Omnisphere Reference Guide



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Reference Guide 1.3 - Software Version 1.3.0 - Soundsources 1.0.2 - Patches Version 1.3

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GETTING STARTED

Welcome To Omnisphere!

INTRODUCTION



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Watch the **Omnisphere Overview** Video

Omnisphere has been designed to accommodate a wide range of operation, from basic interaction with Factory Patches, to comprehensive and complex sound design. Overall, the Omnisphere interface provides an accessible and intuitive workflow, but it also offers as much depth and flexibility as a User needs for their desired application.

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MULTI BROWSER 0 Attributes File Directory Preview Load Lite Version Q Q 0) DIRECTORY: A Search Co Level 3 - His ther Change to Chill **Drying Rack Overtones Menu** Massive Analog Strings **Xylophonic Springs** Wheel -> Chord Martini **Omnisphere Library Multi** MULT Xylophonic Springs heim Fun Live Drops of Love 83.7mb Micro Techno 1 Solo over Sainta NOTES Symphony of Music Boxes percussive apreggiated sounds layered to create a compli-ove. Use the Mod Wheel to modulate the Amp Env Decay th Vinyl Lounge Acadle Tribute to Lanois Aerophonica

Watch the Tutorial Video for Browser Basics and Browser Advanced

Also check out the <u>Browser Episode</u> for background on the philosophy of the new Browser design.

Edit Tags Q Settings Q

Info EBEE

Project +

Omnisphere ships with a massive library of sounds, so it requires a sophisticated way to search, filter and browse its contents. The Browsers in Omnisphere were designed to provide an intuitive and convenient way to quickly find exactly the sounds you need from a library containing thousands of sounds.

NOTE: If you also have Trilian Installed, and are using <u>Omnisphere Library Integration</u>, Trilian Patches and Multis will also have unique images identifying the instrument or feel of the selected sound.

Using categories, searchable attributes (called <u>Tags</u>), <u>Favorites and Projects</u>, the Browsers add a powerful and important feature to the workflow in Omnisphere. The more you understand about the Browser works, the better you will be able to enjoy the Omnisphere sound library.

There are three Browsers in Omnisphere, one each for <u>Multis</u>, <u>Patches</u>, and <u>Soundsources</u>. All three Browsers have the same layout and identical functions, but they interact with different parts of the Core Library. For example, when the Multi Browser is open, only Multis will be accessible in the Browser.

There are two ways to quickly distinguish which Browser is open:

1. The title at the top of the Browser.

red Sleep Cycles

Sort - Shuffle 🖡 🛊 C 🕨



2. The image in the Info Area.

BROWSER - Introduction



The Multi and Patch images are named respectively. The Soundsource Browser displays unique images for the various Soundsources, giving you a visual representation of what to expect from each of the Soundsources.

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Watch the **Omnisphere Overview** for an introduction to the Main Page

This area contains the <u>CONTROLS</u> page, the <u>INFO</u> page and the <u>VISUALIZER</u>. The CONTROLS page is the default area Omnisphere opens to, and it's an excellent starting point for all users.

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Watch the Tutorial Video for Edit Page Overview

Omnisphere's EDIT page has been designed to provide a useful set of controls over every aspect of the sound, but in cases when more precise and detailed controls are needed, the Zoom feature reveals a set of deeper controls. You can also think of the EDIT page as an "Overview" of the sound.

The EDIT page is divided into two primary sections, Common & Layer. The Patch Common parameters on the far left and far right of the EDIT page are controls that affect the whole Patch (both Layer A & Layer B). All of the Layer-specific parameters are in the large middle area, and are generally unique to the Layer. This middle area controls change when Layer A or B is selected. The common controls on the left and right sides do not.

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FX System



FX are an important part of Omnisphere's sound palette, and are used to enhance the sonic character of Patches and Multis. They can add space, density and movement, alter the timbre and shape the sound in many interesting ways.

Having high-quality FX built-in to Omnisphere means that FX are integrated with the interface as well as with the sounds. Any FX used are conveniently saved along with Patches and Multis. Combined with FX Presets, Omnisphere provides a cohesive and intuitive way of working with FX.

Omnisphere contains 33 different FX Units, 29 FX Racks, a comprehensive Preset library, and a powerful feature set for integrating the FX with the synthesis engine.

Omnisphere uses Inserts for Patch FX, and Aux Sends for adding FX to the Parts in a Multi. Insert FX affect only the Patch they're inserted into, either pre or post-fader, while multiple Parts can share any of the <u>Aux Sends FX</u>. All Parts can also go through the final Mastering FX stage.

There's no limit to how FX can be creatively applied, but certain FX, such as Compressors and Modulation FX, are best used as Inserts. Other FX, like Reverbs and Delays, are often best used as Send FX. Deciding when and where to apply FX is also an important part of optimizing CPU usage in Omnisphere.

One of the key features of Omnisphere's FX is that any Layer FX parameter can be modulated with any Modulation Source. This means that FX can be fully integrated into the synthesis architecture and character of a Patch, making them more than simple FX plug-ins.

All FX parameters can be **MIDI** Learned for hands-on control, and enabled for working with host automation.

In addition to individual <u>FX Presets</u>, you can also load or save <u>Rack Presets</u>, which include entire FX chains with all of their settings pre-loaded.

ARPEGGIATOR



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Watch the Omnisphere Episode Video for the Arpeggiator

An Arpeggiator receives incoming MIDI notes, and outputs a sequenced pattern of notes based on a defined set of rules. Similar in concept to a step sequencer, an Arpeggiator has a number of differences that set it apart. Like a step sequencer, an Arpeggiator allows you to create and transpose a pattern, but it also interacts directly with the chords and intervals that you play. Omnisphere features a highly advanced, next-generation Arpeggiator.

Omnisphere's Arpeggiator has multiple modes, trigger-types and clock rates, a variable length 32step Pattern Programmer, and also features the innovative Groove Lock[™] feature that synchronizes the Arpeggiator with Stylus RMX grooves (or any standard MIDI file).

Each Part in Omnisphere can have its own Arpeggiator, each with it's own unique pattern settings. This means that up to eight Arpeggiators can be running simultaneously, which is especially powerful when using Stack Mode.

There are many Arpeggiator presets available to help get you started exploring the Arpeggiator's capabilities. Selecting the different Arpeggiator presets will allow you to check out the some examples of arpeggio patterns that can be created. Arpeggio patterns that you create or modify can be saved as presets for later use.

POWER BUTTON

To engage the Arpeggiator select the power button.

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Watch the <u>Omnisphere Overview</u> tutorial video for more information about the Mixer Page

The MIXER page provides a complete overview of all the Parts in a <u>MULTI</u>. All eight Parts are displayed in a traditional eight-channel Mixer layout, with each Part having the following adjustable settings:

- MIDI Channel
- · Output Channel
- · Mute and Solo

• Patch Name (displays the Patch loaded into the Part, and provides direct access to the Patch Browser)

- Part Level & Pan
- Aux Sends 1 ~ 4

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Any CC1 CC Show Name Show Name Interference NOTES VELO CC Interference Interferenc

Watch the Tutorial Video for Stack Mode

STACK MODE is a powerful feature designed for creating splits, layers, and crossfades with up to eight Parts at once. STACK MODE offers a flexible environment for either live performance or composing. STACK MODE is especially useful for recording a multi-Part performance using a single MIDI track in your host sequencer.

Using Latch and Trigger Modes together with Stack Mode allows you to create complex multi-Part performances that can be layered and quantized in real time.

Use STACK MODE instead of <u>LIVE MODE</u> when you want to create splits and crossfades, and play all the Parts using a single MIDI channel.

There are three different ways to interact with Parts using STACK MODE: NOTES, VELOCITY, and CC. Although they all share the same STACK MODE Grid layout, they are applied very differently from one another.

Using NOTES, each Part Region is mapped to a MIDI Note range, allowing you to map splits, layers and positional crossfades across your keyboard. Using VELOCITY, each Part Region responds to a specific Velocity range, so no matter where you are playing on the keyboard, different Part Regions can be triggered by playing harder or softer. Using CC, Part Regions can be switched and crossfaded using MIDI Control Change messages.

NOTE: STACK MODE works with multiple patches simultaneously, so it requires a powerful computer to make the best use of it. To optimize performance, mute Patch FX like Reverbs and Delays and use the shared <u>Aux Sends FX</u> instead.

Enabling Stack Mode

To enable STACK MODE, select the Power Button to the left of the STACK MODE label.

When STACK MODE is enabled, you'll see "STACK MODE" displayed in the left side of the Omnisphere header. This will be visible from any page in the plug-in.

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LIVE MODE Ð LATCH †+†+ 5 ά \Box Ode to Mr. Newman AM FM Bell 2 Ц Machine Gun Trance Nintendo Club 3 ¢ c **Rich and Fruitiness** Analog Synced Harmonics Shifting Prisms ParaLeader Dry

Watch the Tutorial Video for Live Mode

LIVE MODE is a powerful new feature that allows you to seamlessly switch and layer Patches. LIVE MODE was designed for use in a live performance environment, but is also an inspirational way to interact with the sounds of Omnisphere in composition and production situations. LIVE MODE is especially useful for recording a multi-Part performance using a single MIDI track in your host sequencer.

Using Latch and Trigger Modes together with Live Mode allows powerful control over multi-Part performances that can be switched, layered and quantized in real time.

Use LIVE MODE instead of <u>STACK MODE</u> when you want to switch and layer Parts on the fly, or need enhanced visibility in a live environment. LIVE MODE is also ideal if you have two different MIDI hardware controllers connected to Omnisphere.

LIVE MODE offers multiple Part selection methods that can be MIDI Learned and used for switching and layering Parts. The different selection methods can all be used at the same time. This provides a creative and flexible method of working simultaneously with all the Parts that make up a MULTI.

Using LIVE MODE it's possible to seamlessly switch between Parts without interrupting an already playing Part. For example, sustained notes on Part 1 won't cut off or change after switching to and playing notes on Part 2.

When switching from a Patch with a long release time, a new Part can be selected and played without cutting off the release sound of the previous Patch.

The LIVE MODE page has eight Slots, each corresponding to an Omnisphere Part. Patch names are displayed in large, easy to read type, so they can be read clearly while on stage.

A Part can be played when it's selected (a highlighted Part indicates that it is selected). Parts that are not selected will not respond to incoming MIDI Notes. Patches can be layered by selecting multiple Parts.

In LIVE MODE, all of the Parts respond to a single MIDI channel (or two MIDI channels when in **Dual Live Mode**).

Any Part can be muted and soloed, and controls are available for each Part to adjust mix levels and access the Patch Browser.

Omni Live iPhone Application (OSX only)

LIVE MODE - Introduction



Omni Live is an iPhone/iPod Touch application, designed to turn an iPhone (or iPod Touch) into a simple, wireless remote control of Omnisphere's Live Mode page. Since Omnisphere's Live Mode already allows multiple sound selection, the multi-touch display in Omni Live makes a useful and convenient control surface, in the studio or on the stage.

Omni Live allows you to instantly and remotely choose a Patch or combination of Patches on the Live Mode page simply by touching the Patch names on the Omni Live display.

Omni Live works with Omnisphere 1.3 or higher, using either Mac or PC, and is available as a free download from the iTunes App store.

For complete instructions, please visit our website at: http://www.spectrasonics.net/omni_live_app/

Power Button

To enable LIVE MODE, select the Power Button to the left of the LIVE MODE label.

When LIVE MODE is enabled, you'll see "LIVE MODE" displayed on the left side of the Omnisphere header. This will be visible from any page in the plug-in.

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MEMORY	TUNING	MODULATION	
Process limit	440 Hz 🕴	WHEEL	Wheel
Memory used 353 mb (avail. 1,326)	MASTER TUNING	AFTERTOUCH	After
STREAMING	MISCELLANEOUS	PITCH BENDER	MidICC 56
MODE Streamed	SWITCH TO LAYER UPON ACTIVATION	BREATH CONTROL	Breath
PRE-LOAD MEMORY SIZE	SYNC TABBED PANES TOGETHER	FOOT CONTROL	Foot
NUM BYTES PER READ	ROUND ROBIN No variation	EXPRESSION	Expres
	STARTUP PAGE Main Controls	SUSTAIN	Sustain
STREAM READ-AHEAD	ACCEPT OMNI LIVE CONNECTIONS OFF	SOSTENUTO	Sost
STREAM BRAKE		SOFT PEDAL	Soft
0-0-1,730(0)		LEGATO	Legato
		USER CC	MidICC 13

The System page in Omnisphere is a universal control area that governs how Omnisphere's sounds are streamed, set some user defaults and configures the modulation controls.

SYSTEM



SUPPORT - Contacts/User Groups



Many common technical support questions can be answered by checking the <u>Spectrasonics</u> <u>Support Knowledge Base</u>

NOTE: You will need to have your Omnisphere serial number to log in to the community site.

If you are still in need of technical assistance after referring to the Support Knowledge Base, please contact the Tech Support Department by phone or email, and we will gladly assist you.

If you call and are not able to speak with a technical support specialist, it's important to leave a message. All calls are returned in the order they are received. Your call or email is important to us, and we will get back to you as soon as possible.

818-955-8444 phone 818-955-8613 fax 888-870-4223 toll free in N. America

Monday-Friday 10AM-5PM Pacific Standard Time If you are calling outside N. America, please note the time difference in California.

email: info@spectrasonics.net

USER SUPPORT FORUMS

There are several excellent online users groups and forums for discussing Spectrasonics instruments on the web. These are not official company forums, but many knowledgeable Spectrasonics users visit these and are often very helpful when you need an answer to a question quickly. The Spectrasonics Team also visit these areas and contribute to them from time to time:

Spectrasonics Yahoo Users Group

Omnitalk Omnisphere Forum

Northernsounds Virtual Instrument Forum

SALES SUPPORT

For product orders or sales please contact your local Spectrasonics <u>distributor</u>. All Spectrasonics instruments, Xpanders and libraries are sold through our international distributor and authorized dealer network.

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Audio Unit

Apple introduced the Audio Unit (AU) plug-in specification in Mac OS X. Since this plug-in standard is native to OS X - and not to any specific host or platform (like TDM or VST) - Apple has encouraged companies to adopt it as a standard for all Mac audio applications. Although it is not cross-platform, many host applications like Logic, GarageBand, Digital Performer, Abelton Live and others have adopted the Audio Unit plug-in standard.

AU

Abbreviation for Audio Unit

AUX Send

An alternate variable audio output used to send a signal to a dedicated FX rack for additional FX processing. In Omnisphere, there are four AUX Sends per Part on the Mixer Page. They route audio to corresponding AUX FX racks. For example, Aux Send knob 1 routes audio to AUX FX rack 1, etc. AUX Send knobs control the volume sent to the AUX FX racks.

AUX Return

An AUX Return routes audio from an AUX FX Rack directly to Output A--the Master Fader.

Automation

As you manipulate controls on the Omnisphere interface, the host's automation records these movements and plays them back. These recorded movements can also be edited from inside the host application. You may also use a hardware control surface to manipulate some of Omnisphere's parameters as well.

Bar

A vertical line on a musical staff that indicates the beginning or end of a measure. Synonymous with measure.

Bi-polar control

This kind of control has more than one function within its movement range. Usually, there is a center detent position where the control is off. Moving one direction from the detent position activates one function and moving the other way from the detent position activates a different function. The Master Filter on the Edit Page is an example of this: in the center position, the filter is off. Moving the slider to the left of the center detent position activates a Low Pass Filter. Moving the same slider to the right of the center detent activates a High Pass Filter.

Browser

The dynamic, searchable area of Omnisphere that offers access to the Core Library of Soundsources, Patches and Multis.

Buss

A path which routes audio from one or more sources to a particular destination.

Bypass

Disengaging an FX Unit so that it no longer affects the audio. Doing this saves CPU power.

Clone

To duplicate - Used in MIDI learn terminology. Duplicates the current set of MIDI Learn parameters from Part 1 to Parts 2-8. This is a great time saver when setting up an external hardware MIDI controller. You can set up Part 1 with all the MIDI Learn parameters you like, then clone Part one to all the other Parts. More...

Cycle

One Cycle has been completed when something runs from its start point to its end point. This can refer to things like grooves or LFO waveforms.

Column

A vertical list of available choices in the Browser. Omnisphere's Columns can be changed to list a variety of Attributes.

Compressor/Limiter

A device for reducing the effective dynamic range of an input signal by preventing it from rapidly exceeding or falling below a selected amplitude threshold. The first part of a compander, it is used to make loud parts of a signal softer and soft parts louder. Beyond the threshold, the ratio of the signal's input level to its output level (e.g., 2:1, 4:1) is user-selectable. A compressor is commonly used to keep levels within an acceptable range, but because it can slow a signal's rate of decay below the threshold, compressors are also used to add sustain to instruments such as electric guitar and bass. The limiter acts like a compressor, but operates only at the top end of the dynamic range. The limiter has a faster attack time (1µs to 1ms) than the compressor alone (1ms to 10ms). A compressor/limiter is traditionally inserted between the outputs of a device and the inputs of the mixer or mastering recorder. More...

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GLOSSARY OF TERMS

Center detent

This is the neutral position of a parameter's knob or slider, especially in reference to bi-polar controls. When in this position, the function is disengaged and does not affect anything.

Defaults

These are predetermined settings that Omnisphere recalls when it is first instantiated, cleared, reverted, or when a global mode is changed. Spectrasonics provides factory defaults, but you can replace them with your own settings.

Directory

Used in reference to a folder on the computer's drive.

Drop-down menu

One of these menu lists appears when you click on an Omnisphere display window with a downward arrow. Once you click on the appropriate window, a menu appears to "drop down". Once the menu list appears, you can select an option in the menu with the mouse. Synonymous with pop-up menu.

DSP

Digital Signal Processing - refers to the manipulation of digital audio in a computer. The more processing you would like to do, the faster and more powerful computer you need.

Engine

The core software code that structures the operation of audio functions in a plug-in. The engine developed by Spectrasonics that is responsible for running is Omnisphere is STEAM (Spectrasonics-Team), and Stylus RMXs' engine is S.A.G.E (Spectrasonics Advanced Groove Engine)

Expander

(1) A signal processing device which is the inverse of a compressor, providing the gradual attenuation of signals that fall below a user-defined threshold. This process, known as expansion, reduces background noise and at the same time increases the dynamic range of the input signal.

Fader

A controller in the form of a slider that usually affects the loudness/softness of audio levels. Placing a fader at Unity or 0 gain means that the audio channel is outputting the same audio level as was input to the channel. Most faders allow you to make the volume louder and softer than the originally input signal. Also used to refer to any type of slider. Synonymous with Slider.

Folders/Sub-Folders

An organizational tool on a computer that allows grouping of files. Also known as a Directory. A sub-folder is a folder inside another folder. Also known as a sub-directory.

Footer

The section at the bottom of the Omnisphere GUI that will change depending on which page you're currently viewing.

FX Slot

An area where an FX Unit can be loaded. There are three FX Slots per FX Rack.

FX Unit

An FX Unit is an internal Omnisphere software signal processing plug-in which gets loaded into an FX Slot. Each FX Unit is a real-time sound processor. Currently, there are 33 FX Units in Omnisphere.

FX Rack

The area designated to load FX Units. An FX Rack consists of four FX Slots.

FX Parameter

Any knob, slider, drop-down menu or button that a user can select and adjust. The result is a change in the sound passing through the FX Unit (unless it is bypassed).

FX Preset/Patch

Saving all the current parameter settings of a single FX Unit creates an FX Patch. Users can save custom FX Patches. These FX Patches will be available later in any session. Patch is synonymous with Preset.

FX Rack Preset/Patch

Saving all the current parameter settings of an entire FX Rack creates an FX Rack Patch. An FX Rack Patch can be any combination of up to three FX Units with any settings. Users can save custom FX Rack Patches with custom names. These FX Rack Patches will be available later in any session. Patch is synonymous with Preset.

Global

Anything that affects the status of the entire plug-in.

Groove Lock

Omnisphere's Arpeggiator can import Stylus RMX's grooves as MIDI data to synchronize RMX grooves with the Arpeggiator.

GUI

Graphic User Interface - In Omnisphere this is the plug-in window and all the pages that you see and manipulate.

Host/Host Application

A computer application or hardware device capable of loading Virtual Instrument software plug-ins. Also known as a Sequencer or DAW (Digital Audio Workstation). Logic, Digital Performer, Pro Tools, Cubase, Nuendo, Sonar, GarageBand, Live, Traktion, Fruity Loops, Metro and Acid Pro are all examples of software hosts that work with Omnisphere. MUSE Receptor and Neko are examples of hardware hosts that work with Omnisphere.

Instance

When you open a Omnisphere plug-in your host, there is one instance of it in your session. If your computer is powerful enough, you can run several instances of Omnisphere at once.

Instantiation/De-Instantiation

The process of opening/closing plug-ins from your host. Synonymous with Loading/Unloading, Opening/Closing, Loading/Deleting, etc

Inverted

Reversed or negative polarity modulation.

Keyboard

1) An external MIDI controller capable of triggering notes via piano-style keys.

2) Also a text-entry ASCII computer keyboard. There are several keyboard-mouse combinations that provide access to Omnisphere's features.

Knob

A control that can be turned clockwise and counterclockwise. A knob can be used to control a wide variety of parameters.

Learn

MIDI Learn is capable of mating an external physical controller with virtually any parameter inside Omnisphere for remote performance control and automation applications.

LFO

Low Frequency Oscillator - a continuous, cyclical modulator that can be used to affect a sound in many ways. For example, you can use it to "auto-pan" audio, produce tremolo or filter sweeps.

Limiter

See Compressor/Limiter

List

A display menu of available options. Usually they are presented vertically.

Menu

Two different meanings:

1. Refers to a collection of sounds or grooves that are mapped on a single keyboard layout for easy access.

2. Refers to a user interface software pop-up/drop down list of options.

Menu Item

Refers to the items in the list of a pop-up/drop-down menu in the software interface.

MIDI CC

MIDI Continuous Controller. MIDI has 128 possible controllers. Omnisphere can respond to any of them using the MIDI Learn feature.

Multi patch

Omnisphere is eight-part multi-timbral and settings for all the Patches that make up a Multi can be saved as a 'Multi Patch'.

Multitimbral

The ability to operate on more than one MIDI channel at a time. Omnisphere is 8 Part Multitimbral.

Omni

Through the MIDI Learn function, Omnisphere is capable of being setup so that it responds to any incoming MIDI CC messages on any channel.

Parameter

An Omnisphere control that can be manipulated to affect the audio.

Part

Each Omnisphere Part can load its own Patch and operate independently of all the other Parts. There are 8 Parts in Omnisphere. Each one has its own numbered button in the Header. Parts 1-8 correspond to MIDI Channels 1-8.

Patch

A pre-saved set of parameters. Also known as a Preset. A Factory Patch is a patch created by Spectrasonics. A User Patch is a patch that you can save and name yourself. The name comes from older synthesizer days when many physical patch cords were used to create sounds by connecting parts of the synthesizer together with the patch cords.

Peak

Peak value is the maximum instantaneous excursion from zero of an audio waveform, as measured by a peak meter (PPM). The peak value of a sound is also the maximum instantaneous pressure excursion of the sound

Pitch Shift

The process of changing the frequency of a sound. It can be changed so that it is higher or lower.

Plug-In

A software application that relies on running from within a host application to provide additional needed functionality.

Pole

The roll off slope of Filters is measured in db. For every 6db of roll off, the filter has an additional Pole. A two-pole filter has a roll off slope of 12db and a four-pole filter has a roll off slope of 24db. Omnisphere has filters with 6db, 12db, 18db and 24db rolloff slopes.

Pop-up Menu

A list that seems to appear from nowhere. An example of this is the FX Patch pop-up menu. Cntrl-Click (Mac) or Right-Click (PC) anywhere on an FX Slot and a list appears out of thin air! Synonymous with drop-down menu.

Power Filter

A great sounding filter developed in cooperation with Gmedia from their reknowned impOSCar synthesizer. Be careful when using it though, because the Power Filter can be VERY loud and it requires a fair amount of DSP power from your computer.

Preset

A set of parameters that has been previously saved and is available for recall. Sysnonymous with Patch.

Retrigger

When this parameter is activated, Omnisphere resets an LFO waveform back to its beginning phase position at the start of each measure.

Reverse

Plays a sample backwards.

RMS Compression

Root Mean Square. A formula for describing the level of a signal. RMS is derived by squaring all of the instantaneous voltages along a waveform, averaging the squared values, and taking the square root of that number. For sine-like signals, average power = RMS(voltage) RMS(current)

Round Robin

Term referring to a sampling technique that allows a repeated note to trigger a different take each time it's played, giving a natural sounding result and eliminating the "machine gun" effect.

RTAS

Real Time Audio Suite - a Digidesign proprietary, cross-platform plug-in format for Pro Tools.

S.A.G.E.

Spectrasonics Advanced Groove Engine - when Spectrasonics created our own in-house software development team, SAGE was the technology developed that became the basis for Stylus RMX.

Sample Start

Parameter that controls, from a timing standpoint, how far from the beginning a sample will be triggered. When Reverse is engaged, this controls the end point.

Sequence

A computer file saved by a sequencer/DAW that contains tracks of MIDI notes and audio files.

Sequencer

A computer application that allows recording, entry and editing of MIDI notes and audio files. Also, known as a host if the sequencer is compatible with plug-ins.

Slider

A control that you move back and forth or up and down depending on its orientation. Moving a slider can control a wide variety of parameters. Synonymous with Fader.

Sound Directory

A directory that contains Suites. It is the sub-directory of a Master directory.

Standalone

A software program that is capable of running on its own without a host application.

STEAM

STEAM stands for SpectrasonicsTEAM and is the engine for Omnisphere and many exciting future instruments.

Sub-Page

These are pages within a main Editing Page. For example, on the FX Page, there are 6 FX subpages.

Sync

Abbreviation for Synchronization. When this feature is on, Omnisphere locks corresponding parameters to the host's tempo and then adjustments can be made using rhythmic values like 1/4 notes, 1/8 notes and 1/16 notes. Otherwise the parameter is controlled by Cycles per second.

Tube

An electronic device which consists of various types of electrodes (anode, cathode, etc.) and a heating element, all contained in a vacuum. Its simplest form, the diode, is used as a rectifier. The triode is functionally similar to a transistor. Tubes are called valves in the UK.

Unity

When a parameter is set so that it does not make any changes to the passing signal.

Unity gain

A device which neither attenuates nor amplifies a signal. Most signal processing devices have unity gain, which means that they neither amplify sound nor cause insertion loss, and therefore can be added into an audio system at various places without upsetting the overall gain of the system.

Unlearn

Parameters that have been mated with a physical controller can be unattached via this feature of the MIDI Learn section.

Value Definitions

- 8x this value stretches a cycle of a parameter such as an LFO across 8 bars.
- 1/8 this value cycles a parameter such as an LFO every 1/8 note.
- 1/8D this value cycles a parameter such as an LFO every dotted 1/8 note.
- 1/8T- this value cycles a parameter such as an LFO every triplet 1/8 note.

Valve

See Tube.

VST

Virtual Studio Technology - a cross-platform plug-in platform created by Steinberg.

CREDITS

Produced by Eric Persing

SOFTWARE DEVELOPMENT

Principal software development: Glenn Olander, Neal Olander

Additional coding: Bernie Torelli, Artemiy Pavlov, Bram de Jong, Jon Hodgson, Magnus Jonsson, Audionerdz, David Strozyk, Jay Olson, Shirley Sloper, Bernard Chavonnet, Jankoen de Hann

UVI FIIters by USB

SOUND DEVELOPMENT

Principal Soundsource development: Eric Persing, Diego Stocco, Ignacio Longo, Tobias Marberger, Scott Frankfurt

Principal patch development: Eric Persing, Scott Frankfurt, Ignacio Longo

Audio editing/mapping: Scott Frankfurt, Ignacio Longo, Adam Hawk, Bob Wilson

Library organization and Tagmaster: Stephane Bonvallet

Data Management: Ignacio Longo

Subsonic recording: Armand Hillside

Atmosphere® sound library conversion: Scott Frankfurt, Ignacio Longo, Hans-Joerg Scheffler, Nick Manson

Additional sound development: Bob Daspit, Roby Duke, Peter Maunu, Hans-Jorg Scheffler, Stephane Pigeon, Dan Holter, Steve Conner, Stephane Bonvallet, Schtung Music, Ryeland Allison, Dan Portis-Cathers, Nick Manson, Les Correa, Michael Flint

Performers: Alvin Chea, Cantate Boys Choir, Bill Cantos, Randy Crenshaw, Jeff Gunn, Dave Simpson, Ellis Hall, Huun Huur Tu, Imani Fellowship Choir, Jennifer Ivester, Kirsten Ostrum, Libby Torrance, Melinda Perrin, Pablo Sepulveda, Roby Duke, Steve Amerson, The Hertfordshire Chorus, Linda McCrary and the McCrary family, The Washington Chorale, Bob Daspit, Peter Maunu

VISUALS

Interface design: Eric Persing, Tolga Gurpinar, Scott Frankfurt, Glenn Olander

Graphic design: Tolga Gurpinar

Soundsource visualization: Eric Persing

Additional image development: Diego Stocco, Bob Daspit, Stephane Bonvallet, Jazmine Persing, Soren Persing, Sage Persing

Videomaster: Adam Hawk

Video Episode Production: Diego Stocco, Adam Hawk, Eric Persing

DOCUMENTATION

Reference Guide: Michael Flint, Eric Persing, Robinson Collins

Users Guide: Michael Flint, Adam Hawk, Eric Persing

PRODUCTION



»Getting Started

» The Browsers

» The Edit Page

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»<u>Arpeggiator</u> »<u>The Mixer</u>

»Stack Mode

»Live Mode

» System

» Support

» Glossary

»Credits

Credits

»Legal

Special Thanks Dedication

»The Main Pages

»Concepts

Production Coordinator: Lorey Persing
Warehouse: David Klinger, Barbara Klinger
Discmaster: Adam Hawk
Betamaster: Bob Wilson
Printing: Graphic Visions, Burbank, CA

WEBSITE

Webmaster: Kevin Jordan Site development: Adam Hawk Flash design: Jerry Chan Techshop: John Martin, Lorey Persing



LEGAL - Licensing/Protection FAQs

What's the principle of the standard license agreement?

- Single user music production/performance = Allowed
- Multiple users = Not Allowed
- Non-music use = Not Allowed

Any uses that are not allowed need additional permission or a special license from Spectrasonics.

Are there any legal limitations to how I can use Omnisphere?

The main limitation is that you are not allowed to use it to make a sample library or another kind of sample-based product. You are also restricted from giving away or posting online any loops or samples created using Omnisphere. However, you are able to use Omnisphere in all musical recording applications without paying any additional licenses.

Does Omniphere use copy protection?

Yes, we have our own system. Once you've installed and opened the plug-in, you'll have 4 day grace period to use the product without authorization in demo mode. To continue using the instrument on that computer, you'll need to authorize the plug-in on our web site. It's fast and easy, and you'll get your Response code for your computer immediately. You don't have to use your music computer to do the web authorization.

What type of Copy Protection method does Omnisphere use?

All Spectrasonics products use a custom developed Challenge/ Response system. This system allows you to install and authorize 24 hours a day, 7 days a week. With our system, you aren't limiting to using it on one computer. Our system is more flexible than dongle-based ones, because it's: Single User/Multiple Computer

Does Omnisphere use a dongle?

No.

How many computers can I install it on?

Since all Spectrasonics instruments have a Single User/ Multiple Computer license, this means you can install and use Omnisphere on as many computers that you own and will be using yourself.

What if I need more than one install for laptop use, if my hard drive crashes or if I get a new computer?

Not a problem...our web site is available around the clock to handle these situations immediately. It's very easy to do it online and you'll always be able to get the authorizations that you need for your computers from Spectrasonics.

Can I use my Spectrasonics Instruments on more than one computer at a time? Yes. This is no problem as long as it's for a single user.

I'm concerned about what would happen to my Spectrasonics instruments if the company were to go out of business...would I be still be able to authorize them?

Absolutely! At Spectrasonics, we believe it is essential to guarantee to our users the ability to get lifetime authorizations for the Spectrasonics instruments they purchased. In the unlikely event that the company were to go out of business, we would provide the ability for all registered users to get continued authorizations. In fact, we already have a system in place for this contingency. However, the good news is that this event is highly unlikely...we plan to be around for many years!

Do I have to credit Spectrasonics if I use Omnisphere?

No, it isn't mandatory for our instruments...but we certainly would appreciate it!

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Licensing FAQs Software License Agreement Sounds License Agreement Trademarks

Do I need to obtain a special license to use Omnisphere on a commercial project?

No, the lifetime license fee to use the samples is covered in the purchase price of the instrument. You can use it on as many of your own projects as you like and we hope that you make some hits with it!

Can I use Omnisphere on Music Libraries?

Yes, this is fine. Some companies completely restrict this kind of use altogether - since music libraries can sometimes cross over into the soundware business, but Spectrasonics allows music library use. In fact, we have many customers that use our products in standard music libraries. Specific limitations about music library collection usage of include the following:

• The music in the library must be in a mixed format. You cannot provide separate tracks in your music library if you want to use our products with our standard license.

The intended audience for your music library collection must be to non-musicians.

Can I use Omnisphere in Film Trailers?

Yes, this type of use is fine. Some companies restrict this kind of use, but Spectrasonics allows it.

Can I use Omnisphere in multimedia/game music projects?

Yes, this is OK unless you want to put samples created with Spectrasonics Virtual Instruments directly encoded into the game. That requires a special license. Remember, music use is allowed, but non-music use (example: SFX) is not permitted without a special license for this type of use. Please contact Spectrasonics if you wish to encode the samples into a game system.

Can I distribute the music I've created with Spectrasonics products in a "multitrack" format?

One of the only things that is NOT allowed is distributing your music in a multitrack format that completely exposes tracks created using our samples.

The problem in this case is that the separate tracks can then easily be reused in new works by the end user of the music - who is not a licensed Spectrasonics user. This use then turns into a type of redistribution of our copyrighted samples as a "derivative work", which is not allowed without special permission or a special license from Spectrasonics.

NOTE: "Multi-channel" mixed music is not a problem (5.1, 7.1 mixes, etc.).

within a song's mix and this is considered normal usage.

the creation of new samples or loops.

What if the Spectrasonics elements in my music are exposed for a period of time? We aren't concerned about normal music use, where the music is presented in the standard "mixed" format. Of course our sounds may sometimes appear in exposed passages like intros and breaks

Can I use Spectrasonics Instruments or libraries to create loops or samples for distribution if I'm layering them with other sounds or doing a lot of creative processing? No. At least not without getting special permission or an additional license from Spectrasonics. Legally, this is considered a "derivative work" when our copyrighted sound recordings are involved in

What if it's just for my own use and I don't distribute the samples I've created? If you're a licensed user, you are welcome to use your Spectrasonics instruments and libraries to create new audio samples and loops for your own use. The important thing is not to distribute them.

I work at a production music studio with several other composers/producers. Can we all use Omnisphere from our main server?

No. It's very important that each composer must have his or her own copy and license for Omnisphere. We make regular checks to verify that large production studios have obtained the proper licenses for our instruments and sample libraries.

As a studio owner, can I include Omnisphere on a rental or studio computer for clients to use on their projects?

No. The standard license to use Omnisphere is only granted to the buyer. We have a "single user/multiple computer" lifetime license policy. If it is your own recording project that you are producing, of course that isn't a problem...but your studio clients aren't licensed to use it for their own projects, and Omnisphere use can't be "rented". Multiple license packages are available by contacting your Spectrasonics distributor. If you have questions regarding multi-license packages contact info@spectrasonics.net

Does this mean that I can't use Omnisphere when working on someone else's project? This type of use is very standard and not a problem at all. The "single user" is defined as the person who is licensed to use the software instrument. This means that the licensed user can use it on an unlimited number of musical projects they are involved in. This can be a person's own project, a project where they are acting as a producer or engineer for another artist, as a session musician performing on someone else's project live or in the studio, etc. The main point of our license agreement is the concept of a single licensed user. If a licensed Omnisphere user is not musically involved in a project, that is where there is a restriction - hence the inability to simply rent the instrument or rent "time" to use the instrument as part of a studio's services. Most of our customers use their Spectrasonics instruments on many different kinds of musical projects for different artists and collaborations.

Can my writing partner use a copy of my instrument on their computer?

No...the license to use Omnisphere is on a per-person (single user) basis. They would need their own copy of Omnisphere to use it on their computer.

Can I install my Omnisphere on a client's computer for their use?

Not unless they are a licensed user. They will need their own serial number and registration to be licensed to use the instrument.

I've never heard of these kinds of licensing restrictions before. This seems unusual and totally different from using hardware sound modules. Why does Spectrasonics have such an unusual policy?

It's not actually unusual at all or even unique to Spectrasonics. In fact, this is the identical type of license agreement used by thousands of media libraries, virtually all sample-based virtual instruments and the vast majority of music software. Single user license agreements do have different restrictions compared to using hardware devices, and many people are not aware of these types of differences and restrictions. Part of the purpose of this FAQ section is to serve as a clear explanation of our policies. In this case, these types of "single user" license restrictions are standard for nearly all software/soundware companies, not only Spectrasonics.

Can I resell Omnisphere used to someone else?

Not without obtaining a license transfer from Spectrasonics. The sounds and software are licensed and registered ONLY to you. You cannot automatically transfer the license to someone else, and therefore you cannot simply sell it used. If you do attempt to sell it used without obtaining a license transfer, the buyer will not be able to use the product because it is registered and licensed to you. The Omnisphere license is the right given to a single person to use the instrument. When you purchase the product, you are primarily purchasing the lifetime right to use the product and the sounds it contains in your own music projects. Also, if you sell any of your computers that have a Spectrasonics instruments installed on them, you are required to delete them first from the hard drive.

How would I obtain a license transfer and how much does it cost?

The vast majority of sample libraries and sample-based virtual instruments on the market do not allow license transfers of any kind. However, at Spectrasonics we realize that there are certain circumstances where it can be a legitimate transaction. Because circumstances can vary so much, we only grant license transfers on a case-by-case basis.

Depending on the circumstances, when a license transfer is granted, there is often an additional fee involved that covers the transfer of all the rights to the new user to use the core library sounds, to receive full tech support and continuing support update rights, issuing a new serial number and account, etc. License transferred versions of this software do not have the same upgrade "special pricing" privileges as standard new units purchased at an authorized Spectrasonics dealer. If you have more questions about obtaining license transfers, how much it costs and what the limitations are of license transferred versions, please contact us directly at info@spectrasonics.net

Do license transferred (used) versions get access to software updates and upgrades?

Yes, but not necessarily the same special "upgrade" pricing offers.

Can a license transferred (used) version be resold and transferred again? No. This can only be done once by the original purchaser.

What are the privileges of a Licensed User that purchased Omnisphere from an authorized Spectrasonics dealer?

• Lifetime, unlimited use of the purchased version of the instrument and the sounds it contains to use for music projects.

- · Free phone, email and online Technical Support
- Free software maintenance updates
- · Special upgrade pricing on major new versions

LEGAL/SAMPLING FAQs

Am I allowed to distribute samples I've made of any of Omnisphere's Factory sound libraries?

No. The factory core sound libraries of Omnisphere are copyrighted and may not be distributed. This includes all types of distribution - the use in other sample libraries, sound FX libraries or sample-based hardware or software products is specifically prohibited.

What if I extensively modify the Omnisphere factory sounds?

All modification, layering and tweaking is still legally considered a "derivative work" based on copyrighted recordings, so any type of re-use sample distribution like this would require specific clearance in advance.

Does this mean that I'm not allowed to distribute my own original Omnisphere patches or multis?

That's not a problem. Any type of distribution of user Omnisphere patches and multis (.prt &.mlt files) is not only allowed, it's encouraged! :-)

Am I allowed to distribute samples of my own original Omnisphere patches?

Your own original Omnisphere patches are very likely to be based on our copyrighted material, so the answer would be NO in those cases. Contact us if you have questions.

Can I sample Omnisphere for my own private use?

Of course. Every licensed user is free to use Omnisphere's sounds in any way within the production of their music that works for them creatively...including making their own custom samples with the instrument. Those custom samples only become a legal issue when they go beyond the private musical use of the individual user (i.e. distribution).

Am I permitted to distribute my Omnisphere samples if it's non-commercial?

No. There's no distinction between commercial or non-commercial distribution. Posting/sharing original samples of Omnisphere presents the same legal issues as commercial distribution.

But if Spectrasonics sampled other manufacturers' instruments to make Omnisphere, then why can't I use Omnisphere for my sampling project? This seems inconsistent. For Omnisphere's core library, Spectrasonics researched and obtained all necessary legal clearance to use all the original samples we created that incorporate other manufacturers' instruments.

Please contact Spectrasonics directly if you have any questions regarding sampling Omnisphere®: info@spectrasonics.net

GETTING STARTED



Welcome To Omnisphere!

GETTING STARTED - Quickstart



This Quickstart provides an overview of the essential things you will need to know in order to get started using Omnisphere.

- · Omnisphere is a software instrument plug-in, and requires host software in order to run
- Omnisphere can be a system intensive instrument. A system with a fast CPU and plenty of RAM will greatly enhance performance. Running at the minimum system requirements will limit the number of simultaneous sounds, FX and polyphony available.

1. Install Omnisphere

Installing will take 3 ~ 4 hours, and will require 50 GB of free hard drive space

2. Authorize the Plug-In

Authorization can be done immediately from any computer connected to the Internet

3. Get Everything Updated

Make sure you have the latest versions of the Software, Soundsources and Patches:

- · Open Omnisphere and click on the Spectrasonics logo
- · Select the button labeled "Check for Updates" to open the System Status page
- Status indicators in red mean that an update is necessary. Click the "Get Updates" button to download them.
- · After installing the updates, Omnisphere is ready to go!

NOTE: Be sure to quit your host software before installing the downloaded updates.

4. Use Omnisphere Multitimbrally

• Omnisphere is a multi-timbral instrument, so you can use a single instance to load and play eight different sounds on different MIDI channels.

· Setup your host software for multi-timbral operation

5. Loading Sounds

There are three types of sound libraries in Omnisphere:

Patches, Multis and Soundsources

To load a Patch:

- · Select a Part Number Button in the Header
- · Click on the Patch Name Display just below the large Omnisphere title
- · The Patch Browser will open, allowing you to select and load Patches

To load a Multi:

- · Click the Multi Name Display in the Omnisphere Header
- · The Multi Browser will open, allowing you to select and load Multis

To load a raw Soundsource:

- · Select "Clear Part" from the Utility Menu in the Header
- · Click the Soundsource Name Display below Layer A
- The Soundsource Browser will open, allowing you to select and load Soundsources.

6. Watch essential Video Tutorials

Omnisphere

We have produced quite a few online video tutorials for Omnisphere, and we encourage you to view and download them from our support website.

To begin, please view the following essential videos:

- <u>Getting Started</u>
- <u>Omnisphere Overview</u>
- Browser Basics

These videos will provide the minimum information every Omnisphere user needs to start working with Omnisphere.

7. Explore and Learn

For more in-depth information, watch additional tutorials and explore out this Reference Guide - which is the primary manual for Omnisphere. This guide can be viewed on any computer and can be printed and searched for easy access to find the information you need.

• If you're new to synthesis, we recommend starting with the chapters on <u>Concepts</u>, <u>The Mixer</u>, <u>Browsers</u>, <u>Main Pages</u>, <u>Arpeggiator</u> and <u>Live Mode</u>.

• If you have some experience with synthesis, be sure to check out the chapters on <u>The FX Rack</u>, <u>Automation</u> & <u>MIDI Learn</u>, <u>The Edit Page</u> and <u>Stack Mode</u>.

• Experienced synthesists can go in-depth with zooming concepts that are covered in the chapters on <u>Modulation</u>, <u>Oscillators</u>, <u>Filters</u>, <u>LFOs</u>, and <u>Envelopes</u>.

8. Support Resources

Online resources are available that can answer most technical questions. Please login and visit our Knowledge Base at: http://support.spectrasonics.net

9. Have Fun!

Enjoy using Omnisphere and we hope you make some great music with it!

-The Spectrasonics Team

GETTING STARTED - System Requirements

SYSTEM REQUIREMENTS FOR ALL USERS:

- · 2.0 GHz or higher processor (Intel Core2Duo or higher recommended)
- · 2GB RAM (4GB or more recommended for multis)
- Dual Layer compatible DVD-ROM drive
- 50GB of free hard drive space

Mac Recommendations:

- OSX 10.4.9 or higher
- AudioUnit, VST 2.4 or RTAS capable host software
- Native Universal Binary for Intel Macs (G5 PowerPC compatible)
- 6GB of RAM (or more) if using the <u>Sample File Server</u>

Windows Recommendations:

- VST 2.4 or RTAS capable host software
- Microsoft XP SP2 or later

Omnisphere

- Microsoft Windows 7/Vista compatible
- Native 64-bit and 32-bit on Windows

GETTING STARTED - Installation



Here you will find instructions for performing default and custom installations for both Mac and Windows. In addition to these instructions, there are WatchMe video tutorials on Disc 1 inside the "Mac" and "Windows" folders that cover the installation process in depth. After installing Omnisphere, you will need to authorize the plug-in.

Please refer to the Authorization section of this guide for further information

GETTING STARTED - Mac OS-X Installation on the Startup Drive

Follow this set of instructions to install the Omnisphere large sound library files onto your startup hard drive. You need almost 50GB of free space available on your startup hard drive in order to continue. If you want to install Omnisphere to an external hard drive, please skip to the MAC OSX - CUSTOM INSTALLATION set of instructions <u>here</u>.

NOTE: These screenshots are taken in OSX Leopard. Installation on OSX Tiger will look slightly different.

```
file:///Users/...elopment/SPECTRASONICS/INSTRUMENTS/OMNISPHERE/REF%20GUIDE/REF%20GUIDE%20LOCAL/get_started/all.htm[6/8/10 6:05:54 PM]
```

INSTALLING DISC 1

1. After inserting Omnisphere Disc 1 into the computer, open the disc to reveal its contents from the Desktop.

2. Open the Mac folder, then double-click "Omnisphere Disc 1" to begin the installation of Omnisphere.



3. Click "Continue".

	Welcome to the Omnisphere Disc 1 Installer
Introduction Read Me License Destination Select Installation Type Installation Summary	You will be guided through the steps necessary to install this software.
	Go Back Continu

4. Read this important information about the installation process before you install. Click "Continue" to proceed.



5. After reading through the licensing FAQs, click "Continue".



6. You will then be prompted by another window. Choose "Agree" if you fully understand the licensing agreement to continue.



7. Simply click "Install" to agree to begin installing Omnisphere to the startup hard drive. This is the default installation. Remember there needs to be almost 50GB of free space available on the startup drive in order to completely install Omnisphere.



8. Enter the password for your Mac OSX user account to continue the installation.

	_	
000	-	Installer requires that you type your password.
O Introducti O Read Me O Destinatic O Installatic Installatic	► Details	Name: Spectra User Password: Cancel OK
		Change Install Location)
		Customize Go Back Install

9. The disc will now install. The installation of each disc will take up to 45 minutes. The installer will launch a separate script during the installation to install the large sound library files. The script window will update every 10 seconds to show the progress of the installation.

NOTE: The installer progress bar in the background will not move during the installation of the sound files. This is normal and installation progress will be shown via the "Time Elapsed" area of the script window.

During the installation, it is not recommended to use your computer for anything other than installing Omnisphere. The script window will beep and bounce in the dock if other applications are opened. This is because the script window wants to be the top window on screen at all times. Doing other things while installing probably won't jeopardize the installation, but you should be aware of how the installer script behaves. Selecting the "Hide" button will cause the script window to vanish until the installation completes.

	Installing Core Library files
e Introduction Read Me	The large Omnisphere core library files are now being installed. This disc may take up to 45 minutes. Time elapsed: 3 minutes Hide
 Elicense Destination Select Installation Type Installation Summary 	Preparing Omnisphere Disc 1 Running Omnisphere Disc 1 Core Library Installer script
	(Go Back) (Continue)

10. Once the disc has finished installing, click "OK", then "Close", and continue by installing the next disc.



INSTALLING DISC 2 - DISC 6

The following instructions apply to Disc 2 through 6.

11. After inserting Omnisphere Disc 2 into the computer, open the disc to reveal its contents from the Desktop.

12. Open the Mac folder, then double-click "Omnisphere Disc 2" to begin the installation of Omnisphere.



13. Click "Continue".


14. Read this important information about the installation process before you install. Click "Continue" to proceed.



15. Now choose the same installation destination as you did for Disc 1. Simply click "Install" to continue installing the large sound library files to the startup hard drive.



16. Enter the password for your Mac OSX user account to continue the installation.

00	-	Installer requires that you type your password.
Introducti Read Me Destinatic Installatic Installatic Summary	 Details ? 	Name: Spectra User Password: •••••• Cancel OK
		Change Install Location

17. The disc will now install. The installation of each disc will take up to 45 minutes. The installer will launch a separate script during the installation to install the large sound library files. The script window will update every 10 seconds to show the progress of the installation.

NOTE: The installer progress bar in the background will not move during the installation of the sound files. This is normal and installation progress will be shown via the "Time Elapsed" area of the script window.

During the installation, it is not recommended to use your computer for anything other than installing Omnisphere. The script window will beep and bounce in the dock if other applications are opened. This is because the script window wants to be the top window on screen at all times. Doing other things while installing probably won't jeopardize the installation, but you should be aware of how the installer script behaves. Selecting the "Hide" button will cause the script window to vanish until the installation completes.



18. Once the disc has completed installing, click "OK", then "Close", and continue by installing Disc 3 through 6 exactly as was just done for Disc 2. After installing Disc 6, the installation will be complete.



Once the installation of all six discs is complete, it's now time to open

Omnisphere in your host sequencer and authorize it.

Please consult the Authorization section for assistance with authorizing Omnisphere.

GETTING STARTED - Mac OS-X Installation to an External Drive

Follow this set of instructions to install the Omnisphere large sound library files onto an external hard drive. The Omnisphere plug-in files will be installed to the startup hard drive. You need 50GB of free space available on your external hard drive in order to continue.

NOTE: These screenshots are taken in OSX Leopard. Installation on OSX Tiger will look slightly different.

INSTALLING DISC 1

- 1. After inserting Omnisphere Disc 1 into the computer, open the disc to reveal its contents from the Desktop.
- 2. Open the Mac folder and then double-click "Omnisphere Disc 1" to begin the installation of Omnisphere.



3. Click "Continue".

00	🥪 Install Omnisphere Disc 1
	Welcome to the Omnisphere Disc 1 Installer
e Introduction	Yes will be availed a base of the stress stress stress
Read Me	install this software.
License	
Destination Select	
Installation Type	
Installation	
Summary	
-	
The second second	
Party Sector	
A.	Go Back Continue

4. Read this important information about the installation process before you install. Click "Continue" to proceed.



5. After reading through the licensing FAQs, click "Continue".



6. You will then be prompted by another window. Choose "Agree" if you fully understand the licensing agreement to continue.



7. Click "Change Install Location..." to select a custom installation location for the large sound library files of Omnisphere.

000	Install Omnisphere Disc 2 Core Library				
	Select a Destination				
Introduction	Select the volume where you want to install the Omnisphere Disc 2 Core Library software.				
Read Me Destination Select Installation Type					
Installation Summary	MCFMacBook External Drive 49.8 G8 available 291 G8 available 297 G8 total 298 G8 total				
A CONTRACTOR	Installing this software requires 7.0 GB of space. You have chosen to install this software in the folder "Spectrasonics" on the volume "External Drive".				
	Go Back Continue				

Now select an external drive for the installation. Remember that the drive needs 50GB of free space for the entire installation. After selecting the drive, select

"Choose Folder".

Create or select a folder on the external drive as the installation destination. In this example, a folder named "Spectrasonics Instruments" has been created and selected as the installation destination. After selecting a folder, click "Choose".

Then click "Continue" followed by "Install".

800	😺 install Omn	isphere Disc 1		
	Spectrasonics Instruments		(Q search	
DUVICES MCFMacBook Duk MCFMacBook MCFMacBook Omnisphere Disc 1 # Concol Doing PLACES	Spectrasonics instruments			
(New Folder)		labort.	(Cancel)	Choose)

8. Enter the password for your Mac OSX user account to continue the installation.

e Introducti e Read Me e Destinatic e Installatic	Details	Installer re password. Name: Password:	quires that Spectra Use	you type your		
e Installatio e Summary		Cuttoria		Cancel	ge Install Loca	ation)

9. The disc will now install. The installation of each disc will take up to 45 minutes. The installer will launch a separate script during the installation to install the large sound library files. The script window will update every 10 seconds to show the progress of the installation.

NOTE: The installer progress bar in the background will not move during the installation of the sound files. This is normal and installation progress will be shown via the "Time Elapsed" area of the script window.

During the installation, it is not recommended to use your computer for anything other than installing Omnisphere. The script window will beep and bounce in the dock if other applications are opened. This is because the script window wants to be the top window on screen at all times. Doing other things while installing probably won't jeopardize the installation, but you should be aware of how the installer script behaves. Selecting the "Hide" button will cause the script window to vanish until the installation completes.



10. Once the disc has finished installing, click "OK", then "Close", and continue by installing the next disc.

000	🥪 Install Omnisphere Disc 1
 Instant Introduction Read Me License Destination Select Installation Type Installation Summary 	Install Omnisphere Disc 1 allation completed successfully install Succeeded The software was successfully installed.
	Go Back Close

INSTALLING DISC 2 - DISC 6

The following instructions apply to Disc 2 through Disc 6.

- 11. After inserting Omnisphere Disc 2 into the computer, open the disc to reveal its contents from the Desktop.
- 12. Open the Mac folder, then double-click "Omnisphere Disc 2" to begin the installation of Omnisphere.



13. Click "Continue".



14. Read this important information about the installation process before you install. Click "Continue" to proceed.



15. Now choose the same installation destination as you did for Disc 1. Click "Change Install Location..."

Click Install to perform a standard installation of this software on the volume "MCFMacBook".
(Change Install Location)

Select the same external hard drive as you did in Disc 1 and click "Choose Folder".



16. Enter the password for your Mac OSX user account to continue the installation.



17. The disc will now install. The installation of each disc will take up to 45 minutes. The installer will launch a separate script during the installation to install the large sound library files. The script window will update every 10 seconds to show the progress of the installation.

NOTE: The installer progress bar in the background will not move during the installation of the sound files. This is normal and installation progress will be shown via the "Time Elapsed" area of the script window.

During the installation, it is not recommended to use your computer for anything other than installing Omnisphere. The script window will beep and bounce in the dock if other applications are opened. This is because the script window wants to be the top window on screen at all times. Doing other things while installing probably won't jeopardize the installation, but you should be aware of how the installer script behaves. Selecting the "Hide" button will cause the script window to vanish until the installation completes.

Select the same folder as was done for Disc 1, and click "Choose". Then click "Continue" followed by "Install".



18. Once the disc has completed installing, click "OK", then "Close", and continue by installing Disc 3 through 6 exactly as was just done for Disc 2. After installing Disc 6, the installation will be complete.

	🤪 Install Omnisphere Disc 2 Core Library
 Introduction Read Me Destination Select Installation Type Installation Summary 	t Installation completed successfully
	Go Back Close

Once the installation of all six discs is complete, it's now time to open

Omnisphere in your host sequencer and authorize it.

Please consult the <u>Authorization</u> section for assistance with authorizing Omnisphere.

GETTING STARTED - Windows Installation

INSTALLING DISC 1

1. Insert Omnisphere Disc 1 into the computer 's optical disc drive. Double-click "My Computer". Double-click the disc drive to view its contents and open the folder called "Windows".

2. Double-click setup.exe to begin the installation of Omnisphere.



3. After reading the Introduction, click "Next".

4. Read through the licensing FAQs and license agreement. If you agree to the terms of the license agreement, click "I accept the agreement". Then click "Next".

icense Aar	sement	
Please read	the following important information before continuing.	9
Please read agreement t	the following License Agreement. You must accept the terms of this before continuing with the installation.	8
	LICENSING FAQS PLEASE READ BEFORE INSTALLING	^
What's agreen	the principle of the standard license nent?	
• Single	user music production/performance = Allowed le users = Not Allowed	
• Multip		
Multip I accept	the agreement	

5. You will now need to select an installation destination for the VST plug-in version of Omnisphere on the computer. The default location is:

C:\Program Files\Steinberg\Vstplugins

If you would like to change where the plug-in is installed, click "Browse" and select an alternated installation destination. The RTAS version of Omnisphere is automatically installed during the installation for all users to:

C:\Program Files\Common Files\Digidesign\DAE\Plug-ins

NOTE: If you only use Pro Tools, use the default installation destination for the VST plug-in (C:\Program Files\Steinberg\Vstplugins). Click "Next" to continue.

J Setup - Omnisphere	- 0 💽
Select Folder For VST Plugin Where should the VST plugin DLL file be installed?	
Select the folder in which Setup should install the VST plugi	n DLL file, then click Next.
If you use only RTAS (Digidesign) plugins, you can ignore th	nis (just click Next).
C \Program Files \steinberg \vatplugins	Browse

6. Verify that the VST plug-in installation destination choice is correct and then click "Install".

Setup - Omnisphere		00
Ready to Install Setup is now ready to begin inst	talling Omnisphere on your computer.	
Click Install to continue with the change any settings.	installation, or click Back if you want to	review or
VST Plug-In DLL: C:\Pr RTAS Plug-In: C:\Progr	rogram Files\steinberg\vstplugins ram Files\Common Files\Digidesign\DAE	NPlug-Ins
4		•
	< Back Install	Canc

7. The Omnisphere plug-ins will now be installed.

Setup - Omnisphere	
Installing	
Please wait while Setup installs Omnisphere on your computer.	Č.
Extracting files	
C:\Program Files\steinberg\vstplugins\Omnisphere.dll	
	Cancel

8. Once the plug-in installation has completed, it will now be time to install the Omnisphere Core Library files. Click "Next to continue

9. Now select where to install the Omnisphere large sound library files. You will need 50GB of free hard drive space to install the data on all 6 discs. You must install every disc to the same location on your computer. The default installation destination is to the startup hard drive. If you would like to choose a custom install location to an external hard drive, select "Browse" and select a new installation location. That same location will need to be selected when installing the following discs. When ready to proceed, click "Next".

NOTE: FAT32 formatted drives cannot be used to store the STEAM data (because some STEAM files are larger than 4 GB). If you are not sure, open Windows Explorer, and find the drive (for example, "D:\") then right-click on the drive and selecte "Properties", and the properties window will display either NTFS (acceptable for STEAM) or FAT32 (not acceptable).

10. Verify the install destination for the Omnisphere Core Library files then choose "Install".

11. The Omnisphere Core Library files will now be installed. Please be patient as this process can take up to 45 minutes. When the installation has completed, please insert the next disc in the installation process.

INSTALLING DISC 2 - 6

The following instructions apply to Disc 2 through 6.

12. Insert Omnisphere Disc 2 into the computer 's optical disc drive. Double click "My Computer". Double-click the disc drive to view its contents and open the folder called "Windows".

13. Double-click setup.exe to begin the installation of Omnisphere.

14. After reading the Introduction, click "Next".

Omnisphere

15. Read through the licensing FAQs and license agreement. If you agree to terms of the license agreement, click "I accept the agreement". Then click "Next".

Please read the following important	information before continuing.	¢
Please read the following License A agreement before continuing with th	igreement. You must accept the terms of this ne installation.	
LICE PLEASE REA	NSING FAQS	-
What's the principle o agreement?	f the standard license	
Single user music proc	duction/performance = Allowed	
Multiple users = Not Al	lowed	
Multiple users = Not Al I accept the agreement	liowed	

16. Now select the same installation destination (the STEAM folder) for the Omnisphere large sound library files as was selected for Disc 1. You cannot install the discs to different installation destinations. Then click "Next".

15 Setup - Omnisphere DVD-2 Data	
Select Folder For Data Please select the \STEAM folder	
Browse and find the \STEAM folder you created when installing click Next.	9 Omnisphere disk 1, then
C:\Program Files\Spectrasonics\STEAM	Browse
(< <u>B</u> ack	Next > Cancel

17. Verify the installation destination matches the same installation destination from Disc 1 for the Omnisphere large sound library files then click "Install".

Ready to Install	
Setup is now ready to begin installing (Omnisphere DVD-2 Data on your computer.
Click Install to continue with the install change any settings.	ation, or click Back if you want to review or
STEAM data: C:\Program Files\	Spectrasonics\STEAM
	-
*	•

18. The Omnisphere Core Library files will now be installed. Please be patient as this process can take up to 45 minutes. When the installation has completed, please insert the next disc in the installation process. Install Disc 3 through 6 just as Disc 2 was installed.

serup - Onnispriere ov	/D-2 Data	
Installing Please wait while Setu	ip installs Omnisphere DVD-2 Data on your c	omputer.
Extracting files C:\\Soundsources\F	Factory\Core Library\Human Voices\Human	Voices 01.db

When all six discs have been installed, the installation is complete! It's now time to open Omnisphere in your host sequencer and authorize it.

Please consult the <u>Authorization</u> section for assistance with authorizing Omnisphere.

GETTING STARTED - Authorization

	Welcome to the Omnisphere Authorization System
	You are currently using Omnisphere in Demo mode, and we recommend that you authorize Omnisphere immediately.
Powen Synth	It is much easier to authorize Omnisphere when this computer is contected to the Internet. If this computer is not connected to the Internet or if you need more assistance with authorizing Omnisphere, please click the HELP button below.
	To authorize this computer:
R States	1. Please copy the Challenge code below by clicking the COPY button.
	2. Go to the Spectrasonics website to continue the authorization process. http://www.spectrasonics.net/authorization
	After you have completed the online authorization procedure, the website will then immediately give you a Response code that you can copy from the site.
	3. Paste that Response code below by clicking the PASTE button. (DO NOT ENTER YOUR SERIAL NUMBER HERE)
	4. Complete the authorization process by clicking the CONTINUE button.
	COPY Challenge code: @6cDe FgH/jK Lmn Op\$rs//z
	PASTE Response code:
SPECTRASONICS	
VIATUALIINSTRUMENTS	HELP

Omnisphere authorization can be done immediately from any computer connected to the Internet. There is a 4-day demo period from the time you first open the plug-in to authorize it if immediate Internet access is not available.

After opening Omnisphere in your host sequencer, an authorization window will appear. A Challenge Code will be provided. You will need this Challenge Code along with your Serial Number to complete the online Authorization process.

GETTING STARTED - Authorizing On A Computer Connected To The Internet

The music computer must be connected to the internet while following these instructions.

1. After instantiating Omnisphere into your sequencer, click the Omnisphere splash screen.



You will now see the Omnisphere Authorization System window:

	You are currently using Omnisphere in Demo mode, and we recommend that you authorize Omnisphere immediately.
Printy Stores	It is much easier to authorize Omnisphere when this computer is contected to the Internet. If this computer is not connected to the Internet or if you need more assistance with authorizing Omnisphere, please click the HELP button below.
	To authorize this computer:
	1. Please copy the Challenge code below by clicking the COPY button.
	2. Go to the Spectrasonics website to continue the authorization process. http://www.spectrasonics.net/authorization
	After you have completed the online authorization procedure, the website will then immediately give you a Response code that you can copy from the site.
	3. Paste that Response code below by clicking the PASTE button. (DO NOT ENTER YOUR SERIAL NUMBER HERE)
	4. Complete the authorization process by clicking the CONTINUE button.
	COPY Challenge code: @6cDe FgH/jK Lmn Op\$rs//z
	PASTE Response code:
	1

2. Click the COPY button to copy the challenge code. Log in to the Spectrasonics website with your User Account name and password

http://www.spectrasonics.net/authorization

You will be taken to your User Account page. If you don't yet have a User Account, you can create one. For further assistance, check out the tutorial video

3. If this is your first authorization of Omnisphere, you'll need to add it to your account by pressing the "Add a product to your account" button under the Registered Products table.

		User Acc	ount: Spectra User	
You are logged in as spectrauser				
Logout				
our Profile:				
Username:	spectrauser			
Name:	Spectra User			
Email:	nail: spectrauser@email.com			
Address: 123 Happy St. Funkytown FL, 00001 USA				
Phone:	8888704223			Edit User Information
Instrument	Serial No.	License Type	Get Updates	Get Authorization
Trilian	00000443	Standard	Omnisphere Updates	Omnisphere Authorization
Stylus RMX	0000032	Standard	Stylus RMX Updates	Stylus RMX Authorization
Trilogy	0000058	Standard	Trilogy Updates	Trilogy Authorization
VOTE: Be sur ake advantag Add a produ	e to register y ge of special	your complete co upgrade offers in	ollection of Spectrasoni n the future!	cs Instruments in order to

4. Fill out all of your personal information on this page. Select Omnisphere as your product. When finished, click "Next" at the bottom of the page.

Add a product to your account	
Enter Serial #	Submit

5. You'll then paste your Challenge code in the field on the Authorization page. Please enter the details about your Computer as well, as it will be necessary if you require tech support.

AUTHORIZATION	
User Account: Spectra User	
Serial number: 0000000 - Omnisphere	
Paste the Challenge Code: SAQXdwBs/ /+NvZCQ?M zTygMAAAA	
Computer: Macbook Pro \$ Operating System: Mac OSX 10.6x Snow Leopard \$ Sequencer/Host: Traction \$	
What kind of new sounds would you be interested in? Lesta Diamond's Reggaeton Grooves SUBMIT	

6. You'll then receive a Response Code, which you'll select with your cursor and copy (Control-C on Windows or Command-C on Mac):

AUTHORIZATION
User Account: Spectra User
Authorization Successful!
Here is the Response code to authorize your plug-in Omnisphere:
GBRDxF7SXnd UpXszHVW:zR fLt75s2mpeK mFVfz+Lv7Kd BF2yqf%jUWW UaBskbyfNfw hMd%29
Copy and paste this code into the response field in the plug-in authorization window by pressing the PASTE button in the Omnisphere plug-in. You may also type in the response code, but please be careful to enter it exactly as it appears here. Trilian will then instruct you to reopen the plug-in. If the authorization was successful, you will now be able to use the plug-in.
That's it!
We'll send you a verification email with a copy of your response numbers and registration info.
If you have any problems with the authorization, please email us at:
info@spectrasonics.net
Thanks for your purchase and please now go to the Updates page to verify that you have the latest version of the plug-inhave fun and let us know what you think!

7. Return back to Omnisphere. Click PASTE and the Response Code will now be displayed in Omnisphere.

	Welcome to the Omnisphere Authorization System
	You are currently using Omnisphere in Demo mode, and we recommend that you authorize Omnisphere immediately.
Press Street	It is much easier to authorize Omnisphere when this computer is contected to the Internet. If this computer is not connected to the Internet or if you need more assistance with authorizing Omnisphere, please click the HELP button below.
	To authorize this computer:
	1. Please copy the Challenge code below by clicking the COPY button.
	 Go to the Spectrasonics website to continue the authorization process. http://www.spectrasonics.net/authorization
	After you have completed the online authorization procedure, the website will then immediately give you a Response code that you can copy from the site.
	3. Paste that Response code below by clicking the PASTE button.
	4. Complete the authorization process by clicking the CONTINUE button.
	COPY Challenge code: @6cDe FgH/jK Lmn Op\$rs//z
	PASTE Response code:
	AbC dE+//FgH iJ=kLmn0pQ AbC dE+//FgH iJ=kL\\\n0PQ AbC dE+//FgH iJ=kLmn09Q 7AbC dE+//
SPECIRASONICS	HELP

8. Click CONTINUE

9. Now remove Omnisphere from your host sequencer.

10. Re-insert Omnisphere into your host.

Omnisphere will now be authorized and fully functional.

GETTING STARTED - Authorizing On A Computer NOT Connected To The Internet

If your computer is not connected to the Internet, please follow these instructions for authorizing Omnisphere. You will need a flash drive, hard drive, or blank CD/DVD available for use when following these instructions.

1.After instantiating Omnisphere into your sequencer, click the Omnisphere splash screen:



2. Click the COPY button to copy the challenge code.

	Welcome to the Omnisphere Authorization System
	 You are currently using Omnisphere in Demo mode, and we recommend that you authorize Omnisphere immediately. It is much easier to authorize Omnisphere when this computer is contected to the Internet. If this computer is not connected to the Internet or if you need more assistance with authorizing Omnisphere, please click the HELP button below. To authorize this computer: Please copy the Challenge code below by clicking the COPY button. Go to the Spectrasonics website to continue the authorization process. http://www.spectrasonics.net/authorization After you have completed the online authorization procedure, the website will then immediately give you a Response code below by clicking the PASTE button. Paste that Response code below by clicking the PASTE button.
	4. Complete the authorization process by clicking the CONTINUE button.
SPECTRASONICS	HELP CONTINUE

3. Open a text editor application (such as Text Edit (Mac), Notepad / Wordpad (PC)). Paste into a blank new document. On a Mac, hold COMMAND and press 'V'. On a PC, hold CTRL and press 'V'. The challenge code will now appear in the document. Save the document as a

Rich Text File (RTF) with a filename of your choice.

4. Move the RTF file to a flash drive, hard drive, or burn it to a blank CD/DVD. You will need to transport this document over to a computer that has an Internet connection. Flash drives are recommended because they are cheap and quickly move files between computers.

5. Open the RTF file on a computer with an Internet connection. Highlight the entire challenge code in the document and Copy it. On a Mac, hold COMMAND and press 'C'. On a PC, hold CTRL and press 'C'.

6. Log in to the Spectrasonics website with your User Account name and password

http://www.spectrasonics.net/authorization

You will be taken to your User Account page. If you don't yet have a User Account, you can create one. For further assistance, check out the tutorial video.

7. If this is your first authorization of Omnisphere, you'll need to add it to your account by pressing the "Add a product to your account" button under the Registered Products table.

User Account: Spectra User					
<u>User Account Spectra User</u>					
		fou are log	gged in as spectrauser		
			Logout		
Your Profile:					
Username:	spectrauser				
Name:	Spectra Use	r			
Email:	spectrauser	@email.com			
Address:	123 Happy St. Funkytown FL, 00001 USA				
Phone:	8888704223 Edit User Information				
Current Prod	ucts Register	ed:			
Instrument	Serial No.	License Type	Get Updates	Get Authorization	
Trilian	00000443	Standard	Omnisphere Updates	Omnisphere Authorization	
Stylus RMX	0000032	Standard	Stylus RMX Updates	Stylus RMX Authorization	
Trilogy	0000058	Standard	Trilogy Updates	Trilogy Authorization	
	-		· /	,	
NOTE: Be sure to register your complete collection of Spectrasonics Instruments in order to					
take advantage of special upgrade offers in the future!					
Add a product to your account					

8. Enter your Omnisphere serial number in the box that appears below the button:

Add a product to your account
Enter Serial #

9. You'll then paste your Challenge code in the field on the Authorization page. Please enter the details about your Computer as well, as it will be necessary if you require tech support.

AUTHORIZATION					
User Account: Spectra User					
Serial number: 0000000 - Omnisphere					
Paste the Challenge Code: SAgXdwBs/ /+NvZCQ?M zTygMAAAA					
Computer: Macbook Pro 🗘					
Operating System: Mac OSX 10.6x Snow Leopard ≑					
Sequencer/Host: Traction					
What kind of new sounds would you be interested in?					
Lesta Diamond's Reggaeton Grooves					
SUBMIT					

10. You'll then receive a Response Code, which you'll select with your cursor and copy (Control-C on Windows or Command-C on Mac):

AUTHORIZATION

User Account: Spectra User

Authorization Successful!

Here is the Response code to authorize your plug-in Omnisphere:

GBRDxF7SXnd UpXszHVW:zR fLt75s2mpeK mFVfz+Lv7Kd BF2yqf%jUWW UaBskbyfNfw hMd%29

Copy and paste this code into the response field in the plug-in authorization window by pressing the PASTE button in the Omnisphere plug-in. You may also type in the response code, but please be careful to enter it exactly as it appears here. Trilian will then instruct you to reopen the plug-in. If the authorization was successful, you will now be able to use the plug-in.

That's it!

We'll send you a verification email with a copy of your response numbers and registration info.

If you have any problems with the authorization, please email us at:

info@spectrasonics.net

Thanks for your purchase and please now go to the **Updates** page to verify that you have the latest version of the plug-in...have fun and let us know what you think!

11. Open up a blank new document in a text editor application. Paste into the document. The Response Code will now appear in the document. Save the document as a Rich Text File (RTF) with a filename of your choice.

12. Move the RTF file to a flash drive, hard drive, or burn it to a blank CD/DVD. You will need to transport this document back over to the music computer.

13. Open up the RTF file which contains the Response Code on your music computer. Select and highlight the Response Code in the document and Copy it. On a Mac, hold COMMAND and press 'C'. On a PC, hold CTRL and press 'C'.

14. Return back to Omnisphere. Click PASTE and the Response Code will now be displayed in Omnisphere.

	 Welcome to the Omnisphere Authorization System You are currently using Omnisphere in Demo mode, and we recommend that you authorize Omnisphere immediately. It is much easier to authorize Omnisphere when this computer is contected to the Internet. If this computer is not connected to the Internet or if you need more assistance with authorizing Omnisphere, please click the HELP button below. To authorize this computer: Please copy the Challenge code below by clicking the COPY button. Go to the Spectrasonics website to continue the authorization process. http://www.spectrasonics.net/authorization After you have completed the online authorization procedure, the website will then immediately give you a Response code below by clicking the PASTE button. Paste that Response code below by clicking the CONTINUE button. Complete the authorization process by clicking the CONTINUE button.
Spectrasonics	COPY Challenge code: @6cDe FgH/jK Lmn Op\$rs//z PASTE Response code: AbC dE+//FgH iJ=kLmn0pQ AbC dE+//FgH iJ=kL\\\n0PQ AbC dE+//FgH iJ=kLmn09Q 7AbC dE+// HELP CONTINUE

14. Click CONTINUE.

- 15. Now remove Omnisphere from your host sequencer.
- 16. Re-insert Omnisphere into your host. Omnisphere will now be authorized and fully functional.

GETTING STARTED - Demo Mode

We recommend that you authorize immediately, but if you would rather authorize later, then you may activate the Demo period, which will last 4 days.

This can be useful if you want to try Omnisphere temporarily on a system to test its performance. In Demo mode, saving is disabled and audio artifacts will begin to appear in the signal after a period of time (loading of songs and patches will work though). You will still be able to authorize during or after the demo period.

After pressing the DEMO MODE button you will see this screen:



Go back to the host software and completely remove this instance of the Omnisphere plug-in. Reopen it and you will be in Demo Mode. It will say Demo Mode at the top of the plug-in and there will be an Authorize button below the Utility Menu button.

8	Inst 1	0
	1 2 3 4 5 6 7 8 MULTI SYSTEM	
1		1

If you want to authorize during the demo period, press the Authorize button, and you will see the Omnisphere Authorization System window. After the 4-day demo period has finished, you will be sent back to the Authorization System Window.

GETTING STARTED – Authorization Troubleshooting



If you are returned to the Welcome to the Omnisphere Authorization System page or the demo mode version of Omnisphere after reopening Omnisphere, then that means the plug-in did not accept the response code and it may have been incorrectly entered. You can check your response code by looking at the email that was sent to you after you registered. Remember that the codes are case sensitive. Try authorizing again with the instructions given in the <u>Authorizing</u> section. Make sure you are entering the response code given by the website and NOT the serial number from your user guide.

While in demo mode, if you accidentally press the Authorize button, simply close the interface window and reopen it.

NOTE: If you need further assistance, please contact technical support at info@spectrasonics.net

GETTING STARTED – Moving The STEAM Directory

📁 Soundtrack Pro	⊳	🖳 🧊 STEAM		🧊 Omnisphere 🕨		📁 Defaults	►
Spectrasonics						Documentation	⊳
🧊 Steinberg	⊳					📁 Settings Library	⊳
📁 Syncrosoft	⊳					🧊 Soundsources	⊳
📁 Syncrosoft Soft-	⊳						- 1
📁 Tracktion 3	⊳						- 1
📁 Uvi-Engine	⊳	X					- 1
🧊 WaveBurner	⊳	*					- 1
📁 Xcode	⊳	П	1	I	Ш		П

After installation, you can easily move the large STEAM directory containing all the sound files to a secondary drive if you wish to free up space on your original installation drive.

WINDOWS - MOVING THE STEAM DIRECTORY AFTER INSTALLATION

• Drag or copy the STEAM folder from your installation drive (C:\Program Files\Spectrasonics) to the hard drive location of your choice.

This can be another drive partition, a secondary internal drive or an external hard drive such as a Firewire or USB2 hard drive, etc.

- Next, right-click the SAGE folder in the new location to create a "Shortcut To STEAM".
- Next, copy the shortcut to C:\Program Files\Spectrasonics.

• Finally, make certain to remove the "Shortcut To" from the name (including removing the spaces), leaving the folder shortcut named STEAM

MAC OSX - MOVING THE STEAM DIRECTORY AFTER INSTALLATION

• Drag or copy the STEAM folder from your installation drive

(For Example: Macintosh HD/Library/Application Support/Spectrasonics)

to the hard drive location of your choice. This can be another drive partition, a secondary internal drive or an external hard drive such as a Firewire or USB2 hard drive, etc.

• Next, hold (Apple key and Option key) on the keyboard, click and drag the **STEAM** folder to the desktop to create an alias of the folder named **STEAM**.

• Next, move the STEAM alias from the desktop to Macintosh HD/Users/Username/Library/Application Support/Spectrasonics

GETTING STARTED - Video Tutorials



There are hours of informative online video tutorials available to registered Spectrasonics users on the Spectrasonics website.

Selecting "Video Tutorials" from the Utility Menu provides convenient access to all available tutorials. Tutorial Videos are located online in the <u>Support Knowledge Base</u>. You can play them directly or download them to your system for later viewing.

MIDI Learn and Automation	•
Initialize Multi Clear Multi Save Multi	
Initialize Patch Clear Patch Save Patch Save Patch Quick Copy Part Paste Part	
Initialize Layer Clear Layer Copy Layer Paste Layer	
Reference Guide Video Tutorials	

You will also find links to relevant video tutorials throughout this Reference Guide.

Spectrasonics is always adding additional videos, so check back from time to time to check out the new ones.

GETTING STARTED - Using Omnisphere Stand-Alone on a Computer



Omnisphere was designed to work as a plug-in which closely integrates within your main sequencing application and computer. We recommend using it this way for best results.

Alternatively, Omnisphere may also be used with a simple host application to work as a sound module for live performance. Omnisphere has specials modes which are designed to make it an ideal instrument for use in live situations.

Thirdly, you can also use Omnisphere on dedicated hardware music computers like the MUSE Receptor and NEKO Keyboards, which essentially are PCs dedicated for music performance.

However, there are a few things to keep in mind with using Omnisphere on a standalone system:

1. Omnisphere must reside in a host application on the other computer

2. Omnisphere is a plug-in and does not function as a stand-alone application. It must function as a Virtual Instrument plug-in within a host regardless of what computer it's on. There are many free and inexpensive VST and Audio Unit host applications that will run Omnisphere.

You can get a comprehensive list of hosts on www.kvraudio.com

Latency and Timing accuracy

As a result of being on a stand-alone computer, the latency between MIDI and Audio interfaces will cause Omnisphere to play later than it would on the main sequencing computer, so you will need to compensate for the latency. Also, when Omnisphere is used on the main computer, the timing of playback is extremely tight - sample-accurate in most cases. On a slave system, this type of accuracy is not currently possible.

GETTING STARTED - Checking For Updates

The latest versions of the software, Soundsource library, and patch library for

Omnisphere can be found on our website at:

http://www.spectrasonics.net/updates

With Omnisphere, we've included a way to quickly check for updates directly from the plug-in.

Simply click the Spectasonics logo to reveal the credits page. At the top left, select the button 'Check For Updates':

CHECK FOR UPDATES Software version 1.0h Soundsources version 1.0 Pstches version 1.0	SPECTRASONICS
--	---------------

Selecting it will compare the current installed versions on your system with the latest available updates on the Spectrasonics website. Remember there are separate versions for the Omnisphere software, Soundsources and patches, so make sure that all three are always up to date.



System Status

	Your System	Latest Version	Status
Software	1.0h	1.0h	•
Soundsources	1.0	1.01	•
Patches	1.0	1.01	•

At least one of the components needs to be updated in your system.



QUICK START



»Getting Started

Ouickstart System Recommendations Installation on Mac OSX Installation on WINDOWS Authorization Demo Mode Authorization Troubleshooting Moving the STEAM Directory Video Tutorials Standalone Use Updates

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- »Arpeggiator
- »The Mixer
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- »Live Mode
- » System
- » Support
- »Glossary
- »Credits
- »<u>Legal</u>

GETTING STARTED - Quickstart



This Quickstart provides an overview of the essential things you will need to know in order to get started using Omnisphere.

• Omnisphere is a software instrument plug-in, and requires host software in order to run

• Omnisphere can be a system intensive instrument. A system with a fast CPU and plenty of RAM will greatly enhance performance. Running at the minimum system requirements will limit the number of simultaneous sounds, FX and polyphony available.

1. Install Omnisphere

Installing will take 3 ~ 4 hours, and will require 50 GB of free hard drive space

2. Authorize the Plug-In

Authorization can be done immediately from any computer connected to the Internet

3. Get Everything Updated

Make sure you have the latest versions of the Software, Soundsources and Patches:

- Open Omnisphere and click on the Spectrasonics logo
- Select the button labeled "Check for Updates" to open the System Status page
- Status indicators in red mean that an update is necessary. Click the "Get Updates" button to download them.
- After installing the updates, Omnisphere is ready to go!

NOTE: Be sure to quit your host software before installing the downloaded updates.

4. Use Omnisphere Multitimbrally

- Omnisphere is a multi-timbral instrument, so you can use a single instance to load and play eight different sounds on different MIDI channels.
- Setup your host software for multi-timbral operation

5. Loading Sounds

There are three types of sound libraries in Omnisphere:

Patches, Multis and Soundsources

To load a Patch:

- · Select a Part Number Button in the Header
- · Click on the Patch Name Display just below the large Omnisphere title
- The Patch Browser will open, allowing you to select and load Patches

To load a Multi:

- · Click the Multi Name Display in the Omnisphere Header
- The Multi Browser will open, allowing you to select and load Multis

To load a raw Soundsource:

- · Select "Clear Part" from the Utility Menu in the Header
- · Click the Soundsource Name Display below Layer A

• The Soundsource Browser will open, allowing you to select and load Soundsources.

6. Watch essential Video Tutorials

We have produced quite a few online <u>video tutorials</u> for Omnisphere, and we encourage you to view and download them from our support website.

To begin, please view the following essential videos:

- Getting Started
- <u>Omnisphere Overview</u>
- Browser Basics

These videos will provide the minimum information every Omnisphere user needs to start working with Omnisphere.

7. Explore and Learn

For more in-depth information, watch additional tutorials and explore out this Reference Guide - which is the primary manual for Omnisphere. This guide can be viewed on any computer and can be printed and searched for easy access to find the information you need.

• If you're new to synthesis, we recommend starting with the chapters on <u>Concepts</u>, <u>The Mixer</u>, <u>Browsers</u>, <u>Main Pages</u>, <u>Arpeggiator</u> and <u>Live Mode</u>.

• If you have some experience with synthesis, be sure to check out the chapters on The FX Rack, Automation & MIDI Learn, The Edit Page and Stack Mode.

• Experienced synthesists can go in-depth with zooming concepts that are covered in the chapters on <u>Modulation</u>, <u>Oscillators</u>, <u>Filters</u>, <u>LFOs</u>, and <u>Envelopes</u>.

8. Support Resources

Online resources are available that can answer most technical questions. Please login and visit our Knowledge Base at: <u>http://support.spectrasonics.net</u>

9. Have Fun!

Enjoy using Omnisphere and we hope you make some great music with it!

-The Spectrasonics Team



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GETTING STARTED - System Requirements

SYSTEM REQUIREMENTS FOR ALL USERS:

- 2.0 GHz or higher processor (Intel Core2Duo or higher recommended)
- 2GB RAM (4GB or more recommended for multis)
- Dual Layer compatible DVD-ROM drive
- 50GB of free hard drive space

Mac Recommendations:

- OSX 10.4.9 or higher
- AudioUnit, VST 2.4 or RTAS capable host software
- Native Universal Binary for Intel Macs (G5 PowerPC compatible)
- 6GB of RAM (or more) if using the Sample File Server

Windows Recommendations:

- VST 2.4 or RTAS capable host software
- Microsoft XP SP2 or later
- Microsoft Windows 7/Vista compatible
- Native 64-bit and 32-bit on Windows



GETTING STARTED - Mac OS-X Installation on the Startup Drive

Follow this set of instructions to install the Omnisphere large sound library files onto your startup hard drive. You need almost 50GB of free space available on your startup hard drive in order to continue. If you want to install Omnisphere to an external hard drive, please skip to the MAC OSX - CUSTOM INSTALLATION set of instructions <u>here</u>.

NOTE: These screenshots are taken in OSX Leopard. Installation on OSX Tiger will look slightly different.

INSTALLING DISC 1

1. After inserting Omnisphere Disc 1 into the computer, open the disc to reveal its contents from the Desktop.

2. Open the Mac folder, then double-click "Omnisphere Disc 1" to begin the installation of Omnisphere.



3. Click "Continue".



»Getting Started

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- »The Mixer
- »Stack Mode
- »Live Mode
- »System
- »<u>Support</u>
- »Glossary
- »Credits
- »<u>Legal</u>
4. Read this important information about the installation process before you install. Click "Continue" to proceed.



5. After reading through the licensing FAQs, click "Continue".



6. You will then be prompted by another window. Choose "Agree" if you fully understand the licensing agreement to continue.

e co co	🤪 Install Omnisphere Disc 1	-
	To continue installing the software you must agree to the terms of the software license agreement.	
e Rei E Lic	Click Agree to continue or click Disagree to cancel the installation and quit the Installer.	0
© De © Ins	Read License Disagree Agree	
• Instal • Summ	Any uses that are not allowed need additional permission or a special license from Spectrasonics. Are there any legal limitations to how I can use Omnisphere? The main limitation is that you are not allowed to use it to make a sample library or another kind of sample-based product. You are also restricted from giving away or posting online any loops or samples created using Omnisphere. However, you are able to use Omnisphere in all musical recording applications without paying any additional licenses.) • •

7. Simply click "Install" to agree to begin installing Omnisphere to the startup hard drive. This is the default installation. Remember there needs to be almost 50GB of free space available on the startup drive in order to completely install Omnisphere.

e Introduction Om	et the volume where you want to install the
	nisphere Disc 1 software.
9 Read Me 9 License 9 Destination Select	
Installation Type So Installation	ACFMacBook 1.3 G8 available 297 G8 total
I Summary Inst	alling this software requires 906 MB of space. have chosen to install this software in the folder ectrasonics" on the volume "MCFMacBook".
	(Choose Folder)

8. Enter the password for your Mac OSX user account to continue the installation.

© Introducti © Read Me		Installer re password. Name: Password:	Spectra User	you type your		F
Installatic Installatio Summary	Details	-	-	Cancel	ОК	ļ
			~~~~	Chan	ge Install Loc	ation)

9. The disc will now install. The installation of each disc will take up to 45 minutes. The installer will launch a separate script during the installation to install the large sound library files. The script window will update every 10 seconds to show the progress of the installation.

NOTE: The installer progress bar in the background will not move during the installation of the sound files. This is normal and installation progress will be shown via the "Time Elapsed" area of the script window.

During the installation, it is not recommended to use your computer for anything other than installing Omnisphere. The script window will beep and bounce in the dock if other applications are opened. This is because the script window wants to be the top window on screen at all times. Doing other things while installing probably won't jeopardize the installation, but you should be aware of how the installer script behaves. Selecting the "Hide" button will cause the script window to vanish until the installation completes.

	Installing Core Library files
e Introduction e Read Me	The large Omnisphere core library files are now being installed. This disc may take up to 45 minutes. Time elapsed: 3 minutes Hide
Destination Sele     Installation Typ     Installation     Summary	e Preparing Omnisphere Disc 1 Running Omnisphere Disc 1 Core Library Installer script
	Co Back Continue

10. Once the disc has finished installing, click "OK", then "Close", and continue by installing the next disc.



# **INSTALLING DISC 2 - DISC 6**

The following instructions apply to Disc 2 through 6.

11. After inserting Omnisphere Disc 2 into the computer, open the disc to reveal its contents from the Desktop.

12. Open the Mac folder, then double-click "Omnisphere Disc 2" to begin the installation of Omnisphere.



13. Click "Continue".



14. Read this important information about the installation process before you install. Click "Continue" to proceed.



15. Now choose the same installation destination as you did for Disc 1. Simply click "Install" to continue installing the large sound library files to the startup hard drive.



16. Enter the password for your Mac OSX user account to continue the installation.

0 Introducti 0 Read Me 0 Destinatic		Installer rec password. Name: Password:	quires that Spectra User	you type your		
e Installatio e installatio e Summary	⑦	-		Cancel	ОК	l
			2	Chang	je Install Loca	ition)

17. The disc will now install. The installation of each disc will take up to 45 minutes. The installer will launch a separate script during the installation to install the large sound library files. The script window will update every 10 seconds to show the progress of the installation.

NOTE: The installer progress bar in the background will not move during the installation of the sound files. This is normal and installation progress will be shown via the "Time Elapsed" area of the script window.

During the installation, it is not recommended to use your computer for anything other than installing Omnisphere. The script window will beep and bounce in the dock if other applications are opened. This is because the script window wants to be the top window on screen at all times. Doing other things while installing probably won't jeopardize the installation, but you should be aware of how the installer script behaves. Selecting the "Hide" button will cause the script window to vanish until the installation completes.

0.0	The large Omnisphere core library files are now being installed. This disc may take up to 45 minutes.
9 Introduction 9 Read Me 9 Destination Se	Time elapsed: 3 minutes
Installation Type Installation Summary	Preparing Omnisphere Disc 2 Core Library Running Omnisphere Disc 2 Core Library Installer script
	Go Back Contin

18. Once the disc has completed installing, click "OK", then "Close", and continue by installing Disc 3 through 6 exactly as was just done for Disc 2. After installing Disc 6, the installation will be complete.



Once the installation of all six discs is complete, it's now time to open Omnisphere in your host sequencer and authorize it.

Please consult the <u>Authorization</u> section for assistance with authorizing Omnisphere.



# **GETTING STARTED - Windows Installation**

#### **INSTALLING DISC 1**

1. Insert Omnisphere Disc 1 into the computer 's optical disc drive. Double-click "My Computer". Double-click the disc drive to view its contents and open the folder called "Windows".

2. Double-click setup.exe to begin the installation of Omnisphere.



3. After reading the Introduction, click "Next".

4. Read through the licensing FAQs and license agreement. If you agree to the terms of the license agreement, click "I accept the agreement". Then click "Next".

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cense Agreement	
Please read the following important information before continuing.	0
Please read the following License Agreement. You must accept the terms of t agreement before continuing with the installation.	his
LICENSING FAQS PLEASE READ BEFORE INSTALLING	ŕ
What's the principle of the standard license agreement?	
Single user music production/performance = Allower	ed 🛫
I Multiple users = Not Allowed	

5. You will now need to select an installation destination for the VST plug-in version of Omnisphere on the computer. The default location is:

#### C:\Program Files\Steinberg\Vstplugins

If you would like to change where the plug-in is installed, click "Browse" and select an alternated installation destination. The RTAS version of Omnisphere is automatically installed during the installation for all users to:

#### C:\Program Files\Common Files\Digidesign\DAE\Plug-ins

NOTE: If you only use Pro Tools, use the default installation destination for the VST plug-in (C:\Program Files\Steinberg\Vstplugins). Click "Next" to continue.

Where should the VST plugin DLL file be inst.	alled?	Č
Select the folder in which Setup should install	the VST plugin DLL	file, then click Next.
If you use only RTAS (Digidesign) plugins, yo	u can ignore this (jus	t click Next).
C \Program Files\steinberg\vstplugins		Browse
	< Park	Mard S. Canoal

6. Verify that the VST plug-in installation destination choice is correct and then click "Install".

Setup - Omnisphere		
Ready to Install		
Setup is now ready to begin installing Omr	hisphere on your computer.	C
Click Install to continue with the installation change any settings.	n, or click Back if you want to review or	
VST Plug-In DLL: C:\Program File RTAS Plug-In: C:\Program Files\C	s\steinberg\vstplugins Common Files\Digidesign\DAE\Plug-Ins	*
*	.*	
		I

7. The Omnisphere plug-ins will now be installed.

Setup - Omnisphere	
Installing	
Please wait while Setup installs Omnisphere on your computer.	Ċ
Extracting files	
C:\Program Files\steinberg\vstplugins\Omnisphere.dll	
	Cancel

8. Once the plug-in installation has completed, it will now be time to install the Omnisphere Core Library files. Click "Next to continue

9. Now select where to install the Omnisphere large sound library files. You will need 50GB of free hard drive space to install the data on all 6 discs. You must install every disc to the same location on your computer. The default installation destination is to the startup hard drive. If you would like to choose a custom install location to an external hard drive, select "Browse" and select a new installation location. That same location will need to be selected when installing the following discs. When ready to proceed, click "Next".

NOTE: FAT32 formatted drives cannot be used to store the STEAM data (because some STEAM files are larger than 4 GB). If you are not sure, open Windows Explorer, and find the drive (for example, "D:\") then right-click on the drive and selecte "Properties", and

the properties window will display either NTFS (acceptable for STEAM) or FAT32 (not acceptable).

10. Verify the install destination for the Omnisphere Core Library files then choose "Install".

11. The Omnisphere Core Library files will now be installed. Please be patient as this process can take up to 45 minutes. When the installation has completed, please insert the next disc in the installation process.

#### **INSTALLING DISC 2 - 6**

The following instructions apply to Disc 2 through 6.

12. Insert Omnisphere Disc 2 into the computer 's optical disc drive. Double click "My Computer". Double-click the disc drive to view its contents and open the folder called "Windows".

13. Double-click setup.exe to begin the installation of Omnisphere.

14. After reading the Introduction, click "Next".

15. Read through the licensing FAQs and license agreement. If you agree to terms of the license agreement, click "I accept the agreement". Then click "Next".

icense Agreement	
Please read the following important information before continuing.	0
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.	
LICENSING FAQS	~
PLEASE READ BEFORE INSTALLING	1.3
What's the principle of the standard license agreement?	
Single user music production/performance = Allowed     Multiple users = Not Allowed	
I accept the agreement	
I do not accept the agreement	
2	

16. Now select the same installation destination (the STEAM folder) for the Omnisphere large sound library files as was selected for Disc 1. You cannot install the discs to different installation destinations. Then click "Next".



17. Verify the installation destination matches the same installation destination from Disc 1 for the Omnisphere large sound library files then click "Install".

Ready to Install		
Setup is now ready to begin installing C	Imnisphere DVD-2 Data on your	computer.
Click Install to continue with the installa change any settings.	ition, or click Back if you want to	o review or
STEAM data: C:\Program Files\S	opectrasonics\STEAM	^
4		

18. The Omnisphere Core Library files will now be installed. Please be patient as this process can take up to 45 minutes. When the installation has completed, please insert the next disc in the installation process. Install Disc 3 through 6 just as Disc 2 was installed.



When all six discs have been installed, the installation is complete! It's now time to open Omnisphere in your host sequencer and authorize it.

Please consult the <u>Authorization</u> section for assistance with authorizing Omnisphere.



Omnisphere authorization can be done immediately from any computer connected to the Internet. There is a 4-day demo period from the time you first open the plug-in to authorize it if immediate Internet access is not available.

After opening Omnisphere in your host sequencer, an authorization window will appear. A Challenge Code will be provided. You will need this Challenge Code along with your Serial Number to complete the online Authorization process.

» The Mixer » Stack Mode

» The FX Page

» Arpeggiator

- » Live Mode
- » System
- » Support
- » Glossary
- » Credits
- » Legal

# **GETTING STARTED - Authorization**



# » Getting Started

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# **GETTING STARTED - Demo Mode**

We recommend that you authorize immediately, but if you would rather authorize later, then you may activate the Demo period, which will last 4 days.

This can be useful if you want to try Omnisphere temporarily on a system to test its performance. In Demo mode, saving is disabled and audio artifacts will begin to appear in the signal after a period of time (loading of songs and patches will work though). You will still be able to authorize during or after the demo period.

After pressing the DEMO MODE button you will see this screen:



Go back to the host software and completely remove this instance of the Omnisphere plug-in. Reopen it and you will be in Demo Mode. It will say Demo Mode at the top of the plug-in and there will be an Authorize button below the Utility Menu button.



If you want to authorize during the demo period, press the Authorize button, and you will see the Omnisphere Authorization System window. After the 4-day demo period has finished, you will be sent back to the Authorization System Window.



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# **GETTING STARTED – Authorization Troubleshooting**



If you are returned to the Welcome to the Omnisphere Authorization System page or the demo mode version of Omnisphere after reopening Omnisphere, then that means the plug-in did not accept the response code and it may have been incorrectly entered. You can check your response code by looking at the email that was sent to you after you registered. Remember that the codes are case sensitive. Try authorizing again with the instructions given in the <u>Authorizing</u> section. Make sure you are entering the response code given by the website and NOT the serial number from your user guide.

While in demo mode, if you accidentally press the Authorize button, simply close the interface window and reopen it.

NOTE: If you need further assistance, please contact technical support at <u>info@spectrasonics.net</u>



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# Soundtrack Pro Spectrasonics Steinberg

6	Steinberg	⊳				Settings Library	L
6	Syncrosoft	⊳				Soundsources 🛛 🕨	L
Ď	Syncrosoft Soft-	⊳					L
	Tracktion 3	⊳					
Ĉ	Uvi-Engine	⊳	¥				L
C	WaveBurner	⊳	v				L
Ć	Xcode	⊳	11	Ш	П		Ш

After installation, you can easily move the large STEAM directory containing all the sound files to a secondary drive if you wish to free up space on your original installation drive.

#### WINDOWS - MOVING THE STEAM DIRECTORY AFTER INSTALLATION

• Drag or copy the **STEAM** folder from your installation drive (C:**Program Files\Spectrasonics)** to the hard drive location of your choice.

This can be another drive partition, a secondary internal drive or an external hard drive such as a Firewire or USB2 hard drive, etc.

- Next, right-click the SAGE folder in the new location to create a "Shortcut To STEAM".
- Next, copy the shortcut to C:\Program Files\Spectrasonics.

• Finally, make <u>certain</u> to remove the **"Shortcut To "** from the name (including removing the spaces), leaving the folder shortcut named **STEAM** 

#### MAC OSX - MOVING THE STEAM DIRECTORY AFTER INSTALLATION

• Drag or copy the STEAM folder from your installation drive

#### (For Example: Macintosh HD/Library/Application Support/Spectrasonics)

to the hard drive location of your choice. This can be another drive partition, a secondary internal drive or an external hard drive such as a Firewire or USB2 hard drive, etc.

• Next, hold (Apple key and Option key) on the keyboard, click and drag the **STEAM** folder to the desktop to create an alias of the folder named **STEAM**.

• Next, move the STEAM alias from the desktop to Macintosh HD/Users/Username/Library/Application Support/Spectrasonics

# **GETTING STARTED – Moving The STEAM Directory**

#### GETTING STARTED - Video Tutorials



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# **GETTING STARTED - Video Tutorials**



There are hours of informative online video tutorials available to registered Spectrasonics users on the Spectrasonics website.

Selecting "Video Tutorials" from the Utility Menu provides convenient access to all available tutorials. Tutorial Videos are located online in the <u>Support Knowledge Base</u>. You can play them directly or download them to your system for later viewing.



You will also find links to relevant video tutorials throughout this Reference Guide.

Spectrasonics is always adding additional videos, so check back from time to time to check out the new ones.



# »Getting Started

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Omnisphere was designed to work as a plug-in which closely integrates within your main sequencing application and computer. We recommend using it this way for best results.

Alternatively, Omnisphere may also be used with a simple host application to work as a sound module for live performance. Omnisphere has specials modes which are designed to make it an ideal instrument for use in live situations.

Thirdly, you can also use Omnisphere on dedicated hardware music computers like the MUSE Receptor and NEKO Keyboards, which essentially are PCs dedicated for music performance.

However, there are a few things to keep in mind with using Omnisphere on a standalone system:

1. Omnisphere must reside in a host application on the other computer

2. Omnisphere is a plug-in and does not function as a stand-alone application. It must function as a Virtual Instrument plug-in within a host regardless of what computer it's on. There are many free and inexpensive VST and Audio Unit host applications that will run Omnisphere.

You can get a comprehensive list of hosts on www.kvraudio.com

#### Latency and Timing accuracy

As a result of being on a stand-alone computer, the latency between MIDI and Audio interfaces will cause Omnisphere to play later than it would on the main sequencing computer, so you will need to compensate for the latency. Also, when Omnisphere is used on the main computer, the timing of playback is extremely tight - sample-accurate in most cases. On a slave system, this type of accuracy is not currently possible.

# **GETTING STARTED - Using Omnisphere Stand-Alone on a Computer**

#### CHECKING FOR UPDATES



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# **GETTING STARTED - Checking For Updates**

The latest versions of the software, Soundsource library, and patch library for

Omnisphere can be found on our website at:

http://www.spectrasonics.net/updates

With Omnisphere, we've included a way to quickly check for updates directly from the plug-in.

Simply click the Spectasonics logo to reveal the credits page. At the top left, select the button 'Check For Updates':

CHECK FOR UPDATES

Software version 1.0h Soundsources version 1.0 Patches version 1.0



Selecting it will compare the current installed versions on your system with the latest available updates on the Spectrasonics website. Remember there are separate versions for the Omnisphere software, Soundsources and patches, so make sure that all three are always up to date.



# System Status

	Your System	Latest Version	Status
Software	1.0h	1.0h	•
Soundsources	1.0	1.01	•
Patches	1.0	1.01	•

At least one of the components needs to be updated in your system.



# **CONCEPTS** - Introduction



#### Watch the Omnisphere Overview Video

Omnisphere has been designed to accommodate a wide range of operation, from basic interaction with Factory Patches, to comprehensive and complex sound design. Overall, the Omnisphere interface provides an accessible and intuitive workflow, but it also offers as much depth and flexibility as a User needs for their desired application.

# STEAM[™] Engine



The STEAM[™] Engine is a core technology that was created by the Spectrasonics in-house development team, and will be used as the basis of all future Spectrasonics performance instruments. Like our core S.A.G.E. technology, used for groove-based instruments like Stylus RMX, STEAM[™] is important to our future because it completes the technology transition from earlier performance virtual instruments that were based on the licensed UVI Engine.

Virtual instruments built with the multitimbral STEAM[™] Engine offer many development possibilities into a variety of hybrid synthesis and control capabilities. These include high-resolution Streaming Sample Playback, Integrated FX, Variable Waveshaping synthesis, Granular synthesis, FM synthesis, polyphonic Ring Modulation, Timbre Shifting, and a comprehensive Flex-Mod[™] modulation routing system, to name a few.

The STEAM[™] Engine also enables a more efficient response to technology changes like 64-bit computing or a major new operating system. The new in-house technology allows us to create instruments that can be fully supported across industry changes and allows new innovations and faster transitions in the future.

Just as Stylus RMX, based on S.A.G.E. technology, made early compatibility with Apple's Intel-Macs possible, new instruments based on STEAM[™] technology will make future transitions like these much easier on our customers.

Using STEAM[™], new products are being created from the ground up that support Spectrasonics' long-term vision of the highest-quality sounds and the most musically intuitive user experience.

Virtual instruments powered by STEAM[™] also have unlimited expansion possibilities. The new core software is flexible and open - allowing patches to be shared across hosts and computer platforms. New patches and sounds can be added to the core library, giving the user an ever-expanding sonic palette. In addition, all Spectrasonics virtual instruments based on S.A.G.E. and STEAM[™] technologies can interact in musically useful and innovative ways for a smoother creative flow.



# **CONCEPTS - The MULTI**

The MULTI is at the top of Omnisphere's hierarchy and consists of up to eight Parts, together with four Aux FX Racks and a Master FX Rack.

The Multi Section contains four pages: <u>MIXER</u>, <u>FX</u>, <u>LIVE</u> and <u>STACK</u>. These allow access to a full-featured MIXER, the Multi FX, and two flexible performance modes: LIVE MODE and STACK MODE, which provide interactive environments for both composition and live performance. These sections are covered in detail in their respective sections of the Reference Guide.

Saving a MULTI is like saving the entire state of the plug-in for future recall. A MULTI stores all of the settings from the MIXER page, the Multi FX, the LIVE MODE and STACK MODE pages, all MIDI Learn assignments, and all of the settings (including any unsaved edits) for each of the eight Parts.

All of Omnisphere's settings are saved and recalled with a project in your plug-in host software.

Saving an individual MULTI lets you recall the entire saved state of the plug-in and load it at a later time into new instances of Omnisphere (or new projects) by loading the MULTI from the MULTI Browser.

# **CONCEPTS - Parts & Patches**



Omnisphere is a multi-timbral instrument, allowing up to eight different Parts to be played at the same time within a single instance of the plugin.

Each of the eight Parts can be thought of as an entire synthesizer, complete with its own oscillators, modulation routings, and FX, and each Part can be played on a different MIDI channel.

The settings of all eight Parts are saved with a MULTI, or with your project. Everything will be recalled by loading that specific MULTI or project. The settings of a Part can also be individually saved as a Patch.

A Patch contains all the settings that make up a sound, and can be individually loaded into any of the eight Parts.

# **CONCEPTS - Layers & Oscillators**



Each Part has two Layers (A and B), and each Layer has a set of synthesis controls.

Each Layer has its own polyphonic Primary Oscillator, which can be set to either Sample Mode (using Soundsources) or Synth Mode (using DSP Waveforms). Because each Layer has its own independent Primary Oscillator, you can mix and match the modes by using two Layers.

Using Omnisphere's unique Harmonia feature, each Layer can add up to 4 additional oscillators, giving a single Part as many as 10 separate oscillators!

To learn more, please refer to the extensive **Oscillator** section of the Reference Guide.

NOTE: It isn't necessary to use both Layers when creating sounds. In fact, very complex sounds can be achieved using only one Layer.

**CONCEPTS - Soundsources** 



Soundsources allow Omnisphere's synthesis to begin with sampled sounds instead of DSP waveforms. They are accessed by selecting <u>Sample</u> <u>Mode</u> in the <u>Oscillator</u>.

Soundsources are based on a 'map' of audio samples stored in the Core Library of Omnisphere in Spectrasonics' proprietary STEAM format. A Soundsource can be as simple as a single sample stretched across the keyboard range or as complex as hundreds of chromatically sampled, velocity-switched multi-samples – like you'd find in a modern sample library.

Omnisphere's Core Library Soundsources vary dramatically in size - from a few kilobytes to nearly a gigabyte each! Each Soundsource was carefully prepared and optimized by the Spectrasonics Sound Development team.

Larger and more complex Soundsources take a longer to load, but still load relatively quickly, since the <u>STEAM Engine</u> includes "streaming" technology to allow for playback of very large multisamples. Streaming allows for the samples to buffer off of the computer's hard drive in realtime, instead of all of the samples having to be loaded into the computer's RAM memory.

Soundsources in Omnisphere are similar to using "programs" in a sampler, but there are some key differences:

- 1. A Soundsource contains not only all of the raw samples, mapping information, such as pitch, velocity, zones, and loop points but also Soundsource images, notes and tags.
- 2. Soundsources do not include envelopes, filters, LFOs, FX or any modulation settings. (which are stored in the Patch)

For this reason, you can load a new Soundsource into a Layer, without changing any of the Layer's synthesis settings. This is extremely useful, because you can take any patch you like and have thousands of variations simply by changing the Soundsource!

Most importantly, the concept of Omnisphere is completely different than a typical sampler. Omnisphere is an incredibly deep synthesizer with a massive Core Library that will take a lifetime to explore!

The Factory Core Library of Omnisphere is over 42Gb and includes over 2700 Soundsources specifically designed to work well with the STEAM engine synthesis. The Factory Core Library covers a wide spectrum of sounds, from simple raw waveforms to psychoacoustic samples, morphing textures, and a best-of selection from our award-winning sample libraries. The STEAM engine architecture allows Spectrasonics to expand Omnisphere with new Soundsources in the future as well.

Spectrasonics is constantly improving and adding to the Factory Soundsource Library, so make sure you stay up to date with the "<u>Check for</u> <u>Updates</u>" feature.

NOTE: While version 1.0 of Omnisphere doesn't support user importing of samples, it's a very popular request and we certainly wouldn't rule that out as a new feature for Omnisphere's future.



# **CONCEPTS - Common Parameters**

Each Layer has an independent set of synthesis controls, and there are many parameters that will only affect the individual Layer. However, there are also a number of Common parameters that are shared by both Layers in a Part.

If a parameter is numbered, then it's a Common parameter that can be used by both Layers (ex: LFO 1 ~ 6, Mod Env. 1 ~ 4). If it isn't numbered, then it's specific to the Layer (ex: Amp Env., Filter Env.).

Common parameters include the six LFOs (LFO1 ~ LFO6), the Master Filter, and the four Modulation Envelopes (MOD 1 ~ MOD 4).

In addition, each Layer has its own FX Rack, and there is a Common FX Rack that is shared by both Layers. For additional detail, refer to FX Architecture

# **CONCEPTS - The Header**

The top area of the Omnisphere interface is the Header. The Header is visible from any page in Omnisphere, and is the primary navigation area of the interface.

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The Header contains the Utility Menu, Multi Information including the Multi Name Display and access to the MULTI Browser, indicators for when LIVE MODE or STACK MODE are enabled, and Navigation Buttons for selecting any of the 8 Parts, the MULTI Section or the SYSTEM Page. Finally, there is a Master Volume Control for adjusting the overall output level.

Watch the **Omnisphere Overview** 



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The Utility Menu has three sections. The first is a MIDI Learn sub-menu. The second provides various Clear, Save, Copy & Paste functions for Multis, Patches, Parts and Layers. The third section provides direct access to the Omnisphere Reference Guide.



**CONCEPTS - MIDI Learn** 



The Utility Menu provides the MIDI Learn and Automation options that apply to the whole plug-in. These include MIDI Learn Templates, Unlearn All, and access to a 'Current Assignments' Report. See the <u>MIDI Learn & Automation</u> section for details.

# **CONCEPTS - Clear, Save, Copy & Paste**



The Utility Menu provides options to Initialize or Clear Multis, Patches and Layers, and to Save Multis and Patches. There are also functions that allow Part and Layer settings to be copied and pasted.

Initialize vs Clear (Multi, Patch & Layer)

When you select Initialize (Initialize Multi, Initialize Patch or Initialize Layer), all synthesis parameters for the Multi, Patch or Layer, including FX and Modulation routings will be restored to an unedited 'default' state, including a default Soundsource loaded as a starting point.

When you select Clear (Clear Multi, Clear Patch or Clear Layer), all existing parameters for the Multi, Patch or Layer will be completely cleared, using no sounds or memory.

In all cases, the Mixer settings are retained

NOTE: When using the Clear function, no sounds are loaded, so no sound will be heard from the Multi, Patch or Layer until a Soundsource is loaded.

## Initialize Multi

Initializes all current Multi settings, including all Parts and FX. The Multi is returned to an unedited 'default' state, including default sounds.

#### Clear Multi

Clears all current Multi settings, including all Soundsources, Parts and FX. This will result in a completely empty Multi.

#### Save Multi

Selecting the Save Multi option will open a File Save dialogue. After naming and saving the MULTI, the EDIT TAGS interface will open, allowing you to assign various Attribute Types and Assignments, add custom Assignments, and add your own Keywords and Notes to the MULTI.

Once you have finished editing the tags, click the SAVE button to finish saving the MULTI. You may also cancel the save process by clicking the CANCEL button.

When saving a MULTI, the entire state of the plug-in is saved. This includes the MIXER, LIVE MODE and STACK MODE settings, Multi FX, MIDI Learn assignments, as well as all Part settings. Even if a Part has been modified but not yet saved as an individual Patch, its settings will also be saved with the MULTI.

#### **Initialize Patch**

Initializes all current Patch settings, including all Modulation routing and FX. The Patch is returned to an unedited 'default' state, including the default sound

#### Save Patch

Selecting the Save Patch option will open a File Save dialogue. After naming and saving the Patch, the EDIT TAGS interface will open, allowing you to assign various Attribute Types and Assignments, add custom Assignments, and add your own Keywords and Notes to the Patch.

NOTE: Patches must be saved into a Category folder in the STEAM folder. This can be either an existing folder, or a user-created folder inside the Patches folder

Once you have finished editing the tags, click the SAVE button to finish saving the Patch. You may also cancel the save process by clicking the CANCEL button.

#### Save Patch Quick

When editing an already saved Patch, the new changes can be saved without having to bring up the save dialogue and Tag Editor. Save Patch Quick will simply overwrite the previous version. A confirmation dialogue will pop-up to confirm the save.

Caution	
Overwrite current Patch?	
	Cancel OK

#### Copy Part

This command is used to copy the settings from a single Part. These settings can then be pasted to another Part using the Paste Part command. To copy a Part, select the Part using the Navigation Buttons in the Header, and then select the Copy Part command from the Utility Menu.

#### Paste Part

After a Part has been copied using the Copy Part command, it can be pasted to another Part. To paste a copied Part, select the destination Part using the Navigation Buttons in the Header, and then select the Paste Part command from the Utility Menu.

#### **Initialize Layer**

Initializes all settings for the selected Layer, including Modulation routing and FX. The Layer is returned to an unedited 'default' state, and includes the default sound.

#### Clear Layer

Clears all settings for the selected Layer, including all Soundsources, Modulation routing and FX. This will result in a completely empty Layer.

# Copy Layer

This command is used to copy the settings from a single Layer. These settings can then be pasted to another Layer using the Paste Layer

command. To copy a Layer, select it using the Layer tabs in the Edit Page, and then select the Copy Layer command from the Utility Menu.

#### **Paste Layer**

After a Layer has been copied using the Copy Layer command, it can be pasted to another Layer. To paste a copied Layer, select the destination Layer using the Layer tabs in the Edit Page, and then select the Paste Layer command from the Utility Menu.

NOTE: Modulation Routings are not included with the settings that are copied and pasted using the Copy/Paste Layer commands.

**CONCEPTS - Reference Guide** 

MIDI Learn and Automation	►	1
Initialize Multi		
Clear Multi		
Save Multi		
Initialize Patch		
Clear Patch		
Save Patch		
Save Patch Quick		
Copy Part		
Paste Part		
Initialize Layer		
Clear Layer		E
Copy Layer		1
Paste Layer		f
Reference Guide		Ę
Video Tutorials		H

Selecting this option from the Utility Menu will open Omnisphere's HTML Reference Guide. The Reference Guide will be displayed using your default Web Browser.

The Reference Guide is indexed, so you can search the Guide, print chapters (click the Print Icon next to any chapter to load printable pages), or save it as a PDF. Refer to your system guide for how to create PDFs.



Reference Guide 1.0b - Software Version 1.0.3c - Soundsources 1.0.1 - Patches Version 1.0.3

The Guide is in HTML format, so is portable and can be opened with any Web Browser. This makes it easy to keep up to date, and is very convenient for users. For example, it can be copied to a mobile computer for reference, separate from the plug-in.

The Reference Guide files are found inside the STEAM folder, under Documentation.

Windows: C:\Program Files\Spectrasonics\STEAM\Omnisphere\Documentation\Reference Guide\index.htnl

Mac: Macintosh HD/Users/Username/Application Support/Spectrasonics/STEAM/Omnisphere/Documentation/Reference Guide/index.html

SAGE 🕨	📋 Omnisphere 🖂	📄 Defaults 🔹 🕨	🚞 Authorization Help 🕨	🐚 00-OmniManual.html
STEAM >		Documentation >	🧰 Getting_Started 🛛 🕨	🚞 credits 🔹 🕨
		🚞 Settings Library 🕨	💼 Reference Guide 🕞 🕨	🚞 edit_page 🛛 🕨
		🚞 Soundsources 🕨 🕨	🚞 Soundsource Legal 🕨	🚞 get_started 🔹 🕨
				🚞 glossary 🕨 🕨
				🚞 images 🔹 🕨
				🚞 includes 🔹 🕨
				🐚 index.html
				🚞 legal 🔹 🕨
				🚞 main 🔹 🕨
				🝺 main_frame.html
				omni3dbox_sm3.png
				robots.txt
				🚞 support 🔹 🕨

# **CONCEPTS - LIVE/STACK MODE Indicators**

When either LIVE MODE or STACK MODE is enabled, you'll see "LIVE MODE" or "STACK MODE" displayed on the left side of the Omnisphere header.



**CONCEPTS - Multi Display** 

Dynamic Bellstrings	
---------------------	--

This part of the Header contains the Multi Name Display, Multi Steppers, and a Folder icon for access to the Multi Browser.

Selecting the Folder icon, or anywhere inside the Multi Name Display, will open the Multi Browser. After a MULTI has been loaded, the name of the MULTI will be displayed in the Multi Name Display.

The Multi Stepper buttons (up/down arrows) will load the next or previous MULTI from the Library, based on the current filtered results in the Multi Browser. The buttons step through the available MULTIS one at a time.

# **CONCEPTS - Navigation Buttons**

The Navigation Buttons in the header are used to select and view any of the eight Parts, the Multi Section or the System Page. Only one button can be selected at a time.





Buttons 1-8 are Part Select Buttons. Selecting a Part lets you access and view any of the pages for that Part, including the <u>MAIN page</u>, <u>EDIT</u> page, <u>Patch FX</u> pages, and the <u>Arpeggiator</u> Page.

# **MULTI Button**



Selecting the MULTI button gives you access to any of the pages in the Multi Section, including the MIXER, Aux/Master FX, and the LIVE MODE and STACK MODE pages.

# SYSTEM Button



Selecting the SYSTEM button opens the System page, which contains preferences and settings for the entire plug-in.

# **CONCEPTS - Master Volume Control**

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The Master Volume slider controls the output of the whole plug-in, and includes a meter, which provides a reference to the output signal. The range of the Master Volume slider is  $-inf dB \sim 9.54 dB$ .

# **CONCEPTS - Drop-down Menus (Down Arrows)**

UNISON *	ENVELOPES ZOOM V
	Unrepeat Half time Double time

A downward facing arrow indicates that a drop-down menu is available. There are numerous drop-down menus in the Omnisphere interface, which provide access to settings, Presets, MIDI Learn, Automation and other functions.

# **CONCEPTS - Contextual Menus (Right/Control-Click)**

Reset to Default Value	
Modulate 🕨 🕨	Modulate with LFO
A Show Modulation	Modulate with Envelope
/ Unmodulate	Modulate with Velocity
MIDI CC Learn MIDI CC Learn Inverted MIDI Note Learn MIDI Program Change Learn Enable Host Automation	Modulate with Wheel Modulate with Key Tracking Modulate with Randomize Modulate with Alternate Modulate with Controller All Mod Sources

Contextual Menus are an important part of the Omnisphere interface, and provide convenient access to many important functions.

Right/Control-clicking almost anywhere in the Omnisphere interface will bring up a contextual menu. The contents of the menu will depend on where the cursor is placed when the contextual menu is opened.

For example, Right/Control-clicking over a blank area of the Omnisphere Header will reveal the Utility Menu. Right/Control-clicking a knob or

slider will typically reveal a menu of MIDI Learn, Modulation & Automation options.

# **CONCEPTS - Up/Down Steppers**



Steppers (up/down arrows) are located throughout the Omnisphere interface, and are used to step through values or load saved settings, incrementing or decrementing one at a time. In the picture above, clicking the arrows will step through the different LFO waveforms available.

# **CONCEPTS - Zoom Icon Buttons**

# - MODULATION

# MOD MATRIX ZOOM 🔍

One of the features of Omnisphere's interface design is that it only reveals its depth and complexity on an as-needed basis. The Zoom Icon Buttons provide access to Zoom Views, where you can view expanded information or interact with Omnisphere's more advanced features.

A magnifying glass icon next to a function indicates that a Zoom View is available. Selecting the icon with a '+' inside it opens the Zoom View for that function. When a Zoom View is open, selecting the magnifying glass icon with a '-' inside it, closes the Zoom View.

Zoom Views are available for Modulation, Filters, Envelopes, Velocity Curves, Soundsource info, Patch info, MULTI info and LIVE MODE settings.

There are also Zoom Buttons in the Browsers that access Browser settings, the Tag Editor, and Multi, Patch or Soundsource info.

# **CONCEPTS - Folder Icon Buttons (Browser Access)**



There are three Browsers built in to Omnisphere, one each for Multis, Patches, and Soundsources. All three Browsers have identical functions, but access different parts of the Core Library.

Anywhere that you see a Folder icon, you will be able to access a Browser by clicking on the Folder. If there is a Name Display next to the Folder icon, you can also click inside the Name Display to open the Browser.

#### Multi Browser

The MULTI Browser can only be accessed from the main Header, but is always visible and available from any page in Omnisphere.

#### Patch Browser

The Patch Browser is accessed from the Patch Name Display, and when a Part is selected (using the Part 1 ~ 8 Buttons) is always visible and available from any of the Part pages.

The Patch Browser can also be accessed from the Mixer page (Patch Name Displays), and from the LIVE MODE page when Mixer Controls are enabled.
# Soundsource Browser

The Soundsource Browser is accessed from either the Main Page or the Edit Page.

To learn more about the Browsers in Omnisphere, please see the **Browser** section of the Reference Guide.

# **CONCEPTS - Knobs & Sliders**

Using a mouse, Knobs and Sliders (vertical and horizontal) are adjusted by clicking and dragging. Shift-click and drag for more precise adjustments. Most Knobs and Sliders in Omnisphere can be MIDI Learned for direct control from a MIDI device.

Knobs



**Vertical Sliders** 



Horizontal Unidirectional Slider

Horizontal Bidirectional Slider

**Mini Sliders** 







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Adjusting Knobs and Sliders will display their current setting or value in a floating display above the controls. Holding down the SHIFT key while adjusting Knobs and Sliders allows for more precise adjustments.

# **CONCEPTS - Buttons**

Buttons are used for choosing sections or selecting from among multiples of a single type. When selected, Buttons will be highlighted in blue. For example, there are 6 LFO Buttons. When one of them is highlighted it means it is selected, and that LFO's settings are displayed.

Page Buttons (raised button)



Sub-Page Buttons (smaller raised buttons select sub-pages)



# **CONCEPTS - Switches (Toggles)**

Switches let you toggle certain parameters on and off or switch between multiple options. When a parameter is enabled or selected, the switch will be highlighted. For example on the Edit Page, Switches toggle between SAMPLE Mode and SYNTH Mode, toggle LFO Sync on and off, or select between Velocity Curve settings. Power Buttons are also a type of Switch, an example being the FILTERS On/Off Button.

**Mode Switches** (flat buttons that are side-by-side are Mode Switches)



Indicator Switches are both a status indicator and a toggle. A good example of an Indicator Switch is found on the Edit Page, below each of the Oscillator sub-page Buttons; MAIN, FM, RING, WS & MULT. These indicate whether the feature is enabled or not, and double as a toggle to enable/disable them.

**CONCEPTS - Key Modifiers** 



There are a number of Omnisphere functions that are modified by combining a mouse-click (or click and drag) with one of three Key Modifiers; the Command/Control key, Shift key, or the Option/Alt key. In the manual these are referred to as:

# Control-Click (Mac users, use Command-click)

Sliders & Knobs: resets the slider or knob to a neutral or default position.

Browsers: allows selection of multiple Attributes.

Envelopes (editing): Control-click and drag to engage the Lock function.

### Shift-Click

Sliders & Knobs: Shift-click and drag allows finer and more precise adjustments to values.

Envelopes (editing): Shift-click and drag to engage the Zoom X/Y function

### Option-Click (PC users, use Alt-click)

Envelopes (editing): Option-click to engage the Snap function.

Knobs: temporarily switches from linear mode to circular mode.

In linear mode, clicking on the knob and dragging vertically or horizontally with the mouse moves the knob. In circular mode, option-clicking on the knob and dragging in a circle around the knob will move it.

To switch to circular mode, hold down the Option/Alt key then click and drag the knob. You can then release the Option/Alt key.

The knob will remain in circular mode until you release the mouse button. The knob will then automatically revert to linear mode.

NOTE: Omnisphere defaults to linear mode. Your host may determine a different default mode, but you can still temporarily switch to the alternate mode by using Option-click.

# **CONCEPTS – Parameter Control**

	Reset to Default Value
	Modulate 🕨
	Show Modulation
	Unmodulate
	MIDI CC Learn
	MIDI CC Learn Inverted
	MIDI Note Learn
	MIDI Note Learn Inverted
	Enable Host Automation
	Unlearn
	Show Learns
<u> </u>	

## Understanding Parameter Control

There are three ways to control parameters in Omnisphere: Modulation, MIDI Learn and Automation.

Deciding which type of Parameter Control to use depends on a number of factors including which host you use, which parameters you want to automate and what type of physical controller (if any) you wish to use to control the parameters. Here are some guidelines:

### Modulation

Modulation offers the most sophisticated method of controlling Omnisphere's parameters. This method allows scaling, can use almost any MIDI Message (Wheel, Pitch Bend, Aftertouch, Notes, etc.), and is saved/recalled with each Patch.

To learn more about Modulation, please refer to the Modulation section.

### Automation

With Automation messages, changes made to parameters using the mouse can be recorded in the host software. Parameter adjustments are typically written to an automation track, and in some hosts, you can draw the automation curves directly into the track. This method is most useful for mixing and fine tuning parameter changes over time on an existing performance in your host.

To learn more about Automation, please refer to the Automation section.

### **MIDI Learn**

MIDI Learn enables full remote control of Omnisphere's parameters from MIDI Devices. Almost any parameter in Omnisphere can be MIDI Learned. MIDI Learn assignments are saved with the Multi or with your project. This method is ideal for live performance or recording MIDI-controlled changes into your host on the fly. Parameter adjustments using MIDI Learn are typically written to a MIDI Track in the host software. MIDI Learn assignments for the plug-in can also be separately saved and loaded as **Template Presets**.

Right/Control-clicking a parameter in Omnisphere opens a contextual menu that offers options for all three methods of Automation: Modulation, MIDI Learn and Host Automation.

Host Automation and MIDI Learn give you the ability to control almost any of the parameters of Omnisphere and to record and edit any adjustments in your host.

To learn more about Automation, please refer to the MIDI Learn section.

NOTE: After setting up all of your MIDI Learn and Host Automation assignments, you can save a Default Multi, which will load all of your custom assignments each time you open a new instance of Omnisphere.

# **CONCEPTS – Host Automation**

All MIDI Learnable parameters in Omnisphere can also be automated using the Host Automation feature. Each host handles Host Automation differently, so it's important to understand how your specific software will interact with Omnisphere.

# **Enabling Host Automation**

To make a Host Automation assignment for a parameter in Omnisphere, Right/Control-click a parameter to open its contextual menu, and then select the Enable Host Automation option.



The parameter will be assigned the next available Host Automation ID number, from lowest to highest. Once assigned, changes made to the parameter using the Omnisphere interface can be recorded in real time in the host software.

NOTE: If your host doesn't display Host Automation assignments by name, use the MIDI Learn Report to display the parameter names along with their corresponding Host Automation ID numbers.

All Host Automation assignments are stored with the Multi, saved with the host project file, and can also be saved with a MIDI Learn Template.

NOTE: You can enable up to 128 Host Automation parameters. If you need more than 128 assignments, consider using MIDI Learn together with Host Automation.

# **Technical Considerations**

There are 128 parameter slots in Omnisphere that can be automated, numbered from 0 to 127. These slots correspond to the list of parameters that can be automated in the host or on your control surface. For example, slot 0 is the first parameter in the host or on the control surface, the next one is number 1, etc. You can assign any parameter in Omnisphere to one of these slots using "Enable Host Automation". The parameter will be assigned to the next available slot and may then be automated from the host or control surface. Automation ID numbers correspond to the ordered list of parameters that can be automated in the host or on a control surface.

Parameter automation is capable of two-way communication. If your host and control surface support it, your control surface can display the names of the parameters controlled by each knob or fader, and each control can automatically update to show the current value of a parameter. For example, Mackie Control displays and automatically updates parameter names in real time. Motorized faders can move to show the current values of parameters, which is very useful when opening songs that contain plug-ins controlled by the surface.

Some hosts have a limit on the number of parameters that are available to be Host Automated. For example, some only permit the first 128 parameters of a plug-in to be automated. In others, the limit is 1024 parameters. By comparison, Omnisphere has nearly 20,000 parameters!

If you're working in a host that limits the number of automation parameters, you can also use the MIDI Learn feature of Omnisphere to automate Omnisphere's parameters. The combination of Host Automation and MIDI Learn gives you powerful real-time control of virtually every parameter of Omnisphere.

### **Host-Specific Notes**

 Ableton Live - After Enabling Host Automation for a specific parameter, it is necessary to also move that parameter in the Omnisphere interface to complete the assignment.

• Logic - After setting up all of your MIDI Learn and Host Automation assignments, you can save a Default Multi, which will load all of your custom assignments each time you open a new instance of Omnisphere. Logic Users will see all learned Host Automation parameters by name upon load.

# **CONCEPTS – MIDI Learn**



MIDI Learn is an immensely powerful feature that allows you to remote control virtually any on-screen parameter with a MIDI controller. It is a very flexible system that can adapt to the MIDI device you use and allows changes made to any learned parameter to be recorded by the host application.

While Host Automation support varies widely among hosts, almost all hosts have the ability to record and edit MIDI messages received from a MIDI controller.

The basic process of pairing a physical control to an Omnisphere parameter using MIDI Learn is extremely simple:

- Right/Control-click an Omnisphere parameter.
- Select MIDI CC Learn (or MIDI Note Learn) from the contextual menu.
- Move a physical control (or play a note) on the MIDI device that is connected to Omnisphere.

The Omnisphere parameter will be instantly paired, and can then be controlled using that physical control. All MIDI Learn assignments are stored with the MULTI, saved with the host project file, and can also be saved as a MIDI Learn Template.

# **Key MIDI Learn Concepts**

There are a few key MIDI Learn concepts that will help to understand how flexible the system is:

- All Learnable parameters can be controlled using MIDI Learn, and are also available for use with Host Automation.

- A single physical control can be paired with multiple parameters in Omnisphere. For example, a single physical knob could be setup to control both Cutoff and Resonance.

- A single parameter in Omnisphere can be controlled by multiple physical controls. One useful way to use this is to create sub-mixes using the Mixer. You can 'gang' different groups of Part levels in the Mixer, each controlled by a single physical fader. For example, Parts 1 ~ 4 controlled by one fader, and Parts 3 ~ 6 controlled by a second fader. In this example, two different physical faders would control Parts 3 & 4.

- A MIDI device sending on any MIDI channel can control MIDI Learned parameters on any of Omnisphere's Parts/MIDI Channels. This

means that you can use a MIDI device with all of its controls assigned to a single channel, but still control any parameter on any of Omnisphere eight parts.

- Assignments can be made to receive in "Omni mode" so that when a sequencer's track is changed, all of the controls are still active regardless of the incoming MIDI channel assignment.

- MIDI Control Change, Notes and Program Change messages are supported, but Pitch Bend and Aftertouch messages are not currently supported in the MIDI Learn system.

### Utility Menu

The Utility Menu provides MIDI Learn options that affect the entire plug-in. These include MIDI Learn Templates, Unlearn All, and the MIDI Learn & Automation Report (Show Current Assignments). The Utility Menu is opened from the Header, or by Right/Control-clicking any empty area of the Omnisphere interface.

MIDI Learn and Automation	Save Template		
Initialize Multi Clear Multi Save Multi	Load Template Unlearn Next MIDI Device Unlearn Next Parameter Make MIDI Learned Controls Omni		
Initialize Patch	Unlearn All MIDI Learns		
Clear Patch	Clone Part 1 MIDI Learns		
Save Patch	Show Current Assignments		
Save Patch Quick	Ignore Assignments When Loading Multi		
Copy Part	Ignore rosignments then county hard		
Paste Part	MAIN EDIT FX ARP		
Initialize Layer Clear Layer	LAYER A LAYER B		
Copy Laver			
Paste Layer			
Reference Guide			
Video Tutorials	SawSquare Fat		

#### **MIDI Learn Template**

All MIDI Learn & Automation assignments are saved with a MULTI, but there are times when it makes sense to save a MIDI Learn & Automation configuration for use with another project or environment.

MIDI Learn & Automation Templates allow custom setups to be saved and easily recalled whenever they're needed.

Select 'Save Template' from the MIDI Learn & Automation sub-menu, to store all current MIDI Learn & Automation assignments for later recall. Selecting this option will open a File Save dialogue, allowing the Template to be named and saved.

Select 'Load MIDI Learn Template' to load a previously saved Template. Any existing MIDI Learn assignments will be replaced with the assignments stored in the Template. Selecting this option will open a File Load dialogue, allowing a saved Template to be loaded.

NOTE: Before saving a MIDI Learn Template, you can use MIDI Learn Report (see below) to preview the assignments that will be saved with the Template. This is also a convenient way to verify assignments after a MIDI Learn Template has been loaded.

#### **Unlearn Next MIDI Device**

When a physical controller has been MIDI Learned, you can use this option to Unlearn it. To accomplish this, select Unlearn Next MIDI Device from the menu, then move the physical controller on your MIDI Device.

Using MIDI Learn, a single controller can have more than one parameter assigned to it. This option is especially convenient if you are controlling more than one parameter with a single physical controller. It allows you to clear all assignments for the specific controller, without having to

Unlearn each parameter individually.

### **Unlearn Next Parameter**

When a parameter in the Omnisphere interface has been MIDI Learned, you can use this option to Unlearn it. To accomplish this, select Unlearn Next Parameter from the menu, then select and move the parameter that you wish to Unlearn.

This is a useful feature when you have more than one parameter assigned to a single physical controller. A single parameter can be Unlearned, while the rest will remain assigned to the physical controller.

#### Make Controls Omni

Assignments can be made to receive in MIDI Omni mode so that when a sequencer's track is changed, all of the controls are still active regardless of the incoming MIDI channel assignment.

Omnisphere is MIDI input channel sensitive when MIDI Learning. This means that it can distinguish between a button transmitting Ch 1 and the same button transmitting Ch 2.

Selecting this option allows all non-cloned MIDI Learn settings to respond to any incoming MIDI channel (e.g. MIDI Omni mode reception). This is very useful when you want Omnisphere to respond to an external control regardless of the current incoming MIDI channel.

#### Unlearn All

Selecting this option will clear all existing MIDI Learn and Automation assignments.

### **Clone Part 1 Learns**

Use this option to clone all non-omni Part 1 MIDI Learn assignments to all other Parts in the Multi, and across all other MIDI channels.

#### Show Current Assignments

Show Current Assignments displays all existing MIDI Learn & Automation assignments as a formatted report. The information will be displayed using your default Web Browser.

This is especially useful for checking existing MIDI Learn & Automation assignments before saving a MULTI or a MIDI Learn & Automation Template, or to verify assignments after loading a MIDI Learn & Automation Template.

### MIDI Learn Report

The MIDI Learn Report displays all existing MIDI Learn assignments, and includes Host Automation assignments. The Report will be displayed using your default Web Browser.

The MIDI Learn Report is especially useful for checking existing MIDI Learn assignments before saving a MULTI or a MIDI Learn Template, or to verify assignments after loading a MIDI Learn Template.

NOTE: If your host doesn't display Host Automation assignments by name, use Show Current Assignments to display the parameter names along with their corresponding Host Automation ID numbers.

### Ignore Assignments When Loading Multi (Toggle)

When loading a MULTI, this option determines whether Omnisphere will ignore or load the MIDI Learn assignments that were saved with the MULTI.

When the Ignore Assignments option is enabled (indicated by a checkmark displayed next to it in the menu), Omnisphere will ignore any MIDI Learn assignments that were saved with the MULTI. Instead, all existing assignments will be retained.

When the Ignore Assignments option is disabled (no checkmark next to it in the menu), Omnisphere will replace all existing assignments with the MIDI Learn assignments that were saved with the MULTI.

NOTE: The Ignore Assignments option retains its setting across sessions. If you find that MIDI Learn assignments aren't behaving as

expected after loading a MULTI, please verify that the Ignore Assignments option is properly set.

# **CONTEXTUAL MENU**



Contextual Menus provide parameter-specific MIDI Learn options, and include Modulation and Host Automation options as well.

If a parameter can be MIDI Learned, the following MIDI Learn options will be available when you Right/Control-click directly on the parameter:

# MIDI CC Learn

Select this option, then move or press a control on your MIDI controller. The control will then be paired with the Omnisphere parameter.

### MIDI CC Learn Inverted

When you select this option, then move or press a control on your MIDI controller, the control will be paired with the Omnisphere parameter. However, the values will be inverted. For example, as you increase the value of the physical control, the value of the Omnisphere parameter will decrease.

### MIDI Note Learn

Select this option then play a note on your MIDI controller. That Note will then control the assigned Omnisphere parameter. Once a Note has been MIDI Learned it will no longer trigger a sound when Omnisphere receives Note On messages from that Note, it will only control the assigned parameter.

### **MIDI Note Learn Inverted**

When you select this option, then play a note on your MIDI controller, that Note will then control the assigned Omnisphere parameter. However, the values will be inverted. Once a Note has been MIDI Learned it will no longer trigger a sound when Omnisphere receives Note On messages from that Note, it will only control the assigned parameter.

NOTE: When you MIDI Learn a variable range parameter (such as a knob or slider) using MIDI Note Learn, the Note On/Off messages will toggle the parameter to its maximum and minimum positions respectively. When using MIDI Note Learn Inverted, the values are reversed, so Note On would toggle to the minimum value, Note Off would toggle to the maximum value.

### Unlearn

Select this option to clear all MIDI Learn assignments, including Host Automation assignments, for this parameter.

# Show Learns

Use this option to show all MIDI Learn assignments for this parameter. A pop-up dialogue will open showing all CC and/or Note numbers assigned, or will notify you if there are no current assignments.

# **CONCEPTS - CPU Optimization & Conservation**

One of the most difficult questions to answer is how much CPU power Omnisphere uses. The reason it's so difficult to answer is because STEAM[™] was designed as a very flexible and open system, which allows you to freely add FX and more editing power based on the needs of what you want to create. This means that Omnisphere is capable of using all available CPU power and then some!

It's to be expected that the average patch in Omnisphere uses more CPU than the average patch in most other synths. That's for the simple reason that the average patch in Omnisphere has more things going on than the average patch in most other synths. Simple bread and butter sounds have been done...we're aiming for something beyond that with Omnisphere. However, we are always striving to improve CPU performance and hope to further improve performance in future updates.

There are a large number of features that you can enable in Omnisphere, and if you turn enough of them on you'll eventually overload any CPU. The point at which that happens depends on a lot of things: the number of Omnisphere parts in use, the number of plugins in use, the CPU power, etc. As a result it's impossible to predict what represents a reasonable number of enabled features for every given situation. If you are running into performance issues, it's best to turn off unnecessary features. Here's a summary of example things to try:

- Turn down polyphony.
- · Turn down amplitude envelope release.
- Look for effects that can be turned off.
- · Look for oscillator section features that can be turned off.
- In the case of Unison, try turning down the depth.
- Metal Pipe and AllPass filter types use more CPU than other filter types.
- · Use one filter instead of 2.

• Glitching in the absence of a CPU overload might indicate a streaming underrun. If that's the case, try turning up the Pre-load memory size.

As you can see, there are several ways to help conserve CPU power in Omnisphere. The following detailed tips and techniques are especially useful in busy sessions when trying to make the most of your computer's resources.

# 64-bit Instruments & Hosts

If you are using a 64-bit host (such as Logic 9.1), it can access all available system memory without the usual 3Gb limit. This means that you are less likely to run out of memory when loading very large instruments, or a large number of instances. If you find yourself running low on memory, you should add as much physical RAM as possible to get the most from your 64-bit software.

All Spectrasonics instruments are 64-bit, on both Mac and PC.

### Sample File Server (Mac only)

For Macs running 32-bit host software, the <u>Sample File Server</u> allows you to load large sounds into physical RAM, bypassing the usual 32-bit System Memory limit. It is recommended to have a minimum of 6Gb of RAM installed when using the Sample File Server.

Windows users should use 64-bit host software.

NOTE: If you are running a 64-bit host (such as Logic 9.1), the Sample File Server is unnecessary, and you may get better performance with it disabled.

### Sample Thinning

Sample Thinning allows Soundsources, Patches, and Multis to be loaded with fewer samples when selected, so that less system memory is used. This is especially important when loading large Trilian sounds into Omnisphere, using <u>Omnisphere Library Integration</u>.

Omnisphere provides Thinning options from the <u>System Page</u>, the Edit Page (<u>Soundsource Zoom Edit View</u>), and from the <u>Patch & Multi</u> <u>Browsers</u> Omnisphere

There are four types of Sample Thinning available; Round Robin samples, Legato samples, Velocities, and Pitch Thinning.

When loading larger sounds, such as Trilian sounds inside Omnisphere, using Thinning can make a huge difference in overall system memory demand, and these can be used in combination to balance between the best sound possible, and the conservation of resources.

### Host Buffer Size

Performance and CPU load with all virtual instrument plug-ins are sensitive to the host's audio buffer size - particularly with an instrument as powerful as Omnisphere. If you experience performance issues with Omnisphere such as audio drop-outs, you can gain further Performance headroom by raising your host's audio buffer setting. A setting of 256 is usually a good compromise between good performance and acceptable latency, but you may wish to increase the buffer size if you need more CPU power. Omnisphere will also work with larger buffer sizes, so you can try adjusting this setting in your host.

### **Host Sample Rate**

Omnisphere has been designed for optimal playback at 44.1k or 48k sample rate. If a host's project sample rate is higher than this, (88.2k, 96k, 192k, etc) it can have a significant impact on reducing Omnisphere's performance, without any real sonic benefit to Omnisphere. In fact, certain patches may not sound correct at higher sample rates. So we recommend keeping your host's sample rate at 44.1KHz or 48KHz for the optimal experience with Omnisphere.

### Multi-Instance vs Multi-timbral

On single and dual-core systems, it's best to load multiple Parts (on different MIDI channels) within a single instance of Omnisphere, before opening any additional instances of the intrument. This is the best way to utilize the available CPU power for Omnisphere.

However, if a multi-core system is used, it can be beneficial to open multiple instances of Omnisphere to distribute the processor load between the cores. The resource handling is done by the host, so in this case it's useful to open more than one instance of Omnisphere. So the most efficient use on a multicore machine is to use a couple of instances multitimbrally - if assigning all Parts to a single instance is using up all the resources of a single core. Consult your host's documentation to make sure that it has support for multi-core/multi-processor systems.

### **Limiting Voices**



Omnisphere allows up to 64 voices of polyphony per Part. This can put tremendous demand on the CPU, so limiting polyphony is one of the most important things you can do to manage CPU usage.

As a general principle, set the voice count according to the type of Patch you are working with. For example, Texture or SFX Patches typically don't need 16 or even 8 voices of polyphony. Anytime you are running low on CPU power, this is the first area to look at for conserving CPU.

To adjust polyphony for a Part, use the VOICES stepper on either the Main or Edit Pages.

### Voice Multipliers



When using Granularity and Unison, the Depth sliders control the number of simultaneous voices that are playing, and so can have a big impact on CPU usage. You can often achieve the desired effect using a lower Depth setting.

# Oscillator Sub-Pages (FM, RING, WS, MULT)



It's easy (and fun!) to use all of the oscillator sub-pages at the same time, but used together these can demand a significant amount of CPU power. Using them sparingly will often lead to better sonic results and be easier on the CPU load.

#### Single Layer vs Dual Layer Patches



There's a lot that can be done with a single Layer. If you can achieve the desired sound or complexity using one Layer instead of two, it's likely that a significant amount of CPU power can be conserved.

#### Common FX vs Layer FX



Using Common FX whenever possible is a great way to save CPU power. Instead of loading separate delay units into each Layer FX Rack, try sharing a single unit in the Common FX Rack.

### Waveshaper



The Waveshaper is a great feature, but it can be very CPU intensive, because it is polyphonic. To save CPU, you can try alternate approaches to achieving the desired sound. For example, try experimenting with the Flame Distortion unit first. You could get similar results without putting as much demand on the CPU.

### FM/Ring Mod



Both FM and Ring Mod have dedicated oscillators, thus using additional CPU power. Combining these with additional oscillator features like Waveshaping or Unison can add a lot of required processing.

#### Unused Modulation Routings

			MOD MATRIX ZOOM	e,	< 2
SMOOTH	STATUS	SOURCE	DEP TH	TARGET	TARGET PARAMETER
u—		LF05		Sample Start	
<b>11</b>	HORE INVENT	Velocity		Morphing Input A	•
u—	HUTE INVENT	Mod Envelope3	III [	Unison Depth	•
n—					·

Modulation routings sometimes use CPU power, so be sure to remove any unused routings. For example if you are modulating FM Depth with a Mod Envelope, but then decide to turn FM off, remove the modulation routing to further reduce demand on the CPU.

#### **Bypass Unused FX**



When Bypassed, FX Units do not consume CPU power. To conserve CPU power, Bypass any loaded FX when they are not in use. This especially applies to Aux Send FX, since the entire Aux Send system is enabled even if you are only using one Send.

# EZ-Verb vs. PRO-Verb



EZ-Verb doesn't necessarily use less CPU power than PRO-Verb. PRO-Verb has a variable CPU Power parameter, where EZ-Verb's CPU Power is fixed. This parameter changes the number of reflections in the reverb signal, and a higher setting is not always a "better" sound -but more reflections require a higher amount of power to achieve. Sometimes lower CPU settings will produce a more desirable result. If PRO-verb is set to maximum CPU, it takes much more power than EZ-Verb - while lower PRO Verb CPU settings (like the default settings) can actually require *less* power than EZ-Verb.

# Sharing FX with Aux Racks



When using FX like reverbs, it's often better to use the reverb on an Aux Rack, instead of as an Insert. There are times when several sounds need reverb, and instead of inserting 6 reverbs into 6 individual Parts, you could instead place only one reverb on an Aux Rack and then use the Aux Sends to send all six sounds to the single reverb unit. This is far more efficient on the CPU.

### Aux Sends



If you are not using the AUX Sends on the Mixer Page, make sure all of them are off (all knobs turned fully counter-clockwise). When all of the Aux Sends are off, the entire AUX system is disabled, which saves CPU power. If any of the Aux Sends is on, the entire Aux Send system on all Racks and Parts is enabled, even if no audio is passing through it.

#### STEAMTM ENGINE



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# STEAM[™] Engine



The STEAM[™] Engine is a core technology that was created by the Spectrasonics in-house development team, and will be used as the basis of all future Spectrasonics performance instruments. Like our core S.A.G.E. technology, used for groove-based instruments like Stylus RMX, STEAM[™] is important to our future because it completes the technology transition from earlier performance virtual instruments that were based on the licensed UVI Engine.

Virtual instruments built with the multitimbral STEAM[™] Engine offer many development possibilities into a variety of hybrid synthesis and control capabilities. These include high-resolution Streaming Sample Playback, Integrated FX, Variable Waveshaping synthesis, Granular synthesis, FM synthesis, polyphonic Ring Modulation, Timbre Shifting, and a comprehensive Flex-Mod[™] modulation routing system, to name a few.

The STEAM[™] Engine also enables a more efficient response to technology changes like 64-bit computing or a major new operating system. The new in-house technology allows us to create instruments that can be fully supported across industry changes and allows new innovations and faster transitions in the future.

Just as Stylus RMX, based on S.A.G.E. technology, made early compatibility with Apple's Intel-Macs possible, new instruments based on STEAM[™] technology will make future transitions like these much easier on our customers.

Using STEAM[™], new products are being created from the ground up that support Spectrasonics' long-term vision of the highest-quality sounds and the most musically intuitive user experience.

Virtual instruments powered by STEAM[™] also have unlimited expansion possibilities. The new core software is flexible and open - allowing patches to be shared across hosts and computer platforms. New patches and sounds can be added to the core library, giving the user an ever-expanding sonic palette. In addition, all Spectrasonics virtual instruments based on S.A.G.E. and STEAM[™] technologies can interact in musically useful and innovative ways for a smoother creative flow.



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The MULTI is at the top of Omnisphere's hierarchy and consists of up to eight Parts, together with four Aux FX Racks and a Master FX Rack.

The Multi Section contains four pages: <u>MIXER</u>, <u>FX</u>, <u>LIVE</u> and <u>STACK</u>. These allow access to a full-featured MIXER, the Multi FX, and two flexible performance modes: LIVE MODE and STACK MODE, which provide interactive environments for both composition and live performance. These sections are covered in detail in their respective sections of the Reference Guide.

Saving a MULTI is like saving the entire state of the plug-in for future recall. A MULTI stores all of the settings from the MIXER page, the Multi FX, the LIVE MODE and STACK MODE pages, all MIDI Learn assignments, and all of the settings (including any unsaved edits) for each of the eight Parts.

All of Omnisphere's settings are saved and recalled with a project in your plug-in host software.

Saving an individual MULTI lets you recall the entire saved state of the plug-in and load it at a later time into new instances of Omnisphere (or new projects) by loading the MULTI from the MULTI Browser.



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# **CONCEPTS - The Header**

The top area of the Omnisphere interface is the Header. The Header is visible from any page in Omnisphere, and is the primary navigation area of the interface.



The Header contains the Utility Menu, Multi Information including the Multi Name Display and access to the MULTI Browser, indicators for when LIVE MODE or STACK MODE are enabled, and Navigation Buttons for selecting any of the 8 Parts, the MULTI Section or the SYSTEM Page. Finally, there is a Master Volume Control for adjusting the overall output level.

Watch the **Omnisphere Overview** for an introduction to the Header.



# **CONCEPTS - Drop-down Menus (Down Arrows)**



A downward facing arrow indicates that a drop-down menu is available. There are numerous dropdown menus in the Omnisphere interface, which provide access to settings, Presets, MIDI Learn, Automation and other functions.

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### **CONCEPTS – Parameter Control**



#### **Understanding Parameter Control**

There are three ways to control parameters in Omnisphere: Modulation, MIDI Learn and Automation.

Deciding which type of Parameter Control to use depends on a number of factors including which host you use, which parameters you want to automate and what type of physical controller (if any) you wish to use to control the parameters. Here are some guidelines:

#### Modulation

Modulation offers the most sophisticated method of controlling Omnisphere's parameters. This method allows scaling, can use almost any MIDI Message (Wheel, Pitch Bend, Aftertouch, Notes, etc.), and is saved/recalled with each Patch.

To learn more about Modulation, please refer to the Modulation section.

### Automation

With Automation messages, changes made to parameters using the mouse can be recorded in the host software. Parameter adjustments are typically written to an automation track, and in some hosts, you can draw the automation curves directly into the track. This method is most useful for mixing and fine tuning parameter changes over time on an existing performance in your host.

To learn more about Automation, please refer to the Automation section.

# **MIDI** Learn

MIDI Learn enables full remote control of Omnisphere's parameters from MIDI Devices. Almost any parameter in Omnisphere can be MIDI Learned. MIDI Learn assignments are saved with the Multi or with your project. This method is ideal for live performance or recording MIDI-controlled changes into your host on the fly. Parameter adjustments using MIDI Learn are typically written to a MIDI Track in the host software. MIDI Learn assignments for the plug-in can also be separately saved and loaded as **Template Presets**.

Right/Control-clicking a parameter in Omnisphere opens a contextual menu that offers options for all three methods of Automation: Modulation, MIDI Learn and Host Automation.

Host Automation and MIDI Learn give you the ability to control almost any of the parameters of Omnisphere and to record and edit any adjustments in your host.

To learn more about Automation, please refer to the MIDI Learn section.

NOTE: After setting up all of your MIDI Learn and Host Automation assignments, you can

save a Default Multi, which will load all of your custom assignments each time you open a new instance of Omnisphere.



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# **CONCEPTS - CPU Optimization & Conservation**

One of the most difficult questions to answer is how much CPU power Omnisphere uses. The reason it's so difficult to answer is because STEAM[™] was designed as a very flexible and open system, which allows you to freely add FX and more editing power based on the needs of what you want to create. This means that Omnisphere is capable of using all available CPU power and then some!

It's to be expected that the average patch in Omnisphere uses more CPU than the average patch in most other synths. That's for the simple reason that the average patch in Omnisphere has more things going on than the average patch in most other synths. Simple bread and butter sounds have been done...we're aiming for something beyond that with Omnisphere. However, we are always striving to improve CPU performance and hope to further improve performance in future updates.

There are a large number of features that you can enable in Omnisphere, and if you turn enough of them on you'll eventually overload any CPU. The point at which that happens depends on a lot of things: the number of Omnisphere parts in use, the number of plugins in use, the CPU power, etc. As a result it's impossible to predict what represents a reasonable number of enabled features for every given situation. If you are running into performance issues, it's best to turn off unnecessary features. Here's a summary of example things to try:

- Turn down polyphony.
- Turn down amplitude envelope release.
- · Look for effects that can be turned off.
- · Look for oscillator section features that can be turned off.
- In the case of Unison, try turning down the depth.
- Metal Pipe and AllPass filter types use more CPU than other filter types.
- Use one filter instead of 2.
- Glitching in the absence of a CPU overload might indicate a streaming underrun. If that's the case, try turning up the Pre-load memory size.

As you can see, there are several ways to help conserve CPU power in Omnisphere. The following detailed tips and techniques are especially useful in busy sessions when trying to make the most of your computer's resources.

#### 64-bit Instruments & Hosts

If you are using a 64-bit host (such as Logic 9.1), it can access all available system memory without the usual 3Gb limit. This means that you are less likely to run out of memory when loading very large instruments, or a large number of instances. If you find yourself running low on memory, you should add as much physical RAM as possible to get the most from your 64-bit software.

All Spectrasonics instruments are 64-bit, on both Mac and PC.

#### Sample File Server (Mac only)

For Macs running 32-bit host software, the <u>Sample File Server</u> allows you to load large sounds into physical RAM, bypassing the usual 32-bit System Memory limit. It is recommended to have a minimum of 6Gb of RAM installed when using the Sample File Server.

Windows users should use 64-bit host software.

NOTE: If you are running a 64-bit host (such as Logic 9.1), the Sample File Server is unnecessary, and you may get better performance with it disabled.

#### Sample Thinning

Sample Thinning allows Soundsources, Patches, and Multis to be loaded with fewer samples when selected, so that less system memory is used. This is especially important when loading large Trilian sounds into Omnisphere, using <u>Omnisphere Library Integration</u>.

Omnisphere provides Thinning options from the <u>System Page</u>, the Edit Page (<u>Soundsource Zoom</u> <u>Edit View</u>), and from the <u>Patch & Multi Browsers</u>

There are four types of Sample Thinning available; Round Robin samples, Legato samples, Velocities, and Pitch Thinning.

When loading larger sounds, such as Trilian sounds inside Omnisphere, using Thinning can make a huge difference in overall system memory demand, and these can be used in combination to balance between the best sound possible, and the conservation of resources.

#### Host Buffer Size

Performance and CPU load with all virtual instrument plug-ins are sensitive to the host's audio buffer size - particularly with an instrument as powerful as Omnisphere. If you experience performance issues with Omnisphere such as audio drop-outs, you can gain further Performance headroom by raising your host's audio buffer setting. A setting of 256 is usually a good compromise between good performance and acceptable latency, but you may wish to increase the buffer size if you need more CPU power. Omnisphere will also work with larger buffer sizes, so you can try adjusting this setting in your host.

#### Host Sample Rate

Omnisphere has been designed for optimal playback at 44.1k or 48k sample rate. If a host's project sample rate is higher than this, (88.2k, 96k, 192k, etc) it can have a significant impact on reducing Omnisphere's performance, without any real sonic benefit to Omnisphere. In fact, certain patches may not sound correct at higher sample rates. So we recommend keeping your host's sample rate at 44.1KHz or 48KHz for the optimal experience with Omnisphere.

### Multi-Instance vs Multi-timbral

On single and dual-core systems, it's best to load multiple Parts (on different MIDI channels) within a single instance of Omnisphere, before opening any additional instances of the intrument. This is the best way to utilize the available CPU power for Omnisphere.

However, if a multi-core system is used, it can be beneficial to open multiple instances of Omnisphere to distribute the processor load between the cores. The resource handling is done by the host, so in this case it's useful to open more than one instance of Omnisphere. So the most efficient use on a multicore machine is to use a couple of instances multitimbrally - if assigning all Parts to a single instance is using up all the resources of a single core. Consult your host's documentation to make sure that it has support for multi-core/multi-processor systems.

#### **Limiting Voices**



Omnisphere allows up to 64 voices of polyphony per Part. This can put tremendous demand on the CPU, so limiting polyphony is one of the most important things you can do to manage CPU usage.

As a general principle, set the voice count according to the type of Patch you are working with. For example, Texture or SFX Patches typically don't need 16 or even 8 voices of polyphony. Anytime you are running low on CPU power, this is the first area to look at for conserving CPU.

To adjust polyphony for a Part, use the VOICES stepper on either the Main or Edit Pages.

### **Voice Multipliers**



When using Granularity and Unison, the Depth sliders control the number of simultaneous voices that are playing, and so can have a big impact on CPU usage. You can often achieve the desired effect using a lower Depth setting.

#### Oscillator Sub-Pages (FM, RING, WS, MULT)

FM RING WS MULT

It's easy (and fun!) to use all of the oscillator sub-pages at the same time, but used together these can demand a significant amount of CPU power. Using them sparingly will often lead to better sonic results and be easier on the CPU load.

#### Single Layer vs Dual Layer Patches



There's a lot that can be done with a single Layer. If you can achieve the desired sound or complexity using one Layer instead of two, it's likely that a significant amount of CPU power can be conserved.

#### Common FX vs Layer FX



Using Common FX whenever possible is a great way to save CPU power. Instead of loading separate delay units into each Layer FX Rack, try sharing a single unit in the Common FX Rack.

#### Waveshaper

U		VAVE S	наре	iR	
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		DE	≈тн		
	1	2	3	4	
	osc	FI	LT	AMP	
-	- <b>Ш</b>		-	GAIN	

The Waveshaper is a great feature, but it can be very CPU intensive, because it is polyphonic. To save CPU, you can try alternate approaches to achieving the desired sound. For example, try experimenting with the Flame Distortion unit first. You could get similar results without putting as much demand on the CPU.

#### FM/Ring Mod



Both FM and Ring Mod have dedicated oscillators, thus using additional CPU power. Combining these with additional oscillator features like Waveshaping or Unison can add a lot of required processing.

**Unused Modulation Routings** 

			MOD MATRIX ZOOM	e,	< 2
SMOOTH	STATUS	SOURCE	DEPTH	TARGET	TARGET PARAMETER
u—		LF05		Sample Start	
u	HOLE INVENT	Velocity		Morphing Input A	111
u	HUTE INVERT	Mod Envelope3	II	Unison Depth	
u—					

Modulation routings sometimes use CPU power, so be sure to remove any unused routings. For example if you are modulating FM Depth with a Mod Envelope, but then decide to turn FM off, remove the modulation routing to further reduce demand on the CPU.

### **Bypass Unused FX**



When Bypassed, FX Units do not consume CPU power. To conserve CPU power, Bypass any loaded FX when they are not in use. This especially applies to Aux Send FX, since the entire Aux Send system is enabled even if you are only using one Send.

#### EZ-Verb vs. PRO-Verb



EZ-Verb doesn't necessarily use less CPU power than PRO-Verb. PRO-Verb has a variable CPU Power parameter, where EZ-Verb's CPU Power is fixed. This parameter changes the number of reflections in the reverb signal, and a higher setting is not always a "better" sound -but more reflections require a higher amount of power to achieve. Sometimes lower CPU settings will produce a more desirable result. If PRO-verb is set to maximum CPU, it takes much more power than EZ-Verb - while lower PRO Verb CPU settings (like the default settings) can actually require *less* power than EZ-Verb.

Sharing FX with Aux Racks



When using FX like reverbs, it's often better to use the reverb on an Aux Rack, instead of as an Insert. There are times when several sounds need reverb, and instead of inserting 6 reverbs into 6 individual Parts, you could instead place only one reverb on an Aux Rack and then use the Aux Sends to send all six sounds to the single reverb unit. This is far more efficient on the CPU.

### Aux Sends



If you are not using the AUX Sends on the Mixer Page, make sure all of them are off (all knobs turned fully counter-clockwise). When all of the Aux Sends are off, the entire AUX system is disabled, which saves CPU power. If any of the Aux Sends is on, the entire Aux Send system on all Racks and Parts is enabled, even if no audio is passing through it.

# **BROWSER - Introduction**

	Attributes File Directory	Preview Load Life Version	a (a	Search	6
Category	* Author	* Complexity	* Genre	16	
All Bass - Acoustic Bass - Electric Drum Grooves Live Mode Demos Spilt Patterns	An Bass - Bob Daspit Bass - Dean Tabe Bass - Matt Bissonette Eric Persing Ignacio Longo	Level 3 – High	Ballar Diver Film Old S Timel	d se ichool less	
Weather Change to Chill	*****		_		
Drying Reck Overtones Menu	****				
Massive Analog Strings	*****	Midan banda Banda			
Wheel -> Chord Martini	****	Aylophonic Sprin	99	0.00.00.57	5
Xylophonic Springs		Omnisphere Library	Malti		Ш.
Anaheim Fun Live	****			a constants	
Drops of Love	****	60 T-1		and the second s	
	****	B3.7mb			
Micro Techno 1	****	NO	TES TABS		
Micro Techno 1 Solo over Sainta			and the second		
Micro Techno 1 Solo over Sainta Symphony of Music Boxes		Two percussive apreggiated sounds layered to create a complex			
Micro Techno 1 Solo over Sainta Symphony of Music Boxes Vinyi Lounge	****	property line the Mod Wheel to	moounave une A	inp city becay time.	
Micro Techno 1 Solo over Saints Symphony of Music Boxes Vinyi Lounge Acedie Tribute to Lanois	****	groove. Use the Mod Wheel to			
Micro Techno 1 Solo over Saints Symphony of Music Boxes Vinyl Lounge Acadle Tributs to Lanols Aerophonica	****	groove. Use the Mod Wheel to			

Watch the Tutorial Video for Browser Basics and Browser Advanced

Also check out the Browser Episode for background on the philosophy of the new Browser design.

Omnisphere ships with a massive library of sounds, so it requires a sophisticated way to search, filter and browse its contents. The Browsers in Omnisphere were designed to provide an intuitive and convenient way to quickly find exactly the sounds you need from a library containing thousands of sounds.

NOTE: If you also have Trilian Installed, and are using <u>Omnisphere Library Integration</u>, Trilian Patches and Multis will also have unique images identifying the instrument or feel of the selected sound.

Using categories, searchable attributes (called <u>Tags</u>), <u>Favorites and Projects</u>, the Browsers add a powerful and important feature to the workflow in Omnisphere. The more you understand about the Browser works, the better you will be able to enjoy the Omnisphere sound library.

There are three Browsers in Omnisphere, one each for <u>Multis</u>, <u>Patches</u>, and <u>Soundsources</u>. All three Browsers have the same layout and identical functions, but they interact with different parts of the Core Library. For example, when the Multi Browser is open, only Multis will be accessible in the Browser.

There are two ways to quickly distinguish which Browser is open:

1. The title at the top of the Browser.

**MULTI BROWSER** 

PATCH BROWSER

SOUNDSOURCE BROWSER

2. The image in the Info Area.



The Multi and Patch images are named respectively. The Soundsource Browser displays unique images for the various Soundsources, giving you a visual representation of what to expect from each of the Soundsources.



# **BROWSER - Browser Layout**

The layout is the same for all three Browsers, providing a common interface and workflow regardless of which Browser is open. Once you familiarize yourself with the common layout and operation of any Browser, you will be functional with all three Browsers.

NOTE: The Soundsource Browser does not contain the Lite Version Button and Lite Version Zoom Icon.

# **BROWSER – Header**



The The Browser Header contains the Browser Title and a Memory Meter, controls that let you apply filtering options using the Directory Menu and Search Field, buttons that allow selection between the two browsing modes (Attributes or File Directory), and a Preview Load button that toggles between loading methods; Preview Load and Auto Load (the default behavior when Preview Load button is disabled). In addition, the Lite Version Button and Lite Version Zoom Icon provide options for memory management and sample thinning.

NOTE: The Soundsource Browser does not contain the Lite Version Button or Lite Version Zoom Button.

#### **Memory Meter**

The Memory Meter is a gauge that shows how much Virtual Memory the instance of the plug-in is using.

If the Memory Meter approaches full, you will see a popup warning, and may need to take steps to reduce memory usage, such as enable the Lite Version of Patches, or reduce the Pre Load Memory parameter on the System Page.



The circular meter is a smaller version of the linear meters that are found on the System Page and the Lite Version Zoom Page in the Patch and Multi Browsers.

NOTE: If you set a Memory Limit on the System Page, this gauge will show the amount of memory used relative to the selected limit. For example, if you set the limit to .5Gb, and load .4Gb of sample data, the gauge will show roughly 80% full, even if you have far more system memory available.

NOTE (Mac only): If you have selected <u>Sample File Server</u> using the System Page Streaming Mode settings, the Meter will not display memory usage.

# **BROWSER - Filters**

The four-column layout of the Browser Filters provides both hierarchical and Attributes-based filtering functions, and operates in two distinct modes.

In Attributes Mode, the Browser Filters display selectable Category and context-sensitive Attributes columns based on the tags that have been added to the Multi, Patches or Soundsources.

* Category	* Type	* Gender	* Technique
Electro Pero	Gospel Choir	All	All All
Human Volces	Gregorian Men	Male	Bah
Hybrid Organic	Human Synth		Bang
Impacts and Hits	Jazz Volces		Bap
Keyboards	Pop Stacks		Bends
MikeySounds	Throat Singers		Bink

In File Directory Mode, the Browser Filters display folders and files just as they are stored in the directory on your computer's hard drive.

All Composite Morphing Distortion	ul I Human Volces 01 + I Human Volces 02	Gregorian Men Human Synth Japanese Children's Choir Jazz Vocels London Choir London Choir FX	All +
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# **BROWSER - Info Area**

The Info Area provides detailed information about the selected sound in the right column. The image in the right column also helps distinguish which Browser you're using. This is the default View Mode for all Browsers.



Four Column View displays results in four columns, which scroll horizontally. This allows viewing of more results at once.

Anticipation	Gopiglitch	R2-D2 on Crack	Step-phaser String Machine 1
Bad Latitude	Granular Carousel Organ 2000	R2-D2 plays Pacman	Step-phaser String Machine 2
BBC Labs	Heightened Pulse Solo	Rave of the Buzzards	Stepmelater Complex
Bouncing Ball Party	IDM Bassbeich 1	Rave of the Buzzheads	Stepmeister Ringer
Bubbling Analog Brew	IDM Bassbelch 2	Rave of the Files	Sucking Syncbots
Chaos Bowla 1	Mondo Progger Lead	Raving in the Estuary 1	Synk Bombz
Chaos Modular Lead	Monophonic Velofilter Pad 2	Raving in the Estuary 2	Talking Filter Groove
Choral Chordalis	Morse Code Synthy	Raving in the Estuary 3	Talking Filter Groove
Circadian Groove	Mr Putney	<b>Ripping the Prophets Apart Lead</b>	TB Killerz
Dancing Gameboys	New World Order	Screeming Combers	Testosterone Lead
Digitalika	One Layer Bombast	Singing Glacier Stones	The Computer Age
Elastik Aliens	Polymoceanic	Space Gilders 1	The Formant Wheel
Glitch-o-plex Speatic Synth	Pulsatronic Oberheim	Space Gilders 2	The Odd Boy Dances

# **BROWSER - Footer**



The Browser Footer provides additional sorting and browsing options, access to the <u>Project</u> menu, the <u>Tag Editor</u> and <u>Browser Settings</u>, and allows switching between the two view modes (<u>Info View or 4-column View</u>).

# **BROWSER - Lite Version**



The Lite Version feature provides added flexibility when loading Patches and Multis to help you manage available memory resources and is especially useful for quick loading and auditioning sounds.

Enabling the Lite Version Button allows you to reduce, or "thin" the number of samples that are loaded with a Patch or Multi.

When this button is enabled, the thinning settings from the Lite Version Options Zoom are applied.

This feature is especially useful when loading Trilian sounds into Omnisphere using <u>Omnisphere Library Integration</u>. Many of the sounds included in the Trilian Factory Library are quite large, and contain thousands of samples, with some over 2 Gigabytes in size! These can place a heavy demand on available memory and take a longer time to load.

NOTE: All Thinning options applied here are saved with the song, the Patch, or the Multi, and are recalled the next time you load. However, nothing is saved until you specifically save your host song, or save the Omnisphere Patch or Multi.

NOTE: The Lite Version Button will reset to its default disabled state when you close the Browser. To keep it enabled, select the "Keep Lite Version Selected" option in the Lite Version Options Zoom pane.

### Lite Version Options Zoom Pane



Selecting the Lite Version Zoom Icon provides access to a number of thinning options, which allow you to customize the Lite Version settings. At the top of the Zoom window is a Memory meter that shows current Virtual Memory usage.

NOTE: If you set a Memory Limit on the System Page, this gauge will show the amount of memory used relative to the selected limit.

### **Round Robin**



Soundsources can include a large number of Round Robin samples per zone, so these can add significantly to the size of the Soundsource. This option lets you control the number of Round Robin samples that are loaded with the Patch or Multi.

In many cases, you can save quite a bit of memory by reducing Round Robins to 'At most 2 RRs', without sacrificing the more realistic feel that Round Robins provide. Selecting "No RR" will result in no Round Robin samples being loaded with the Patch or Multi. Selecting "No Limit" will load all of the Round Robin samples available.

NOTE: Most Omnisphere sounds do not contain Round Robin samples. However, if you are using Trilian sounds inside Omnisphere, this feature becomes very important, as Trilian sounds contain a very large number of Round Robin samples.

# Velocities



Soundsources may also contain a very large number of velocity switching samples mapped across many regions of the entire keyboard range. This setting provides a variety of options for reducing the number of velocity switched samples that are loaded with the Patch or Multi. To apply Velocity thinning, select from the options in the drop down menu.

# No Limit

Will load all Velocity switched samples.

# **Every other**

Will load every other Velocity switched sample.

# Every third

Will only load every third Velocity switched sample.

# **Every fourth**

Will only load every fourth Velocity switched sample.

# Velocities above

Selecting a value from this menu, for example, 64, will only load Velocity switched samples mapped to a Velocity of 64 and above.

## **Velocities below**

Selecting a value from this menu, for example, 100, will only load Velocity switched samples mapped to a Velocity of 100 and below.

NOTE: When thinning Velocities, there are no gaps in the sound. The remaining Velocity switched samples will adjust to be triggered across the full Velocity range.

### Legato



This option determines whether Legato Soundsources are loaded or not.

If "No limit" is selected, Legato Soundsources will be loaded. If "None" is selected, no Legato Soundsources will be loaded.

#### Omnisphere

NOTE: Omnisphere sounds do not currently contain Legato Soundsources. However, if you are loading Trilian sounds in Omnisphere, this feature becomes very important for overall memory management.

# **Pitch Thinning**



Omnisphere Patches & Multis can contain a huge number of samples mapped across the full keyboard range. Pitch Thinning lets you limit the samples that are loaded to match either a "trained" range of played notes, or a selected Scale or Interval. Using Pitch Thinning can substantially reduce the number of samples loaded with the Patch or Multi.

# **Trained Pitch Thinning**

- [	Begin Training	
-	Finish Training	

With Trained Pitch Thinning, you can load only the samples used during a performance.

For example, if you are working on a melodic phrase that has notes in a limited range, say from C2 to C4, by using Trained Pitch Thinning, you can speed up load times, and reduce memory usage by loading only the samples used in that range.

If you have recorded an Omnisphere part in a song, and want to speed up load times and conserve memory, you can apply Trained Pitch Thinning by playing the MIDI clip in the host. Omnisphere will then only load the samples used in the actual phrase.

To use Trained Pitch Thinning, select the Begin Training button. Play a range of notes (or a MIDI clip in the host), and then select the Finish Training button. This will limit the loaded samples to the note pitches that were played during training.



# **Pitch Thinning Using Scales & Intervals**

To limit loaded samples to a specific Scale or Interval, select the Pitch Thinning drop-down menu, and select an option from the available submenus. You can select from Major or Minor Scales, or from a variety of Intervals.

NOTE: Although only a limited set of samples will be loaded, this won't result in "silent zones" on the keyboard. All notes will still

Omnisphere

play, but will be stretched from the nearest pitched sample.

NOTE: The Pitch Thinning options on the Lite Version Zoom are the same as those found on the Soundsource Zoom Edit View. However, the Lite Version feature affects the entire Patch or Multi, while the Soundsource Zoom options affect only the individual Soundsource. Use the Soundsource Zoom Edit View if you want to apply different thinning options to each Layer in a Patch.

# Lite Version Default Settings

The Lite Version Default Settings are useful for quick loading, and easy auditioning of complete sounds. Unlike "Preview Load", which loads the samples only for a limited range of notes, Lite Version applies sample thinning, loads the sound across the entire keyboard range, and is immediately playable after loading.

When Lite Version is enabled with the default settings, the following settings will be in effect:

- Round Robin: No RR samples. No Round Robin samples will be loaded.
- Velocities: above 65. Only Velocity switched samples mapped above a Velocity of 65 will be loaded.
- Legato: None. No Legato samples will be loaded.

# Keep Lite Version Selected Button



The Lite Version Button will reset to its default, disabled state when you close the Browser. When this option is enabled, the Lite Version Button in the Browser will remain enabled, even after closing the Browser. Think of it as changing the default state of the Lite Version Button to 'enabled'.

# **BROWSER - Access**



Anywhere that you see a Folder Icon Button, you will be able to access a Browser by clicking on the Folder. If there is a Name Display next to the Folder, you can also click inside the Name Display to open the Browser.

# **BROWSER - Multi Browser**

The Multi Browser is accessed using the Multi Display in the Header, which is always visible and available from any page in Omnisphere. Select the Folder Icon Button or click inside the Multi Name Display to open the Multi Browser.



NOTE: The Multi button does not have to be selected to access the Multi Browser. You can access the Multi Browser from any page in the plug-in.



The Multi Browser

# **BROWSER - Patch Browser**

When a Part is selected (using the Part  $1 \sim 8$  Buttons), the Patch Browser is accessed from the Patch Name Display, which is always visible and available from any of the Part pages. Select the Folder Icon Button or click inside the Patch Name Display to open the Patch Browser.



The Patch Browser can also be accessed from the Mixer page (Patch Name Displays), and from the Live Mode page when Mixer Controls are enabled.

Mixer Patch Name Display



Live Mode Mixer Controls



# The Patch Browser



**BROWSER - Soundsource Browser** 

The Soundsource Browser is accessed from either the Main Page or the Edit Page.

# Main Page

On the CONTROLS sub-page, select the Folder Icon Button or click inside the Soundsource Name Display to open the Soundsource Browser.



On the INFO sub-page, select the Folder Icon Button to open the Soundsource Browser.



## Edit Page

In the OSCILLATOR section, select the Folder Icon Button or click inside the Soundsource Name Display to open the Soundsource Browser.



### Soundsource Browser



**BROWSER - Search and Filtering** 

All searching and filtering is accomplished from the Browser Header (using the Directory Menu and the Search Field) and the Browser Filters. There are different options available for filtering the results, and setting up how sounds are browsed, displayed and previewed.

×	PATC	H BROWSER	0
DIRECTORY: AII	Attributes File Directory	Preview Load Lite Versi	ion 🔍 🔍 Search 🕥 🔒
Category	* Туре	* Source	* Timbre

The Directory Menu, Search Field and Browser Filters always work in combination with each other, and used together will further refine the results. The order in which they are applied isn't important. You can apply selections and criteria using all three methods in any order, and you will still end up with the same filtered results.

# **BROWSER - Directory Menu**


The Directory Menu allows filtering by libraries. Select the Directory Menu down arrow or name display to open the menu. After selecting a Library, only the sounds in that Library will be displayed in the Browser.

They can be further refined using the Search Field and the Browser Filters. Selecting 'All' will remove any Directory Menu filtering and show all Libraries simultaneously.

After saving custom Multis or Patches, the User Library will be available from the menu. Selecting this Library will display only custom User Multis or Patches in the Browser.

For additional details refer to the **Browser Saving & Managing Sounds** section.

NOTE: If you also have Trilian Installed, and are using <u>Omnisphere Library Integration</u>, Trilian libraries will also appear in the DIRECTORY Menu.

# **BROWSER - Search Field**

The Search function in Omnisphere works much like a search engine. Click anywhere in the Search Field to enter search text. Press the Enter/Return key to initiate the search and view the filtered results.



The Search function will check sound Names, Tags, Keywords, and even Notes text to determine the search results.

Selecting Attributes in the Browser Filters can refine the search even further. The more selections that are made, the narrower the search results will be. To search the entire Core Library, be sure to select "All" in each of the Browser Filter columns.

Search Lock

By default, when a Browser is closed the Search Field will be cleared.

Enabling the Search Lock button allows search entries (and the filtered results) to be retained after the Browser is closed and re-opened.

NOTE: The Search Lock setting is saved as a global user setting. For example, if you enable Search Lock, it will remain enabled the next time you open an instance of the plug-in.

NOTE: When you change the Search Lock setting, that change is applied to all Browsers. For example, enabling or disabling Search Lock in the Patch Browser also enables or disables it in the Multi and Soundsource Browsers.

#### Search Clear



Select the Search Clear button to instantly clear the Search Field. When you select the Search Clear button, the displayed sounds will immediately update accordingly.

NOTE: You can apply the Search Clear button with Search Lock enabled. This allows you to make changes to your search criteria without changing the Search Lock status.

# **BROWSER – Filters (Attributes & File Directory)**

Using Attributes Mode, filtering is achieved by selecting Categories or <u>Projects</u> and additional Attributes to refine the list of sounds. The first column drop-down menu allows you to select between "Category" and "Project" (if you have created any Projects), while the remaining Attribute columns may change their labels depending on the Category selection.

There are two browsing modes available, Attributes Mode and File Directory Mode. These are selected using the Attributes and File Directory Buttons, which will toggle between modes.



#### Attributes Mode

Using Attributes Mode, filtering is achieved by selecting Categories and Attributes to refine the list of sounds. The first column will always be labeled "Category", while the remaining Attribute columns may change their labels depending on the Category selection.

For example, in the Soundsource Browser, if the Category "Psychoacoustic" is selected, then the Attribute columns will automatically display Type, Source and Timbre.

* Category	* Type	* Genre	* Complexity
MikeySounds	All	All	All I
Pads + Strings	Bells and Chimes	Ambient	Level 1 – Low
Psychoscoustic	Bowed Colors	Ballad	Level 2 – Medium
Retro Underground	Complex Motion	Dance	Level 3 – High
SFX and Noise	Electrical Experiments	Electronica	GRAMMEN AND A
Synth Bass	Ethnic Colors	Experimental	

If the Category "Human Voices" is then selected, the Attribute columns will change to Type, Gender and Technique.

Category	* Type	* Gender	<ul> <li>Technique</li> </ul>
Human Volces	All	All	Ali
Hybrid Organic	Boys Choir	Boys	Ahs
Impacts and Hits	Classical Choir	Boys and Girls	Babbling
Keyboards	Classical Soloists	Female	Beh
MikeySounds	Combinations	Male	Bang
Peds + Strings	Gospel Choir	Male and Female	Bep

These changes are intended to reflect Attributes that make more sense in context to the Category selection. These are recommended Attributes, but you can still manually select different Attributes from the column drop-down menus.



NOTE: This behavior is dependent on the setting "Category Sensitive Attributes" in the Browser Settings. Automatic Attributes changes will only occur if this setting is enabled (the default state). If the setting is disabled, the labels will remain static when changing Categories.

# **File Directory Mode**

Using File Directory Mode, the Browser Filters display a File Folder hierarchy that matches how they are stored on your computer's hard drive.

All	All	Bowls Hit	All
Ambiences	Psychoacoustic01 >	Bowls Water	Burning Plano FX
Composite Morphing		Burning Plano	Burning Plano FX Bend
Effects and Noises		Deep Piano Pick	Burning Plano FX Hits
Human Voices		Drying Rack	Burning Plano FX Noise
Psychoacoustic	<ul> <li>Image: Image: Ima</li></ul>	Ebowed Plano	Burning Plano Tonal

When you select a Folder in a column, the list of sounds will be filtered to include only the sounds that exist in the Folders below it in the file hierarchy.

This traditional method of file browsing may be more natural to some Users, and is useful when creating a large custom collection of Multis and Patches. You can create a custom file directory hierarchy inside the STEAM folder, and organize your custom Patches to suit your own needs. That hierarchy can then be directly browsed using the File Directory mode of the Browser.

NOTE – Most of the Factory Library in Omnisphere does not use folders or sub-directories, so File Directory mode is not particularly useful for browsing Factory sounds.



There are numerous options available to change how sounds are organized and displayed, and for navigating the sounds in the Info Area. The controls for these options are found in the Browser Footer.

These tools allow you to sort sounds in different ways, including by Ratings, and because there are thousands of sounds to explore, these controls will help you explore more deeply into the Library. These Browser controls will also work on filtered results.

Sort Menu



The Sort Menu includes three ways to sort the list of sounds.

# A-Z & Z-A

The A-Z & Z-A options provide a simple way to reverse the alphabetization of the patches. Select Z-A to reverse the order, and A-Z to restore it. The Browser display defaults to A-Z sorting.



#### Ratings

All sounds in the library can be given ratings from 1 to 5 stars using the Ratings system. Selecting Ratings from the Sort menu will display rated sounds at the top of the Browser list, in order of their Ratings. For example, 5-star sounds will be listed first, followed by 4-star sounds, and so on.

#### Shuffle Button



It's a common error to only browse the sounds near the beginning of the alphabetical list. Every time the Shuffle Button is selected, the order of the sounds will be randomized. This button is useful for keeping the list of sounds fresh and inspiring, instead of always showing the same sounds at the top of the list.

#### **Browser Stepper Buttons**

The Stepper Buttons step through the sounds in the Browser one at a time. When you step to the next sound, it will be selected and loaded.



The Browser Stepper Buttons can be MIDI Learned, and those assignments will apply to the Stepper Buttons in all three Browsers.

The Steppers are especially useful for browsing sounds quickly with Preview Load and Audition Auto-Play enabled, or for conveniently stepping through a filtered selection of sounds.

TIP – <u>MIDI Learning</u> the Browser steppers to switches on your MIDI controller is a great way to speed up the auditioning process, especially when used with the "Auto-Play" and "Preview Load" options enabled.

#### **Refresh Button**



Selecting this button will refresh the display of sounds in a Browser. Using the Refresh button will ensure that all of the available sounds are displayed. When changes are made to the library outside of the Browser (e.g. after installing a library update or manually moving custom Patches), or while Omnisphere is open, use the Refresh Button to update the Browser display.

# **BROWSER - View Modes**

There are two modes available for viewing sounds: Info View and 4-Column View. Selecting the Buttons shown below will toggle between modes.

#### Info View

This is the default view for all Browsers. The sounds are listed on the left and the area on the right contains details about the selected sound. If your mouse has a scroll-wheel, it can be used to scroll through the list of sounds.



The info area on the right includes the name of the sound, which part of the Library it belongs to (or the current Layer, in the case of Soundsources), a Zoom Button to access more detailed information, the file size of the sound, a thumbnail image for that sound type, Notes for the sound, and a Tags view to quickly check its Tags.

#### 4-Column View

To see more sounds listed at once, select the 4-Column View. This will display the results in four columns. The vertical scrollbar is replaced with a horizontal scrollbar. Using the scroll-wheel on your mouse will still work for horizontal scrolling in 4-Column View mode.

Anticipation	Gopiglitch	R2-D2 on Crack	Step-phaser String Machine 1
Bad Latitude	Granular Carousel Organ 2000	R2-D2 plays Pacman	Step-phaser String Machine 2
BBC Labs	Heightened Pulse Solo	Rave of the Buzzards	Stepmelater Complex
Bouncing Ball Party	IDM Bassbeich 1	Rave of the Buzzheads	Stepmeister Ringer
Bubbling Analog Brew	IDM Bassbeich 2	Rave of the Flies	Sucking Syncbots
Chaos Bowla 1	Mondo Progger Lead	Raving in the Estuary 1	Synk Bombz
Chaos Modular Lead	Monophonic Velofilter Pad 2	Raving in the Estuary 2	Talking Filter Groove
Choral Chordalis	Morse Code Synthy	Raving in the Estuary 3	Talking Filter Groove
Circadian Groove	Mr Putney	Ripping the Prophets Apart Lead	TB Killerz
Dancing Gameboys	New World Order	Screaming Combers	Testosterone Lead
Digitalika	One Løyer Bombast	Singing Glacier Stones	The Computer Age
Elastik Aliens	Polymoceanic	Space Gliders 1	The Formant Wheel
Glitch-o-plex Spastic Synth	Pulsatronic Oberheim	Space Gilders 2	The Odd Boy Dances

**BROWSER - Info Zoom Views** 

S	
	Omniscience 2
	Created using Reaktor's *Metaphysical Function* ensemble. Single stretched amblent sample – best played as a drone, with single notes, octaves, fourths or tilths. Works great with Harmonia and Start modulation. AUTHOR: Ignacio Longo LIBRARY: Core Library SPECS: Sampled AP4 to AP4, CATEGORY: Textures SUBCATEGORY: Textures 01 MOOD: Dreamlike, Floating, Hopeful, Longing, Mystical, Peaceful, Somber, Spacey, Joyful, Meditative TONALITY: Open TYPE: Dreamling, Celestial
	PHONE HAPD + V/V/V LEGAL INPO

When the Info View mode is selected, the right column contains information about the selected sound. In addition, there is a Zoom Button that will open a Zoom View for additional details about the sound. The Zoom Views in the different Browsers contains similar information.

The Soundsource Zoom View will typically contain the most information, with details about the origin of the samples and suggestions for their application.

#### Soundsource Zoom View: Edit & Info Panes



The Soundsource Zoom View contains two sub-panes; the Edit Zoom and Info Zoom panes. Use the EDIT and INFO Buttons to select the desired view.

The Info Zoom pane shows the descriptions, keywords, and tags of the Soundsource. This is the default view when opening the Soundsource Zoom from the Soundsource Browser.

The Edit View provides access to the Sub-layer Mixer and Sample Thinning controls for the Soundsource.

To learn more about the Soundsource Edit Zoom, see the Edit Page: <u>Soundsource Zoom</u> section.

# Full Size Image



Omnisphere

The images for Multis and Patches are the same as those found in the Info View.

For Soundsources. the image will be a visualization of of the sound that it's associated with. Similar sounds might have similarly themed images. Sometimes this image might be rather abstract, or it can be more literal. Many of the Soundsource images will be images of the original item that was sampled.

NOTE: If you are loading Trilian sounds into Omnisphere using Omnisphere Library Integration, you will also see images for Trilian Patches and Multis.

# File Size



This is the total amount of memory that is used when the sound is loaded.

NOTE: If a Patch contains only DSP waveforms (no Soundsources), no size will be listed.

#### More Info + WWW

MORE INFO → WWW

Additional information about Omnisphere's Soundsources can be found on the internet. We've provided a web link button that will take you to a webpage with further information about the sound and/or it's author.

#### Legal Info



This will take you to a page that details all of the legal information about how Omnisphere's Soundsources can (and can't) be used as well as copyright information about how the samples and effects were obtained and licensed.

# **BROWSER - Favorites & Projects**

<ul> <li>Project</li> <li>All</li> <li>Film Score</li> <li>Rock Band</li> <li>Sound Design</li> <li>Video Game</li> </ul>	▼ Genre All Ballad Diverse Electronica Film High Energy
Adagio Expressivo Boys Choir Ahs ^ Classic Nylon Guitar Clean Fender – Full Range Electro Kick Harmonic Rhodes Phased Hammond Plucked Dream Plano Arp Shredder Studio Tron Strings	**** **** **** **** **** **** ****

Projects and Favorites provide tools for managing, organizing and recalling user-defined groups of sounds, making it much more convenient to navigate specific sounds, recall preferred sounds, and work efficiently with the enormous library contained in Omnisphere.

Projects let you collect sounds into organized groups for instant recall later, and you can identify Favorites by applying Ratings to Multis, Patches and Soundsources. Favorites can also be very useful for prioritizing sounds within Projects!

NOTE: Be sure to watch the Favorites and Projects Tutorial Video.

Projects and Favorites are global library tags and are saved automatically, available for later recall. They will also appear across multiple instances of Omnisphere. If you add Projects or Favorites to one instance, they will appear in any other instances that you have open, or that you open later.

# **BROWSER - Projects**

<ul> <li>Project</li> </ul>	
All	
Film Score	- 11
Rock Band	- 1
Sound Design	
Video Galile	
Adagio Expressivo	
Boys Choir Ahs ^	
Classic Nylon Guitar	
Clean Fender – Full Range	
Electro Kick	
Harmonic Rhodes	
Phased Hammond	
Plucked Dream Plano Arp	
Shredder	
Studio Tron Strings	

A Project is a user-defined collection of sounds that are organized under a single, named group. This can be applied in many useful ways. For example Projects can be created and named according to jobs that you are working on, or created for different sessions, songs or styles.

You can add Multis, Patches and Soundsources to a Project. The Project system is flexible and easy to manage, and since you name and populate the Projects yourself when creating them, they can be organized in ways that are most meaningful to you.

When a Project is selected in the Browser, only the sounds that have been added to that Project will be displayed. This gives you instant access to filtered and organized selections of sounds.

Projects work well together with <u>Favorites</u>, offering additional sorting options, and with Search and Attribute Filters for further managing the display of your Project's sounds.

#### Creating, Managing, and Accessing Projects

The Project Menu



The Project Menu provides all of the options needed to create, manage and access Projects. Using the Project Menu, you can Create Projects, Delete Projects, add sounds to or remove sounds from a Project, and Show Projects in the Browser. These are the actions you can take using the Project menu:

#### Create a Project

	notes as we
Film Score	ie.
Create Project	
Show Projects	Ð,
Delete Project	►

Select "Create Project" from the Project Menu, type a name for the Project into the text field, and press Return/Enter on your keyboard.



The Project is now created, and available to add sounds to.



After creating a Project, its name will appear in the top section of the Project Menu.

#### Add a sound to a Project

To add a sound to a Project, first select the sound in the Browser that you wish to add. Next, open the Project Menu and select the Project name you wish to add the sound to. That's it!

Whenever that sound is selected, if you open the Project Menu you will see a checkmark next to that Project name, indicating that the selected sound is in that Project.



A sound can be added to multiple Projects. If a sound has been added to multiple Projects, you will see checkmarks next to the names of all the Projects it has been added to.

This makes it easy to quickly see if a sound has been added to one or more Projects.

#### **Browse Projects**

Once you have created one or more Projects and added sounds to them, you can then quickly browse your Projects to find and select the specific sounds you added to them.

To browse your Projects, select "Show Projects" from the Project Menu.



The left-most attribute filter will change from "Category" to "Project", and all of your Projects will show up in the left-most attribute column.

Select a Project from the Project list, and your Browser will display only the sounds contained in that Project.

Project
 All
 Film Score
 Rock Band
 Sound Design
 Video Game

Select "Show Projects" from the Project Menu again, and the attribute filter will return to the Category view.

You can also switch between displaying Projects or Categories by selecting the left-most attribute filter menu, and selecting Project or Category.



#### Remove a sound from a Project

To remove a sound from a Project, first select the sound you wish to remove by selecting it in the Browser. Next, open the Project Menu and select the Project name you wish to remove the sound from (there should be a checkmark next to the Project name). To confirm that the sound was removed from the Project, select the Project Menu again and confirm that the checkmark was removed.

#### **Delete a Project**



To delete a Project, open the Project Menu and select the Project you wish to delete from the "Delete Project" sub-menu. A confirmation popup will appear, asking you to confirm the deletion. Selecting OK will delete the Project.



<ul> <li>Project</li> </ul>	
All	
Film Score	
Sound Design	
Video Game	

Deleting a Project doesn't remove or delete any sounds from the library. It simply removes the tags assigned to that Project. If you have the same Project also being used in the Multi, Patch and Soundsource Browsers, you will have to delete the Project separately in those Browsers.

# **BROWSER - Favorites**

Addicting Comper	*****
American Obesity	*****
Asia Minor	****
Basic JP+Juno Comper	****
Big Prog Chiffer	***
Chromachords 2	***
Classic Eighties Polylead	****
Clear as Day	**
Compressed Poly Clavs	****
CS-80 Clavisynth	**
Dry Euro Wasp	
Eighties Oberheim Pluck	***
Fifth Pluck ala Dave Stewart	****
FM Direct Seq	

The Favorites feature in Omnisphere provides a familiar and convenient way of rating and organizing sounds in the library. You identify Favorites by applying Ratings to Multis, Patches and Soundsources, and can easily change or remove assigned Ratings. This feature is useful for identifying and organizing sounds by preference, or creating sub-groups inside Projects. You can also sort sounds in the Browser by Ratings, bringing your favorite sounds to the top of the Browser list.

Used together with the Projects feature, Favorites provides a powerful and convenient way to organize and manage the Omnisphere sound library.

#### Adding a Rating to a sound

To add a Rating to a sound, open the Browser and select one of the Rating Dots to the right of the sound's name. The dots will change to stars when you select them. You can rate a sound from 1 star to 5 stars.



By selecting only the Rating Dots, you can rate sounds without loading them. This allows you to rate a large number of sounds very quickly, without having to load each one as you go along.

#### Changing or removing a Rating

After you have added a Rating to a sound, you can easily change it by selecting the dots (or stars) again.

There are two ways to remove the Rating from a sound: either click in the empty space just to the left of the Rating Dots, or CTRL/CMD-click on

the dots/stars themselves.

# Sorting by Ratings

Addicting Comper	****
American Obesity	****
Asia Minor	****
Basic JP+Juno Comper	****
Fifth Pluck ala Dave Stewart	****
Big Prog Chiffer	***
Chromachords 2	*** • •
Eighties Oberheim Pluck	***
Clear as Day	** • • •
Compressed Poly Clavs	** • • •
CS-80 Clavisynth	** • • •
Classic Eighties Polylead	****
Dry Euro Wasp	
FM Direct Seq	

To see your Favorites sorted according to their Ratings, open the Sort Menu in the Browser Footer and select "Ratings". The sounds in the Browser window will then be displayed with your favorite sounds at the top of the list, in order of their Rating. The top-rated (5-star) sounds will appear first, followed by 4-star sounds, then 3-star sounds, etc.

✓ Featured	le
A-Z Z-A	
Ratings	

To return to an alphabetical list, open the Sort Menu again and select "A-Z".

# **BROWSER – Selecting and Loading Sounds**

Selecting a sound in the Browser also loads the sound. How quickly it loads depends on the size of the file, as well as the Preview Load and Lite Version settings that you have enabled or selected. Lite Version is especially designed for fast loading of ready-to-play sounds.

#### Auditioning Sounds

When browsing a substantial library, it's important to have convenient ways of quickly auditioning the sounds. The Browser provides an Audition Button, the Lite Version button with multiple thinning settings available in the Lite Version Options Zoom, a quick Preview Load, and options in the Browser Settings for setting up the Audition and Preview Load behavior.

Preview-Load Note Range	C4 *	→ C4 *	Audition Auto-Play	С С
Audition Note	C4 *		Browser Synchronization	Ċ
Audition Note Length	1 sec *	Ca	ategory Sensitive Attributes	Φ

If Audition Auto-Play is enabled in the Browser Settings, then selecting a sound will automatically audition it. The Audition Note and Audition Note Length settings determine the pitch and duration of the auditioned note.



Select the Audition Button in the Browser Footer to hear a note played using the currently loaded sound. The sound will play for as long as the button is selected (or until it decays).

The "Audition Note" setting in the Browser Settings Zoom determines the pitch of the note.

#### **Preview Load and Lite Version**



Omnisphere provides different ways to control how sounds are loaded. These are Auto Load, Preview Load and Lite Version, and these can interact with each other for maximum flexibility.

Auto Load is what we call the default way that Omnisphere loads sounds, and is always active if Preview Mode is not enabled. Auto Load will load the complete sound, with all samples, across all zones of the keyboard.

Preview Load will only load samples across a limited range of notes, based on the "Preview-Load Note Range" setting in Browser Settings. Because of this, Preview Load can load sounds much more quickly, making it a useful feature when previewing a large number of sounds, or when you need to audition sounds quickly.

Enabling and disabling the Preview Load button will toggle between the modes.

The Lite Version button is independent of the Auto Load and Preview Load modes, and can be used in combination with either of them.

When the Lite Version button is enabled, it will apply Sample Thinning settings based on the Lite Version Zoom Options. It also provides a way to quickly browse and audition sounds in the library.

Using Lite Version together with Preview Load is the fastest way to browse and audition a large number of sounds. Using Lite Version with Preview Load disabled (in Auto Load mode) allows for faster loading of complete, ready-to-play sounds.

Using these methods together with Audition Auto-Play and MIDI Learned Browser Steppers provides an exceptionally fast and convenient way to browse the Omnisphere Library.

NOTE: If Preview Load is enabled when the Browser is closed, the setting automatically reverts to Auto Load, and the full sound is loaded.

# **BROWSER – Saving & Managing Sounds**



Omnisphere offers a very flexible way to manage custom Patches & Multis, for example, you can create custom collections of sounds organized by project or style. These can then be searched, selected or filtered using the features of the Browser.

The process of saving and managing custom Patches or Multis in Omnisphere is essentially identical, with the main difference being the locations of the user libraries that you create.

The best way to think of it is, at the top level you create Directories (or Libraries), under which you can organize your Patches into Categories.

Folders created at the top level will show up in the DIRECTORIES drop-down menu.

Subfolders created inside these will be displayed in the Category column of the Browser.

#### Saving Patches & Multis



Selecting the Save Patch (or Save Multi) option from the Utility Menu will open a File Save dialogue. After naming and saving the Patch or Multi, the EDIT TAGS interface will open, allowing you to assign various Attribute Types and Assignments, add custom Assignments, and add your own Keywords and Notes to the file.

Once you have finished editing the tags, click the SAVE button to finish saving the file. You may also cancel the save process by clicking the CANCEL button.

Omnisphere

You must save Patches & Multis within the User folders, that is, you cannot save at the User folder level itself.

There is no need to press the "Refresh" button in the Browser after saving a new Patch or Multi.

NOTE: Patches & Multis must be saved into a Category folder inside the User folder. This folder can be in an existing user directory, a newly created sub-folder inside the User folder, or a new user directory.

#### Managing Patches & Multis

User		:	Q search	h		
STEAM N Omnisphere	Defaults Documentation Settings Library Soundsources		Multis Patches Presets User Tags		G Factory ► User ►	Drum Grooves Fault Live Mode Demos mlt_omn.index Split Patterns Split Sounds Stacked Patterns Stacked Sounds

The Browser is designed to handle searching, browsing, loading and saving sounds.

User-created Patches or Multis are managed using your computer's built-in file manager (either the Mac Finder, or the Windows Explorer). This makes it very easy to organize and manage your custom Patch and Multi Libraries, and structure them in any way that makes sense to you.

The default save location for Patches is inside a folder named "User" located at: ... /STEAM/Omnisphere/Settings Library/Patches/User.

The default save location for Multis is inside a folder named "User" located at: ... /STEAM/Omnisphere/Settings Library/Multis/User.

You can create additional folders at those locations and name them whatever you like. When you create a new folder at the top level (alongside the User folder), it will show up in the DIRECTORIES drop-down menu in the respective Browser.

NOTE: When you rename or create new folders at the top level, you must re-instantiate Omnisphere, and then select the Refresh button for them to appear correctly in Omnisphere's Browser.

In order to save a Patch or Multi, you must save it into a Category sub-folder within a User folder. If there are no existing subfolders inside a User folder, you can create a new one using your system's file manager, or by using the File Save Dialogue while saving a Patch or Multi. You can then save your Patch or Multi into the new subfolder. You can create as many sub-folders as you like, and those sub-folders will be displayed as Categories in the Category column of the Browser.

Once you have created a user library, using Omnisphere's File Directory browsing method will allow you to browse your Patches and Multis within their folders, just as they are located on your Hard Drive.

#### **Renaming, Relocating and Deleting Patches & Multis**



To rename, relocate or delete a user-saved Patch or Multi you must use the Mac Finder or Windows Explorer to do so. Navigate to the User folder, locate the desired files there, and rename, delete or relocate them using your file manager.

# **BROWSER – Edit Tags**

Selecting the Edit Tags Button in the Browser Footer opens the Tag Editor.

Edit Tags 🔍

Omnisphere's customizable tagging system allow sounds to have Tags assigned to them, which categorizes sounds and makes them searchable and filterable. Tags are based on Attributes that also can be customized by the User.

ATTRIBUTE TYPES	RESET ALL	OVERVIEW	E ASSIGNMENTS
Author	Eric Persing		Eric Persing Ignacio Longo
Envelope	Medium Decay, Percusa	ive	Michael Flint Scott Frankfurt Tobias Marberger
Timbre	Acoustic, Chimey, Bells,	Reverberant, Organic	
			HORE G. CATEGORY
/ KEYW	ORDS	A hybrid between a music box and church bells	
2 WEB	LINK		

It is not required to create Tags for custom sounds, but it's strongly recommended to add them, as Tags will make them easier to find when browsing and to share with other Users.

NOTE: You won't be able to open the Tag Editor for a Patch or Multi unless it has already been saved to the Library.

#### **Attribute Types**

All of Omnisphere's factory sounds have at least three Attribute Types assigned to them, and can have up to eight Attribute Types assigned. Each Attribute Type can have multiple Attribute Assignments.

#### **Required & Optional Types**

There are two kinds of Attribute Types; Optional and Required. Any Attribute Type highlighted by a thin red box indicates that it is Required – meaning that Attributes must be assigned to them. Optional Attribute Types (those without a red box) don't require Attributes assigned to them.



The Required indicator can be expanded or contracted on custom sounds (Required Attributes Types in factory presets cannot be changed, however).

#### **Reordering Attribute Types**

Attribute Types can be reordered by dragging them vertically into another position. The first three Attribute Types will be displayed in the Attributes columns in the Browser Filters.

Attribute Types in factory sounds are fixed, and can't be reorganized. Of course any Multi or Patch can be saved as a new User Multi or Patch and the Attribute Types can then be customized.

#### **Create New Attribute Type**



By selecting the drop-down menu next to any Attribute Type a custom Attribute Type can be created by selecting "Create New Attribute Type".

Enter the name of the new Attribute Type in the field and it will be added to existing types in the Attributes Types column. When you create a new Attribute Type, it's also necessary to create new Assignments for the new Attribute Type. Please see the section on adding <u>Assignments</u> for details.

	ATTRIBUTE TYPES	RESET ALL	OVERVIEW	+ ASSIGNMENTS
Ŧ	Author	Bob Daspit		Not Weird Really Weird Sorta Wierd
Ŧ	Complexity	Level 2 - Medium		
Ŧ	Туре	Synth Bells		
Ŧ	Weirdness	Really Weird		

# **Removing Attributes**

The "Remove This Attribute" option is available from the Attribute Types drop-down menu, and when selected, will do one of two things. If the Attribute Type is a factory Attribute Type (e.g. Author, Complexity, etc.) then all custom Assignments will be removed, but not the Attribute Type itself. If it's a User-created Attribute Type, it will remove the Attribute Type and all of its Assignments.

# **BROWSER – Overview**

RESET ALL	OVERVIEW
Arpeggiated	
Organic Patterns	
Ambient, Film, Ballad, World Music	
Level 2 - Medium	
Eric Persing	

The Overview area displays all of the Assignments assigned to each Attribute Type.

#### Reset All



The "Reset All" button in the Overview area will clear all Assignments for all Attribute Types. If this button was selected accidentally, the Reset can be undone by immediately pressing the Cancel button in the Edit Tags screen.

+ ASSIGNMENTS	
Arpeggiated	
Rhythmic	
Sophisticated	

# **BROWSER** – Assignments

This column will display a preset list of Assignments that can be allocated to an Attribute Type. Multiple Assignments are permitted for all Attribute Types.

## Adding Assignments



To create custom Assignments, you must first select an existing Attribute Type or create a custom one. After an Attribute Type has been selected or created, selecting the "+" button will allow for the creation of a new Assignment for it. To create additional Assignments, press the "+" button again until all the desired Assignments have been created.

Assignments can be created for both custom and factory Attribute Types.

#### **Assignments View**

MORE Q CATEGORY SORT

These switches determine how Assignments are viewed and sorted on the Edit Tags page.

#### More

Selecting this option hides the Overview area so that more Assignments can be displayed at a time.

	ATTRIBUTE TYPES	RESET ALL			E ASSIGNMENTS
T	Туре	Analog Tones Bell Harmonics Bells Acoustic	Electrical Experiments Electronics Environmental	Modern Sonics Motion Muted Colors	Throat Singers Vintage Cheese Vinvi Lo-Fi
Ŧ	Source	Big Boomers Bizarre Planos Bowed Instruments	Evolving Overtones Fast Animation	Mysterious Organic Keyboards Overdriven FX	Vocal Noise Voltage Warheads
v	Timbre	Bowls and Bells Boys Choir Celestial	Gospel Choir Gothic Bells Gregorian Men	Piano Impacts Piano Scrapes Pop Stacks	Waves - Classic Pulse Waves - Classic PWM Waves - Classic Saw
v	Technique	Classic Keys Classical Choir Classical Keyboards	Guitars Acoustic Guitars Vintage	Power Chords Psychoacoustic FX Beversing	Waves - Classic Sine Waves - Classic Square Waves - Classic Sunc
v	Complexity	Classical Soloists Combo Organs	Human Synth Hybrid Sounds	Rumblers Sci-Fi Sound Design	Waves - Classic Triangle Waves - Combo
Ŧ	Author	Darkness Deep Tones	Liquid Resonators Lo-Fi Hits	Stinger Stabs String Machines	Waves - Digital Waves - Nulti Oscillator Waves - Noise
v		Drama Hits Dreaming	Mechanics Metallic Overtones	String Resonance Strings Acoustic Sweepers	Wild FX World Instruments
Ŧ		Ebowed Instruments	Metallics	The Playroom	
					MORE Q CATEGORY SORT

**BROWSER – Category & Sort** 

#### Category

Selecting this option will highlight all of the tags for the Attribute that have been used in whatever category the currently loaded sound is in. For example, if a Psychoacoustic sound is loaded, all of the tags for Psychoacoustic sounds will be highlighted in blue text.

Analog Tones	
Bell Harmonics	
Bells Acoustic	
Big Boomers	
Bizarre Pianos	
Bowed Instruments	
Bowls and Bells	
Boys Choir	
Celestial	
Classic Keys	
Classical Choir	
Classical Keyboards	
Classical Soloists	
Combo Organs	
Custom-built Instents	
Darkness	
Deep Tones	
Distorted Tones	
Drama Hits	
Dreaming	
Drones	
Ebowed Instruments	
Electrical Experiments	
MORE Q CATEGORY SOR	T

#### Sort

The Sort function works in two ways. First it groups all Attributes that are in the same Category as the currently loaded sound. If the Category button is also selected, this first group will be highlighted in blue text.

The remaining unassigned Attributes are displayed below the top Attributes, and are sorted alphabetically.



**BROWSER – Keywords, Weblink & Sort** 

# Keywords

Keywords are descriptive words and phrases that are outside of the scope of Attributes, but are still useful when searching and browsing sounds. These can be more subjective and can be changed or added to both factory and User-created Multis and Patches. You may want to add your name or comment to indicate that it's a favorite sound, or an artist that the sound reminds you of or a project that the sound is associated with.

To add a Keyword, simply click the Keyword field, and type them in. Separate each Keyword with a comma. Select and delete any Keywords that you wish to remove.



#### Weblink



This will configure the web link on the Patch Zoom or Multi Zoom page.

This field can only contain a valid web address, but it does not need to be a full URL. For example, Instead of "http://www.spectrasonics.net", it can simply be written "spectrasonics.net" and will still be considered a valid web address.

#### Notes

The Notes field can contains notes about how the sound was created, playing tips, and some suggestions for how it can be modified.



NOTE: All of the text in the Notes field will be checked during searches in the Browser.

# **BROWSER - Edit Tags Footer**

The Footer displays information about the current sound, and allows any changes to the Edit Tags to be saved or canceled.

#### Directory, Category and Name

These are informational displays indicating the Directory, Category and the name of the Sound.

DIRECTORY	CATEGORY	NAME
Omnisphere Library	ARP + Rhythm	Anticipation

#### Cancel/Save

Any changes made in the Tag Editor can be saved or canceled by selecting the appropriate button.



NOTE: Saving the Tags also saves the Patch or Multi and any modifications that have been made to it.

#### **BROWSER - Settings**

file:///Users/...evelopment/SPECTRASONICS/INSTRUMENTS/OMNISPHERE/REF% 20GUIDE/REF% 20GUIDE% 20LOCAL/browser/all.htm[6/8/10 6:07:42 PM]



Selecting the Settings Button will open the Browser Settings Zoom View. Settings are saved across sessions, and are restored the next time you load Omnisphere.

NOTE: Audition Auto Play will reset each time Omnisphere is loaded.

 SETTINGS Q

 Preview-Load Note Range
 C4 ▼
 Audition Auto-Play
 U

 Audition Note
 C4 ▼
 Browser Synchronization
 U

 Audition Note Length
 5 sec ▼
 Category Sensitive Attributes
 U

#### Preview/Load Note Range

When Preview Load is enabled in the Browser, this function will determine what note range is loaded.

#### Audition Note

Determines the pitch of the single note that will be played when sounds are auditioned while Audition Auto-Play is enabled.

#### Range C-1 to B8

NOTE: This setting also affects the pitch of the Audition Buttons in the Browser and on the Part pages.

#### Audition Note Length

When Audition Auto-Play is enabled and a sound is selected, it will play for a limited amount of time. This setting determines how long the auditioned sound will play.

Range 1 to 9 seconds

#### Audition Auto Play

When enabled, every time a Multi, Patch or Soundsource is selected in the Browser, the Audition Note will sound for the length of time determined by the Audition Note Length.

This is useful for browsing through sounds using the Browser Steppers, and is especially useful when combined with Preview Load, as it allows rapid loading and auditioning of multiple sounds.

#### **Browser Synchronization**

When enabled, the Browser Filters will retain their current Attribute selections when another Part or Layer is selected. This is very useful when browsing a large number of Soundsources because the Attribute selections for Layer A and Layer B will remain the same as you move between Layers and across different Parts.

For example, you need to create a Multi and you only want to check Soundsources in the "Ambience" Category. After setting the first Part to view only the Ambience category, Browser Synchronization will make it so all the subsequent Parts will open with the same Ambience category selected.

#### **Category Sensitive Attributes**

If Category Sensitive Attributes is enabled (the default state), then the different Attributes columns may change when a new Category is selected. This ensures that the context of the Attributes matches the Category. If this setting is disabled, then the Attributes columns will remain static when you change Categories.

# **BROWSER - Omnisphere Library Integration**

DIRECTORY	✓ All	utes
Categor     All     ARP + R     Bass - I	Atmosphere Library Omnisphere Library Trilian Library Trilogy Library	ustic G
Bass – F Boing Custom	User VIP Library XTRA – Bass Legends	ressive and Fiz log Bas

One of the great features of Omnisphere 1.1 (or higher) is the Omnisphere Library Integration feature.

Beginning with Omnisphere 1.1, Trilian Soundsources, Patches and Multis can be conveniently loaded directly within Omnisphere for further synthesis manipulation or just convenience of use.

If you have both Omnisphere and Trilian installed, your Trilian libraries will appear in the Omnisphere Browsers and Browser DIRECTORY menu along with your other Omnisphere libraries.

You can then load your Trilian sounds into Omnisphere just like you would any other Omnisphere sound!

NOTE: Trilian User Patches and User Multis will not appear in the Omnisphere library. You can still use Trilian to open those, or simply recreate them in Omnisphere using Trilian Soundsources or Patches, and then save them as Omnisphere Patches or Multis.

# **BROWSER - Omnisphere Library Integration - Setup**

In order to enable Omnisphere Library Integration, you must first have a full install of Trilian, registered and authorized, on your system.

Next, install and authorize Omnisphere 1.1 (or higher). If you already have Omnisphere 1.1 or higher on your system, you will be asked to reauthorize it after you have installed and registered Trilian.

When you first launch Omnisphere 1.1 or higher, you will see the following splash screen. Click the Authorize button, and follow the normal steps for authorization.



NOTE: You must generate a new Response Code using your user account at the Spectrasonics website.

After (re)authorizing Omnisphere 1.1 or higher, the Trilian libraries will appear in your Omnisphere Browsers.

#### Troubleshooting

If you are loading Trilian sounds into Omnisphere, and see the following error message, it indicates that you haven't successfully registered and authorized Trilian.



Please register and authorize Trilian before trying to load Trilian sounds in Omnisphere.

# **BROWSER - Omnisphere Library Integration - Using Trilian Sounds**

Depending on your session needs, the Omnisphere Library Integration feature offers the ability to apply Omnisphere's powerful synthesis tools to Trilian sounds, combine Omnisphere and Trilian sounds in interesting ways, or to simply conserve system resources by including your Trilian Parts alongside your Omnisphere Parts in a single Omnisphere instance.

There are various useful ways that you can combine Omnisphere and Trilian Soundsources and Patches within Omnisphere to open up a tremendous variety of sounds and performance applications.

For performances, you could use Stack Mode or Live Mode to create useful combinations of Trilian basses and Omnisphere synth sounds. Try using keyboard or velocity splits, layering, or apply Part switching to a Multi in Live Mode.

In this Stack Mode example, you can create a Multi in Omnisphere that contains a number of Omnisphere Parts, and one or more Trilian bass Parts. In Stack Mode, create keyboard splits that trigger the bass Parts with lower notes, and Omnisphere synth Parts with the higher notes. You can experiment with layers and crossfades too!



Using the same Multi in Live Mode, you can instantly switch between Trilian and Omnisphere parts, or instantly layer them. For example, this would allow you to play a solo bass phrase in one passage, and then instantly add a doubled guitar or strings sound to the bass for another.



There are endless sound design possibilities as well. For example, if you apply Omnisphere's synthesis power to Trilian Synth Bass waveforms, you can take those sounds much further to create very unique bass timbres!

In another example, you could load Acoustic Bass samples from Trilian, and combine them with Psychoacoustic samples from Omnisphere, creating new and interesting hybrid sounds!

Omnisphere



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»The Browsers Introduction **Overview** Browser Layout Browser Header **Browser Filters** Info Area **Browser Footer** Lite Version **Browser Access** Multi Browser Patch Browser Soundsource Browser **Operation** Favorites & Projects Selecting & Loading Sounds Saving & Managing Sounds Edit Tags Browser Settings Library Integration

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#### PATCH BROWSER 0 Preview Load Lite Version Q Q DIRECTORY: A Attributes File Directory Search 0 6 Co evel 1 - Low Louge 2 - Made Clave ing Synths ***** Addicting Co American Obesity Asia Minor American Obesity **Basic JP+Juno Comper** *** **Omnisphere Library Patch** PATICH Fifth Pluck als Dave Stewart **** **Big Prog Chiffer** ** Chron nachords 2 162.6mb **Eighties Oberheim Pluck** Clear as Day NOTES Compressed Poly Clavs * CS-80 Clavisynth Analog Classics brings the vocabulary of the vintage ana to the soft synth world. An incredible array of Classic Sy og synth era 4 **Classic Eighties Polylead** create the st noes for th Dry Euro Wasp FM Direct Seq Sort - Shuttle & C > Project * Edit Tags Q Settings Q Same. Info

The layout is the same for all three Browsers, providing a common interface and workflow regardless of which Browser is open. Once you familiarize yourself with the common layout and operation of any Browser, you will be functional with all three Browsers.

*NOTE: The Soundsource Browser does not contain the Lite Version Button and Lite Version Zoom I con.* 

# **BROWSER - Browser Layout**



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# **BROWSER - Search and Filtering**

All searching and filtering is accomplished from the Browser Header (using the Directory Menu and the Search Field) and the Browser Filters. There are different options available for filtering the results, and setting up how sounds are browsed, displayed and previewed.



The Directory Menu, Search Field and Browser Filters always work in combination with each other, and used together will further refine the results. The order in which they are applied isn't important. You can apply selections and criteria using all three methods in any order, and you will still end up with the same filtered results.



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Projects and Favorites provide tools for managing, organizing and recalling user-defined groups of sounds, making it much more convenient to navigate specific sounds, recall preferred sounds, and work efficiently with the enormous library contained in Omnisphere.

Projects let you collect sounds into organized groups for instant recall later, and you can identify Favorites by applying Ratings to Multis, Patches and Soundsources. Favorites can also be very useful for prioritizing sounds within Projects!

NOTE: Be sure to watch the Favorites and Projects Tutorial Video.

Projects and Favorites are global library tags and are saved automatically, available for later recall. They will also appear across multiple instances of Omnisphere. If you add Projects or Favorites to one instance, they will appear in any other instances that you have open, or that you open later.

**BROWSER - Favorites & Projects** 



# **BROWSER – Selecting and Loading Sounds**

Selecting a sound in the Browser also loads the sound. How quickly it loads depends on the size of the file, as well as the Preview Load and Lite Version settings that you have enabled or selected. Lite Version is especially designed for fast loading of ready-to-play sounds.

#### **Auditioning Sounds**

When browsing a substantial library, it's important to have convenient ways of quickly auditioning the sounds. The Browser provides an Audition Button, the Lite Version button with multiple thinning settings available in the Lite Version Options Zoom, a quick Preview Load, and options in the Browser Settings for setting up the Audition and Preview Load behavior.



If Audition Auto-Play is enabled in the Browser Settings, then selecting a sound will automatically audition it. The Audition Note and Audition Note Length settings determine the pitch and duration of the auditioned note.



Select the Audition Button in the Browser Footer to hear a note played using the currently loaded sound. The sound will play for as long as the button is selected (or until it decays).

The "Audition Note" setting in the Browser Settings Zoom determines the pitch of the note.

#### **Preview Load and Lite Version**



Omnisphere provides different ways to control how sounds are loaded. These are Auto Load, Preview Load and Lite Version, and these can interact with each other for maximum flexibility.

Auto Load is what we call the default way that Omnisphere loads sounds, and is always active if Preview Mode is not enabled. Auto Load will load the complete sound, with all samples, across all zones of the keyboard.

Preview Load will only load samples across a limited range of notes, based on the "Preview-Load Note Range" setting in Browser Settings. Because of this, Preview Load can load sounds much more quickly, making it a useful feature when previewing a large number of sounds, or when you need to audition sounds quickly.

Enabling and disabling the Preview Load button will toggle between the modes.

The Lite Version button is independent of the Auto Load and Preview Load modes, and can be used in combination with either of them.

When the Lite Version button is enabled, it will apply Sample Thinning settings based on the Lite Version Zoom Options. It also provides a way to quickly browse and audition sounds in the library.

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Using Lite Version together with Preview Load is the fastest way to browse and audition a large number of sounds. Using Lite Version with Preview Load disabled (in Auto Load mode) allows for faster loading of complete, ready-to-play sounds.

Using these methods together with Audition Auto-Play and MIDI Learned Browser Steppers provides an exceptionally fast and convenient way to browse the Omnisphere Library.

NOTE: If Preview Load is enabled when the Browser is closed, the setting automatically reverts to Auto Load, and the full sound is loaded.



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# **BROWSER – Saving & Managing Sounds**



Omnisphere offers a very flexible way to manage custom Patches & Multis, for example, you can create custom collections of sounds organized by project or style. These can then be searched, selected or filtered using the features of the Browser.

The process of saving and managing custom Patches or Multis in Omnisphere is essentially identical, with the main difference being the locations of the user libraries that you create.

The best way to think of it is, at the top level you create Directories (or Libraries), under which you can organize your Patches into Categories.

Folders created at the top level will show up in the DIRECTORIES drop-down menu.

Subfolders created inside these will be displayed in the Category column of the Browser.

#### Saving Patches & Multis

🗊 Us	er	Q search	
STEAM F Omnisphere F	Defaults Documentation Settings Library Soundsources	Multis Factory Factor	ARP + Rhythm Distortion Fault Skyboards Psychoacoustic Retroground Synth Classic Synth Classic

Selecting the Save Patch (or Save Multi) option from the Utility Menu will open a File Save dialogue.

After naming and saving the Patch or Multi, the EDIT TAGS interface will open, allowing you to assign various Attribute Types and Assignments, add custom Assignments, and add your own Keywords and Notes to the file.

Once you have finished editing the tags, click the SAVE button to finish saving the file. You may also cancel the save process by clicking the CANCEL button.

You must save Patches & Multis within the User folders, that is, you cannot save at the User folder level itself.

There is no need to press the "Refresh" button in the Browser after saving a new Patch or Multi.

NOTE: Patches & Multis must be saved into a Category folder inside the User folder. This folder can be in an existing user directory, a newly created sub-folder inside the User folder, or a new user directory.

#### **Managing Patches & Multis**

🗊 User		:	Q search	h		
3 STEAM ► 🛛 🖓 Omnisphere ►	Defaults Documentation Settings Libran Soundsources		Multis Patches Presets User Tags		Factory  > User >	<ul> <li>Drum Grooves</li> <li>Fault</li> <li>Live Mode Demos</li> <li>mit_omn.index</li> <li>Split Patterns</li> <li>Split Sounds</li> <li>Stacked Patterns</li> <li>Stacked Sounds</li> </ul>

The Browser is designed to handle searching, browsing, loading and saving sounds.

User-created Patches or Multis are managed using your computer's built-in file manager (either the Mac Finder, or the Windows Explorer). This makes it very easy to organize and manage your custom Patch and Multi Libraries, and structure them in any way that makes sense to you.

The default save location for Patches is inside a folder named "User" located at: ... /STEAM/Omnisphere/Settings Library/Patches/User.

The default save location for Multis is inside a folder named "User" located at: ... /STEAM/Omnisphere/Settings Library/Multis/User.

You can create additional folders at those locations and name them whatever you like. When you create a new folder at the top level (alongside the User folder), it will show up in the DIRECTORIES drop-down menu in the respective Browser.

NOTE: When you rename or create new folders at the top level, you must re-instantiate Omnisphere, and then select the Refresh button for them to appear correctly in Omnisphere's Browser.

In order to save a Patch or Multi, you must save it into a Category sub-folder within a User folder. If there are no existing subfolders inside a User folder, you can create a new one using your system's file manager, or by using the File Save Dialogue while saving a Patch or Multi. You can then save your Patch or Multi into the new subfolder. You can create as many sub-folders as you like, and those sub-folders will be displayed as Categories in the Category column of the Browser.

Once you have created a user library, using Omnisphere's File Directory browsing method will allow you to browse your Patches and Multis within their folders, just as they are located on your Hard Drive.

#### Renaming, Relocating and Deleting Patches & Multis



To rename, relocate or delete a user-saved Patch or Multi you must use the Mac Finder or Windows Explorer to do so. Navigate to the User folder, locate the desired files there, and rename, delete or relocate them using your file manager.

# 

# **BROWSER – Edit Tags**

Selecting the Edit Tags Button in the Browser Footer opens the Tag Editor.



Omnisphere's customizable tagging system allow sounds to have Tags assigned to them, which categorizes sounds and makes them searchable and filterable. Tags are based on Attributes that also can be customized by the User.

ATTRIBUTE TYPE	RESET ALL	OVERVIEW	E ASSIGNMENTS
Author	Eric Persing		Eric Pensing Ignacio Longo
Envelope	Medium Decay, Percussi	ve	Les Corres Michael Flint Scott Frankfurt Tobias Marberger
Timbre	Acoustic, Chimey, Bells,	Acoustic, Chimey, Bells, Reverberant, Organic	
	-		
	-		
× KEYWORDS			MORE 14 CATEDONT
		A hybrid between a music box and church bells	

It is not required to create Tags for custom sounds, but it's strongly recommended to add them, as Tags will make them easier to find when browsing and to share with other Users.

*NOTE:* You won't be able to open the Tag Editor for a Patch or Multi unless it has already been saved to the Library.

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# **BROWSER - Settings**



Selecting the Settings Button will open the Browser Settings Zoom View. Settings are saved across sessions, and are restored the next time you load Omnisphere.

NOTE: Audition Auto Play will reset each time Omnisphere is loaded.

# SETTINGS Q Preview-Load Note Range C4 ▼ Audition Auto-Play U Audition Note C4 ▼ Browser Synchronization U Audition Note Length 5 sec ▼ Category Sensitive Attributes U

#### Preview/Load Note Range

When Preview Load is enabled in the Browser, this function will determine what note range is loaded.

#### **Audition Note**

Determines the pitch of the single note that will be played when sounds are auditioned while Audition Auto-Play is enabled.

Range C-1 to B8

*NOTE:* This setting also affects the pitch of the Audition Buttons in the Browser and on the Part pages.

#### **Audition Note Length**

When Audition Auto-Play is enabled and a sound is selected, it will play for a limited amount of time. This setting determines how long the auditioned sound will play.

Range 1 to 9 seconds

#### **Audition Auto Play**

When enabled, every time a Multi, Patch or Soundsource is selected in the Browser, the Audition Note will sound for the length of time determined by the Audition Note Length.

This is useful for browsing through sounds using the Browser Steppers, and is especially useful when combined with Preview Load, as it allows rapid loading and auditioning of multiple sounds.

#### **Browser Synchronization**

When enabled, the Browser Filters will retain their current Attribute selections when another Part or Layer is selected. This is very useful when browsing a large number of Soundsources because the Attribute selections for Layer A and Layer B will remain the same as you move between Layers and across different Parts.

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For example, you need to create a Multi and you only want to check Soundsources in the "Ambience" Category. After setting the first Part to view only the Ambience category, Browser Synchronization will make it so all the subsequent Parts will open with the same Ambience category selected.

#### **Category Sensitive Attributes**

If Category Sensitive Attributes is enabled (the default state), then the different Attributes columns may change when a new Category is selected. This ensures that the context of the Attributes matches the Category. If this setting is disabled, then the Attributes columns will remain static when you change Categories.



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**BROWSER - Omnisphere Library Integration** 



One of the great features of Omnisphere 1.1 (or higher) is the Omnisphere Library Integration feature.

Beginning with Omnisphere 1.1, Trilian Soundsources, Patches and Multis can be conveniently loaded directly within Omnisphere for further synthesis manipulation or just convenience of use.

If you have both Omnisphere and Trilian installed, your Trilian libraries will appear in the Omnisphere Browsers and Browser DIRECTORY menu along with your other Omnisphere libraries.

You can then load your Trilian sounds into Omnisphere just like you would any other Omnisphere sound!

NOTE: Trilian User Patches and User Multis will not appear in the Omnisphere library. You can still use Trilian to open those, or simply recreate them in Omnisphere using Trilian Soundsources or Patches, and then save them as Omnisphere Patches or Multis.

# 

# **BROWSER - Multi Browser**

The Multi Browser is accessed using the Multi Display in the Header, which is always visible and available from any page in Omnisphere. Select the Folder Icon Button or click inside the Multi Name Display to open the Multi Browser.



*NOTE:* The Multi button does not have to be selected to access the Multi Browser. You can access the Multi Browser from any page in the plug-in.

DIRECTORY: AI	Attributes File Directory	Preview Load Life Version Q. Q. Sc	sarch (C
* Category	* Author	* Complexity * Genre	
All Bess - Acoustic Bess - Electric Drum Grooves Live Mode Demos Spilt Patterns	All Bess - Bob Daspit Bess - Dean Taba Bess - Matt Bissonette Eric Persing Ignacio Longo	All Ballad Level 3 – High Diverse Film Old School Timeless	
Weather Change to Chill Drying Rack Overtones Menu Massive Analog Strings Wheel > Chord Martini	****	Xylophonic Springs	mnisevene
Xylophonic Springs Anaheim Fun Live	****	Omnisphere Library Multi	MULTI
Drops of Love Micro Techno 1	****	63.7mb	
Solo over Saints	****	NOTES	
Vinyi Lounge	****	Two percussive apregglated sounds layered to creat groove. Use the Mod Wheel to modulate the Amp En	te a complex v Decay time.
	素素素		

The Multi Browser

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# BROWSER - Patch Browser

When a Part is selected (using the Part  $1 \sim 8$  Buttons), the Patch Browser is accessed from the Patch Name Display, which is always visible and available from any of the Part pages. Select the Folder Icon Button or click inside the Patch Name Display to open the Patch Browser.



The Patch Browser can also be accessed from the Mixer page (Patch Name Displays), and from the <u>Live Mode</u> page when Mixer Controls are enabled.

Mixer Patch Name Display



Live Mode Mixer Controls



#### The Patch Browser

DIRECTORY: AI	Attributes File Directory	Preview Load Lite Versio	<u>a</u> (a	Search	0
* Category	* Type Classical Choir	* Genre		omplexity ul	-
ARP + Rhythm Bass - Acoustic Bass - Electric Boing Customer Temp	Classical Sololsts Clavs Clicks Combinations Comping Synths	Amblent Ballad Dence Electronica Experimental		Level 1 – Low Level 2 – Medium	
Addicting Comper	*****	1			_
American Obesity					
American Obesity Asia Minor	****				
American Obesity Asia Minor Basic JP+Juno Comper	****	American Ol	bealty		
American Obesity Asia Minor Basic JP+Juno Comper Fifth Pluck ala Dave Stewart	***** **** **** ****	American Ol Omnisphere Libr	besity rary Patch	PATCH	1
American Obesity Asia Minor Basic JP+Juno Comper Fifth Pluck als Dave Stewart Big Prog Chiffer	* * * * * * * * * * * * * * * * * *	American Ol Omnisphere Libs	besity rary Patch	PATCH	Ð
American Obesity Asia Minor Basic JP+Juno Comper Fifth Pluck ala Dave Stewart Big Prog Chiffer Chromachords 2	***** **** **** **** ***	American Ol Omnisphere Lib	bealty rary Patch	PATCH	Ð
American Obesity Asia Minor Basic JP+Juno Comper Fifth Pluck als Dave Stewart Big Prog Chiffer Chromachords 2 Eighties Oberheim Pluck	* * * * * * * * * * * * * * * * * * * * * * * *	American Ol Omnisphere Libs	bealty rary Patch	PATCH	Ĩ
American Obesity Asia Minor Basic JP+Juno Comper Fifth Pluck ala Dave Stewart Big Prog Chiffer Chromachords 2 Eighties Oberheim Pluck Clear as Day	* * * * * * * * * * * * * * * * * * * * * * * * * * *	American Ol Omnisphere Libe	bealty rary Patch	PATCH	Ĩ
American Obesity Asia Minor Basic JP+Juno Comper Fifth Pluck ala Dave Stewart Big Prog Chiffer Chromachords 2 Chromachords 2 Eighties Oberheim Pluck Clear as Day Compressed Poly Clavs	* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *	American Ot Omnisphere Libe	NOTES	PATCH	Ĵ
American Obesity Asia Minor Basic JP+Juno Comper Fifth Pluck ala Dave Stewart Big Prog Chiffer Chromachords 2 Eightes Oberheim Pluck Clear as Day Compressed Poly Clavs CS-80 Clavisynth	* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *	American Ol Omnisphere Lib 162.6m Analog Classics brings the	beelty nary Patch NOTES s vocabulary of	ADT	
American Obesity Asia Minor Basic JP+Juno Comper Fifth Pluck ala Dave Stewart Big Prog Chiffer Chromachords 2 Eighties Oberheim Pluck Clear as Day Compressed Poly Clavs CS-80 Clavisynth Classic Eighties Polylead	* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *	American O Omnisphere Lib 162.6mb Analog Classics brings the to the soft synth world. An were used to great the an	NOTES NOTES vocabulary of Incredible arr	The vintage analog synth by of Classic Synthesters	- 

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# BROWSER - Soundsource Browser

The Soundsource Browser is accessed from either the Main Page or the Edit Page.

#### Main Page

On the <u>CONTROLS</u> sub-page, select the Folder Icon Button or click inside the Soundsource Name Display to open the Soundsource Browser.



On the INFO sub-page, select the Folder Icon Button to open the Soundsource Browser.

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#### Edit Page

In the **OSCILLATOR** section, select the Folder Icon Button or click inside the Soundsource Name Display to open the Soundsource Browser.



#### Soundsource Browser

DIRECTORY: A	Attributes File Directory	Preview Load	Q Search	0
* Category	* Type	* Source	* Timbre	
All	All	All	All	
Acoustic Base Composite Morphing Distortion Electric Base Human Voices	Analog Tones Bass – Acoustic Bass Guitar Bass – Acoustic Upright Bass – Electric Fingered Bass – Electric Fretles	Additive Synth ARP 2600 ARP Odyssey Baritone Gultar Bells	Acoustic Aggressive Airy Analog Analog Tape	
Omniscience 1			_	
Omniaciance 2				
One Man Crowd Noise				
Opielalo		Omniscience	1 665	
Oczies 1		Soundsource	1 (1. (1. (1. (1. (1. (1. (1. (1. (1. (1	
Oozies 2				
Oczies 3		100		
Oczies 4		30.4mb		
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Opel			TAGE TAGE	
Operawayes 1		Created using Reaktor's "Me	taphysical Function* ensemble. S	Ingle
Operawayes 2		stretched ambient sample -	best played as a drone, with single	e notes,
Optical Diffraction Giltch		octaves, fourths or fifths. Wo	orks great with Harmonia and Star	£
		THOUGH DUTIN		

Watch the **Omnisphere Overview** for an introduction to the Main Page

This area contains the <u>CONTROLS</u> page, the <u>INFO</u> page and the <u>VISUALIZER</u>. The CONTROLS page is the default area Omnisphere opens to, and it's an excellent starting point for all users.

**MAIN CONTROLS - Introduction** 

The MAIN CONTROLS page is the default page that Omnisphere opens to and can be considered the 'dashboard of Omnisphere'. It allows quick changes to the Patch that's been loaded, such as blending the Layers, Panning and Filtering. There are also useful performance controls that appear exclusively on this page.

The number of voices can be set, pitch and keyboard intonation and the bend ranges for the patch. Lastly there are controls for the Solo modes, Glide and enabling the Arpeggiator (Arpeggiator presets are available from the drop-down menu).

The Main Controls page is divided up into three sections. To the left and right are controls that affect the whole Part, and the center section has controls that are specific to each Layer.

Some parameters are unique to the Main Controls page, such as the MASTER FILTER, PITCH BEND and the SCALE options, for loading different types of tuning.

It includes multipurpose sliders for PAN, ATTACK and RELEASE, so different changes can easily be made from one place.

Below the Soundsource name displays for each Layer in the center, the Zoom icons reveal more information about those Soundsources.

# **MAIN CONTROLS - Voices**

The VOICES parameter determines the number of simultaneous notes (also called polyphony) that are playable in a single Part. Omnisphere is capable of up to 64 voices of polyphony per part, and the VOICES selector determines the maximum number of voices that the Patch will have.

The higher the number of voices that the Patch has, the more CPU power it will use, so this is a very important parameter in Omnisphere. The best approach is to only set it to the maximum number of notes that are needed for the given musical application.

The factory Patches have all been set conservatively, so if more polyphony is needed, increase the number of voices.

Range 1-64

NOTE: Voices applies to all sounding notes, not just the ones that are currently being played. This is important to consider when playing sounds with longer release times

# **MAIN CONTROLS - Octave**

This function raises or lowers the overall pitch by transposing the Patch in 12-semitone increments. There is a total range of five Octaves. Range -2 to +2

# **MAIN CONTROLS - Scale**

One of Omnisphere's versatile features is its ability to utilize different tunings, which includes historical temperaments, microtonal scales and user-created temperaments as well. Omnisphere can import any .TUN scale file.

Each Part can have a single Scale active at one time. In a Multi up to eight different Scales can be loaded at the same time.

Each tuning lists the number of notes per octave. For example, if you select "Pelog 7-tone" the octave will repeat every eighth half-step.

NOTE: The common reference for all of the alternate tunings is that pitch of middle-C (C3 or C4 on your controller) will always be the same, no matter what Scale is loaded.

Some of the temperaments that are included with Omnisphere are:

#### Arabic

The first two Arabic scales were created in the first century by Persian philosopher Abu Nasr al-Farabi and are still used in modern Arabian music. Sabbagh tuning is designed for the Od (a lute-like instrument) and last is a common Turkish 24-note scale.

Al-Farabi 17-Tone Al-Farabi 19-Tone Sabbagh 7-Tone Turkish 24-Tone

#### Gamelan

These scales are used in Indonesian gamelan music. A Gamelan is an ensemble comprised of metallic percussion, strings, horns and vocals. So these scales work very well with metallic, bell-like sounds.

Degung 5-tone Jemblung 5-tone Pelog 7-tone Pelog and Slendro *(Pelog on the white keys and Slendro on black)* Slendro 5-tone Udan 12-tone

#### Historical

These are mostly octave-based scales, where were attempts to resolve the inherent 'un-pure' nature of the 12-tone scale, so some intervals and chords will sound very pure and others will be quite dissonant (the dissonant notes are sometimes called 'wolf' tones)

Kirnberger II – Named for Johann Kirnberger, who was a student of Bach.

Meantone Half – First created in the 15th century, and utilized by JS Bach, amongst others. It attempted to create purer thirds, by sacrificing the purity of the fifths.

Olympos 5-tone - an Ancient Greek pentatonic scale.

Pythagorean – Named for Pythagoras, based on perfect fifths and has been used since 3500BC. There are two 17-tone versions and a 12-tone Pythagorean scale as well.

Silbermann – Named for Gottfried Silbermann, an builder of keyboards in the 16th century.

Werkmeister - Named for Andreas Werkmeister who created it in the late 1600s.

#### Microtonal

These scales are stretched outside the standard 12-tone scale, and simply add additional microtonal steps from just under an octave up to 48 tones per octave.

- 11-Tone One octave minus one half tone
- 13-Tone One octave and a half tone
- 17-Tone One octave and a major fourth
- 19-Tone One octave and a major fifth
- 24-Tone Two octaves
- 31-Tone Two octaves and a fourth
- 48-Tone Four octaves

#### Modern

These alternative scales were created within the last one hundred and fifty years.

Bohlen-Pierce - a 13-tone scale named for Heinz Bohlen and John Pierce

Carlos Scales - Synthesis pioneer Wendy Carlos created these five scales. The first three are microtonal and the remaining two are 12-tone scales.

- Carlos Alpha 18-tone
- Carlos Beta 22-tone
- Carlos Gamma 35-tone
- Carlos Harmonic C
- Carlos Super Just C

Darreg Genus – A 9-Tone scale named for Ivor Darreg, who created the first re-tunable synthesizer in the 1950s.

Ellis – A 24-tone scale named for Alexander Ellis and Hermann von Helmholtz, a well-known scientist of the 1800s.

Partch 29-tone – Henry Partch, an American composer of the 20th century created many alternate tunings, such as 43-tone, 37-tone and this 29-tone scale.

#### Western

Equal Temperament - the default tuning for most of Western culture (and for Omnisphere as well).

# **MAIN CONTROLS - V-Curve**

The "V" stands for Velocity. Omnisphere has four velocity curve presets available on the CONTROLS screen. The first curve is linear, then two exponential curves and the last is flat. These curves are provided to quickly adjust the dynamic response of the current Patch to your MIDI controller and playing style.

#### Linear

The linear curve is the most commonly used velocity setting. Playing harder on the keyboard will have a direct effect on any parameter that is modulated with velocity in an even and linear way.

#### **Exponential Positive**

The Exponential Positive curve means that when playing softly not much effect will be heard, but when playing at a moderate intensity on the keyboard the velocity modulation will be more dramatic than with a linear curve.

#### **Exponential Negative**

Exponential Negative has the opposite effect of Exponential positive – meaning that it's better suited for more intense touch and provides the widest musical dynamic range.

#### Flat

Omnisphere will receive the same velocity value with this flat curve. Useful if a totally consistent and predictable result is desired.

#### **V-CURVE ZOOM**

The V-Curve Zoom button provides access to the Velocity Curve Zoom, for precise editing of the Patch's Velocity response.

#### **MAIN CONTROLS - Bend**

Omnisphere has the ability to control the Pitch Bender's range independently for both up and down movements (whereas many synthesizers only allow the same amount of bend in both directions). This setting is for the patch, and determines how much the note will bend when using the MIDI controller's pitch bender.

#### DOWN

Determines how much the pitch will bend down using the MIDI controller's pitch bender.

Range 0 to 24 semitones

#### UP

Determines how much the pitch will bend up using the MIDI controller's pitch bender.

Range 0 to 24 semitones

# MAIN CONTROLS - Part Level, Mute & Solo

This slider determines the overall volume of the selected Part. This slider, and the Mute/Solo switches are the same as the Mute/Solo and Part Level control on the Mixer page.

Range -Inf dB to +9.54dB

NOTE: The Part Level, MUTE and SOLO parameters are saved with the MULTI, not the Patch.

M (Mute) - Suppresses the audio of the Part.

S (Solo) - Isolates the audio of the Part, muting any other Parts that are active.

# **MAIN CONTROLS - Layer**

# LAYER MIX

These two independent faders control the mix or "blend" of the two Layers in the Part. Each fader's range is from -inf dB (zero) to +9.54dB. Selecting the fader while holding down the Command key (Mac) or Control key (Windows) will automatically set the levels to 0dB.

Omnisphere

Between the two controls is the "VU Meter" that displays the volume level of the left and right audio channels of the Part.

Range inf dB (zero) to +9.54dB

#### LAYER ON/OFF

Below each of the Layer Mix sliders are two on/off buttons that determine if a Layer is active or not. They also can be used to mute either layer to make comparisons without having to adjust the Layer Mix faders. If the button is light blue, the layer is active, if it's gray, it's inactive and no sound will be heard.

NOTE: If a Layer is active it uses CPU power. If a Layer is inactive, no CPU power is used.

### MAIN CONTROLS - Pan, Attack & Release

Below the LAYER MIX sliders are two multi-purpose mini-sliders. This control defaults as a traditional PAN parameter, but ATTACK or RELEASE for each layer can be accessed as well by clicking within in the rectangle.

#### PAN

Each layer has an independent PAN controls. Selecting the slider while holding down the Command/Control key will snap it back to the center position.

#### ATTACK

The Attack parameter governs how quickly the sound starts, which means minimum settings will make the Attack fast and higher settings will slow the Attack down. Attack times range from instantaneous to almost two minutes long. This is a duplicate parameter of the AMP ENV Attack slider on the EDIT page.

Range 0.00 to 100 seconds

#### RELEASE

Release is how long the sound will decay *after* the note has been released. Minimum Release settings result in no sound after the note has been released. Maximum settings will add up to almost two minutes of Release time. This is a duplicate parameter of the AMP ENV Release slider on the EDIT page.

RELEASE Range 0.00 to 100 seconds

# VOICES

The VOICES parameter determines the number of simultaneous notes (also called polyphony) that are playable in a single Part. Omnisphere is capable of up to 64 voices of polyphony per part, and the VOICES selector determines the maximum number of voices that the Part will have.

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The factory Patches have all been set conservatively, so if more polyphony is needed, increase the number of voices.

NOTE: Voices applies to all sounding notes, not just the ones that are currently being played. This is important to consider when playing sounds with longer release times

**REFERENCE:** See CPU Conservation Chapter

Range 1-64

OCTAVE

This function raises or lowers the overall pitch by transposing the patch in 12-semitone increments. There is a total range of five Octaves.

Range -2 to +2

# MAIN CONTROLS - Soundsource Name Display, Browser & Zoom

These menus display the names of both Soundsources or waveforms used in the Patch. Next to each Layer's Soundsource waveform display is a Folder icon that opens Omnisphere's Soundsource browser. From the Browser, thousands of new Soundsources can be selected, producing infinite variations for any Patch.

Below the Soundsource name is a Zoom icon, which opens the Soundsource Zoom view. This Zoom view contains information, pictures, web links and other details about the Soundsource.

If no Soundsource is displayed, then the layer is currently empty.

# MAIN CONTROLS - Master Filter & Resonance

#### MASTER FILTER

Omnisphere's MASTER FILTER is a filter for the whole Patch, meaning that it affects both Layer A and B. The MASTER FILTER has two available filter modes; LPF and HPF. The HPF (High Pass Filter) removes low frequencies from the sound. The LPF (Low Pass Filter) removes high frequencies from the sound.

The MASTER FILTER is completely separate from Omnisphere's dedicated <u>Filter section</u> on the <u>EDIT</u> page. The MASTER FILTER is designed as a simple tone control. The extensive Filter section in the EDIT page should be used for serious sound shaping.

NOTE: Either LPF or HPF can be enabled at one time, but not both.

#### RESONANCE

The RESONANCE control affects the whole Patch, which means it will affect both Layer A & Layer B. <u>RESONANCE</u>, sometimes called 'Q', adds emphasis to the cutoff point of the MASTER FILTER. Because it works with the MASTER FILTER, it will not have any effect on the sound if the MASTER FILTER is set to minimum value.

At minimum settings, little to no emphasis will be heard. Moving the slider to the right will add more emphasis to the sound.

NOTE: The Master Filter is not capable of self-oscillation, but the Dual-Filter on the EDIT page is.

TIP: Try MIDI learning the Master Filter to a MIDI Foot Controller. Having a simple "Tone Pedal" for live performance is extremely useful.

# MAIN CONTROLS - Solo/Legato

SOLO

Solo allows the Patch to play monophonically. SOLO mode is most effective when playing lead or bass lines. It works in conjunction with the LEGATO button below it, which determines how the sound is triggered.

# LEGATO

Legato is a triggering mode that allows the envelope and Soundsource to run through their settings instead of re-triggering with every new note that is played. If LEGATO is not selected, then each new note played will retrigger both the envelopes and the Soundsource.

NOTE: In vintage synths, Legato 'ON' would be referred to as "Single Trigger" while Legato 'OFF' would be "Multi Trigger"

# **MAIN CONTROLS - Glide**

Glide is a portamento effect, which adds a pitch slide from one note to the next. Omnisphere's Glide function is polyphonic, which means that every note that's played will have a sliding pitch. Selecting the SOLO button above it enables monophonic Glide.

The control slider next to the GLIDE button determines how slowly or quickly that the pitches slide from one note to the next. The higher the control slider is set, the slower the pitch glide between notes.

Range 0 to 2 seconds

# GLIDE LEGATO

Glide Legato will change the criteria for when GLIDE is enabled. If legato notes are played, then GLIDE will be activated. If quick, staccato notes are played, the Glide effect will not be heard.

GLIDE A B (LAYER BUTTONS)

GLIDE can be used on just one Layer if desired. By default, when GLIDE is selected, both A & B will active. If neither A or B is selected, no GLIDE effect will be heard, and the GLIDE button will turn itself off.

Gliding on one Layer only can be an interesting musical effect

MAIN CONTROLS - Arpeggiator

This button engages Omnisphere's powerful Arpeggiator. The ARP button simply turns the Arpeggiator on or off. Arpeggiator presets can be loaded from this page by pressing the menu arrow to the ARP button and choosing a preset.

For more details about the Arpeggiator, refer to the Arpeggiator ssection of this guide.

**MAIN - Info Page** 

The MAIN INFO page provides visual characterization of the Soundsources that make up the patch and useful information about the Patch with Performance suggestions.

#### Layer A/Layer B AREAS

Each of Omnisphere's two Layers has a Soundsource image area as well as the name of the Soundsources used in the Patch. The Layer A/B rectangles above the Soundsource names act as a Layer On/Off switches for quick auditioning.

Selecting the <u>Soundsource Zoom</u> icons will display information specific to the Soundsource on that Layer. This includes a larger Soundsource image. details about the origins of the Soundsource a web link and legal information links with more info about the Soundsource.

NOTES

The NOTES area contains a description of the patch, ideas for its application and other performance information that will be of interest. This can be simple comments, suggestions or ideas. It can provide more detailed information like educational or historical material, background data, programming information or other creative options.

#### TAGS

Attributes are one of Omnisphere's most powerful features. Tags are attributes that can detail the physical characteristics, timbre quality and similar descriptions of the patch. These Attributes enable patch selections to be filtered via Omnisphere's Browser. You can edit these Tags using the powerful "Edit Tags" feature of the Browser.

**MAIN - Soundsource Zoom Page** 

The Soundsource Zoom displays a larger image associated with the Soundsource as well as a variety of detailed information about the sound.

#### Soundsource Name & Notes

Notes will include some information about the sampled sound, including as the origin of the sound and how it was modified or adapted for inclusion in Omnisphere. There also will be some suggestions for its use and some ideas for modifying it.

#### Soundsource Attributes

Omnisphere

This section will cover a wide variety of data and Tags, including the author, specifications and categorization.

#### More Info + WWW

Additional information about most of Omnisphere's Soundsources can be found on the Internet. A web link button will open a webpage with further information about the Soundsource and/or it's author.

#### Legal Info

This button will open a page in your web browser that detail legal information about trademark and copyright issues regarding Omnisphere's Core Library.

**MAIN - Visualizer Page** 

The VISUALIZER creates a dynamic graphic representation of the patch as it's being played. Though not necessarily designed as a serious analysis tool, it's fun to use and adds visual impact to the sound that is being played.

There are two types of VISUALIZER effects, SCOPE & ANALYZER that are chosen by a rocker switch in the upper right of the VISUALIZER display.

SCOPE is a waveform display, similar to an oscilloscope. The ANALYZER is based on a realtime spectrum analyzer, actively displaying the different frequencies in the current sound.

There are several control knobs that affect the VISUALIZER'S display. Depending if they controlling the SCOPE or ANALYZER, they will have different functions.

VISUALIZER SCOPE

The Scope display is controlled by four parameter knobs, which are (counterclockwise)

#### Fade

Controls the visual feedback of the waveform display, the higher the setting the longer the waveforms fade out into the background.

NOTE: The Fade control will need to be set to a medium to high level for any significant movement will be seen.

#### Expand

This determines the height (Amplitude) of the waveform displayed. Lower settings will reduce the amplitude and higher settings will increase it.

#### Movement

Controls the visual decay of the waveform. The higher this parameter is set, the more the waveform will bounce around in the VISUALIZER'S window.

#### Layer XFade

This control will visually blend the waveforms coming from Layer A & Layer B. When set to minimum or maximum, only one of the Layer waveforms will be displayed. At 50%, half will be Layer A and half Layer B:

Layer XFade will only work if a Soundsource is enabled on both Layers.

# VISUALIZER ANALYZER

The Analyzer display is controlled by four parameter knobs, which are (counterclockwise)

# Duration

When this control is increased, more graphic elements are added to the analyzer spectrum bars in the display.

# Color

Raising the Color parameter will introduce a deeper blue color in the graphic elements that move above the spectrum display.

# Horiz (Horizontal)

This controls how much horizontal movement the graphic elements will have above the spectrum display.

# Damping

The damping control will determine how long the graphic elements will remain above the spectrum display. The higher the setting, the quicker the elements will drop to the bottom of the display.



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MAIN - Information



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# SOUNDSOURCE ZOOM Q EDT INFO Omniscience 2 Created using Reaktor's *Metaphysical Function* ensemble. Single stretched ambient sample – best played as a drone, with single notes, octaves, fourths or fifths. Works great with Harmonia and Start modulation. AUTHOR: Ignacio Longo

LIBRARY: Core Libra

CATEGORY Text

TONALITY: Of TYPE: Dreaming, O

MORE HIPO + VVV LEDAL INFO

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**MAIN - Soundsource Zoom Page** 

The Soundsource Zoom Icon opens the Soundsource Zoom Edit View. When the Soundsource Zoom is open, you can toggle between Edit View and Info View using the Edit and Info buttons on the Soundsource Zoom pane.

MOOD: Drea



The Soundsource Zoom can also be opened from the Edit Page Soundsource Display, or from the Soundsource Browser Info Pane.

The Soundsource Zoom Edit View allows you to adjust various parameters specific to the Soundsource loaded in the selected Layer. For details please see the <u>Soundsource Zoom Edit</u> <u>View</u> chapter.

The Soundsource Zoom Info View provides detailed information about the Soundsource. To learn more, see the <u>Soundsource Zoom Info View</u> chapter.

#### Soundsource Name & Notes

Notes will include some information about the sampled sound, including as the origin of the sound and how it was modified or adapted for inclusion in Omnisphere. There also will be some suggestions for its use and some ideas for modifying it.

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MAIN - Visualizer



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VISUALIZER SCOPE

The Scope display is controlled by four parameter knobs, which are (counterclockwise)

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Controls the visual feedback of the waveform display, the higher the setting the longer the waveforms fade out into the background.

*NOTE:* The Fade control will need to be set to a medium to high level for any significant movement will be seen.

#### Expand

This determines the height (Amplitude) of the waveform displayed. Lower settings will reduce the amplitude and higher settings will increase it.

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Controls the visual decay of the waveform. The higher this parameter is set, the more the waveform will bounce around in the VISUALIZER'S window.

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Raising the Color parameter will introduce a deeper blue color in the graphic elements that move above the spectrum display.

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#### Damping

The damping control will determine how long the graphic elements will remain above the spectrum display. The higher the setting, the quicker the elements will drop to the bottom of the display.



# Watch the Tutorial Video for Edit Page Overview

Omnisphere's EDIT page has been designed to provide a useful set of controls over every aspect of the sound, but in cases when more precise and detailed controls are needed, the Zoom feature reveals a set of deeper controls. You can also think of the EDIT page as an "Overview" of the sound.

The EDIT page is divided into two primary sections, Common & Layer. The Patch Common parameters on the far left and far right of the EDIT page are controls that affect the whole Patch (both Layer A & Layer B). All of the Layer-specific parameters are in the large middle area, and are generally unique to the Layer. This middle area controls change when Layer A or B is selected. The common controls on the left and right sides do not.



# **EDIT PAGE - Oscillator**

Watch the Tutorial Video for Oscillators

The Oscillator is the heart of Omnisphere's vast synthesis capabilities. It has a 'split-personality' since each Layer's Oscillator can have either high-definition, streaming sample-playback or dynamic, real-time, DSP-generated waveforms. The Oscillator's extensive synthesis capabilities vary depending if Sample mode or Synth mode is utilized.

#### SAMPLE MODE

Omnisphere's massive core-library is comprised of over 40GB of high-definition, sample-based sounds, called Soundsources, to

use as a source for synthesis. These Soundsources cover a wide spectrum of sounds, from simple raw waveforms to psychoacoustic samples, to morphing textures, warm voices, choirs, vintage keyboards, analog synths and a best-of selection from our award-winning sample libraries.

#### SYNTH MODE

These are DSP waveforms, generated in real-time by the STEAM engine, that are similar in principle to vintage synthesizer waveshapes. They have the same rich character of classic synthesizers, but with a much greater level of control and sound shaping abilities. The Synth Oscillators are not modeled to emulate any particular brand of synthesizer, but instead were extensively tweaked to have a great-sound and versatile character that's unique to Omnisphere.

The combination of both types of sound generation makes Omnisphere a true hybrid instrument, able to transform both the SAMPLE and SYNTH sounds via a wide range of complex synthesis methods.

The STEAM engine goes beyond traditional synthesizers by including a set of dedicated oscillators for Hard-Sync, Frequency Modulation, Ring Modulation and the unique Voice Multiplier. In fact, a single part can have up to 24 oscillators used per voice!

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	Copy Osc Preset
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	Detuned Poly Pulse
	Giant Unisync
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# **EDIT PAGE - Oscillator Presets**

The OSCILLATOR header displays a list of presets by selecting the drop-down menu. Oscillator settings can be saved, copied and pasted from one layer to another. The menu will display a list of factory presets as well as any presets that have been saved by the user.

Factory Oscillator presets are primarily designed as starting points to give an idea what the Oscillators are capable of. Keep in mind these Oscillator presets will only change the settings within the Oscillator section.

Oscillator presets, like other presets, are stored inside in the directory structure of the STEAM folder. Any presets that are saved or loaded are files on the hard drive.

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# EDIT PAGE - Sample/Synth Mode Selector



Selecting either mode switch will determine whether the Layer will be able to load a Soundsource (SAMPLE) or will utilize a DSP Waveform (SYNTH).

SAMPLE MODE does not load a Soundsource by default. First a Soundsource must be selected from the Soundsource Browser.

SYNTH MODE defaults to the "SawSquare Fat" waveform.

# **EDIT PAGE - Oscillator Sub-Pages**



Each of the five sub-pages contain a wide set of synthesis functions that can applied to the Oscillator. The default sub-page is MAIN.

MAIN	The Oscillator modifiers
FM	Frequency Modulation synthesis
RING	Ring Modulation synthesis
WS	The Wave Shaper
MULT	The Voice Multiplier

#### **INDICATOR SWITCHES**

The Indicator Switches below the sub-pages indicate activity in that area. They also double as mini-power-switches for those functions, so that quick comparisons can be made. It's also useful to see at a glance which features are currently in use. Selecting the Oscillator sub-page buttons will not enable their functions, but selecting the small indicator switches below the sub-pages will.

NOTE: The MAIN sub-page's indicator is unique because it doesn't function as a switch and will remain unlit until the default settings are changed.

# EDIT PAGE - Oscillator Sample Mode



When in SAMPLE mode, the OSCILLATOR plays back Soundsources from Omnisphere's massive core-library. Soundsources range from complex, multi-sampled sounds to single sample mapped across a keyboard.

SAMPLE MAIN



#### Soundsource Display

The Soundsource Display area contains an image of the loaded Soundsource, and provides controls to access to the Soundsource Browser and Soundsource Zoom View

#### Image

Whenever you load a Soundsource into the Layer, it will include an image representing the Soundsource. This makes it convenient to see at a glance the type of Soundsource that is loaded.

#### **Browser Access**

Selecting the Folder icon, the Soundsource Name Display, or the Soundsource Image will open the Soundsource Browser.

# 

**EDIT PAGE - Oscillator Timbre Control** 

The TIMBRE slider varies the harmonic tone quality of the Soundsource by altering the tonal characteristics of the original sample(s) in different ways. There are two TIMBRE modes, CRUSH and SHIFT. The center-point of this bidirectional slider is the null point – meaning no TIMBRE change will occur.

**TIMBRE CRUSH MODE** – Polyphonic Bit-Crushing (Distortion) and filtering are applied to the Soundsource. Bit-Crushing with a Low-Pass Filter is applied left of the center-point. Right of the center-point, Bit-Crushing with a High-Pass filter is applied. Timbre Crushing works effectively with any Soundsource.

**TIMBRE SHIFT MODE** - Transposes the mapping of the samples in one direction and changes the pitch in the opposite. This results in significant harmonic changes in the Soundsource. Moving the TIMBRE slider to the right will transpose the sample mapping down and the pitches up and vise versa when moving it to the left.

When SHIFT is applied, in either direction, the character of the Soundsource can change significantly. And when the SHIFT is used as a modulation target, the character of the Soundsource can change dynamically.

NOTE: The more samples the Soundsource has mapped across the keyboard, the more effective that TIMBRE SHIFT will be. Conversely, with a texture or other Soundsource that only contains a single sample, SHIFT will have no effect.

TIP: To see how many samples the Soundsource uses, select the <u>Soundsource Zoom</u> icon at the top of the OSCILLATOR header and refer to the 'SPECS'.

NOTE: Because of the way TIMBRE SHIFT works, changes to the modulation of the TIMBRE slider must be retriggered to hear the effect. TIMBRE changes can't be heard on a sustained note.

START START START PADE

EDIT PAGE – Oscillator Sample Start

The START control determines at what point in the sample that it begins when the oscillator is triggered. This setting will vary depending on the number of samples in the Soundsource.

This feature has several applications. First, it can remove sharp attacks or clicks at the start of a sample.



Soundsources can have a single sample mapped across the entire keyboard (Textures are a typical example of this). Other types of Soundsources often have many samples mapped to different ranges on the keyboard. These ranges are called 'zones'

The number of zones determines the maximum range of the Start slider. If the Soundsource has more than 12 zones mapped, the range of the START slider is 1 second. If it has less than 12 zones, then the START slider's range can be up to 90 seconds. The .60 range is especially useful when modulating long evolving Texture Soundsources and using the <u>Arpeggiator</u>.

#### SAMPLE START FADE



These are mode switches that control the shape of the sample start point. This can be useful for eliminating clicks that might happen at certain sample start offsets. These three mode switches set the duration of fade-in;



# **EDIT PAGE - Sample Oscillator Key Tracking**



If the TRACKING (also known as Keyboard Tracking) switch is enabled then the pitch of the Soundsource will track the keyboard, meaning the root pitch of the samples will be changed with each key.

When TRACKING is disabled, the Oscillator will not track the keyboard and depending what kind of Soundsource is loaded, some keys may have static pitches.

Single Sample	All of the keys will play the same pitch
Multi-Sample	The range of each sample will have the same pitch. For example, if there is a different sample mapped to each octave, then each octave will only play a single pitch.
Chromatic Sample	Since every key has a sample, there is no apparent change when Keyboard Tracking is disabled.

Disabling Keyboard Tracking can be useful for drones, unusual sound effect or strange tonal combinations.

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# **EDIT PAGE - Soundsource Zoom**

The Soundsource Zoom Edit View provides controls that let you manage several aspects of the complex Soundsources in Omnisphere. It is particularly useful when loading Trilian Soundsources into Omnisphere using <u>Omnisphere Library Integration</u>.

Using the Soundsource Edit Zoom you can mix the levels of multiple channels, such as Microphone and Direct Pickup outputs, select the desired Release Noise and adjust its level, enable the special Legato articulation triggering, and other adjustments. Deceptively simple, this single interface provides important sound shaping and memory management capabilities.
NOTE: Some of the controls are intended for use with Trilian sounds when loaded into Omnisphere. For example, Omnisphere sounds don't currently include Legato Soundsources, so this control will have no effect on Omnisphere Soundsources.

Selecting the Zoom icon in the Soundsource Display will open the Soundsource Zoom Edit View by default. The Soundsource Zoom has two sub-panes, the Edit View and the Info View, accessed by selecting the EDIT and INFO buttons.

The Soundsource Zoom Info View provides the most information about the loaded Soundsource, with details about the origin of the samples and suggestions for their application. It also displays a large representative image of the loaded sound. The Soundsource Zoom Info View is covered in detail in the <u>Browser</u> section of the guide.

The Edit View is divided into two main areas, the Image area and the Controls area. The Image area contains a large, representative image of the loaded Soundsource. The Controls area consists of a Soundsource Name Display, Soundsource Mix section, Special Articulations section, and the Sample Thinning section.



## **EDIT PAGE - Soundsource Zoom - Mix**

When using <u>Omnisphere Library integration</u> it is possible to load Trilian Soundsources in Omnisphere. Most Trilian Soundsources are multichannel, and these controls allow you to mix the output channels. In some cases, the two channels are used for double tracking instruments (such as in Trilogy's Fretless section).

The Soundsource Mix section provides level faders for both channels. Mixing the two sources can have a strong affect on the sonic characteristics of the instrument and how it sits in your mix.

Moving the faders to the left lowers the level, moving them to the right increases the level.

If you only want to hear one of the channels, simply move the level for the other channel all the way to the left.



# **EDIT PAGE - Soundsource Zoom - Special Articulations**

Special Articulations are additional Soundsources loaded in the background that will be automatically triggered depending on how a passage is performed. The Special Articulations are Legato Soundsources (samples of actual Legato performances), and Release Noise articulations.

Omnisphere Soundsources don't use Special Articulations, but most Trilian Soundsources do. When using <u>Omnisphere Library Integration</u>, the Special Articulations section lets you control how these articulations are applied to the primary Soundsource.

NOTE: It is possible to apply Trilian Release Noises to Omnisphere Soundsources by selecting from the available Release Noises in the drop down menu.

#### Use Legato SS / Legato Rules



When Legato Soundsources are available and loaded, enabling the Use Legato SS button will automatically trigger these Special Articulation samples when playing legato-phrased notes a half step or a whole step apart, providing added realism and nuance to the instrument sound.

NOTE: Omnisphere sounds don't currently include Legato Soundsources, so this control will have no effect on Omnisphere Soundsources. It is most useful when loading Trilian sounds into Omnisphere.

In Trilian Soundsources where Legato Soundsources are available, the Use Legato SS feature enables very realistic hammer-on, pull-off and other types of performance phrasing. It allows for a very natural playing style, and great sounding Legato trills!

Enabling Use Legato SS will change the way the instrument responds to notes that are played Legato. Successive Legato notes that are played half step or a whole step apart, will behave much like a lead synth using SOLO mode. That is, the next note played will cut-off the previously played note. If you sustain the cut off note, it will sound again when you release the successive note. The key difference is that Legato Mode is actually polyphonic!

Notes played Legato, but more than a whole step apart will not trigger the Use Legato SS behavior.

NOTE: The Use Legato SS button only changes the behavior of the Part. In order to hear the Legato Soundsources, make sure "No Limit" is selected in the Sample Thinning - Legato menu. This will allow the Legato Soundsources to load, and can add a very live, dynamic quality to the sound during performance.

NOTE: Use Legato SS is a Patch Common parameter. Changing its setting will affect both Layers in the Patch.

#### Release Soundsource Menu



Release Soundsources are triggered only after a note has been released.

This menu lets you select the Soundsource used for Release Noises. You can also select "No Release Soundsource" if none are desired. Some Soundsources have multiple sets of Release Noises (e.g. a softer set), and you can try mixing the Release Noises from sounds other than the one loaded.

#### **Release Key Tracking**



When the Release Key Tracking Button is enabled, the pitch of the Release Noise will track the keyboard. If it is disabled, the Release Noise will only play at the pitch of the root note.

#### **Release Level**



This level fader is used to mix the level of the Release Soundsource. Use it together with the Soundsource Mix faders to set the balance you prefer.

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Omnisphere

When experimenting with mixing Release Noises, try mixing them louder for up-tempo tunes, and lower them for tunes with slower tempos.

If the fader is all the way to the left, no Release Soundsource will be heard. Moved all the way to the right, will make the Release Soundsource very prominent. A setting of around -3dB is usually a good starting point for a natural sound.

NOTE: The Amp Envelope Release Time must be set long enough to hear the decay of the Release Noise Soundsource.

NOTE: Legato and Release Noise Soundsources load after the primary Soundsource samples have finished loading. If you have Release Noise Soundsources enabled, you can start playing before they have loaded, but you will hear long sustains ringing instead of the noises. This is because release times for the amp envelope are set long to let the full Release Noises through.

### **Transition Timing**



This fader affects the transition time between the sustained sample release and the Release Noise Soundsource. At higher settings you will hear an overlap of the sustained sample release time, and the trigger of the release noise. This can be a desirable effect in some circumstances.

If the fader is all the way to the left, there will be no overlap. The farther to the right you move the fader, the more overlap will be heard.

## EDIT PAGE - Soundsource Zoom - Thinning

SAMPLE THINNING				
ROUND ROBIN	No limit 👻			
VELOCITIES	Every third 🔹			
LEGATO	No limit 🗸			
РІТСН	A# Major 🗸			
	BEGIN TRAINING			

In addition to Special Articulations, Soundsources may also include multiple Round Robin samples and Velocity switched samples.

For this reason, a fully loaded Soundsource can use quite a bit of memory. The Sample Thinning interface helps to manage the use of those resources.

By limiting the number of Round Robin samples, or the Velocity switched samples, or by turning off Legato Soundsources, you can dramatically reduce memory used.

#### Round Robin



To limit the number of Round Robin samples that are loaded, select an option from the Round Robin menu.

You can choose a setting that ranges from "No RR" too "At Most 4 RR". Select "No Limit" to allow all Round Robin samples to be loaded.

### Velocities



Soundsources can include a very large number of Velocity switched samples, which is great for very realistic and expressive playing. However, if you need to conserve system resources, you can choose to thin the amount of Velocities using this menu.

### No Limit

Will load all Velocity switched samples.

### **Every other**

Will load every other Velocity switched sample.

#### **Every third**

Will only load every third Velocity switched sample.

#### **Every fourth**

Will only load every fourth Velocity switched sample.

#### **Velocities above**

Selecting a value from this menu, for example, 64, will only load Velocity switched samples mapped to a Velocity of 64 and above.

#### **Velocities below**

Selecting a value from this menu, for example, 100, will only load Velocity switched samples mapped to a Velocity of 100 and below.

NOTE: When thinning Velocities, there are no gaps in the sound. The remaining Velocity switched samples will adjust to be triggered across the full Velocity range.

### Legato



This menu has two options, No Limit and None, which determine whether or not Legato Soundsources will be loaded with the sound.

If No Limit is selected, Legato Soundsources will be loaded if the Soundsource has Legato Soundsources associated with it. If None is selected, the Legato Soundsources will be unloaded.

TIP: If you choose to load the Legato Soundsources, you must also enable the Use Legato SS button to trigger them when playing.

NOTE: If you are not using the Use Legato SS feature, it's a good idea to unload the Legato Soundsources (by selecting None from the menu) to conserve system resources.

NOTE: You can think of the difference between the Legato Thinning menu, and the Use Legato SS button in this way: The Legato menu controls whether the Legato Soundsources will be loaded or not, while the Use Legato SS button determines the behavior of the Part (whether it will "solo" notes played Legato that are half step or a whole step apart).

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### **Pitch Thinning**



A Soundsource can contain thousands of samples mapped across the full keyboard range. Pitch Thinning lets you limit the samples that are loaded to match either a "trained" range of played notes, or a selected Scale or Interval. Using Pitch Thinning can substantially reduce the number of samples loaded with the Soundsource.

TIP: Although only a limited set of samples will be loaded, this won't result in "silent zones" on the keyboard. All notes will still play, but will be stretched from the nearest pitched sample.

#### **Trained Pitch Thinning**



With Trained Pitch Thinning, you can load only the samples used during a performance.

For example, if you are working on a simple melodic phrase that has notes in a limited range, say from C2 to C4, by using Trained Pitch Thinning, you can speed up load times, and reduce memory usage by loading only the samples used in that range.

If you have recorded an Omnisphere part in a song, and want to speed up load times and conserve memory, you can apply Trained Pitch Thinning by playing the MIDI clip in the host. Omnisphere will then only load the samples used in the actual phrase.

To use Trained Pitch Thinning, select the Begin Training button. Play a range of notes (or a MIDI clip in the host), and then select the Finish Training button. This will limit the loaded samples to the note pitches that were played during training.

#### **Pitch Thinning Using Scales & Intervals**



To limit loaded samples to a specific Scale or Interval, select the Pitch Thinning drop-down menu, and select an option from the available submenus. You can select from Major or Minor Scales, or from a variety of Intervals.

NOTE: The Pitch Thinning options on the Soundsource Zoom Edit View are the same as those found on the Patch & Multi Browser "Lite Version" Zoom. However, the Browser's Lite Version feature affects the entire Patch or Multi, while the Soundsource Zoom options affect only the individual Soundsource. Using the Soundsource Zoom thinning options, you can apply different thinning options to each Layer in a Patch.

NOTE: All Thinning options applied here are saved with the Patch or Multi, and are recalled the next time you load them.

SAMPLE SYNTH	
SawSquare Fat	•
	MULT
SHAPE	
SYMMETRY	
ANALOG	PHASE

### **EDIT PAGE - Oscillator Synth Mode**

The SYNTH waveforms are DSP-generated, and are similar to classic analog waveforms, but with a greater level of dynamic control. SYNTH mode features an oval representation of the waveshape, called the Waveform Display. Changes that are made to the three unidirectional sliders in the MAIN section below will dynamically and visually alter the contour of the waveform.

## **EDIT PAGE – Oscillator Synth Waveforms**



By selecting anywhere in the Waveform display a drop-down menu will appear with a list of the five available waveform types. All five waveforms are hybrids, meaning they are mixtures of different waveshapes and their contours can be changed dynamically.



### SawSquare Fat Waveform



### SawSquare Bright Waveform



These two waves can be traditional Sawtooth or Square waves – and anything in between – which is why they are both called SawSquare. Moving the SHAPE slider in the MAIN sub-page will demonstrate the continuous contour change from a Sawtooth to Square.

The Bright and Fat versions of the SawSquare waveform are similar, but with a different character. The SawSquare Bright has a bit leaner and buzzier timbre and is excellent for polyphonic applications. The SawSquare Fat has a thicker sound, especially in the low end and is ideal for monophonic lead sounds.

### **Triangle Waveform**



#### Omnisphere

A Triangle wave is more symmetrical than the SawSquare waveforms and has a mellower character, because of fewer overtones. By moving the SHAPE slider towards maximum it will sound richer and more like a Square wave.

#### Sine Waveform



The sine wave is the most symmetrical and since it has no overtones, it sounds very pure. But with the SHAPE, SYMMETRY and HARD SYNC controls, overtones can be added to alter its character.

#### **Noise Waveform**



White Noise contains all frequencies, which therefore is pure noise. Since changing the wave's contour with the SHAPE control would not normally make any difference to noise, the three sliders in the MAIN section have different functions when the Noise waveform is selected.

EDIT PAGE – Oscillator Synth Shape



This control is unique to the SYNTH waveforms in Omnisphere. Moving this slider can modify the contour of any of the five waveshapes. The waveform display will dynamically change the waveshape as the SHAPE slider is moved.



The SHAPE slider is modulatable which can add movement and variation to the sound.

NOISE waveform only - SHAPE becomes a complex filter control, which varies from white noise (all frequencies) at the minimum setting, to pink noise (reduced high frequencies) at the maximum setting.

### EDIT PAGE – Oscillator Synth Symmetry



Symmetry varies the span of the waveform and is most commonly used for Pulse-Width modulation. This is especially useful when SYMMETRY is used as a modulation destination, as it adds shifting tone color and movement to the sound. The Symmetry control can vary the span of all waveforms (except Noise).

NOISE waveform only - The SYMMETRY slider becomes a morphing filter that sweeps through four different types of filters. Starting at the minimum setting with low pass to a notch filter, then to a high pass and finally to band pass at maximum setting.

## EDIT PAGE – Oscillator Synth Hard-Sync



Hard Sync was a feature on some analog synthesizers, which gave the timbre a "throaty" dipthong type of sonic characteristic when swept. Hard Sync was popularized on synthesizers like the Prophet Five and the early Oberheim synthesizers for more metallic and aggressive timbre, especially useful for lead sounds. Hard Sync is achieved by using two oscillators, one which is the 'master' and the other the 'slave. The slave is forced to restart its waveform when hard-synced with the master oscillator and the master controls the pitch. So any changes in the slave oscillator's pitch don't change the pitch of the master, they change the overtones and harmonic structure instead.

In the past, an oscillator would need to be sacrificed to get the hard-sync effect, but Omnisphere has a hidden, dedicated oscillator just for hardsync. The hard-sync oscillator becomes the slave and the Oscillator's waveform is the master.

NOISE waveform only - HARD SYNC control acts as a stereo width control that begins with monaural setting at the minimum setting and gradually spreads the noise into both right and left channels towards the maximum setting.

## EDIT PAGE – Oscillator Synth Analog



The Analog control allows inconsistency to be introduced into the pitch and phase of the oscillator, which makes Omnisphere sound and behave more like a vintage analog instrument. When the Analog control is set to 50% and lower, it destabilizes the phase of the oscillator. After 50% it will also destabilize the pitch. As the Analog control is increased past 75% the pitch will become heavily detuned.

NOTE: The Analog control has an affect on <u>Unison</u> voice too, of if Unison detuning is too drastic, it may be desirable to reduce the Analog control.

## EDIT PAGE – Oscillator Synth Phase



The PHASE control will only have an audible effect when it is heard combined with another layer, as phase changes can only be perceived when they are in relation to another audio signal.

The best way to understand the PHASE control is to set up a SYNTH sound on Layer A (with the ANALOG control to zero). Then, from the UTILITY menu select the Copy Layer option and select Layer B and select the Paste Layer option from the UTILITY menu. This way two identical Oscillator Layers will be sounding and changes in the Phase can easily be heard.

If the PHASE control is at minimum, then the Oscillator will be triggered at the start of the waveform. As the value is increased, the point in the waveform that the Oscillator will be triggered will be moved and it will be out of phase with the other Layer. When the horizontal slider is set to maximum, it will be 180 degrees out of phase the other Layer's Oscillator.



Many interesting composite waveforms can be created with the Phase control this way, and this technique is particularly useful for Synth Bass sounds.

NOTE: The PHASE is best utilized when the ANALOG control, also in the MAIN section, is set to a minimum value.

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### **EDIT PAGE – Oscillator Frequency Modulation**

FM stands for Frequency Modulation. FM has been a feature on synthesizers since the 1960s, but it was most famously realized in Yamaha's DX/TX series of digital synthesizers in the 1980s. It was well known for producing glassy, metallic sounds and for creating sound that are more harmonically complex.

FM is a form of audio synthesis where the timbre of one waveform, called the "carrier", is changed by modulating it with the frequency of another

waveform, called the "modulator" - hence Frequency Modulation synthesis.

FM can take simple waveforms, like sine waves, and make them sound quite complex. In Omnisphere, the exciting thing is that any Soundsource or DSP waveform in Omnisphere can be modulated with FM.

Each Layer in Omnisphere has a dedicated, hidden FM oscillator, which acts as the modulator; so the other Layer's Oscillator is not required for FM synthesis to work. This dedicated Modulation Oscillator can utilize different waveforms and both its frequency and depth can be shifted and modulated.

# EDIT PAGE – Oscillator FM Controls

## **FM POWER SWITCH**



Turns the FM modulating oscillator on or off.

## FM KEYBOARD TRACKING



The small music-keyboard switch enables or disables Keyboard Tracking. The Keyboard Tracking button determines whether the modulator oscillator tracks the keyboard.

If the Keyboard Tracking is turned on, then the modulator oscillator will track the keyboard, meaning it will change pitch with the keyboard. If Keyboard Tracking is off, the modulation oscillator will not change pitch with the keyboard, it will stay the same pitch no matter what key is played. This can be useful for more clangorous sounds.

### **FM FREQUENCY**



Controls the frequency of the modulator oscillator. Because the modulator is unheard, it does not change the pitch of the original Oscillator. Instead it alters the timbral characteristics of the Oscillator's waveform.

When this horizontal slider is set to just above the minimum, it can produce LFO-type pitch effects. Moving the slider towards the maximum increases the frequency and begins to oscillate fast enough that it will introduce timbre changes.

The notches along the FREQUENCY slider are markers for the frequency ratios that will produce the most musically useful results.

These musically useful values at the notches are decimal versions of these ratios - 1/4, 1/2, 3/4 and 1 – represented as .250, .500. .750 and 1.00.

Range 0.000 to 1.000

### FM DEPTH



Controls the modulator's depth. The higher the DEPTH slider is set, the more the dedicated modulator is affecting the timbre of the OSCILLATOR.

Range 0.000 to 1.000

### **FM WAVEFORM**



Many FM synthesizers use only Sine waves, but Omnisphere's modulator can use any one of four different waveforms. The four mode switches are for Sine, Triangle, Sawtooth and Noise. Each successive waveform has more overtones and so will add a brighter timbre.

In general FM works better when beginning with a simpler, more pure sound than a sound with a lot of complexity to start with.



## **EDIT PAGE – Oscillator Ring Modulation**

RING is short for Ring Modulation, which is similar in concept to FM (and the parameters are exactly the same as those in the FM sub-page). In Ring Modulation the frequencies of both oscillators are multiplied, which changes their overall amplitude, so it's can also be referred to as Amplitude Modulation.

Traditionally Ring Modulation is used as an effect to create high-frequency, clangorous overtones. However, Omnisphere's Ring Modulator is polyphonic and can track the keyboard – meaning the pitch does not have to be fixed; it can follow the pitch of the keyboard. The result is something much more musical and useful than a traditional Ring Modulator.

### **EDIT PAGE – Oscillator Ring-Mod Controls**



The Keyboard Tracking for the Ring Modulator works just like it does in the FM section. Most Ring Modulators do not track the keyboard, which is part of the character of their sound, but Omnisphere provides the option to enable Keyboard Tracking if required.

If the Keyboard Tracking is turned on, then the Ring Modulator oscillator will change pitch with the keyboard. If Keyboard Tracking is turned off, the modulation oscillator will remain the same pitch no matter what key is played.

#### **RING MOD FREQUENCY**



Controls the frequency of the modulation oscillator. When the FREQUENCY slider is set to minimum value, very slow modulation is heard. Sweeping thru the different values will cause different overtones become more pronounced, because the modulator oscillator is in the audio range.

#### Omnisphere

The notches along the FREQUENCY slider are markers for the frequency ratios that will produce the most musically useful results. Just like in the FM section, the most musically useful values are at the notches. They are represented as .250, .500. .750 and 1.00.

Range 0.000 to 1.000

### **RING MOD DEPTH**



This horizontal slider controls the depth of the Ring Modulation, meaning how much interaction occurs between the Oscillator and the modulation oscillator.

Range 0.000 to 1.000

### **RING MOD WAVEFORM**



Ring Modulators typically only use a Sine wave. The dedicated RING oscillator in Omnisphere can use any one of four waveforms; Sine, Triangle, Sawtooth and Noise. Each successive waveform has more overtones and will introduce a brighter, more harmonically rich character to the OSCILLATOR's waveform.

### **EDIT PAGE – Oscillator Wave Shaper**



Omnisphere's Wave Shaper takes the Oscillator's waveform and passes it thru mathematically generated curves that add various types of distortion, which changes the waveform's harmonic content.

Instead of being a stand-alone effect, Omnisphere's Wave Shaper is part of the Oscillator, and is polyphonic, making it a synthesis function and not just an effect. This means that the Oscillator's can have more harmonic richness without the clashing sound heard when playing chords thru a monophonic distortion (such as a fuzz box). Polyphonic distortion is far more versatile musically.

**EDIT PAGE – Oscillator Wave Shaper Controls** 

WAVE SHAPER POWER SWITCH



This turns the Wave Shaping effect on or off.

## WAVE SHAPER DEPTH



This controls the amount of Wave Shaping that is introduced to the Oscillator. The higher this slider is set, the more pronounced the effect of the Wave Shaper would be. Waveshaper Depth is Modulatable.

TIP: Starting with simpler, less harmonically rich waveforms will produce the best results with the Waveshaper.

NOTE: Polyphonic Waveshaping is powerful, but it takes significant CPU power, so use it wisely.

Range 0.000 to 1.000

#### WAVE SHAPER ALGORITHIMS 1-4



Omnisphere has four preset Wave Shaping algorithms that range from least to most aggressive. 1 is the most subtle and 4 is the most extreme. The numbered mode switches enable one of these four algorithms.

#### WAVE SHAPER OSC/FILT/AMP



These three mode switches determine at what point in Omnisphere's audio path that the Wave Shaper is placed. It can be placed after the Oscillator, the Filter or the Amplifier;

OSC (Oscillator) - The Waveshaper is placed after the Oscillator output, before the Filter section.

FILT (Filter) – The Wave Shaper is placed after the Filter's output, before the Amplifier.

AMP (Amplifier) – The Wave Shaper is placed after Omnisphere's Amplifier.

NOTE: In most cases, the FILT and AMP positions will sound the same.

#### WAVE SHAPER MIX



The mix mini-slider controls the balance between the original Oscillator's signal and the Wave Shaped sound. If the mix is at minimum setting, then the effect Wave Shaper is not heard. When set to maximum, only the Wave Shaped signal is heard. The Waveshaper mix control is modulatable.

Range 0.000 to 1.000

#### WAVE SHAPER GAIN



The Gain mini-slider controls the amount of gain that's applied to the to the output.

Range 0.000 to 1.000

## **EDIT PAGE – Oscillator Voice Multiplier**



The MULT sub-page contains all the unique, polyphonic Voice Multiplier functions of Omnisphere. The Voice Multiplier adds richness and variety with three versatile modes; Polyphonic Unison, Granular Synthesis or Harmonia. All three modes work via the same basic principle of multiplying the number of oscillator voices to achieve different types of sonic enrichment.

The modes of the Voice Multiplier are exclusive; meaning only one of these features can be active at a time. When the OSCILLATOR is in SAMPLE mode, all three Voice Multiplier modes are available; GRANULAR, HARMONIA and UNISON.

In SYNTH mode, only two of the Voice Multiplier modes are available; HARMONIA and UNISON. However, the SYNTH Voice Multiplier modes have some extra features not available in SAMPLE mode.

NOTE: The three Voice Multiplier functions; Unison, Granular and Harmonia, can be very CPU-intensive, so make account for this when setting the Voice count and envelope Release times.

MAIN	FM		RING		WS.	MULT
100						-
U)		U	liso	N 1		
	-2	-1	0	+1	+2	
OCTAVE						
-1	ЕРТН		. :		SPREA	<u>.                                    </u>

## EDIT PAGE - Oscillator Voice Multiplier - Unison

In vintage analog polyphonic synthesizers, Unison was used to trigger all of the voices cards of the synthesizer at the same time for a rich, detuned monophonic sound. Omnisphere takes Unison to the next level by offering *polyphonic* Unison, with numerous enhancements and controls. Just a few or many unison voices can be added, so each note played will sound several voices - each with different detune, spread and octave.

## EDIT PAGE - Oscillator Voice Multiplier - Unison Controls



UNISON PHASE CONTROL (SYNTH mode only)



The Phase Control option is unique to the SYNTH mode. The Phase Control means the initial phases of the Unison voices can be randomly spread across a range. The width of the range they are spread is controlled by stepping through the five Phase Control options, which range completely from In-Phase to 180° out of Phase. Perfectly in-phase produces results like digital synthesizers. Out of phase settings produce classic analog-like results.

$\sim$ $\ddagger$	All Unison voices perfectly in phase.
<b>\$</b> \$	Unison voices slightly Out Of Phase
NV \$	Unison voices 90° Out Of Phase
VWn ‡	Unison voices Out Of Phase
<b>√000</b> ^‡	Unison voices completely Out Of Phase (180°)

#### UNISON DETUNE



This determines to what degree the unison notes will be detuned compared to the original OSCILLATOR. This setting does not affect the pitch of the original OSCILLATOR, just the unison voices.

The Unison Detune control is modulateable.

#### UNISON DETUNE FINE/COARSE

DE	TUNE
FINE	COARSE

These mode switches determine the range of the DETUNE slider. If FINE is selected, then the DETUNE slider will only detune the UNISON voices up to a half step (99 cents). This works for classic Unison and "SuperSaw" types of sounds.

When COARSE is selected, the range of the DETUNE slider is increased to a fifth or an octave above the note, depending how many are added. When the Detune slide is used in COARSE mode, the Unison voices will gradually glide to the final chord, producing the classic "THX" logo effect.

### DETUNE OCTAVE



The Octave switches specify at which octave the unison notes will sound, up to two octaves above or two octaves below. This is not a traditional transpose control, as it only pitches the UNISON voices up or down – the pitch of the Oscillator will still be at the same pitch.

#### **UNISON DEPTH**



The DEPTH slider controls the amount of UNISON voices added. Increasing the setting of this slider increases the number of UNISON voices. The more Unison voices used, the richer the sound, but the higher the demand on the CPU.

The maximum number of Unison voices is eight.

### **UNISON SPREAD**



UNISON voices can panned across the stereo image. Spread controls the extent of the stereo imaging. When the mini-slider is at minimum setting, the UNISON voices are all in the center of the stereo image. When set to maximum value, the UNISON voices are panned across the stereo field.

Both the UNISON DEPTH and SPREAD are modulatable.

Range 0.000 to 1.000

### EDIT PAGE – Oscillator Voice Multiplier - Harmonia™



HARMONIA[™] is one of Omnisphere's most exciting and unique new features. While it may in intuitively look like it shares the same functionality of the traditional Harmonizer effect, it's actually far more powerful because it's built into Omnisphere's OSCILLATOR as a polyphonic synthesis component, and not just as an audio effect.

HARMONIA[™] adds four additional oscillators to the layer. Since each Layer has it's own HARMONIA section, it can add up to ten additional oscillators per patch!

### EDIT PAGE – Oscillator Voice Multiplier - Harmonia™ Controls

#### HARMONIA PRESETS



A complete set of HARMONIA presets can be accessed by selecting the menu arrow. Any factory presets can be copied, pasted or saved as well as any custom settings.

### **HARMONIA VOICES 1-4**



Up to four HARMONIA voices can be stacked on top of the OSCILLATOR'S voice by selecting the numbered switches in HARMONIA. Keep in mind the more additional voices are added, the higher the demand on the CPU.

### HARMONIA LEVEL



Controls output level of the HARMONIA voices, so the effect of each Harmonia voice can be subtle or pronounced.

Range 0.000 to 1.000

### HARMONIA PAN



Each of the HARMONIA voices can be individually positioned in the stereo field with the PAN controls.

Range 0.000 to 1.000

### HARMONIA DETUNE



Each of the HARMONIA voices can be detuned by +/- 100 cents. When the knobs are centered, there is no detuning of the HARMONIA voices.

#### HARMONIA INTERVAL

0	+9	•
0	-12	•
0	-12	•
C	0	-

Each of the HARMONIA voices can be transposed over a four-octave range. Selecting the INTERVAL switch will bring up a drop-down menu of half-step transpositions, either up or down by two octaves.

Range -24 to +24

## EDIT PAGE – Oscillator Voice Multiplier - Harmonia™ (Synth-Mode Special Features)



When the OSCILLATOR is set to SYNTH mode, all of the HARMONIA features in SAMPLE mode are available, as well as a second set of options that are unique to SYNTH mode. This special "Page II" set of controls allows full independent waveform control over each Harmonia voice!

The two small triangles below the HARMONIA header toggle back and forth between two pages of HARMONIA controls. Selecting the right triangle will bring up the second HARMONIA page, with the SYNTH-only features.

#### HARMONIA PHASE

Like the Phase Control option in UNISON, this is unique to the SYNTH Oscillators. The Phase Control means the initial phases of the HARMONIA voices can be randomly spread across a range. The width of the range is controlled by stepping through the five Phase Control options, which range from In-Phase to totally out of Phase.





### HARMONIA SHAPE



This is the same as the SHAPE control on the MAIN OSCILLATOR page, so each of HARMONIA's four voices can have it's own offset to the shape setting in the main Synth Oscillator. The center position indicates that the shape is identical to the shape on the OSC MAIN sub-page.

NOTE: To learn more about the SHAPE functionality, check out the description in the OSC MAIN chapter.

Range 0.000 to 1.000

HARMONIA SYM



SYM is short for SYMMETRY, and like SHAPE, the HARMONIA voice's symmetry can be controlled in the same way as they are on the OSCILLATOR'S MAIN page. The center position indicates that the Symmetry is identical to the Symmetry on the OSC MAIN sub-page.

NOTE: To learn more about the SYMMETRY functionality, check out the description in the OSC SYMMETRY chapter.

Range 0.000 to 1.000

#### HARMONIA SYNC



SYNC is short for HARD SYNC and is the same parameter on the MAIN page for the OSCILLATOR and has the exact same function. The center position indicates that the Sync is identical to the Hard Sync on the OSC MAIN sub-page.

NOTE: To learn more about the HARD SYNC functionality, check out the description in the OSC HARD SYNC chapter

Range 0.000 to 1.000

### HARMONIA WAVESHAPE



The waveshape of each of the four HARMONIA voices can be set from these steppers. Four of the waveshapes are the same as those available in the Waveform Selector in **SYNTH MAIN**; Triangle, Sine, SawSquare Bright & SawSquare Fat. The fifth waveshape, called OSC, means the HARMONIA waveform will follow as the primary Oscillator's current waveform selection.



NOTE: To learn more about the SYNTH WAVESHAPE functionality, refer to the OSC SHAPE chapter

### EDIT PAGE – Oscillator Voice Multiplier - Granular (Sample mode only)

SAMPLE SYNTH
Graintable Bright Comber a
MAIN FM RING WS MULT
GRANULAR *
<u> </u>
GRAIN DEPTH INTENSITY
- PITCH GRAINS - 🙀 DETUNING
U iU
INTERVAL SMOOTHING
GLIDING SPREAD

Granular synthesis is a powerful method of fragmenting pieces of sound into very small bits of audio called 'grains'. Since each grain can have its own duration, amplitude and envelope, they can create a layered 'soundscape' of overlapping tones. The composer Innas Xenakis first conceptualized Granular synthesis in the 1970s. It's a useful technique for everything from evolving soundscapes to edgy, gritty glitchiness.

Omnisphere contains a fully implemented set of granular controls. Soundsources turned into grains can be manipulated by altering their pitch, duration, envelope and position in the stereo field. Up to eight voices of granularity are available per Layer.

NOTE: Granular requires a great deal of processing power, so apply it according to the capability of the system that Omnisphere's being used on.

## EDIT PAGE – Oscillator Voice Multiplier – Granular Controls

#### **GRAIN DEPTH**



By moving this mini-slider to maximum, an increasing number of grains will be taken from the Soundsource. The higher the number of grains added, the higher the demand on the CPU. Excellent results can usually be obtained without using a lot of Grain Depth, so use it wisely.

Range 0.000 to 1.000

### **PITCH GRAINS**



Sets how often the grains will be transposed in pitch. The Pitch Grains parameter and the two below it, INTERVAL and GLIDING, are all related – which is why they all have a small grey dash next to them.

If the PITCH GRAINS parameter is set to 0, then neither the INTERVAL nor the GLIDING parameters will have any effect.

PITCH GRAINS DIRECTION

Between the eight mini-sliders in the GRANULAR section are four small mode switches with directional arrows. These determine which direction the PITCH GRAINS will go. That is why there is a small line extending from the PITCH GRAINS slider to these four buttons.

These are the four PITCH GRAIN DIRECTIONS available;

- The PITCH GRAINS will only go up
- The PITCH GRAINS will only go down
- The PITCH GRAINS will only go up or down – so they will never got up *and* down on the same note.
- The PITCH GRAINS will randomly go up and down on the same note.

### **GRANULAR INTERVAL**



This slider determines what musical interval the PITCH GRAINS will use. The INTERVAL can be set from one to twelve semitones.

This parameter will not have any effect if the PITCH GRAINS slider is set to zero.

Range 1 to 12 semitones

### GRANULAR GLIDING



GLIDING determines how often the grains will glide between the note that is played and the transposed interval of a pitch grain.

This parameter will not have any effect if the PITCH GRAINS slider is set to zero.

Range 0.000 to 1.000

### **GRANULAR INTENSITY**



When the sample has been sliced into grains, the size of the grains can be altered, which gives the impression of a change in speed and intensity. When the INTENSITY slider is lower, the length of the grains is longer and therefore a slower transition between each of the grains. When the INTENSITY mini-slider is higher, the length of the grains is shorter and results in the grains moving faster.

GRAIN Intensity is a Modulatable parameter.

Range 0.000 to 1.000

### GRANULAR DETUNING



The grains can be detuned from each other by increasing this control. The higher DETUNING is set, the more variation in pitch will be heard in the grains. This does not affect the pitch of the Soundsource itself, just the grains.

Range 0.000 to 1.000

### **GRANULAR SMOOTHING**



Since the grains can be changed in pitch and amplitude, the change from grain to grain can be abrupt and jarring. Increasing the value of this mini-slider softens the sharp transitions between the grains. Think of SMOOTHING as cross-fading between the grains.

Range 0.000 to 1.000

### **GRANULAR SPREAD**



Controls the placement of the grains within the stereo image - the higher the Spread, the more grains will be panned across the stereo field. Range 0.000 to 1.000

## **EDIT PAGE - Modulation**

Watch the Tutorial Video for Modulation

Modulation adds motion and complexity to sounds. Simply put, modulation is any source that's affecting a target parameter in some way. The most common form of modulation in all synthesizers is vibrato, where an LFO modulates the pitch of an Oscillator. Modulation the method used in synths for adding richness and variety to a sound in real-time. Omnisphere's modulation capabilities are very extensive but they are simple to use with the Flex-Mod[™] system we've designed. Omnisphere also features a traditional Modulation Matrix Zoom view that provides more precise control over modulation routings and an overview of all assigned routings.

There are three ways to set up modulation routings in Omnisphere:

- 1. Modulations can be set up on the fly by right-clicking parameters and choosing a modulation source from a drop down menu.
- 2. Modulation routings can be defined in the Modulation section of the EDIT overview.
- 3. Modulation routings can be configured on the Mod Matrix Zoom view.

With the wide variety of sources and destinations, there are literally thousands of potential modulation routings that can be configured.

### EDIT PAGE - Flex Mod™

1			
1	Reset to Default Value		
	Modulate 🕨 🕨	Modulate with LFO	
A	Show Modulation	Modulate with Envelope	
11	Unmodulate	Modulate with Velocity	
	MIDI CC Learn MIDI CC Learn Inverted MIDI Note Learn MIDI Program Change Learn Enable Host Automation	Modulate with Wheel Modulate with Key Tracking Modulate with Randomize Modulate with Alternate Modulate with Controller All Mod Sources	44
	Unlearn		

The quickest way to set up a modulation routing is by right clicking on the control to be modulated*. From the menu, select from the list of available sources.

The first group of modulation options in the list is commonly used sources. If there's more than once source available of a given type, the next available source will be used automatically. This approach saves a lot of time that used to be wasted trying to find an unused source.

For example, when "Modulate with LFO" is selected, the next available LFO will automatically be routed to the target parameter. This means if LFO1 is already being used as a modulation source, the Flex-Mod system will automatically assign LFO2. Of course any of these automatic routings can be overridden as well.

A complete list of all of the Modulation sources is provided at the bottom of the menu as "All Mod Sources", so specific sources can be chosen if that's preferred.

After the target parameter's modulation source has been selected, the routing is then displayed in the MODULATION section of the EDIT page.

* Not all controls are Modulatable, but the majority are.

NOTE: If all six LFOs have been routed as modulation sources, and "Modulate with LFO" is selected it will default to LFO1. This is the same with the modulation envelopes – after four are in use all additional "Modulate with Envelope" routings will default to MOD Envelope 1.

-	MODULATION	€,
	Amp Envelope	•
+	Synth Shape	•
MUTE	)	INVERT

## **EDIT PAGE - Modulation Section**

The Modulation section has two functions; to display any existing modulation routings and also to create new routings. Existing routings can also be edited here. The key concept of the Modulation section of the EDIT page is that only one modulation routing is displayed at a time (the Mod Matrix Zoom shows many routings simultaneously)



Selecting the drop down arrow on the MODULATION header will bring up a menu that allows new modulation routings to be created as well as the removal of existing routings. All of the modulation routings set up in the currently selected Layer are visible from this list. Selecting any of these routings will allow them to be displayed and modified in the Modulation section of the EDIT page.

#### Source Depth



This slider controls the amount of modulation that will be sent from the source to the modulation target. If the slider is set to minimum, the modulation source will have no effect on the modulation target. The higher the setting, the more the source will be affecting to the target. This is useful in controlling the subtlety of the modulation. However it is possible to send too much signal from the source, which causes unusual behavior in the target because the values are out of range.

#### **Target Parameter**



This slider is a duplicate of the target parameter – meaning it's another representation of the parameter that's being modulated. Inside the parameter 'slot' is a dual indicator. The blue line represents the range of the modulation and the white point indicates the current value of the modulation.

Mute



The currently displayed modulation routing can be muted with this switch. This is a quick way to hear the Patch with and without the modulation routing.

#### Invert



The Invert button changes the modulation source by reversing the values so it will have the opposite effect on the modulation target. For example, if the modulation source is an LFO with an ascending ramp wave as its waveform, it will invert the signal to that of a descending ramp waveform.

## **EDIT PAGE - Mod Sources List**

#### Amp Envelope

The SOURCES menu brings up a list of the 28 possible modulation sources available in Omnisphere.

These are the 28 available modulation sources in Omnisphere;

- LF01 Low Frequency Oscillator 1
- LFO2 Low Frequency Oscillator 2
- LF03 Low Frequency Oscillator 3
- LFO4 Low Frequency Oscillator 4
- LF05 Low Frequency Oscillator 5
- LF06 Low Frequency Oscillator 6
- Alternate Every keystroke alternates between positive and negative values (polyphonic)
- Random Every keystroke will generate a random value (polyphonic)

Velocity – MIDI velocity values (polyphonic)

- Key Tracking Values based on what not is played on the MIDI keyboard
- Filter Envelope The output of the Filter Envelope (polyphonic)
- Amp Envelope The output of the Amp Envelope (polyphonic)
- Mod Envelope 1 The output of Modulation Envelope 1
- Mod Envelope 2 The output of Modulation Envelope 2
- Mod Envelope 3 The output of Modulation Envelope 3
- Mod Envelope 4 The output of Modulation Envelope 4
- Wheel The value from Modulation wheel MIDI controller (MIDI CC#1)
- Aftertouch The MIDI note pressure value (Channel Aftertouch)
- Pitch Bender The value from the Pitch Bend MIDI controller
- Breath Controller The value of a breath controller MIDI device (MIDI CC#2)
- Foot Controller The value of a MIDI Foot Controller (MIDI CC#4)
- Expression The value of a continuous MIDI expression (MIDI CC#11)
- Sustain The value from a MIDI Sustain pedal (MIDI CC#64)
- Sostenuto The value from a MIDI Sostenuto pedal (MIDI CC#66)
- Soft Pedal The value from a MIDI Soft Pedal (MIDI CC#67)
- Legato The value from a MIDI Legato Pedal (MIDI CC#68)
- User CC A user-defined Continuous Controller (or MIDI CC value defined from the System page)
- Morphing Source a special-purpose modulation source described in the Morphing Modulation chapter

### **EDIT PAGE - Mod Target List**



A "Modulation Target" is a parameter that can be controlled by a source. "Target" is another word for "Destination". Omnisphere has an extensive set of over sixty different modulation targets available. They are grouped in six categories;

### Oscillator

Pitch Coarse – The coarse tuning of the oscillator's pitch (polyphonic) Pitch Fine – The fine-tuning of the oscillator's pitch (polyphonic) Unison Detune – The amount of detuning of Oscillator unison voices (monophonic) Unison Depth - The amount of Oscillator Unison voices added (monophonic) FM Frequency – The frequency of the dedicate FM modulator (polyphonic) **FM Depth** – The depth of the FM modulator (polyphonic) **Ring Mod Frequency** – The frequency of the Ring modulator (polyphonic) Ring Mod Depth - The amount of Ring Modulation (polyphonic) Waveshaper Depth – The amount of Oscillator Waveshaping (polyphonic) Waveshaper Mix – The blend of the waveshaping signal (polyphonic) Harmonia Mix* - The blend of the Harmonia voices with the primary Oscillator (polyphonic) Sample Timbre – The Sample Timbre parameter in the Oscillator (polyphonic) **Sample Start** – The Sample Start parameter in the Oscillator (polyphonic) **Sample Granular Intensity** – The size/intensity of the sample grains (monophonic) Sample Pitch Grains – The probability of Granular pitch grains (monophonic) Synth Shape – The Synth Oscillator's shape (polyphonic) Synth Hard Sync – The Synth Oscillator's Hard Sync (polyphonic) Synth Symmetry – The Synth Oscillator's Symmetry (polyphonic) Synth Phase – The Synth Oscillator's Phase control (polyphonic) Synth Analog – The Synth Oscillator's Analog control (polyphonic)

### Filter

Cutoff – The Filter's cutoff frequency (polyphonic)
Resonance – The Filter's Resonance amount (polyphonic)
Filter Mix – The mix between Filter1 and Filter2 (monophonic)
Spread – The Filter's Spread control value (monophonic)
Filter 1 Cutoff Offset – The Filter 1 cutoff offset value (monophonic)
Filter 2 Cutoff Offset – The Filter 2 cutoff offset value (monophonic)
Filter 1 Res Offset - The Filter 1 Resonance offset (monophonic)
Filter 2 Res Offset - The Filter 2 Resonance offset (monophonic)
Filter 1 Spread – The Filter 1 spread (monophonic)
Filter 2 Spread – The Filter 2 spread (monophonic)

#### Amp

Omnisphere

Amplitude* – The amplitude level (polyphonic)Pan – The stereo panning control (polyphonic)

LFO

LFO1 Rate – The speed of LFO1 (monophonic)
LFO1 Depth – The amount of LFO1 (monophonic)
LFO2 Rate – The speed of LFO2 (monophonic)
LFO2 Depth – The amount of LFO2 (monophonic)
LFO3 Rate – The speed of LFO3 (monophonic)
LFO3 Depth – The amount of LFO3 (monophonic)
LFO4 Rate – The speed of LFO4 (monophonic)
LFO4 Depth – The amount of LFO4 (monophonic)
LFO5 Rate – The speed of LFO5 (monophonic)
LFO5 Depth – The amount of LFO5 (monophonic)
LFO5 Rate – The speed of LFO5 (monophonic)
LFO5 Depth – The amount of LFO5 (monophonic)
LFO6 Rate – The speed of LFO6 (monophonic)

#### Envelope

Amp Env Attack Trim* – The relative AMP Attack time (polyphonic) Amp Env Decay Trim* - The relative AMP Decay time (polyphonic) Amp Env Release Trim* - The relative AMP Release time (polyphonic) Amp Env Speed – The speed of the Amplitude Envelope Filter Env Attack Trim* - The relative Filter Attack time (polyphonic) Filter Env Decay Trim* - The relative Filter Decay time (polyphonic) Filter Env Release Trim* - The relative Filter Release time (polyphonic) Filter Env Depth – The amount of the Filter Envelope **Filter Env Speed** – The speed of the Filter Envelope (monophonic) Mod Env1 Depth – The amount of Mod Envelope1 (monophonic) Mod Env1 Speed – The speed of Mod Envelope1 (monophonic) Mod Env2 Depth - The amount of Mod Envelope2 (monophonic) Mod Env2 Speed – The speed of Mod Envelope2 (monophonic) Mod Env3 Depth - The amount of Mod Envelope3 (monophonic) Mod Env3 Speed – The speed of Mod Envelope3 (monophonic) Mod Env4 Depth – The amount of Mod Envelope4 (monophonic) Mod Env4 Speed – The speed of Mod Envelope4 (monophonic)

#### Morphing Modulation

Morphing Input A – Explained in the Morphing Modulation section Morphing Input B – Explained in the Morphing Modulation section Morphing Input A/B Xfade – Explained in the Morphing Modulation section (monophonic)

### * These parameters appear exclusively within the Modulation Matrix and are not seen on the GUI.



### **EDIT PAGE - Effects Modulation**

The fact that Omnisphere can modulate nearly fifty synthesis parameters is only part of the story. Any of Omnisphere's modulation sources can be applied to the myriad of FX parameters as well. Just about every single parameter in all of Omnisphere's 33 effects modules can be modulated, which means there are over 200 effects parameters available on top of all of the synthesis parameters. In total, Omnisphere has nearly 300 available modulation targets!

Effects Modulation can be set up quickly using the same flex-mod system available on the MAIN and EDIT pages.

#### Modulation Effects Menu

Any effect that's added to a Layer Effect rack (A or B) is available as a modulation target. After any Effect has been added to a Layer rack, a new category called "Layer Effects" will appear at the bottom of the list of target categories.

NOTE: Only FX assigned to a Layer Rack are available as Modulation Targets - FX in the COMMON rack are not.

When any modulatable parameter is right-clicked, the same list of Modulation options appears when a synthesis parameter is right-clicked. All of the Modulation options are the same.



After a parameter has been assigned as a Modulation Target, the control will become shaded with a bluish tint (in the example below, the Delay control is now blue).





These parameters will be available as long as the effect module is assigned to the Patch – meaning they will no longer appear if they effect is removed from that Layer's rack.

## **EDIT PAGE - Mod Matrix Zoom**

			MOD MATRIX ZOOM	Q	< >
SMOOTH	STATUS	SOURCE	DEPTH	TARGET	TARGET PARAMETER
-0-	MUTE INVERT	Amp Envelope		Synth Shape	·
<b>II</b> ——	MUTE INVERT		III		· · · · · · · · · · · · · · · · · · ·
m——	MUTE INVERT	Other layer 🔹			· III
II.——	MUTE INVERT	Amp Envelope		Resonance	· III
<b>II</b>	MUTE INVERT	LF01 v		Synth Symmetry	· · · · · · · · · · · · · · · · · · ·
<b>II</b> ——	MUTE INVERT	LFO2 +			·
-01	MUTE INVERT	LF03 +			·
III	MUTE INVERT	LFO4 v		Filter 2 Spread	·
<b>II</b>	MUTE INVERT	Mod Envelope1 ·		Cutoff	·
<b>II</b>	MUTE INVERT	Mod Envelope2 ·	III	Cutoff	·
III	MUTE INVERT	Off 🗸		Off	·
	MUTE INVERT	Off 🗸		Off	·
			LAYER A LAYER B		

Selecting the Zoom icon on the Modulation header will open the Mod Matrix Zoom view. The Mod Matrix view offers precise control over all of the modulation routings in the Patch. The advantage of this zoom view is that the many routings can be displayed for editing simultaneously.

There are the same Source/Target sections, Depth and Target Parameter controls from the EDIT overview page, as well as some controls unique to the Mod Matrix Zoom, like smoothing. There are two sub-pages in Mod Matrix Zoom, each with twelve modulation routings making for a total of 24 possible modulation routings available per Patch.

It's important to note that Omnisphere also has a number of fixed modulation routings as well. Many of the typical routings have already been hardwired in the STEAM engine, so they don't have to be assigned. These include Velocity control over Envelope depth, Key Tracking of Filter depth, Filter Envelope to Cutoff, and so on.

Page Switch



Toggles between the two Mod Matrix sub-pages. It's generally a good rule of thumb to fill up the first modulation page before any mod routings are added on the second modulation page. Each page displays twelve routings at a time. The Mod Matrix shows modulation routings for both Layers simultaneously.

Smoothing



The modulation Smoothing control takes the incoming modulation source and slows the sharper points down, smoothing them out. This means that the character of the modulation source will not have quite as drastic or harsh an effect on the modulation destination. It works in a similar way to the Lag processors on some vintage synthesizers. This is the same principle that is used in Glide/Portamento, but applied to any source and target.

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#### Status



This is a shared area with two switches, Mute & Invert.

The Mute control virtually disconnects the modulation routing. This is a quick way to hear what kind of effect it's having on the part.

The Invert control allows toggles between positive or negative modulation.

#### Source



The source area displays and selects the modulation source to control a target. Selecting the source will open up a menu of 28 modulation sources and "Off" – which negates any modulation source.

Depth



This control determines to what degree the source affects the modulation target. The higher the setting, the more the Source will affect the target. Depending on the kind of Modulation Source used, it is possible to send too much signal from the Modulation Source, which causes unexpected results in the target. This is explained in the section below on the Target Parameter.

#### Target



The Target is the destination for the Source's modulation output. Omnisphere has a large number of modulation targets, including synthesis parameters as well as effects parameters.

The full list of Targets is listed in the MODULATION section here

#### **Target Parameter**



This control represents the setting of the target parameter - meaning it's another representation of it.

Inside the parameter 'slot' is a dual indicator. The blue line represents the range of the modulation and the white point indicates the current value of the modulation.

# Layer Display Switches



These buttons allow viewing the active modulation routings on either layer. When Layer A or Layer B is selected, that layer's modulation routings are shown in bright blue text, while the other layer's routings are disabled.

LF01	 Synth Hard Sync	

## **MOD MATRIX ZOOM – Morphing Modulation**

SOURCE	DEPTH	TARGET	
Morphing Source		Cutoff	Ψ.
LF01		Morphing Input A	*
Random		Morphing Input B	*
Wheel		Morphing Input A/B Xfade	*

### Watch the Tutorial Video for Morphing Modulation

Omnisphere has a very special modulation feature that goes beyond the standard method of modulating a single target with a single source, called morphing modulation. This system uses dual-sources to modulate a single target and adds a morphing component to interactively crossfade between the outputs of the two modulation sources. This can create very dynamic modulation routings and effects.



There are four components to Morphing Modulation, which means setting up a Morphing Modulation routing will use four slots in the Modulation Matrix.

First a target must be designated; this is the parameter that will be modified by the morphing modulation. Two different modulation sources need to be defined. The degree that the two modulation sources will be blended together is determined by the Morphing Input A/B Xfade source. This modulation source will control how the two morphing inputs are combined before they are sent to the target.

### **Morphing Source**



This defines that target of morphing modulation. It can be any of Omnisphere's modulation targets. Once "Morphing Source" is selected and a Target parameter is designated, then the two morphing modulation inputs must be defined.

### **Morphing Input A**



This is one of the two sources that will become a Morphing Input. The sum of both Morphing Input A and B will be sent to the target defined in Morphing Source routing, so its necessary to define Morphing Input A as the target.

#### Morphing Input B



This is the other morphing source that will modulate the target. After the Source is chosen, then Morphing Input B needs to be selected as the target.

It's important to make the Source in Morphing Input B different from Morphing Input A – if they are the same source then the morphing will have no effect.

#### Morphing Input A/B Xfade

Wheel	 Morphing Input A/B Xfade

This routing is what defines what will control the morphing between the two A/B inputs – so the Source here should be one that is suited to this kind of cross fading.

Suggested Morphing Inputs for A/B Xfade;

Wheel

Velocity

LFOS

Envelopes



### **EDIT PAGE - Filters**

Watch the Tutorial Video for Filters

The Filter is a key component of subtractive synthesis. It's designed to remove frequencies from within a sound, which can enhance the character of that sound. Filters typically consist of a cutoff control, which sets the removal of certain frequencies, and a resonance control, which emphasizes the frequency of the cutoff point.

The most common form of filtering is called lowpass, which means that higher frequencies are removed while lower frequencies *pass* through without being removed. Most vintage synthesizers employed low-pass filtering, but some also included high-pass filtering, which removes low frequencies and lets the high frequencies pass through.

Omnisphere includes an exceptionally versatile dual-filtering system, which features two stereo filters per layer that can be routed in series or parallel. There are twenty-four different filter types available, which include lowpass, highpass, bandpass and other specialized varieties. Because Omnisphere's filters are stereo, they are ideal for dynamic filter panning effects.

The FILTERS section of the EDIT overview features a basic set of filter controls, such as Cutoff, Resonance, Keyboard tracking and Filter envelope depth. The full set of filter controls are available on the <u>FILTER ZOOM</u> view.

### **EDIT PAGE - Filter Power Switch**

#### Enables or disables the Filter.

NOTE: Turning the Filter OFF saves CPU power, since every voice played has it's own dual-filter per Layer.

#### Save Filter Preset ... Copy Filter Preset Paste Filter Preset SawSquare Fat MAIN FM BING WS MULT Bandpass Filters **Highpass Filters** Dual Hipass Dual Resonant Juicy HPF Lowpass Filters Specialty Filters HPF Crisp HPF Juicy 12db HPF Juicy 24db HPF Juicy 36dB HPF Juicy 48dB HPF UVI D VELO Wide HPF Juicy

## EDIT PAGE - Filters Presets

Omnisphere has a wide variety of customized filter configurations, called presets. The presets represent the settings of Omnisphere's complex dual stereo filter. Filter presets can be selected, copied, pasted and saved from this menu.

TIP: If you find a Patch that has an interesting custom filter configuration, you can save it into your preset library to use with your own patches!

The Presets are categorized into several sub-categories; Bandpass Filters, Highpass Filters, Lowpass Filters and Specialty Filters. For the sake of space, the preset names are abbreviated, but this is what the different abbreviations mean;


HPF LPF UVI db	High Pass Filter Low Pass Filter UVI Filter from Atmosphere® Short for Decibel. Names like 12db, 24db, refer to the roll off slope of the filters.
-------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------

NOTE: Filter presets are not the same as Filter types. Filter Presets include the settings for Filter type. Filter types are covered in the <u>FILTER ZOOM</u> section.

#### FILTER PRESET MENU

After a Preset has been chosen from the drop-down menu, the name will be displayed in the preset display window:



If the filter types are changed in the Zoom view, then the display will be changed to "Modified" until the Filter settings are saved as a preset or another preset is selected.



NOTE: Filter presets intentionally do not recall CUTOFF, RES, KEY and ENV settings. This is done because it's the best way to audition the different Filter Presets within the context of your current Patch.



**EDIT PAGE - Filter Cutoff** 

The primary function of the filter is to remove, hence "cut off", frequencies from a sound. Omnisphere's filter can remove frequencies in a variety of ways, via its numerous different filter types; Lowpass, Highpass, Bandpass, Notch and several specialized ones. Depending on the Filter type, the Cutoff will remove different types of frequencies in various ways.

For example, if a Low Pass filter is used, turning the control counter-clockwise will remove the higher frequencies. If a High-Pass Filter is used, turning it clockwise will remove low frequencies. Experiment with cutoff control with the wide variety of filter presets and types

Range 00.05Hz to 19.00kHz

# **EDIT PAGE - Filter Resonance**



Resonance is also called 'Q' or Emphasis in synthesizers, because it emphasizes the cutoff point of the filter. Resonance can often increase the loudness of the Filter, so its a good idea to use this control along with the Filter Gain, so that audio clipping does not occur.



TIP: Omnisphere's UVI1 filter can self-oscillate. If the Resonance is set to maximum, the filter can be 'tuned' by the cutoff control.

# **EDIT PAGE - Filter Key Tracking**



The Filter Tracking is a dedicated modulation control. It determines to what extent the cutoff frequncy will track the keyboard. The higher the KEY value is set, the more the filter will open over the upper range of the keyboard and close in the lower ranges of the keyboard.

For example, If a low pass filter is loaded and the cutoff is set below 1.00KHz, the notes played below middle-C will be come increasingly darker in tone, and keys above middle-C will be increasingly brighter. At the minimum setting, higher and lower notes have no effect on the cutoff frequency.

Range 0 to 127

## FILTER KEY TRACKING INVERT SWITCH

KEY

Key Tracking can be inverted simply by selecting the word "Key" below the control. This switch will change to inverted text when Key tracking is inverted and the sonic result will be the opposite of standard Filter Key Tracking.

# EDIT PAGE - Filter Envelope Depth



The Filter Envelope Depth is a dedicated modulation control. It sets the amount that the Filter Envelope controls the cutoff frequency. At minimum setting, the Filter Envelope has no affect on the cutoff. The higher the setting, the greater effect the Filter Envelope's contour has in opening and closing the Filter.

NOTE – If both the Filter Cutoff and Filter Envelope Depth are set to minimum values, little to no sound will be heard. If the Filter Cutoff is at the maximum value, then the ENV DEPTH knob will have no effect, since the cutoff is already wide open. A good starting point is to keep the ENV control at the middle point.

Range 0 to 127

## **ENV INVERT SWITCH**

## ENV

This control inverts the Filter Envelopes contour and so it will have the effect of closing the filter (lowering the cutoff frequency). This switch will change to inverted text when Env tracking is inverted.

TIP: Inverting the Filter's Envelope can be useful for creating unusual contours, such as double triggering and release effects

# **EDIT PAGE - Filter Gain**

By default the FILTER GAIN is set at 0.0db. Changing this control alters the output level of the Filters. One application would be if the Filter is closed down, and the tone is quite dark and rather low in output, the level could be compensated for by using the FILTER GAIN control. More commonly, Filter combinations with Resonances can get too loud, causing distortion and clipping. The GAIN slider is very useful to reduce the overall level in these cases.

Range between - inf (0) and +9.54.dB

# **EDIT PAGE - Filter Cutoff Spread**



The SPREAD control in Omnisphere's Filter is not typically found on most synthesizers. Since Omnisphere's filter is stereo, the SPREAD control can move the cutoff frequency in one direction on one side of the stereo field while moving it in the opposite direction in the other side of the stereo field.

For example, the filter would be opening on the right channel while closing on the left channel. This can create unique panning effects that are more dramatic than the standard audio panning approach – particularly when SPREAD is modulated.



NOTE: Unlike the other filters, the Power filter is not a pair of L/R mono filters. Instead, it's a stereo filter with no spread capability. In the case of the Power Filter, the Spread control does the same function as the <u>Width</u> control in the Power Filter effect unit.

# **EDIT PAGE - Filter Zoom**



FILTER ZOOM in Omnisphere provides precise control over each Layer's dual-filter. The two stereo filters are represented on the right and left. The central area controls the routing and contains the shared controls. Each of the two stereo filters can have any of 24 filter types assigned to

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it. They can be combined in series or parallel, allowing for hundreds of possible filter configurations.

There are primary Cutoff and Resonance controls for the entire filter, but both FILTER 1 and FILTER 2 each have their own independent Cutoff and Resonance offsets which are applied to those primary values.

# FILTER ZOOM - Power Switches

# **Dual-Filter Power Switch**



Enables or disables the entire Filter. It is a duplicate of the power button on the EDIT page. The entire Dual-Filter can be turned on and off with this switch, which provides a quick way to compare the sound with and without filtering.

## FILTER 1 & FILTER 2 Power Switches



## Enables or disables Filter 1 and/or Filter 2.

NOTE: If both Filter 1 and Filter 2 are turned off, the only control on the Filter Zoom page that will still change the sound is the GAIN slider.

# FILTER ZOOM – Filter Type



The Filter Type menu allows you to select the actual Filter algorithm to be used in Filter 1 or Filter 2. Omnisphere comes with a wide range of filter types. Each of the two stereo filters has the same twentyfour filter types available.

Because of the flexible dual-filter system in Omnisphere, these different filter types can be combined, routed in series or parallel, allowing for hundreds of possible filter configurations.

The extent to which the frequencies are removed is based on the roll-off slope (measured in dB) of the filter type. This means a Lowpass filter with a 24dB roll-off is going to allow less sound to pass through than a filter with a 12dB roll-off.

Once a customized filter configuration has been created, the settings can be saved as a Filter Preset and loaded it from the FILTERS section on the EDIT overview page.

OFF		The Filter is off.
LOW PASS	Gentle 6db	A subtle, 1-pole low pass, useful for acoustic sounds
	Crisp 12db	
	Warm 12db	
	Juicy 12db	This new 2-pole Low Pass filter has a very smooth response at high resonances.
	Warm 24db	
	Smooth 24db	
	Colorful 24db	
	Edge 24db	
	Juicy 24db	This new 4-pole Low Pass filter has a very smooth response at high resonances.
	Power LP24	This is the Low Pass 24db filter from the Power Filter FX module
	UVI 1	The 4-pole 24db Low Pass filter used in Atmosphere (can self-

		oscillate)
	UVI 2	The 3-pole 18db Low Pass filter used in Atmosphere
	UVI 3	The 2-pole 12db Low Pass filter used in Atmosphere
HIGH PASS	UVI	The 2-pole 12db High Pass filter used in Atmosphere
	Crisp	
	Juicy 12db	This new 2-pole High Pass filter has a very smooth response at high resonances.
	Juicy 24db	This new 4-pole High Pass filter has a very smooth response at high resonances.
OTHER	Bandpass	All frequencies above and below a certain range are removed.
	Bandpass Juicy 12db	This new 2-pole Band Pass filter has a very smooth response at high resonances.
	Bandpass Juicy 24db	This new 4-pole Band Pass filter has a very smooth response at high resonances.
	Notch	Frequencies pass thru a narrow 'notch', also known as a 'band- reject' filter
	Allpass	All frequencies are passed equally, but it changes the phase relationship between the frequencies.
	Metal Pipe +	A complex stereo comb-filter that produces flanger-like metallic overtones
	Metal Pipe -	A complex stereo comb-filter, inverted

# FILTER ZOOM – Cutoff Offset



The Filter Cutoff settings affect both FILTER 1 and FILTER 2. The CUTOFF OFFSET counterbalances the Cutoff for FILTER1 and FILTER2 independently. These are not separate filters controls; they simply increase or decrease the Cutoff frequency of that particular Filter Type, relative to the primary Cutoff control.

When the slider is centered in the middle, there is no offset to the Filter Cutoff. Moving the control to the right increases the Filter Cutoff and moving it to the left decreases the cutoff.

# FILTER ZOOM – Resonance Offset



As Filter Resonance settings affect both FILTER 1 and FILTER 2, the RES OFFSET (meaning Resonance Offset) allows the depth of the resonance for FILTER1 and FILTER2 to be set independently. This control decreases or increases the amount of Resonance of that particular Filter Type.

When the slider is centered in the middle, there is no offset to the Filter Resonance. Moving the slider to the right increases the Filter Resonance and setting it farther left decreases the Resonance.

# FILTER ZOOM – Spread Offset



As both of Omnisphere's filters are stereo, they are both capable of offsetting their stereo position with this control. Like the other Offset controls in Filter Zoom, this counterbalances the setting of the primary control, in this case is the Spread control.

NOTE: Since Spread moves the cutoff between Right and Left, the Spread Offset can counteract the Spread's setting for each Filter if moved in the opposite direction.





The central part of the FILTER ZOOM section is dedicated for controls that are common to both of the Filters, including the ability to route to two Filters in parallel or in series and to place them before or after the Amplifier.

Dual Filter					
Independent Controis FILTER 1 Cutoff Offset Res Offset Spread Offset	Independent Controis FILTER 2 Cutoff Offset Res Offset Spread Offset				
Sha					
	INCE SPREAD ENV KEY GAIN				

Aside from the Series/Parallel and Mix option, the remaining four knobs (CUTOFF, RES, SPREAD, KEY, ENV) are exactly the same as those in the Filter section on the EDIT page. So any changes that are made on these controls will be reflected on the Edit page as well.

# FILTER ZOOM – Series / Parallel



When Omnisphere's two Filters are in "Series", it means that the output of Filter 1 is feeding into Filter 2 – and thus affects the character of Filter 2. When the two Filters are in Series, the Mix control is not in use. "Parallel" means the two Filters are both working, but they are not directly affecting the other; they are operating side-by-side and mixed together. The Mix slider controls the balance between the two filters.



FILTER ZOOM - Mix



In Parallel mode, each of the two Filters pass thru the Filter Mixer, and the Mix control determines how much of each filter is heard. Centering the slider will allow both filters to be heard equally, and sliding it to the right or left will favor one over the other.

Range 100.00 to 00.100 (50.50 is the center point)

# FILTER ZOOM – Gain



The Gain adjusts the level of the input, or output of the Filter Module.

Range between - inf (0) and +9.54.dB

# FILTER ZOOM – Pre / Post



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The Dual-Filter can be placed before or after the Gain Control. These switches determine if the gain control will be used before or after the Filter. Aggressive Filter sounds will have a different character depending if PRE or POST is enabled.

#### PRE



The Gain Control is applied before the Filters.

POST



POST means that the Gain Control will be applied after the Filters

# FILTER ZOOM - Cutoff



The primary Cutoff control is identical to the Cutoff control on the EDIT page. The primary function of the filter is to remove, hence "cut off", frequencies from the sound. Omnisphere's filter can remove frequencies in a variety of ways, from Lowpass, Highpass, Bandpass, Notch and also specialized filter types. When different Types are loaded, the Cutoff will remove different frequencies from the sound.

Depending what Filter preset is chosen, the Cutoff control will remove different frequencies in various ways.

For example, if a Low Pass filter is used, turning the control counter-clockwise will remove the higher frequencies. If a High-Pass Filter is used, the opposite will happen. It's best to experiment with cutoff control with the wide variety of Filter Types.

The Filter's roll off slope is measured in dB, and is sometimes expressed in "poles". The higher the dB value, the greater the extent of the filtering, but this should not be confused with sounding "better". Filters with fewer poles can often sound more appropriate than those with more poles.

6dB =	1 Pole
12dB =	2 Pole
18dB =	3 Pole
24dB =	4 Pole

Range 00.05Hz to 19.00kHz

## FILTER ZOOM – Resonance



The Resonance control on the FILTER ZOOM page is identical to the RES knob on the EDIT page. Resonance is also called 'Q' or Emphasis in synthesizers, because it emphasizes the cutoff point of the filter. Resonance can often increase the loudness of the Filter, so its a good idea to use this control along with the Filter Gain, so that audio clipping does not occur.

TIP: Omnisphere's UVI1 filter can self-oscillate. If the Resonance is set to maximum, the filter can be 'tuned' by the cutoff control.



Range 0 to 127

# FILTER ZOOM - Spread



The SPREAD control on the FILTER ZOOM page is identical to the SPREAD slider on the EDIT page. The SPREAD control in Omnisphere's Filter is not typically found on most synthesizers. Since Omnisphere's filter is stereo, the SPREAD control can move the cutoff frequency in one direction on one side of the stereo field while moving it in the opposite direction in the other side of the stereo field.

For example, the filter would be opening on the right channel while closing on the left channel. This can create unique panning effects that are more dramatic than the standard audio panning approach – particularly when SPREAD is modulated.

Range L to R

NOTE: Unlike the other filters, the Power filter is not a pair of L/R mono filters. Instead, it's a stereo filter with no spread capability. In the case of the Power Filter, the Spread control does the same function as the <u>Width</u> control in the Power Filter effect unit.

# FILTER ZOOM – Key Tracking



The KEY control on the FILTER ZOOM page is identical to the KEY slider on the EDIT page. The Filter Tracking is a dedicated modulation control. It determines to what extent the cutoff frequency will track the keyboard. The higher the KEY value is set, the more the filter will open over the upper range of the keyboard and close in the lower ranges of the keyboard.

For example, if a low pass filter is loaded and the cutoff is set below 1.00KHz, the notes played below middle-C will be come increasingly darker in tone, and keys above middle-C will be increasingly brighter. At the minimum setting, higher and lower notes have no effect on the cutoff frequency.

## **KEY INVERT SWITCH**



KEY

# FILTER ZOOM - Envelope



The Filter ENV control is identical to the ENV control found on the EDIT page. The Filter Envelope Depth is a dedicated modulation control. It sets the amount that the Filter Envelope controls the cutoff frequency. At minimum setting, the Filter Envelope has no affect on the cutoff. The higher the setting, the greater effect the Filter Envelope's contour has in opening and closing the Filter.

NOTE – If both the Filter Cutoff and Filter Envelope Depth are set to minimum values, little to no sound will be heard. If the Filter Cutoff is at the maximum value, then the ENV DEPTH knob will have no effect, since the cutoff is already wide open. A good starting point is to keep the ENV control at the middle point.

## **ENV INVERT SWITCH**

ENV	

The Filter ENV INVERT switch is identical to the Filter ENV INVERT switch on the EDIT page. This control inverts the Filter Envelopes contour and so it will have the effect of closing the filter (lowering the cutoff frequency). This switch will change to inverted text when Env tracking is inverted.

TIP: Inverting the Filter's Envelope can be useful for creating unusual contours, such as double triggering and release effects

# **EDIT PAGE - Envelopes**

1775	LAYER A		
ZA B			
	Gewißquire Fet	Handonser-Alberta el Regioner electronic el Algorer electronic el densi entre el preseno	
HITCH		- ENVELOPES	10.04
A B B Balances For For			

#### Watch the Tutorial Video for Envelopes

One of the innovative features of Omnisphere's envelopes is that each of them has two interfaces. There have always been two competing design philosophies; ADSR envelopes, which are fast and easy to use, and Complex envelopes, which are more powerful and flexible but typically not as fast or easy to use.

In Omnisphere we combined both ideas into one, offering the best of both worlds. Omnisphere's envelopes are extremely powerful and at the same time very easy to use, regardless of the envelope style.

Envelopes are the contours that shape the sound coming from the Oscillators and the Filters.

A basic ADSR-style envelope determines how quickly a sound will begin, its initial decay, what level it sustains at, and how long it will fade out after the note has been released. These different elements of the envelope are called stages. Most synthesizers have 4-stage envelopes, often called ADSR envelopes, which stands for Attack, Decay, Sustain and Release.

Complex envelopes contain contours with more than four stages. Complex envelopes allow a much greater degree of control in shaping the sound, and offer tremendous flexibility when shaping sounds and can be very useful in creating rhythmic shapes.

Each Part in Omnisphere has eight envelopes, and each can be used either as a basic 4-stage ADSR envelope, or as a Complex envelope. Each Layer has a dedicated AMP (Amplitude) envelope and a dedicated FILTER envelope, while there are four Modulation envelopes that are common to both Layers.

#### AMP ENVELOPE



Each Part has two dedicated AMP (Amplitude) Envelopes, one each for Layer A and Layer B. These shape the overall loudness of the Layer. A dedicated Velocity knob controls the dynamic output of the AMP Envelopes based on MIDI Velocity.

#### FILTER ENVELOPE



Each Part also has two dedicated FILTER Envelopes, one each for Layer A and Layer B. These shape the Filter cutoff for each Layer. A dedicated Velocity knob controls the dynamic output of the FILTER Envelopes based on MIDI Velocity.

## **MODULATION ENVELOPES**



Modulation Envelopes are global, meaning there are a total of four Mod Envelopes available per Part. The Modulation Envelopes are monophonic, in contrast to the FILTER and AMP envelopes, which are polyphonic. The best way to think of Modulation Envelopes is as unipolar LFOs that can have custom defined shapes.

1, 2, 3, 4 (Modulation Envelope buttons)



Under the MODS sub-page these small switches select any of the four modulation envelopes.

Instead of a dedicated VELO (Velocity) control, each of the four Modulation Envelopes has itOs own DEPTH control knob.

# **EDIT PAGE – ADSR Controls**



The ADSR Envelope slider interface operates the same way for all the different envelope types in Omnisphere.



The screenshot above is from the Envelopes Zoom page, but illustrates what a standard ADSR Envelope looks like. The first to second point (or Stage) is the Attack time; the second point is the decay time, which ends at the third point, the Sustain level. After the note is released, the Sustain level drops away based on the Release time.

When viewed on the MAIN page, the ADSR looks like this;



A - Attack



The 'A' stands for ATTACK, which means the attack time of the envelope. At minimum setting, the Attack is immediate, so the Envelope will start as soon as a controller triggers it. Higher settings will delay the Attack time, so the Envelope will gradually fade in.

## Range between 0 to 20 seconds.

D - Decay



The 'D' is the DECAY time, which begins after the Attack has reached its maximum level. At minimum settings, the Decay will be zero, which means there is no Decay after the Attack and the Envelope goes straight to the Sustain stage. At the maximum setting, the DECAY can be about twenty seconds before the Sustain stage starts.

Range between 0 to 20 seconds

#### S - Sustain



'S' is the Sustain Level. Unlike A, D & R, Sustain is not a time value; it's a level value. Sustain determines at what level the Envelope's output remains constant while a note is held. At the minimum setting there is no sustain, so the envelope's output will stop until it's been retriggered. Higher sustain settings mean the Envelope's output will be constant as long as a note is held down.

**R** - Release



'R' is the Release time value. After a note has been let go, the sound will continue to decay for the duration of the Release time. Raising this fader lengthens the Release time. Lowering it decreases Release time.

Range 0 to 20 seconds.

# EDIT PAGE – Velo (Envelope Velocity)



VELO is short for Velocity Sensitivity. The Velocity knob controls how much MIDI velocity will affect the output signal of the Envelope. Moving the control counter-clockwise decreases the dynamic sensitivity of the envelope and clockwise changes increases the sensitivity.

NOTE: Each of the VELO (Velocity) controls for the two AMP and two FILTER envelopes are independent. The VELO control will only affect the selected envelope.

# EDIT PAGE – Envelope Depth



The DEPTH controls are dedicated to the four MOD Envelopes. Turning this knob clockwise increases how much of the modulation envelope is sent to the modulation target. The default setting is at maximum.

NOTE: The DEPTH controls for the Modulation Envelopes are independent. The DEPTH control will only affect the selected envelope.

# EDIT PAGE – Envelope Types



Since each Envelope is capable of having either simple or complex contours, Omnisphere displays the status of the envelope shape with two icons:

The Simple icon looks like the four ADSR sliders, and will be displayed as long as the envelope has only 4 stages.

When an envelope has more than 4 stages, its icon will change to display the Complex icon, which looks like a Complex envelope, and includes an "X" button.

×

#### **X BUTTON**

When the X button is selected, it will revert the complex envelope contours to a SIMPLE one, and the icon will revert to the SIMPLE icon.

When you want to simplify an envelope, you can use the X button to quickly reset a complex envelope to a simple ADSR style envelope. This can't be undone, so use it with caution!

NOTE: Changing an Envelope's shape to complex can only be done by accessing the Envelope Zoom page and adding stages/points.





The ENVELOPE ZOOM page provides precise editing of the eight available envelopes in a Part. Complex envelopes can be created with hundreds of stages. Each envelope segment can have one of nine different curve presets applied to it. These include bumps, spikes, pulses, curves and linear transitions. It is not necessary to choose between a simple or complex envelope, since they both exist simultaneously. Any changes made to the ADSR sliders on the MAIN page will be reflected on the Envelopes Zoom page.

A complex envelope can be further configured via a dedicated set of editing options that can fine-tune, scale and modify specific parts of the envelope. Envelope contours can be repeated or 'unrepeated' to easily add or remove more stages.



Envelope Zoom has a special CHAOS feature, which can randomize the envelope's shape. Chaos can also be set to automatically change on every cycle, creating constantly changing envelopes. The degree that CHAOS will affect the Envelope is determined with dedicated probability mini-sliders.

You can also create a Groove Lock[™] envelope simply by dragging and dropping a standard MIDI file (for example, from Stylus RMX) onto the Envelope Display. This will automatically create a rhythmic envelope matching the groove contained in the MIDI file.

# EDIT PAGE – Envelopes Zoom Preset Menu



There are two drop-down menus that provide access to Envelope Presets. One is on the Edit Page next to the ENVELOPES label, the other is found in the Envelopes Zoom View beside the ENVELOPES ZOOM label.

The Drop-down menus will display a list of various Envelope presets as well as options to Save, Copy and Paste Envelopes.

Envelope Presets contain all the contours of a single envelope. The Save Envelope Preset function allows you to save envelopes for later recall. Envelopes can be copied to other Layers or Parts using the Copy/Paste Envelope Preset functions. This provides a quick and convenient way to work with envelopes, and Omnisphere ships with a large number of interesting and useful Envelope Presets for you to explore.

## Saving & Loading Envelope Presets

To save a customized Envelope setting select Save Envelope Preset. A standard save dialogue will appear. Make sure that the preset that's being saved is given a name. Omnisphere will automatically add the '.env' extension to the name.

By default the Envelope preset will be saved in the STEAM folder, inside the Omnisphere Settings Library/Presets/Envelope folder. You can also create custom sub-folders within the Envelope folder to organize custom Presets according to your own preferences.

After a new Preset has been saved it can be loaded using the Envelope Presets menu. Use one of the drop-down menus and browse to your newly saved Preset.

Omnisphere       Defaults       Multis       Arpeggiator       00. Default ADSR.env         Documentation       Patches       Effects       01. Defaultvelope.env         Settings Library       Presets       Envelope       Complex Envelopes         Soundsources       User Tags       Filter       Rhythmic Envelopes         Harmonia       Simple Envelopes       Simple Envelopes         KiDI Learn       Stack       Tuning File         Velocity Curv       Velocity Curv		Env	elope	•	
	Omnisphere >	Defaults Documentation Settings Library Soundsources	Multis Patches Presets User Tags	Arpeggiator  > Effects  > Envelope.zlp Filter  > Harmonia  > LFO  > MIDI Learn  > Oscillator  > Stack  > Tuning File  > Velocity Curv	<ul> <li>00. Default ADSR.em</li> <li>01. Defaulvelope.e</li> <li>Complex Envelopes</li> <li>LFO-style Envelopes</li> <li>Rhythmic Envelopes</li> <li>Simple Envelopes</li> </ul>

NOTE: In order to load any shared Preset file, it must first be placed in the Envelope folder;

STEAM/Omnisphere/Settings Library/Presets/Envelope/Sub-Folder

Only then will it appear on the list of presets.

#### Copying & Pasting Envelope Presets

Select "Copy Envelope Preset" from the Presets menu to copy the current Envelope contours. Then select the Envelope to copy it to. This can be any of the Envelopes in the current Part - or in any other Part. From the Presets menu select "Paste Envelope Preset" and the copied Envelope will replace it.

NOTE: There is no 'Undo' for Pasting an Envelope, so use caution when Copying and Pasting them.

# EDIT PAGE – Envelope Page Buttons

- LAYER	ENVS -		- MOD EN	VELOPES -	
AMP	FILTER	MOD 1	MOD 2	MOD 3	MOD 4

Above the Envelope Display area are six buttons that select the controls for the six Envelopes available in the current Layer.

NOTE: the AMP and FILTER Envelopes displayed are only for the current Layer, the other Layer must be selected to see the other two AMP/FILTER envelopes.

EDIT PAGE – Mod Envelopes Timeline

The four MOD Envelopes each have an LED indicator that tracks the time it takes to play through the Envelope contour. The rate of the Envelope's contour will make these LEDs trace along as a visual guide. The LED timeline display is also helpful in monitoring the different types of Envelope triggering.

For example, if "NOTE" triggering is enabled, the LED display will start at the beginning of the Envelope every time a note is triggered. If "LEGATO" is selected, the LEDs will continue to along the timeline even when new legato notes are triggered.

NOTE: Until a MOD envelope has been set up as a modulation source to a target in Omnisphere, the LED display will be off.

## EDIT PAGE – Envelopes Zoom Edit



There are four different automated Envelope adjustments, which provide a simple way to double and/or half the total number of Envelope points. These options can quickly change the playback rate of the Envelopes as well.



Repeat	Every time 'Repeat' is selected, all of the stages in the Envelope will be duplicated, doubling the number of points.
Unrepeat	Can undo any Repeats that have been done. Unrepeat can also be used to "halve" the number of segments in an envelope.
Half time	Each time this is selected, Half time will change the speed of the Envelope's contour by half.
Double time	The speed of the Envelope's contour will double every time this is selected.





The contour of the current Envelope can be modified from this display. The point to the extreme left is always the Attack time and on the last two points on the right are the Sustain level and the Release time stages. Time is represented horizontally and Level is on the vertical axis.

To add an additional stage to the Envelope, right-click (Control-Click) and select "add" from the pop-up menu. When an additional point is added, all points to the right are shifted to make room for the new stage. When selecting between two points, a new point is inserted in the

middle of the stage and the points to the right are not shifted.

Selecting and dragging any point in the display will change the position of the point. Selecting anywhere there is no line or point will move the background grid forward and back.

When any point has been selected a small numerical window will appear above the display that indicate the level settings for that point (0.000 is minimum and 1.000 is maximum).

Right Clicking (or Control-Clicking) in the display area will bring up the Envelope Point menu, which is explained next.

# **EDIT PAGE – Envelope Curves**

Remove	
Add	
Curve1	
Curve2	
Pulse	ļ
Spike	
✓ Step	
Linear	
Bump	
Four Pulses	
Three Pulses	
SPEED	

All of Omnisphere's eight dedicated Envelopes are capable of generating contours with hundreds of points. Right/Control-clicking anywhere in the Envelope display are will bring up a list that allows points to be added or removed, followed by a list of preset curves.

Clicking and dragging directly on the curve can change the orientation and position of the curves. A cross hair will appear that will move the curve in any direction within the limits of the curve.

Some presets automatically have maximum level settings, such as Spike, Pulse and Bump. To reduce the levels, click and drag and the cross hair will appear that will allow the amplitude of the curve to be changed.





NOTE: Envelopes can never have fewer than four points, as they correspond to the ADSR of the simple envelope. Attempting to remove these ADSR points will be ignored.

TIP: Double-clicking on any point in the Envelope will remove it.

NOTE: Whether an Envelope is considered SIMPLE or COMPLEX depends on the number of points (or stages) it has. Since there are many preset curves available, it's possible to have a SIMPLE envelope, but with a complex shape, as it only has four points;



EDIT PAGE – Envelope Editing Controls



These mode switches offer several methods for precise editing of the Envelopes.

## ENVELOPES ZOOM SNAP



When SNAP is selected, any horizontal repositioning of a point is limited to 16th notes. The Envelope Display has vertical reference lines, which are helpful when using SNAP to line up the points at the 16th note divisions.

If the Envelope is short, under a few seconds, the SNAP points are correspondingly small. When an Envelope is long, the snap points appear to

Omnisphere

be greater in scale.

Keyboard Shortcut - Option/Alt

# ENVELOPES ZOOM LOCK



When LOCK is enabled, all the points to the right of the point selected can be moved as one single group of stages. The only restriction is the current range of the Envelope Display.

Keyboard Shortcut -Command/Control

## **ENVELOPES ZOOM X/Y**



Keyboard Shortcut - Shift

## **ENVELOPES ZOOM FINE**

Movement of points will be at a higher resolution than normal when FINE is enabled. The numbers in the value window will be correspondingly small as long as FINE is in use.

FINE

## ENVELOPES ZOOM SCALE

The range of the Envelope will be increased by dragging any of the points within it (except the first one). Scaling the Envelope beyond the limit of Envelope Display will appear to 'squish' many of the points together, but selecting AUTO ZOOM will expand the view to fit them all.

NOTE: When zoomed in, clicking and dragging in an empty region of the envelope display will drag the display left or right.

# **EDIT PAGE – Envelope Chaos**

AUTO —	CHAOS	
		LEVELS

The envelope contour can be randomized with the special CHAOS feature. CHAOS can change the level settings for all the points in an Envelope as well as the curve transitions between the points.

Chaos works by taking the existing points in an Envelope and randomizing their Levels and Curves based on two controls. The two sliders in the CHAOS section, CURVES and LEVELS, control the probability of randomization. Also, the four Modulation Envelopes have an automatic feature that randomizes the CHAOS on every cycle of the Envelope.

## **CHAOS AUTO**







When enabled, the Level and Curve settings will be re-randomized with every cycle of the Envelope. For example, if an Envelope's cycle lasts for two seconds, then every two seconds the contour will change according to the settings of the CURVES and LEVELS probability sliders.

NOTE: The AUTO switch is only available on Modulation Envelopes 1 - 4.

## CHAOS SWITCH



Each time the CHAOS button is selected, it will randomize the Envelope's contour. The two adjacent mini-sliders, CURVES and LEVELS, determine the probability of randomization made when CHAOS is selected.

NOTE: CHAOS only affects the existing points in an Envelope; it will not add or remove any stages.

#### **CHAOS CURVES**



The higher the Curves probability slider is set, the greater the likelihood of variance in the curves between the stages. Higher settings will also smooth out the sharper Envelope transition types, such as bump, pulse, spike, linear and the three and four pulses curves.

#### CHAOS LEVELS

The amplitude of the Envelope points will be changed more or less frequently, depending on the setting of this control. At minimum setting, the levels of the points will only change slightly. Maximum settings will produce more dramatic shifts in the Level values of the stages.

NOTE: LEVEL changes are strictly vertical; no point is moved horizontally with CHAOS.

## EDIT PAGE – Envelopes Speed



Controls how quickly the envelope will cycle. This is a rate-based control, based on the duration of the Envelope.

For example, if the Envelope's cycle is 2 seconds, and the SPEED slider is set to 0.50, the Envelope will take 4 seconds to complete its cycle. If the SPEED slider is set to 5.00, the Envelope will cycle 3 times every second. This control can be modulated.

Range 0.10X-10.0X (1.00X is the default)

## EDIT PAGE – Envelope Velocity



This knob controls the effect of MIDI Velocity on the output of the envelope. Moving the slider to the left decreases the dynamic sensitivity of the envelope. Moving the slider to the right increases the sensitivity.

# **EDIT PAGE – Envelopes Depth**



The Depth slider is a duplicate of the knob found on the MODS sub-page. At the minimum settings, little to no modulation will be sent to the target. At the maximum setting the full output of the Modulation Envelope will be affect the modulation target.

## Range 0 to 1.00

# EDIT PAGE – Envelope Trigger



Several modes are available to determine how the Envelope is triggered and cycled. The NOTE/LEGATO/SONG modes are only available on the Modulation Envelopes.

#### LOOP

This switch toggles Envelope looping. When selected the Envelope will continually repeat.

#### SYNC

The Envelope will sync to the song's tempo. Both LOOP and SYNC can be selected at the same time so the Envelope will cycle and sync to the song's tempo.

SYNC

#### NOTE/LEGATO/SONG

NOTE LEGATO SONG

These three mode switches are only available on the Modulation Envelopes as they are related to the Modulation Envelopes Timeline display.

**NOTE** – With every note played, the Envelope will be retriggered.

LEGATO - The Envelope is only retriggered on the first note of a legato passage.

SONG - The Envelope will follow the song position in the host.

```
EDIT PAGE – Envelopes Zoom – Zooming
```

#### AUTO ZOOM



Selecting the button will auto-fit all of the points into the Envelope Display.



#### Omnisphere

NOTE: If the Envelopes contour is very short, less than 1/4 of a bar, the Envelope Zoom will not fill the Envelope Display area with the full Envelope.

#### ZOOM



This slider controls the how much of the Envelope Display is seen. At the minimum value it will display a small part of the first segment and a maximum setting all 100 bars are visible.

If your mouse has a scroll wheel, you can use it to zoom. Mouse-over the envelope display and move your scroll wheel to zoom.

NOTE: If the Envelopes contour is very short, less than 1/4 of a bar, the Zoom slider will not be able to fill the Envelope Display area with the full Envelope.



EDIT PAGE – Groove Lock™ Envelopes

# Watch the Tutorial Video for Groove Lock™ Envelopes

Groove Lock[™] is one of Omnisphere's most innovate features. With Groove Lock[™] you can lock the groove of the Envelopes to the feel of any Stylus RMX or Standard MIDI file. This dramatically expands the rhythmic potential of the Omnisphere Envelopes. You can instantly create a Groove Lock[™] envelope by simply dragging and dropping any standard MIDI file (for example, from Stylus RMX) onto the Envelope Display. This can be applied to any of the available envelope types; AMP, Filter and Mod.

When you drop a MIDI file onto the Envelope Display, it imports the rhythmic information contained in that MIDI file, resulting in a complex rhythmic envelope.

This is a very fast and convenient way to create complex envelopes, and can dramatically reduce the time required to create such envelopes from scratch.



Complex Envelope after Groove Lock[™]applied



Using MIDI files provides a great starting point for creating interesting new envelopes. It allows envelopes to be Groove Locked to other Spectrasonics plug-ins, or to any MIDI-based musical phrase in your project.

HINT: When you drop a MIDI file onto the Envelope Display, it will replace the existing envelope. If desired, you can save your current envelope as an <u>Envelope Preset</u> before creating the new Groove Lock envelope.

**EDIT PAGE – LFOS** 

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	SYNC U DELAY	LEI CO CO LEIE		

Watch the Tutorial Video for LFOs

LFOs (Low Frequency Oscillators) are used for cyclical modulation effects like vibrato, tremolo, filter sweeps and auto-pan effects.

Omnisphere has six independent LFOs available for each Part. All six LFOs have an identical set of parameters and can be used as sources within Omnisphere's Modulation Matrix.



## **EDIT PAGE – LFO Presets**

Selecting the menu arrow in the section header will display a drop down menu that allows copying, pasting and saving of LFO settings as presets. Below that is the list of available LFO presets, which can be applied to the currently selected LFO. When the LFO is set up to modulate an Omnisphere parameter, these presets can be auditioned.

# **EDIT PAGE – LFO Number**



Underneath the section header are page buttons numbered 1-6, each of which represents an LFO. Selecting a button displays the current values of that LFO's parameters.

# EDIT PAGE – LFO Waveforms

Each of Omnisphere's LFOs can have its own waveshape. There are nine available LFO waveforms.



**Sine** – A smooth curved shape that begins positive and then curves negative and back again. Useful for sweeps and vibrato.



**Triangle** – Is a positive/negative shape like the Sine, but without curvature. Useful for sweeps and vibrato.



**Square** – Starts at maximum positive value and then drops to maximum negative value. Useful for trills and pulsing effects.



**Rounded Square** – A smoothed Square wave. Useful for smooth pulsing.



**Ramp** – A linear slope from highest to lowest value. This waveform is also frequently referred to as a sawtooth wave. Useful for sweeps.



**Reverse Ramp** – A linear slope from lowest to highest value. This waveform is also frequently referred to as an inverted sawtooth wave. Useful for reverse sweeps



**Sample and Hold** – Steps through random values. Useful for classic analog synth effects.



Heartbeat - Modeled after a human heartbeat



**Noise/Random** - Similar to Sample and Hold, with random values, but doesn't step, the values change immediately. Useful for adding chaos.

The waveforms can be changed by selecting the stepper buttons or by dragging the cursor on the LFO waveform display

# **EDIT PAGE – LFO Rate**



The Rate knob controls the speed of the LFO's cycle. The Rate knob has two modes. These modes depend on the state of the LFO <u>Sync</u> button.

• SYNC OFF – The LFO's rate is not synchronized with the host tempo and the LFO's rate is measured in Hz. The rate increases, as it's turned clockwise.

• SYNC ON – The LFO's rate is synchronized to the host's tempo. Changing the rate in Sync mode scrolls through different rhythmic value groups - it does not simply get faster as the knob is turned clockwise. Some examples of note values found spread out around the control are:

8x - this value stretches a cycle across eight bars.

1/8 - this value cycles the LFO every eighth note.

1/8 dot - this value cycles the LFO every dotted eighth note.

1/8 triplet - this value cycles the LFO every eighth note triplet

Range (Sync Mode On)

32X, 16X, 8X, 7X, 6X, 5X, 4X, 3X, 2X,

1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96,

1/1 dot, 1/2 dot, 1/4 dot, 1/8 dot, 1/16 dot,

1/1 triplet, 1/2 triplet, 1/4 triplet, 1/8 triplet, 1/16 triplet

Range (Sync Mode Off) 0 to 48Hz

## **EDIT PAGE – LFO Depth**



This knob controls LFO depth. The higher the setting, the greater the amount of the LFO signal is sent to the modulation matrix.

# **EDIT PAGE – LFO Delay**



The Delay slider determines the how quickly the LFO's depth will reach its maximum strength after a note has been triggered. This allows the modulation to be introduced gradually, for example, to achieve delayed vibrato.

When the slider is set to maximum, it will take approximately 5 seconds for the LFO depth to reach maximum value.

The LFO Delay always works in a "legato" style trigger mode, where subsequent legato notes do not retrigger the start of the LFO delay. The LFO Trigger Mode has no affect on the Delay slider, since it is always in "legato" triggering mode.

# **EDIT PAGE - LFO Sync**



The Sync switch determines how the LFO rate behaves. When Sync is enabled, the LFO will lock its rate to the host's song tempo. Also, the values assigned to the Rate knob will change. Instead of displaying a value in Hz, the values are displayed in rhythmic values.

(See the <u>LFO Rate</u> for the different values available when SYNC is enabled)

# Free Note Legato Song Pos

EDIT PAGE – LFO Trigger Mode

The LFO trigger mode determines how the LFO will begin its cycle. There are four available LFO Trigger Modes:

Free - The LFO will independently cycle regardless of when a note is triggered.

Note - The LFO will restart its cycle with every new note that is played.

Legato – The LFO will start its cycle when the first note is played, but will continue its cycle when additional notes are played. If staccato notes are played, the LFO will restart its cycle with each note.

**Song Pos** – The LFO will track the bars and beats of the song. This 'Song Position' mode is the best to use if repeatable results are required for playback.

**EDIT PAGE – LFO Unipolar Switch** 



The Unipolar switch is represented by a small (+) button. When it is not selected, the LFO will be in Bipolar mode. In Bipolar mode the modulation corresponds to the mid-point of the LFO, meaning that the LFO's output will stay above and below the mid-point. When the Unipolar switch is selected, the LFO is Unipolar, the LFO will above the mid-point and will double the range of its amplitude.



In this example, the oscillator's pitch is being modulated with a Sine wave from LFO1. If LFO1 is in bipolar mode, the pitch will go above, then below, the pitch of the note that was triggered. In Unipolar mode, the pitch would only rise above the pitch of the note being triggered – and the range of the change in pitch would be greater.

For example, a Unipolar LFO applied to Oscillator pitch is great for simulating guitar-string bending, as guitarists typically bend strings only in one direction. Another use is for a Unipolar LFO to modulate the filter-cutoff. This will often create better filter sweeps than a bipolar LFO, as a bipolar LFO cycles below the mid-point – so no result is heard if the cutoff frequency is low.

NOTE: If it's desired to have the value needs to go negative instead of positive, simply select the INVERT button in the <u>MODULATION</u> section.

**EDIT PAGE – LFO Phase** 



The small LFO Phase slider determines the point at which the LFO waveform will begin its cycle. If the slider is set to minimum, the LFO will begin its cycle at the start of the waveform. As the phase is increased, the point in the waveform that the LFO will begin its cycle will be changed.

For example, if the Phase control is in the center of the slider, the LFO will trigger from the middle of the waveform. In the screenshot above, the LFO's waveform is a ramp wave, and if the Phase control is in the center, the waveform will start at the point where the slope goes below the center-point.

NOTE: If all six LFOs have been routed as modulation sources, and "Modulate with LFO" is selected on any additional parameters, they will all default to LFO1. These routings to LFO1 can be overridden in the Mod Matrix Zoom page.

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РІТСН А В						
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				2 12		

# **EDIT PAGE - Common**

Watch the Tutorial Video for Edit Page

Omnisphere

The Patch Common parameters in the Footer and on the far left and far right of the EDIT page are controls that affect the whole Patch (both Layer A & Layer B).

All Layer-specific parameters are found in the large middle area, and are generally unique to the Layer.

When you change the view to a different Layer, the controls in the middle area will change to reflect the settings in the selected Layer. The common controls in the Footer and on the left and right sides will not change, as they are common to both Layers.

The Patch Common controls on the left include the MIX section, with Level, Pan & Pitch controls. Patch Common controls on the right are the Velocity Curves, Solo/Glide modes and Voice controls. The V-Curve (Velocity Curve) section also has a Zoom option for customizing Velocity curves.



The Footer contains a Part level fader, a Part level meter and Mute/Solo buttons that mirror those found on the MIXER Page. The Footer also contains Layer Selection Buttons, a Link Layers button, Latch Mode button, Trigger Mode controls, Sustain Mode selection buttons and Sustain and Expression pedal switches.

There are other parameters that are common to the whole patch as well. The LFOs are common, as are the Modulation Envelopes.

The general rule to follow is; "If it's a numbered parameter, it's a control that's common to the whole Patch".

NOTE: Many of the parameters found in the Common Controls areas of the EDIT page can also be found on the MAIN page.

# **EDIT PAGE - Selecting & Linking Layers**



The Layer Selection Tabs & Buttons toggle between the controls for each Layer in a Patch. The parameters in the center section of the EDIT page will change when toggling between Layers. The common parameters in the Footer and on the far left and far right will not change when switching Layers.

The Layer selection controls will highlight to indicate the selected Layer.

NOTE: The Layer Selection Buttons in the Footer will remain visible when the Soundsource Browser is open. You can use the Layer Selection Buttons to toggle between Layers while browsing Soundsources, which makes it very convenient to quickly load or replace Soundsources for both Layers.

## Linking Layers



The LINK Button makes it possible to lock the controls of both Layers together. When enabled, any parameter changes made in one Layer will be exactly mirrored in the other.

The LINK Button will highlight when enabled, to indicate that the Layers are linked.

When the LINK Button is disabled, changes made to Layer parameters will only affect the selected Layer.

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```

For example, if you select Layer A and enable the Link Button, moving the Timbre slider on Layer A to the far left will cause the Timbre slider on Layer B to also move to the far left.

NOTE: Layer On/Off, Pan, Level, Transpose, Coarse Pitch and Fine Pitch are not linked when linking layers.

# **EDIT PAGE - Latch & Trigger Modes**



#### Latch & Trigger Modes

The Latch Mode and Trigger Mode features extend the performance capabilities of Omnisphere, especially when used together with Live Mode or Stack Mode.

Used together, they enable a wide range of creative performance, live remixing, and composition techniques to discover and explore.

NOTE: Be sure to check out the "Latch and Trigger Modes" tutorial, and the in-depth sections of the Reference Guide for using Latch & Trigger modes together with <u>Live Mode</u> and <u>Stack Mode</u>.

Watch the Tutorial Video for Latch & Trigger Modes

#### Latch Mode



When Latch Mode is enabled for a Part, repeatedly playing a note will toggle the note on and off. When it is toggled on, the note will continue to sustain, even if the note is released. Playing the same note again will toggle it off. This allows quick triggering of rhythmic phrases or sustained sounds, while freeing the hands to play additional notes for layering, or for switching to other Parts to play new phrases on top.

The Latch Mode button allows you to toggle Latch Mode on and off for the selected Part.

Selecting the Latch Mode button will enable Latch Mode. The button will highlight to indicate that Latch Mode is enabled for the Part.

If you are already holding sustained notes when you enable Latch Mode, those held notes will be latched.

Selecting the Latch Mode button again will disable Latch Mode for the part.

NOTE: Disabling Latch Mode for a Part while it's playing will immediately send an "All Notes Off" message to the Part. The tails from FX and release stages from envelopes will continue to decay. The All Notes Off command will apply to all notes that are playing on that Part.

NOTE: A Part's Latch Mode status can also be viewed or changed from the LIVE MODE or STACK MODE pages.

Trigger Mode



Trigger Mode enables real-time quantization of incoming MIDI notes, so that Parts will always play in sync. This makes it very easy to

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experiment and improvise along with other clocked sources without losing synchronization. These features are a lot of fun to use for jamming and building up ideas quickly!

The Trigger Mode icon displays the current Trigger Mode for the selected Part, and allows you to access the Trigger Mode menu for that Part.



To change Trigger Modes, select the Trigger Mode icon and choose the desired Trigger Mode from drop-down menu. A checkmark will appear next to the selected option, and the Trigger Mode icon will change to reflect the selected Trigger Mode.

#### **Trigger Modes**

Immediate: This is the default Trigger Mode. MIDI input is not quantized, and playback of MIDI notes is immediate.

**Next 16th:** this option delays the playback of incoming MIDI notes to the next 16th note. In other words, notes are quantized in real time to the next 16th note. If you play ahead of the next 16th, there may be a slight delay before the note sounds. This delay will be a maximum of a 16th note at the current tempo. This mode makes it easy to play quick phrases in perfect sync with other Parts or clocked sources.

**Next Beat:** this option delays playback to the next beat. If incoming MIDI notes arrive ahead of the next beat, the delay is a maximum of one beat. Next Beat mode makes it very easy to trigger rhythmic patches in perfect sync, and when used together with Latch Mode, for layering phrases that are quantized to the beat in real time.

**Next Bar:** delays playback until the next bar. If MIDI messages arrive ahead of the next bar, the delay is a maximum of one bar. This mode is especially useful if you want to synchronize phrases on the downbeat of a measure. You can press a note anytime in the previous bar and it will wait until the next bar to play.

NOTE: The selected Trigger Mode also affects a Part's Arpeggiator, LFOs and Envelopes. These will also be delayed until the note itself is triggered.

NOTE: A Part's Trigger Mode can also be viewed or changed from the LIVE MODE or STACK MODE pages.

# **EDIT PAGE - Sustain & Expression**



#### Sustain Modes



There are two Sustain modes available in the Footer, Standard Sustain (Mode 1) and Alternate Sustain (Mode 2). The Sustain Mode selection switches (numbered 1 and 2) allow you to switch between modes, and are MIDI-learnable switches.

#### Standard Sustain (Mode 1)

When the Standard Sustain Mode is selected, using your Sustain pedal will behave like a normal Sustain function. Notes played then released will be sustained, and additional notes played will overlap and sustain. Sustains will be heard until the sound decays or the pedal is released.

#### Alternate Sustain (Mode 2)

When the Alternate Sustain Mode is selected, when your Sustain pedal is pressed, notes played then released will sustain as normal, but additional notes played will cut off the previously played notes. This is especially useful when playing Rock style bass lines, and is great for certain chorded phrases as well.

The last notes played will continue to sustain until the sound decays or the pedal is released.

NOTE: Notes that are still held when playing additional notes won't be cut off. If you play and hold a note, then play another note, both will be heard and sustained.

#### Sustain Pedal Icon



The Sustain Pedal Icon is an on/off toggle. It defaults to on (enabled). When this switch is enabled, the Sustain pedal will always affect Sustain (CC#64).

When this switch is disabled, the Sustain pedal will still send CC#64 messages, but will not be applied to Sustain. This allows the Sustain pedal to be used exclusively for modulating other parameters using the Mod Matrix, or by MIDI-learning controls such as on/off switches for FX modules, or Layer on/off controls.

NOTE: When the Sustain Icon is enabled, the Sustain pedal can still be used to modulate or control other parameters, however those additions will act in combination with the Sustain function.

#### **Expression Pedal Icon**



When this switch is disabled, the Expression pedal will still send CC#11 messages, but will not be applied to Expression. This allows the Expression pedal to be used exclusively for modulating other parameters using the Mod Matrix, or by MIDI-learning controls such as FX or Filter parameters, or Layer mix controls.

NOTE: When the Expression Icon is enabled, the Expression pedal can still be used to modulate or control other parameters, however those additions will act in combination with the normal Expression function.

## **EDIT PAGE - Layer Mixer**

The MIX and PITCH section offers controls for the levels, panning and pitch of Layer A and Layer B.

## LAYER MIXER LEVELS



The level sliders are used to blend the two layers, oftentimes, even a subtle change in level can make the patch sound very different.

The Layer mixer level sliders cover a range of -inf dB (silence) to +9.54dB.

To quickly set the Level to 0dB (unity gain), select the slider when holding down the Command key (Mac) or Control key (Windows). It will snap to the 0dB Unity gain position.

Range -inf dB (silence) to +9.54dB

# LAYER ON/OFF



Below each of the Layer Mix sliders are two on/off buttons that determine if a Layer is active or not. They also can be used to mute either layer to make comparisons without having to adjust the Layer Mix faders. If the button is light blue, the layer is active, if it's gray, it's inactive and no sound will be heard.

# **EDIT PAGE - Pitch**



The PITCH area has three sets of controls for changing the pitch of both Layers; TRANSPOSE, COARSE & FINE. The COARSE and TRANSPOSE controls are shared by the same knob. Selecting the label switch below the PITCH knobs will toggle between COARSE and TRANSPOSE.

# TRANSPOSE



The Transpose controls work like MIDI transposition and pitch changes are made in semitones. Changes in pitch don't affect the sound quality of the Oscillator. Transpose is most often used to set the oscillators at different semitone values, such as octaves or different intervals. Transpose offers the best available sound quality but it is not Modulatable.

Range -24 semitones to +24 semitones

## COARSE


Coarse operates in a similar way to a fine pitch control, but with a much larger range. Unlike Transpose, using Coarse tuning does affect the sound quality of the Oscillator, but it is a Modulatable control. COARSE is very useful for wide-range pitch modulation FX.

Range -4800 cents to +4800 cents

NOTE: Changing from Coarse to Transpose (or vise versa) will not reset the pitch values because they are separate parameters.

#### FINE



The fine pitch controls are the most precise, changing the pitch in 1-cent increments. The Fine controls can shift the pitch 100 cents up or down, or one semitone each way.

The most common use of fine pitch controls is to 'de-tune' one oscillator a small amount (less that 15 cents) that makes the oscillators sound richer because of the chorusing effect it provides.

Range -100 cents to +100 cents

# **EDIT PAGE - Velocity Curves**



The "V" stands for Velocity. Omnisphere has four velocity curve presets available on the CONTROLS screen. The first curve is linear, then two exponential curves and the last is flat. These curves are provided to quickly adjust the dynamic response of the current Patch to your MIDI controller and playing style.

#### LINEAR



The linear curve is the most commonly used velocity setting. Playing harder on the keyboard will have a direct effect on any parameter that is modulated with velocity in an even and linear way.

**EXPONENTIAL POSITIVE** 



The Exponential Positive curve means that when playing softly not much effect will be heard, but when playing at a moderate intensity on the keyboard the velocity modulation will be more dramatic than with a linear curve.

### **EXPONENTIAL NEGATIVE**

Exponential Negative has the opposite effect of Exponential positive – meaning that it's better suited for more intense touch and provides the widest musical dynamic range.

### FLAT



Omnisphere will receive the same velocity value with this flat curve. Useful if a totally consistent and predictable result is desired.

### **V-CURVE ZOOM**

The V-Curve Zoom button provides access to the <u>Velocity Curve Zoom</u>, for precise editing of the Patch's Velocity response.

# **EDIT PAGE - Velocity Curve Zoom**



By selecting the Zoom icon next to the different Velocity curves presets opens the VELOCITY CURVE ZOOM. This page provides detailed controls to create and modify velocity curves. The Velocity curve settings are global to the Patch – meaning that curve settings will apply to both layers, but the amount applied by layer can be controlled by the Layer A and Layer B.

You can save, copy and load preset Velocity curves from the drop-down menu next to the VELOCITY CURVE ZOOM header.

### **CURVE DISPLAY**





When changes are applied to the SLOPE & OFFSET sliders (described below) the shape of the curve change will change accordingly in this display.

AMP ENV (Layer A & Layer B)



The AMP ENV (Amplitude Envelope) independently controls how much the Amplitude Envelope is affected to the Velocity curve. If the knobs are set to a low level, then keyboard velocity will have only a small effect on the Amplitude Envelope's control of the level of the layer.

FILTER ENV (Layer A & Layer B)



The FILTER ENV (Filter Envelope) independently controls how much the Filter Envelope is affected to the Velocity curve. If the controls are set to a low level, then keyboard velocity won't have much effect on the Filter Envelope's control of the Filter.

# SLOPE



This horizontal control adjusts the steepness, or slope, of the velocity curve. If the slider is set all the way to maximum, the curve will be very steep. Minimum settings will have a horizontal (or flat) curve.

### OFFSET



This vertical slider offsets the velocity curve by raising and lowering it within the display. At high settings the curve will start at a higher level and moving the slider down will set the velocity curve to a minimum level.

#### CONTROL POINT



The Control-Point determines the shape of the velocity curve, whether it's a positive or negative curve (or even a straight linear curve). The Control Point, OFFSET and SLOPE sliders can create a wide variety of curves. Move the Control Point around the grid by selecting and dragging it until the desired curve is set.

# EDIT PAGE - Solo & Glide

#### SOLO



Solo allows the Patch to play monophonically. SOLO mode is most effective when playing lead or bass lines. It works in conjunction with the LEGATO button below it, which determines how the sound is triggered.

### LEGATO

Legato is a triggering mode that allows the envelope and Soundsource to run through their settings instead of re-triggering with every new note that is played. If LEGATO is not selected, then each new note played will retrigger both the envelopes and the Soundsource.

NOTE: In vintage synths, Legato 'ON' would be referred to as "Single Trigger" while Legato 'OFF' would be "Multi Trigger"

# GLIDE



Glide is a portamento effect, which adds a pitch slide from one note to the next. Omnisphere's Glide function is polyphonic, which means that every note that's played will have a sliding pitch. Selecting the SOLO button above it enables monophonic Glide.

The control slider next to the GLIDE button determines how slowly or quickly that the pitches slide from one note to the next. The higher the control slider is set, the slower the pitch glide between notes.

Range 0 to 2 seconds

### **GLIDE LEGATO**

Glide Legato will change the criteria for when GLIDE is enabled. If legato notes are played, then GLIDE will be activated. If quick, staccato notes are played, the Glide effect will not be heard.





# GLIDE A B (LAYER BUTTONS)



GLIDE can be used on just one Layer if desired. By default, when GLIDE is selected, both A & B will active. If neither A or B is selected, no GLIDE effect will be heard, and the GLIDE button will turn itself off.

Gliding on one Layer only can be an interesting musical effect.

# EDIT PAGE - Voice, Octave & Gain

# VOICES



The VOICES parameter determines the number of simultaneous notes (also called polyphony) that are playable in a single Part. Omnisphere is capable of up to 64 voices of polyphony per part, and the VOICES selector determines the maximum number of voices that the Part will have.

The higher the number of voices that the Patch has, the more CPU power it will use, so this is a very important parameter in Omnisphere. The best approach is to only set it to the maximum number of notes that are needed for the given musical application.

The factory Patches have all been set conservatively, so if more polyphony is needed, increase the number of voices.

NOTE: Voices applies to all sounding notes, not just the ones that are currently being played. This is important to consider when playing sounds with longer release times

Range 1-64

OCTAVE



This function raises or lowers the overall pitch by transposing the patch in 12-semitone increments. There is a total range of five Octaves. Range -2 to +2

GAIN



The output level of the part can be controlled in 1db increments. The default is -6db.

Range +10db to -24db



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### **EDIT PAGE - Oscillator**



#### Watch the Tutorial Video for Oscillators

The Oscillator is the heart of Omnisphere's vast synthesis capabilities. It has a 'split-personality' since each Layer's Oscillator can have either high-definition, streaming sample-playback or dynamic, real-time, DSP-generated waveforms. The Oscillator's extensive synthesis capabilities vary depending if Sample mode or Synth mode is utilized.

#### SAMPLE MODE

Omnisphere's massive core-library is comprised of over 40GB of high-definition, sample-based sounds, called Soundsources, to use as a source for synthesis. These Soundsources cover a wide spectrum of sounds, from simple raw waveforms to psychoacoustic samples, to morphing textures, warm voices, choirs, vintage keyboards, analog synths and a best-of selection from our award-winning sample libraries.

#### SYNTH MODE

These are DSP waveforms, generated in real-time by the STEAM engine, that are similar in principle to vintage synthesizer waveshapes. They have the same rich character of classic synthesizers, but with a much greater level of control and sound shaping abilities. The Synth Oscillators are not modeled to emulate any particular brand of synthesizer, but instead were extensively tweaked to have a great-sound and versatile character that's unique to Omnisphere.

The combination of both types of sound generation makes Omnisphere a true hybrid instrument, able to transform both the SAMPLE and SYNTH sounds via a wide range of complex synthesis methods.

The STEAM engine goes beyond traditional synthesizers by including a set of dedicated oscillators for Hard-Sync, Frequency Modulation, Ring Modulation and the unique Voice Multiplier. In fact, a single part can have up to 24 oscillators used per voice!

EDIT PAGE - Oscillator

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### **EDIT PAGE - Modulation**



Watch the Tutorial Video for Modulation

Modulation adds motion and complexity to sounds. Simply put, modulation is any source that's affecting a target parameter in some way. The most common form of modulation in all synthesizers is vibrato, where an LFO modulates the pitch of an Oscillator. Modulation the method used in synths for adding richness and variety to a sound in real-time. Omnisphere's modulation capabilities are very extensive but they are simple to use with the Flex-Mod[™] system we've designed. Omnisphere also features a traditional Modulation Matrix Zoom view that provides more precise control over modulation routings and an overview of all assigned routings.

There are three ways to set up modulation routings in Omnisphere:

1. Modulations can be set up on the fly by right-clicking parameters and choosing a modulation source from a drop down menu.

- 2. Modulation routings can be defined in the Modulation section of the EDIT overview.
- 3. Modulation routings can be configured on the Mod Matrix Zoom view.

With the wide variety of sources and destinations, there are literally thousands of potential modulation routings that can be configured.



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#### Watch the Tutorial Video for Filters

The Filter is a key component of subtractive synthesis. It's designed to remove frequencies from within a sound, which can enhance the character of that sound. Filters typically consist of a cutoff control, which sets the removal of certain frequencies, and a resonance control, which emphasizes the frequency of the cutoff point.

The most common form of filtering is called lowpass, which means that higher frequencies are removed while lower frequencies *pass* through without being removed. Most vintage synthesizers employed low-pass filtering, but some also included high-pass filtering, which removes low frequencies and lets the high frequencies pass through.

Omnisphere includes an exceptionally versatile dual-filtering system, which features two stereo filters per layer that can be routed in series or parallel. There are twenty-four different filter types available, which include lowpass, highpass, bandpass and other specialized varieties. Because Omnisphere's filters are stereo, they are ideal for dynamic filter panning effects.

The FILTERS section of the EDIT overview features a basic set of filter controls, such as Cutoff, Resonance, Keyboard tracking and Filter envelope depth. The full set of filter controls are available on the <u>FILTER ZOOM</u> view.



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**EDIT PAGE - Envelopes** 



### Watch the Tutorial Video for Envelopes

One of the innovative features of Omnisphere's envelopes is that each of them has two interfaces. There have always been two competing design philosophies; ADSR envelopes, which are fast and easy to use, and Complex envelopes, which are more powerful and flexible but typically not as fast or easy to use.

In Omnisphere we combined both ideas into one, offering the best of both worlds. Omnisphere's envelopes are extremely powerful and at the same time very easy to use, regardless of the envelope style.

Envelopes are the contours that shape the sound coming from the Oscillators and the Filters.

A basic ADSR-style envelope determines how quickly a sound will begin, its initial decay, what level it sustains at, and how long it will fade out after the note has been released. These different elements of the envelope are called stages. Most synthesizers have 4-stage envelopes, often called ADSR envelopes, which stands for Attack, Decay, Sustain and Release.

Complex envelopes contain contours with more than four stages. Complex envelopes allow a much greater degree of control in shaping the sound, and offer tremendous flexibility when shaping sounds and can be very useful in creating rhythmic shapes.

Each Part in Omnisphere has eight envelopes, and each can be used either as a basic 4-stage ADSR envelope, or as a Complex envelope. Each Layer has a dedicated AMP (Amplitude) envelope and a dedicated FILTER envelope, while there are four Modulation envelopes that are common to both Layers.

#### AMP ENVELOPE



Each Part has two dedicated AMP (Amplitude) Envelopes, one each for Layer A and Layer B. These shape the overall loudness of the Layer. A dedicated Velocity knob controls the dynamic output of the AMP Envelopes based on MIDI Velocity.

#### FILTER ENVELOPE



Each Part also has two dedicated FILTER Envelopes, one each for Layer A and Layer B. These shape the Filter cutoff for each Layer. A dedicated Velocity knob controls the dynamic output of the FILTER Envelopes based on MIDI Velocity.

#### MODULATION ENVELOPES



Modulation Envelopes are global, meaning there are a total of four Mod Envelopes available per Part. The Modulation Envelopes are monophonic, in contrast to the FILTER and AMP envelopes, which are polyphonic. The best way to think of Modulation Envelopes is as uni-polar LFOs that can have custom defined shapes.

1, 2, 3, 4 (Modulation Envelope buttons)



Under the MODS sub-page these small switches select any of the four modulation envelopes.

Instead of a dedicated VELO (Velocity) control, each of the four Modulation Envelopes has itOs own DEPTH control knob.



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Watch the Tutorial Video for LFOs

LFOs (Low Frequency Oscillators) are used for cyclical modulation effects like vibrato, tremolo, filter sweeps and auto-pan effects.

Omnisphere has six independent LFOs available for each Part. All six LFOs have an identical set of parameters and can be used as sources within Omnisphere's <u>Modulation Matrix</u>.



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#### **EDIT PAGE - Common**



#### Watch the Tutorial Video for Edit Page

The Patch Common parameters in the Footer and on the far left and far right of the EDIT page are controls that affect the whole Patch (both Layer A & Layer B).

All Layer-specific parameters are found in the large middle area, and are generally unique to the Layer.

When you change the view to a different Layer, the controls in the middle area will change to reflect the settings in the selected Layer. The common controls in the Footer and on the left and right sides will not change, as they are common to both Layers.

The Patch Common controls on the left include the MIX section, with Level, Pan & Pitch controls. Patch Common controls on the right are the Velocity Curves, Solo/Glide modes and Voice controls. The V-Curve (Velocity Curve) section also has a Zoom option for customizing Velocity curves.



The Footer contains a Part level fader, a Part level meter and Mute/Solo buttons that mirror those found on the MIXER Page. The Footer also contains Layer Selection Buttons, a Link Layers button, Latch Mode button, Trigger Mode controls, Sustain Mode selection buttons and Sustain and Expression pedal switches.

There are other parameters that are common to the whole patch as well. The LFOs are common, as are the Modulation Envelopes.

The general rule to follow is; "If it's a numbered parameter, it's a control that's common to the whole Patch".

NOTE: Many of the parameters found in the Common Controls areas of the EDIT page can also be found on the MAIN page.



FX are an important part of Omnisphere's sound palette, and are used to enhance the sonic character of Patches and Multis. They can add space, density and movement, alter the timbre and shape the sound in many interesting ways.

Having high-quality FX built-in to Omnisphere means that FX are integrated with the interface as well as with the sounds. Any FX used are conveniently saved along with Patches and Multis. Combined with FX Presets, Omnisphere provides a cohesive and intuitive way of working with FX.

Omnisphere contains 33 different FX Units, 29 FX Racks, a comprehensive Preset library, and a powerful feature set for integrating the FX with the synthesis engine.

Omnisphere uses Inserts for Patch FX, and Aux Sends for adding FX to the Parts in a Multi. Insert FX affect only the Patch they're inserted into, either pre or post-fader, while multiple Parts can share any of the <u>Aux Sends FX</u>. All Parts can also go through the final Mastering FX stage.

There's no limit to how FX can be creatively applied, but certain FX, such as Compressors and Modulation FX, are best used as Inserts. Other FX, like Reverbs and Delays, are often best used as Send FX. Deciding when and where to apply FX is also an important part of optimizing CPU usage in Omnisphere.

One of the key features of Omnisphere's FX is that any Layer FX parameter can be modulated with any Modulation Source. This means that FX can be fully integrated into the synthesis architecture and character of a Patch, making them more than simple FX plug-ins.

All FX parameters can be MIDI Learned for hands-on control, and enabled for working with host automation.

In addition to individual <u>FX Presets</u>, you can also load or save <u>Rack Presets</u>, which include entire FX chains with all of their settings preloaded.

# **FX - Architecture & Signal Flow**

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The FX in Omnisphere are organized into Racks, with each Rack containing up to four FX Units.

### PATCH FX:

A Patch in Omnisphere can contain up to three Racks of four FX Units each, for a total of twelve FX Units in a single Patch.

To access the FX Racks for a Patch, select a Part in the header and then select the FX button.

Each Layer of a Patch (A & B) has its own FX Rack. The FX in these Racks affect the specific Layer they're inserted into, and can have any of their parameters modulated with any Modulation Source. These are Pre-fader Insert FX.

Each Patch also has a Common FX Rack, which affects both layers. These are Post-fader Insert FX.

### **MULTI FX:**

A MULTI in Omnisphere can contain up to four Aux Send Racks plus a Master Rack, for a total of twenty FX Units.

To access the FX Racks for the four Aux Sends and the MASTER Rack, select the MULTI tab in the header and then select the FX button.

Each of the four Aux Sends has its own FX Rack. The four Aux FX Racks can be used by any of the eight Parts in a MULTI using the Aux Sends on the Mixer page.

The final FX Rack in the signal chain is the Master Rack. All audio routed through OUT A runs through the Master FX Rack.

In summary, a MULTI can have up to 20 FX Units loaded, plus 8 Parts containing up to 12 FX Units each. This means a fully loaded MULTI can have as many as 116 active FX Units (in 29 Racks) loaded at once! Of course, to actually run that many simultaneous FX would require a very powerful computer.

Below is the effects signal flow to give you an idea how Omnisphere's effects are chained.



#### Signal Flow

Each FX Rack has four FX Slots. The signal flow of every FX Rack type is in series - feeding the audio from the top slot through the middle slot and then through the bottom slot. An example of this is illustrated in the picture below:

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- In this example, the audio first goes through Flame Distortion FX Unit in the top slot.
- The distorted audio is sent into the EZ-Phaser unit in the middle slot.
- The distorted and phased audio is sent to the EZ-Verb unit in the slot below it.

# **FX** - Descriptions



The Omnisphere FX Units are effects that exist within the Omnisphere plug-in.

There are 33 different professional quality internal FX Units to choose from:

### COMPRESSOR/LIMITER GAIN FX

#### **Tube Limiter**

Both a limiter and compressor, modeled on the warm sound of the famous Fairchild™ 670 tube limiters of the 1960's.

#### **Tape Slammer**

Simulates the effects of different types of analog tape compression, saturation and age.

#### Modern Compressor

Modeled after the legendary SSL[™] console compressors, with a bright, "solid-state" sound character.

### Vintage Compressor

Modeled on vintage UA LA-2A[™] and 1176[™] compressors, with a very warm and musical sound.

#### **Gate Expander**

A traditional Noise Gate effect that also works well as a Dynamic Expander.

#### Imager

A handy Utility device that can be used as stereo image widener, phase corrector, and much more.

EQUALIZERS Vintage 2-band EQ

Modeled after the Pultec[™] EQP2-A model tube equalizer, with a very warm and musical tone.

#### Vintage 3-Band EQ

Modeled after the Pultec™ EQP series tube equalizers, renowned for their extremely musical and fat tones.

#### Graphic 7-Band EQ

Useful for tailoring a full spectrum audio source with broad control of multiple bands.

#### Graphic 12-Band EQ

Useful for tailoring a full spectrum audio source with fine control of multiple bands for precision control.

# Parametric 2-Band EQ

Provides precision frequency control, with two fully sweepable, overlapping bands.

#### Parametric 3-band EQ

Provides precision frequency control, with three fully sweepable, overlapping bands.

# FILTERS

Wah-Wah Modeled after classic wah pedals of the 1970s.

### **Power Filter**

Developed in cooperation with GForce Software, and based on their famous impOSCarÔ filter design.

### **Formant Filter**

A filter based on the characteristics of the human vocal tract.

### **DISTORTION AMP FX**

Valve Radio A unique device that functions both as a dual filter and a distortion device.

#### **Flame Distortion**

An extremely versatile distortion and bit crushing unit.

### Smoke Amp Simulator

A guitar amplifier modeling effect, with models for a variety of amps and cabinets.

### MODULATION FX

**Ultra-Chorus** A very rich and thick chorus unit, with some unique LFO modes.

### **Retro-Phaser**

Classic Phaser unit with a vintage, low-fi vibe and a darker tone.

#### **PRO-Phaser**

A versatile and rich phaser design capable of going way beyond traditional Phaser effects.

# EZ-Phaser

Best suited for classic phaser effects, while being very easy to use and understand.

### **Retro-Flanger**

Classic Flanger unit with a warm, vintage character.

# Flanger

Provides many traditional flanging and tuned resonance effects.

# DELAYS

#### **Chorus Echo**

Inspired by the classic RolandÔ Chorus-Echo units from the 1970s. Features a modulated delay line that can be synced to the host tempo and also includes a vintage chorus mode.

### **BPM Delay**

A single "true-stereo" delay unit that is always in-sync with the host tempo.

### **BPM Delay X2**

Dual monaural delays that are always synchronized to the host tempo.

# BPM Delay X3

Triple LCR mono delays that are always synchronized to the host tempo.

### Retroplex

Modeled after the old Tape Echo units of the 60's and 70's such as the Echoplex™.

#### **Radio Delay**

A Dual mono BPM-style delay, but with the delayed signals running through a Valve Radio distortion filter.

# REVERB

Spring Verb

Faithfully recreates the cheesy vibe of the ancient spring reverbs of 1960's era guitar amplifiers.

### PRO-Verb

The premier, studio-quality reverb unit in the Omnisphere FX arsenal. Extremely versatile and rich.

#### EZ-Verb

A simple to use, basic reverb unit that uses less CPU power.

### But can you only use four effects units at a time?

Nope! It's actually possible to have a huge number of simultaneous FX Units active at the same time in one instance of Omnisphere. Any of the FX Units can be put into one of the four slots in an Omnisphere FX Rack -and up to 29 FX Racks can be open at once!

Here's the structure:

4 Effects per rack x 3 racks per part = 12 Effects/Part

12 Effects per Part x 8 Parts = 96 FX

4 Effects per rack x 4 Aux racks + Master rack = 20 Effects per MULTI

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= 116 maximum simultaneous FX Units (if your computer can handle it!)

### NOTES ON USING THE FX

• Each FX Unit consumes differing amounts of additional CPU power when in use, so the number of simultaneous FX Units depends of the CPU power available in your computer. Some FX, like the PRO-Verb, can use differents amounts of CPU power depending on their settings.

• To maximize CPU performance in multi-timbral, LIVE or STACK applications, it's recommend to Bypass any Part FX Units which can be shared by other parts (especially reverbs & delays). A good approach is to copy a Part FX Unit's settings, Bypass it and then paste the settings into a free Aux rack for shared use by the multi-timbral Parts.

• Some FX Units have two pages. The second page parameters can be reached by clicking the arrow on the right side of the plug-in. Usually, it's labeled "MORE" or lists the type of parameter found on the second page.

• You can use external third-party FX plug-ins with Omnisphere by utilizing the multiple outputs feature of Omnisphere with your host.

# FX BASICS - Loading An FX Unit

To load an FX Unit into a Rack, click the downward facing triangle on the desired slot.



From the resulting drop-down menu, choose an FX Unit by selecting the FX name in the menu.

Tube Limiter Tape Slammer	
Tape Slammer	
rupe siumner	
Modern Compr	essor
Vintage Compr	essor
Gate Expander	
Imager	
a mager	
Vintage 2-Band	EQ
Vintage 3-Band	EQ
Graphic 7-Banc	EQ
Graphic 12-Bar	nd EQ
Parametric 2-Ba	and EQ
Parametric 3-B	and EQ
Wah-Wah	
Power Filter	
Formant Filter	
Tormane Tinter	
Valve Radio	_
✓ Flame Distortio	n 📕
Smoke Amp Sin	nulator
Ultra Chorus	
Retro-Phaser	
PRO-Phaser	
EZ-Phaser	
Retro-Flanger	
Flanger	
Chorus Echo	
BPM Delay	
BPM Delay X2	
BPM Delay X3	
Retroplex	
Radio Delay	
Spring Verb	
PRO-Verb	
EZ-Verb	

FX BASICS - Changing An FX Unit



To select a different FX Unit in the same FX Slot, click the same downward arrow and choose a different one from the drop-down menu list.

# FX BASICS - Bypassing An FX Unit

An FX Unit is active when the oval FX Name Window is lit up with a light blue color.



To Bypass an FX Unit, click the oval FX Name Window. The name window darkens when bypassed.



Clicking the window again will reactivate the FX Unit.

NOTE: Bypassing an Effect DOES save CPU power.

# FX BASICS - Removing An FX Unit



To remove an FX Unit from the rack, click the downward facing triangle on the active slot and choose NO EFFECT from the top of the list.

NOTE: Removing any unneeded FX Units saves memory when the patch is loaded. It is recommended to remove any unnecessary FX before saving Patches, Multis or Songs.

# **FX PRESETS - Introduction**



The flexible FX Preset system offers rapid access to the full power of the Omnisphere FX. You can easily create, copy, paste, save and recall unique individual FX Units or entire Racks of FX to instantly give any Element within Omnisphere a customized sound.

There are two kinds of FX Presets: FX Unit Presets and FX Rack Presets.

FX Presets may be:

- · Saved with custom names
- · Loaded from a drop-down menu

- Copied from any FX Slot or Rack
- · Pasted to any FX Slot or Rack
- Freely shared across any platform or host.

TERMINOLOGY: "Programs", "Patches" or "Settings" are common terms in other products for "Presets". They all mean essentially the same thing. In Omnisphere, we use the term "Presets" exclusively in reference to the settings of individual components, like FX, Envelopes, etc. The term "Patch" always refers to a completed sound in Omnisphere.

HINT: Spectrasonics has included an extensive factory library of hundreds of useful Presets to give you a glimpse into the world of Omnisphere FX. They are a fantastic starting point for exploring the diverse sonic possibilities with the FX system - Don't miss them!

# **FX PRESETS - Unit Presets**



An FX Unit Preset consists of the complete customized parameter settings of a specific FX Unit, which allows for "total recall" of that one effect. It's very useful to build a library of FX Unit presets that you like, since you can quickly experiment with trying Presets that were created for one purpose, but using them for a completely different purpose.

FX Unit Presets are organized so that only Presets relevant to a particular unit appear in the Preset List. For example, in the picture below, the Retroplex Delay has it's own Preset list.

			No. of Concession, Name					
	•	Save Effects Preset						•
Į	a	Paste Effects Preset						•
	•	00. Default Preset Ancient Echobox Bicentenial						•
l	•	Breakup						e
I	•	Flutterface Long Darkness Maximum Length Clor						•
	•	My Undoing Old Chorus						e
1	° v	Retro Slappy		RUT	TER		. all	•
	RETROPLEX	Self Mutilation	LAY			1960 1		
	a dha	VARI-SPEED FEEDBACK	TAPE MODE	AMOUNT	SPEED	YEAR WE	OTH HORT &	

This makes working with FX Presets very easy and clear. You will only see the Presets that pertain to the FX Unit you're working with. Patches are saved in the Omnisphere/Settings Library/Presets/Effects/ directory.

🧊 Omnisphere ト	📁 Defaults	►	📁 Multis	▶	📁 Arpeggiator	⊳
	Documentation	- ▶	📁 Patches	- ▶	Effects	$\gg$
	🧊 Settings Library	⊳	📁 Presets	⊳	📁 Envelope	⊳
	Soundsources	►	📁 User Tags	►	Envelope.zip	
				- 1	💭 Filter	⊳

You can create as many sub-directories for patches as you like, as long as the folders are nested in the specific directory for that unit on your drive. FX Patches have the extension **.fxp_rmx** 

# **FX PRESETS - Saving**

Saving an FX Preset allows you to give a Preset a custom name and recall it later from a list of Presets. This is a convenient way to build a custom library of FX that you like to use.

To Save a Preset:

- · Select the drop-down arrow to the left of the unit.
- · A drop-down menu will appear.
- Select SAVE EFFECTS PRESET.
- A Save dialog box will appear allowing you to name the FX Preset. The Save dialog box defaults to the directory for that particular FX Unit.

NOTE: There is no Delete Preset command. To remove a Preset, you must navigate to the Preset via your computer's directory structure and remove it manually. The same is true for renaming Presets.

# **FX PRESETS - Copying & Pasting Units**

Copying an FX Unit, along with all of its current parameter settings and Pasting it into another slot is a quick and useful way of reorganizing the order and placement of FX Units. It's not required to Save a Preset in order to use it in another other FX Slot. You can simply Copy the FX Unit with its current settings and simply Paste it into any other FX Slot to change the order of effects. You can also Paste over an existing FX Unit

with a different FX Unit and new settings.

To Copy and Paste an Effect:

- Select the drop-down arrow to the left of the FX unit you'd like to copy.
- A drop-down menu will appear.
- Select COPY EFFECT PRESET.
- · Choose any other FX Slot. (It does not matter whether or not the targeted FX Slot currently has an Effect on it.)
- · Select the drop-down arrow to the left of the unit.
- From the drop-down menu will Select PASTE EFFECT PRESET.

This FX Slot now has the exact same FX Unit and settings as the original FX Unit.

# **FX PRESETS - Racks**



A Rack Preset saves the settings of all four FX Slots into a single Preset. Any combination of up to four FX Units and their respective settings is saved. This feature gives you instant "total recall" of a whole FX Rack to try on anything in Omnisphere. The possible combinations of Effects and settings are an endless source of inspiration.

Selecting the PRESETS menu in the upper left of the FX Rack accesses FX Rack Presets.



FX PRESETS - Saving Racks

Saving a full Rack Preset allows you to give the Preset a custom name and recall it for future use. This is a convenient way to build a custom library of Rack Preset sthat you like to use.

To Save an FX Rack:

· Select the PRESETS menu arrow above the FX rack.

A drop-down menu will appear like the one below.

	Save Rack Preset (Infir	nite Bees) .	
	Copy Rack Preset		
	Paste Rack Preset		
	00 - Empty Rack		
	01 - Ambient Spaces		•
	02 - Colorizers		•
~	03 - FX oriented		•
	04 - Overdriven		
	05 - Utility		•

Select SAVE EFFECT RACK PRESET

• A Save dialog box will appear allowing you to name the FX Rack Preset. The Save dialog box defaults to the Omnisphere/Settings Library/Presets/Effects/Racks directory on your drive.



All FX Racks Presets appear in the Omnisphere interface in the drop-down menu. It's possible to setup as many sub-directories for Presets as you like, as long as the sub-folders are nested in the "Racks" directory on your drive. FX Rack Preset have the extension **.fxr_rmx** 

NOTE: There is no Delete Preset command. To remove a Preset, you must navigate to the Preset via your computer's directory structure and remove it manually. The same is true for renaming Presets.

# **FX PRESETS - Loading Racks**

Loading FX Rack Presets from the menu is an easy way to use your favorite FX combinations at any time. Also, it allows you to quickly experiment with many combinations of different settings in different musical contexts.

To Load an FX Rack Preset:

- · Select the PRESETS menu arrow above the FX rack.
- A drop-down menu will appear.
- · Select a Rack Preset from the menu to load the new Rack.



FX PRESETS - Copying & Pasting Racks



Copying an FX Rack along with all of its current parameter settings and pasting to a different Rack is a quick and useful way of working with FX Racks. It's not required to Save a Preset in order to copy it to another Rack. You can simply Copy the Rack with its current settings and Paste it into any other Rack. You can also Paste over an existing Rack.

To Copy and Paste an FX Rack:

- · Select the PRESETS menu arrow above the FX rack.
- Select COPY EFFECT RACK.
- · Choose another FX Rack. (It does not matter whether or not the targeted Rack currently has any FX Units in it.)
- · Select the PRESETS menu arrow above the FX rack.
- Select PASTE EFFECT RACK.

This FX Rack now has the exact same Effects and settings as the original FX Rack.

# **FX - Tube Limiter**



The Tube Limiter FX Unit in Omnisphere is both a limiter and compressor. It was modeled on the warm sound of the famous Fairchild[™] 670 tube limiters of the 1960's. The Tube Limiter has a slower and smoother response than the other compressors in Omnisphere, that not only works great as a stereo buss compressor/limiter, it also works well for individual instruments. It has a fixed internal compression ratio that matches the character the old Fairchild[™] units. The Tube Limiter is an ideal tool for pumping things up in a musically fat way.

#### LIMIT

Engages and Disengages an additional Brick wall limiter at the output. The compression controls continue to work regardless of whether the brick wall limiter is engaged or not.

### THRESHOLD

Sets the audio level at which the unit starts to compress the signal. If the input signal is below the Threshold level, the unit does not apply any compression. Once the level crosses the Threshold, then the compression begins to affect the signal. Range: 0 to -60db

### GAIN

A make-up gain stage that adjusts the overall output volume to compensate for compression level reduction. Range 0 to 24 db.

#### PEAK/RMS

Allows the choice of PEAK Limiting or RMS Compression curves. Peak Limiting detects audio transients that are louder than the set Threshold level and applies compression to control those Peaks to whatever level you've set. RMS Compression detects an audio signal's average level and applies Compression to the overall signal. This helps make the whole audio signal louder. With RMS, there is no specific ceiling for the audio as there is with Peak Limiting.

### ATTACK

Adjusts the amount of time that the compressor takes to start compressing once the audio has gone above the Threshold level. Range: 0.1ms to 400ms

#### RELEASE

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the Threshold level. Range: 10ms to 5000ms.

# FX - Tape Slammer



The Tape Slammer FX Unit is designed to simulate the effects of different types of analog tape compression, saturation and age. It's very versatile and is the perfect unit to add when you need a little more edge, grit or warmth. It's also ideal to make something sound more retro, and even works well as a normal compressor/limiter too!

### PAGE ONE CONTROLS

### SATURATE

Controls the amount of the tape saturation/distortion effect. Range: 0 to 100%

### AGE

Allows you to control how "old" the "tape stock" is. Range: Bright to Dark

### THRESHOLD

Sets the audio level at which the unit starts to simulate the tape compression. If the input signal is below the Threshold level, the unit does not apply any compression. Once the level crosses the Threshold, then the compression begins to affect the signal. Range: 0 to -60db

### ATTACK

Adjusts the amount of time that the compressor takes to start compressing once the audio has gone above the Threshold level. Range: 0.1ms to 400ms

### RELEASE

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the Threshold level. Range: 10ms to

5000ms.

### GAIN

A make-up gain stage that adjusts the overall output volume to compensate for compression level reduction. Range 0 to 24 db.

### PAGE TWO CONTROLS

#### LIMIT

Engages and Disengages an additional Brick wall limiter at the output. The compression controls continue to work regardless of whether the brick wall limiter is engaged or not.

# PEAK/RMS

Allows the choice of PEAK Limiting or RMS Compression curves. Peak Limiting detects audio transients that are louder than the set Threshold level and applies compression to control those Peaks to whatever level you've set. RMS Compression detects an audio signal's average level and applies Compression to the overall signal. This helps make the whole audio signal louder. With RMS, there is no specific ceiling for the audio as there is with Peak Limiting.

# **FX - Modern Compressor**



The Modern Compressor FX unit has a bright, "solid-state" sound character with a very fast and snappy response curve. The Modern Compressor was modeled after the legendary SSL™ compressors found in their renowned consoles that are responsible for many hit records. This compressor is great for the stereo master buss if you want a very clear bright sound, or works equally well in bringing out the presence of any individual element in a mix.

### THRESHOLD

Sets the audio level at which the unit starts to compress the signal. If the input signal is below the Threshold level, the unit does not apply any compression. Once the level crosses the Threshold, then the compression begins to affect the signal. Range: 0 to -60db

### RATIO

The range of dynamic compression once the compressor engages. Range is 1:1 to 8:1

#### GAIN

A make-up gain stage that adjusts the overall output volume to compensate for compression level reduction. Range 0 to 24 db.

#### PEAK/RMS

Allows the choice of PEAK Limiting or RMS Compression curves. Peak Limiting detects audio transients that are louder than the set Threshold level and applies compression to control those Peaks to whatever level you've set. RMS Compression detects an audio signal's average level and applies Compression to the overall signal. This helps make the whole audio signal louder. With RMS, there is no specific ceiling for the audio as there is with Peak Limiting.

#### ATTACK

Adjusts the amount of time that the compressor takes to start compressing once the audio has gone above the Threshold level. Range: 0.1ms to 400ms

#### RELEASE

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the Threshold level. Range: 10ms to 5000ms.

### LIMIT

Engages and Disengages an additional Brick wall limiter at the output. The compression controls continue to work regardless of whether the brick wall limiter is engaged or not.

# **FX - Vintage Compressor**



Although the Modern and Vintage Compressor units have nearly identical controls, the sound and response characteristics couldn't be more different. The Vintage Compressor was modeled on vintage UA LA-2A[™] and 1176[™] style response curves, but given more flexibility to tailor the sound. This unit is very warm and musical sounding and works best with individual elements.

### THRESHOLD

Sets the audio level at which the unit starts to compress the signal. If the input signal is below the Threshold level, the unit does not apply any compression. Once the level crosses the Threshold, then the compression begins to affect the signal. Range: 0 to -60db

#### RATIO

The range of dynamic compression once the compressor engages. Range is 1:1 to 16:1

#### GAIN

A make-up gain stage that adjusts the overall output volume to compensate for compression level reduction. Range 0 to 24 db.

#### PEAK/RMS

Allows the choice of PEAK Limiting or RMS Compression curves. Peak Limiting detects audio transients that are louder than the set Threshold level and applies compression to control those Peaks to whatever level you've set. RMS Compression detects an audio signal's average level and applies Compression to the overall signal. This helps make the whole audio signal louder. With RMS, there is no specific ceiling for the audio as there is with Peak Limiting.

# ATTACK

Adjusts the amount of time that the compressor takes to start compressing once the audio has gone above the Threshold level. Range: 0.1ms to 400ms

### RELEASE

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the Threshold level. Range: 10ms to 5000ms.

#### LIMIT

Engages and Dis-engages an additional Brick wall limiter at the output. The compression controls continue to work regardless of whether the brick wall limiter is engaged or not.

# FX - Gate Expander



The Gate Expander FX unit is a traditional Noise Gate type of effect. It also works well as a Dynamic Expander, which is the inverse of a compression effect.

#### THRESHOLD

Controls the audio level at which the Gate starts to open. Range: 0 to 35db

### ATTACK

Adjusts the speed at which the gate opens. Range: 0.1 ms to 400ms

# HOLD

Adjusts how long the gate remains open. Range: 0 to 2000ms

# RELEASE

Adjusts the speed at which the gate closes. 0.1 to 4000ms

# RANGE

Controls the dynamic range of the attenuation of the gate. Range: -90 to 0db

# FX - Imager



The Imager is a very useful "swiss army knife" utility device that can be used as stereo image widener, phase corrector, monoizer, panner, channel inverter, leveler, gain booster and more!

# PAN

Controls the spatial placement and stereo balance of the audio within the stereo field.

Range: -100%Left to 100%Right.

# IMAGE

Controls the stereo width of the audio. Center is normal stereo.

Range: Mono to Wide Stereo +100%

### SWAP L/R

Allows you to swap the Left and Right Channels of a stereo audio source.

Options: L/R, R/L.

### PHASE

Allows control over phase relationship between Left and Right Channels.

Menu options: Normal, Inverted, Inverted-Left Channel, Inverted-Right Channel.

# [AUTO PAN] RATE

Controls how fast or slow the auto panning will occur.

When Synced: 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/2D, 1/4D, 1/8D, 1/16D, 1/2T, 1/4T, 1/8T, 1/16T.

Unsynced: 0 to 8.8Hz

### [AUTO PAN] DEPTH

Controls how much auto panning occurs. Range: OFF to 100%.

# [AUTO PAN] SYNC

Engages and Disengages auto-pan synchronization with the host's tempo.

### GAIN

Adjusts the overall output volume. Range: 0 to 13 dB.

# FX - Vintage 2-Band EQ



The Vintage 2-Band Equalizer FX unit was modeled after the great fixed frequency design of the vintage Pultec[™] EQP2-A model tube equalizer. The unique characteristic of this classic design is that on each EQ band, the same frequency can be broadly cut and boosted simultaneously. It also includes a gentle low pass filter for the hi-band, which results in very warm and musical tones that can have a lot of gain without getting harsh.

# [LOW BAND] BOOST

Increases gain of the selected frequency. Range: 0 to +20 dB

# [LOW BAND] FREQ

Drop-down menu that provides Frequency options of 20, 30, 50, 60, 75, 100, 200 Hertz

# [LOW BAND] CUT

Reduces the gain of the selected frequency. Range: 0 to -20 dB

# [HIGH BAND] BOOST

Increases gain of the selected frequency. Range: 0 to +20 dB

# [HIGH BAND] Q

Controls the Resonance or EQ Bandwidth of the selected frequency. Range: 0 to 1

# [HIGH BAND] FREQ

Drop-down menu that provides EQ frequency choices of 2000, 3000, 4000, 5000, 8000, 10000, 12000, 140000, 16000, 18000 Hertz

# [HIGH BAND] CUT

Reduces the gain of the selected frequency. Range: 0 to -20 dB

# [HIGH BAND] FILTER

Adjusts the Frequency cutoff of the Low Pass Filter. Range: 5000 to 18000 Hz

# FX - Vintage 3-Band EQ



The Vintage 3-Band Equalizer FX unit was modeled after the great fixed frequency design of the vintage Pultec[™] EQP series tube equalizers, which are renowned for their extremely musical and fat tones that can have a lot of gain without getting harsh.

# [LOW] FREQ

Drop-down menu that provides Frequency options of 20, 30, 50, 60, 75, 100, 200 Hertz

### [LOW] GAIN

Adjusts the gain of the Low Band. Range: -20 to +20 dB

### [MED] FREQ

Drop-down menu that provides Frequency choices. Choices: 300, 500, 800, 1200, 1600 Hz

### [MED] GAIN

Adjusts the gain of the Mid Band. Range: -20 to +20 dB

# [HIGH] FREQ

Drop-down menu that provides EQ frequency choices of 2000, 3000, 4000, 5000, 8000, 10000, 12000, 140000, 16000, 18000 Hertz

# [HIGH] GAIN

Adjusts the gain of the High Band. Range: -20 to +20 dB

# LEVEL

Adjusts the overall output volume. Range: 0 to 13 dB.

# FX - Graphic 7-Band EQ



The 7 Band Graphic Equalizer is very useful for tailoring a full spectrum audio source with broad control of multiple bands. With the Q control, it is much more versatile than an average graphic EQ - capable of achieving comb filter FX and even basic speaker simulation effects.

# PAGE ONE CONTROLS

### 50Hz, 100Hz, 500Hz, 1k, 5k, 10k, 15k

Each knob controls the gain of the corresponding frequency. Range: -18 to +18 dB

# PAGE TWO CONTROLS

### Q

Controls the Resonance or EQ Bandwidth of all seven frequency bands. Range: 0.1 to 2

# LEVEL

Adjusts the overall output volume. Range: 0 to 13 dB.





The 12-Band Graphic Equalizer is very useful for tailoring a full spectrum audio source with fine controls of multiple bands for precision control. With the Q control, it's much more versatile than an average graphic EQ - capable of comb filter FX and even basic speaker simulation effects.

# 63Hz, 125Hz, 250Hz, 400Hz, 630Hz, 1k, 1.6k, 2.5k, 4k, 6.3k, 10k, 16k

Each knob controls the boost or cut gain of the corresponding frequency. Range: -16 to +16 dB

### Q

Controls the Resonance or EQ Bandwidth of all twelve frequency bands. Range: 0.1 to 2

# LEVEL

Adjusts the overall output volume. Range: 0 to 13 dB.

# FX - Parametric 2-Band EQ



The 2-Band Parameter Equalizer has the benefit of precision frequency control, with two fully sweepable, overlapping bands. This type of EQ is best suited for "surgical" equalization, particularly in pinpoint cutting or reducing of an undesirable frequency in the source audio.

# [LOW] FREQ

Selects a Frequency. Range: 30 to 7000 Hz

# [LOW] Q

Controls the Resonance or EQ Bandwidth. Range: 1.9 to 0.1

# [LOW] GAIN

Adjusts the gain of the Low Band. Range: -20 to +20 dB

# [HIGH] FREQ

Selects a sweepable frequency. Range: 1000 to 16000 Hz

# [HIGH] Q

Controls the Resonance or EQ Bandwidth. Range: 1.9 to 0.1

# [HIGH] GAIN

Adjusts the gain of the High Band. Range: -20 to +20 dB

# LEVEL

Adjusts the overall output volume. Range: 0 to 13 dB.

# FX - Parametric 3-Band EQ



The 3-Band Parameter Equalizer has the benefit of precision frequency control, with three fully sweepable, overlapping bands. This type of EQ is best suited for "surgical" equalization, particularly in pinpoint cutting or reducing of an undesirable frequency in the source audio.

# [LOW] FREQ

Selects a Frequency. Range: 30 to 600 Hz

# [LOW] Q

Controls the Resonance or EQ Bandwidth. Range: 1.9 to 0.1

# [LOW] GAIN

Adjusts the gain of the Low Band. Range: -20 to +20 dB

# [MID] FREQ

Selects a Frequency. Range: 100 to 6000 Hz

# [MID] GAIN

Adjusts the gain of the Mid Band. Range: -20 to +20 dB

# [HIGH] FREQ

Selects a Frequency. Range: 1000 to 16000 Hz

# [HIGH] Q

Controls the Resonance or EQ Bandwidth. Range: 1.9 to 0.1

# [HIGH] GAIN

Adjusts the gain of the High Band. Range: -20 to +20 dB

# FX - Wah-Wah



The Wah-Wah FX unit was modeled after classic wah pedals of the 1970's. It's a fun and versatile effect that doesn't sound like any of the other Omnisphere Filters. This FX unit works both as a sweeping wah-wah and also as an "auto-wah" envelope filter effect by using the controls on Page 2.

# PAGE ONE CONTROLS

# [SWEEP LFO] RATE

Controls how fast or slow the LFO Sweeps.

When Synced: 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/2D, 1/4D, 1/8D, 1/16D, 1/2T, 1/4T, 1/8T, 1/16T.

Unsynced: 0 to 8.8Hz

### [SWEEP LFO] DEPTH

Controls the sweep range of the LFO sweep. Range: Off to 100%

# [SWEEP LFO] SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.

# [TONE] FREQ

Controls the Center Frequency range of the filter wah. Range: -10 to +10%

# [TONE] Q

Controls the Resonance or emphasis of the wah frequency. Range: -10 to +10%

# [TONE] WIDE

A phase reversal that inverts the left and right modulation for a stereo wah effect.

# PAGE TWO CONTROLS

### [AUTO ENV] THRESHOLD

The audio level at which the Envelope Follower modulation begins. Range 0 to -90dB

#### [AUTO ENV] ATTACK

The time of the Envelope Follower modulation beginning slope. Range 200 to 8000 ms

### [AUTO ENV] RELEASE

The time of the Envelope Follower modulation ending slope. Range 25 to 1500 ms

#### [AUTO ENV] POLARITY

The polarity of the Envelope Follower modulation. Choices: HIGH/LOW, LOW/HIGH

#### SOURCE

Drop-down menu that allows a choice between LFO and AUTO-ENV as source of Wah-wah modulation.

### LEVEL

Adjusts the overall output volume. Range: 0 to 13 dB.

# **FX - Power Filter**



The Power Filter is a brand new filter developed in cooperation with GMedia, which is based on their famous impOSCar filter design. This rich sounding filter requires a fair amount of CPU power and should be used sparingly on slower computer systems. It's the same Power Filter as the one on the Filter section, but with more filter types and an additional dedicated LFO for sweeping the width, which is useful for producing formant and vowel sweeps.

CAUTION: The Power Filter has tremendous headroom and is capable of very loud sounds that can hurt your ears and damage your speakers if you aren't careful. GMedia's warning that it "Screams like a Bastard" should be heeded! Please be mindful of this when working with the Resonance, Drive and Gain knobs.

### PAGE ONE CONTROLS

### CUTOFF

Controls the cutoff frequency of the Filter. Range: 17.125 to 18318 Hz.

# RES

Controls the Resonance or "Q" of the Filter, which emphasizes the cutoff frequency to the point of oscillation at the highest settings.

# WIDTH

Controls the amount of Frequency separation between the filters. Range: 0 to 1.
## TYPE

Drop-down menu determines the sonic character of the different filter options.

Low Pass 24dB, Band Pass 24dB, High Pass 24dB, LP/LP, BP/BP, HP/HP, LP/BP, LP/HP, BP/HP

## DRIVE

Controls the amount of overdrive/saturation. Range: 0 to 1

## LEVEL

Adjusts the overall output volume. Range: 0 to 1

## PAGE TWO CONTROLS

## [CUTOFF] RATE

Controls how fast or slow the filter cutoff cycles.

Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

## [CUTOFF] DEPTH

Controls the sweep range of the cutoff modulation. Range: 0 to 1

## [CUTOFF] SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.

## [WIDTH] RATE

Controls how fast or slow the filter width cycles.

Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

## [WIDTH] DEPTH

Controls the modulation range of the width sweeping LFO. Range: 0 to 1

## [WIDTH] SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.

## **FX - Formant Filter**



The Format Filter adds characteristics of the human voice to a sound. It accomplishes this by chaining a narrow set of bandpass filters, set at specific frequencies, which reflect the formants of the human voice.

### PAGE ONE CONTROLS

### HEADSIZE

Simulates the resonating qualities, based on the size of a human head. Higher values will have a deeper resonance. Range: 0.00Cm to 1.00Cm

## VOWEL

Selects the type of vocal formant, or vowel character, that will affect the sound. Sweeping the control will gradually change between the different vowel sounds. Range: 0.00Hz to 1.00Hz

### **RES** (Resonance)

Emphasizes the formant's frequency. Range: 0.00 to 1.00

CAUTION: High RES levels can cause loud oscillations.

### BLEND

Blends in the higher frequencies of the original sound, to add clarity to the filtered result. Range: 0.00Amp to 1.00Amp

### LEVEL

Determines the overall Formant Filter effect level. Range: -infdB to 0dB

#### PAGE TWO CONTROLS

These are two dedicated modulation LFOs for both the HEADSIZE and the VOWEL controls on Page One.

## [HEADSIZE] RATE

Controls the speed of the Headsize modulation. The rate types are either in Hz or in rhythmic values depending on whether the Sync button is enabled or not.

Range:

Synced: 32x, 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

#### [HEADSIZE] DEPTH

Controls the amount of the modulation. Range: 0 to 1

#### [HEADSIZE] SYNC

There are two ways to control the rate of the Headsize modulation, by Hz and by various sync rates with the host. When the Sync button is enabled, the values will change to musical rates.

### [VOWEL] RATE

Controls the speed of the Vowel modulation. The rate types are either in Hz or in rhythmic values depending on whether the Sync button is enabled or not.

Range:

Synced: 32x, 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

#### [VOWEL] DEPTH

Controls the intensity of the Vowel modulation. Range: 0 to 1

## [VOWEL] SYNC

There are two ways to control the rate of the Vowel modulation, by Hz and by sync rates with the host. When the Sync button is enabled, the values will change to musical rates.

## FX - Valve Radio



The Valve Radio FX unit is a unique device, which functions equally well as a dual filter and also a distortion device. The combination of these two effects can product many types of vintage radio and telephone speaker simulation effects. This unit also includes a simple noise gate on Page 2.

### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

## PAGE ONE CONTROLS

#### LOPASS

Controls the frequency cutoff of the Low Pass filter. Range: 100 to 22000 Hz

#### **HIPASS**

Controls the frequency cutoff of the High Pass filter. Range: 20 to 10000 Hz

## Q

Controls the Resonance or "Q" of the two filters, which emphasizes the cutoff frequencies.

Range: .5 to 3.0

## DRIVE

Increases the amount of overdrive distortion gain. Range: 0 to 100%

#### • PAGE TWO CONTROLS

## GATE

Sets the audio level at which the threshold for the Gate starts to open. Range: 0 to 35dB

## ATTACK

Adjusts the speed at which the gate opens. Range: 0.1 ms to 400ms

## RELEASE

Adjusts the speed at which the gate closes. 0.1 to 4000ms

## GAIN

Adjusts the overall output volume. Range: 0 to 3.5 dB.

## **FX - Flame Distortion**



Flame is an extremely versatile distortion unit capable of anything from mild tube overdrive to nasty bit crushing and radical fuzzbox effects. The Driver has many different types of waveshaping types and the unique structure of not only pre/post gain, but pre and post filtering with mixable LP/HP filters on each side of the Drive circuit. All of which makes for a killer distortion processor!

## **MINI-SLIDER**

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%Wet

## [PRE] GAIN

Adjusts the amount of gain BEFORE being processed by the Flame Driver. Range: -200 to +10 dB

## [PRE] TYPE

Adjusts the balance of two filter types applied to the audio BEFORE being processed by the Driver.

Range: 100% Low Pass to 100% High Pass.

### [PRE] FILTER

Controls the Cutoff Frequency of the Filter. Range: 100 to 21924.17 Hz

#### DRIVER

Drop-down menu with different waveshaping drive options.

Choices: Warm, Heat, BURN, Fuzzy, Scorch, Loud, Glow, Roast, Toast, 2 Bits, Torch, Bake, Ignite, Gater, Psycho, Cook, Blaze, Smoke, MELT, Topkill, Tube, Valve

CAUTION: Some of these drivers can produce extremely loud sounds, so watch out!

## [POST] GAIN

Adjusts the amount of gain AFTER being processed by the Flame Driver. Range: -200 to +10 dB

## [POST] TYPE

Adjusts the balance of two filter types applied to the audio AFTER being processed by the Driver.

Range: 100% Low Pass to 100% High Pass.

## [POST] FILTER

Controls the Frequency of the Filter. Range: 100 to 21924.17 Hz

## FX - Smoke Amp Simulator





The Smoke Amp Simulator has a full set of amplifier controls, speaker combinations and modeled versions of several classic guitar amplifiers.

## PAGE ONE CONTROLS (AMP)

### AMP

Enables or disables the amplifier model. If the switch is off, then none of the amplifier models will be active (although the Speaker, Gain, Drive and Master controls will still be operational).

### MODEL

These are representations, or models, of well-known guitar amplifiers;

USA – Fender™ Deluxe Plexi – Marshall™ Plexi British – VOX™ AC-30 Chief – Matchless™ Chieftain Rectify – Mesa Boogie™ Rectifier Twin – American Fender Twin ™

## MIC

This is a switch to control on-axis versus off-axis micing of the speakers.

#### SPEAKER

There are three different algorithms that simulate the number of speaker cones in an amplifier housing. If OFF is chosen, no speaker modeling will be heard.

1X12 - one active 12-inch speaker

2X12 – two active 12-inch speakers

4X12 – four active 12-inch speakers

## GAIN

The Gain switch introduces a XXdB boost into the guitar amp, like a "High Gain" switch.

## DRIVE

Sometimes referred to as Overdrive, Drive represents the amount of overloading of the amplifier – which is what creates distortion. The higher this control is set, the more distorted the signal will be. Range: 0-100

## MASTER

This is the output level of the amplifier. When set to a minimum setting, no signal will be heard. Range: 0-100

## PAGE TWO CONTROLS (TONE)

## TONE

This switch enables the four tone controls. When turned off, the settings of the Bass, Mid, Treble and Presence are disabled.

## BASS

Controls the amount of low frequencies. Range: 0-100

## MID

Controls the amount of mid-range frequencies. Range: 0-100

## TREBLE

Controls the amount of high frequencies. Range: 0-100

## PRESENCE

Sometimes referred to as Brilliance or Edge, Presence boosts very high frequencies. Range: 0-100

## FX - Ultra Chorus



Chorus is a pitch and delay effect that adds a rich, shimmering quality to a sound by detuning and delaying the incoming signal and combining it with the unaffected signal.

The Ultra Chorus has a dedicated LFO, a 'Lush' control, which gives this unit a very dense, rich character compared with other Choruses.

## PAGE ONE CONTROLS

## MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

## RATE

This control sets the cycle speed of the LFO. Minimum settings will produces a sweeping effect, higher settings will make for a more warbling effect. Range: 0.00Hz to 15.000Hz

## DEPTH

The Depth control adjusts the amount of pitch modulation from the LFO. Range: 0.01 to 0.98

## DELAY

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Controls the Delay time. Range: 0.00-1.00

## SHAPE

These three waveforms control the contour of the pitch change applied to the delay.

Sine - A symmetrical, smoothly cycling wave

Random – Asymmetrical changes in the wave make randomized pitch changes.

Linear – A symmetrical, linear cycle.

## LUSH

Sums the left and right signal, which adds more density to the sound.

## PAGE TWO CONTROLS

## FEEDBACK

Applied to the Delay, Feedback repeats the delays for more sonic density. At minimum settings the difference is minor, at maximum settings it creates flanging metallic overtones. Range: 0.01 to 0.98

## INVERT

Reverses the phase of the Chorus.

### WIDTH

Pans the chorused signal to left and right, widening up the stereo image. Range: 0.00-1.00

## TONE

Tone is a combination High-Pass and Low-Pass filter. When set at 12-O'Clock (.500) the Tone is neutral. When shifted clockwise, a high-pass filter is applied, when changed counter-clockwise, a low-pass filter is applied. Range: 0.00-1.00

#### LEVEL

Adjusts the overall output volume. Range: -inf to 0.00

## FX - Retro Phaser



A Phaser with a vintage, low-fi vibe, the Retro Phaser. On the surface it looks similar to the EZ-Phaser, but has more features, and a dedicated page for tone shaping.

## PAGE ONE CONTROLS

## **MINI-SLIDER**

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

## RATE

Controls how fast the LFO cycles. The value of the Rate control is determined by the Sync control. If Sync is engaged, then the vales of Rate will be in musical time. If Sync is not engaged, Rate's values will be in Hz.

## Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

## DEPTH

Controls the sweep range of the modulation. Range: 0 to 1

## SYNC

Engages and disengages synchronization of the LFO rate with the host's tempo.

## POLES

Drop down menu that selects how many stages or "poles" the phaser uses. More poles equal a more resonant sound character.

Range: 4, 6, 8 or 12 poles

## MANUAL

Controls the center point of the phaser. Range: 0-100%

## FEEDBACK

Controls the amount of resonance/feedback of the phaser. High settings will oscillate.

Range: 0-100%

## INVERT

Changes the phase angle of the Phaser by 180, which changes the tone character of the Phasing.

## PAGE TWO CONTROLS

## DIRT

Adds subtle overdrive to the Phaser's signal

## TONE

This control is a simple tone filter control. Range: Tone Dark - Tone Bright

## TONE FX

Applies the Tone setting to both the wet and dry signals, or just the wet signal. Range: WET/DRY or WET

## WIDTH

Controls the width of the stereo image of the phasing signal. Range: 0-100%

## LEVEL

Adjusts the overall output volume. Range: 0 to 13.0 dB.

## FX - PRO Phaser





The PRO-Phaser FX unit is one of the most versatile and richest phaser designs ever. It is also capable of producing a wide array of unique sounds beyond traditional phaser effects - including tuned resonances, strange pitch bending effects and envelope followed phasing - to name a few!

### **MINI-SLIDER**

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

## PAGE ONE CONTROLS

### [LFO] RATE

Controls how fast or slow the LFO cycles.

Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

### [LFO] MIN

Controls the minimum point of modulation depth of the LFO. Range: 0 to 100%

#### [LFO] MAX

Controls the maximum point of modulation depth of the LFO. Range: 0 to 100%

## POLES

Drop down menu that selects how many stages or "poles" the phaser uses. More poles equals a more resonant sound character.

Choices: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 poles

## SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.

## WIDTH

Controls the width of the stereo image of the phasing signal. Range: 0 to 360 degrees

#### FEEDBACK

Controls the amount of resonance/feedback of the phaser. High settings will oscillate.

Range: 0 to 100%

#### PAGE TWO CONTROLS

#### SOURCE

Continuous mix control to blend between LFO and Envelope Follower modulaion sources.

Range: 0 to 100%

## [ENVELOPE] ATTACK

The time of the Envelope Follower modulation beginning slope. Range: 0 to 400ms

## [ENVELOPE] RELEASE

The time of the Envelope Follower modulation ending slope. Range: 0 to 1000ms

## [ENVELOPE] MIN

Controls the minimum point of modulation depth of the Envelope. Range: 0 to 100%

### [ENVELOPE] MAX

Controls the maximum point of modulation depth of the Envelope. Range: 0 to 100%

## DRIVE

Controls the amount of overdrive at the final output. Range: 0 to 100

## LEVEL

Adjusts the overall output volume. Range: -200 to +10db

## FX - EZ Phaser



Contrary to what you might expect, EZ-Phaser is not a simplified version of the PRO-Phaser, but an entirely different phaser design with it's own unique sonic character. EZ-Phaser is best suited to recreating classic phaser effects and it is very simple to use and understand.

## **MINI-SLIDER**

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 1

## RATE

Controls how fast or slow the Phaser cycles.

Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

#### DEPTH

Controls how wide the sweep range of the LFO will be. Range: 0 to 1

## SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.

## POLES

Drop down menu that selects how many stages or "poles" the phaser uses. More poles equals a more resonant sound character.

Choices: Four or Eight poles

## MANUAL

Controls the center frequency of the phaser. Range: 0.005 to 0.1

## FEEDBACK

Controls the amount of resonance/feedback of the phaser. Range: 0 to 1

## LEVEL

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Adjusts the overall output volume. Range: -infinity to 0 Unity gain.

## FX - Retro-Flanger



Flanging is a sweeping, comb-filter type effect. The Retro-Flanger has special features that give the sound a more lo-fi, vintage character.

## MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 1

## PAGE ONE CONTROLS

## RATE

Controls how fast or slow the Flanger cycles. This is the Retro-Flanger's LFO rate control.

Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

## DEPTH

Controls how wide the sweep range of the LFO will be. Range: 0.01 to 1

## SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.

## DELAY

Controls the center frequency/delay time of the flanger. Range: 0.005 to 0.1ms

## FEEDBACK

Controls the amount of delay feedback, which produces a stronger flanging resonance

Range: 0.01 to 0.99

## INVERT

Reverses the phase of the delay feedback signal, producing a throatier flanging tone.

## LEVEL

Adjusts the overall output volume. Range: -infinity to 0 Unity gain.

## PAGE TWO CONTROLS

DIRT

Adds overdrive to the Retro-Flanger's signal

## TONE

This control is a simple tone filter control that adjusts the brightness of the signal.

Range: Tone Dark – Tone Bright

## TONE FX

Applies the Tone setting to both the wet and dry signals, or just the wet signal. Range: WET/DRY or WET

## WIDTH

Controls the width of the stereo image of the Retro-Flanger signal. Range: 0-100%

## FX - Flanger



The simple to use Flanger unit provides many types of traditional flanging and tuned resonance effects. The invert switch allows for a wider range of sound characteristics than most flangers offer.

## MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 1

## RATE

Controls how fast or slow the Flanger cycles.

Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

## DEPTH

Controls how wide the sweep range of the LFO will be. Range: 0.01 to 1

## SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.

## DELAY

Controls the center frequency/delay time of the flanger. Range: 0.005 to 0.1ms

## FEEDBACK

Controls the amount of delay feedback, which produces a stronger flanging resonance

Range: 0.01 to 0.99

## INVERT

Reverses the phase of the delay feedback signal, producing a throatier flanging tone.

## LEVEL

Adjusts the overall output volume. Range: -infinity to 0 Unity gain.

## FX - Chorus Echo



Inspired by the classic Roland Chorus-Echo units from the 1970s, this unit combines both analog-style delay and chorusing, but includes new features, like stereo width control and a dedicated 'Dirt' control for a more gritty sound.

## PAGE ONE CONTROLS

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

## DELAY

The value of the Delay control is determined by what MODE is currently enabled. These can be time values or ratio values.

CHORUS 1 Range: 1ms – 100ms

CHORUS 2 Range: 5ms – 500ms

ECHO Range: 50ms - 2000ms

BPM Range: 1/1 ms, 1/2 ms, 1/4 ms, 1/8 ms, 1/16 ms, 1/32 ms, 1/64 ms, 1/2 D ms, 1/4 D ms, 1/8 D ms, 1/16 D ms, 1/2 T ms, 1/4 T ms, 1/8 T ms, 1/16 T ms.

NOTE: The D means 'dotted' and the T means 'triplet'

### FEEDBACK

Feeds the delay signal back to the input for echo repeats. Range: 0-100%

### RATE

Controls the speed of the pitch modulation. Rage 0Hz to 8.8Hz

#### DEPTH

Controls the amount of pitch modulation. Range: 0-100%

## MODE

Four modes are available which determine the character of the Chorus/Echo. The first three modes are time-based, ignoring the host's tempo. The last mode, BPM, is based on the host's tempo, and is based on a wide variety of note values.

CHORUS 1 – Based on a very short delay range, with a maximum value of 100ms.

CHORUS 2 - Longer delay, up to half a second.

ECHO - A very long delay, up to 2 seconds long

BPM - Delays based on musical values and host tempo

## INVERT

Inverts the delayed signal, so it's out of phase with the original signal

## PAGE TWO CONTROLS

## DIRT

Adds a warm distortion to the signal.

## TONE

A boost/cut control which adds higher or lower frequencies to the sound. Range Tone Dark - Tone Bright

## TONE FX

A single tone filter which controls the brightness of the signal. Range: WET/DRY or WET

## WIDTH

Controls the width of the stereo image of the Chorus-Echo's signal. Range: 0-100%

## LEVEL

Adjusts the overall output volume. Range: 0 to 13.0 dB.

## FX - BPM Delay



The BPM Delay offers a single "true-stereo" delay unit that is always in-sync with the host's tempo. The feedback and drive controls can produce some cool sounds with the built-in resonant filtering.

## MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

## PAGE ONE CONTROLS

## LEVEL

Adjusts the overall output volume. Range: 0 to 1

## PAN

Controls the spatial placement of the delayed audio in the stereo field.

## BOUNCE

Controls how much the delayed audio bounces between the left and right channels.

Range: 0 to 100%

## DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

## TONE

Controls whether the delayed audio goes through a high-pass or low-pass filter. In the center, the filter is turned off, similar to the Master Filter

on the Edit Page. Range: 0 to 1

## EMPH

Controls the resonance of the Tone control cutoff frequency in the delayed signal.

Range: 0 to 1

## FEEDBACK

Feeds the delay signal back to the input for echo repeats. Range: 0 to 1

## PAGE TWO CONTROLS

## [OVERDRIVE] FEEDBACK LOOP

Inserts the Overdrive and Tone Filter into the Feedback Loop. This is useful for producing echoes that get darker with each successive repeat, and also for creating infinite dub-style echo feedback.

CAUTION: Turning this switch ON can produce extremely loud and powerful howling feedback signals which can damage your ears and your speakersÉso watch out!

## [OVERDRIVE] TYPE

Selects between Odd or Even harmonic distortion for the delayed signal.

## [OVERDRIVE] DRIVE

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1

## [OVERDRIVE] PRE/POST

Selects between the overdrive circuit being placed before the Tone Control filter (PRE), or after the Tone control filter (POST).

## FX - BPM Delay X2



The BPM DelayX2 offers dual monoaural delays that are always synchronized to the host's tempo. The feedback and drive controls can produce some cool sounds with the built-in resonant filtering.

## MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

## PAGE ONE CONTROLS

## [DELAY1] LEVEL

Controls the volume of the delayed audio. Range: -inf to 0dB

## [DELAY1] DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

## [DELAY1] PAN

Controls the spatial placement of the delayed audio in the stereo field.

## [DELAY2] LEVEL

Controls the volume of the delayed audio. Range: -inf to 0dB

## [DELAY2] DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

## [DELAY2] PAN

Controls the spatial placement of the delayed audio in the stereo field.

## FEEDBACK

Feeds the delay signal back to the input for echo repeats. Range: 0 to 1

## PAGE TWO CONTROLS

### [COLOR] TONE

Controls whether the delayed audio goes through a high-pass or low-pass filter. In the center, the filter is turned off, similar to the Master Filter on the Edit Page. Range: 0 to 1

### [COLOR] EMPH

Controls the resonance of the Tone control cutoff frequency in the delayed signal.

Range: 0 to 1

## [COLOR] FEEDBACK TONE

Inserts the Overdrive and Tone Filter into the Feedback Loop. This is useful for producing echoes that get darker with each successive repeat, and also for creating infinite dub-style echo feedback.

CAUTION: Turning this switch ON can produce extremely loud and powerful howling feedback signals which can damage your ears and your speakers *É*so watch out!

#### [OVERDRIVE] TYPE

Selects between Odd or Even harmonic distortion for the delayed signal.

## [OVERDRIVE] DRIVE

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1

## [OVERDRIVE] PRE/POST

Selects between the overdrive circuit being placed before the Tone Control filter (PRE), or after the Tone control filter (POST).

## GAIN

Adjusts the overall output volume. Range: 0 to 1

## FX - BPM Delay X3

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G,	-0	LEVEL	DELAY	LEVEL	DELAY	LEVEL	DELAY	PEEDBACK	0	e



The BPM DelayX3 offers triple LCR mono delays that are always synchronized to the host's tempo. The feedback and drive controls can produce some cool sounds with the built-in resonant filtering.

### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

### PAGE ONE CONTROLS

### [LEFT] LEVEL

Controls the volume of the delayed audio. Range: -inf to 0dB

## [LEFT] DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

### [CENTER] LEVEL

Controls the volume of the delayed audio. Range: -inf to 0dB

### [CENTER] DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

#### [RIGHT] LEVEL

Controls the volume of the delayed audio. Range: -inf to 0dB

#### [RIGHT] DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

#### FEEDBACK

Feeds the delay signal back to the input for echo repeats. Range: 0 to 1

## PAGE TWO CONTROLS

## [COLOR] TONE

Controls whether the delayed audio goes through a high-pass or low-pass filter. In the center, the filter is turned off, similar to the Master Filter on the Edit Page. Range: 0 to 1

#### [COLOR] EMPH

Controls the resonance of the Tone control cutoff frequency in the delayed signal.

Range: 0 to 1

## [COLOR] FEEDBACK TONE

Inserts the Overdrive and Tone Filter into the Feedback Loop. This is useful for producing echoes that get darker with each successive repeat, and also for creating infinite dub-style echo feedback.

CAUTION: Turning this switch ON can produce extremely loud and powerful howling feedback signals which can damage your ears

and your speakers - so watch out!

## [OVERDRIVE] TYPE

Selects between Odd or Even harmonic distortion for the delayed signal.

## [OVERDRIVE] DRIVE

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1

## [OVERDRIVE] PRE/POST

Selects between the overdrive circuit being placed before the Tone Control filter (PRE), or after the Tone control filter (POST).

## GAIN

Adjusts the overall output volume. Range: 0 to 1

## **FX** - Retroplex



The Retroplex delay unit is specially modeled after the old Tape Echo units of the 60's and 70's like the Echoplex™, with some modern enhancements. It's a lot of fun and unpredictable!

## MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

## PAGE ONE CONTROLS

## VARI-SPEED

Smoothly controls the tape speed/delay time of the echoes. Range: 1% to 10%

## FEEDBACK

Feeds the delay signal back to the input for echo repeats. Range: 0 to 100%

## TAPE MODE

Drop-down menu offering different preset types of echo and delay ranges.

Choices: ECHO 1, ECHO 2, DELAY 1, DELAY 2

## [FLUTTER] AMOUNT

Simulates the tape flutter motor instability effect of vintage tape echo machines that make the echoes vary in pitch from one repeat to the next. Range: 0 to 100%

[FLUTTER] SPEEDControls how fast the motor instability affects the tape flutter pitch modulation of the echoes. Range: 0 to 100%

## YEAR

Drop-down menu that contains a list of "years" from 1960-2000. Choosing a year simulates the fidelity of the chosen era. Earlier years have less fidelity than later years.

## WIDTH

Controls the width of the echo stereo imaging. Range: 0(mono) to 100%(full stereo)

## PAGE TWO CONTROLS

## DRIVE

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1

## SMASH

Adjusts the bit resolution of the delayed audio for additional distortion. Range: 32bit to 4bit

## FREEZE

Locks the echo buffer for a continuous playback loop of what is in the echo buffer. Useful for simulating sound on sound style tape looping techniques.

NOTE: The Freeze buffer is cleared when Omnisphere is closed. To save the Freeze buffer, you need to render Omnisphere to an audio file.

## GAIN

Adjusts the overall output volume. Range: 0 to 100

## FX - Radio Delay



Radio Delay is essentially a hybrid of a Dual mono BPM-style delay, but with the delayed signals running through the Valve Radio distortion filter. This produces cool, dual-filtered echo effects that sound like they are coming from distorted old speakers or radios. Another cool trick with this delay is that it can be "de-synced" from the host's tempo and set to a completely different tempo, so that the delays don't always have that "perfect" sound to them. A very useful and interesting effect!

NOTE: The Radio Tuner graphic on Page 2 is not functional - it's just there for fun!

## MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

## PAGE ONE CONTROLS

## [FILTERS] HPF

Controls the cutoff frequency for the high pass filter. Range: 20 to 10000Hz

## [FILTERS] LPF

Controls the cutoff frequency for the low pass filter. Range: 100 to 22000Hz

## [FILTERS] Q

Controls the resonance of the cutoff frequency of the filters in the delayed signal.

Range: 0 to 1

## [DELAYS] LEFT

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

## [DELAYS] TEMPO

Controls the speed of the delays from host Sync to any independent tempo setting.

Range: SYNC, 42.30 to 500 BPM

## [DELAYS] RIGHT

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

## FEEDBACK

Feeds the delay signal back to the input for echo repeats. Range: 0 to 100%

## PAGE TWO CONTROLS

## FEEDBACK LOOP

Inserts the Overdrive and Tone Filter into the Feedback Loop. This is useful for producing echoes that get darker with each successive repeat, and also for creating infinite dub-style echo feedback.

CAUTION: Turning this switch ON can produce extremely loud and powerful howling feedback signals which can damage your ears and your speakers - so watch out!

## DRIVE

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1

## WIDTH

Controls the stereo width of the delay and dry signal. Range: 0 to 100%

## GAIN

Adjusts the overall output volume. Range: 0db to 12db





The Spring Verb unit was included in the Omnisphere FX family because we felt that our other reverbs in Omnisphere were sounding too good! This unit faithfully recreates the cheesy vibe of the ancient spring reverbs of 1960's era guitar amplifiers. It's a limited effect to be sure, but when you have need of a retrosonic blast from the past - this baby's more than up to the challenge!

## **MINI-SLIDER**

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0

to 100%

## PAGE ONE CONTROLS

## [REVERBERATION] TIME

Controls the length of the reverb. Range: 0 to 100%

## [REVERBERATION] TONE

Controls the basic tone color of the reverb character. Range: -10 to +10

## [REVERBERATION] WIDTH

Controls the stereo width of the audio. Full left is Mono, Center is normal stereo and full right is ultra-wide "fake" Stereo.

### PAGE TWO CONTROLS

### [TONE] EQ

Engages and disengages the EQ Tone controls.

## [TONE] BASS

Controls the amount of low frequencies. Range: -15 to +15 dB

## [TONE] TREBLE

Controls the amount of high frequencies. Range: -15 to +15 dB

## [TONE] INSERT

Allows you to position the EQ before or after the reverb. Choices: PRE or POST

## GAIN

Adjusts the overall output volume. Range: -24 to +24 dB

## FX - PRO Verb



PRO-Verb is the premier, studio-quality reverb unit in the Omnisphere FX arsenal. It's very versatile and can achieve not only great Room, Plate and Hall simulations, but it's also capable of producing unusual metallic resonances and special effects. Be sure to check out the large array of Factory Patches for PRO-Verb, as they demonstrate the range of possibilities very well.

## MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

## PAGE ONE CONTROLS

## SIZE

Controls the Room/Hall size of the reverberation. Range: 0 to 100

## тіме

Controls the overall length of the reverb. Range: 100 to 20000ms

## PREDELAY

Controls the amount it takes for the first reflection to appear. Range: 0 to 500ms

## CPU LOAD

Controls the quality of the reverb by allowing to plug-in to use more or less CPU power to create a higher or lower quality of reverb effect. Also very useful for making different density variations.

Range: 0 to 100%

## DENSITY

Controls the smoothness or coarseness of the reflections. Range: 0 to 1000

## [TONE] LOWS

Controls the level of the low frequencies of the reverb. Range: -18 to +6 dB

## [TONE] HIGHS

Controls the level of the high frequencies of the reverb. Range: -18 to +6 dB

## PAGE TWO CONTROLS

## [REVERB SHAPING] LO FREQ

Chooses the low crossover frequency of the reverb signal. Range: 25 to 1000Hz

## [REVERB SHAPING] LO TIME

Controls the specific length of the reverb's Low Frequencies. Range: 10 to 400

## [REVERB SHAPING] HI FREQ

Chooses the high crossover frequency of the reverb signal. Range: 500 to 22000Hz

## [REVERB SHAPING] HI TIME

Controls the specific length of the reverb's High Frequencies. Range: 10 to 400

## WIDTH

Adjusts the stereo width of the Wet signal. Range: 0 to 100%

## DIFFUSION

Controls the amount of chaotic variation in the reverb reflections. Range: 0 to 100

## FREEZE

Locks the reverb signal that is currently in the buffer to create an infinite reverb effect.

NOTE: The Freeze buffer is cleared when Omnisphere is closed. To save the Freeze buffer, you need to render Omnisphere to an audio file.

## FX- EZ Verb



The EZ-Verb is a simple to use, basic reverb unit with tone controls.

## MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

## ТІМЕ

Controls the length of the Reverb. Range: 0 to 0.98

## PREDELAY

Controls the amount it takes for the first reflection to appear. Range: 0 to 100ms

#### **HF DAMP**

Controls the amount of High Frequency Dampening of the Wet signal. Range: 1 to 0.013824

## LF DAMP

Controls the amount of Low Frequency Dampening of the Wet signal. Range: 0 to 0.328509

## LEVEL

Adjusts the overall output volume. Range: 0 to 1



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### **FX - Architecture & Signal Flow**



The FX in Omnisphere are organized into Racks, with each Rack containing up to four FX Units.

#### PATCH FX:

A Patch in Omnisphere can contain up to three Racks of four FX Units each, for a total of twelve FX Units in a single Patch.

To access the FX Racks for a Patch, select a Part in the header and then select the FX button.

Each Layer of a Patch (A & B) has its own FX Rack. The FX in these Racks affect the specific Layer they're inserted into, and can have any of their parameters modulated with any Modulation Source. These are Pre-fader Insert FX.

Each Patch also has a Common FX Rack, which affects both layers. These are Post-fader Insert FX.

#### MULTI FX:

A MULTI in Omnisphere can contain up to four Aux Send Racks plus a Master Rack, for a total of twenty FX Units.

To access the FX Racks for the four Aux Sends and the MASTER Rack, select the MULTI tab in the header and then select the FX button.

Each of the four Aux Sends has its own FX Rack. The four Aux FX Racks can be used by any of the eight Parts in a MULTI using the Aux Sends on the Mixer page.

The final FX Rack in the signal chain is the Master Rack. All audio routed through OUT A runs through the Master FX Rack.

In summary, a MULTI can have up to 20 FX Units loaded, plus 8 Parts containing up to 12 FX Units each. This means a fully loaded MULTI can have as many as 116 active FX Units (in 29 Racks) loaded at once! Of course, to actually run that many simultaneous FX would require a very powerful computer.

Below is the effects signal flow to give you an idea how Omnisphere's effects are chained.



#### Signal Flow

Each FX Rack has four FX Slots. The signal flow of every FX Rack type is in series - feeding the audio from the top slot through the middle slot and then through the bottom slot. An example of this is illustrated in the picture below:



 $\mbox{ \bullet}$  In this example, the audio first goes through Flame Distortion FX Unit in the top slot.

- The distorted audio is sent into the EZ-Phaser unit in the middle slot.
- The distorted and phased audio is sent to the EZ-Verb unit in the slot below it.



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## **FX** - Descriptions



The Omnisphere FX Units are effects that exist within the Omnisphere plug-in.

There are 33 different professional quality internal FX Units to choose from:

### COMPRESSOR/LIMITER GAIN FX

#### **Tube Limiter**

Both a limiter and compressor, modeled on the warm sound of the famous Fairchild[™] 670 tube limiters of the 1960's.

#### Tape Slammer

Simulates the effects of different types of analog tape compression, saturation and age.

#### Modern Compressor

Modeled after the legendary SSL[™] console compressors, with a bright, "solid-state" sound character.

#### Vintage Compressor

Modeled on vintage UA LA-2A[™] and 1176[™] compressors, with a very warm and musical sound.

#### Gate Expander

A traditional Noise Gate effect that also works well as a Dynamic Expander.

#### Imager

A handy Utility device that can be used as stereo image widener, phase corrector, and much more.

### EQUALIZERS Vintage 2-band EQ

Modeled after the Pultec[™] EQP2-A model tube equalizer, with a very warm and musical tone.

#### Vintage 3-Band EQ

Modeled after the Pultec[™] EQP series tube equalizers, renowned for their extremely musical and fat tones.

## Graphic 7-Band EQ

Useful for tailoring a full spectrum audio source with broad control of multiple bands.

#### Graphic 12-Band EQ

Useful for tailoring a full spectrum audio source with fine control of multiple bands for precision control.

## Parametric 2-Band EQ

Provides precision frequency control, with two fully sweepable, overlapping bands.

## Parametric 3-band EQ

Provides precision frequency control, with three fully sweepable, overlapping bands.

#### FILTERS Wah-Wah

Modeled after classic wah pedals of the 1970s.

Power Filter

Developed in cooperation with GForce Software, and based on their famous impOSCarÔ filter design.

## Formant Filter

A filter based on the characteristics of the human vocal tract.

#### **DISTORTION AMP FX**

Valve Radio A unique device that functions both as a dual filter and a distortion device.

#### **Flame Distortion**

An extremely versatile distortion and bit crushing unit.

#### **Smoke Amp Simulator**

A guitar amplifier modeling effect, with models for a variety of amps and cabinets.

#### MODULATION FX

Ultra-Chorus

A very rich and thick chorus unit, with some unique LFO modes.

#### Retro-Phaser

Classic Phaser unit with a vintage, low-fi vibe and a darker tone.

#### PRO-Phaser

A versatile and rich phaser design capable of going way beyond traditional Phaser effects.

#### EZ-Phaser

Best suited for classic phaser effects, while being very easy to use and understand.

#### Retro-Flanger

Classic Flanger unit with a warm, vintage character.

#### Flanger

Provides many traditional flanging and tuned resonance effects.

## DELAYS

#### **Chorus Echo**

Inspired by the classic RolandÔ Chorus-Echo units from the 1970s. Features a modulated delay line that can be synced to the host tempo and also includes a vintage chorus mode.

### BPM Delay

A single "true-stereo" delay unit that is always in-sync with the host tempo.

#### **BPM Delay X2**

Dual monaural delays that are always synchronized to the host tempo.

#### **BPM Delay X3**

Triple LCR mono delays that are always synchronized to the host tempo.

#### Retroplex

Modeled after the old Tape Echo units of the 60's and 70's such as the Echoplex™.

#### Radio Delay

A Dual mono BPM-style delay, but with the delayed signals running through a Valve Radio distortion filter.

#### REVERB Spring Verb

Faithfully recreates the cheesy vibe of the ancient spring reverbs of 1960's era guitar amplifiers.

#### PRO-Verb

The premier, studio-quality reverb unit in the Omnisphere FX arsenal. Extremely versatile and rich.

#### EZ-Verb

A simple to use, basic reverb unit that uses less CPU power.

#### But can you only use four effects units at a time?

Nope! It's actually possible to have a huge number of simultaneous FX Units active at the same time in one instance of Omnisphere. Any of the FX Units can be put into one of the four slots in an Omnisphere FX Rack -and up to 29 FX Racks can be open at once!

Here's the structure:

4 Effects per rack x 3 racks per part = 12 Effects/Part

12 Effects per Part x 8 Parts = 96 FX

4 Effects per rack x 4 Aux racks + Master rack = 20 Effects per MULTI

-----

= 116 maximum simultaneous FX Units (if your computer can handle it!)

#### NOTES ON USING THE FX

• Each FX Unit consumes differing amounts of additional CPU power when in use, so the number of simultaneous FX Units depends of the CPU power available in your computer. Some FX, like the PRO-Verb, can use differents amounts of CPU power depending on their settings.

• To maximize CPU performance in multi-timbral, LIVE or STACK applications, it's recommend to Bypass any Part FX Units which can be shared by other parts (especially reverbs & delays). A good approach is to copy a Part FX Unit's settings, Bypass it and then paste the settings into a free Aux rack for shared use by the multi-timbral Parts.

• Some FX Units have two pages. The second page parameters can be reached by clicking the arrow on the right side of the plug-in. Usually, it's labeled "MORE" or lists the type of parameter found on the second page.

• You can use external third-party FX plug-ins with Omnisphere by utilizing the multiple outputs feature of Omnisphere with your host.

#### LOADING AN FX UNIT



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## FX BASICS - Loading An FX Unit

To load an FX Unit into a Rack, click the downward facing triangle on the desired slot.



From the resulting drop-down menu, choose an FX Unit by selecting the FX name in the menu.





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F				
Save Rack Preset	Save Rack Preset			
Copy Rack Preset		Copy Rack Preset		
Paste Rack Preset		Paste Rack Preset		
00 - Empty Rack 01 - Ambient Spaces 02 - Colorizers 03 - FX oriented 04 - Overdriven 05 - Utility		00 - Empty Rack 01 - Ambient Spaces 02 - Colorizers 03 - FX oriented 04 - Overdriven 05 - Utility	* * * * *	

The flexible FX Preset system offers rapid access to the full power of the Omnisphere FX. You can easily create, copy, paste, save and recall unique individual FX Units or entire Racks of FX to instantly give any Element within Omnisphere a customized sound.

There are two kinds of FX Presets: FX Unit Presets and FX Rack Presets.

FX Presets may be:

- Saved with custom names
- · Loaded from a drop-down menu
- · Copied from any FX Slot or Rack
- · Pasted to any FX Slot or Rack
- Freely shared across any platform or host.

TERMINOLOGY: "Programs", "Patches" or "Settings" are common terms in other products for "Presets". They all mean essentially the same thing. In Omnisphere, we use the term "Presets" exclusively in reference to the settings of individual components, like FX, Envelopes, etc. The term "Patch" always refers to a completed sound in Omnisphere.

HINT: Spectrasonics has included an extensive factory library of hundreds of useful Presets to give you a glimpse into the world of Omnisphere FX. They are a fantastic starting point for exploring the diverse sonic possibilities with the FX system - Don't miss them!

## **FX PRESETS - Introduction**



## **FX - Tube Limiter**



The Tube Limiter FX Unit in Omnisphere is both a limiter and compressor. It was modeled on the warm sound of the famous Fairchild[™] 670 tube limiters of the 1960's. The Tube Limiter has a slower and smoother response than the other compressors in Omnisphere, that not only works great as a stereo buss compressor/limiter, it also works well for individual instruments. It has a fixed internal compression ratio that matches the character the old Fairchild[™] units. The Tube Limiter is an ideal tool for pumping things up in a musically fat way.

#### LIMIT

Engages and Disengages an additional Brick wall limiter at the output. The compression controls continue to work regardless of whether the brick wall limiter is engaged or not.

## THRESHOLD

Sets the audio level at which the unit starts to compress the signal. If the input signal is below the Threshold level, the unit does not apply any compression. Once the level crosses the Threshold, then the compression begins to affect the signal. Range: 0 to -60db

#### GAIN

A make-up gain stage that adjusts the overall output volume to compensate for compression level reduction. Range 0 to 24 db.

### PEAK/RMS

Allows the choice of PEAK Limiting or RMS Compression curves. Peak Limiting detects audio transients that are louder than the set Threshold level and applies compression to control those Peaks to whatever level you've set. RMS Compression detects an audio signal's average level and applies Compression to the overall signal. This helps make the whole audio signal louder. With RMS, there is no specific ceiling for the audio as there is with Peak Limiting.

#### ATTACK

Adjusts the amount of time that the compressor takes to start compressing once the audio has gone above the Threshold level. Range: 0.1ms to 400ms

#### RELEASE

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the Threshold level. Range: 10ms to 5000ms.

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#### Vintage 2-Band EQ



## FX - Vintage 2-Band EQ



The Vintage 2-Band Equalizer FX unit was modeled after the great fixed frequency design of the vintage Pultec[™] EQP2-A model tube equalizer. The unique characteristic of this classic design is that on each EQ band, the same frequency can be broadly cut and boosted simultaneously. It also includes a gentle low pass filter for the hi-band, which results in very warm and musical tones that can have a lot of gain without getting harsh.

## [LOW BAND] BOOST

Increases gain of the selected frequency. Range: 0 to +20 dB

#### [LOW BAND] FREQ

Drop-down menu that provides Frequency options of 20, 30, 50, 60, 75, 100, 200 Hertz

#### [LOW BAND] CUT

Reduces the gain of the selected frequency. Range: 0 to -20 dB

## [HIGH BAND] BOOST

Increases gain of the selected frequency. Range: 0 to +20 dB

### [HIGH BAND] Q

Controls the Resonance or EQ Bandwidth of the selected frequency. Range: 0 to 1

#### [HIGH BAND] FREQ

Drop-down menu that provides EQ frequency choices of 2000, 3000, 4000, 5000, 8000, 10000, 12000, 140000, 16000, 18000 Hertz

#### [HIGH BAND] CUT

Reduces the gain of the selected frequency. Range: 0 to -20 dB

#### [HIGH BAND] FILTER

Adjusts the Frequency cutoff of the Low Pass Filter. Range: 5000 to 18000 Hz

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# WINH WAR WAREP LFO RATE DEPTH SYNC FREQ Q WIDE AUTO-ENV

The Wah-Wah FX unit was modeled after classic wah pedals of the 1970's. It's a fun and versatile effect that doesn't sound like any of the other Omnisphere Filters. This FX unit works both as a sweeping wah-wah and also as an "auto-wah" envelope filter effect by using the controls on Page 2.

## • PAGE ONE CONTROLS

3040

## [SWEEP LFO] RATE

Controls how fast or slow the LFO Sweeps.

When Synced: 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/2D, 1/4D, 1/8D, 1/16D, 1/2T, 1/4T, 1/8T, 1/16T.

Unsynced: 0 to 8.8Hz

## [SWEEP LFO] DEPTH

Controls the sweep range of the LFO sweep. Range: Off to 100%

## [SWEEP LFO] SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.

## [TONE] FREQ

Controls the Center Frequency range of the filter wah. Range: -10 to +10%

#### [TONE] Q

Controls the Resonance or emphasis of the wah frequency. Range: -10 to +10%

### [TONE] WIDE

A phase reversal that inverts the left and right modulation for a stereo wah effect.

## • PAGE TWO CONTROLS

## [AUTO ENV] THRESHOLD

The audio level at which the Envelope Follower modulation begins. Range 0 to -90dB

## [AUTO ENV] ATTACK

The time of the Envelope Follower modulation beginning slope. Range 200 to 8000 ms

## [AUTO ENV] RELEASE

The time of the Envelope Follower modulation ending slope. Range 25 to 1500 ms

## [AUTO ENV] POLARITY

## FX - Wah-Wah

The polarity of the Envelope Follower modulation. Choices: HIGH/LOW, LOW/HIGH

## SOURCE

Drop-down menu that allows a choice between LFO and AUTO-ENV as source of Wah-wah modulation.

LEVEL

Adjusts the overall output volume. Range: 0 to 13 dB.


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# FX - Valve Radio



The Valve Radio FX unit is a unique device, which functions equally well as a dual filter and also a distortion device. The combination of these two effects can product many types of vintage radio and telephone speaker simulation effects. This unit also includes a simple noise gate on Page 2.

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

#### GE ONE CONTROLS

#### SS

ols the frequency cutoff of the Low Pass filter. Range: 100 to 22000 Hz

ols the frequency cutoff of the High Pass filter. Range: 20 to 10000 Hz

ols the Resonance or "Q" of the two filters, which emphasizes the cutoff frequencies.

e: .5 to 3.0

# Е

ses the amount of overdrive distortion gain. Range: 0 to 100%

#### **GE TWO CONTROLS**

he audio level at which the threshold for the Gate starts to open. Range: 0 to 35dB

#### СК

is the speed at which the gate opens. Range: 0.1 ms to 400ms

#### ASE

is the speed at which the gate closes. 0.1 to 4000ms

is the overall output volume. Range: 0 to 3.5 dB.



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ULTRA GHORUS Bandom **ATRA CHORUS** LUSH RATE DEPTH DELA SHAPE HORE 0 ULTRA GHORUS FEEDBACK INVERT LEVEL - BACK WIDTH

**FX - Ultra Chorus** 

Chorus is a pitch and delay effect that adds a rich, shimmering quality to a sound by detuning and delaying the incoming signal and combining it with the unaffected signal.

The Ultra Chorus has a dedicated LFO, a 'Lush' control, which gives this unit a very dense, rich character compared with other Choruses.

#### • PAGE ONE CONTROLS

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

# RATE

This control sets the cycle speed of the LFO. Minimum settings will produces a sweeping effect, higher settings will make for a more warbling effect. Range: 0.00Hz to 15.000Hz

#### DEPTH

The Depth control adjusts the amount of pitch modulation from the LFO. Range: 0.01 to 0.98

#### DELAY

Controls the Delay time. Range: 0.00-1.00

#### SHAPE

These three waveforms control the contour of the pitch change applied to the delay.

Sine - A symmetrical, smoothly cycling wave

Random – Asymmetrical changes in the wave make randomized pitch changes.

Linear – A symmetrical, linear cycle.

#### LUSH

Sums the left and right signal, which adds more density to the sound.

#### • PAGE TWO CONTROLS

#### FEEDBACK

Applied to the Delay, Feedback repeats the delays for more sonic density. At minimum settings the difference is minor, at maximum settings it creates flanging metallic overtones. Range: 0.01 to 0.98

#### INVERT

Reverses the phase of the Chorus.

#### WIDTH

Pans the chorused signal to left and right, widening up the stereo image. Range: 0.00-1.00

#### TONE

Tone is a combination High-Pass and Low-Pass filter. When set at 12-O'Clock (.500) the Tone is neutral. When shifted clockwise, a high-pass filter is applied, when changed counter-clockwise, a low-pass filter is applied. Range: 0.00-1.00

#### LEVEL

Adjusts the overall output volume. Range: -inf to 0.00



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# FX - Chorus Echo



Inspired by the classic Roland Chorus-Echo units from the 1970s, this unit combines both analogstyle delay and chorusing, but includes new features, like stereo width control and a dedicated 'Dirt' control for a more gritty sound.

#### • PAGE ONE CONTROLS

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

#### DELAY

The value of the Delay control is determined by what MODE is currently enabled. These can be time values or ratio values.

CHORUS 1 Range: 1ms - 100ms

CHORUS 2 Range: 5ms - 500ms

ECHO Range: 50ms - 2000ms

BPM Range: 1/1 ms, 1/2 ms, 1/4 ms, 1/8 ms, 1/16 ms, 1/32 ms, 1/64 ms, 1/2 D ms, 1/4 D ms, 1/8 D ms, 1/16 D ms, 1/2 T ms, 1/4 T ms, 1/8 T ms, 1/16 T ms.

NOTE: The D means 'dotted' and the T means 'triplet'

#### FEEDBACK

Feeds the delay signal back to the input for echo repeats. Range: 0-100%

#### RATE

Controls the speed of the pitch modulation. Rage OHz to 8.8Hz

#### DEPTH

Controls the amount of pitch modulation. Range: 0-100%

#### MODE

Four modes are available which determine the character of the Chorus/Echo. The first three modes are time-based, ignoring the host's tempo. The last mode, BPM, is based on the host's tempo, and is based on a wide variety of note values.

CHORUS 1 – Based on a very short delay range, with a maximum value of 100ms.

CHORUS 2 - Longer delay, up to half a second.

ECHO – A very long delay, up to 2 seconds long

BPM – Delays based on musical values and host tempo

#### INVERT

Inverts the delayed signal, so it's out of phase with the original signal

#### • PAGE TWO CONTROLS

#### DIRT

Adds a warm distortion to the signal.

# TONE

A boost/cut control which adds higher or lower frequencies to the sound. Range Tone Dark – Tone Bright

# TONE FX

A single tone filter which controls the brightness of the signal. Range: WET/DRY or WET

#### WIDTH

Controls the width of the stereo image of the Chorus-Echo's signal. Range: 0-100%

# LEVEL

Adjusts the overall output volume. Range: 0 to 13.0 dB.



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<u>Delays</u> <u>Reverbs</u>	[REVERBERATION] TONE
Spring Verb <u>PRO-Verb</u>	Controls the basic tone color of the re
EZ-Verb	[REVERBERATION] WIDTH
» <u>Arpeggiator</u> » <u>The Mixer</u>	Controls the stereo width of the audic ultra-wide "fake" Stereo.
»Stack Mode	
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» <u>System</u>	[TONE] EQ
» <u>Support</u>	Engages and disengages the EQ Tone
» <u>Glossary</u>	[TONE] BASS
» <u>Credits</u>	Controls the amount of low frequencie
» <u>Legal</u>	[TONE] TREBLE
	Controls the amount of high frequenc
	[TONE] INSERT
	Allows you to position the EQ before
	GAIN
	Adjusts the overall output volume. R

**FX - Spring Verb** 



The Spring Verb unit was included in the Omnisphere FX family because we felt that our other reverbs in Omnisphere were sounding too good! This unit faithfully recreates the cheesy vibe of the ancient spring reverbs of 1960's era guitar amplifiers. It's a limited effect to be sure, but when you have need of a retrosonic blast from the past - this baby's more than up to the challenge!

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

ange: 0 to 100%

everb character. Range: -10 to +10

o. Full left is Mono, Center is normal stereo and full right is

controls.

es. Range: -15 to +15 dB

cies. Range: -15 to +15 dB

or after the reverb. Choices: PRE or POST

Range: -24 to +24 dB



**MIXER - Aux Sends** 

Each of the four Aux Sends has its own FX Rack (accessed by selecting the FX Button at the top of the MIXER). The AUX1 ~ AUX4 knobs let you control the amount of FX applied to the Part.

NOTE: The Aux Sends FX are shared by all 8 Parts in the MULTI. Please see the <u>FX</u> chapter for a signal flow diagram.

CPU CONSERVATION AND MUTING

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# When all 32 Aux Send knobs are in the zero position (fully counter-clockwise), all Aux Send FX will be internally bypassed to conserve CPU power.

Conversely, if any one of the Aux Send knobs is not in the zero position, then all Aux Send FX will be enabled.

To conserve CPU power, please make sure that all Aux Sends on the MIXER page are in the zero position when not in use.

*NOTE: Please refer to the <u>CONCEPTS</u> section on <u>CPU Optimization</u> for more tips on getting the best performance from the instrument.* 

#### CONCEPTS - MIDI Learn



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#### **CONCEPTS – MIDI Learn**



MIDI Learn is an immensely powerful feature that allows you to remote control virtually any onscreen parameter with a MIDI controller. It is a very flexible system that can adapt to the MIDI device you use and allows changes made to any learned parameter to be recorded by the host application.

While Host Automation support varies widely among hosts, almost all hosts have the ability to record and edit MIDI messages received from a MIDI controller.

The basic process of pairing a physical control to an Omnisphere parameter using MIDI Learn is extremely simple:

- Right/Control-click an Omnisphere parameter.
- Select MIDI CC Learn (or MIDI Note Learn) from the contextual menu.
- Move a physical control (or play a note) on the MIDI device that is connected to Omnisphere.

The Omnisphere parameter will be instantly paired, and can then be controlled using that physical control. All MIDI Learn assignments are stored with the MULTI, saved with the host project file, and can also be saved as a MIDI Learn Template.

#### **Key MIDI Learn Concepts**

There are a few key MIDI Learn concepts that will help to understand how flexible the system is:

- All Learnable parameters can be controlled using MIDI Learn, and are also available for use with Host Automation.

- A single physical control can be paired with multiple parameters in Omnisphere. For example, a single physical knob could be setup to control both Cutoff and Resonance.

- A single parameter in Omnisphere can be controlled by multiple physical controls. One useful way to use this is to create sub-mixes using the Mixer. You can 'gang' different groups of Part levels in the Mixer, each controlled by a single physical fader. For example, Parts 1 ~ 4 controlled by

one fader, and Parts 3  $\sim$  6 controlled by a second fader. In this example, two different physical faders would control Parts 3 & 4.

- A MIDI device sending on any MIDI channel can control MIDI Learned parameters on any of Omnisphere's Parts/MIDI Channels. This means that you can use a MIDI device with all of its controls assigned to a single channel, but still control any parameter on any of Omnisphere eight parts.

- Assignments can be made to receive in "Omni mode" so that when a sequencer's track is changed, all of the controls are still active regardless of the incoming MIDI channel assignment.

- MIDI Control Change, Notes and Program Change messages are supported, but Pitch Bend and Aftertouch messages are not currently supported in the MIDI Learn system.



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#### COMMON 100 Save Effects Preset ... **Copy Effects Preset** G Paste Effects Preset 6 00. Default Preset **Blown Radio Tubes Dual Filtering** G G Fat n Nasty a Machine Blew Up Mean Little Bugs Pure Low Cut Filter 0 **Radio Overdrive** G G

An FX Unit Preset consists of the complete customized parameter settings of a specific FX Unit, which allows for "total recall" of that one effect. It's very useful to build a library of FX Unit presets that you like, since you can quickly experiment with trying Presets that were created for one purpose, but using them for a completely different purpose.

FX Unit Presets are organized so that only Presets relevant to a particular unit appear in the Preset List. For example, in the picture below, the Retroplex Delay has it's own Preset list.

V PRESETS	A B COMMON	
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•	Paste Effects Preset	e.
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	Maximum Length Clone	
·	My Undoing	
	Old Chorus Parenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenparenteenpa	1991
° V	Retro Slappy	2
RETROPLEX	Self Mutilation	
0	WARSPELD FEISBACK FARE MODE ANOUNT SPELD FEAR WOTH HORE S	

This makes working with FX Presets very easy and clear. You will only see the Presets that pertain to the FX Unit you're working with.

Patches are saved in the Omnisphere/Settings Library/Presets/Effects/ directory.

# **FX PRESETS - Unit Presets**



You can create as many sub-directories for patches as you like, as long as the folders are nested in the specific directory for that unit on your drive. FX Patches have the extension **.fxp_rmx** 

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A Rack Preset saves the settings of all four FX Slots into a single Preset. Any combination of up to four FX Units and their respective settings is saved. This feature gives you instant "total recall" of a whole FX Rack to try on anything in Omnisphere. The possible combinations of Effects and settings are an endless source of inspiration.

Selecting the PRESETS menu in the upper left of the FX Rack accesses FX Rack Presets.



## **FX PRESETS - Racks**

# Watch the Omnisphere Episode Video for the Arpeggiator

An Arpeggiator receives incoming MIDI notes, and outputs a sequenced pattern of notes based on a defined set of rules. Similar in concept to a step sequencer, an Arpeggiator has a number of differences that set it apart. Like a step sequencer, an Arpeggiator allows you to create and transpose a pattern, but it also interacts directly with the chords and intervals that you play. Omnisphere features a highly advanced, next-generation Arpeggiator.

Omnisphere's Arpeggiator has multiple modes, trigger-types and clock rates, a variable length 32-step Pattern Programmer, and also features the innovative Groove Lock™ feature that synchronizes the Arpeggiator with Stylus RMX grooves (or any standard MIDI file).

Each Part in Omnisphere can have its own Arpeggiator, each with it's own unique pattern settings. This means that up to eight Arpeggiators can be running simultaneously, which is especially powerful when using Stack Mode.

There are many Arpeggiator presets available to help get you started exploring the Arpeggiator's capabilities. Selecting the different Arpeggiator presets will allow you to check out the some examples of arpeggio patterns that can be created. Arpeggio patterns that you create or modify can be saved as presets for later use.

POWER BUTTON

To engage the Arpeggiator select the power button.

**ARPEGGIATOR - Presets** 

Selecting the down-arrow on the right side of the ARPEGGIATOR label will reveal the Presets menu, which has save/copy/paste options and a menu of Arpeggiator preset patterns. Any custom arpeggios can be saved as presets. You can also copy and paste patterns between Omnisphere's Parts with the Copy/Paste functions.

# **ARPEGGIATOR - Modes**

There are eleven different Arpeggiator modes available which determine the way the Arpeggiator outputs notes. Clicking on the MODE field will reveal the available modes.

**Chord** – all the notes held in a chord will be triggered at the same time, based on the velocity value of each step.

Up – all the notes held will be played in an ascending arpeggio.

Down - all the notes held will be played in a descending arpeggio.

**Up/Down** – all the notes held will first be played ascending, then descending.

Up/Down+ - similar to Up/Down, Up/Down+ repeats the upper note and the lower note, instead of just playing them once.

**Down/Up** – all the notes held will first be played in a descending arpeggio, then an ascending arpeggio.

Down/Up+ - similar to Down/Up, Down/Up+ repeats the lowest and highest notes when it reverses direction.

Random – All the notes held will be played in random order in the arpeggio.

As Played – The notes are played in the order they are triggered.

Repeat X2 - Every note in the arpeggio will be repeated twice, in ascending order.

Repeat X4 – Every note in the arpeggio will be repeated four times, in ascending order.

# **ARPEGGIATOR - Trigger**

#### Legato

The Arpeggiator will continue through all of the steps in the pattern as long as notes are played legato. If staccato notes are played, the Arpeggiator will restart from the beginning of the pattern.

#### **Song Position**

The Arpeggiator will follow the song position (bar & beats) of the host.

#### Note

Every time a new note is triggered, the Arpeggiator will restart from the first step.

# **ARPEGGIATOR - Clock**



c	~	1/1 1/2 1/4 1/8 1/16 1/32 1/64	
-		1/1 triplet	
		1/2 triplet	1
		1/4 triplet	
		1/8 triplet	
		1/16 triplet	
		1/32 triplet	
		1/64 triplet	
9		1/1 dotted	
		1/2 dotted	
		1/4 dotted	
		1/8 dotted	
		1/16 dotted	D
		1/32 dotted	
		1/64 dotted	

The clock setting lets you change the internal resolution of the pattern, and determines the time value of each step. For example, if you select 1/8 then each step in the Arpeggiator will be equal to an eighth note. In addition to straight steps, triplets and dotted note values are available from the Clock menu.

Available ranges are:

Straight steps: 1/1 ~ 1/32

Triplets: 1/1 triplet ~ 1/64 triplet

Dotted notes: 1/1 dotted ~ 1/64 dotted

**ARPEGGIATOR - Octave** 

#### 1 OCT

The Arpeggiator will play back a pattern based only on notes that are being held on the MIDI controller.

2 OCT

The Arpeggiator will play back a pattern based on notes being held on the MIDI controller, followed by the same pattern one octave higher.

# 3 ОСТ

The Arpeggiator will play back a pattern based on notes being held on the MIDI controller, followed by the same pattern one octave, then two octaves higher – over a three-octave range.

#### 4 OCT

The Arpeggiator will play back a pattern based on notes being held on the MIDI controller, followed by the same pattern one octave, then two

octaves, and again three octaves higher - over a four-octave range.

# **ARPEGGIATOR - Reset**

#### When selected, the pattern will immediately reset to the first step.

NOTE: Using Reset will start playback from the first step regardless of <u>Trigger</u> mode.

# **ARPEGGIATOR - Length**

Allows the overall length of all events in the arpeggio to be shortened or lengthened. In the example below, the length of each event is at maximum length.

After changing the Length control to its minimum value, all of the events are a very short duration.

NOTE: Changing the length of individual events is discussed in the **Pattern Programming** section.

# **ARPEGGIATOR - Swing**

At the minimum setting, all the events are aligned straight to the tempo grid. As the control's setting is increased, the events will have a greater swing groove. At high settings the swing will be very exaggerated.

NOTE: If the Swing control is selected, the <u>Groove-Lock Strength</u> slider will be forced to maximum setting, which is how it's designed to work.

# **ARPEGGIATOR - Velocity**

This control determines how much the velocity of incoming notes affects the dynamics of the Arpeggiator pattern. At maximum setting, keyboard velocity overrides all of the velocity settings in the Arpeggiator's steps. As the setting gets closer to minimum, the velocity values of each step will determine the dynamics of the Arpeggiator pattern. Generally a setting of 50% is a good balance, since it allows the incoming MIDI velocity to interact with the dynamics of the pattern.

# **ARPEGGIATOR - Pattern Programming**

Omnisphere's Arpeggiator can have up to 32 steps in a pattern. Each step can have it's own length and velocity value.

To change the velocity of a step, click and hold at the top of the step and drag it up or down to raise or lower the velocity value of the step.

Two or more steps can be combined to create a tie. The fastest way to "tie" steps together is to double-click the next step to the right. It is also possible to finely adjust the duration of an individual step by holding down SHIFT while dragging the right edge of the bar horizontally until the desired length is achieved. If the subsequent step of the pattern is empty, the duration of a step can be dragged into the empty step, also creating a musical 'tie'.

# **ARPEGGIATOR - Range**

The thin blue bar under the steps determines how many steps the pattern will have. To change the number of steps, select the right end of the Range Slider and drag it until the desired number of steps is set.

NOTE – Dragging the Range Slider will not delete any steps – it just hides them, so you can access these hidden events again by simply increasing the range slider to the right.

Range 1-32

# ARPEGGIATOR - Groove Lock™

Groove Lock[™] is one of Omnisphere's most innovate new features. In the past, arpeggiators have always had a fixed timing, so they've had limited usefulness in genres outside of electronic music. With Groove Lock[™] you can lock the groove of the Arpeggiator to the feel of any <u>Stylus RMX</u> or <u>Standard MIDI file</u>. This dramatically expands the rhythmic potential of the Omnisphere Arpeggiator.

Any MIDI data from Stylus RMX – including Grooves that have had Chaos applied to them - can be dragged from Stylus RMX's MIDI File field into Omnisphere's Groove Lock[™] field. The name of the RMX Groove is also carried over.

As well, the feel of any standard MIDI file can be used as a reference for Groove Lock[™]. This is achieved by loading a standard MIDI file into Groove Lock[™] using drag and drop or the MIDI file browser. This is explained in the MIDI file browsing section.

Grooves can be dragged from either of Stylus RMX's two MIDI File fields, located on the Directory page and on the Chaos page.

Stylus RMX Directory Page

Stylus RMX Chaos Page

Click and drag the name of the MIDI file from Stylus RMX into the Groove Lock[™] field below the Arpeggiator display to lock the feel of Omnisphere and Stylus RMX together.

Groove Lock[™] is not limited to Stylus RMX MIDI data, any standard MIDI file can be dragged into Omnisphere's Groove Lock[™] feature. This is explained in the <u>MIDI file browsing</u> section.

# **GROOVE LOCK™** - Strength

Strength is a blend control that determines how much the imported MIDI groove will affect the feel of the Arpeggiator's pattern. At minimum setting, Omnisphere will ignore the imported MIDI groove in favor of a standard, straight 'grid' feel. With Strength set to maximum, the imported MIDI groove will completely override the grid and base the feel of the Arpeggiator's pattern on the imported groove.

# GROOVE LOCK[™] - MIDI File Browsing

In addition to drag and drop, it's also possible to click inside the Groove Lock[™] field to open a file dialog, which allows browsing to any .MID file on your computer that you wish to import into the Arpeggiator.

NOTE: Omnisphere will only recognize the first 128 MIDI note events in a .MID file, so any subsequent notes are ignored.

# **GROOVE LOCK™** - Indicator Dots

When a MIDI file has been imported or dragged into the Groove Lock[™] field, a series of small blue dots will appear directly below the Arpeggiator steps. These dots serve a dual purpose. They confirm that Groove Lock[™] has received MIDI data and provide a visual reference for the feel of the MIDI content. Changing the Arpeggiator's Clock value will change the resolution of the blue dots.

Arpeggiator Clock set to 1/8

Arpeggiator Clock set to 1/16

The Groove Lock[™] feature uses the timing and note values of the MIDI content, not the melodic value. This means that Omnisphere locks to the feel or groove of the clip, not to the musical pattern itself. This applies to polyphonic MIDI files as well.

# **GROOVE LOCK™ - Clear**

Clears the MIDI file from the from the Groove Lock[™] field.

**ARPEGGIATOR - Presets** 



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**ARPEGGIATOR - Presets** 

Selecting the down-arrow on the right side of the ARPEGGIATOR label will reveal the Presets menu, which has save/copy/paste options and a menu of Arpeggiator preset patterns. Any custom arpeggios can be saved as presets. You can also copy and paste patterns between Omnisphere's Parts with the Copy/Paste functions.



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There are eleven different Arpeggiator modes available which determine the way the Arpeggiator outputs notes. Clicking on the MODE field will reveal the available modes.

**Chord** – all the notes held in a chord will be triggered at the same time, based on the velocity value of each step.

**Up** – all the notes held will be played in an ascending arpeggio.

**Down** – all the notes held will be played in a descending arpeggio.

**Up/Down** – all the notes held will first be played ascending, then descending.

**Up/Down+** - similar to Up/Down, Up/Down+ repeats the upper note and the lower note, instead of just playing them once.

 $\ensuremath{\text{Down/Up}}$  – all the notes held will first be played in a descending arpeggio, then an ascending arpeggio.

**Down/Up+** - similar to Down/Up, Down/Up+ repeats the lowest and highest notes when it reverses direction.

**Random** – All the notes held will be played in random order in the arpeggio.

As Played – The notes are played in the order they are triggered.

**Repeat X2** – Every note in the arpeggio will be repeated twice, in ascending order.

**Repeat X4** – Every note in the arpeggio will be repeated four times, in ascending order.

**ARPEGGIATOR - Modes** 

#### **ARPEGGIATOR** - Trigger



# **ARPEGGIATOR - Trigger**

#### Legato

The Arpeggiator will continue through all of the steps in the pattern as long as notes are played legato. If staccato notes are played, the Arpeggiator will restart from the beginning of the pattern.

#### **Song Position**

The Arpeggiator will follow the song position (bar & beats) of the host.

#### Note

Every time a new note is triggered, the Arpeggiator will restart from the first step.

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ARPEGGIATOR	-	Clock
-------------	---	-------

		CLOCK	
	L	1/2 dotted	
		1/1	
		1/2	ł.
		1/4	
Ę		1/8	
	1	1/16	
C'		1/32	
		1/64	
-		1/1 triplet	ł
		1/2 triplet	I
		1/4 triplet	
		1/8 triplet	
		1/16 triplet	
		1/32 triplet	1
		1/64 triplet	
9		1/1 dotted	
		1/2 dotted	
		1/4 dotted	
		1/8 dotted	
I		1/16 dotted	D
		1/32 dotted	
		1/64 dotted	ļ

The clock setting lets you change the internal resolution of the pattern, and determines the time value of each step. For example, if you select 1/8 then each step in the Arpeggiator will be equal to an eighth note. In addition to straight steps, triplets and dotted note values are available from the Clock menu.

- Available ranges are:
  - Straight steps: 1/1 ~ 1/32
  - Triplets: 1/1 triplet ~ 1/64 triplet
  - Dotted notes: 1/1 dotted ~ 1/64 dotted



## 1 OCT

The Arpeggiator will play back a pattern based only on notes that are being held on the MIDI controller.

# 2 OCT

The Arpeggiator will play back a pattern based on notes being held on the MIDI controller, followed by the same pattern one octave higher.

#### 3 OCT

The Arpeggiator will play back a pattern based on notes being held on the MIDI controller, followed by the same pattern one octave, then two octaves higher – over a three-octave range.

#### 4 OCT

The Arpeggiator will play back a pattern based on notes being held on the MIDI controller, followed by the same pattern one octave, then two octaves, and again three octaves higher – over a four-octave range.

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# **ARPEGGIATOR - Reset**

When selected, the pattern will immediately reset to the first step. NOTE: Using Reset will start playback from the first step regardless of <u>Trigger</u> mode.

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# **ARPEGGIATOR - Length**

Allows the overall length of all events in the arpeggio to be shortened or lengthened. In the example below, the length of each event is at maximum length.

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After changing the Length control to its minimum value, all of the events are a very short duration.

*NOTE:* Changing the length of individual events is discussed in the <u>Pattern Programming</u> section.



**ARPEGGIATOR - Swing** 

At the minimum setting, all the events are aligned straight to the tempo grid. As the control's setting is increased, the events will have a greater swing groove. At high settings the swing will be very exaggerated.

*NOTE:* If the Swing control is selected, the <u>Groove-Lock Strength</u> slider will be forced to maximum setting, which is how it's designed to work.

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# **ARPEGGIATOR - Velocity**

This control determines how much the velocity of incoming notes affects the dynamics of the Arpeggiator pattern. At maximum setting, keyboard velocity overrides all of the velocity settings in the Arpeggiator's steps. As the setting gets closer to minimum, the velocity values of each step will determine the dynamics of the Arpeggiator pattern. Generally a setting of 50% is a good balance, since it allows the incoming MIDI velocity to interact with the dynamics of the pattern.

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# **ARPEGGIATOR - Pattern Programming**

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Omnisphere's Arpeggiator can have up to 32 steps in a pattern. Each step can have it's own length and velocity value.

To change the velocity of a step, click and hold at the top of the step and drag it up or down to raise or lower the velocity value of the step.

Two or more steps can be combined to create a tie. The fastest way to "tie" steps together is to double-click the next step to the right. It is also possible to finely adjust the duration of an individual step by holding down SHIFT while dragging the right edge of the bar horizontally until the desired length is achieved. If the subsequent step of the pattern is empty, the duration of a step can be dragged into the empty step, also creating a musical 'tie'.



# **ARPEGGIATOR - Range**

The thin blue bar under the steps determines how many steps the pattern will have. To change the number of steps, select the right end of the Range Slider and drag it until the desired number of steps is set.

NOTE – Dragging the Range Slider will not delete any steps – it just hides them, so you can access these hidden events again by simply increasing the range slider to the right.

Range 1-32

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**MIDI File Browsing** 

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# **ARPEGGIATOR** - Groove Lock[™]

Groove Lock[™] is one of Omnisphere's most innovate new features. In the past, arpeggiators have always had a fixed timing, so they've had limited usefulness in genres outside of electronic music. With Groove Lock[™] you can lock the groove of the Arpeggiator to the feel of any <u>Stylus RMX</u> or <u>Standard MIDI file</u>. This dramatically expands the rhythmic potential of the Omnisphere Arpeggiator.

Any MIDI data from Stylus RMX – including Grooves that have had Chaos applied to them - can be dragged from Stylus RMX's MIDI File field into Omnisphere's Groove Lock[™] field. The name of the RMX Groove is also carried over.

As well, the feel of any standard MIDI file can be used as a reference for Groove Lock[™]. This is achieved by loading a standard MIDI file into Groove Lock[™] using drag and drop or the MIDI file browser. This is explained in the MIDI file browsing section.

Grooves can be dragged from either of Stylus RMX's two MIDI File fields, located on the Directory page and on the Chaos page.

Stylus RMX Directory Page

Stylus RMX Chaos Page

Indicator Dots Clear Button

Range Groove Lock Introduction

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Click and drag the name of the MIDI file from Stylus RMX into the Groove Lock™ field below the Arpeggiator display to lock the feel of Omnisphere and Stylus RMX together.

ARPEGGIATOR - Groove Lock  $^{\rm TM}$ 

Groove Lock[™] is not limited to Stylus RMX MIDI data, any standard MIDI file can be dragged into Omnisphere's Groove Lock[™] feature. This is explained in the <u>MIDI file browsing</u> section.

Watch the Omnisphere Overview tutorial video for more information about the Mixer Page

The MIXER page provides a complete overview of all the Parts in a <u>MULTI</u>. All eight Parts are displayed in a traditional eight-channel Mixer layout, with each Part having the following adjustable settings:

- MIDI Channel
- Output Channel
- · Mute and Solo
- · Patch Name (displays the Patch loaded into the Part, and provides direct access to the Patch Browser)
- Part Level & Pan
- Aux Sends 1 ~ 4

# **MIXER - Part Number & MIDI Channel**

#### Part Number

Each of Omnisphere's eight parts is numbered along the far left of the MIXER page.

# **MIDI Channel**
By default, Parts 1 ~ 8 are assigned sequentially to MIDI Channels 1 ~ 8. However, each Part in a MULTI can be set to respond to any one of 16 MIDI channels. Select the desired channel from the MIDI Channel drop-down menu.

Range 1 to 16

NOTE: While either LIVE MODE or STACK MODE is enabled, these settings are ignored.

### MIXER - Mute & Solo

Mute

Selecting the "M" Button mutes the audio output for that Part. However, the Part is still playing in the background when muted, and will continue to use CPU resources.

Solo

*

Selecting the "S" Button will Solo a Part. When the Solo button is selected, only that Part will be heard and all other Parts will be muted. It is possible to Solo multiple Parts by selecting additional Solo buttons.

NOTE: The Solo and Mute Buttons can be MIDI Learned. Using this feature can make it very easy to Mute or Solo multiple Parts simultaneously. Check out the <u>MIDI Learn</u> chapter for more information.

### **MIXER - Output Assignment**

By default, Parts  $1 \sim 8$  are assigned to OUT A. However, each Part in a MULTI can be routed to any one of the 8 Output channels. Select the desired channel from the Output Channel drop-down menu.

Range OUT A – OUT H

NOTE - Please refer to the FX Architecture section for more detail about how Omnisphere's Outputs and FX are routed.

## **MIXER - Patch Name Display**

The Patch Name Display shows the currently loaded Patch. Clicking the Patch Name Display will open the Patch Browser. Patches can then be browsed and loaded for that Part. Closing the Patch Browser will return you to the MIXER page.

NOTE: Please refer to the BROWSER section of the manual for detailed information about using Omnisphere's Patch Browser.

### **MIXER - Level & Pan**

Level

Each Part has a Part Level fader. Moving the fader to the left decreases volume, moving the fader to right increases volume.

The Level Meter displays the Part's current signal level. Although the meter can go into the "red", Omnisphere will rarely distort on the Part level, so distortion is not a problem at this stage.

Range -inf to + 9.54dB

NOTE: Use Command/CTRL-click to reset the fader to 0dB.

Pan

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Each Part has a Pan control. Moving the knob counter-clockwise pans to the left. Moving the knob clockwise pans to the right.

Range -63L to +63R

## **MIXER - Aux Sends**

Each of the four Aux Sends has its own FX Rack (accessed by selecting the FX Button at the top of the MIXER). The AUX1 ~ AUX4 knobs let you control the amount of FX applied to the Part.

NOTE: The Aux Sends FX are shared by all 8 Parts in the MULTI. Please see the <u>FX</u> chapter for a signal flow diagram.

### **CPU CONSERVATION AND MUTING**

When all 32 Aux Send knobs are in the zero position (fully counter-clockwise), all Aux Send FX will be internally bypassed to conserve CPU power.

Conversely, if any one of the Aux Send knobs is not in the zero position, then all Aux Send FX will be enabled.

To conserve CPU power, please make sure that all Aux Sends on the MIXER page are in the zero position when not in use.

NOTE: Please refer to the CONCEPTS section on CPU Optimization for more tips on getting the best performance from the instrument.



# **MIXER - Part Number & MIDI Channel**

#### Part Number

Each of Omnisphere's eight parts is numbered along the far left of the MIXER page.

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By default, Parts 1  $\sim$  8 are assigned sequentially to MIDI Channels 1  $\sim$  8. However, each Part in a MULTI can be set to respond to any one of 16 MIDI channels. Select the desired channel from the MIDI Channel drop-down menu.

Range 1 to 16

NOTE: While either LIVE MODE or STACK MODE is enabled, these settings are ignored.



**MIXER - Mute & Solo** 

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Solo

Selecting the "M" Button mutes the audio output for that Part. However, the Part is still playing in

the background when muted, and will continue to use CPU resources.

Mute

Selecting the "S" Button will Solo a Part. When the Solo button is selected, only that Part will be heard and all other Parts will be muted. It is possible to Solo multiple Parts by selecting additional Solo buttons.

*NOTE:* The Solo and Mute Buttons can be MIDI Learned. Using this feature can make it very easy to Mute or Solo multiple Parts simultaneously. Check out the <u>MIDI Learn</u> chapter for more information.



# **MIXER - Output Assignment**

By default, Parts 1 ~ 8 are assigned to OUT A. However, each Part in a MULTI can be routed to any one of the 8 Output channels. Select the desired channel from the Output Channel drop-down menu.

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Range OUT A – OUT H

NOTE - Please refer to the <u>FX Architecture</u> section for more detail about how Omnisphere's Outputs and FX are routed.



## **MIXER - Patch Name Display**

The Patch Name Display shows the currently loaded Patch. Clicking the Patch Name Display will open the Patch Browser. Patches can then be browsed and loaded for that Part. Closing the Patch Browser will return you to the MIXER page.

NOTE: Please refer to the <u>BROWSER</u> section of the manual for detailed information about using Omnisphere's Patch Browser.

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# **STACK MODE - Introduction**

Any CC:1 · O STACK MODE VELO CC	Show Name *
Helf Time Malevolence 2 (next best)	
Ebowed Plano Zing Swell (next 1/16)	
Mid Range Echoes (next beat)	
Undercover Operation (latch, next best)	
Resonant Space Click (next beat)	
Pulsing Resonance (next beat)	
Adaglo Expressivo	
Grooving Metal	lophone (next beat)

#### Watch the Tutorial Video for Stack Mode

STACK MODE is a powerful feature designed for creating splits, layers, and crossfades with up to eight Parts at once. STACK MODE offers a flexible environment for either live performance or composing. STACK MODE is especially useful for recording a multi-Part performance using a single MIDI track in your host sequencer.

Using Latch and Trigger Modes together with Stack Mode allows you to create complex multi-Part performances that can be layered and quantized in real time.

Use STACK MODE instead of LIVE MODE when you want to create splits and crossfades, and play all the Parts using a single MIDI channel.

There are three different ways to interact with Parts using STACK MODE: NOTES, VELOCITY, and CC. Although they all share the same STACK MODE Grid layout, they are applied very differently from one another.

Using NOTES, each Part Region is mapped to a MIDI Note range, allowing you to map splits, layers and positional crossfades across your keyboard. Using VELOCITY, each Part Region responds to a specific Velocity range, so no matter where you are playing on the keyboard, different Part Regions can be triggered by playing harder or softer. Using CC, Part Regions can be switched and crossfaded using MIDI Control Change messages.

NOTE: STACK MODE works with multiple patches simultaneously, so it requires a powerful computer to make the best use of it. To optimize performance, mute Patch FX like Reverbs and Delays and use the shared <u>Aux Sends FX</u> instead.

#### **Enabling Stack Mode**

To enable STACK MODE, select the Power Button to the left of the STACK MODE label.

When STACK MODE is enabled, you'll see "STACK MODE" displayed in the left side of the Omnisphere header. This will be visible from any page in the plug-in.

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### **STACK MODE - Presets Menu**

All STACK MODE settings (except MIDI Channel, which will always default to "Any") are saved and recalled with the MULTI, which means you can setup a MULTI specifically for use with STACK MODE enabled.

In addition to saving and loading complete MULTIS, Stack Presets can be independently saved and loaded from the drop-down menu at the top of the STACK MODE page.

A Stack Preset only saves and recalls the layout of the STACK MODE Grid. This includes the positions of all added Part Regions, and the original Part numbers associated to those Regions.

When a Stack Preset is loaded, it will replace the layout of the STACK MODE Grid. Part Regions will be automatically matched to the same Part numbers they were assigned when the Preset was saved.

NOTE: Stack Presets do not store Patches, Part Names, CC assignments, or which setting (NOTES, VELOCITY or CC) was selected at the time the Stack Preset was saved.

### **STACK MODE - MIDI Channel Menu**

All of the Parts in STACK MODE respond to a single MIDI Channel, even if the Parts are assigned to different MIDI Channels on the Mixer page. Use the MIDI Channel menu to choose which MIDI Channel STACK MODE will respond to.

Range Any, CH: 1 – CH: 16

# **STACK MODE - MIDI CC Menu**

Use the MIDI CC menu to choose which MIDI Control Change number STACK MODE will respond to when using the CC setting.

NOTE: When using CC, all Parts added to the <u>Stack Mode Grid</u> will be triggered simultaneously when notes are played, even if their Regions are outside the CC value range, and not outputting audio. Therefore, this feature can put a high demand on the <u>CPU</u>.

STACK MODE - Grid

The Stack Mode Grid is made up of 8 horizontal Rows, each divided by 128 lines corresponding to the full range of possible MIDI values.

Up to 8 Parts can be arranged on the STACK MODE Grid as Regions. A Region will always correspond to one Part, and is displayed horizontally along a Row. Once added to the grid, Regions can be moved, resized or edited using the Mouse.

One Row can contain multiple Part Regions, but each Part can only be present in one Row at a time.

### **STACK MODE - Adding & Removing Parts**

To add a Part, Right/Control-Click on the desired Row in the Stack Mode Grid, then choose a Part from the menu. All of the Patches loaded into the current Multi will appear in this menu. Any unassigned Parts will display as "------".

NOTE: You can add Parts to the Stack Mode Grid that have no Patches loaded yet.

To place two (or more) Parts on the same Row simply Right/Control-Click on a Row again, and select "Add Part" for each Part that you want to add to that Row. Up to 8 Parts can be added to a single Row, however it is usually simplest to assign each Part to its own corresponding Row.

To remove a Part from any Row, Right/Control-Click on the Region and select "Remove this Part".

NOTE: Removing a Part from the STACK MODE grid doesn't remove that Part from the Multi, so it can be added back to the grid again if desired. When re-adding a Part, all previous changes made to its Region (position, width and fades) are retained when added back to the grid.

### STACK MODE - Moving, Crossfading & Resizing Regions

Moving - To move a Region, click inside the Region and drag horizontally.

NOTE: You can only drag Regions horizontally, and not vertically across Rows. To relocate a Part to another Row, simply add the Part to the desired Row using the Add Part contextual menu. The Part will relocate, with its Region settings (position, width and fades) intact.

**Resizing** – Click and drag the lower right or lower left corner of a Region to increase or decrease its width. If two Regions are on the same Row and crossfaded together, resizing will only change the width of the selected Region.

Fading – To add a fade to a Region, select the upper-right or upper-left corner of the Region and drag the corner inward. The further the corner is dragged, the more gradual the ramp and the longer the fade will be.

You can shorten or remove a fade by dragging the upper corner of the fade outward.

**Contiguous & Crossfade** – To have contiguous or crossfaded Regions, both Regions must be on the same Row. Once on the same Row, Regions can be placed side-by-side for contiguous layout.

To crossfade two Regions, place two Regions on the same Row. Create a fade on one Region (on the side facing the other Region), then drag the faded Region toward the other. When the Regions touch, Omnisphere will automatically create a crossfade.

Dragging inside the crossfaded area will move the crossfade without changing its length. This will not move the Regions themselves, although the relative length of the Regions will change accordingly.

Dragging on the upper corners of the crossfade will increase or decrease the length of the crossfade, without moving either Region. Again, the relative length of the Regions will change accordingly.

### **STACK MODE - Latch & Trigger Modes**

The Latch Mode and Trigger Mode features extend the multi-timbral performance capabilities of Omnisphere, especially when used together with Live Mode or Stack Mode.

They enable real-time creation of complex, multi-Part performances with full synchronization between Parts, and across multiple Omnisphere,

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Trilian and Stylus RMX instances, without the need for traditional sequencing techniques.

Latch Mode causes notes to be held when played (or toggled off when played again), allowing quick triggering of repeating arpeggiated phrases or sustained sounds, while freeing the hands to play additional notes for layering, or for switching to other Parts to play new phrases on top.

Using Trigger Modes, incoming MIDI notes can be quantized in real-time, making it very easy to experiment and improvise along with other Parts and clocked sources without losing synchronization. These features are a lot of fun to use for jamming and building up ideas quickly!

Used together, they enable a wide range of creative performance, live remixing, and composition techniques to discover and explore.

NOTE: You can only drag Regions horizontally, and not vertically across Rows. To relocate a Part to another Row, simply add the Part to the desired Row using the Add Part contextual menu. The Part will relocate, with its Region settings (position, width and fades) intact.

# STACK MODE - Latch Mode



When Latch Mode is enabled for a Part, repeatedly playing a note will toggle the note on and off. When it is toggled on, the note will continue to sustain, even if the note is released. Playing the same note again will toggle it off.

When the Stack Mode page is open, you can access the Latch Mode setting for a Part by right/control-clicking on the Part Region. Select "Latch Mode" from the context menu to toggle Latch Mode on or off for the Part.

NOTE: A Part's Latch Mode status can also be viewed & changed from the EDIT Page using the controls in the Footer or from the LIVE MODE page using the Latch Mode View button. The Latch Mode Icons are MIDI-learnable, so you can assign a hardware control to remotely enable or disable Latch Mode for a Part.

Latch Mode allows rapid and creative layering of multiple notes or Parts. Using splits, you can also play along using other unlatched Parts in Stack Mode. Latch Mode is extremely useful when working with rhythmic sounds, and used together with Trigger Modes allows one-shot triggering of sounds quantized in real-time.

Latch Mode is set independently for each of the eight Parts. It is also independent from Stack Mode, so Stack Mode does not need to be enabled for Latch Mode to be active.

Viewing & Enabling Latch Mode



To enable Latch Mode for a Part, control/right-click its Part Region, and select the "Latch Mode" option from the context menu.

When Latch Mode is enabled for a Part, a checkmark will appear next to the Latch Mode menu option, and the word "Latch" will be appended to the Part Name on the Stack Mode grid.

To disable Latch Mode for a Part, select "Latch Mode" again from that Part's context menu.

When Latch Mode is disabled for a Part, the Latch Mode menu option will be unchecked, and the word "Latch" will no longer be appended to the Part Name.

NOTE: Disabling Latch Mode for a Part while it's playing will immediately send an "All Notes Off" message to the Part. The tails from FX and release stages from envelopes will continue to decay. The All Notes Off command will apply to all notes that are playing on that Part.

### All Notes Off



Sometimes when using Latch Mode, it's possible to lose track of which notes are latched, or you might have multiple Parts playing in Latch Mode that you want to stop simultaneously.

The All Notes Off command will send an "All Notes Off" message to all 8 Parts at once. All Parts will stop playing, regardless of their Latch status. FX tails and release stages from envelopes will continue to decay, so that the cut off is not unnaturally abrupt.

To access the All Notes Off command, control/right-click on a Part Region, and select "All Notes Off" from the context menu.

NOTE: You can also access the All Notes Off command by using the All Notes Off button on the LIVE MODE page. The All Notes Off button is MIDI-learnable, which allows you to trigger it using a hardware controller. This is especially useful when using Latch Mode together with Stack Mode.

NOTE: If you have multiple Parts playing using Latch Mode and only want to stop one Part, disable Latch Mode only for that Part.



# STACK MODE - Trigger Mode

Trigger Mode controls the playback timing of incoming MIDI notes, providing real-time quantization as those notes are played.

When the Stack Mode page is open, you can access the Trigger Mode settings for a Part by right/control-clicking on the Part Region.

H	alf Time Malevolence 2 (latch)
	Remove this part
Eb	✓ Latch mode
	All notes off (panic)
	✓ Trigger immediate
	Trigger next 1/16
	Trigger next beat
	Trigger next bar
	Add part 1 – Half Time Malevolence 2
_	Add part 2 - Ebowed Piano Zing Swell
	Add part 3 – Mid Range Echoes
	Add part 4 - Undercover Operation
	Add part 5 - Resonant Space Click
	Add part 6 - Pulsing Resonance
C2	Add part 7 – Adagio Expressivo
	Add part 8 – Grooving Metallophone

NOTE: Trigger Mode can also be accessed from the LIVE MODE page using the Latch Mode View button, or from the EDIT Page using the controls in the Footer.

When playing complex phrases or rhythmic sounds along with other sequences, it can be difficult to sync those performances. Trigger Mode

solves these problems by quantizing live MIDI input. With Trigger Modes other than Immediate selected, the playback from each incoming MIDI note is delayed until the the next point on the bar/beat grid is reached. This makes it much easier to play in a live performance setting with complete synchronization.

Trigger Mode controls the playback start time of MIDI notes played live via a MIDI controller or from MIDI notes sent from a MIDI track in the host sequencer.

Trigger Modes are set independently for each of the eight Parts. Trigger Modes are also independent from Stack Mode, so Stack Mode does not need to be enabled for Trigger Modes to be active.

#### Using Trigger Modes in Stack Mode

Using the splits, layers and crossfades in Stack Mode together with Trigger Mode quantizing allows for very complex and interesting performance possibilities.

One simple example is to setup a split with an arpeggiated synth bass on the lower keys, and another arpeggiated sound on the upper keys. Playing them together in sync can be really difficult. Setting the Trigger Modes to Next 16th for both Parts would quantize them together in real time as you played, so your arpeggiated phrases will always sync perfectly.

Trigger Modes can also be used while browsing and auditioning sounds. If you have selected a Trigger Mode other than Immediate for the Part, the sounds will be real-time quantized and will play in sync with the host or other clocked source as you audition them.

#### Viewing & Selecting Trigger Modes

When a Trigger Mode other than Immediate is selected for a Part, the name of the selected Trigger Mode will be appended to the Part Region name.



To select or change the Trigger Mode for a Part, control/right-click its Part Region, and select the desired Trigger Mode from the context menu. A checkmark will appear next to the selected Trigger Mode.

Remove this part Latch mode
All notes off (panic)
Trigger immediate
(Trigger next heat
V Trigger next beat
Trigger next bar
Add part 1 - Half Time Malevolence 2
Add part 2 – Ebowed Piano Zing Swell
Add part 3 – Mid Range Echoes
Add part 4 – Undercover Operation
Add part 5 – Resonant Space Click
Add part 6 - Pulsing Resonance
Add part 7 - Adagio Expressivo
Add part 8 - Grooving Metallophone

### **Trigger Modes**

Immediate: This is the default Trigger Mode. MIDI input is not quantized, and playback of MIDI notes is immediate.

NOTE: When Immediate is selected, no Trigger Mode name will be appended to the Part Name.

**Next 16th:** this option delays the playback of incoming MIDI notes to the next 16th note. In other words, notes are quantized in real time to the next 16th note. If you play ahead of the next 16th, there may be a slight delay before the note sounds. This delay will be a maximum of a 16th note at the current tempo. This mode makes it easy to play quick phrases in perfect sync with other Parts or clocked sources.

**Next Beat:** this option delays playback to the next beat. If incoming MIDI notes arrive ahead of the next beat, the delay is a maximum of one beat. Next Beat mode makes it very easy to trigger rhythmic patches in perfect sync, and when used together with Latch Mode, for layering phrases that are quantized to the beat in real time.

**Next Bar:** delays playback until the next bar. If MIDI messages arrive ahead of the next bar, the delay is a maximum of one bar. This mode is especially useful if you want to synchronize phrases on the downbeat of a measure. You can press a note anytime in the previous bar and it will wait until the next bar to play.

NOTE: The selected Trigger Mode also affects a Part's Arpeggiator, LFOs and Envelopes. These will also be delayed until the note itself is triggered.

# **STACK MODE - Operation Modes**

There are three ways that Part Regions can be used in STACK MODE: NOTES, VELO and CC. Only one of these can be active at a time.

# **STACK MODE OPERATIONS MODES - Notes**

When NOTES is selected, Part Regions are mapped to a MIDI Note range, allowing you to map splits, layers and positional crossfades across the keyboard. Each of the 128 lines in the grid correspond to a MIDI Note number, and Regions can be mapped over a ten-octave range. When NOTES is selected, a mini-keyboard is displayed at the bottom of the Stack Mode Grid

NOTE: The mini-keyboard will highlight notes in blue as they are played. Notes highlighted in red are notes that have been MIDI Note Learned in <u>LIVE MODE</u>, and are shown for reference only.

### **STACK MODE OPERATIONS MODES - Velocity**

When VELO is selected, Part Regions are mapped to a specific Velocity range. The mini-keyboard is not displayed. Instead, the horizontal axis represents the 128 Velocity values. This allows Velocity switching and crossfading of Parts. For example, which Part is played depends on how hard or soft the MIDI keyboard is played.

The horizontal axis shows white reference numbers for Velocity values and also displays incoming MIDI Note messages. The markers on the horizontal axis range from 1-127. When you play notes, their Velocity values will be displayed by blue vertical bars.

Parts on the left side of the Grid will be triggered at lower Velocity levels, while at higher Velocity, Parts on the right side of the Grid will be triggered.

In the example below, all the Parts will be triggered except the Region at the far right, which is mapped to a Velocity range of 109-128.

In this example, playing at lower Velocity values triggers the two Parts on the left.

Omnisphere

In this example, playing at medium Velocity values crossfades to the Region in the center of the Grid.

Finally, as Velocity increases further, the next Region to the right will be triggered by higher Velocity values.

# **STACK MODE OPERATIONS MODES - CC**

When CC is selected, Part Regions can be switched or crossfaded using MIDI CC messages. This is useful for crossfading patches from a MIDI hardware slider or knob. Each Region can be mapped to specific values across the MIDI CC's range. The MIDI Control Change number that STACK MODE uses is chosen from the MIDI CC menu on the STACK MODE page.

Once the MIDI Control Change Number has been chosen, all of the Regions will respond to that CC number. The current MIDI CC value is displayed at the bottom of the Stack Mode Grid, similar to VELO mode, but only the current value is visible. While holding notes down, the value display will update as you sweep across the range of CC values.

NOTE: When using CC, all Parts added to the Stack Mode Grid will be triggered simultaneously when notes are played, even if their Regions are outside the CC value range, and not outputting audio. Therefore, this feature can put a high demand on the <u>CPU</u>.

NOTE: MIDI CC 32 (bank select) is not available.

# **STACK MODE - Display Menu**

The Display Menu allows you to choose which information is displayed with each Region in the Stack Mode Grid.

### SHOW NAME

Displays only the Part Name.

## SHOW PART #

Displays only the Part Number. This corresponds to the Part Number on the Mixer Page.

### SHOW NAME and #

Displays both the Part Name and the Part Number.



All STACK MODE settings (except MIDI Channel, which will always default to "Any") are saved and recalled with the MULTI, which means you can setup a MULTI specifically for use with STACK MODE enabled.

In addition to saving and loading complete MULTIS, Stack Presets can be independently saved and loaded from the drop-down menu at the top of the STACK MODE page.

A Stack Preset only saves and recalls the layout of the STACK MODE Grid. This includes the positions of all added Part Regions, and the original Part numbers associated to those Regions.

When a Stack Preset is loaded, it will replace the layout of the STACK MODE Grid. Part Regions will be automatically matched to the same Part numbers they were assigned when the Preset was saved.

NOTE: Stack Presets do not store Patches, Part Names, CC assignments, or which setting (NOTES, VELOCITY or CC) was selected at the time the Stack Preset was saved.

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**STACK MODE - Presets Menu** 



# **STACK MODE - MIDI Channel Menu**

All of the Parts in STACK MODE respond to a single MIDI Channel, even if the Parts are assigned to different MIDI Channels on the Mixer page. Use the MIDI Channel menu to choose which MIDI Channel STACK MODE will respond to.

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Range Any, CH: 1 - CH: 16



## STACK MODE - MIDI CC Menu

Use the MIDI CC menu to choose which MIDI Control Change number STACK MODE will respond to when using the CC setting.

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*NOTE:* When using CC, all Parts added to the <u>Stack Mode Grid</u> will be triggered simultaneously when notes are played, even if their Regions are outside the CC value range, and not outputting audio. Therefore, this feature can put a high demand on the <u>CPU</u>.



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The Stack Mode Grid is made up of 8 horizontal Rows, each divided by 128 lines corresponding to

the full range of possible MIDI values. Up to 8 Parts can be arranged on the STACK MODE Grid as Regions. A Region will always

correspond to one Part, and is displayed horizontally along a Row. Once added to the grid, Regions can be moved, resized or edited using the Mouse.

One Row can contain multiple Part Regions, but each Part can only be present in one Row at a time.

**STACK MODE - Grid** 



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To add a Part, Right/Control-Click on the desired Row in the Stack Mode Grid, then choose a Part from the menu. All of the Patches loaded into the current Multi will appear in this menu. Any unassigned Parts will display as "------".

NOTE: You can add Parts to the Stack Mode Grid that have no Patches loaded yet.

To place two (or more) Parts on the same Row simply Right/Control-Click on a Row again, and select "Add Part" for each Part that you want to add to that Row. Up to 8 Parts can be added to a single Row, however it is usually simplest to assign each Part to its own corresponding Row.

To remove a Part from any Row, Right/Control-Click on the Region and select "Remove this Part".

NOTE: Removing a Part from the STACK MODE grid doesn't remove that Part from the Multi, so it can be added back to the grid again if desired. When re-adding a Part, all previous changes made to its Region (position, width and fades) are retained when added back to the grid.

### **STACK MODE - Adding & Removing Parts**



## STACK MODE - Moving, Crossfading & Resizing Regions

Moving – To move a Region, click inside the Region and drag horizontally.

NOTE: You can only drag Regions horizontally, and not vertically across Rows. To relocate a Part to another Row, simply add the Part to the desired Row using the Add Part contextual menu. The Part will relocate, with its Region settings (position, width and fades) intact.

**Resizing** – Click and drag the lower right or lower left corner of a Region to increase or decrease its width. If two Regions are on the same Row and crossfaded together, resizing will only change the width of the selected Region.

**Fading** – To add a fade to a Region, select the upper-right or upper-left corner of the Region and drag the corner inward. The further the corner is dragged, the more gradual the ramp and the longer the fade will be.

You can shorten or remove a fade by dragging the upper corner of the fade outward.

**Contiguous & Crossfade** – To have contiguous or crossfaded Regions, both Regions must be on the same Row. Once on the same Row, Regions can be placed side-by-side for contiguous layout.

To crossfade two Regions, place two Regions on the same Row. Create a fade on one Region (on the side facing the other Region), then drag the faded Region toward the other. When the Regions touch, Omnisphere will automatically create a crossfade.

Dragging inside the crossfaded area will move the crossfade without changing its length. This will not move the Regions themselves, although the relative length of the Regions will change accordingly.

Dragging on the upper corners of the crossfade will increase or decrease the length of the crossfade, without moving either Region. Again, the relative length of the Regions will change accordingly.

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# **STACK MODE - Latch & Trigger Modes**

The Latch Mode and Trigger Mode features extend the multi-timbral performance capabilities of Omnisphere, especially when used together with Live Mode or Stack Mode.

They enable real-time creation of complex, multi-Part performances with full synchronization between Parts, and across multiple Omnisphere, Trilian and Stylus RMX instances, without the need for traditional sequencing techniques.

Latch Mode causes notes to be held when played (or toggled off when played again), allowing quick triggering of repeating arpeggiated phrases or sustained sounds, while freeing the hands to play additional notes for layering, or for switching to other Parts to play new phrases on top.

Using Trigger Modes, incoming MIDI notes can be quantized in real-time, making it very easy to experiment and improvise along with other Parts and clocked sources without losing synchronization. These features are a lot of fun to use for jamming and building up ideas quickly!

Used together, they enable a wide range of creative performance, live remixing, and composition techniques to discover and explore.

NOTE: You can only drag Regions horizontally, and not vertically across Rows. To relocate a Part to another Row, simply add the Part to the desired Row using the Add Part contextual menu. The Part will relocate, with its Region settings (position, width and fades) intact.



# **STACK MODE - Operation Modes**

There are three ways that Part Regions can be used in STACK MODE: <u>NOTES</u>, <u>VELO</u> and <u>CC</u>. Only one of these can be active at a time.

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# STACK MODE - Display Menu

The Display Menu allows you to choose which information is displayed with each Region in the Stack Mode Grid.

#### SHOW NAME

Displays only the Part Name.

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### SHOW PART #

Displays only the Part Number. This corresponds to the Part Number on the Mixer Page.

### SHOW NAME and #

Displays both the Part Name and the Part Number.

# **LIVE MODE - Introduction**



### Watch the Tutorial Video for Live Mode

LIVE MODE is a powerful new feature that allows you to seamlessly switch and layer Patches. LIVE MODE was designed for use in a live performance environment, but is also an inspirational way to interact with the sounds of Omnisphere in composition and production situations. LIVE MODE is especially useful for recording a multi-Part performance using a single MIDI track in your host sequencer.

Using Latch and Trigger Modes together with Live Mode allows powerful control over multi-Part performances that can be switched, layered and quantized in real time.

Use LIVE MODE instead of **STACK MODE** when you want to switch and layer Parts on the fly, or need enhanced visibility in a live environment. LIVE MODE is also ideal if you have two different MIDI hardware controllers connected to Omnisphere.

LIVE MODE offers multiple Part selection methods that can be MIDI Learned and used for switching and layering Parts. The different selection methods can all be used at the same time. This provides a creative and flexible method of working simultaneously with all the Parts that make up a MULTI.

Using LIVE MODE it's possible to seamlessly switch between Parts without interrupting an already playing Part. For example, sustained notes on Part 1 won't cut off or change after switching to and playing notes on Part 2.

When switching from a Patch with a long release time, a new Part can be selected and played without cutting off the release sound of the previous Patch.

The LIVE MODE page has eight Slots, each corresponding to an Omnisphere Part. Patch names are displayed in large, easy to read type, so they can be read clearly while on stage.

A Part can be played when it's selected (a highlighted Part indicates that it is selected). Parts that are not selected will not respond to incoming MIDI Notes. Patches can be layered by selecting multiple Parts.

In LIVE MODE, all of the Parts respond to a single MIDI channel (or two MIDI channels when in Dual Live Mode).

Any Part can be muted and soloed, and controls are available for each Part to adjust mix levels and access the Patch Browser.

### **Omni Live iPhone Application (OSX only)**



Omni Live is an iPhone/iPod Touch application, designed to turn an iPhone (or iPod Touch) into a simple, wireless remote control of Omnisphere's Live Mode page. Since Omnisphere's Live Mode already allows multiple sound selection, the multi-touch display in Omni Live makes a useful and convenient control surface, in the studio or on the stage.

Omni Live allows you to instantly and remotely choose a Patch or combination of Patches on the Live Mode page simply by touching the Patch names on the Omni Live display.

Omni Live works with Omnisphere 1.3 or higher, using either Mac or PC, and is available as a free download from the iTunes App store.

For complete instructions, please visit our website at: http://www.spectrasonics.net/omni live app/

### **Power Button**

To enable LIVE MODE, select the Power Button to the left of the LIVE MODE label.

When LIVE MODE is enabled, you'll see "LIVE MODE" displayed on the left side of the Omnisphere header. This will be visible from any page in the plug-in.

LIVE MODE - MIDI Learn

To MIDI Learn a Part, Right/Control-click on its Slot to open the contextual menu, then choose the Part selection method you would like to MIDI learn.

#### **MIDI CC Learn:**

Select MIDI CC Learn from the menu, and then physically move a control on your MIDI device. The control on your MIDI device will now select the Part.

MIDI Note Learn (Key Select):

Select MIDI Note Learn from the menu, and then play a note from your MIDI controller. That note will now select the Part.

NOTE: Learned MIDI Notes will display as red highlighted keys on the STACK MODE mini-keyboard. Select the Notes setting on the <u>STACK MODE</u> page to display the mini-keyboard.

#### **MIDI Program Change:**

Select MIDI Program Change Learn from the menu, and then press a Program Change button on your MIDI device. This Program Change button will now select the Part.

There are three modes available (Touch, Latch, and Switch) that determine how the Part selection methods operate. See the LIVE MODE Settings section for details.

NOTE: Multiple assignments can be made for a Part. For example, you can assign both <u>MIDI Key Select</u> and <u>MIDI CC</u> to a single Part Slot.

### LIVE MODE - Show Menu

LIVE MODE offers four ways to switch or layer the eight Parts; via MIDI Notes, MIDI CC messages, MIDI Program Change, or via the mouse. The first three methods use MIDI Learn to setup how the Parts will respond. Although all four methods can be active at the same time, only one can be displayed at a time on the interface. The SHOW MENU lets you choose which Part selection method's information is displayed on the LIVE MODE page.

Part Numbers or MIDI Learn assignments are displayed in the boxes to the left of the Part names, either individually or grouped with the optional Mixer Controls. When the Mixer Controls are enabled, this information is displayed in the upper-right corner of the Mixer Controls box.

In the examples below, the Parts are illustrated with and without the Mixer Controls enabled.

#### SHOW: Key Select

Displays the MIDI Note assigned to select the Part.

### SHOW: MIDI CC

Displays the MIDI Control Change number assigned to select the Part.

#### SHOW: Program Change

Displays the MIDI Program Change number assigned to select the Part.

# SHOW: Part Number

This is the default display, which corresponds to the actual Part Number.

# LIVE MODE - Reordering Parts



Parts can be reordered by dragging and dropping them between the eight Slots. Dropping a Part into an occupied Slot doesn't delete the existing Part. Instead, all the remaining Parts will move to make room for the dropped Part.
NOTE: Reordering Parts in the LIVE MODE display will not change their positions in the MIXER. For example, a Patch loaded into Part 3 of the <u>MIXER</u> will remain as Part 3, regardless of which Part Slot it occupies on the LIVE MODE page.

NOTE: <u>MIDI Learn</u> assignments are specific to the Slot, not to the Part. When reordering Parts, MIDI Learn assignments do not move with them, but remain with the Slot.

# **LIVE MODE - Mixer Controls**

Displays the basic mix controls for each of the eight Parts, and includes a Mute button, Solo button, a Level slider and a Folder icon to access the Patch Browser. Any changes made using the Mixer Controls on the LIVE MODE page will be reflected on the MIXER page, since they are the same parameters.

**Mute** – Mutes the Part. Multiple Parts can be Muted. This is a duplicate of the Mute button from the MIXER page, and can be MIDI Learned.

**Solo** – Mutes all Parts except the one that's been selected. Multiple Parts can be Soloed. This is a duplicate of the Solo button from the MIXER page, and can be MIDI Learned.

**Patch Browser** – Opens the Patch Browser, allowing Patches to be loaded into the Part. Closing the Patch Browser returns to the LIVE MODE page.

*

**Level** – Controls the output level of the Part. This is a duplicate of the Level slider from the MIXER page, and can be MIDI Learned.

LIVE MODE - Dual Live Mode

Dual Live Mode adds a second MIDI channel to Live Mode, and is designed for use with two MIDI controllers. It divides the eight Parts into two columns of four Parts each (Parts 1-4, and Parts 5-8). Each column can receive MIDI messages on its own MIDI channel. The color scheme is changed so that the second column is highlighted in white instead of blue.



NOTE: Parts can still be reordered in Dual Live Mode. Parts can also be moved between the two columns (and therefore switched between MIDI channels), simply by dragging them from one column to the other.

TIP: Using Dual Live Mode with two MIDI controllers, it's possible to setup one MIDI Controller to be used exclusively for playing the eight Parts, while the other MIDI Controller is dedicated to Part selection.



# LIVE MODE - Latch & Trigger Modes

The Latch Mode and Trigger Mode features extend the multi-timbral performance capabilities of Omnisphere, especially when used together

with Live Mode or Stack Mode.

They enable real-time creation of complex, multi-Part performances with full synchronization between Parts, and across multiple Omnisphere, Trilian and Stylus RMX instances, without the need for traditional sequencing techniques.

Latch Mode causes notes to be held when played (or toggled off when played again), allowing quick triggering of repeating arpeggiated phrases or sustained sounds, while freeing the hands to play additional notes for layering, or for switching to other Parts to play new phrases on top.

Using Trigger Modes, incoming MIDI notes can be quantized in real-time, making it very easy to experiment and improvise along with other Parts and clocked sources without losing synchronization. These features are a lot of fun to use for jamming and building up ideas quickly!

Used together, they enable a wide range of creative performance, live remixing, and composition techniques to discover and explore.



# LIVE MODE - Latch Mode

When Latch Mode is enabled for a Part, repeatedly playing a note will toggle the note on and off. When it is toggled on, the note will continue to sustain, even if the note is released. Playing the same note again will toggle it off.

Latch Mode is accessed from the LIVE MODE page, using the Latch Mode View button.



NOTE: A Part's Latch Mode status can also be viewed & changed from the LIVE MODE page using the Latch Mode View button, or from the EDIT Page, using the controls in the Footer.

Latch Mode allows rapid and creative layering of multiple notes or Parts, which you can then play along with by switching to other Parts in Live Mode. Using Latch Mode is extremely useful when working with rhythmic sounds, and used together with Trigger Modes, allows one-shot triggering of sounds quantized in real-time.

Latch Mode is set independently for each of the eight Parts. It is also independent from Live Mode, so Live Mode does not need to be enabled for Latch Mode to be active.

# Viewing & Enabling Latch Mode

To view or adjust the Latch Mode status for a Part, open the LIVE MODE page, and select the Latch Mode View button to open the Latch Mode View.

NOTE: The Latch Mode View button toggles between the Latch Mode and Live Mode views. Closing the Latch Mode View does not change or disable the Latch Mode or Trigger Mode settings.



When the Latch Mode View is open, you will see the Latch & Trigger Mode Part Controls.

Selecting the Latch Mode Icon for a Part will enable Latch Mode for that Part. The Icon will highlight to indicate that Latch Mode is enabled for the Part.

If you are already holding sustained notes when you enable Latch Mode, those held notes will be latched.

Selecting the Latch Mode Icon again will disable Latch Mode for the part.



NOTE: Disabling Latch Mode for a Part while it's playing will immediately send an "All Notes Off" message to the Part. The tails from FX and release stages from envelopes will continue to decay. The All Notes Off command will apply to all notes that are playing on that Part.

Latch Mode Icons are MIDI-learnable, so you can assign a hardware control to remotely enable or disable Latch Mode for a Part.

### All Notes Off



Sometimes when using Latch Mode, it's possible to lose track of which notes are latched, or you might have multiple Parts playing in Latch Mode that you want to stop simultaneously.

The All Notes Off button will send an "All Notes Off" message to all 8 Parts at once. FX tails and release stages from envelopes will continue to decay, so the cut off is not unnaturally abrupt. Notes being played on all Parts will be stopped, regardless of their Latch status.

The All Notes Off button is MIDI-learnable, which allows you to trigger it using a hardware controller.

NOTE: If you have multiple Parts playing using Latch Mode and only want to stop one Part, disable that Part's Latch Mode Icon to send an All Notes Off message only to that Part.

# LIVE MODE - Trigger Mode

[]		E MODE 🕮	<b>♦</b> ♦
2 * 1 2	Half Time Malevolence 2	1 × 5 L	Resonant Space Click
ມ * 2 ເ	Ebowed Plano Zing Swell	1 * 6 E	Pulsing Resonance
• * 3 L	Mid Range Echoes	1 * 7 E	Adagio Expressivo
• * 4 •	Undercover Operation	: * 8 E	Grooving Metallophone

Trigger Mode enables real-time quantization of incoming MIDI notes, so that multiple Parts will always play in sync.

Trigger Mode is accessed from the LIVE MODE page, using the Latch Mode View button.



NOTE: Trigger Modes can also be viewed & accessed from the STACK MODE page using Part Regions and their context menus, or from the EDIT Page using the controls in the Footer.

When playing complex phrases or rhythmic sounds along with other sequences, it can be difficult to sync those performances. Trigger Mode solves these problems by quantizing live MIDI input. With Trigger Modes other than Immediate selected, the playback from each incoming MIDI note is delayed until the the next point on the bar/beat grid is reached. This makes it much easier to play in a live performance setting with complete synchronization.

Trigger Mode controls the playback start time of MIDI notes played live via a MIDI controller or from MIDI notes sent from a MIDI track in the host sequencer.

Trigger Modes are set independently for each of the eight Parts, and Trigger Modes are independent from Live Mode, so Live Mode does not need to be enabled for Trigger Modes to be active.

## Using Trigger Mode in Live Mode

Using the switching and layering capabilities of Live Mode together with Trigger Mode quantizing allows for some exciting performance possibilities.

For example, you can easily switch between or layer two different arpeggiating sounds, without worrying about falling out of sync as you play.

Trigger Modes can also be used while browsing and auditioning sounds. If you have selected a Trigger Mode other than Immediate for the Part, the sounds will be real-time quantized and will play in sync with the host or other clocked source as you audition them.

## Viewing & Selecting Trigger Modes



To view and select the Trigger Mode for a Part, open the LIVE MODE page, and select the Latch Mode View button to open the Latch Mode View.

NOTE: The Latch Mode View button toggles between the Latch Mode and Live Mode views. Closing the Latch Mode View does not change or disable Latch Mode or Trigger Mode settings.



When the Latch Mode View is enabled, you will see the Latch & Trigger Mode Part Controls. The Trigger Mode Icon will display the currently selected Trigger Mode for the Part, and allows you to access the Trigger Mode menu for that Part.

_		Trigger immediate	
J	1	Trigger next 1/16	
1		Trigger next beat	
		Trigger next bar	ſ
L			

Select the Trigger Mode icon, and choose the desired Trigger Mode from drop-down menu. A checkmark will appear next to the selected option, and the Trigger Mode icon will change to reflect the selected Trigger Mode.

### **Trigger Modes**

Immediate: This is the default Trigger Mode. MIDI input is not quantized, and playback of MIDI notes is immediate.

**Next 16th:** this option delays the playback of incoming MIDI notes to the next 16th note. In other words, notes are quantized in real time to the next 16th note. If you play ahead of the next 16th, there may be a slight delay before the note sounds. This delay will be a maximum of a 16th note at the current tempo. This mode makes it easy to play quick phrases in perfect sync with other Parts or clocked sources.

**Next Beat**: this option delays playback to the next beat. If incoming MIDI notes arrive ahead of the next beat, the delay is a maximum of one beat. Next Beat mode makes it very easy to trigger rhythmic patches in perfect sync, and when used together with Latch Mode, for layering phrases that are quantized to the beat in real time.

**Next Bar:** delays playback until the next bar. If MIDI messages arrive ahead of the next bar, the delay is a maximum of one bar. This mode is especially useful if you want to synchronize phrases on the downbeat of a measure. You can press a note anytime in the previous bar and it will wait until the next bar to play.

NOTE: The selected Trigger Mode also affects a Part's Arpeggiator, LFOs and Envelopes. These will also be delayed until the note itself is triggered.

# LIVE MODE - Previous/Next

The Previous/Next arrows step through the eight Slots one at a time, changing the selected Part without stopping any notes currently being played. The Previous/Next arrows can be MIDI Learned, so they can be triggered via MIDI messages.

When <u>Dual Live Mode</u> is enabled, two sets of Previous/Next arrows will be visible. The left set will step through Part Slots 1-4, and the right set will step through Part Slots 5-8. Both sets can be MIDI learned via their respective MIDI channels.



SETTINGS PARTS 1-8		
MIDI CC	С U	
Program Change	с U	
Key Select	C)	
MIDI Channel	Any *	
Mouse Select Mode	Touch	
MIDI CC Mode	Latch 🔻	
Key Select Mode	Touch 🔻	
Key Select Display Format	C4 is 60 🔻	
Prog Change Display Format	1 to 128 🔹	

The SETTINGS page allows the configuration of LIVE MODE parameters. These include the Part selection methods that LIVE MODE will respond to, as well as settings for MIDI Channel, Modes, and Display Formats.

## Settings in Dual Live Mode

When Dual Live Mode is enabled, the Settings options are duplicated for both channels and grouped as Parts 1-4 and Parts 5-8 (corresponding to the two columns in Dual Live Mode). This allows settings to be customized individually for each MIDI device.

NOTE: LIVE MODE Settings are saved with the MULTI.

## **Key Select**

When enabled, Parts can be selected using learned MIDI Control Change messages. When disabled, Parts will not respond to MIDI Control Change messages.

### **Program Change**

When enabled, Parts can be selected using learned MIDI Program Change messages. When disabled, Parts will not respond to Program Change messages.

## **Key Select**

When enabled, Parts can be selected using learned MIDI Note messages. When disabled, Parts will not respond to MIDI Note messages.

NOTE: Even when the MIDI CC, PROGRAM CHANGE or KEY SELECT buttons are disabled, you can still add new <u>MIDI Learn</u> assignments. LIVE MODE will make the new assignments, but will not respond to those MIDI messages until the respective Power Button is enabled.

## **MIDI Channel**

Determines which MIDI Channel LIVE MODE will respond to.

Any - Will respond to MIDI messages sent from any MIDI channel.

CH:1 - CH:16 - Will only respond to MIDI messages sent from the specified MIDI channel.

### Mouse Select Mode

Parts can be selected (or deselected) using a Mouse.

Latch – Latch Mode acts as an 'on/off' toggle, so when a Part is first selected with the Mouse cursor, it can be played. When it's selected again, the Part is deselected. Using Latch mode, multiple Parts can be selected for layered playing.

**Touch** – Only the Part currently selected with the Mouse cursor can be played. Selecting another Part switches to the new Part. Touch mode is useful for switching sounds quickly and is the default Mouse Select Mode.

## MIDI CC Mode

Parts can be selected or deselected using MIDI Control Change messages.

Latch - Latch Mode acts as an 'on/off' toggle. Sending a learned MIDI CC message to a Part will select it. Another message from that MIDI CC assignment will deselect the Part.

NOTE: Latch Mode is intended for use with MIDI controllers that are set to use momentary mode. If your MIDI controller is set to use toggle mode, you should use Switch Mode instead of Latch Mode when using MIDI CC.

Touch - Sending a learned MIDI CC message to a Part will select it, and all other Parts will be deselected. Only one Part can be selected at a time using Touch Mode with MIDI CC.

NOTE: If you want to use Touch Mode to select multiple Parts at once, please use Key Select rather than MIDI CC. Using Touch Mode with Key Select supports the selection of multiple Parts.

**Switch** - The default Mode. Parts will be selected corresponding exactly with the actions of the learned MIDI CC messages. If the learned CC is at 0, the Part is deselected. If the learned CC is at 127, the Part is selected.

NOTE: Each Part responds to the CC events from your MIDI controller based on how you have the MIDI buttons programmed. You can program your MIDI controller in toggle mode or momentary mode and the Parts will respond accordingly.

Key Select Mode

Parts can be selected or deselected using MIDI Note messages, such as notes on your MIDI keyboard. Once notes have been learned they will no longer trigger sounds when sent, but will instead select and deselect Parts according to the chosen mode.

Latch – Latch mode acts as an 'on/off' toggle. Sending a learned MIDI Note message to a Part will select it. Sending the note again will deselect the Part.

Touch – Sending a learned MIDI Note message to a Part will select it, and all other Parts will be deselected. If multiple MIDI Note messages are sent at once, any combination of Parts can be selected at once. This is the default Key Select mode and is very useful for live performance, since it allows instant selection of any combination of Parts.

Switch - Parts will remain selected only while holding down the assigned Note on a MIDI keyboard

Key Select Display Format

Middle-C (note number 60) is referred to in two different ways - as either C3 or C4 - depending on the MIDI device manufacturer. You can choose either numbering convention, based on your keyboard or your host software. Please refer to your device or host's owner's manual to determine which is the correct setting.

**Program Change Display Format** 

The LIVE MODE display can accommodate different Program Change numbering systems. Some MIDI devices have Program Change systems that are based on 8 numbers instead of 10. Others use 0-127 or 1-128. This option allows you to change the display to match your MIDI device. Please consult your MIDI device's owner's manual to determine which is the correct setting.

Omnisphere



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LIVE MODE - MIDI Learn

To MIDI Learn a Part, Right/Control-click on its Slot to open the contextual menu, then choose the Part selection method you would like to MIDI learn.

### MIDI CC Learn:

Select MIDI CC Learn from the menu, and then physically move a control on your MIDI device. The control on your MIDI device will now select the Part.

MIDI Note Learn (Key Select):

Select MIDI Note Learn from the menu, and then play a note from your MIDI controller. That note will now select the Part.

NOTE: Learned MIDI Notes will display as red highlighted keys on the STACK MODE minikeyboard. Select the Notes setting on the <u>STACK MODE</u> page to display the minikeyboard.

#### **MIDI Program Change:**

Select MIDI Program Change Learn from the menu, and then press a Program Change button on your MIDI device. This Program Change button will now select the Part.

There are three modes available (Touch, Latch, and Switch) that determine how the Part selection methods operate. See the LIVE MODE Settings section for details.

NOTE: Multiple assignments can be made for a Part. For example, you can assign both <u>MIDI Key Select</u> and <u>MIDI CC</u> to a single Part Slot.



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LIVE MODE offers four ways to switch or layer the eight Parts; via MIDI Notes, MIDI CC messages, MIDI Program Change, or via the mouse. The first three methods use MIDI Learn to setup how the Parts will respond. Although all four methods can be active at the same time, only one can be displayed at a time on the interface. The SHOW MENU lets you choose which Part selection method's information is displayed on the LIVE MODE page.

Part Numbers or MIDI Learn assignments are displayed in the boxes to the left of the Part names, either individually or grouped with the optional Mixer Controls. When the Mixer Controls are enabled, this information is displayed in the upper-right corner of the Mixer Controls box.

In the examples below, the Parts are illustrated with and without the Mixer Controls enabled.

## SHOW: Key Select

Displays the MIDI Note assigned to select the Part.

SHOW: MIDI CC

Displays the MIDI Control Change number assigned to select the Part.

LIVE MODE - Show Menu

# SHOW: Program Change

Displays the MIDI Program Change number assigned to select the Part.

## SHOW: Part Number

This is the default display, which corresponds to the actual Part Number.



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# **少** LIVE MODE Ð 1414 PREVIOUS NEXT SHOW: Part N 2 6 **Buenos Aires** Sine Bass 3 Hat 4 **Orange Lounge Groove** Altered Sleep Cycle 1 1 8 Kick

Parts can be reordered by dragging and dropping them between the eight Slots. Dropping a Part into an occupied Slot doesn't delete the existing Part. Instead, all the remaining Parts will move to make room for the dropped Part.

NOTE: Reordering Parts in the LIVE MODE display will not change their positions in the MIXER. For example, a Patch loaded into Part 3 of the <u>MIXER</u> will remain as Part 3, regardless of which Part Slot it occupies on the LIVE MODE page.

NOTE: <u>MIDI Learn</u> assignments are specific to the Slot, not to the Part. When reordering Parts, MIDI Learn assignments do not move with them, but remain with the Slot.

# LIVE MODE - Reordering Parts



# LIVE MODE - Mixer Controls

Displays the basic mix controls for each of the eight Parts, and includes a Mute button, Solo button, a Level slider and a Folder icon to access the Patch Browser. Any changes made using the Mixer Controls on the LIVE MODE page will be reflected on the **MIXER** page, since they are the same parameters.

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**Mute** – Mutes the Part. Multiple Parts can be Muted. This is a duplicate of the Mute button from the MIXER page, and can be MIDI Learned.

**Solo** – Mutes all Parts except the one that's been selected. Multiple Parts can be Soloed. This is a duplicate of the Solo button from the MIXER page, and can be MIDI Learned.

**Patch Browser** – Opens the Patch Browser, allowing Patches to be loaded into the Part. Closing the Patch Browser returns to the LIVE MODE page.

**Level** – Controls the output level of the Part. This is a duplicate of the Level slider from the MIXER page, and can be MIDI Learned.

*



# LIVE MODE - Dual Live Mode

Dual Live Mode adds a second MIDI channel to Live Mode, and is designed for use with two MIDI controllers. It divides the eight Parts into two columns of four Parts each (Parts 1-4, and Parts 5-8). Each column can receive MIDI messages on its own MIDI channel. The color scheme is changed so that the second column is highlighted in white instead of blue.



NOTE: Parts can still be reordered in Dual Live Mode. Parts can also be moved between the two columns (and therefore switched between MIDI channels), simply by dragging them from one column to the other.

TIP: Using Dual Live Mode with two MIDI controllers, it's possible to setup one MIDI Controller to be used exclusively for playing the eight Parts, while the other MIDI Controller is dedicated to Part selection.

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# LIVE MODE - Latch & Trigger Modes

[ <del>1</del> 4 <del>1</del> 4]	LATCH	LIVE MODE	ŧ,	PREVIOUS
(		SHOW: Part Number		NEXT V
1.1		1.7		
1	Half Time Malevolence 2	5		Resonant Space Click
ų -				
2	Ebowed Piano Zing Swell	6		Pulsing Resonance
3	Mid Range Echoes	7		Adagio Expressivo
4	Undercover Operation	8		Grooving Metallophone
2				

The Latch Mode and Trigger Mode features extend the multi-timbral performance capabilities of Omnisphere, especially when used together with Live Mode or Stack Mode.

They enable real-time creation of complex, multi-Part performances with full synchronization between Parts, and across multiple Omnisphere, Trilian and Stylus RMX instances, without the need for traditional sequencing techniques.

Latch Mode causes notes to be held when played (or toggled off when played again), allowing quick triggering of repeating arpeggiated phrases or sustained sounds, while freeing the hands to play additional notes for layering, or for switching to other Parts to play new phrases on top.

Using Trigger Modes, incoming MIDI notes can be quantized in real-time, making it very easy to experiment and improvise along with other Parts and clocked sources without losing synchronization. These features are a lot of fun to use for jamming and building up ideas quickly!

Used together, they enable a wide range of creative performance, live remixing, and composition techniques to discover and explore.



# LIVE MODE - Previous/Next

The Previous/Next arrows step through the eight Slots one at a time, changing the selected Part without stopping any notes currently being played. The Previous/Next arrows can be MIDI Learned, so they can be triggered via MIDI messages.

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When <u>Dual Live Mode</u> is enabled, two sets of Previous/Next arrows will be visible. The left set will step through Part Slots 1-4, and the right set will step through Part Slots 5-8. Both sets can be MIDI learned via their respective MIDI channels.



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MIDI CC	С U	
Program Change	С С	
Key Select	С С	
MIDI Channel	Any 🔻	
Mouse Select Mode	Touch	
MIDI CC Mode	Latch	
Key Select Mode	Touch v	
Key Select Display Format	C4 ls 60 🔻	
Prog Change Display Format	1 to 128 🔻	

The SETTINGS page allows the configuration of LIVE MODE parameters. These include the Part selection methods that LIVE MODE will respond to, as well as settings for MIDI Channel, Modes, and Display Formats.

### Settings in Dual Live Mode

When Dual Live Mode is enabled, the Settings options are duplicated for both channels and grouped as Parts 1-4 and Parts 5-8 (corresponding to the two columns in Dual Live Mode). This allows settings to be customized individually for each MIDI device.

NOTE: LIVE MODE Settings are saved with the MULTI.

### **Key Select**

When enabled, Parts can be selected using learned MIDI Control Change messages. When disabled, Parts will not respond to MIDI Control Change messages.

#### **Program Change**

When enabled, Parts can be selected using learned MIDI Program Change messages. When disabled, Parts will not respond to Program Change messages.

## **Key Select**

When enabled, Parts can be selected using learned MIDI Note messages. When disabled, Parts will not respond to MIDI Note messages.

NOTE: Even when the MIDI CC, PROGRAM CHANGE or KEY SELECT buttons are disabled, you can still add new <u>MIDI Learn</u> assignments. LIVE MODE will make the new assignments, but will not respond to those MIDI messages until the respective Power Button is enabled.

**MIDI Channel** 

Determines which MIDI Channel LIVE MODE will respond to.

Any – Will respond to MIDI messages sent from any MIDI channel.

 $\mbox{CH:1}-\mbox{CH:16}-\mbox{Will only respond to MIDI messages sent from the specified MIDI channel.}$ 

**Mouse Select Mode** 

Parts can be selected (or deselected) using a Mouse.

**Latch** – Latch Mode acts as an 'on/off' toggle, so when a Part is first selected with the Mouse cursor, it can be played. When it's selected again, the Part is deselected. Using Latch mode, multiple Parts can be selected for layered playing.

**Touch** – Only the Part currently selected with the Mouse cursor can be played. Selecting another Part switches to the new Part. Touch mode is useful for switching sounds quickly and is the default Mouse Select Mode.

### MIDI CC Mode

Parts can be selected or deselected using MIDI Control Change messages.

**Latch** - Latch Mode acts as an 'on/off' toggle. Sending a learned MIDI CC message to a Part will select it. Another message from that MIDI CC assignment will deselect the Part.

NOTE: Latch Mode is intended for use with MIDI controllers that are set to use momentary mode. If your MIDI controller is set to use toggle mode, you should use Switch Mode instead of Latch Mode when using MIDI CC.

**Touch** - Sending a learned MIDI CC message to a Part will select it, and all other Parts will be deselected. Only one Part can be selected at a time using Touch Mode with MIDI CC.

NOTE: If you want to use Touch Mode to select multiple Parts at once, please use Key Select rather than MIDI CC. Using Touch Mode with Key Select supports the selection of multiple Parts.

**Switch** - The default Mode. Parts will be selected corresponding exactly with the actions of the learned MIDI CC messages. If the learned CC is at 0, the Part is deselected. If the learned CC is at 127, the Part is selected.

NOTE: Each Part responds to the CC events from your MIDI controller based on how you have the MIDI buttons programmed. You can program your MIDI controller in toggle mode or momentary mode and the Parts will respond accordingly.

### Key Select Mode

Parts can be selected or deselected using MIDI Note messages, such as notes on your MIDI keyboard. Once notes have been learned they will no longer trigger sounds when sent, but will instead select and deselect Parts according to the chosen mode.

**Latch** – Latch mode acts as an 'on/off' toggle. Sending a learned MIDI Note message to a Part will select it. Sending the note again will deselect the Part.

**Touch** – Sending a learned MIDI Note message to a Part will select it, and all other Parts will be deselected. If multiple MIDI Note messages are sent at once, any combination of Parts can be selected at once. This is the default Key Select mode and is very useful for live performance, since it allows instant selection of any combination of Parts.

 $\ensuremath{\textbf{Switch}}$  – Parts will remain selected only while holding down the assigned Note on a MIDI keyboard

**Key Select Display Format** 

Middle-C (note number 60) is referred to in two different ways - as either C3 or C4 - depending on the MIDI device manufacturer. You can choose either numbering convention, based on your keyboard or your host software. Please refer to your device or host's owner's manual to determine which is the correct setting.

Program Change Display Format

The LIVE MODE display can accommodate different Program Change numbering systems. Some MIDI devices have Program Change systems that are based on 8 numbers instead of 10. Others use 0-127 or 1-128. This option allows you to change the display to match your MIDI device. Please consult your MIDI device's owner's manual to determine which is the correct setting.

MEMORY	TUNING	MODULATION	
Process limit	440 Hz	WHEEL	Wheel
Memory used 353 mb (avail. 1,326)	MASTER TUNING	AFTERTOUCH	Atter -
STREAMING	MISCELLANEOUS	PITCH BENDER	MidICC 56
MODE Streamed	SWITCH TO LAYER UPON ACTIVATION	BREATH CONTROL	Breath
PRE-LOAD MEMORY SIZE	SYNG TABBED PANES TOGETHER	FOOT CONTROL	Foot
NUM BYTES PER READ	ROUND ROBIN No variation	EXPRESSION	Expres
	STARTUP PAGE Main Controls	SUSTAIN	Sustain
STREAM READ-AHEAD	ACCEPT OWNI LIVE CONNECTIONS OFF	SOSTENUTO	Sout
STREAM BRAKE		SOFT PEDAL	Soft *
0 - 0 - 1,730(0)		LEGATO	Legato ·
		UBER CC	MidICC 13

The System page in Omnisphere is a universal control area that governs how Omnisphere's sounds are streamed, set some user defaults and configures the modulation controls.





The Sample Memory Menu allows you to manually limit the amount of virtual memory Omnisphere can use for Sample Memory.

The default is 'Process limit'. To disable memory limit alerts, use 'No limit on Sample Memory' instead.

✓ No limit on Sample Memory
Process limit
0.25 gb limit
0.50 gb limit
0.75 gb limit
1.00 gb limit
1.25 gb limit
1.50 gb limit
1.75 gb limit
2.00 gb limit
2.25 gb limit
2.50 gb limit
2.75 gb limit
3.00 gb limit

Selecting a value from the drop-down menu sets the maximum amount of virtual memory Omnisphere will have available to use.

Using the up-down steppers will step through the available values.

NOTE: Omnisphere Soundsources can require a great deal of memory. When limiting the amount of memory available to Omnisphere, it is a good idea to also apply Sample Thinning using the Patch Browser <u>Lite Version</u> feature, or the thinning options on the Soundsource Zoom Edit View.

## **Memory Meter**

The Memory Meter displays the amount of memory currently in use by Omnisphere, along with the remaining available memory. This display mirrors the Memory Gauge found on the Browser Pages.



NOTE: When Server Mode (Mac only) is enabled, the <u>Sample Memory Menu</u> will show "No limit on Sample Memory". This is correct for Server Mode. The Memory Meter will always display "Memory used 0 mb", but will continue to display your remaining available memory.

SYSTEM - Streaming



The first column contains controls for the streaming function in Omnisphere. Streaming permits samples to largely reside on disk. In this way you can use large samples with a relatively small amount of memory.

### **Streaming Swtich**



This button engages or disengages drive streaming in Omnisphere. If you disable disc streaming your sounds will take longer to load and will take up more RAM.

It's recommended to leave streaming ON unless you know what you are doing (e.g. have lots of physical memory) or need to disable hard drive streaming.

NOTE: On the Mac version of Omnisphere, the Streaming Switch is replaced by a Mode menu, which adds a <u>Sample File Server</u> as an alternative to using 64-bit hosts.

### **Pre-Load Memory Size**

Determines how much memory is devoted to sample pre-load. The higher the settings, the less likely that glitches will occur due to streaming problems. However, turning it up requires more memory and will increase the load time for Soundsources.

Recommended values are between 22,000 to 66,000, with 60,000 as the standard default value. If patches make use Timbre or Sample-Start, this parameter might need to be raised over 40,000.

NOTE - Soundsources must be reloaded when changing this parameter before the new value will take effect.

Range - 1000 samples to 100,000 samples

#### Num Bytes Per Read

Determines the size of each read of sample data. Increasing this setting improves performance when working with a small number of large samples. The recommended setting is around 150,000. This parameter is generally not as important as the Pre-Load Memory Size. Values smaller than 100,000 should be avoided.

Range - 1000 Bytes to 480,000 Bytes

Lock Memory

Determines if RAM is dedicated to holding the Pre-Load memory. Lock Memory should be kept on except for rare cases where RAM is unavailable for this purpose (such as running many large applications simultaneously.) Soundsources must be reloaded when changing this parameter before it will take effect.

### System Read-Ahead

This switch increases low-level disc read-ahead so fewer physical disc head movements are needed to perform several consecutive read actions. Since Stream Read-Ahead improves efficiency in almost all situations it should be left on.

## Stream Brake

The control balances system resources between streaming and other operations. This is the second most important streaming parameter, after the Pre-Load Memory Size. It should generally be set to a moderate value around 0.1. Values above 0.5 may lead to streaming glitches due to deferring streaming reads in order to give priority to other processing operations in the application. Turning it down to zero may cause glitches in other operations due to the streaming monopolizing the CPU. There is a relationship between this parameter and the Num Bytes Per Read parameter. When that parameter is turned up, this parameter should generally also be turned up.

Range - 0.00 seconds to 1.00 seconds

Stream Display

Left number - The number of streams in progress. Should normally be zero, but should flash temporarily to a non-zero number when a note is started. If it stays non-zero for several seconds, that may be a problem, and so reducing the Brake (or increasing the PreLoad) would be recommended.

**Middle number** - The number of notes in progress. Should be zero when no notes are playing. May be a 2x or 4x multiple of the number of notes when doing velocity cross fading, or when there are multiple layers.

**Right number** - The number of samples that are "pre loaded" (including all voices in all parts). Should go up and down as various SoundSources are loaded. It may "lag" a bit behind load actions, which is normal.

**Right number in parenthesis** - number of samples loaded in "Streaming = OFF " mode. Should always be zero unless Streaming is turned off. An error is indicated by the streaming status display at the bottom of the left column on the system page when you see two numbers at the end of the display;

# SYSTEM - Sample File Server



On the Mac version of Omnisphere, the Streaming Switch is replaced by the Mode menu, and provides an additional Server mode for loading sample data.

NOTE: The Server mode only works on Mac, so you wont see the Mode menu on Windows. On Windows, use a 64-bit host instead.

Server mode is a way of solving the "out of memory" problem that can happen when using large sample sets with 32-bit hosts and is an alternative to using 64-bit hosts. The Server mode should be used when you are running a 32-bit host on Mac, and you are loading large samples. If you are running a Mac 64-bit host (such as Logic 9.1 or higher), it is not necessary to enable Server mode.

NOTE: The Sample File Server uses physical RAM to load samples, and a minimum of 6GB of RAM is recommended when using Server Mode, especially when loading larger Keyswitch Multis.

The Streaming Mode Menu contains three items: Streamed, Not Streamed, and Server. Streamed and Not Streamed enable and disable Streaming. Select the Server option to enable the Sample File Server.



When Server is enabled, a new system process is created (in addition to the host process) called SpectrasonicsServer. It will appear in the Mac Activity Monitor. Omnisphere starts and stops that process automatically, so you should never have to worry about it.

NOTE: Server mode uses streaming internally, so the remaining stream-related controls in the Streaming section are still applied and useful when in Server mode.

# **SYSTEM - Miscellaneous Introduction**



This area determines the settings for master tuning, the instrument's startup page and preferences for how the Layers behave in the interface.

## Startup Page Preference

STARTUP PAGE	Main Controls	

Omnisphere's default startup page is the Main Page. This menu allows you to set either the Main Page or the Edit page as the startup page.



# Switch To Layer Upon Activation Preference



The Layer MIX sliders on the **EDIT** page have activation buttons below them. If Switch To Layer Upon Activation is set to "ON", then whenever you turn on a Layer, it will automatically switch the EDIT page's view to that Layer.

For example, if Layer A is activated, but Layer B is not, and you select the Layer B activation button, the EDIT page's view will switch to Layer B.

Omnisphere

This is the default behavior and the way that Atmosphere worked. If you prefer to not have the automatic Layer switching, you can turn that behavior off here.

If Switch To Layer Upon Activation is off, then Layer activation will not cause the Edit page to change to the activated Layer.

### Sync Tabbed Panes Together

When enabled, this function will ensure that when you change from one Part to a different Part, the view will be the same.

For example, if Part1 has the FX page selected, and then Part2 is selected, it will also display the FX page. If Sync Tabbed Panes Together is disabled, then the views will not synchronize – they'll change depending what Part you are on.

### **Round Robin**



Repeated notes on a sample-based instrument can typically cause a "machine gun" effect, with notes repeating monotonously. Round Robin is a sampling technique that allows a repeated note to trigger a different sampled "take" each time it's played. This makes repeated notes sound very natural, and eliminates the machine gun effect.

Some Soundsources include multi-sampled Round Robin samples, which means we recorded multiple takes for each note and velocity. In fact, a single Soundsource can contain a huge number of Round Robin samples! This is particularly true for Trilian basses. If you are loading Trilian sounds into Omnisphere using Omnisphere Library Integration, this setting can be especially useful.



The Round Robin Menu lets you select how Round Robin samples will be ordered when two or more Round Robin samples are loaded into memory.

There are four playback options available on the drop-down menu: No Variation, Random, Random Full Cycle, and Sequential.

NOTE: The Sample Thinning settings located in the Patch Browser's <u>Lite Version Zoom</u> or the Soundsource Zoom Edit View determine how many Round Robin samples are loaded with the Patch or Soundsource.

## Accept Omni Live Connections



Enabling this option allows Omnisphere to communicate with the Omni Live iPhone application. When Accept Omni Live Connections is enabled, Omni Live will be able to automatically connect to Omnisphere when launched.

For complete instructions on setting up Omni Live, please visit our website at: http://www.spectrasonics.net/omni live app/

# **SYSTEM - Modulation**

Omnisphere

The MODULATION assignments section allows you to override and remap the standard MIDI messages used the <u>Modulation Matrix</u> sources in Omnisphere. Simply select the drop-down menu next to one of the fourteen modulation types and a pop up will appear that says "Move MIDI Controller". Then on your MIDI controller move the knob, slider or wheel that you wish to use to remap to that Modulation source.

The 'User CC' Modulation source is particularly useful for adding an additional, non-standard MIDI Controller into the Omnisphere Modulation Matrix - without disrupting any of the standard assignments.

# **SYSTEM - MIDI Controller**

The choices for MIDI modulation source in Omnisphere include a variety of standard MIDI controllers such as Wheel, Expression, Soft Pedal, etc. You can use these options on the System Page to map those sources to other MIDI controls. This can be useful if you don't have a particular physical controller such as an Expression Pedal. For example, if you map Wheel to Breath Control, you can use a Breath Controller in any patches that use the Wheel as a modulation source.

To re-map any of these controllers, select a menu in the MODULATION column and move the controller that you want to assign to modulation type.

NOTE: The remapped control will only be visible on the System Page. In the Modulation Matrix and Modulation Source menu of the Edit Page the original Modulation Source name will be shown. For this reason, it's recommended to use the 'User CC' source, since that's not used in any factory patches.

# SYSTEM - Master Tuning

This is Omnisphere's global tuning parameter. That means any tuning change you make on MASTER TUNING will affect any other <u>tuning</u> <u>settings</u> in the instrument. The default is 440Hz, which is the standard for most Western music. For other tuning standards, Omnisphere's master pitch can be changed to accommodate any of them.

Range – 420Hz-460Hz



## **SYSTEM - Memory Management**



The Sample Memory Menu allows you to manually limit the amount of virtual memory Omnisphere can use for Sample Memory.

The default is 'Process limit'. To disable memory limit alerts, use 'No limit on Sample Memory' instead.

✓ No limit on Sample	Memory
Process limit	
0.25 gb limit	
0.50 gb limit	
0.75 gb limit	
1.00 gb limit	
1.25 gb limit	
1.50 gb limit	
1.75 gb limit	
2.00 gb limit	
2.25 gb limit	
2.50 gb limit	
2.75 gb limit	
3.00 gb limit	

Selecting a value from the drop-down menu sets the maximum amount of virtual memory Omnisphere will have available to use.

Using the up-down steppers will step through the available values.

NOTE: Omnisphere Soundsources can require a great deal of memory. When limiting the amount of memory available to Omnisphere, it is a good idea to also apply Sample Thinning using the Patch Browser <u>Lite Version</u> feature, or the thinning options on the Soundsource Zoom Edit View.

### **Memory Meter**

The Memory Meter displays the amount of memory currently in use by Omnisphere, along with the remaining available memory. This display mirrors the Memory Gauge found on the Browser Pages.



NOTE: When Server Mode (Mac only) is enabled, the <u>Sample Memory Menu</u> will show "No limit on Sample Memory". This is correct for Server Mode. The Memory Meter will always display "Memory used 0 mb", but will continue to display your remaining available memory.

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# SYSTEM - Streaming



The first column contains controls for the streaming function in Omnisphere. Streaming permits samples to largely reside on disk. In this way you can use large samples with a relatively small amount of memory.

#### **Streaming Swtich**



This button engages or disengages drive streaming in Omnisphere. If you disable disc streaming your sounds will take longer to load and will take up more RAM.

It's recommended to leave streaming ON unless you know what you are doing (e.g. have lots of physical memory) or need to disable hard drive streaming.

NOTE: On the Mac version of Omnisphere, the Streaming Switch is replaced by a Mode menu, which adds a <u>Sample File Server</u> as an alternative to using 64-bit hosts.

#### **Pre-Load Memory Size**

Determines how much memory is devoted to sample pre-load. The higher the settings, the less likely that glitches will occur due to streaming problems. However, turning it up requires more memory and will increase the load time for Soundsources.

Recommended values are between 22,000 to 66,000, with 60,000 as the standard default value. If patches make use Timbre or Sample-Start, this parameter might need to be raised over 40,000.

NOTE - Soundsources must be reloaded when changing this parameter before the new value will take effect.

Range - 1000 samples to 100,000 samples

Num Bytes Per Read

Determines the size of each read of sample data. Increasing this setting improves performance when working with a small number of large samples. The recommended setting is around 150,000. This parameter is generally not as important as the Pre-Load Memory Size. Values smaller than 100,000 should be avoided.

Range - 1000 Bytes to 480,000 Bytes

### Lock Memory

Determines if RAM is dedicated to holding the Pre-Load memory. Lock Memory should be kept on except for rare cases where RAM is unavailable for this purpose (such as running many large applications simultaneously.) Soundsources must be reloaded when changing this parameter before it will take effect.

#### System Read-Ahead

This switch increases low-level disc read-ahead so fewer physical disc head movements are needed to perform several consecutive read actions. Since Stream Read-Ahead improves efficiency in almost all situations it should be left on.

## Stream Brake

The control balances system resources between streaming and other operations. This is the second most important streaming parameter, after the Pre-Load Memory Size. It should generally be set to a moderate value around 0.1. Values above 0.5 may lead to streaming glitches due to deferring streaming reads in order to give priority to other processing operations in the application. Turning it down to zero may cause glitches in other operations due to the streaming monopolizing the CPU. There is a relationship between this parameter and the Num Bytes Per Read parameter. When that parameter is turned up, this parameter should generally also be turned up.

Range - 0.00 seconds to 1.00 seconds

Stream Display
**Left number** - The number of streams in progress. Should normally be zero, but should flash temporarily to a non-zero number when a note is started. If it stays non-zero for several seconds, that may be a problem, and so reducing the Brake (or increasing the PreLoad) would be recommended.

**Middle number** - The number of notes in progress. Should be zero when no notes are playing. May be a 2x or 4x multiple of the number of notes when doing velocity cross fading, or when there are multiple layers.

**Right number** - The number of samples that are "pre loaded" (including all voices in all parts). Should go up and down as various SoundSources are loaded. It may "lag" a bit behind load actions, which is normal.

**Right number in parenthesis** - number of samples loaded in "Streaming = OFF " mode. Should always be zero unless Streaming is turned off. An error is indicated by the streaming status display at the bottom of the left column on the system page when you see two numbers at the end of the display;



#### **SYSTEM - Sample File Server**

	Not streamed
MODE	✓ Streamed
	Server

On the Mac version of Omnisphere, the Streaming Switch is replaced by the Mode menu, and provides an additional Server mode for loading sample data.

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NOTE: The Sample File Server uses physical RAM to load samples, and a minimum of 6GB of RAM is recommended when using Server Mode, especially when loading larger Keyswitch Multis.

The Streaming Mode Menu contains three items: Streamed, Not Streamed, and Server. Streamed and Not Streamed enable and disable Streaming. Select the Server option to enable the Sample File Server.

MODE	Streamed	7
MODE	Not streamed	
MODE	Server	7

When Server is enabled, a new system process is created (in addition to the host process) called SpectrasonicsServer. It will appear in the Mac Activity Monitor. Omnisphere starts and stops that process automatically, so you should never have to worry about it.

*NOTE:* Server mode uses streaming internally, so the remaining stream-related controls in the Streaming section are still applied and useful when in Server mode.

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#### **SYSTEM - Miscellaneous Introduction**



This area determines the settings for master tuning, the instrument's startup page and preferences for how the Layers behave in the interface.

Startup Page Preference



Omnisphere's default startup page is the Main Page. This menu allows you to set either the Main Page or the Edit page as the startup page.

N	Main Visualizer	
E	✓ Main Controls	
	Edit Page	

#### Switch To Layer Upon Activation Preference



The Layer MIX sliders on the **EDIT** page have activation buttons below them. If Switch To Layer Upon Activation is set to "ON", then whenever you turn on a Layer, it will automatically switch the EDIT page's view to that Layer.

For example, if Layer A is activated, but Layer B is not, and you select the Layer B activation button, the EDIT page's view will switch to Layer B.

This is the default behavior and the way that Atmosphere worked. If you prefer to not have the automatic Layer switching, you can turn that behavior off here.

If Switch To Layer Upon Activation is off, then Layer activation will not cause the Edit page to change to the activated Layer.

#### Sync Tabbed Panes Together

When enabled, this function will ensure that when you change from one Part to a different Part, the view will be the same.

For example, if Part1 has the FX page selected, and then Part2 is selected, it will also display the FX page. If Sync Tabbed Panes Together is disabled, then the views will not synchronize – they'll change depending what Part you are on.

#### **Round Robin**

ROUND ROBIN	No variation
	THE FUILLEDT

Repeated notes on a sample-based instrument can typically cause a "machine gun" effect, with notes repeating monotonously. Round Robin is a sampling technique that allows a repeated note to trigger a different sampled "take" each time it's played. This makes repeated notes sound very natural, and eliminates the machine gun effect.

Some Soundsources include multi-sampled Round Robin samples, which means we recorded multiple takes for each note and velocity. In fact, a single Soundsource can contain a huge number of Round Robin samples! This is particularly true for Trilian basses. If you are loading Trilian sounds into Omnisphere using Omnisphere Library Integration, this setting can be especially useful.



The Round Robin Menu lets you select how Round Robin samples will be ordered when two or more Round Robin samples are loaded into memory.

There are four playback options available on the drop-down menu: No Variation, Random, Random Full Cycle, and Sequential.

*NOTE:* The Sample Thinning settings located in the Patch Browser's <u>Lite Version Zoom</u> or the Soundsource Zoom Edit View determine how many Round Robin samples are loaded with the Patch or Soundsource.

#### Accept Omni Live Connections



Enabling this option allows Omnisphere to communicate with the Omni Live iPhone application. When Accept Omni Live Connections is enabled, Omni Live will be able to automatically connect to Omnisphere when launched.

For complete instructions on setting up Omni Live, please visit our website at: <u>http://www.spectrasonics.net/omni_live_app/</u>

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The MODULATION assignments section allows you to override and remap the standard MIDI messages used the <u>Modulation Matrix</u> sources in Omnisphere. Simply select the drop-down menu next to one of the fourteen modulation types and a pop up will appear that says "Move MIDI Controller". Then on your MIDI controller move the knob, slider or wheel that you wish to use to remap to that Modulation source.

The 'User CC' Modulation source is particularly useful for adding an additional, non-standard MIDI Controller into the Omnisphere Modulation Matrix - without disrupting any of the standard assignments.

**SYSTEM - Modulation** 



**SYSTEM - Master Tuning** 

This is Omnisphere's global tuning parameter. That means any tuning change you make on MASTER TUNING will affect any other <u>tuning settings</u> in the instrument. The default is 440Hz, which is the standard for most Western music. For other tuning standards, Omnisphere's master pitch can be changed to accommodate any of them.

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Range – 420Hz-460Hz

#### **SUPPORT - Contacts/User Groups**



Many common technical support questions can be answered by checking the Spectrasonics Support Knowledge Base

NOTE: You will need to have your Omnisphere serial number to log in to the community site.

If you are still in need of technical assistance after referring to the Support Knowledge Base, please contact the Tech Support Department by phone or email, and we will gladly assist you.

If you call and are not able to speak with a technical support specialist, it's important to leave a message. All calls are returned in the order they are received. Your call or email is important to us, and we will get back to you as soon as possible.

818-955-8444 phone 818-955-8613 fax 888-870-4223 toll free in N. America

Monday-Friday 10AM-5PM Pacific Standard Time If you are calling outside N. America, please note the time difference in California.

email: info@spectrasonics.net

#### USER SUPPORT FORUMS

There are several excellent online users groups and forums for discussing Spectrasonics instruments on the web. These are not official company forums, but many knowledgeable Spectrasonics users visit these and are often very helpful when you need an answer to a question quickly. The Spectrasonics Team also visit these areas and contribute to them from time to time:

Spectrasonics Yahoo Users Group

Omnitalk Omnisphere Forum

Northernsounds Virtual Instrument Forum

#### SALES SUPPORT

For product orders or sales please contact your local Spectrasonics <u>distributor</u>. All Spectrasonics instruments, Xpanders and libraries are sold through our international distributor and authorized dealer network.

#### **SUPPORT - General FAQs**

#### What is Omnisphere?

Omnisphere is an amazingly versatile new multi-timbral Power Synthesizer, based on Spectrasonics new in-house engine called STEAM. It features a massive 40+GB core library (over ten times the size of Atmosphere!), extensive synthesis capabilities, a fully featured arpeggiator with a unique Groove-Lock system for syncing with Stylus RMX grooves, over thirty built-in effects and much, much more!

#### What is the STEAM engine?

STEAM is a new, in-house core technology that is the foundation of Omnisphere as well as a whole new generation of Spectrasonics instruments.

#### What's the difference between Atmosphere and Omnisphere?

Virtually everything!

Omnisphere is a completely new synthesizer. It's the first instrument to use our state-of-the-art STEAM Engine[™]. In addition to the samplebased synthesis found in Atmopshere, the STEAM Engine[™] can create entire categories of cutting-edge new sounds with its many realtime synthesis technologies. The core library in Omnisphere is gigantic - ten times the size of Atmosphere!

#### So does Omnisphere replace Atmosphere?

Yes, Omnisphere is Atmosphere's successor.

#### What kinds of sounds does Omnisphere produce?

Good ones. :-)

Omnisphere is incredibly versatile and produces a vast range of sounds, from the organic to the electronic. Its primary focus is on producing unique new sounds, but it works equally well as a "go-to" instrument for any production approach - from the most experimental to the most traditional.

#### What is a "Psychoacoustic" soundsource?

"Psychoacoustic" sampling is a completely new concept that we've been developing at Spectrasonics for a long time. The idea is to use sampling technology to create unique sounds in a totally organic way, instead of the standard approach of using sampling to emulate traditional instruments. Our goal is to capture the "sound within the sound" of an acoustic source by performing and recording it in unique and creative ways - even going as far as building crazy acoustic instruments from scratch! When Psychoacoustic soundsources interact with the powerful STEAM engine, the result is Organic Synthesis!

#### Does Omnisphere include any traditional sounds?

Yes! Although the focus of Omnisphere is on cutting-edge timbres, there are many outstanding traditional sounds in Omnisphere. There are beautiful Orchestral String Ensembles, the largest selection of different choirs and human voices, Celeste, Churchbells, Glass Armonicas, highly expressive Guitars and much more.

#### Hmmm...Is Omnisphere a "real" synthesizer or just a "rompler"?

Omnisphere is no rompler! It is a powerhouse synthesizer that competes with the finest hardware and software synths at any level. Omnisphere indeed has "real" DSP oscillators that allow Hard Sync, FM PWM, Waveshaping and much more. Its STEAM Engine™ also excels at high definition sample streaming - the realtime manipulation features like Granular Synthesis, Harmonia, Timbre Shifting and Polyphonic Ring Modulation can also be applied to the sample oscillators.

It's really the best of both worlds!

#### Is Omnisphere a workstation synth?

The mission of Omnisphere is all about the creation and manipulation of dynamic new sounds that have never been heard before. However, it's very broad in its sonic scope and will appeal to users all across the musical spectrum. You can think of it more like an "Exploration-station". :-)

#### How large is the core library?

The Omnisphere core library is ten times the size of Atmosphere - over 40 gigabytes! There are thousands and thousands of different soundsources and patches, with more being added all the time.

#### Will it contain all the sounds of the original Atmosphere?

Yes! All the original core library samples and enhanced versions of all the classic Atmosphere patches are included in Omnisphere.

#### I've heard that some of the original Spectrasonics sample libraries are included with Omnisphere?

Yes! As a bonus, we've included the 'best of' our award-winning sample libraries, including Symphony Of Voices, Distorted Reality, Vocal Planet, Hans Zimmer Guitars and many others - please refer to the Reference Guide for a complete list. Keep in mind that the material used from the Sample Libraries are the most playable ones. Phrases and loops were excluded from the Omnisphere core library.

#### How much of the Core Library is from the original sample libraries?

A very small percentage. The vast majority of the 42+ gigabytes s brand new. And of course, all the patches are brand new and have never been presented before.

#### Is it possible to import my own samples into Omnisphere?

Not initially. While the first release of Omnisphere does not support user import of samples, we understand how cool that would be and certainly wouldn't rule that out for the future.

Most importantly, the concept of Omnisphere is completely different than a typical sampler. Omnisphere is an incredibly deep synthesizer with a massive Core Library that will take a lifetime to explore.

#### How fast of a computer will I need to run Omnisphere?

As with all virtual instruments - the faster the better. Omnisphere is designed to run optimally on modern computers. See the <u>System Requirements</u> for more information.

#### Is there an upgrade for Atmosphere users?

Yes! All registered Atmosphere customers can now upgrade to Omnisphere through the Spectrasonics Techshop.

#### Is Atmosphere currently still available?

No. Omnisphere has now replaced Atmosphere.

#### Is Omnisphere expandable?

Yes! We have many plans to extend Omnisphere in lots of different ways in the future.

#### Is Omnisphere native Universal Binary for Intel Macs?

Absolutely. The STEAM Engine™ is Universal Binary, just like Stylus RMX.

#### What about Universal Binary support for Trilogy?

Trilian is the successor to Trilogy and represents the future of that plugin. Trilian is based on the STEAM Engine, and is a 64-bit Intel Mac native plugin.

#### Is Omnisphere 64 bit?

Yes! All of our instruments, including Omnisphere, are 64-bit on both Mac and Windows platforms.

#### Does Omnisphere use disc-streaming?

Yes! Omnisphere streams from the disc for quick previewing of the sounds. Disc streaming is configurable as well.

#### Is there a DEMO version of Omnisphere I can try?

Because of the size of our instruments, we don't offer Demo versions.

However, you can contact one of our local dealers in your area in order to arrange a live demo of Omnisphere.

To find a local dealer in your area, please contact your local Spectrasonics distributor.

#### Why aren't there any audio demos posted yet?

Omnisphere is easily the most diverse instrument we've ever made, that will have applications in almost any kind of genre, so you literally can't do it justice with only a few mp3s.

Our focus right now is on making the instrument itself great, getting it to market and providing the educational materials of how to use it the most effectively. So producing the several hundred audio tracks that would be necessary to cover Omnisphere's vast musical application and scope is not our top priority right now.

That said, we do have some very cool new ideas of ways that you'll be able to check out what Omnisphere can do in the coming months.

#### Are there Omnisphere video tutorials like there are for RMX?

Yes, We are making a lot of video tutorials right now that are being posted. These will be available for all registered Spectrasonics users to view and download in the <u>Support Knowlegebase</u>.

#### Can I download the upgrade?

No. Since the library is over 40 gigs, it will not be available as a download.

#### Does Omnisphere also include Trilogy?

No. The successor to Trilogy is Trilian, which is also based on the STEAM engine. However, if you have purchased both Omnisphere and Trilian, you can open Trilian sounds inside Omnisphere using <u>Omnisphere Library Integration</u>.

#### Does Omnisphere have the same FX as RMX?

Yes, it contains all the same Effects as Stylus RMX and Trilian.

#### What are the multi-point envelopes like in Omnisphere compared to other synths?

Multipoint envelopes have always been extraordinarily useful in synths. However, they've traditionally been rather tedious to program. Our goal with the envelopes in Omnisphere was to offer the expressive power of multipoint envelopes while making them easy, and even fun, to work with!

You even can do cool things with them without getting into the details of patch programming. There are many simple and flexible ways to get sophisticated envelope shapes in Omnisphere!

#### Does Omnisphere include a written manual or pdf?

Like RMX, the Omnisphere Reference Guide is accessible directly through the plug-in. The comprehensive, integrated Reference Guide, has many benefits:

1. Saves paper and trees.

- 2. It's searchable
- 3. We can keep it up to date with the software releases.

And of course hours of free Omnisphere video tutorials are provided for registered users on our site.

# Can I use Omnisphere on my G4? What kind of performance can I expect? Could I at least run Omnisphere in a minimal mode and bounce to audio?

We are recommending using Omnisphere on more up to date computers, and although you may be able to open Omnisphere on a G4, the performance would be quite limited.

#### Can I selectively install parts of the Omnisphere library since it is so large?

Because of patch compatibility, Omnisphere must always be installed with the complete library. However, you can install the 42 gig library to a secondary or external drive if you wish.

#### Will Omnisphere's streaming benefit from a faster hard drive?

Fast drives are a smart way to go of course. There's a chapter in the Reference Guide devoted to optimizing Performance with Omnisphere.

#### Can I run Omnisphere side by side with Atmosphere?

Omnisphere and Atmosphere can be run side by side, since they are separate instruments. Keep in mind that Omnisphere is a completely new synthesizer that also includes the Atmosphere library.

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Will I be able to open custom patches that I made in Atmosphere? No. Since Omnisphere is a completely new instrument, it's not possible to open custom saved Atmosphere patches in Omnisphere.

However, you will be able to recreate your custom patches with much more choice and flexibility, and also trade and share patches with other users! This is possible because Omnisphere is based on our own technology, and will allow for song compatibility with future updates, just like all the updates with RMX have been song compatible since it's introduction.

#### Why couldn't you just make an Intel Mac version of Atmosphere? Isn't that an easy transfer to UB?

No, not at all. Atmosphere and Trilogy are based on a licensed third party engine that for many reasons couldn't be updated to Intel Macs. There's also a lot more to the Atmosphere patches than simple sample library playback.

#### Will I still be able to upgrade to Omnisphere if I purchase Atmosphere after September 15th, 2008?

Yes, as long as you are an Atmosphere customer, you will be able to upgrade. To qualify for the special upgrade pricing, you must have purchased the products from an authorized dealer and registered them prior to upgrading to Omnisphere.

#### Will there be a time limitation to get the VIP upgrade, once Omnisphere is released?

No, in order to get the VIP upgrade discount, you just need to be an original registered customer of all three products - Atmosphere/ Trilogy/ Stylus RMX. This is our way of saying thanks to all our loyal Spectrasonics users!

#### Where do I order the upgrade from? Can I get the upgrade through my local dealer?

Upgrades are available exclusively through the Spectrasonics Techshop.

#### Do I need to have Atmosphere installed before purchasing the upgrade to Omnipshere?

No, but you will need to have authorized and registered Atmosphere.

#### Can I install Omnisphere on a different drive?

Yes, you can definitely install the library to a secondary or external drive.

#### Can I order Omnisphere directly from Spectrasonics?

No. Unless you are upgrading from Atmosphere, you will need to purchase Omnisphere through an authorized Spectrasonics dealer. To find a dealer in your area, please contact one of our <u>distributors</u>.

#### Can I upgrade if I bought a used copy of Atmosphere?

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#### Will Omnisphere run on the Muse Receptor?

This hasn't been tested yet, but the MUSE team are big Spectrasonics users themselves.

We are confident that Muse will be working on getting the Receptor ready for Omnisphere soon.

#### Is there a student discount price for Omnisphere?

Spectrasonics doesn't offer student discounts, however qualifying school's and institutions can participate in our EDU program.

#### Is it compatible with Mac OSX Leopard and Microsoft Vista?

Yes, Omnisphere is compatible with both Windows Vista and OSX Leopard.

### **SUPPORT - Updates**

It's important to download and install the latest version of Omnisphere, since we are continuing to add new features and improve their performance and capabilities.

http://www.spectrasonics.net/updates



#### **SUPPORT - General FAQs**

#### What is Omnisphere?

Omnisphere is an amazingly versatile new multi-timbral Power Synthesizer, based on Spectrasonics new in-house engine called STEAM. It features a massive 40+GB core library (over ten times the size of Atmosphere!), extensive synthesis capabilities, a fully featured arpeggiator with a unique Groove-Lock system for syncing with Stylus RMX grooves, over thirty built-in effects and much, much more!

#### What is the STEAM engine?

STEAM is a new, in-house core technology that is the foundation of Omnisphere as well as a whole new generation of Spectrasonics instruments.

# What's the difference between Atmosphere and Omnisphere? Virtually everything!

Omnisphere is a completely new synthesizer. It's the first instrument to use our state-of-the-art STEAM Engine[™]. In addition to the sample-based synthesis found in Atmopshere, the STEAM Engine[™] can create entire categories of cutting-edge new sounds with its many realtime synthesis technologies. The core library in Omnisphere is gigantic - ten times the size of Atmosphere!

#### So does Omnisphere replace Atmosphere?

Yes, Omnisphere is Atmosphere's successor.

#### What kinds of sounds does Omnisphere produce?

Good ones. :-)

Omnisphere is incredibly versatile and produces a vast range of sounds, from the organic to the electronic. Its primary focus is on producing unique new sounds, but it works equally well as a "go-to" instrument for any production approach - from the most experimental to the most traditional.

#### What is a "Psychoacoustic" soundsource?

"Psychoacoustic" sampling is a completely new concept that we've been developing at Spectrasonics for a long time. The idea is to use sampling technology to create unique sounds in a totally organic way, instead of the standard approach of using sampling to emulate traditional instruments. Our goal is to capture the "sound within the sound" of an acoustic source by performing and recording it in unique and creative ways - even going as far as building crazy acoustic instruments from scratch! When Psychoacoustic soundsources interact with the powerful STEAM engine, the result is Organic Synthesis!

#### Does Omnisphere include any traditional sounds?

Yes! Although the focus of Omnisphere is on cutting-edge timbres, there are many outstanding traditional sounds in Omnisphere. There are beautiful Orchestral String Ensembles, the largest selection of different choirs and human voices, Celeste, Churchbells, Glass Armonicas, highly expressive Guitars and much more.

#### Hmmm...Is Omnisphere a "real" synthesizer or just a "rompler"?

Omnisphere is no rompler! It is a powerhouse synthesizer that competes with the finest hardware and software synths at any level. Omnisphere indeed has "real" DSP oscillators that allow Hard Sync, FM PWM, Waveshaping and much more. Its STEAM Engine™ also excels at high definition sample streaming - the realtime manipulation features like Granular Synthesis, Harmonia, Timbre Shifting and Polyphonic Ring Modulation can also be applied to the sample oscillators.

It's really the best of both worlds!

#### Is Omnisphere a workstation synth?

The mission of Omnisphere is all about the creation and manipulation of dynamic new sounds that have never been heard before. However, it's very broad in its sonic scope and will appeal to users

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all across the musical spectrum. You can think of it more like an "Exploration-station". :-)

#### How large is the core library?

The Omnisphere core library is ten times the size of Atmosphere - over 40 gigabytes! There are thousands and thousands of different soundsources and patches, with more being added all the time.

#### Will it contain all the sounds of the original Atmosphere?

Yes! All the original core library samples and enhanced versions of all the classic Atmosphere patches are included in Omnisphere.

## I've heard that some of the original Spectrasonics sample libraries are included with Omnisphere?

Yes! As a bonus, we've included the 'best of' our award-winning sample libraries, including Symphony Of Voices, Distorted Reality, Vocal Planet, Hans Zimmer Guitars and many others - please refer to the Reference Guide for a complete list. Keep in mind that the material used from the Sample Libraries are the most playable ones. Phrases and loops were excluded from the Omnisphere core library.

#### How much of the Core Library is from the original sample libraries?

A very small percentage. The vast majority of the 42+ gigabytes s brand new. And of course, all the patches are brand new and have never been presented before.

#### Is it possible to import my own samples into Omnisphere?

Not initially. While the first release of Omnisphere does not support user import of samples, we understand how cool that would be and certainly wouldn't rule that out for the future.

Most importantly, the concept of Omnisphere is completely different than a typical sampler. Omnisphere is an incredibly deep synthesizer with a massive Core Library that will take a lifetime to explore.

#### How fast of a computer will I need to run Omnisphere?

As with all virtual instruments - the faster the better. Omnisphere is designed to run optimally on modern computers.

See the System Requirements for more information.

#### Is there an upgrade for Atmosphere users?

Yes! All registered Atmosphere customers can now upgrade to Omnisphere through the <u>Spectrasonics Techshop.</u>

#### Is Atmosphere currently still available?

No. Omnisphere has now replaced Atmosphere.

#### Is Omnisphere expandable?

Yes! We have many plans to extend Omnisphere in lots of different ways in the future.

#### Is Omnisphere native Universal Binary for Intel Macs?

Absolutely. The STEAM Engine[™] is Universal Binary, just like Stylus RMX.

#### What about Universal Binary support for Trilogy?

Trilian is the successor to Trilogy and represents the future of that plugin. Trilian is based on the STEAM Engine, and is a 64-bit Intel Mac native plugin.

#### Is Omnisphere 64 bit?

Yes! All of our instruments, including Omnisphere, are 64-bit on both Mac and Windows platforms.

#### Does Omnisphere use disc-streaming?

Yes! Omnisphere streams from the disc for quick previewing of the sounds. Disc streaming is configurable as well.

#### Is there a DEMO version of Omnisphere I can try?

Because of the size of our instruments, we don't offer Demo versions.

However, you can contact one of our local dealers in your area in order to arrange a live demo of Omnisphere.

To find a local dealer in your area, please contact your local Spectrasonics distributor.

#### Why aren't there any audio demos posted yet?

Omnisphere is easily the most diverse instrument we've ever made, that will have applications in almost any kind of genre, so you literally can't do it justice with only a few mp3s.

Our focus right now is on making the instrument itself great, getting it to market and providing the educational materials of how to use it the most effectively. So producing the several hundred audio tracks that would be necessary to cover Omnisphere's vast musical application and scope is not our top priority right now.

That said, we do have some very cool new ideas of ways that you'll be able to check out what Omnisphere can do in the coming months.

#### Are there Omnisphere video tutorials like there are for RMX?

Yes, We are making a lot of video tutorials right now that are being posted. These will be available for all registered Spectrasonics users to view and download in the <u>Support Knowlegebase</u>.

#### Can I download the upgrade?

No. Since the library is over 40 gigs, it will not be available as a download.

#### Does Omnisphere also include Trilogy?

No. The successor to Trilogy is Trilian, which is also based on the STEAM engine. However, if you have purchased both Omnisphere and Trilian, you can open Trilian sounds inside Omnisphere using <u>Omnisphere Library Integration</u>.

#### Does Omnisphere have the same FX as RMX?

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#### **GLOSSARY OF TERMS**

#### Audio Unit

Apple introduced the Audio Unit (AU) plug-in specification in Mac OS X. Since this plug-in standard is native to OS X - and not to any specific host or platform (like TDM or VST) - Apple has encouraged companies to adopt it as a standard for all Mac audio applications. Although it is not cross-platform, many host applications like Logic, GarageBand, Digital Performer, Abelton Live and others have adopted the Audio Unit plug-in standard.

#### AU

Abbreviation for Audio Unit

#### AUX Send

An alternate variable audio output used to send a signal to a dedicated FX rack for additional FX processing. In Omnisphere, there are four AUX Sends per Part on the Mixer Page. They route audio to corresponding AUX FX racks. For example, Aux Send knob 1 routes audio to AUX FX rack 1, etc. AUX Send knobs control the volume sent to the AUX FX racks.

#### AUX Return

An AUX Return routes audio from an AUX FX Rack directly to Output A -- the Master Fader.

#### Automation

As you manipulate controls on the Omnisphere interface, the host's automation records these movements and plays them back. These recorded movements can also be edited from inside the host application. You may also use a hardware control surface to manipulate some of Omnisphere's parameters as well.

#### Bar

A vertical line on a musical staff that indicates the beginning or end of a measure. Synonymous with measure.

#### **Bi-polar control**

This kind of control has more than one function within its movement range. Usually, there is a center detent position where the control is off. Moving one direction from the detent position activates one function and moving the other way from the detent position activates a different function. The Master Filter on the Edit Page is an example of this: in the center position, the filter is off. Moving the slider to the left of the center detent position activates a Low Pass Filter. Moving the same slider to the right of the center detent activates a High Pass Filter.

#### Browser

The dynamic, searchable area of Omnisphere that offers access to the Core Library of Soundsources, Patches and Multis.

#### Buss

A path which routes audio from one or more sources to a particular destination.

#### Bypass

Disengaging an FX Unit so that it no longer affects the audio. Doing this saves CPU power.

#### Clone

To duplicate - Used in MIDI learn terminology. Duplicates the current set of MIDI Learn parameters from Part 1 to Parts 2-8. This is a great time saver when setting up an external hardware MIDI controller. You can set up Part 1 with all the MIDI Learn parameters you like, then clone Part one to all the other Parts. More...

#### Cycle

One Cycle has been completed when something runs from its start point to its end point. This can refer to things like grooves or LFO waveforms.

#### Column

A vertical list of available choices in the Browser. Omnisphere's Columns can be changed to list a variety of Attributes.

#### Compressor/Limiter

A device for reducing the effective dynamic range of an input signal by preventing it from rapidly exceeding or falling below a selected amplitude threshold. The first part of a compander, it is used to make loud parts of a signal softer and soft parts louder. Beyond the threshold, the ratio of the signal's input level to its output level (e.g., 2:1, 4:1) is user-selectable. A compressor is commonly used to keep levels within an acceptable range, but because it can slow a signal's rate of decay below the threshold, compressors are also used to add sustain to instruments such as electric guitar and bass. The limiter acts like a compressor, but operates only at the top end of the dynamic range. The limiter has a faster attack time (1 s to 1ms) than the compressor alone (1ms to 10ms). A compressor/limiter is traditionally inserted between the outputs of a device and the inputs of the mixer or mastering recorder. More...

#### Center detent

This is the neutral position of a parameter's knob or slider, especially in reference to bi-polar controls. When in this position, the function is disengaged and does not affect anything.

#### Defaults

These are predetermined settings that Omnisphere recalls when it is first instantiated, cleared, reverted, or when a global mode is changed. Spectrasonics provides factory defaults, but you can replace them with your own settings.

#### Directory

Used in reference to a folder on the computer's drive.

#### Drop-down menu

One of these menu lists appears when you click on an Omnisphere display window with a downward arrow. Once you click on the appropriate window, a menu appears to "drop down". Once the menu list appears, you can select an option in the menu with the mouse. Synonymous with pop-up menu.

#### DSP

Digital Signal Processing - refers to the manipulation of digital audio in a computer. The more processing you would like to do, the faster and more powerful computer you need.

#### Engine

The core software code that structures the operation of audio functions in a plug-in. The engine developed by Spectrasonics that is responsible for running is Omnisphere is STEAM (Spectrasonics-Team), and Stylus RMXs' engine is S.A.G.E (Spectrasonics Advanced Groove Engine)

#### Expander

(1) A signal processing device which is the inverse of a compressor, providing the gradual attenuation of signals that fall below a user-defined threshold. This process, known as expansion, reduces background noise and at the same time increases the dynamic range of the input signal.

#### Fader

A controller in the form of a slider that usually affects the loudness/softness of audio levels. Placing a fader at Unity or 0 gain means that the audio channel is outputting the same audio level as was input to the channel. Most faders allow you to make the volume louder and softer than the originally input signal. Also used to refer to any type of slider. Synonymous with Slider.

#### Folders/Sub-Folders

An organizational tool on a computer that allows grouping of files. Also known as a Directory. A sub-folder is a folder inside another folder. Also known as a sub-directory.

#### Footer

The section at the bottom of the Omnisphere GUI that will change depending on which page you're currently viewing.

#### FX Slot

An area where an FX Unit can be loaded. There are three FX Slots per FX Rack.

#### FX Unit

An FX Unit is an internal Omnisphere software signal processing plug-in which gets loaded into an FX Slot. Each FX Unit is a real-time sound processor. Currently, there are 33 FX Units in Omnisphere.

#### FX Rack

The area designated to load FX Units. An FX Rack consists of four FX Slots.

#### **FX** Parameter

Any knob, slider, drop-down menu or button that a user can select and adjust. The result is a change in the sound passing through the FX Unit (unless it is bypassed).

#### **FX** Preset/Patch

Saving all the current parameter settings of a single FX Unit creates an FX Patch. Users can save custom FX Patches. These FX Patches will be available later in any session. Patch is synonymous with Preset.

#### **FX Rack Preset/Patch**

Saving all the current parameter settings of an entire FX Rack creates an FX Rack Patch. An FX Rack Patch can be any combination of up to three FX Units with any settings. Users can save custom FX Rack Patches with custom names. These FX Rack Patches will be available later in any session. Patch is synonymous with Preset.

#### Global

Anything that affects the status of the entire plug-in.

#### Groove Lock

Omnisphere's Arpeggiator can import Stylus RMX's grooves as MIDI data to synchronize RMX grooves with the Arpeggiator.

#### GUI

Graphic User Interface - In Omnisphere this is the plug-in window and all the pages that you see and manipulate.

#### **Host/Host Application**

A computer application or hardware device capable of loading Virtual Instrument software plug-ins. Also known as a Sequencer or DAW (Digital Audio Workstation). Logic, Digital Performer, Pro Tools, Cubase, Nuendo, Sonar, GarageBand, Live, Traktion, Fruity Loops, Metro and Acid Pro are all examples of software hosts that work with Omnisphere. MUSE Receptor and Neko are examples of hardware hosts that work with Omnisphere.

#### Instance

When you open a Omnisphere plug-in your host, there is one instance of it in your session. If your computer is powerful enough, you can run several instances of Omnisphere at once.

#### Instantiation/De-Instantiation

The process of opening/closing plug-ins from your host. Synonymous with Loading/Unloading, Opening/Closing, Loading/Deleting, etc

#### Inverted

Reversed or negative polarity modulation.

#### Keyboard

1) An external MIDI controller capable of triggering notes via piano-style keys.

2) Also a text-entry ASCII computer keyboard. There are several keyboard-mouse combinations that provide access to Omnisphere's features.

#### Knob

A control that can be turned clockwise and counterclockwise. A knob can be used to control a wide variety of parameters.

#### Learn

MIDI Learn is capable of mating an external physical controller with virtually any parameter inside Omnisphere for remote performance control and automation applications.

#### LFO

Low Frequency Oscillator - a continuous, cyclical modulator that can be used to affect a sound in many ways. For example, you can use it to "auto-pan" audio, produce tremolo or filter sweeps.

#### Limiter

See Compressor/Limiter

#### List

A display menu of available options. Usually they are presented vertically.

#### Menu

Two different meanings:

- 1. Refers to a collection of sounds or grooves that are mapped on a single keyboard layout for easy access.
- 2. Refers to a user interface software pop-up/drop down list of options.

#### Menu Item

Refers to the items in the list of a pop-up/drop-down menu in the software interface.

#### MIDI CC

MIDI Continuous Controller. MIDI has 128 possible controllers. Omnisphere can respond to any of them using the MIDI Learn feature.

#### Multi patch

Omnisphere is eight-part multi-timbral and settings for all the Patches that make up a Multi can be saved as a 'Multi Patch'.

#### Multitimbral

The ability to operate on more than one MIDI channel at a time. Omnisphere is 8 Part Multitimbral.

#### Omni

Through the MIDI Learn function, Omnisphere is capable of being setup so that it responds to any incoming MIDI CC messages on any channel.

#### An Omnisphere control that can be manipulated to affect the audio.

Parameter

#### Part

Each Omnisphere Part can load its own Patch and operate independently of all the other Parts. There are 8 Parts in Omnisphere. Each one has its own numbered button in the Header. Parts 1-8 correspond to MIDI Channels 1-8.

#### Patch

A pre-saved set of parameters. Also known as a Preset. A Factory Patch is a patch created by Spectrasonics. A User Patch is a patch that you can save and name yourself. The name comes from older synthesizer days when many physical patch cords were used to create sounds by connecting parts of the synthesizer together with the patch cords.

#### Peak

Peak value is the maximum instantaneous excursion from zero of an audio waveform, as measured by a peak meter (PPM). The peak value of a sound is also the maximum instantaneous pressure excursion of the sound

#### Pitch Shift

The process of changing the frequency of a sound. It can be changed so that it is higher or lower.

#### Plug-In

A software application that relies on running from within a host application to provide additional needed functionality.

#### Pole

The roll off slope of Filters is measured in db. For every 6db of roll off, the filter has an additional Pole. A two-pole filter has a roll off slope of 12db and a four-pole filter has a roll off slope of 24db. Omnisphere has filters with 6db, 12db, 18db and 24db rolloff slopes.

#### Pop-up Menu

A list that seems to appear from nowhere. An example of this is the FX Patch pop-up menu. Cntrl-Click (Mac) or Right-Click (PC) anywhere on an FX Slot and a list appears out of thin air! Synonymous with drop-down menu.

#### **Power Filter**

A great sounding filter developed in cooperation with Gmedia from their reknowned impOSCar synthesizer. Be careful when using it though, because the Power Filter can be VERY loud and it requires a fair amount of DSP power from your computer.

#### Preset

A set of parameters that has been previously saved and is available for recall. Sysnonymous with Patch.

#### Retrigger

When this parameter is activated, Omnisphere resets an LFO waveform back to its beginning phase position at the start of each measure.

#### Reverse

Plays a sample backwards.

#### **RMS Compression**

Root Mean Square. A formula for describing the level of a signal. RMS is derived by squaring all of the instantaneous voltages along a waveform, averaging the squared values, and taking the square root of that number. For sine-like signals, average power = RMS(voltage) RMS(current)

#### **Round Robin**

Term referring to a sampling technique that allows a repeated note to trigger a different take each time it's played, giving a natural sounding result and eliminating the "machine gun" effect.

#### RTAS

Real Time Audio Suite - a Digidesign proprietary, cross-platform plug-in format for Pro Tools.

#### S.A.G.E.

Spectrasonics Advanced Groove Engine - when Spectrasonics created our own in-house software development team, SAGE was the technology developed that became the basis for Stylus RMX.

#### Sample Start

Parameter that controls, from a timing standpoint, how far from the beginning a sample will be triggered. When Reverse is engaged, this controls the end point.

#### Sequence

A computer file saved by a sequencer/DAW that contains tracks of MIDI notes and audio files.

#### Sequencer

A computer application that allows recording, entry and editing of MIDI notes and audio files. Also, known as a host if the sequencer is compatible with plug-ins.

#### Slider

A control that you move back and forth or up and down depending on its orientation. Moving a slider can control a wide variety of parameters. Synonymous with Fader.

#### Sound Directory

A directory that contains Suites. It is the sub-directory of a Master directory.

#### Standalone

A software program that is capable of running on its own without a host application.

#### STEAM

STEAM stands for SpectrasonicsTEAM and is the engine for Omnisphere and many exciting future instruments.

#### Sub-Page

These are pages within a main Editing Page. For example, on the FX Page, there are 6 FX sub-pages.

#### Sync

Abbreviation for Synchronization. When this feature is on, Omnisphere locks corresponding parameters to the host's tempo and then adjustments can be made using rhythmic values like 1/4 notes, 1/8 notes and 1/16 notes. Otherwise the parameter is controlled by Cycles per second.

#### Tube

An electronic device which consists of various types of electrodes (anode, cathode, etc.) and a heating element, all contained in a vacuum. Its simplest form, the diode, is used as a rectifier. The triode is functionally similar to a transistor. Tubes are called valves in the UK.

#### Unity

When a parameter is set so that it does not make any changes to the passing signal.

#### Unity gain

A device which neither attenuates nor amplifies a signal. Most signal processing devices have unity gain, which means that they neither amplify sound nor cause insertion loss, and therefore can be added into an audio system at various places without upsetting the overall gain of the system.

#### Unlearn

Parameters that have been mated with a physical controller can be unattached via this feature of the MIDI Learn section.

#### Value Definitions

Omnisphere

- 8x this value stretches a cycle of a parameter such as an LFO across 8 bars.
  1/8 this value cycles a parameter such as an LFO every 1/8 note.
  1/8D this value cycles a parameter such as an LFO every dotted 1/8 note.
  1/8T- this value cycles a parameter such as an LFO every triplet 1/8 note.

Valve

See Tube.

VST

Virtual Studio Technology - a cross-platform plug-in platform created by Steinberg.

#### CREDITS

#### **Produced by Eric Persing**

#### SOFTWARE DEVELOPMENT

#### Principal software development: Glenn Olander, Neal Olander

Additional coding: Bernie Torelli, Artemiy Pavlov, Bram de Jong, Jon Hodgson, Magnus Jonsson, Audionerdz, David Strozyk, Jay Olson, Shirley Sloper, Bernard Chavonnet, Jankoen de Hann

UVI FIIters by USB

#### SOUND DEVELOPMENT

Principal Soundsource development: Eric Persing, Diego Stocco, Ignacio Longo, Tobias Marberger, Scott Frankfurt

Principal patch development: Eric Persing, Scott Frankfurt, Ignacio Longo

Audio editing/mapping: Scott Frankfurt, Ignacio Longo, Adam Hawk, Bob Wilson

Library organization and Tagmaster: Stephane Bonvallet

Data Management: Ignacio Longo

Subsonic recording: Armand Hillside

Atmosphere® sound library conversion: Scott Frankfurt, Ignacio Longo, Hans-Joerg Scheffler, Nick Manson

Additional sound development: Bob Daspit, Roby Duke, Peter Maunu, Hans-Jorg Scheffler, Stephane Pigeon, Dan Holter, Steve Conner, Stephane Bonvallet, Schtung Music, Ryeland Allison, Dan Portis-Cathers, Nick Manson, Les Correa, Michael Flint

**Performers:** Alvin Chea, Cantate Boys Choir, Bill Cantos, Randy Crenshaw, Jeff Gunn, Dave Simpson, Ellis Hall, Huun Huur Tu, Imani Fellowship Choir, Jennifer Ivester, Kirsten Ostrum, Libby Torrance, Melinda Perrin, Pablo Sepulveda, Roby Duke, Steve Amerson, The Hertfordshire Chorus, Linda McCrary and the McCrary family, The Washington Chorale, Bob Daspit, Peter Maunu

#### VISUALS

Interface design: Eric Persing, Tolga Gurpinar, Scott Frankfurt, Glenn Olander

Graphic design: Tolga Gurpinar

Soundsource visualization: Eric Persing

Additional image development: Diego Stocco, Bob Daspit, Stephane Bonvallet, Jazmine Persing, Soren Persing, Sage Persing

Videomaster: Adam Hawk

Video Episode Production: Diego Stocco, Adam Hawk, Eric Persing

#### DOCUMENTATION

Reference Guide: Michael Flint, Eric Persing, Robinson Collins

Users Guide: Michael Flint, Adam Hawk, Eric Persing

#### PRODUCTION

Production Coordinator: Lorey Persing

Warehouse: David Klinger, Barbara Klinger

Discmaster: Adam Hawk

Betamaster: Bob Wilson

Printing: Graphic Visions, Burbank, CA

#### WEBSITE

Webmaster: Kevin Jordan

Site development: Adam Hawk

Flash design: Jerry Chan

Techshop: John Martin, Lorey Persing

#### SPECIAL THANKS

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The Producer wishes to extend personal thanks to:

Jaz, Soren and Sage - much love and thanks from Daddy for all your great ideas and backrubs!

Scott - my dear "separated at birth" brother...we did it! Forever grateful that your spirit and amazing gifts are at the very heart of Omnisphere.

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**Ignacio** - you are truly the engine of Sound DEV mi amigo. Thanks for freely giving so much of yourself and I'm glad that your soul has finally returned to your body!

**Tolga** - you may live a world away, but we have a creative connection that is truly one-of-a-kind. Thanks for sharing the vision with me and for the millions of tweaks!

BW - for always being a sounding board and offering the perfect perspective and encouragement. You are a true friend.

Stephane - you are a hero! Thanks for being with me in the trenches at the end, I'll never forget it.

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Michael - What a major blessing it is to have you on the team! Your diligence and extra effort allows the impossible to be possible....thanks!

Les - virtuoso of the VL-Tone, your great attitude and feedback makes all the difference.

....and most especially to my dearest Lorey- without whose faith, determination and encouragement Omnisphere would simply not exist.

"I will declare that your love stands firm forever, that you established your faithfulness in heaven itself." - Psalm 89:2

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Omnisphere is dedicated to two of the greatest musicians that ever lived - both were mentors, dear friends and profound sources of inspiration for this instrument.

They would have made some amazing music with Omnisphere.

See you again friends ....

Omnisphere

# 

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Credits Special Thanks Dedication

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#### **LEGAL - Licensing/Protection FAQs**

#### What's the principle of the standard license agreement?

• Single user music production/performance = Allowed

- Multiple users = Not Allowed
- Non-music use = Not Allowed

Any uses that are not allowed need additional permission or a special license from Spectrasonics.

#### Are there any legal limitations to how I can use Omnisphere?

The main limitation is that you are not allowed to use it to make a sample library or another kind of sample-based product. You are also restricted from giving away or posting online any loops or samples created using Omnisphere. However, you are able to use Omnisphere in all musical recording applications without paying any additional licenses.

#### Does Omniphere use copy protection?

Yes, we have our own system. Once you've installed and opened the plug-in, you'll have 4 day grace period to use the product without authorization in demo mode. To continue using the instrument on that computer, you'll need to authorize the plug-in on our web site. It's fast and easy, and you'll get your Response code for your computer immediately. You don't have to use your music computer to do the web authorization.

#### What type of Copy Protection method does Omnisphere use?

All Spectrasonics products use a custom developed Challenge/ Response system. This system allows you to install and authorize 24 hours a day, 7 days a week. With our system, you aren't limiting to using it on one computer. Our system is more flexible than dongle-based ones, because it's: Single User/Multiple Computer

#### Does Omnisphere use a dongle?

No.

#### How many computers can I install it on?

Since all Spectrasonics instruments have a Single User/ Multiple Computer license, this means you can install and use Omnisphere on as many computers that you own and will be using yourself.

#### What if I need more than one install for laptop use, if my hard drive crashes or if I get a new computer?

Not a problem...our web site is available around the clock to handle these situations immediately. It's very easy to do it online and you'll always be able to get the authorizations that you need for your computers from Spectrasonics.

#### Can I use my Spectrasonics Instruments on more than one computer at a time?

Yes. This is no problem as long as it's for a single user.

# I'm concerned about what would happen to my Spectrasonics instruments if the company were to go out of business...would I be still be able to authorize them?

Absolutely! At Spectrasonics, we believe it is essential to guarantee to our users the ability to get lifetime authorizations for the Spectrasonics instruments they purchased. In the unlikely event that the company were to go out of business, we would provide the ability for all registered users to get continued authorizations. In fact, we already have a system in place for this contingency. However, the good news is that this event is highly unlikely...we plan to be around for many years!

#### Do I have to credit Spectrasonics if I use Omnisphere?

No, it isn't mandatory for our instruments...but we certainly would appreciate it!

#### Do I need to obtain a special license to use Omnisphere on a commercial project?

No, the lifetime license fee to use the samples is covered in the purchase price of the instrument. You can use it on as many of your own projects as you like and we hope that you make some hits with it!

#### Can I use Omnisphere on Music Libraries?

Yes, this is fine. Some companies completely restrict this kind of use altogether - since music libraries can sometimes cross over into the soundware business, but Spectrasonics allows music library use. In fact, we have many customers that use our products in standard music libraries. Specific limitations about music library collection usage of include the following:

• The music in the library must be in a mixed format. You cannot provide separate tracks in your music library if you want to use our products with our standard license.

• The intended audience for your music library collection must be to non-musicians.

#### Can I use Omnisphere in Film Trailers?

Yes, this type of use is fine. Some companies restrict this kind of use, but Spectrasonics allows it.

#### Can I use Omnisphere in multimedia/game music projects?

Yes, this is OK unless you want to put samples created with Spectrasonics Virtual Instruments directly encoded into the game. That requires a special license. Remember, music use is allowed, but non-music use (example: SFX) is not permitted without a special license for this type of use. Please contact Spectrasonics if you wish to encode the samples into a game system.

#### Can I distribute the music I've created with Spectrasonics products in a "multitrack" format?

One of the only things that is NOT allowed is distributing your music in a multitrack format that completely exposes tracks created using our samples.

The problem in this case is that the separate tracks can then easily be reused in new works by the end user of the music - who is not a licensed Spectrasonics user. This use then turns into a type of redistribution of our copyrighted samples as a "derivative work", which is not allowed without special permission or a special license from Spectrasonics.

NOTE: "Multi-channel" mixed music is not a problem (5.1, 7.1 mixes, etc.).

#### What if the Spectrasonics elements in my music are exposed for a period of time?

We aren't concerned about normal music use, where the music is presented in the standard "mixed" format. Of course our sounds may sometimes appear in exposed passages like intros and breaks within a song's mix and this is considered normal usage.

# Can I use Spectrasonics Instruments or libraries to create loops or samples for distribution if I'm layering them with other sounds or doing a lot of creative processing?

No. At least not without getting special permission or an additional license from Spectrasonics. Legally, this is considered a "derivative work" when our copyrighted sound recordings are involved in the creation of new samples or loops.

#### What if it's just for my own use and I don't distribute the samples I've created?

If you're a licensed user, you are welcome to use your Spectrasonics instruments and libraries to create new audio samples and loops for your own use. The important thing is not to distribute them.

#### I work at a production music studio with several other composers/producers. Can we all use Omnisphere from our main server?

No. It's very important that each composer must have his or her own copy and license for Omnisphere. We make regular checks to verify that large production studios have obtained the proper licenses for our instruments and sample libraries.

#### As a studio owner, can I include Omnisphere on a rental or studio computer for clients to use on their projects?

No. The standard license to use Omnisphere is only granted to the buyer. We have a "single user/multiple computer" lifetime license policy. If it is your own recording project that you are producing, of course that isn't a problem...but your studio clients aren't licensed to use it for their own projects, and Omnisphere use can't be "rented". Multiple license packages are available by contacting your Spectrasonics distributor. If you have questions regarding multi-license packages contact info@spectrasonics.net

#### Does this mean that I can't use Omnisphere when working on someone else's project?

This type of use is very standard and not a problem at all. The "single user" is defined as the person who is licensed to use the software instrument. This means that the licensed user can use it on an unlimited number of musical projects they are involved in. This can be a person's own project, a project where they are acting as a producer or engineer for another artist, as a session musician performing on someone else's project live or in the studio, etc. The main point of our license agreement is the concept of a single licensed user. If a licensed Omnisphere user is not musically involved in a project, that is where there is a restriction - hence the inability to simply rent the instrument or rent "time" to use the instrument as part of a studio's services. Most of our customers use their Spectrasonics instruments on many different kinds of musical projects

for different artists and collaborations.

#### Can my writing partner use a copy of my instrument on their computer?

No...the license to use Omnisphere is on a per-person (single user) basis. They would need their own copy of Omnisphere to use it on their computer.

#### Can I install my Omnisphere on a client's computer for their use?

Not unless they are a licensed user. They will need their own serial number and registration to be licensed to use the instrument.

# I've never heard of these kinds of licensing restrictions before. This seems unusual and totally different from using hardware sound modules. Why does Spectrasonics have such an unusual policy?

It's not actually unusual at all or even unique to Spectrasonics. In fact, this is the identical type of license agreement used by thousands of media libraries, virtually all sample-based virtual instruments and the vast majority of music software. Single user license agreements do have different restrictions compared to using hardware devices, and many people are not aware of these types of differences and restrictions. Part of the purpose of this FAQ section is to serve as a clear explanation of our policies. In this case, these types of "single user" license restrictions are standard for nearly all software/soundware companies, not only Spectrasonics.

#### Can I resell Omnisphere used to someone else?

Not without obtaining a license transfer from Spectrasonics. The sounds and software are licensed and registered ONLY to you. You cannot automatically transfer the license to someone else, and therefore you cannot simply sell it used. If you do attempt to sell it used without obtaining a license transfer, the buyer will not be able to use the product because it is registered and licensed to you. The Omnisphere license is the right given to a single person to use the instrument. When you purchase the product, you are primarily purchasing the lifetime right to use the product and the sounds it contains in your own music projects. Also, if you sell any of your computers that have a Spectrasonics instruments installed on them, you are required to delete them first from the hard drive.

#### How would I obtain a license transfer and how much does it cost?

The vast majority of sample libraries and sample-based virtual instruments on the market do not allow license transfers of any kind. However, at Spectrasonics we realize that there are certain circumstances where it can be a legitimate transaction. Because circumstances can vary so much, we only grant license transfers on a case-by-case basis.

Depending on the circumstances, when a license transfer is granted, there is often an additional fee involved that covers the transfer of all the rights to the new user to use the core library sounds, to receive full tech support and continuing support update rights, issuing a new serial number and account, etc. License transferred versions of this software do not have the same upgrade "special pricing" privileges as standard new units purchased at an authorized Spectrasonics dealer. If you have more questions about obtaining license transfers, how much it costs and what the limitations are of license transferred versions, please contact us directly at info@spectrasonics.net

#### Do license transferred (used) versions get access to software updates and upgrades?

Yes, but not necessarily the same special "upgrade" pricing offers.

#### Can a license transferred (used) version be resold and transferred again?

No. This can only be done once by the original purchaser.

#### What are the privileges of a Licensed User that purchased Omnisphere from an authorized Spectrasonics dealer?

• Lifetime, unlimited use of the purchased version of the instrument and the sounds it contains to use for music projects.

- · Free phone, email and online Technical Support
- Free software maintenance updates
- Special upgrade pricing on major new versions

#### LEGAL/SAMPLING FAQs

#### Am I allowed to distribute samples I've made of any of Omnisphere's Factory sound libraries?

No. The factory core sound libraries of Omnisphere are copyrighted and may not be distributed. This includes all types of distribution - the use in other sample libraries, sound FX libraries or sample-based hardware or software products is specifically prohibited.

#### What if I extensively modify the Omnisphere factory sounds?

All modification, layering and tweaking is still legally considered a "derivative work" based on copyrighted recordings, so any type of re-use

sample distribution like this would require specific clearance in advance.

#### Does this mean that I'm not allowed to distribute my own original Omnisphere patches or multis?

That's not a problem. Any type of distribution of user Omnisphere patches and multis (.prt &.mlt files) is not only allowed, it's encouraged! :-)

#### Am I allowed to distribute samples of my own original Omnisphere patches?

Your own original Omnisphere patches are very likely to be based on our copyrighted material, so the answer would be NO in those cases. Contact us if you have questions.

#### Can I sample Omnisphere for my own private use?

Of course. Every licensed user is free to use Omnisphere's sounds in any way within the production of their music that works for them creatively...including making their own custom samples with the instrument. Those custom samples only become a legal issue when they go beyond the private musical use of the individual user (i.e. distribution).

#### Am I permitted to distribute my Omnisphere samples if it's non-commercial?

No. There's no distinction between commercial or non-commercial distribution. Posting/sharing original samples of Omnisphere presents the same legal issues as commercial distribution.

# But if Spectrasonics sampled other manufacturers' instruments to make Omnisphere, then why can't I use Omnisphere for my sampling project? This seems inconsistent.

For Omnisphere's core library, Spectrasonics researched and obtained all necessary legal clearance to use all the original samples we created that incorporate other manufacturers' instruments.

Please contact Spectrasonics directly if you have any questions regarding sampling Omnisphere®: info@spectrasonics.net

#### **LEGAL NOTICES - Software License Agreement**

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# **CONCEPTS – Host Automation**

All MIDI Learnable parameters in Omnisphere can also be automated using the Host Automation feature. Each host handles Host Automation differently, so it's important to understand how your specific software will interact with Omnisphere.

### **Enabling Host Automation**

To make a Host Automation assignment for a parameter in Omnisphere, Right/Control-click a parameter to open its contextual menu, and then select the Enable Host Automation option.

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The parameter will be assigned the next available Host Automation ID number, from lowest to highest. Once assigned, changes made to the parameter using the Omnisphere interface can be recorded in real time in the host software.

NOTE: If your host doesn't display Host Automation assignments by name, use the MIDI Learn Report to display the parameter names along with their corresponding Host Automation ID numbers.

All Host Automation assignments are stored with the Multi, saved with the host project file, and can also be saved with a <u>MIDI Learn Template</u>.

NOTE: You can enable up to 128 Host Automation parameters. If you need more than 128 assignments, consider using MIDI Learn together with Host Automation.

### **Technical Considerations**

There are 128 parameter slots in Omnisphere that can be automated, numbered from 0 to 127. These slots correspond to the list of parameters that can be automated in the host or on your control surface. For example, slot 0 is the first parameter in the host or on the control surface, the next one is number 1, etc. You can assign any parameter in Omnisphere to one of these slots using "Enable Host Automation". The parameter will be assigned to the next available slot and may then be automated from the host or control surface. Automation ID numbers correspond to the ordered list of parameters that can be automated in the host or on a control surface.

Parameter automation is capable of two-way communication. If your host and control surface support it, your control surface can display the names of the parameters controlled by each knob or fader, and each control can automatically update to show the current value of a parameter. For example, Mackie Control displays and automatically updates parameter names in real time. Motorized faders can move to show the current values of parameters, which is very useful when opening songs that contain plug-ins controlled by the surface.

Some hosts have a limit on the number of parameters that are available to be Host Automated. For example, some only permit the first 128 parameters of a plug-in to be automated. In others, the limit is 1024 parameters. By comparison, Omnisphere has nearly 20,000 parameters!

If you're working in a host that limits the number of automation parameters, you can also use the MIDI Learn feature of Omnisphere to automate Omnisphere's parameters. The combination of Host Automation and MIDI Learn gives you powerful real-time control of virtually every parameter of Omnisphere.

#### **Host-Specific Notes**

• Ableton Live - After Enabling Host Automation for a specific parameter, it is necessary to also move that parameter in the Omnisphere interface to complete the assignment.

• Logic - After setting up all of your MIDI Learn and Host Automation assignments, you can save a Default Multi, which will load all of your custom assignments each time you open a new instance of Omnisphere. Logic Users will see all learned Host Automation parameters by name upon load.



# **GETTING STARTED - Checking For Updates**

The latest versions of the software, soundsource library, and patch library for Omnisphere can be found on our website at:

### http://www.spectrasonics.net/updates

You're definitely going to want to stay up to date with latest software and sounds for Omnisphere, because we have a lot in store for this instrument.

With Omnisphere, we've included a way for you to be able to quickly check for updates directly from the plug-in.

Simply click the Spectasonics logo to reveal the credits page. At the top left, there is a button to Check For Updates:



Clicking this will compare the current installed versions on your system with the latest available updates on the Spectrasonics website. Remember that there are separate versions for the Omnisphere software, soundsources, and patches, so you'll want to make sure that all three are always up to date.



# System Status

-	Your System	Latest Version	Status
Software	1.0h	1.0h	•
Soundsources	1.0	1.01	•
Patches	1.0	1.01	

At least one of the components needs to be updated in your system.



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# **GETTING STARTED - Authorizing On A Computer Connected To The Internet**

The music computer must be connected to the internet while following these instructions. 1. After instantiating Omnisphere into your sequencer, click the Omnisphere splash screen.



You will now see the Omnisphere Authorization System window:

	Welcome to the Omnisphere Authorization System
	You are currently using Omnisphere in Demo mode, and we recommend that you authorize Omnisphere immediately.
	It is much easier to authorize Omnisphere when this computer is contected to the Internet. If this computer is not connected to the Internet or if you need more assistance with authorizing Omnisphere, please click the HELP button below.
	To authorize this computer:
	1. Please copy the Challenge code below by clicking the COPY button.
	2. Go to the Spectrasonics website to continue the authorization process. http://www.spectrasonics.net/authorization
	After you have completed the online authorization procedure, the website will then immediately give you a Response code that you can copy from the site.
	3. Paste that Response code below by clicking the PASTE button. (DO NOT ENTER YOUR SERIAL NUMBER HERE)
	4. Complete the authorization process by clicking the CONTINUE button.
	COPY Challenge code: @6cDe FgH/jK Lmn Op\$rs//z
	PASTE Response code:
<u></u>	
SPECTRASONICS	
- VIETURGOUNET RUMERTE	CONTINUE

file:///Users/...nt/SPECTRASONICS/INSTRUMENTS/OMNISPHERE/REF%20GUIDE/REF%20GUIDE/20LOCAL/get_started/authorization/page01.html[6/8/10 6:13:51 PM]

2. Click the COPY button to copy the challenge code. Log in to the Spectrasonics website with your User Account name and password

http://www.spectrasonics.net/authorization

You will be taken to your User Account page. If you don't yet have a User Account, you can create one. For further assistance, check out the <u>tutorial video</u>

3. If this is your first authorization of Omnisphere, you'll need to add it to your account by pressing the "Add a product to your account" button under the Registered Products table.

	User Account: Spectra User	
	You are logged in as spectrause	er
	Logout	
Your Profile	:	
Username	spectrauser	
Name:	Spectra User	
Email:	spectrauser@email.com	
Address:	123 Happy St. Funkytown FL, 00001 USA	
Phone:	8888704223	Edit User Information

Current Products Registered:

Instrument	Serial No.	License Type	Get Updates	Get Authorization
Trilian	00000443	Standard	Omnisphere Updates	Omnisphere Authorization
Stylus RMX	0000032	Standard	Stylus RMX Updates	Stylus RMX Authorization
Trilogy	0000058	Standard	Trilogy Updates	Trilogy Authorization

NOTE: Be sure to register your complete collection of Spectrasonics Instruments in order to take advantage of special upgrade offers in the future!

Add a product to your account

4. Fill out all of your personal information on this page. Select Omnisphere as your product. When finished, click "Next" at the bottom of the page.

Add a product to your account	
Enter Serial #	Submit

5. You'll then paste your Challenge code in the field on the Authorization page. Please enter the details about your Computer as well, as it will be necessary if you require tech support.

AUTHORIZATION
User Account: Spectra User
Serial number: 0000000 - Omnisphere
Paste the Challenge Code: SAQXdwBs/ /+NvZCQ?M zTygMAAAA
Computer: Macbook Pro
Operating System: Mac OSX 10.6x Snow Leopard \$
Sequencer/Host: Traction 💠
What kind of new sounds would you be interested in? Lesta Diamond's Reggaeton Grooves
SUBMIT

6. You'll then receive a Response Code, which you'll select with your cursor and copy (Control-C on Windows or Command-C on Mac):

AUTHORIZATION	
---------------	--

User Account: Spectra User

Authorization Successful!

Here is the Response code to authorize your plug-in Omnisphere:

GBRDxF7SXnd UpXszHVW:zR fLt?5s2mpeK mFVfz+Lv7Kd BF2yqf%jUWW UaBskbyfNfw hMd%29

Copy and paste this code into the response field in the plug-in authorization window by pressing the PASTE button in the Omnisphere plug-in. You may also type in the response code, but please be careful to enter it exactly as it appears here. Trilian will then instruct you to reopen the plug-in. If the authorization was successful, you will now be able to use the plug-in.

That's it!

We'll send you a verification email with a copy of your response numbers and registration info.

If you have any problems with the authorization, please email us at:

info@spectrasonics.net

Thanks for your purchase and please now go to the Updates page to verify that you have the latest version of the plug-in...have fun and let us know what you think!

7. Return back to Omnisphere. Click PASTE and the Response Code will now be displayed in Omnisphere.

	Welcome to the Omnisphere Authorization System
	You are currently using Omnisphere in Demo mode, and we recommend that you authorize Omnisphere immediately.
Perset a Siveral	It is much easier to authorize Omnisphere when this computer is contected to the Internet. If this computer is not connected to the Internet or if you need more assistance with authorizing Omnisphere, please click the HELP button below.
	To authorize this computer:
	1. Please copy the Challenge code below by clicking the COPY button.
	<ol> <li>Go to the Spectrasonics website to continue the authorization process. http://www.spectrasonics.net/authorization</li> </ol>
	After you have completed the online authorization procedure, the website will then immediately give you a Response code that you can copy from the site.
	3. Paste that Response code below by clicking the PASTE button. (DO NOT ENTER YOUR SERIAL NUMBER HERE)
	4. Complete the authorization process by clicking the CONTINUE button.
	COPY Challenge code: @6cDe FgH/jK Lmn Op\$rs//z
	PASTE Response code:
	AbC dE+//FgH iJ=kLmn0pQ AbC dE+//FgH iJ=kL\\\n0PQ AbC dE+//FgH iJ=kLmn09Q 7AbC dE+//
c////	
SPECTRASONICS	HELP CONTINUE

- 8. Click CONTINUE
- 9. Now remove Omnisphere from your host sequencer.
- 10. Re-insert Omnisphere into your host.

Omnisphere will now be authorized and fully functional.



# **GETTING STARTED - Mac OS-X Installation to an External Drive**

Follow this set of instructions to install the Omnisphere large sound library files onto an external hard drive. The Omnisphere plug-in files will be installed to the startup hard drive. You need 50GB of free space available on your external hard drive in order to continue.

NOTE: These screenshots are taken in OSX Leopard. Installation on OSX Tiger will look slightly different.

# **INSTALLING DISC 1**

1. After inserting Omnisphere Disc 1 into the computer, open the disc to reveal its contents from the Desktop.

2. Open the Mac folder and then double-click "Omnisphere Disc 1" to begin the installation of Omnisphere.



# 3. Click "Continue".



4. Read this important information about the installation process before you install. Click "Continue"

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to proceed.



5. After reading through the licensing FAQs, click "Continue".



6. You will then be prompted by another window. Choose "Agree" if you fully understand the licensing agreement to continue.

00	😺 Install Omnisphere Disc 1	
	To continue installing the software you must agree to the terms of the software license agreement.	-
0 Int		100
O Rei	Click Agree to continue or click Disagree to cancel the installation	D
O Lic	and quit the instaner.	
@ De	(Read License) (Disagree) (Agree)	
@ Ins	Cheld ceche	
@ installat	NON-MUSIC USE = NOC Allowed	
• Summa	Any uses that are not allowed need additional permission or a special license from Spectrasonics.	Ш
	Are there any legal limitations to how I can use Omnisphere? The main limitation is that you are not allowed to use it to make a sample library or another kind of sample-based product. You are also restricted from giving away or posting online any loops or samples created using Omnisphere. However, you are able to use Omnisphere in all musical recording applications without	
L	Print     Save     Go Back     Continu	

7. Click "Change Install Location..." to select a custom installation location for the large sound library files of Omnisphere.

	Select a Destination
Introduction	Select the volume where you want to install the Omnisphere Disc 2 Core Library software.
Read Me     Destination Select     Installation Type	
Installation  Summary	MCFMacBook External Drive 49.8 G8 available 291 G8 available 297 G8 total 298 G8 total
	Installing this software requires 7.0 GB of space.
Tomas and the	You have chosen to install this software in the folder "Spectrasonics" on the volume "External Drive",
	Choose Folder
	Go Back Continue

Now select an external drive for the installation. Remember that the drive needs 50GB of free space for the entire installation. After selecting the drive, select

"Choose Folder".

Create or select a folder on the external drive as the installation destination. In this example, a folder named "Spectrasonics Instruments" has been created and selected as the installation destination. After selecting a folder, click "Choose".

Then click "Continue" followed by "Install".

800	😺 Install Omni	sphere Disc 1		
	Spectrasonics Instruments		(Q search	
DEVICES     MCFMacBook     Disk     MCFMacBook     Omnisphere Disc 1      record Point     PLACES	Spectrasonics instruments -			
(New Folder			(Cancel )	Choose )

8. Enter the password for your Mac OSX user account to continue the installation.

e Introducti e Read Me e Destinatic e Installatic e Installation e Summary	<ul> <li>Details</li> <li>?</li> </ul>	Installer requires that you type your password. Name: Spectra User Password: ••••••••••••••••••••••••••••••••••••
		Customize Go Back Install

9. The disc will now install. The installation of each disc will take up to 45 minutes. The installer will launch a separate script during the installation to install the large sound library files. The script window will update every 10 seconds to show the progress of the installation.

NOTE: The installer progress bar in the background will not move during the installation of the sound files. This is normal and installation progress will be shown via the "Time Elapsed" area of the script window.

During the installation, it is not recommended to use your computer for anything other than installing Omnisphere. The script window will beep and bounce in the dock if other applications are opened. This is because the script window wants to be the top window on screen at all times. Doing other things while installing probably won't jeopardize the installation, but you should be aware of how the installer script behaves. Selecting the "Hide" button will cause the script window to vanish until the installation completes.



10. Once the disc has finished installing, click "OK", then "Close", and continue by installing the next disc.



# **INSTALLING DISC 2 - DISC 6**

The following instructions apply to Disc 2 through Disc 6.

11. After inserting Omnisphere Disc 2 into the computer, open the disc to reveal its contents from the Desktop.

12. Open the Mac folder, then double-click "Omnisphere Disc 2" to begin the installation of Omnisphere.



13. Click "Continue".



14. Read this important information about the installation process before you install. Click "Continue" to proceed.



15. Now choose the same installation destination as you did for Disc 1. Click "Change Install Location..."

1	itandard Install on "MCFMacBook"
Introduction     Read Me     Destination Select     Installation Type     Installation     Summary	Click Install to perform a standard installation of this software on the volume "MCFMacBook".
	Change Install Location

Select the same external hard drive as you did in Disc 1 and click "Choose Folder".



16. Enter the password for your Mac OSX user account to continue the installation.

800	😺 Install Omn	isphere Disc 1		
< >) (II = (II) (I	Spectrasonics Instruments	0	Q search	-
PDCVICES  MCFMacBook  Disk  MCFMacBook  Ontrivicities 1   PLACES  PLACES	Spectrasonics Instruments.			
		4		
New Folder			(Cancel)	Choose )

17. The disc will now install. The installation of each disc will take up to 45 minutes. The installer will launch a separate script during the installation to install the large sound library files. The script window will update every 10 seconds to show the progress of the installation.

NOTE: The installer progress bar in the background will not move during the installation of the sound files. This is normal and installation progress will be shown via the "Time Elapsed" area of the script window.

During the installation, it is not recommended to use your computer for anything other than installing Omnisphere. The script window will beep and bounce in the dock if other applications are opened. This is because the script window wants to be the top window on screen at all times. Doing other things while installing probably won't jeopardize the installation, but you should be aware of how the installer script behaves. Selecting the "Hide" button will cause the script window to vanish until the installation completes.

Select the same folder as was done for Disc 1, and click "Choose". Then click "Continue" followed by "Install".

0.0	The large Omnisphere core library files are now being installed. This disc may take up to 45 minutes.
) Introduction Read Me Destination Se	Time elapsed: 3 minutes
Installation Type	Preparing Omnisphere Disc 2 Core Library Running Omnisphere Disc 2 Core Library Installer script
	Go Back Contin

18. Once the disc has completed installing, click "OK", then "Close", and continue by installing Disc 3 through 6 exactly as was just done for Disc 2. After installing Disc 6, the installation will be complete.



Once the installation of all six discs is complete, it's now time to open Omnisphere in your host sequencer and authorize it.

Please consult the Authorization section for assistance with authorizing Omnisphere.



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# **GETTING STARTED - Authorizing On A Computer NOT Connected To The Internet**

If your computer is not connected to the Internet, please follow these instructions for authorizing Omnisphere. You will need a flash drive, hard drive, or blank CD/DVD available for use when following these instructions.

1.After instantiating Omnisphere into your sequencer, click the Omnisphere splash screen:



2. Click the COPY button to copy the challenge code.

-	Welcome to the Omnisphere Authorization System
	You are currently using Omnisphere in Demo mode, and we recommend that you authorize Omnisphere immediately.
Posta Surra	It is much easier to authorize Omnisphere when this computer is contected to the Internet. If this computer is not connected to the Internet or if you need more assistance with authorizing Omnisphere, please click the HELP button below.
	To authorize this computer:
	1. Please copy the Challenge code below by clicking the COPY button.
	2. Go to the Spectrasonics website to continue the authorization process. http://www.spectrasonics.net/authorization
	After you have completed the online authorization procedure, the website will then immediately give you a Response code that you can copy from the site.
	3. Paste that Response code below by clicking the PASTE button. (DO NOT ENTER YOUR SERIAL NUMBER HERE)
	4. Complete the authorization process by clicking the CONTINUE button.
	COPY Challenge code: @6cDe FgH/jK Lmn Op\$rs//z
	PASTE Response code:
~ / lee	
SPECTRASONICS	HELP CONTINUE

3. Open a text editor application (such as Text Edit (Mac), Notepad / Wordpad (PC)). Paste into a blank new document. On a Mac, hold COMMAND and press 'V'. On a PC, hold CTRL and press 'V'. The challenge code will now appear in the document. Save the document as a Rich Text File (RTF) with a filename of your choice.

4. Move the RTF file to a flash drive, hard drive, or burn it to a blank CD/DVD. You will need to transport this document over to a computer that has an Internet connection. Flash drives are recommended because they are cheap and quickly move files between computers.

5. Open the RTF file on a computer with an Internet connection. Highlight the entire challenge code in the document and Copy it. On a Mac, hold COMMAND and press 'C'. On a PC, hold CTRL and press 'C'.

6. Log in to the Spectrasonics website with your User Account name and password

#### http://www.spectrasonics.net/authorization

You will be taken to your User Account page. If you don't yet have a User Account, you can create one. For further assistance, check out the <u>tutorial video</u>.

7. If this is your first authorization of Omnisphere, you'll need to add it to your account by pressing the "Add a product to your account" button under the Registered Products table.

	User Acc	ount: Spectra User	
	You are log	gged in as <i>spectrauser</i>	
		Logout	
Your Profile:			
Username:	spectrauser		
Name:	Spectra User		
Email:	spectrauser@email.com		
Address:	123 Happy St. Funkytown FL, 00001 USA		
Phone:	8888704223		Edit User Information

Current Products Registered:

Instrument	Serial No.	License Type	Get Updates	Get Authorization
Trilian	00000443	Standard	Omnisphere Updates	Omnisphere Authorization
Stylus RMX	0000032	Standard	Stylus RMX Updates	Stylus RMX Authorization
Trilogy	0000058	Standard	Trilogy Updates	Trilogy Authorization

NOTE: Be sure to register your complete collection of Spectrasonics Instruments in order to take advantage of special upgrade offers in the future!

Add a product to your account

8. Enter your Omnisphere serial number in the box that appears below the button:

Add a product to your account	
Enter Serial #	Submit

9. You'll then paste your Challenge code in the field on the Authorization page. Please enter the details about your Computer as well, as it will be necessary if you require tech support.

AUTHORIZATION
User Account: Spectra User
Serial number: 0000000 - Omnisphere
Paste the Challenge Code: <u>SAqXdwBs</u> / /+NvZCQ?M zTygMAAAA
Commuter Machaeli Bro
Computer: Macbook Pro 🗧
Sequencer/Host: Traction +
What kind of new sounds would you be interested in?
SUBMIT

10. You'll then receive a Response Code, which you'll select with your cursor and copy (Control-C on Windows or Command-C on Mac):

AUTHORIZATION	
User Account: Spectra User	
Authorization Successful!	
Here is the Response code to authorize your plug-in Omnisphere:	
GBRDxF75Xnd UpXszHVW:zR fLt75s2mpeK mFVfz+Lv7Kd BF2yqf%jUWW UaBskbyfNfw hMd%29	
Copy and paste this code into the response field in the plug-in authorization window by pre button in the Omnisphere plug-in. You may also type in the response code, but please be o exactly as it appears here. Trilian will then instruct you to reopen the plug-in. If the authori successful, you will now be able to use the plug-in.	ssing the PASTE areful to enter it zation was
That's it!	
We'll send you a verification email with a copy of your response numbers and registration in	fo.
If you have any problems with the authorization, please email us at:	
info@spectrasonics.net	
Thanks for your purchase and please now go to the Updates page to verify that you have the plug-inhave fun and let us know what you think!	e latest version of
<ol> <li>Open up a blank new document in a text editor application. Paste into the docume esponse Code will now appear in the document. Save the document as a Rich Text F filename of your choice.</li> </ol>	ent. The File (RTF) with

12. Move the RTF file to a flash drive, hard drive, or burn it to a blank CD/DVD. You will need to

transport this document back over to the music computer.

13. Open up the RTF file which contains the Response Code on your music computer. Select and highlight the Response Code in the document and Copy it. On a Mac, hold COMMAND and press 'C'. On a PC, hold CTRL and press 'C'.

14. Return back to Omnisphere. Click PASTE and the Response Code will now be displayed in Omnisphere.

The second	You are currently using Omnisphere in Demo mode, and we recommend that you authorize Omnisphere immediately. It is much easier to authorize Omnisphere when this computer is contected to the Internet. If this computer is not connected to the Internet or if you need more assistance with authorizing Omnisphere, please click the HELP button below. To authorize this computer: 1. Please copy the Challenge code below by clicking the COPY button. 2. Go to the Spectrasonics website to continue the authorization process.
	It is much easier to authorize Omnisphere when this computer is contected to the Internet. If this computer is not connected to the Internet or if you need more assistance with authorizing Omnisphere, please click the HELP button below. To authorize this computer: 1. Please copy the Challenge code below by clicking the COPY button. 2. Go to the Spectrasonics website to continue the authorization process.
	To authorize this computer: 1. Please copy the Challenge code below by clicking the COPY button. 2. Go to the Spectrasonics website to continue the authorization process.
	Please copy the Challenge code below by clicking the COPY button.     So to the Spectrasonics website to continue the authorization process.
	2. Go to the Spectrasonics website to continue the authorization process.
	http://www.spectrasonics.net/authonization
	After you have completed the online authorization procedure, the website will then immediately give you a Response code that you can copy from the site.
3	3. Paste that Response code below by clicking the PASTE button. (DO NOT ENTER YOUR SERIAL NUMBER HERE)
	4. Complete the authorization process by clicking the CONTINUE button.
	COPY Challenge code: @6cDe FgH/jK Lmn Op\$rs//z
	PASTE Bespapse code:
1 mg	AbC dE+//FgH iJ=kLmn0pQ AbC dE+//FgH iJ=kL\\\n0PQ AbC dE+//FgH iJ=kLmn09Q 7AbC dE+//
Spectrasonics	

- 14. Click CONTINUE.
- 15. Now remove Omnisphere from your host sequencer.
- 16. Re-insert Omnisphere into your host. Omnisphere will now be authorized and fully functional.



# EDIT PAGE - Sample/Synth Mode Selector



Selecting either mode switch will determine whether the Layer will be able to load a Soundsource (SAMPLE) or will utilize a DSP Waveform (SYNTH).

SAMPLE MODE does not load a Soundsource by default. First a Soundsource must be selected from the Soundsource Browser.

SYNTH MODE defaults to the "SawSquare Fat" waveform.

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# **CONCEPTS - MIDI Learn Menus**

### **Utility Menu**

The Utility Menu provides MIDI Learn options that affect the entire plug-in. These include MIDI Learn Templates, Unlearn All, and the MIDI Learn & Automation Report (Show Current Assignments). The Utility Menu is opened from the Header, or by Right/Control-clicking any empty area of the Omnisphere interface.

MIDI Learn and Automation	Save Template
Initialize Multi Clear Multi Save Multi	Load Template Unlearn Next MIDI Device Unlearn Next Parameter Make MIDI Learned Controls Omni
Initialize Patch	Unlearn All MIDI Learns
Clear Patch	Clone Part 1 MIDI Learns
Save Patch Save Patch Quick Copy Part	Show Current Assignments Ignore Assignments When Loading Multi
Paste Part	MAIN EDIT FX ARP
Initialize Layer Clear Layer	LAYER A LAYER B
Copy Laver	
Paste Layer	
Reference Guide	
video i utoriais	SawSquare Fat

### **MIDI Learn Template**

All MIDI Learn & Automation assignments are saved with a MULTI, but there are times when it makes sense to save a MIDI Learn & Automation configuration for use with another project or environment.

MIDI Learn & Automation Templates allow custom setups to be saved and easily recalled whenever they're needed.

Select 'Save Template' from the MIDI Learn & Automation sub-menu, to store all current MIDI Learn & Automation assignments for later recall. Selecting this option will open a File Save dialogue, allowing the Template to be named and saved.

Select 'Load MIDI Learn Template' to load a previously saved Template. Any existing MIDI Learn assignments will be replaced with the assignments stored in the Template. Selecting this option will open a File Load dialogue, allowing a saved Template to be loaded.

NOTE: Before saving a MIDI Learn Template, you can use MIDI Learn Report (see below) to preview the assignments that will be saved with the Template. This is also a convenient way to verify assignments after a MIDI Learn Template has been loaded.

### **Unlearn Next MIDI Device**

When a physical controller has been MIDI Learned, you can use this option to Unlearn it. To accomplish this, select Unlearn Next MIDI Device from the menu, then move the physical controller on your MIDI Device.

Using MIDI Learn, a single controller can have more than one parameter assigned to it. This option is especially convenient if you are controlling more than one parameter with a single physical controller. It allows you to clear all assignments for the specific controller, without having to Unlearn each parameter individually.

#### **Unlearn Next Parameter**

When a parameter in the Omnisphere interface has been MIDI Learned, you can use this option to Unlearn it. To accomplish this, select Unlearn Next Parameter from the menu, then select and move the parameter that you wish to Unlearn.

This is a useful feature when you have more than one parameter assigned to a single physical controller. A single parameter can be Unlearned, while the rest will remain assigned to the physical controller.

#### Make Controls Omni

Assignments can be made to receive in MIDI Omni mode so that when a sequencer's track is changed, all of the controls are still active regardless of the incoming MIDI channel assignment.

Omnisphere is MIDI input channel sensitive when MIDI Learning. This means that it can distinguish between a button transmitting Ch 1 and the same button transmitting Ch 2.

Selecting this option allows all non-cloned MIDI Learn settings to respond to any incoming MIDI channel (e.g. MIDI Omni mode reception). This is very useful when you want Omnisphere to respond to an external control regardless of the current incoming MIDI channel.

#### **Unlearn All**

Selecting this option will clear all existing MIDI Learn and Automation assignments.

#### **Clone Part 1 Learns**

Use this option to clone all non-omni Part 1 MIDI Learn assignments to all other Parts in the Multi, and across all other MIDI channels.

#### **Show Current Assignments**

Show Current Assignments displays all existing MIDI Learn & Automation assignments as a formatted report. The information will be displayed using your default Web Browser. This is especially useful for checking existing MIDI Learn & Automation assignments before saving a MULTI or a MIDI Learn & Automation Template, or to verify assignments after loading a MIDI Learn & Automation Template.

### **MIDI Learn Report**

The MIDI Learn Report displays all existing MIDI Learn assignments, and includes Host Automation assignments. The Report will be displayed using your default Web Browser.

The MIDI Learn Report is especially useful for checking existing MIDI Learn assignments before saving a MULTI or a MIDI Learn Template, or to verify assignments after loading a MIDI Learn Template.

NOTE: If your host doesn't display Host Automation assignments by name, use Show Current Assignments to display the parameter names along with their corresponding Host Automation ID numbers.

### Ignore Assignments When Loading Multi (Toggle)

When loading a MULTI, this option determines whether Omnisphere will ignore or load the MIDI Learn assignments that were saved with the MULTI.

When the Ignore Assignments option is enabled (indicated by a checkmark displayed next to it in the menu), Omnisphere will ignore any MIDI Learn assignments that were saved with the MULTI. Instead, all existing assignments will be retained.

When the Ignore Assignments option is disabled (no checkmark next to it in the menu), Omnisphere will replace all existing assignments with the MIDI Learn assignments that were saved with the MULTI.

NOTE: The Ignore Assignments option retains its setting across sessions. If you find that MIDI Learn assignments aren't behaving as expected after loading a MULTI, please verify that the Ignore Assignments option is properly set.

### CONTEXTUAL MENU



Contextual Menus provide parameter-specific MIDI Learn options, and include Modulation and Host Automation options as well.

If a parameter can be MIDI Learned, the following MIDI Learn options will be available when you Right/Control-click directly on the parameter:

#### **MIDI CC Learn**

Select this option, then move or press a control on your MIDI controller. The control will then be paired with the Omnisphere parameter.

#### **MIDI CC Learn Inverted**

When you select this option, then move or press a control on your MIDI controller, the control will be paired with the Omnisphere parameter. However, the values will be inverted. For example, as you increase the value of the physical control, the value of the Omnisphere parameter will decrease.

### **MIDI Note Learn**

Select this option then play a note on your MIDI controller. That Note will then control the assigned Omnisphere parameter. Once a Note has been MIDI Learned it will no longer trigger a sound when Omnisphere receives Note On messages from that Note, it will only control the assigned parameter.

#### **MIDI Note Learn Inverted**

When you select this option, then play a note on your MIDI controller, that Note will then control the assigned Omnisphere parameter. However, the values will be inverted. Once a Note has been MIDI Learned it will no longer trigger a sound when Omnisphere receives Note On messages from that Note, it will only control the assigned parameter.

NOTE: When you MIDI Learn a variable range parameter (such as a knob or slider) using MIDI Note Learn, the Note On/Off messages will toggle the parameter to its maximum and minimum positions respectively. When using MIDI Note Learn Inverted, the values are reversed, so Note On would toggle to the minimum value, Note Off would toggle to the maximum value.

# Unlearn

Select this option to clear all MIDI Learn assignments, including Host Automation assignments, for this parameter.

## Show Learns

Use this option to show all MIDI Learn assignments for this parameter. A pop-up dialogue will open showing all CC and/or Note numbers assigned, or will notify you if there are no current assignments.



# **EDIT PAGE - Soundsource Zoom - Thinning**



# In addition to Special Articulations, Soundsources may also include multiple Round Robin samples and Velocity switched samples.

For this reason, a fully loaded Soundsource can use quite a bit of memory. The Sample Thinning interface helps to manage the use of those resources.

By limiting the number of Round Robin samples, or the Velocity switched samples, or by turning off Legato Soundsources, you can dramatically reduce memory used.

### **Round Robin**

	ORMELE INNERING
	✓ No limit
	At most 4 RRs
VEL	At most 3 RRs
	At most 2 RRs
	No RR

To limit the number of Round Robin samples that are loaded, select an option from the Round Robin menu.

You can choose a setting that ranges from "No RR" too "At Most 4 RR". Select "No Limit" to allow all Round Robin samples to be loaded.

# Velocities



Soundsources can include a very large number of Velocity switched samples, which is great for very realistic and expressive playing. However, if you need to conserve system resources, you can choose to thin the amount of Velocities using this menu.

#### No Limit

Will load all Velocity switched samples.

### Every other

Will load every other Velocity switched sample.

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#### **Every third**

Will only load every third Velocity switched sample.

#### **Every fourth**

Will only load every fourth Velocity switched sample.

#### Velocities above

Selecting a value from this menu, for example, 64, will only load Velocity switched samples mapped to a Velocity of 64 and above.

#### Velocities below

Selecting a value from this menu, for example, 100, will only load Velocity switched samples mapped to a Velocity of 100 and below.

*NOTE:* When thinning Velocities, there are no gaps in the sound. The remaining Velocity switched samples will adjust to be triggered across the full Velocity range.

#### Legato

	· · · ·	
1	No limit	
	None	

This menu has two options, No Limit and None, which determine whether or not Legato Soundsources will be loaded with the sound.

If No Limit is selected, Legato Soundsources will be loaded if the Soundsource has Legato Soundsources associated with it. If None is selected, the Legato Soundsources will be unloaded.

TIP: If you choose to load the Legato Soundsources, you must also enable the Use Legato SS button to trigger them when playing.

NOTE: If you are not using the Use Legato SS feature, it's a good idea to unload the Legato Soundsources (by selecting None from the menu) to conserve system resources.

NOTE: You can think of the difference between the Legato Thinning menu, and the Use Legato SS button in this way: The Legato menu controls whether the Legato Soundsources will be loaded or not, while the Use Legato SS button determines the behavior of the Part (whether it will "solo" notes played Legato that are half step or a whole step apart).

#### Pitch Thinning

SAMPLE THINNING						
ROUND ROBIN	No limit 🗸					
VELOCITIES	Every third -					
LEGATO	No limit 🔻					
РІТСН	A# Major 🗸					
	BEGIN TRAINING					

A Soundsource can contain thousands of samples mapped across the full keyboard range. Pitch Thinning lets you limit the samples that are loaded to match either a "trained" range of played notes, or a selected Scale or Interval. Using Pitch Thinning can substantially reduce the number of samples loaded with the Soundsource.

TIP: Although only a limited set of samples will be loaded, this won't result in "silent zones" on the keyboard. All notes will still play, but will be stretched from the nearest pitched sample.

#### Trained Pitch Thinning

BEGIN TRAINING	]-
FINISH TRAINING	

With Trained Pitch Thinning, you can load only the samples used during a performance.

For example, if you are working on a simple melodic phrase that has notes in a limited range, say from C2 to C4, by using Trained Pitch Thinning, you can speed up load times, and reduce memory usage by loading only the samples used in that range.

If you have recorded an Omnisphere part in a song, and want to speed up load times and conserve memory, you can apply Trained Pitch Thinning by playing the MIDI clip in the host. Omnisphere will then only load the samples used in the actual phrase.

To use Trained Pitch Thinning, select the Begin Training button. Play a range of notes (or a MIDI clip in the host), and then select the Finish Training button. This will limit the loaded samples to the note pitches that were played during training.

Pitch Thinning Using Scales & Intervals



To limit loaded samples to a specific Scale or Interval, select the Pitch Thinning drop-down menu, and select an option from the available sub-menus. You can select from Major or Minor Scales, or from a variety of Intervals.

NOTE: The Pitch Thinning options on the Soundsource Zoom Edit View are the same as those found on the Patch & Multi Browser "Lite Version" Zoom. However, the Browser's Lite Version feature affects the entire Patch or Multi, while the Soundsource Zoom options affect only the individual Soundsource. Using the Soundsource Zoom thinning options, you can apply different thinning options to each Layer in a Patch.

NOTE: All Thinning options applied here are saved with the Patch or Multi, and are recalled the next time you load them.



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# **BROWSER - Lite Version**



The Lite Version feature provides added flexibility when loading Patches and Multis to help you manage available memory resources and is especially useful for quick loading and auditioning sounds.

Enabling the Lite Version Button allows you to reduce, or "thin" the number of samples that are loaded with a Patch or Multi.

When this button is enabled, the thinning settings from the Lite Version Options Zoom are applied.

This feature is especially useful when loading Trilian sounds into Omnisphere using <u>Omnisphere</u> <u>Library Integration</u>. Many of the sounds included in the Trilian Factory Library are quite large, and contain thousands of samples, with some over 2 Gigabytes in size! These can place a heavy demand on available memory and take a longer time to load.

NOTE: All Thinning options applied here are saved with the song, the Patch, or the Multi, and are recalled the next time you load. However, nothing is saved until you specifically save your host song, or save the Omnisphere Patch or Multi.

*NOTE:* The Lite Version Button will reset to its default disabled state when you close the Browser. To keep it enabled, select the "Keep Lite Version Selected" option in the Lite Version Options Zoom pane.

#### Lite Version Options Zoom Pane

		LIT	E VERSION OPTION	s q	
			Memory used 0 mb (avail. 1,817)		
Round Robins	No RR		Pitch	Minor thirds C	Begin Training
Velocities	Vel above 65				
Legato	None			Keep Lite Version Selected	

Selecting the Lite Version Zoom Icon provides access to a number of thinning options, which allow you to customize the Lite Version settings.

At the top of the Zoom window is a Memory meter that shows current Virtual Memory usage.

NOTE: If you set a Memory Limit on the System Page, this gauge will show the amount of memory used relative to the selected limit.

#### **Round Robin**

No limit	
At most 4 RRs	
At most 3 RRs	
At most 2 RRs	
ns ✔ No RR	

Soundsources can include a large number of <u>Round Robin</u> samples per zone, so these can add significantly to the size of the Soundsource. This option lets you control the number of Round Robin samples that are loaded with the Patch or Multi.
In many cases, you can save quite a bit of memory by reducing Round Robins to 'At most 2 RRs', without sacrificing the more realistic feel that Round Robins provide. Selecting "No RR" will result in no Round Robin samples being loaded with the Patch or Multi. Selecting "No Limit" will load all of the Round Robin samples available.

NOTE: Most Omnisphere sounds do not contain Round Robin samples. However, if you are using Trilian sounds inside Omnisphere, this feature becomes very important, as Trilian sounds contain a very large number of Round Robin samples.

### Velocities



Soundsources may also contain a very large number of velocity switching samples mapped across many regions of the entire keyboard range. This setting provides a variety of options for reducing the number of velocity switched samples that are loaded with the Patch or Multi. To apply Velocity thinning, select from the options in the drop down menu.

### No Limit

Will load all Velocity switched samples.

### **Every other**

Will load every other Velocity switched sample.

### **Every third**

Will only load every third Velocity switched sample.

### **Every fourth**

Will only load every fourth Velocity switched sample.

### Velocities above

Selecting a value from this menu, for example, 64, will only load Velocity switched samples mapped to a Velocity of 64 and above.

### Velocities below

Selecting a value from this menu, for example, 100, will only load Velocity switched samples mapped to a Velocity of 100 and below.

*NOTE:* When thinning Velocities, there are no gaps in the sound. The remaining Velocity switched samples will adjust to be triggered across the full Velocity range.

### Legato

es_	Vel above 65	
Ĩ	No limit	
to 🗸	None	

This option determines whether Legato Soundsources are loaded or not.

If "No limit" is selected, Legato Soundsources will be loaded. If "None" is selected, no Legato Soundsources will be loaded.

NOTE: Omnisphere sounds do not currently contain Legato Soundsources. However, if you are loading Trilian sounds in Omnisphere, this feature becomes very important for overall memory management.

### **Pitch Thinning**



Omnisphere Patches & Multis can contain a huge number of samples mapped across the full keyboard range. Pitch Thinning lets you limit the samples that are loaded to match either a "trained" range of played notes, or a selected Scale or Interval. Using Pitch Thinning can substantially reduce the number of samples loaded with the Patch or Multi.

### **Trained Pitch Thinning**

With Trained Pitch Thinning, you can load only the samples used during a performance.

For example, if you are working on a melodic phrase that has notes in a limited range, say from C2 to C4, by using Trained Pitch Thinning, you can speed up load times, and reduce memory usage by loading only the samples used in that range.

If you have recorded an Omnisphere part in a song, and want to speed up load times and conserve memory, you can apply Trained Pitch Thinning by playing the MIDI clip in the host. Omnisphere will then only load the samples used in the actual phrase.

To use Trained Pitch Thinning, select the Begin Training button. Play a range of notes (or a MIDI clip in the host), and then select the Finish Training button. This will limit the loaded samples to the note pitches that were played during training.

### **Pitch Thinning Using Scales & Intervals**



To limit loaded samples to a specific Scale or Interval, select the Pitch Thinning drop-down menu, and select an option from the available sub-menus. You can select from Major or Minor Scales, or from a variety of Intervals.

NOTE: Although only a limited set of samples will be loaded, this won't result in "silent zones" on the keyboard. All notes will still play, but will be stretched from the nearest pitched sample.

NOTE: The Pitch Thinning options on the Lite Version Zoom are the same as those found on the Soundsource Zoom Edit View. However, the Lite Version feature affects the entire Patch or Multi, while the Soundsource Zoom options affect only the individual Soundsource. Use the Soundsource Zoom Edit View if you want to apply different thinning options to each Layer in a Patch.

### Lite Version Default Settings

The Lite Version Default Settings are useful for quick loading, and easy auditioning of complete sounds. Unlike "Preview Load", which loads the samples only for a limited range of notes, Lite Version applies sample thinning, loads the sound across the entire keyboard range, and is immediately playable after loading.

When Lite Version is enabled with the default settings, the following settings will be in effect:

- Round Robin: No RR samples. No Round Robin samples will be loaded.
- Velocities: above 65. Only Velocity switched samples mapped above a Velocity of 65 will be loaded.
- Legato: None. No Legato samples will be loaded.

### Keep Lite Version Selected Button



The Lite Version Button will reset to its default, disabled state when you close the Browser. When this option is enabled, the Lite Version Button in the Browser will remain enabled, even after closing the Browser. Think of it as changing the default state of the Lite Version Button to 'enabled'.



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recalled by loading that specific MULTI or project. The settings of a Part can also be individually saved as a Patch. A Patch contains all the settings that make up a sound, and can be individually loaded into any of the eight Parts.

The settings of all eight Parts are saved with a MULTI, or with your project. Everything will be



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Each Part has two Layers (A and B), and each Layer has a set of synthesis controls.

Each Layer has its own polyphonic Primary Oscillator, which can be set to either Sample Mode (using Soundsources) or Synth Mode (using DSP Waveforms). Because each Layer has its own independent Primary Oscillator, you can mix and match the modes by using two Layers.

Using Omnisphere's unique Harmonia feature, each Layer can add up to 4 additional oscillators, giving a single Part as many as 10 separate oscillators!

To learn more, please refer to the extensive **Oscillator** section of the Reference Guide.

NOTE: It isn't necessary to use both Layers when creating sounds. In fact, very complex sounds can be achieved using only one Layer.



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### **CONCEPTS - Soundsources**



Soundsources allow Omnisphere's synthesis to begin with sampled sounds instead of DSP waveforms. They are accessed by selecting <u>Sample Mode</u> in the <u>Oscillator</u>.

Soundsources are based on a 'map' of audio samples stored in the Core Library of Omnisphere in Spectrasonics' proprietary STEAM format. A Soundsource can be as simple as a single sample stretched across the keyboard range or as complex as hundreds of chromatically sampled, velocity-switched multi-samples – like you'd find in a modern sample library.

Omnisphere's Core Library Soundsources vary dramatically in size - from a few kilobytes to nearly a gigabyte each! Each Soundsource was carefully prepared and optimized by the Spectrasonics Sound Development team.

Larger and more complex Soundsources take a longer to load, but still load relatively quickly, since the <u>STEAM Engine</u> includes "streaming" technology to allow for playback of very large multisamples. Streaming allows for the samples to buffer off of the computer's hard drive in realtime, instead of all of the samples having to be loaded into the computer's RAM memory.

Soundsources in Omnisphere are similar to using "programs" in a sampler, but there are some key differences:

1. A Soundsource contains not only all of the raw samples, mapping information, such as pitch, velocity, zones, and loop points – but also Soundsource images, notes and tags.

2. Soundsources do not include envelopes, filters, LFOs, FX or any modulation settings. (which are stored in the Patch)

For this reason, you can load a new Soundsource into a Layer, without changing any of the Layer's synthesis settings. This is extremely useful, because you can take any patch you like and have thousands of variations simply by changing the Soundsource!

Most importantly, the concept of Omnisphere is completely different than a typical sampler. Omnisphere is an incredibly deep synthesizer with a massive Core Library that will take a lifetime to explore!

The Factory Core Library of Omnisphere is over 42Gb and includes over 2700 Soundsources specifically designed to work well with the STEAM engine synthesis. The Factory Core Library covers a wide spectrum of sounds, from simple raw waveforms to psychoacoustic samples, morphing textures, and a best-of selection from our award-winning sample libraries. The STEAM engine

architecture allows Spectrasonics to expand Omnisphere with new Soundsources in the future as well.

Spectrasonics is constantly improving and adding to the Factory Soundsource Library, so make sure you stay up to date with the "Check for Updates" feature.

NOTE: While version 1.0 of Omnisphere doesn't support user importing of samples, it's a very popular request and we certainly wouldn't rule that out as a new feature for Omnisphere's future.



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### **CONCEPTS - Common Parameters**



Each Layer has an independent set of synthesis controls, and there are many parameters that will only affect the individual Layer. However, there are also a number of Common parameters that are shared by both Layers in a Part.

RESONANCE

If a parameter is numbered, then it's a Common parameter that can be used by both Layers (ex: LFO 1 ~ 6, Mod Env. 1 ~ 4). If it isn't numbered, then it's specific to the Layer (ex: Amp Env., Filter Env.).

Common parameters include the six LFOs (LFO1  $\sim$  LFO6), the Master Filter, and the four Modulation Envelopes (MOD 1  $\sim$  MOD 4).

In addition, each Layer has its own FX Rack, and there is a Common FX Rack that is shared by both Layers. For additional detail, refer to <u>FX Architecture</u>



### **CONCEPTS – Utility Menu**



The Utility Menu has three sections. The first is a MIDI Learn sub-menu. The second provides various Clear, Save, Copy & Paste functions for Multis, Patches, Parts and Layers. The third section provides direct access to the Omnisphere Reference Guide.

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The Utility Menu provides the MIDI Learn and Automation options that apply to the whole plug-in. These include MIDI Learn Templates, Unlearn All, and access to a 'Current Assignments' Report. See the MIDI Learn & Automation section for details.

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The Utility Menu provides options to Initialize or Clear Multis, Patches and Layers, and to Save Multis and Patches. There are also functions that allow Part and Layer settings to be copied and pasted.

Initialize vs Clear (Multi, Patch & Layer)

When you select Initialize (Initialize Multi, Initialize Patch or Initialize Layer), all synthesis parameters for the Multi, Patch or Layer, including FX and Modulation routings will be restored to an unedited 'default' state, including a default Soundsource loaded as a starting point.

When you select Clear (Clear Multi, Clear Patch or Clear Layer), all existing parameters for the Multi, Patch or Layer will be completely cleared, using no sounds or memory. In all cases, the Mixer settings are retained

NOTE: When using the Clear function, no sounds are loaded, so no sound will be heard from the Multi, Patch or Layer until a Soundsource is loaded.

### Initialize Multi

Initializes all current Multi settings, including all Parts and FX. The Multi is returned to an unedited 'default' state, including default sounds.

### **Clear Multi**

Clears all current Multi settings, including all Soundsources, Parts and FX. This will result in a completely empty Multi.

### Save Multi

Selecting the Save Multi option will open a File Save dialogue. After naming and saving the MULTI, the EDIT TAGS interface will open, allowing you to assign various Attribute Types and Assignments, add custom Assignments, and add your own Keywords and Notes to the MULTI.

Once you have finished editing the tags, click the SAVE button to finish saving the MULTI. You may also cancel the save process by clicking the CANCEL button.

When saving a MULTI, the entire state of the plug-in is saved. This includes the MIXER, LIVE MODE and STACK MODE settings, Multi FX, MIDI Learn assignments, as well as all Part settings. Even if a Part has been modified but not yet saved as an individual Patch, its settings will also be saved with the MULTI.

### **Initialize Patch**

Initializes all current Patch settings, including all Modulation routing and FX. The Patch is returned to an unedited 'default' state, including the default sound

### Save Patch

Selecting the Save Patch option will open a File Save dialogue. After naming and saving the Patch, the EDIT TAGS interface will open, allowing you to assign various Attribute Types and Assignments, add custom Assignments, and add your own Keywords and Notes to the Patch.

NOTE: Patches must be saved into a Category folder in the STEAM folder. This can be either an existing folder, or a user-created folder inside the Patches folder

Once you have finished editing the tags, click the SAVE button to finish saving the Patch. You may also cancel the save process by clicking the CANCEL button.

### Save Patch Quick

When editing an already saved Patch, the new changes can be saved without having to bring up the save dialogue and Tag Editor. Save Patch Quick will simply overwrite the previous version. A confirmation dialogue will pop-up to confirm the save.

n

### **Copy Part**

This command is used to copy the settings from a single Part. These settings can then be pasted to another Part using the Paste Part command. To copy a Part, select the Part using the Navigation Buttons in the Header, and then select the Copy Part command from the Utility Menu.

### Paste Part

After a Part has been copied using the Copy Part command, it can be pasted to another Part. To paste a copied Part, select the destination Part using the Navigation Buttons in the Header, and then select the Paste Part command from the Utility Menu.

### **Initialize Layer**

Initializes all settings for the selected Layer, including Modulation routing and FX. The Layer is

returned to an unedited 'default' state, and includes the default sound.

### Clear Layer

Clears all settings for the selected Layer, including all Soundsources, Modulation routing and FX. This will result in a completely empty Layer.

### Copy Layer

This command is used to copy the settings from a single Layer. These settings can then be pasted to another Layer using the Paste Layer command. To copy a Layer, select it using the Layer tabs in the Edit Page, and then select the Copy Layer command from the Utility Menu.

### Paste Layer

After a Layer has been copied using the Copy Layer command, it can be pasted to another Layer. To paste a copied Layer, select the destination Layer using the Layer tabs in the Edit Page, and then select the Paste Layer command from the Utility Menu.

*NOTE: Modulation Routings are not included with the settings that are copied and pasted using the Copy/Paste Layer commands.* 



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# MIDI Learn and Automation Initialize Multi Clear Multi Save Multi Initialize Patch Clear Patch Save Patch Save Patch Quick Copy Part Paste Part Initialize Layer Clear Layer Copy Layer Paste Layer Reference Guide Video Tutorials

Selecting this option from the Utility Menu will open Omnisphere's HTML Reference Guide. The Reference Guide will be displayed using your default Web Browser.

The Reference Guide is indexed, so you can search the Guide, print chapters (click the Print Icon next to any chapter to load printable pages), or save it as a PDF. Refer to your system guide for how to create PDFs.

Search

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Reference Guide 1.0b - Software Version 1.0.3c - Soundsources 1.0.1 - Patches Version 1.0.3

The Guide is in HTML format, so is portable and can be opened with any Web Browser. This makes it easy to keep up to date, and is very convenient for users. For example, it can be copied to a mobile computer for reference, separate from the plug-in.

The Reference Guide files are found inside the STEAM folder, under Documentation.

### **CONCEPTS - Reference Guide**

Windows: C:\Program Files\Spectrasonics\STEAM\Omnisphere\Documentation\Reference Guide\index.htnl

Mac: Macintosh HD/Users/Username/Application Support/Spectrasonics/STEAM/Omnisphere/Documentation/Reference Guide/index.html





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### **CONCEPTS - Video Tutorials**



Selecting the "Video Tutorials" option from the Utility Menu will open your default web browser and load the Video Tutorials page from the Spectrasonics website.

This option provides convenient access to all available video tutorials located online in the <u>Support</u> <u>Knowledge Base</u>. You can play the tutorials directly or download them to your system for later viewing.

*NOTE:* Your computer must be connected to the Internet for this menu option to function correctly.



## **CONCEPTS - LIVE/STACK MODE Indicators**

When either LIVE MODE or STACK MODE is enabled, you'll see "LIVE MODE" or "STACK MODE" displayed on the left side of the Omnisphere header.



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### **CONCEPTS - Multi Display**



This part of the Header contains the Multi Name Display, Multi Steppers, and a Folder icon for access to the Multi Browser.

Selecting the Folder icon, or anywhere inside the Multi Name Display, will open the Multi Browser. After a MULTI has been loaded, the name of the MULTI will be displayed in the Multi Name Display.

The Multi Stepper buttons (up/down arrows) will load the next or previous MULTI from the Library, based on the current filtered results in the Multi Browser. The buttons step through the available MULTIS one at a time.

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### **CONCEPTS - Navigation Buttons**

The Navigation Buttons in the header are used to select and view any of the eight Parts, the Multi Section or the System Page. Only one button can be selected at a time.

### Part Select Buttons (1 ~ 8)



Buttons 1-8 are Part Select Buttons. Selecting a Part lets you access and view any of the pages for that Part, including the MAIN page, EDIT page, Patch FX pages, and the Arpeggiator Page.

### **MULTI Button**



Selecting the MULTI button gives you access to any of the pages in the Multi Section, including the MIXER, Aux/Master FX, and the LIVE MODE and STACK MODE pages.



Selecting the SYSTEM button opens the System page, which contains preferences and settings for the entire plug-in.

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### **CONCEPTS - Master Volume Control**



The Master Volume slider controls the output of the whole plug-in, and includes a meter, which provides a reference to the output signal. The range of the Master Volume slider is  $-inf dB \sim 9.54 dB$ .

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### **CONCEPTS - Contextual Menus (Right/Control-Click)**

11		
1	Reset to Default Value	
	Modulate 🕨 🕨	Modulate with LFO
P	Show Modulation	Modulate with Envelope
1	Unmodulate	Modulate with Velocity
	MIDI CC Learn MIDI CC Learn Inverted MIDI Note Learn MIDI Program Change Learn Enable Host Automation	Modulate with Wheel Modulate with Key Tracking Modulate with Randomize Modulate with Alternate Modulate with Controller All Mod Sources
	Unlearn	

Contextual Menus are an important part of the Omnisphere interface, and provide convenient access to many important functions.

Right/Control-clicking almost anywhere in the Omnisphere interface will bring up a contextual menu. The contents of the menu will depend on where the cursor is placed when the contextual menu is opened.

For example, Right/Control-clicking over a blank area of the Omnisphere Header will reveal the Utility Menu. Right/Control-clicking a knob or slider will typically reveal a menu of MIDI Learn, Modulation & Automation options.



## **CONCEPTS - Up/Down Steppers**



Steppers (up/down arrows) are located throughout the Omnisphere interface, and are used to step through values or load saved settings, incrementing or decrementing one at a time. In the picture above, clicking the arrows will step through the different LFO waveforms available.

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### **CONCEPTS - Zoom Icon Buttons**

MODULATION

MOD MATRIX ZOOM

One of the features of Omnisphere's interface design is that it only reveals its depth and complexity on an as-needed basis. The Zoom Icon Buttons provide access to Zoom Views, where you can view expanded information or interact with Omnisphere's more advanced features.

A magnifying glass icon next to a function indicates that a Zoom View is available. Selecting the icon with a '+' inside it opens the Zoom View for that function. When a Zoom View is open, selecting the magnifying glass icon with a '-' inside it, closes the Zoom View.

Zoom Views are available for Modulation, Filters, Envelopes, Velocity Curves, Soundsource info, Patch info, MULTI info and LIVE MODE settings.

There are also Zoom Buttons in the Browsers that access Browser settings, the Tag Editor, and Multi, Patch or Soundsource info.

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### **CONCEPTS - Folder Icon Buttons (Browser Access)**



There are three Browsers built in to Omnisphere, one each for Multis, Patches, and Soundsources. All three Browsers have identical functions, but access different parts of the Core Library.

Anywhere that you see a Folder icon, you will be able to access a Browser by clicking on the Folder. If there is a Name Display next to the Folder icon, you can also click inside the Name Display to open the Browser.

### Multi Browser

The MULTI Browser can only be accessed from the main Header, but is always visible and available from any page in Omnisphere.

### Patch Browser

The Patch Browser is accessed from the Patch Name Display, and when a Part is selected (using the Part  $1 \sim 8$  Buttons) is always visible and available from any of the Part pages.

The Patch Browser can also be accessed from the Mixer page (Patch Name Displays), and from the LIVE MODE page when Mixer Controls are enabled.

### Soundsource Browser

The Soundsource Browser is accessed from either the Main Page or the Edit Page.

To learn more about the Browsers in Omnisphere, please see the <u>Browser</u> section of the Reference Guide.

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### **CONCEPTS - Knobs & Sliders**

Using a mouse, Knobs and Sliders (vertical and horizontal) are adjusted by clicking and dragging. Shift-click and drag for more precise adjustments. Most Knobs and Sliders in Omnisphere can be MIDI Learned for direct control from a MIDI device.

Knobs



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**Vertical Sliders** 

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Mini Sliders









# **CONCEPTS - Floating Parameter Values**



Adjusting Knobs and Sliders will display their current setting or value in a floating display above the controls. Holding down the SHIFT key while adjusting Knobs and Sliders allows for more precise adjustments.

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# 

### **CONCEPTS - Buttons**

Buttons are used for choosing sections or selecting from among multiples of a single type. When selected, Buttons will be highlighted in blue. For example, there are 6 LFO Buttons. When one of them is highlighted it means it is selected, and that LFO's settings are displayed.

Page Buttons (raised button)



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Sub-Page Buttons (smaller raised buttons select sub-pages)



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## **CONCEPTS - Switches (Toggles)**

Switches let you toggle certain parameters on and off or switch between multiple options. When a parameter is enabled or selected, the switch will be highlighted. For example on the Edit Page, Switches toggle between SAMPLE Mode and SYNTH Mode, toggle LFO Sync on and off, or select between Velocity Curve settings. Power Buttons are also a type of Switch, an example being the FILTERS On/Off Button.

**Mode Switches** (flat buttons that are side-by-side are Mode Switches)



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Switches (flat buttons which are separated are On/Off Switches)



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### **CONCEPTS - Indicator Switches**

Indicator Switches are both a status indicator and a toggle. A good example of an Indicator Switch is found on the Edit Page, below each of the Oscillator sub-page Buttons; MAIN, FM, RING, WS & MULT. These indicate whether the feature is enabled or not, and double as a toggle to enable/disable them.

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### **CONCEPTS - Key Modifiers**



There are a number of Omnisphere functions that are modified by combining a mouse-click (or click and drag) with one of three Key Modifiers; the Command/Control key, Shift key, or the Option/Alt key. In the manual these are referred to as:

### Control-Click (Mac users, use Command-click)

Sliders & Knobs: resets the slider or knob to a neutral or default position.

Browsers: allows selection of multiple Attributes.

Envelopes (editing): Control-click and drag to engage the Lock function.

### Shift-Click

Sliders & Knobs: Shift-click and drag allows finer and more precise adjustments to values.

Envelopes (editing): Shift-click and drag to engage the Zoom X/Y function

### Option-Click (PC users, use Alt-click)

Envelopes (editing): Option-click to engage the Snap function.

Knobs: temporarily switches from linear mode to circular mode.

In linear mode, clicking on the knob and dragging vertically or horizontally with the mouse moves the knob. In circular mode, option-clicking on the knob and dragging in a circle around the knob will move it.

To switch to circular mode, hold down the Option/Alt key then click and drag the knob. You can then release the Option/Alt key.

The knob will remain in circular mode until you release the mouse button. The knob will then automatically revert to linear mode.

NOTE: Omnisphere defaults to linear mode. Your host may determine a different default mode, but you can still temporarily switch to the alternate mode by using Option-click.



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# Project All Film Score Rock Band Sound Design Video Game Adagio Expressivo Boys Choir Ahs ^

**Classic Nylon Guitar** 

Harmonic Rhodes

Phased Hammond

Studio Tron Strings

Electro Kick

Shredder

Clean Fender - Full Range

Plucked Dream Plano Arp

**BROWSER - Projects** 

A Project is a user-defined collection of sounds that are organized under a single, named group. This can be applied in many useful ways. For example Projects can be created and named according to jobs that you are working on, or created for different sessions, songs or styles.

You can add Multis, Patches and Soundsources to a Project. The Project system is flexible and easy to manage, and since you name and populate the Projects yourself when creating them, they can be organized in ways that are most meaningful to you.

When a Project is selected in the Browser, only the sounds that have been added to that Project will be displayed. This gives you instant access to filtered and organized selections of sounds.

Projects work well together with <u>Favorites</u>, offering additional sorting options, and with Search and Attribute Filters for further managing the display of your Project's sounds.

### Creating, Managing, and Accessing Projects

### The Project Menu



The Project Menu provides all of the options needed to create, manage and access Projects. Using the Project Menu, you can Create Projects, Delete Projects, add sounds to or remove sounds from a Project, and Show Projects in the Browser. These are the actions you can take using the Project menu:

Create a Project

Film Score	ie.
Create Project	
Show Projects	Ð,
Delete Project	

Select "Create Project" from the Project Menu, type a name for the Project into the text field, and press Return/Enter on your keyboard.



The Project is now created, and available to add sounds to.



After creating a Project, its name will appear in the top section of the Project Menu.

### Add a sound to a Project

To add a sound to a Project, first select the sound in the Browser that you wish to add. Next, open the Project Menu and select the Project name you wish to add the sound to. That's it!

Whenever that sound is selected, if you open the Project Menu you will see a checkmark next to that Project name, indicating that the selected sound is in that Project.



A sound can be added to multiple Projects. If a sound has been added to multiple Projects, you will see checkmarks next to the names of all the Projects it has been added to.

This makes it easy to quickly see if a sound has been added to one or more Projects.

### **Browse Projects**

Once you have created one or more Projects and added sounds to them, you can then quickly browse your Projects to find and select the specific sounds you added to them.

To browse your Projects, select "Show Projects" from the Project Menu.



The left-most attribute filter will change from "Category" to "Project", and all of your Projects will show up in the left-most attribute column. Select a Project from the Project list, and your Browser will display only the sounds contained in that Project.



Select "Show Projects" from the Project Menu again, and the attribute filter will return to the Category view.

You can also switch between displaying Projects or Categories by selecting the left-most attribute filter menu, and selecting Project or Category.



### Remove a sound from a Project

To remove a sound from a Project, first select the sound you wish to remove by selecting it in the Browser. Next, open the Project Menu and select the Project name you wish to remove the sound from (there should be a checkmark next to the Project name). To confirm that the sound was removed from the Project, select the Project Menu again and confirm that the checkmark was removed.

### **Delete a Project**



To delete a Project, open the Project Menu and select the Project you wish to delete from the "Delete Project" sub-menu. A confirmation popup will appear, asking you to confirm the deletion. Selecting OK will delete the Project.

Caution
Delete the Rock Band project? This will not delete any patches, multis, or soundsources - but will remove all Rock Band project tags. This cannot be undone.
Cancel
T Drolect
All
Film Score
Sound Design
Video Game

Deleting a Project doesn't remove or delete any sounds from the library. It simply removes the tags assigned to that Project. If you have the same Project also being used in the Multi, Patch and Soundsource Browsers, you will have to delete the Project separately in those Browsers.



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### **BROWSER - Info Area**

The Info Area provides detailed information about the selected sound in the right column. The image in the right column also helps distinguish which Browser you're using. This is the default View Mode for all Browsers.

Jazz Stacks Mixed Dahs Soundsource A	
15.1mb	
NOTES TAGS The Jazz Stacks were created by painstaking or four outstanding male vocalists - singing simul triple tracked for a left/center/right stereo sprea with a little Vintage 2-Band EQ and some of the	verdubbing of taneously, but id. Works well short ro

Four Column View displays results in four columns, which scroll horizontally. This allows viewing of more results at once.

Anticipation	Gopiglitch	R2-D2 on Crack	Step-phaser String Machine 1
Bad Latitude	Granular Carousel Organ 2000	R2-D2 plays Pacman	Step-phaser String Machine 2
BBC Labs	Heightened Pulse Solo	Rave of the Buzzards	Stepmeister Complex
Bouncing Ball Party	IDM Bassbeich 1	Rave of the Buzzheads	Stepmeister Ringer
Bubbling Analog Brew	IDM Bassbeich 2	Rave of the Files	Sucking Syncbots
Chaos Bowls 1	Mondo Progger Lead	Raving in the Estuary 1	Synk Bombz
Chaos Modular Lead	Monophonic Velofilter Pad 2	Raving in the Estuary 2	Talking Filter Groove
Choral Chordalis	Morse Code Synthy	Raving in the Estuary 3	Talking Filter Groove
Circadian Groove	Mr Putney	<b>Ripping the Prophets Apart Lead</b>	TB Killerz
Dancing Gameboys	New World Order	Screeming Combers	Testosterone Lead
Digitalika	One Layer Bombast	Singing Glacier Stones	The Computer Age
Elastik Aliens	Polymoceanic	Space Gliders 1	The Formant Wheel
Glitch-o-plex Speatic Synth	Pulsatronic Oberheim	Space Gliders 2	The Odd Boy Dances


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# »<u>The Edit Page</u>

Introduction **Oscillator** Introduction **Oscillator Presets** Sample & Synth Mode Oscillator Sub-Pages Sample Mode Sample Timbre Control Sample Start Sample Key Tracking Soundsource Zoom Soundsource Zoom Mix Soundsource Zoom Articulations Soundsource Zoom Thinning Synth Mode Synth Waveforms Synth Shape Synth Symmetry Synth Hard-Sync Synth Analog Synth Phase Frequency Modulation **FM Controls Ring Modulation Ring Mod Controls** Wave Shaper Wave Shaper Controls Voice Multiplier <u>Unison</u> Unison Controls <u>Harmonia</u> Harmonia Controls Harmonia Synth Mode <u>Granular</u> Granular Controls Modulation **Filters** Envelopes LFOS Common Controls

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### EDIT INFO SOUNDSOURCE ZOOM Trillan Ac 1 - Full Range ^ All RR SOUNDSOURCE MIX SAMPLE THINNING At most 4 RRs 100 Every third U-147 Tube Mic No limit LEGATO **Direct Pickup 1** C Maio PITCH REGIN TRAINING SPECIAL ARTICULATIONS USE LEGATO SS RELEASE THT Trilian Ac 1 Release 朝日 -110 RELEASE LEVEL TRANSITION TIME

The Soundsource Zoom Edit View provides controls that let you manage several aspects of the complex Soundsources in Omnisphere. It is particularly useful when loading Trilian Soundsources into Omnisphere using <u>Omnisphere Library Integration</u>.

Using the Soundsource Edit Zoom you can mix the levels of multiple channels, such as Microphone and Direct Pickup outputs, select the desired Release Noise and adjust its level, enable the special Legato articulation triggering, and other adjustments. Deceptively simple, this single interface provides important sound shaping and memory management capabilities.

NOTE: Some of the controls are intended for use with Trilian sounds when loaded into Omnisphere. For example, Omnisphere sounds don't currently include Legato Soundsources, so this control will have no effect on Omnisphere Soundsources.

Selecting the Zoom icon in the Soundsource Display will open the Soundsource Zoom Edit View by default. The Soundsource Zoom has two sub-panes, the Edit View and the Info View, accessed by selecting the EDIT and INFO buttons.

The Soundsource Zoom Info View provides the most information about the loaded Soundsource, with details about the origin of the samples and suggestions for their application. It also displays a large representative image of the loaded sound. The Soundsource Zoom Info View is covered in detail in the <u>Browser</u> section of the guide.

The Edit View is divided into two main areas, the Image area and the Controls area. The Image area contains a large, representative image of the loaded Soundsource. The Controls area consists of a Soundsource Name Display, Soundsource Mix section, Special Articulations section, and the Sample Thinning section.

### **EDIT PAGE - Soundsource Zoom**

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Addicting Comper	*****
American Obesity	****
Asia Minor	****
Basic JP+Juno Comper	****
Big Prog Chiffer	***
Chromachords 2	***
Classic Eighties Polylead	★ 200 EB
Clear as Day	**
Compressed Poly Clavs	****
CS-80 Clavisynth	**
Dry Euro Wasp	
Eighties Oberheim Pluck	***
Fifth Pluck ala Dave Stewart	****
FM Direct Seg	

The Favorites feature in Omnisphere provides a familiar and convenient way of rating and organizing sounds in the library. You identify Favorites by applying Ratings to Multis, Patches and Soundsources, and can easily change or remove assigned Ratings. This feature is useful for identifying and organizing sounds by preference, or creating sub-groups inside Projects. You can also sort sounds in the Browser by Ratings, bringing your favorite sounds to the top of the Browser list.

Used together with the Projects feature, Favorites provides a powerful and convenient way to organize and manage the Omnisphere sound library.

### Adding a Rating to a sound

To add a Rating to a sound, open the Browser and select one of the Rating Dots to the right of the sound's name. The dots will change to stars when you select them. You can rate a sound from 1 star to 5 stars.



By selecting only the Rating Dots, you can rate sounds without loading them. This allows you to rate a large number of sounds very quickly, without having to load each one as you go along.

### Changing or removing a Rating

After you have added a Rating to a sound, you can easily change it by selecting the dots (or stars) again.

There are two ways to remove the Rating from a sound: either click in the empty space just to the left of the Rating Dots, or CTRL/CMD-click on the dots/stars themselves.

### Sorting by Ratings

### **BROWSER - Favorites**

Addicting Comper	****
American Obesity	****
Asia Minor	****
Basic JP+Juno Comper	****
Fifth Pluck ala Dave Stewart	****
Big Prog Chiffer	***
Chromachords 2	***
Eighties Oberheim Pluck	***
Clear as Day	**
Compressed Poly Clavs	** -
CS-80 Clavisynth	** -
Classic Eightles Polylead	****
Dry Euro Wasp	
FM Direct Seg	

To see your Favorites sorted according to their Ratings, open the Sort Menu in the Browser Footer and select "Ratings". The sounds in the Browser window will then be displayed with your favorite sounds at the top of the list, in order of their Rating. The top-rated (5-star) sounds will appear first, followed by 4-star sounds, then 3-star sounds, etc.

		_
	✓ Featured	le
-	A-Z	-
	Z-A	
	Ratings	

To return to an alphabetical list, open the Sort Menu again and select "A-Z".



### **BROWSER – Assignments**



This column will display a preset list of Assignments that can be allocated to an Attribute Type. Multiple Assignments are permitted for all Attribute Types.

### **Adding Assignments**



To create custom Assignments, you must first select an existing Attribute Type or create a custom one. After an Attribute Type has been selected or created, selecting the "+" button will allow for the creation of a new Assignment for it. To create additional Assignments, press the "+" button again until all the desired Assignments have been created.

Assignments can be created for both custom and factory Attribute Types.

### **Assignments View**



These switches determine how Assignments are viewed and sorted on the Edit Tags page.

### More

Selecting this option hides the Overview area so that more Assignments can be displayed at a time.

Type         Analog Tones Bell Harmonics         Electrical Experiments Electronics         Modern Sonics         Throat Singers           Source         Bell Harmonics         Electronics         Motion         Vintage Cheese           Source         Big Boomers         Evolving Overtones         Mysterious         Vocal Noise           Bowd Instruments         Glass Resonators         Organic Keyboards         Voltage           Bowd Instruments         Gotsic Bells         Oospel Choir         Piano Impacts         Waves - Classic PWM           Technique         Classic Keys         Guitars Vintage Cheese         Waves - Classic Saw         Vocal Noise           Complexity         Classical Choir         Guitars Vintage Cheese         Waves - Classic Saw         Waves - Classic Saw           Author         Classical Soloists         Human Resonators         Powersing         Waves - Classic Sync           Author         Darkness         Liquid Resonators         Stinger Stabs         Waves - Classic Sync           Darkness         Liquid Resonators         Stinger Stabs         Waves - Classic Sync           Complexity         Darkness         Liquid Resonators         Stinger Stabs         Waves - Classic Sync           Author         Darkness         Liquid Resonators         Stinger Stabs		ATTRIBUTE TYPES	RESET ALL			E ASSIGNMENTS
Source         Big Boomers Bizarre Pianos         Evolving Overtones Fast Animation         Mysterious Organic Keyboards         Vocal Noise           Timbre         Bowds Instruments         Glass Resonations         Overdriven FX         Warbeads           Timbre         Bowds Instruments         Gospel Choir         Piano Impacts         Waves - Classic PWM           Technique         Classica Keys         Guitars Vintage         Piano Scrapes         Waves - Classic Sww           Technique         Classica Keys         Guitars Vintage         Paychoacoustic FX         Waves - Classic Sww           Complexity         Classical Choir         Guitars Vintage         Paychoacoustic FX         Waves - Classic Sync           Author         Custom-built Instruments         Jazz Voices         Sound Design         Waves - Classic Sync           Author         Derkness         Liquid Resonators         String Resonators         Waves - Olisital           Derkness         LoFit Hits         String Resonators         String Resonators         Waves - Noise           Dram Hits         Mechanics         String Resonators         Waves - Classic Sync	Y	Туре	Analog Tones Bell Harmonics Bells Acoustic	Electrical Experiments Electronics Environmental	Modern Sonics Motion Muted Colors	Throat Singers Vintage Cheese Vinyl Lo-Fi
Timbre         Bowls and Bells         Gospel Choir         Piano Impacts         Waves - Classic Pulse           Timbre         Boys Choir         Gothic Bells         Piano Scrapes         Waves - Classic PWM           Technique         Classica Keys         Guitars Acoustic         Power Chords         Waves - Classic Saw           Technique         Classica Keys         Guitars Vintage         Psychoscoustic FX         Waves - Classic Sync           Complexity         Classical Soloists         Human Resonators         Reversing         Waves - Classic Sync           Author         Darkness         Liquid Resonators         Scinger Stabs         Waves - Classic Triangle           Darkness         Liquid Resonators         Stinger Stabs         Waves - Classic Triangle           Author         Darkness         Liquid Resonators         Stinger Stabs         Waves - Noise           Desprones         Lo-Fi Hits         String Resonatore         Waves - Noise           Drama Hits         Mechanics         String Scoustic         Wild FX           Dreaming         Metallic Resonators         Tring Resonatore         Word Instruments           Dreaming         Metallic Resonators         Tring Resonatore         Word Instruments           Dreaming         Metallic Resonators         Text	Ŧ	Source	Big Boomers Bizarre Planos Bowed Instruments	Evolving Overtones Fast Animation	Mysterious Organic Keyboards Overdriven FX	Vocal Noise Voltage Warheads
Technique     Classica Keys     Guitars Acoustic     Power Chords     Waves - Classic Sine       Classical Choir     Guitars Vintage     Psychoacoustic FX     Waves - Classic Square       Complexity     Classical Keyboards     Human Resonators     Reversing     Waves - Classic Square       Complexity     Classical Soloists     Human Synth     Rumblers     Waves - Classic Triangle       Author     Darkness     Liquid Resonators     Sci-Fi     Waves - Combo       Darkness     Liquid Resonators     Stinger Stabs     Waves - Noise       Destorted Tones     Lo-Fi Hits     String Resonatore     Waves - Voise       Dram Hits     Mechanics     String Acoustic     Wild FX       Dreaming     Metallic Resonators     Textural FX       Ebowed Instruments     Metallics     The Playroom	Ŧ	Timbre	Bowls and Bells Boys Choir Celestial	Gospel Choir Gothic Bells Gregorian Men	Piano Impacts Piano Scrapes Pon Stacks	Waves - Classic Pulse Waves - Classic PWM Waves - Classic Saw
Complexity     Classical Reyolards     Human Remoters     Networking     Waves - Classical Sylic       Complexity     Classical Reyolards     Human Synth     Rumblers     Waves - Classical Sylic       Author     Control Castor     String Resonators     String Resonance     Waves - Classical Sylic       Author     Deep Tones     Lo-Fi Textures     String Machines     Waves - Nulti Oscillator       Distorted Tones     Lo-Fi Textures     String Resonance     Waves - Utility       Drama Hits     Mechanics     String Resonance     Waves - Utility       Drones     Lo-Fi Textures     String Resonance     Waves - Wav	Ŧ	Technique	Classic Keys Classical Choir Classical Keyboards	Guitars Acoustic Guitars Vintage	Power Chords Psychoacoustic FX	Waves - Classic Sune Waves - Classic Square Waves - Classic Square
Author         Costom-Duit instruments         Jazz Voices         Sound Design         Waves - built           Darkness         Liquid Resonators         Stinger Stabs         Waves - Multi Oscillator           Deep Tones         Lo-Fi Hits         String Machines         Waves - Multi Oscillator           Distorted Tones         Lo-Fi Textures         String Resonance         Waves - Utility           Drama Hits         Mechanics         Strings Acoustic         Wild FX           Drones         Metallic Overtones         Sweepers         World Instruments           Drones         Metallic Resonators         Textural FX         Ebowed Instruments	Ŧ	Complexity	Classical Soloists Combo Organs	Human Synth Hybrid Sounds	Rumblers Sci-Fi	Waves - Classic Triangle Waves - Classic Triangle Waves - Combo
Distorted Tones Lo-Fi Textures String Resonance Waves - Unity     Drama Hits Mechanics String Recoustic Wild FX     Draming Metallic Overtones Sweepers World Instruments     Drones Metallic Resonators Textural FX     Ebowed Instruments Metallics The Playroom	Ŧ	Author	Darkness Deep Tones	Liquid Resonators Lo-Fi Hits	Stinger Stabs String Machines	Waves - Digital Waves - Multi Oscillator Waves - Noise
Drones Metallic Resonators Textural FX     Ebowed Instruments Metallics The Playroom	Ŧ		Distorted Tones Drama Hits Dreaming	Mechanics Metallic Overtones	String Resonance Strings Acoustic Sweepers	Wild FX World Instruments
	Ŧ		Drones Ebowed Instruments	Metallic Resonators Metallics	Textural FX The Playroom	

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**BROWSER – Header** 



TheThe Browser Header contains the Browser Title and a Memory Meter, controls that let you apply filtering options using the Directory Menu and Search Field, buttons that allow selection between the two browsing modes (Attributes or File Directory), and a Preview Load button that toggles between loading methods; Preview Load and Auto Load (the default behavior when Preview Load button is disabled).

In addition, the Lite Version Button and Lite Version Zoom Icon provide options for memory management and sample thinning.

*NOTE: The Soundsource Browser does not contain the Lite Version Button or Lite Version Zoom Button.* 

### **Memory Meter**

The Memory Meter is a gauge that shows how much Virtual Memory the instance of the plug-in is using.



If the Memory Meter approaches full, you will see a popup warning, and may need to take steps to reduce memory usage, such as enable the Lite Version of Patches, or reduce the Pre Load Memory parameter on the System Page.



The circular meter is a smaller version of the linear meters that are found on the System Page and the Lite Version Zoom Page in the Patch and Multi Browsers.

NOTE: If you set a Memory Limit on the System Page, this gauge will show the amount of memory used relative to the selected limit. For example, if you set the limit to .5Gb, and load .4Gb of sample data, the gauge will show roughly 80% full, even if you have far more system memory available.

NOTE (Mac only): If you have selected <u>Sample File Server</u> using the System Page Streaming Mode settings, the Meter will not display memory usage.

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# The four-column layout of the Browser Filters provides both hierarchical and Attributes-based filtering functions, and operates in two distinct modes.

In Attributes Mode, the Browser Filters display selectable Category and context-sensitive Attributes columns based on the tags that have been added to the Multi, Patches or Soundsources.



In File Directory Mode, the Browser Filters display folders and files just as they are stored in the directory on your computer's hard drive.

All Composite Morphing	All Human Volces 01	Gregorian Men Human Synth	All +
Human Volces	Human Voices 02	Jazz Vocals	
Oneshots Psychoacoustic		London Choir London Choir FX	

## **BROWSER - Filters**



# **BROWSER - Footer**



The Browser Footer provides additional sorting and browsing options, access to the **<u>Project</u>** menu, the <u>**Tag Editor**</u> and <u>**Browser Settings**</u>, and allows switching between the two view modes (<u>Info</u> <u>View or 4-column View</u>).

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# **BROWSER - Access**



Anywhere that you see a Folder Icon Button, you will be able to access a Browser by clicking on the Folder. If there is a Name Display next to the Folder, you can also click inside the Name Display to open the Browser.

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## **BROWSER - Directory Menu**

DIRECTORY	✓ All	utes
-	Atmosphere Library	and the second second
<ul> <li>Categor</li> </ul>	Omnisphere Library	
All	Trilian Library	
ARP + R	Trilogy Library	ustic G
Bass - F	User	ressive
Boing	VIP Library	and Fi
Custom	XTRA - Bass Legends	log Bas
01 Shradd	or Hoad	

The Directory Menu allows filtering by libraries. Select the Directory Menu down arrow or name display to open the menu. After selecting a Library, only the sounds in that Library will be displayed in the Browser.

They can be further refined using the Search Field and the Browser Filters. Selecting 'All' will remove any Directory Menu filtering and show all Libraries simultaneously.

After saving custom Multis or Patches, the User Library will be available from the menu. Selecting this Library will display only custom User Multis or Patches in the Browser.

For additional details refer to the Browser Saving & Managing Sounds section.

NOTE: If you also have Trilian Installed, and are using <u>Omnisphere Library Integration</u>, Trilian libraries will also appear in the DIRECTORY Menu.



## **BROWSER - Search Field**

The Search function in Omnisphere works much like a search engine. Click anywhere in the Search Field to enter search text. Press the Enter/Return key to initiate the search and view the filtered results.



The Search function will check sound Names, Tags, Keywords, and even Notes text to determine the search results.

Selecting Attributes in the Browser Filters can refine the search even further. The more selections that are made, the narrower the search results will be. To search the entire Core Library, be sure to select "All" in each of the Browser Filter columns.

# Search Lock

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By default, when a Browser is closed the Search Field will be cleared.

Enabling the Search Lock button allows search entries (and the filtered results) to be retained after the Browser is closed and re-opened.

NOTE: The Search Lock setting is saved as a global user setting. For example, if you enable Search Lock, it will remain enabled the next time you open an instance of the plug-in.

*NOTE:* When you change the Search Lock setting, that change is applied to all Browsers. For example, enabling or disabling Search Lock in the Patch Browser also enables or disables it in the Multi and Soundsource Browsers.

Search Clear



Select the Search Clear button to instantly clear the Search Field. When you select the Search Clear button, the displayed sounds will immediately update accordingly.

*NOTE:* You can apply the Search Clear button with Search Lock enabled. This allows you to make changes to your search criteria without changing the Search Lock status.



# **BROWSER – Filters (Attributes & File Directory)**

Using Attributes Mode, filtering is achieved by selecting Categories or **Projects** and additional Attributes to refine the list of sounds. The first column drop-down menu allows you to select between "Category" and "Project" (if you have created any Projects), while the remaining Attribute columns may change their labels depending on the Category selection.

There are two browsing modes available, Attributes Mode and File Directory Mode. These are selected using the Attributes and File Directory Buttons, which will toggle between modes.

Attributes	File Directory
------------	----------------

### Attributes Mode

Using Attributes Mode, filtering is achieved by selecting Categories and Attributes to refine the list of sounds. The first column will always be labeled "Category", while the remaining Attribute columns may change their labels depending on the Category selection.

For example, in the Soundsource Browser, if the Category "Psychoacoustic" is selected, then the Attribute columns will automatically display Type, Source and Timbre.

* Category	* Type	* Genre	* Complexity
MikeySounds Pads + Strings Psychoacoustic Retro Underground SFX and Noise Synth Bass	All Bells and Chimes Bowed Colors Complex Motion Electrical Experiments Ethnic Colors	All Ambient Beilad Dance Electronica Experimental	All Level 1 – Low Level 2 – Medium Level 3 – High

If the Category "Human Voices" is then selected, the Attribute columns will change to Type, Gender and Technique.

* Category	* Type	* Gender	* Technique	
Human Voices	All	All	All	
Hybrid Organic	Boys Choir	Boys	Ahs	
Impacts and Hits	Classical Choir	Boys and Girls	Babbling	
Keyboards	Classical Soloists	Female	Bah	
MikeySounds	Combinations	Male	Bang	
Peds + Strings	Gospel Choir	Male and Female	Bap	

These changes are intended to reflect Attributes that make more sense in context to the Category selection. These are recommended Attributes, but you can still manually select different Attributes from the column drop-down menus.

_		_
•	Туре	
	Author	
	Complexity	
	Gn Effect Mon	
	Gender	
	Mood	
	Source	
	Technique	
	Timbre	
	Tonality	
	Туре	

NOTE: This behavior is dependent on the setting "Category Sensitive Attributes" in the Browser Settings. Automatic Attributes changes will only occur if this setting is enabled (the default state). If the setting is disabled, the labels will remain static when changing Categories.

### File Directory Mode

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Using File Directory Mode, the Browser Filters display a File Folder hierarchy that matches how they are stored on your computer's hard drive.

All	All	Bowls Hit	Ali +
Ambiences	Psychoacoustic01 +	Bowls Water	Burning Piano FX
Composite Morphing		Burning Plano	Burning Plano FX Bend
Effects and Noises		Deep Piano Pick	Burning Piano FX Hits
Human Voices		Drying Rack	Burning Plano FX Noise
Paychoscoustic +		Ebowed Plano	Burning Plano Tonal

When you select a Folder in a column, the list of sounds will be filtered to include only the sounds that exist in the Folders below it in the file hierarchy.

This traditional method of file browsing may be more natural to some Users, and is useful when creating a large custom collection of Multis and Patches. You can create a custom file directory hierarchy inside the STEAM folder, and organize your custom Patches to suit your own needs. That hierarchy can then be directly browsed using the File Directory mode of the Browser.

NOTE – Most of the Factory Library in Omnisphere does not use folders or sub-directories, so File Directory mode is not particularly useful for browsing Factory sounds.



## **BROWSER - Displaying and Navigating Results**



There are numerous options available to change how sounds are organized and displayed, and for navigating the sounds in the Info Area. The controls for these options are found in the Browser Footer.

These tools allow you to sort sounds in different ways, including by Ratings, and because there are thousands of sounds to explore, these controls will help you explore more deeply into the Library. These Browser controls will also work on filtered results.

### Sort Menu

1	Sort *	

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The Sort Menu includes three ways to sort the list of sounds.

### A-Z & Z-A

The A-Z & Z-A options provide a simple way to reverse the alphabetization of the patches. Select Z-A to reverse the order, and A-Z to restore it. The Browser display defaults to A-Z sorting.

✓ Featured A-Z	le
Z-A	
Ratings	

Ratings

All sounds in the library can be given ratings from 1 to 5 stars using the Ratings system. Selecting Ratings from the Sort menu will display rated sounds at the top of the Browser list, in order of their Ratings. For example, 5-star sounds will be listed first, followed by 4-star sounds, and so on.

### Shuffle Button



It's a common error to only browse the sounds near the beginning of the alphabetical list. Every time the Shuffle Button is selected, the order of the sounds will be randomized. This button is useful for keeping the list of sounds fresh and inspiring, instead of always showing the same sounds at the top of the list.

### **Browser Stepper Buttons**

The Stepper Buttons step through the sounds in the Browser one at a time. When you step to the next sound, it will be selected and loaded.



The Browser Stepper Buttons can be MIDI Learned, and those assignments will apply to the Stepper Buttons in all three Browsers.

The Steppers are especially useful for browsing sounds quickly with Preview Load and Audition Auto-Play enabled, or for conveniently stepping through a filtered selection of sounds.

TIP – <u>MIDI Learning</u> the Browser steppers to switches on your MIDI controller is a great way to speed up the auditioning process, especially when used with the "Auto-Play" and "Preview Load" options enabled.

### **Refresh Button**



Selecting this button will refresh the display of sounds in a Browser. Using the Refresh button will ensure that all of the available sounds are displayed. When changes are made to the library outside of the Browser (e.g. after installing a library update or manually moving custom Patches), or while Omnisphere is open, use the Refresh Button to update the Browser display.



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### **BROWSER - View Modes**

There are two modes available for viewing sounds: Info View and 4-Column View. Selecting the Buttons shown below will toggle between modes.

### Info View

This is the default view for all Browsers. The sounds are listed on the left and the area on the right contains details about the selected sound. If your mouse has a scroll-wheel, it can be used to scroll through the list of sounds.

Anticipation Bad Latitude BBC Labs Bouncing Ball Party Bubbiling Analog Brew Chaos Bowls 1 Chaos Modular Lead Choral Chordalis	Circadian Groove Omnisphere Library Patch
Circadian Groove Dancing Gameboys Digitalika Elastik Allens Giltch-o-plex Spastic Synth Gopigiltch	ARP + Rhythm patches make use of the Arpegglator, Envelopes and LFOs, which are great tools to achieve complex rhythmic patterns. The Mod Wheel modulates Resonance.

The info area on the right includes the name of the sound, which part of the Library it belongs to (or the current Layer, in the case of Soundsources), a Zoom Button to access more detailed information, the file size of the sound, a thumbnail image for that sound type, Notes for the sound, and a Tags view to quickly check its Tags.

### 4-Column View

To see more sounds listed at once, select the 4-Column View. This will display the results in four columns. The vertical scrollbar is replaced with a horizontal scrollbar. Using the scroll-wheel on your mouse will still work for horizontal scrolling in 4-Column View mode.

Anticipation	Gopiglitch	R2-D2 on Crack	Step-phaser String Machine 1
Bad Latitude	Granular Carousel Organ 2000	R2-D2 plays Pacman	Step-phaser String Machine 2
BBC Labs	Heightened Pulse Solo	Rave of the Buzzards	Stepmeister Complex
Bouncing Ball Party	IDM Bassbeich 1	Rave of the Buzzheads	Stepmeister Ringer
Bubbling Analog Brew	IDM Bassbelch 2	Rave of the Files	Sucking Syncbots
Chaos Bowls 1	Mondo Progger Lead	Raving in the Estuary 1	Synk Bombz
Chaos Modular Lead	Monophonic Velofilter Pad 2	Raving in the Estuary 2	Talking Filter Groove
Choral Chordalis	Morse Code Synthy	Raving in the Estuary 3	Talking Filter Groove
Circadian Groove	Mr Putney	<b>Ripping the Prophets Apart Lead</b>	TB Killerz
Dancing Gameboys	New World Order	Screeming Combers	Testosterone Lead
Digitalika	One Layer Bombast	Singing Glacier Stones	The Computer Age
Elastik Aliens	Polymoceanic	Space Gilders 1	The Formant Wheel
Glitch-o-plex Speatic Synth	Pulsatronic Oberheim	Space Gilders 2	The Odd Boy Dances



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When the Info View mode is selected, the right column contains information about the selected sound. In addition, there is a Zoom Button that will open a Zoom View for additional details about the sound. The Zoom Views in the different Browsers contains similar information.

The Soundsource Zoom View will typically contain the most information, with details about the origin of the samples and suggestions for their application.

### Soundsource Zoom View: Edit & Info Panes



The Soundsource Zoom View contains two sub-panes; the Edit Zoom and Info Zoom panes. Use the EDIT and INFO Buttons to select the desired view.

The Info Zoom pane shows the descriptions, keywords, and tags of the Soundsource. This is the default view when opening the Soundsource Zoom from the Soundsource Browser.

The Edit View provides access to the Sub-layer Mixer and Sample Thinning controls for the Soundsource.

To learn more about the Soundsource Edit Zoom, see the Edit Page: Soundsource Zoom section.

Full Size Image

**BROWSER - Info Zoom Views** 



The images for Multis and Patches are the same as those found in the Info View.

For Soundsources. the image will be a visualization of of the sound that it's associated with. Similar sounds might have similarly themed images. Sometimes this image might be rather abstract, or it can be more literal. Many of the Soundsource images will be images of the original item that was sampled.

NOTE: If you are loading Trilian sounds into Omnisphere using Omnisphere Library Integration, you will also see images for Trilian Patches and Multis.



### File Size

This is the total amount of memory that is used when the sound is loaded.

NOTE: If a Patch contains only DSP waveforms (no Soundsources), no size will be listed.





Additional information about Omnisphere's Soundsources can be found on the internet. We've provided a web link button that will take you to a webpage with further information about the sound and/or it's author.

### Legal Info



This will take you to a page that details all of the legal information about how Omnisphere's Soundsources can (and can't) be used as well as copyright information about how the samples and effects were obtained and licensed.

# 

### **BROWSER - Attributes**

### **Attribute Types**

All of Omnisphere's factory sounds have at least three Attribute Types assigned to them, and can have up to eight Attribute Types assigned. Each Attribute Type can have multiple Attribute Assignments.

### **Required & Optional Types**

There are two kinds of Attribute Types; Optional and Required. Any Attribute Type highlighted by a thin red box indicates that it is Required – meaning that Attributes must be assigned to them. Optional Attribute Types (those without a red box) don't require Attributes assigned to them.

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The Required indicator can be expanded or contracted on custom sounds (Required Attributes Types in factory presets cannot be changed, however).

### **Reordering Attribute Types**

Attribute Types can be reordered by dragging them vertically into another position. The first three Attribute Types will be displayed in the Attributes columns in the Browser Filters.

Attribute Types in factory sounds are fixed, and can't be reorganized. Of course any Multi or Patch can be saved as a new User Multi or Patch and the Attribute Types can then be customized.

### **Create New Attribute Type**



By selecting the drop-down menu next to any Attribute Type a custom Attribute Type can be created by selecting "Create New Attribute Type".

Enter the name of the new Attribute Type in the field and it will be added to existing types in the Attributes Types column. When you create a new Attribute Type, it's also necessary to create new Assignments for the new Attribute Type. Please see the section on adding <u>Assignments</u> for details.

	ATTRIBUTE TYPES	RESET ALL	OVERVIEW	+ ASSIGNMENTS
•	Author	Bob Daspit		Not Weird Really Weird Sorta Wierd
Ŧ	Complexity	Level 2 - Medium		
Ŧ	Туре	Synth Bells		
•	Weirdness	Really Weird		

### **Removing Attributes**

The "Remove This Attribute" option is available from the Attribute Types drop-down menu, and when selected, will do one of two things. If the Attribute Type is a factory Attribute Type (e.g. Author, Complexity, etc.) then all custom Assignments will be removed, but not the Attribute Type itself. If it's a User-created Attribute Type, it will remove the Attribute Type and all of its Assignments.



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RESET ALL	OVERVIEW	
Arpeggiated		
Organic Patterns		
Ambient, Film, Ballad,	World Music	
Level 2 - Medium		
Eric Persing		

The Overview area displays all of the Assignments assigned to each Attribute Type.

**Reset All** 



The "Reset All" button in the Overview area will clear all Assignments for all Attribute Types. If this button was selected accidentally, the Reset can be undone by immediately pressing the Cancel button in the Edit Tags screen.

# **BROWSER** – Overview



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# Category

Selecting this option will highlight all of the tags for the Attribute that have been used in whatever category the currently loaded sound is in. For example, if a Psychoacoustic sound is loaded, all of the tags for Psychoacoustic sounds will be highlighted in blue text.



### Sort

The Sort function works in two ways. First it groups all Attributes that are in the same Category as the currently loaded sound. If the Category button is also selected, this first group will be highlighted in blue text.

The remaining unassigned Attributes are displayed below the top Attributes, and are sorted alphabetically.

# **BROWSER – Category & Sort**





### **BROWSER – Keywords, Weblink & Sort**

### Keywords

Keywords are descriptive words and phrases that are outside of the scope of Attributes, but are still useful when searching and browsing sounds. These can be more subjective and can be changed or added to both factory and User-created Multis and Patches. You may want to add your name or comment to indicate that it's a favorite sound, or an artist that the sound reminds you of or a project that the sound is associated with.

To add a Keyword, simply click the Keyword field, and type them in. Separate each Keyword with a comma. Select and delete any Keywords that you wish to remove.



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### Weblink



This will configure the web link on the Patch Zoom or Multi Zoom page.

This field can only contain a valid web address, but it does not need to be a full URL. For example, Instead of "<u>http://www.spectrasonics.net</u>", it can simply be written "<u>spectrasonics.net</u>" and will still be considered a valid web address.

### Notes

The Notes field can contains notes about how the sound was created, playing tips, and some suggestions for how it can be modified.

NOTES

This Soundsource was created by morphing "Plucked Piano" with a custom Physical Modeling sound - via our CMT methods. Works great with the Timbre control and is extremely versatile.

NOTE: All of the text in the Notes field will be checked during searches in the Browser.



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### **BROWSER - Edit Tags Footer**

The Footer displays information about the current sound, and allows any changes to the Edit Tags to be saved or canceled.

### Directory, Category and Name

These are informational displays indicating the Directory, Category and the name of the Sound.

DIRECTORY	CATEGORY	NAME
Omnisphere Library	ARP + Rhythm	Anticipation

### Cancel/Save

Any changes made in the Tag Editor can be saved or canceled by selecting the appropriate button.



NOTE: Saving the Tags also saves the Patch or Multi and any modifications that have been made to it.



# **BROWSER - Omnisphere Library Integration - Setup**

In order to enable Omnisphere Library Integration, you must first have a full install of Trilian, registered and authorized, on your system.

Next, install and authorize Omnisphere 1.1 (or higher). If you already have Omnisphere 1.1 or higher on your system, you will be asked to reauthorize it after you have installed and registered Trilian.

When you first launch Omnisphere 1.1 or higher, you will see the following splash screen. Click the Authorize button, and follow the normal steps for authorization.



NOTE: You must generate a new Response Code using your user account at the Spectrasonics website.

After (re)authorizing Omnisphere 1.1 or higher, the Trilian libraries will appear in your Omnisphere Browsers.

### Troubleshooting

If you are loading Trilian sounds into Omnisphere, and see the following error message, it indicates that you haven't successfully registered and authorized Trilian.

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Please register and authorize Trilian before trying to load Trilian sounds in Omnisphere.



# **BROWSER - Omnisphere Library Integration - Using Trilian Sounds**

Depending on your session needs, the Omnisphere Library Integration feature offers the ability to apply Omnisphere's powerful synthesis tools to Trilian sounds, combine Omnisphere and Trilian sounds in interesting ways, or to simply conserve system resources by including your Trilian Parts alongside your Omnisphere Parts in a single Omnisphere instance.

There are various useful ways that you can combine Omnisphere and Trilian Soundsources and Patches within Omnisphere to open up a tremendous variety of sounds and performance applications.

For performances, you could use Stack Mode or Live Mode to create useful combinations of Trilian basses and Omnisphere synth sounds. Try using keyboard or velocity splits, layering, or apply Part switching to a Multi in Live Mode.

In this Stack Mode example, you can create a Multi in Omnisphere that contains a number of Omnisphere Parts, and one or more Trilian bass Parts. In Stack Mode, create keyboard splits that trigger the bass Parts with lower notes, and Omnisphere synth Parts with the higher notes. You can experiment with layers and crossfades too!



Using the same Multi in Live Mode, you can instantly switch between Trilian and Omnisphere parts, or instantly layer them. For example, this would allow you to play a solo bass phrase in one passage, and then instantly add a doubled guitar or strings sound to the bass for another.

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There are endless sound design possibilities as well. For example, if you apply Omnisphere's synthesis power to Trilian Synth Bass waveforms, you can take those sounds much further to create very unique bass timbres!

In another example, you could load Acoustic Bass samples from Trilian, and combine them with Psychoacoustic samples from Omnisphere, creating new and interesting hybrid sounds!

### EDIT PAGE - FIlter Resonance



# EDIT PAGE - Filter Resonance



Resonance is also called 'Q' or Emphasis in synthesizers, because it emphasizes the cutoff point of the filter. Resonance can often increase the loudness of the Filter, so its a good idea to use this control along with the Filter Gain, so that audio clipping does not occur.



TIP: Omnisphere's UVI1 filter can self-oscillate. If the Resonance is set to maximum, the filter can be 'tuned' by the cutoff control.

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# **MAIN CONTROLS - Voices**

The VOICES parameter determines the number of simultaneous notes (also called polyphony) that are playable in a single Part. Omnisphere is capable of up to 64 voices of polyphony per part, and the VOICES selector determines the maximum number of voices that the Patch will have.

The higher the number of voices that the Patch has, the more CPU power it will use, so this is a very important parameter in Omnisphere. The best approach is to only set it to the maximum number of notes that are needed for the given musical application.

The factory Patches have all been set conservatively, so if more polyphony is needed, increase the number of voices.

Range 1-64

NOTE: Voices applies to all sounding notes, not just the ones that are currently being played. This is important to consider when playing sounds with longer release times

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# **MAIN CONTROLS - Octave**

This function raises or lowers the overall pitch by transposing the Patch in 12-semitone increments. There is a total range of five Octaves.

Range -2 to +2

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**MAIN CONTROLS - Scale** 

One of Omnisphere's versatile features is its ability to utilize different tunings, which includes historical temperaments, microtonal scales and user-created temperaments as well. Omnisphere can import any .TUN scale file.

Each Part can have a single Scale active at one time. In a Multi up to eight different Scales can be loaded at the same time.

Each tuning lists the number of notes per octave. For example, if you select "Pelog 7-tone" the octave will repeat every eighth half-step.

NOTE: The common reference for all of the alternate tunings is that pitch of middle-C (C3 or C4 on your controller) will always be the same, no matter what Scale is loaded.

Some of the temperaments that are included with Omnisphere are:

### Arabic

The first two Arabic scales were created in the first century by Persian philosopher Abu Nasr al-Farabi and are still used in modern Arabian music. Sabbagh tuning is designed for the Od (a lutelike instrument) and last is a common Turkish 24-note scale.

- Al-Farabi 17-Tone
- Al-Farabi 19-Tone
- Sabbagh 7-Tone
- Turkish 24-Tone

### Gamelan

These scales are used in Indonesian gamelan music. A Gamelan is an ensemble comprised of metallic percussion, strings, horns and vocals. So these scales work very well with metallic, bell-like sounds.

Degung 5-tone

Jemblung 5-tone Pelog 7-tone Pelog and Slendro *(Pelog on the white keys and Slendro on black)* Slendro 5-tone Udan 12-tone

### Historical

These are mostly octave-based scales, where were attempts to resolve the inherent 'un-pure' nature of the 12-tone scale, so some intervals and chords will sound very pure and others will be quite dissonant (the dissonant notes are sometimes called 'wolf' tones)

Kirnberger II – Named for Johann Kirnberger, who was a student of Bach.

Meantone Half – First created in the 15th century, and utilized by JS Bach, amongst others. It attempted to create purer thirds, by sacrificing the purity of the fifths.

Olympos 5-tone – an Ancient Greek pentatonic scale.

Pythagorean – Named for Pythagoras, based on perfect fifths and has been used since 3500BC. There are two 17-tone versions and a 12-tone Pythagorean scale as well.

Silbermann – Named for Gottfried Silbermann, an builder of keyboards in the 16th century.

Werkmeister – Named for Andreas Werkmeister who created it in the late 1600s.

### Microtonal

These scales are stretched outside the standard 12-tone scale, and simply add additional microtonal steps from just under an octave up to 48 tones per octave.

- 11-Tone One octave minus one half tone13-Tone One octave and a half tone
- 17-Tone One octave and a major fourth
- 19-Tone One octave and a major fifth
- 24-Tone Two octaves
- 31-Tone Two octaves and a fourth
- 48-Tone Four octaves

### Modern

These alternative scales were created within the last one hundred and fifty years.

Bohlen-Pierce – a 13-tone scale named for Heinz Bohlen and John Pierce

Carlos Scales - Synthesis pioneer Wendy Carlos created these five scales. The first three are microtonal and the remaining two are 12-tone scales.

Carlos Alpha 18-tone

Carlos Beta 22-tone

Carlos Gamma 35-tone

Carlos Harmonic C

Carlos Super Just C

Darreg Genus – A 9-Tone scale named for Ivor Darreg, who created the first retunable synthesizer in the 1950s. Ellis – A 24-tone scale named for Alexander Ellis and Hermann von Helmholtz, a well-known scientist of the 1800s.

Partch 29-tone – Henry Partch, an American composer of the 20th century created many alternate tunings, such as 43-tone, 37-tone and this 29-tone scale.

### Western

Equal Temperament - the default tuning for most of Western culture (and for Omnisphere as well).


# **MAIN CONTROLS - V-Curve**

The "V" stands for Velocity. Omnisphere has four velocity curve presets available on the CONTROLS screen. The first curve is linear, then two exponential curves and the last is flat. These curves are provided to quickly adjust the dynamic response of the current Patch to your MIDI controller and playing style.

#### Linear

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The linear curve is the most commonly used velocity setting. Playing harder on the keyboard will have a direct effect on any parameter that is modulated with velocity in an even and linear way.

#### **Exponential Positive**

The Exponential Positive curve means that when playing softly not much effect will be heard, but when playing at a moderate intensity on the keyboard the velocity modulation will be more dramatic than with a linear curve.

#### **Exponential Negative**

Exponential Negative has the opposite effect of Exponential positive – meaning that it's better suited for more intense touch and provides the widest musical dynamic range.

#### Flat

Omnisphere will receive the same velocity value with this flat curve. Useful if a totally consistent and predictable result is desired.

#### **V-CURVE ZOOM**

The V-Curve Zoom button provides access to the <u>Velocity Curve Zoom</u>, for precise editing of the Patch's Velocity response.



# **MAIN CONTROLS - Bend**

Omnisphere has the ability to control the Pitch Bender's range independently for both up and down movements (whereas many synthesizers only allow the same amount of bend in both directions). This setting is for the patch, and determines how much the note will bend when using the MIDI controller's pitch bender.

#### DOWN

Determines how much the pitch will bend down using the MIDI controller's pitch bender.

Range 0 to 24 semitones

# UP

Determines how much the pitch will bend up using the MIDI controller's pitch bender.

Range 0 to 24 semitones

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# MAIN CONTROLS - Part Level, Mute & Solo

This slider determines the overall volume of the selected Part. This slider, and the Mute/Solo switches are the same as the Mute/Solo and Part Level control on the Mixer page.

Range - Inf dB to +9.54dB

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NOTE: The Part Level, MUTE and SOLO parameters are saved with the MULTI, not the Patch.

M (Mute) - Suppresses the audio of the Part.

S (Solo) – Isolates the audio of the Part, muting any other Parts that are active.



# **MAIN CONTROLS - Layer**

#### LAYER MIX

These two independent faders control the mix or "blend" of the two Layers in the Part. Each fader's range is from -inf dB (zero) to +9.54dB. Selecting the fader while holding down the Command key (Mac) or Control key (Windows) will automatically set the levels to OdB.

Between the two controls is the "VU Meter" that displays the volume level of the left and right audio channels of the Part.

Range inf dB (zero) to +9.54dB

#### LAYER ON/OFF

Below each of the Layer Mix sliders are two on/off buttons that determine if a Layer is active or not. They also can be used to mute either layer to make comparisons without having to adjust the Layer Mix faders. If the button is light blue, the layer is active, if it's gray, it's inactive and no sound will be heard.

NOTE: If a Layer is active it uses CPU power. If a Layer is inactive, no CPU power is used.

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# MAIN CONTROLS - Pan, Attack & Release

Below the LAYER MIX sliders are two multi-purpose mini-sliders. This control defaults as a traditional PAN parameter, but ATTACK or RELEASE for each layer can be accessed as well by clicking within in the rectangle.

#### PAN

Each layer has an independent PAN controls. Selecting the slider while holding down the Command/Control key will snap it back to the center position.

#### ATTACK

The Attack parameter governs how quickly the sound starts, which means minimum settings will make the Attack fast and higher settings will slow the Attack down. Attack times range from instantaneous to almost two minutes long. This is a duplicate parameter of the AMP ENV Attack slider on the EDIT page.

Range 0.00 to 100 seconds

#### RELEASE

Release is how long the sound will decay *after* the note has been released. Minimum Release settings result in no sound after the note has been released. Maximum settings will add up to almost two minutes of Release time. This is a duplicate parameter of the AMP ENV Release slider on the EDIT page.

RELEASE Range 0.00 to 100 seconds



# MAIN CONTROLS - Soundsource Name Display, Browser & Zoom

These menus display the names of both Soundsources or waveforms used in the Patch. Next to each Layer's Soundsource waveform display is a Folder icon that opens Omnisphere's Soundsource browser. From the Browser, thousands of new Soundsources can be selected, producing infinite variations for any Patch.

Below the Soundsource name is a Zoom icon, which opens the Soundsource Zoom view. This Zoom view contains information, pictures, web links and other details about the Soundsource.

If no Soundsource is displayed, then the layer is currently empty.

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**MAIN CONTROLS - Master Filter & Resonance** 

### MASTER FILTER

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Omnisphere's MASTER FILTER is a filter for the whole Patch, meaning that it affects both Layer A and B. The MASTER FILTER has two available filter modes; LPF and HPF. The HPF (High Pass Filter) removes low frequencies from the sound. The LPF (Low Pass Filter) removes high frequencies from the sound.

The MASTER FILTER is completely separate from Omnisphere's dedicated <u>Filter section</u> on the <u>EDIT</u> page. The MASTER FILTER is designed as a simple tone control. The extensive Filter section in the EDIT page should be used for serious sound shaping.

NOTE: Either LPF or HPF can be enabled at one time, but not both.

#### RESONANCE

The RESONANCE control affects the whole Patch, which means it will affect both Layer A & Layer B. **RESONANCE**, sometimes called 'Q', adds emphasis to the cutoff point of the MASTER FILTER. Because it works with the MASTER FILTER, it will not have any effect on the sound if the MASTER FILTER FILTER is set to minimum value.

At minimum settings, little to no emphasis will be heard. Moving the slider to the right will add more emphasis to the sound.

*NOTE:* The Master Filter is not capable of self-oscillation, but the <u>Dual-Filter</u> on the EDIT page is.

TIP: Try MIDI learning the Master FIIter to a MIDI Foot Controller. Having a simple "Tone Pedal" for live performance is extremely useful.



# MAIN CONTROLS - Solo/Legato

SOLO

Solo allows the Patch to play monophonically. SOLO mode is most effective when playing lead or bass lines. It works in conjunction with the LEGATO button below it, which determines how the sound is triggered.

## LEGATO

Legato is a triggering mode that allows the envelope and Soundsource to run through their settings instead of re-triggering with every new note that is played. If LEGATO is not selected, then each new note played will retrigger both the envelopes and the Soundsource.

NOTE: In vintage synths, Legato 'ON' would be referred to as "Single Trigger" while Legato 'OFF' would be "Multi Trigger"

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Glide is a portamento effect, which adds a pitch slide from one note to the next. Omnisphere's Glide function is polyphonic, which means that every note that's played will have a sliding pitch. Selecting the SOLO button above it enables monophonic Glide.

The control slider next to the GLIDE button determines how slowly or quickly that the pitches slide from one note to the next. The higher the control slider is set, the slower the pitch glide between notes.

Range 0 to 2 seconds

#### **GLIDE LEGATO**

Glide Legato will change the criteria for when GLIDE is enabled. If legato notes are played, then GLIDE will be activated. If quick, staccato notes are played, the Glide effect will not be heard.

GLIDE A B (LAYER BUTTONS)

GLIDE can be used on just one Layer if desired. By default, when GLIDE is selected, both A & B will active. If neither A or B is selected, no GLIDE effect will be heard, and the GLIDE button will turn itself off.

Gliding on one Layer only can be an interesting musical effect

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**MAIN CONTROLS - Glide** 



# **MAIN CONTROLS - Arpeggiator**

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This button engages Omnisphere's powerful Arpeggiator. The ARP button simply turns the Arpeggiator on or off. Arpeggiator presets can be loaded from this page by pressing the menu arrow to the ARP button and choosing a preset.

For more details about the Arpeggiator, refer to the Arpeggiator ssection of this guide.



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# EDIT PAGE - Oscillator Voice Multiplier - Unison



In vintage analog polyphonic synthesizers, Unison was used to trigger all of the voices cards of the synthesizer at the same time for a rich, detuned monophonic sound. Omnisphere takes Unison to the next level by offering *polyphonic* Unison, with numerous enhancements and controls. Just a few or many unison voices can be added, so each note played will sound several voices - each with different detune, spread and octave.

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# EDIT PAGE – Oscillator Synth Shape



This control is unique to the SYNTH waveforms in Omnisphere. Moving this slider can modify the contour of any of the five waveshapes. The waveform display will dynamically change the waveshape as the SHAPE slider is moved.



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The SHAPE slider is modulatable which can add movement and variation to the sound.

NOISE waveform only - SHAPE becomes a complex filter control, which varies from white noise (all frequencies) at the minimum setting, to pink noise (reduced high frequencies) at the maximum setting.

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# EDIT PAGE – Oscillator Synth Symmetry



Symmetry varies the span of the waveform and is most commonly used for Pulse-Width modulation. This is especially useful when SYMMETRY is used as a modulation destination, as it adds shifting tone color and movement to the sound. The Symmetry control can vary the span of all waveforms (except Noise).

*NOISE waveform only* - The SYMMETRY slider becomes a morphing filter that sweeps through four different types of filters. Starting at the minimum setting with low pass to a notch filter, then to a high pass and finally to band pass at maximum setting.

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# EDIT PAGE – Oscillator Synth Hard-Sync



Hard Sync was a feature on some analog synthesizers, which gave the timbre a "throaty" dipthong type of sonic characteristic when swept. Hard Sync was popularized on synthesizers like the Prophet Five and the early Oberheim synthesizers for more metallic and aggressive timbre, especially useful for lead sounds. Hard Sync is achieved by using two oscillators, one which is the 'master' and the other the 'slave. The slave is forced to restart its waveform when hard-synced with the master oscillator and the master controls the pitch. So any changes in the slave oscillator's pitch don't change the pitch of the master, they change the overtones and harmonic structure instead.

In the past, an oscillator would need to be sacrificed to get the hard-sync effect, but Omnisphere has a hidden, dedicated oscillator just for hard-sync. The hard-sync oscillator becomes the slave and the Oscillator's waveform is the master.

*NOISE waveform only* - HARD SYNC control acts as a stereo width control that begins with monaural setting at the minimum setting and gradually spreads the noise into both right and left channels towards the maximum setting.

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# MOD MATRIX ZOOM – Morphing Modulation

SOURCE	DEPTH	TARGET	
Morphing Source		Cutoff	
LFO1		Morphing Input A	
Random		Morphing Input B	
Wheel		Morphing Input A/B Xfade	

# Watch the Tutorial Video for Morphing Modulation

Omnisphere has a very special modulation feature that goes beyond the standard method of modulating a single target with a single source, called morphing modulation. This system uses dual-sources to modulate a single target and adds a morphing component to interactively crossfade between the outputs of the two modulation sources. This can create very dynamic modulation routings and effects.



There are four components to Morphing Modulation, which means setting up a Morphing Modulation routing will use four slots in the Modulation Matrix.

First a target must be designated; this is the parameter that will be modified by the morphing modulation. Two different modulation sources need to be defined. The degree that the two modulation sources will be blended together is determined by the Morphing Input A/B Xfade source. This modulation source will control how the two morphing inputs are combined before they are sent to the target.

#### **Morphing Source**



This defines that target of morphing modulation. It can be any of Omnisphere's modulation targets. Once "Morphing Source" is selected and a Target parameter is designated, then the two morphing modulation inputs must be defined.

#### Morphing Input A



This is one of the two sources that will become a Morphing Input. The sum of both Morphing Input A and B will be sent to the target defined in Morphing Source routing, so its necessary to define Morphing Input A as the target.

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#### Morphing Input B

Random	 Morphing Input B	
		_

This is the other morphing source that will modulate the target. After the Source is chosen, then Morphing Input B needs to be selected as the target.

It's important to make the Source in Morphing Input B different from Morphing Input A – if they are the same source then the morphing will have no effect.

#### Morphing Input A/B Xfade



This routing is what defines what will control the morphing between the two A/B inputs – so the Source here should be one that is suited to this kind of cross fading.

Suggested Morphing Inputs for A/B Xfade;

Wheel Velocity LFOS

Envelopes



# **EDIT PAGE - Mod Target List**

Synth Shape *

A "Modulation Target" is a parameter that can be controlled by a source. "Target" is another word for "Destination". Omnisphere has an extensive set of over sixty different modulation targets available. They are grouped in six categories;

#### Oscillator

Pitch Coarse - The coarse tuning of the oscillator's pitch (polyphonic) Pitch Fine – The fine-tuning of the oscillator's pitch (polyphonic) Unison Detune - The amount of detuning of Oscillator unison voices (monophonic) Unison Depth - The amount of Oscillator Unison voices added (monophonic) FM Frequency – The frequency of the dedicate FM modulator (polyphonic) FM Depth – The depth of the FM modulator (polyphonic) **Ring Mod Frequency** – The frequency of the Ring modulator (polyphonic) Ring Mod Depth – The amount of Ring Modulation (polyphonic) **Waveshaper Depth** – The amount of Oscillator Waveshaping (polyphonic) Waveshaper Mix - The blend of the waveshaping signal (polyphonic) Harmonia Mix* - The blend of the Harmonia voices with the primary Oscillator (polyphonic) Sample Timbre – The Sample Timbre parameter in the Oscillator (polyphonic) Sample Start – The Sample Start parameter in the Oscillator (polyphonic) **Sample Granular Intensity** – The size/intensity of the sample grains (monophonic) Sample Pitch Grains - The probability of Granular pitch grains (monophonic) Synth Shape - The Synth Oscillator's shape (polyphonic) Synth Hard Sync – The Synth Oscillator's Hard Sync (polyphonic) Synth Symmetry – The Synth Oscillator's Symmetry (polyphonic) Synth Phase – The Synth Oscillator's Phase control (polyphonic) Synth Analog – The Synth Oscillator's Analog control (polyphonic)

#### Filter

Cutoff – The Filter's cutoff frequency (polyphonic)
Resonance – The Filter's Resonance amount (polyphonic)
Filter Mix – The mix between Filter1 and Filter2 (monophonic)
Spread – The Filter's Spread control value (monophonic)
Filter 1 Cutoff Offset – The Filter 1 cutoff offset value (monophonic)
Filter 2 Cutoff Offset – The Filter 2 cutoff offset value (monophonic)
Filter 1 Res Offset - The Filter 1 Resonance offset (monophonic)
Filter 2 Res Offset - The Filter 2 Resonance offset (monophonic)

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Filter 1 Spread – The Filter 1 spread (monophonic)Filter 2 Spread – The Filter 2 spread (monophonic)

#### Amp

Amplitude* – The amplitude level (polyphonic)Pan – The stereo panning control (polyphonic)

#### LFO

LFO1 Rate – The speed of LFO1 (monophonic)
LFO1 Depth – The amount of LFO1 (monophonic)
LFO2 Rate – The speed of LFO2 (monophonic)
LFO2 Depth – The amount of LFO2 (monophonic)
LFO3 Rate – The speed of LFO3 (monophonic)
LFO3 Depth – The amount of LFO3 (monophonic)
LFO4 Rate – The speed of LFO4 (monophonic)
LFO4 Depth – The amount of LFO4 (monophonic)
LFO5 Rate – The speed of LFO5 (monophonic)
LFO5 Depth – The amount of LFO5 (monophonic)
LFO5 Rate – The speed of LFO5 (monophonic)
LFO5 Depth – The amount of LFO5 (monophonic)
LFO6 Rate – The speed of LFO6 (monophonic)

#### Envelope

Amp Env Attack Trim* - The relative AMP Attack time (polyphonic) Amp Env Decay Trim* - The relative AMP Decay time (polyphonic) Amp Env Release Trim* - The relative AMP Release time (polyphonic) Amp Env Speed – The speed of the Amplitude Envelope Filter Env Attack Trim* - The relative Filter Attack time (polyphonic) Filter Env Decay Trim* - The relative Filter Decay time (polyphonic) Filter Env Release Trim* - The relative Filter Release time (polyphonic) Filter Env Depth – The amount of the Filter Envelope Filter Env Speed – The speed of the Filter Envelope (monophonic) Mod Env1 Depth – The amount of Mod Envelope1 (monophonic) Mod Env1 Speed – The speed of Mod Envelope1 (monophonic) Mod Env2 Depth – The amount of Mod Envelope2 (monophonic) Mod Env2 Speed – The speed of Mod Envelope2 (monophonic) Mod Env3 Depth - The amount of Mod Envelope3 (monophonic) Mod Env3 Speed – The speed of Mod Envelope3 (monophonic) Mod Env4 Depth – The amount of Mod Envelope4 (monophonic) Mod Env4 Speed - The speed of Mod Envelope4 (monophonic)

# **Morphing Modulation**

Morphing Input A – Explained in the Morphing Modulation section

Morphing Input B – Explained in the Morphing Modulation section

**Morphing Input A/B Xfade** – Explained in the Morphing Modulation section (monophonic)

* These parameters appear exclusively within the Modulation Matrix and are not seen on the GUI.

# 

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FILTER ZOOM in Omnisphere provides precise control over each Layer's dual-filter. The two stereo filters are represented on the right and left. The central area controls the routing and contains the shared controls. Each of the two stereo filters can have any of 24 filter types assigned to it. They can be combined in series or parallel, allowing for hundreds of possible filter configurations.

There are primary Cutoff and Resonance controls for the entire filter, but both FILTER 1 and FILTER 2 each have their own independent Cutoff and Resonance offsets which are applied to those primary values.



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The Power Filter is a brand new filter developed in cooperation with GMedia, which is based on their famous impOSCar filter design. This rich sounding filter requires a fair amount of CPU power and should be used sparingly on slower computer systems. It's the same Power Filter as the one on the Filter section, but with more filter types and an additional dedicated LFO for sweeping the width, which is useful for producing formant and vowel sweeps.

CAUTION: The Power Filter has tremendous headroom and is capable of very loud sounds that can hurt your ears and damage your speakers if you aren't careful. GMedia's warning that it "Screams like a Bastard" should be heeded! Please be mindful of this when working with the Resonance, Drive and Gain knobs.

#### • PAGE ONE CONTROLS

#### CUTOFF

Controls the cutoff frequency of the Filter. Range: 17.125 to 18318 Hz.

#### RES

Controls the Resonance or "Q" of the Filter, which emphasizes the cutoff frequency to the point of oscillation at the highest settings.

#### WIDTH

Controls the amount of Frequency separation between the filters. Range: 0 to 1.

#### TYPE

Drop-down menu determines the sonic character of the different filter options.

Low Pass 24dB, Band Pass 24dB, High Pass 24dB, LP/LP, BP/BP, HP/HP, LP/BP, LP/HP, BP/HP

#### DRIVE

Controls the amount of overdrive/saturation. Range: 0 to 1

LEVEL

Adjusts the overall output volume. Range: 0 to 1

#### • PAGE TWO CONTROLS

#### [CUTOFF] RATE

Controls how fast or slow the filter cutoff cycles.

Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

FX - Power Filter

Unsynced: 0.00Hz to 15.000Hz

#### [CUTOFF] DEPTH

Controls the sweep range of the cutoff modulation. Range: 0 to 1

#### [CUTOFF] SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.

# [WIDTH] RATE

Controls how fast or slow the filter width cycles.

#### Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

#### [WIDTH] DEPTH

Controls the modulation range of the width sweeping LFO. Range: 0 to 1

#### [WIDTH] SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.



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#### EDIT PAGE – Envelopes Zoom Preset Menu



There are two drop-down menus that provide access to Envelope Presets. One is on the Edit Page next to the ENVELOPES label, the other is found in the Envelopes Zoom View beside the ENVELOPES ZOOM label.

The Drop-down menus will display a list of various Envelope presets as well as options to Save, Copy and Paste Envelopes.

Envelope Presets contain all the contours of a single envelope. The Save Envelope Preset function allows you to save envelopes for later recall. Envelopes can be copied to other Layers or Parts using the Copy/Paste Envelope Preset functions. This provides a quick and convenient way to work with envelopes, and Omnisphere ships with a large number of interesting and useful Envelope Presets for you to explore.

#### Saving & Loading Envelope Presets

To save a customized Envelope setting select Save Envelope Preset. A standard save dialogue will appear. Make sure that the preset that's being saved is given a name. Omnisphere will automatically add the '.env' extension to the name.

By default the Envelope preset will be saved in the STEAM folder, inside the Omnisphere Settings Library/Presets/Envelope folder. You can also create custom sub-folders within the Envelope folder to organize custom Presets according to your own preferences.

After a new Preset has been saved it can be loaded using the Envelope Presets menu. Use one of the drop-down menus and browse to your newly saved Preset.



NOTE: In order to load any shared Preset file, it must first be placed in the Envelope folder;

STEAM/Omnisphere/Settings Library/Presets/Envelope/Sub-Folder

Only then will it appear on the list of presets.

#### **Copying & Pasting Envelope Presets**

Select "Copy Envelope Preset" from the Presets menu to copy the current Envelope contours. Then select the Envelope to copy it to. This can be any of the Envelopes in the current Part - or in any other Part. From the Presets menu select "Paste Envelope Preset" and the copied Envelope will replace it.

NOTE: There is no 'Undo' for Pasting an Envelope, so use caution when Copying and Pasting them.



# **EDIT PAGE - LFO Sync**



The Sync switch determines how the LFO rate behaves. When Sync is enabled, the LFO will lock its rate to the host's song tempo. Also, the values assigned to the Rate knob will change. Instead of displaying a value in Hz, the values are displayed in rhythmic values.

(See the LFO Rate for the different values available when SYNC is enabled)

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# **EDIT PAGE – LFO Rate**



The Rate knob controls the speed of the LFO's cycle. The Rate knob has two modes. These modes depend on the state of the LFO <u>Sync</u> button.

• SYNC OFF – The LFO's rate is not synchronized with the host tempo and the LFO's rate is measured in Hz. The rate increases, as it's turned clockwise.

• SYNC ON – The LFO's rate is synchronized to the host's tempo. Changing the rate in Sync mode scrolls through different rhythmic value groups - it does not simply get faster as the knob is turned clockwise. Some examples of note values found spread out around the control are:

8x - this value stretches a cycle across eight bars.

1/8 - this value cycles the LFO every eighth note.

- 1/8 dot this value cycles the LFO every dotted eighth note.
- 1/8 triplet this value cycles the LFO every eighth note triplet

Range (Sync Mode On) 32X, 16X, 8X, 7X, 6X, 5X, 4X, 3X, 2X, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 dot, 1/2 dot, 1/4 dot, 1/8 dot, 1/16 dot, 1/1 triplet, 1/2 triplet, 1/4 triplet, 1/8 triplet, 1/16 triplet

Range (Sync Mode Off) 0 to 48Hz

ER Svorn



By selecting the Zoom icon next to the different Velocity curves presets opens the VELOCITY CURVE ZOOM. This page provides detailed controls to create and modify velocity curves. The Velocity curve settings are global to the Patch - meaning that curve settings will apply to both layers, but the amount applied by layer can be controlled by the Layer A and Layer B.

AMP ENV

FILTER ENV

You can save, copy and load preset Velocity curves from the drop-down menu next to the VELOCITY CURVE ZOOM header.

#### CURVE DISPLAY



When changes are applied to the SLOPE & OFFSET sliders (described below) the shape of the curve change will change accordingly in this display.

AMP ENV (Layer A & Layer B)



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The AMP ENV (Amplitude Envelope) independently controls how much the Amplitude Envelope is affected to the Velocity curve. If the knobs are set to a low level, then keyboard velocity will have only a small effect on the Amplitude Envelope's control of the level of the layer.

FILTER ENV (Layer A & Layer B)



The FILTER ENV (Filter Envelope) independently controls how much the Filter Envelope is affected to the Velocity curve. If the controls are set to a low level, then keyboard velocity won't have much effect on the Filter Envelope's control of the Filter.

#### SLOPE



This horizontal control adjusts the steepness, or slope, of the velocity curve. If the slider is set all the way to maximum, the curve will be very steep. Minimum settings will have a horizontal (or flat) curve.

#### OFFSET



This vertical slider offsets the velocity curve by raising and lowering it within the display. At high settings the curve will start at a higher level and moving the slider down will set the velocity curve to a minimum level.

#### CONTROL POINT

٢

The Control-Point determines the shape of the velocity curve, whether it's a positive or negative curve (or even a straight linear curve). The Control Point, OFFSET and SLOPE sliders can create a wide variety of curves. Move the Control Point around the grid by selecting and dragging it until the desired curve is set.



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#### **EDIT PAGE - Oscillator Presets**



The OSCILLATOR header displays a list of presets by selecting the drop-down menu. Oscillator settings can be saved, copied and pasted from one layer to another. The menu will display a list of factory presets as well as any presets that have been saved by the user.

Factory Oscillator presets are primarily designed as starting points to give an idea what the Oscillators are capable of. Keep in mind these Oscillator presets will only change the settings within the Oscillator section.

Oscillator presets, like other presets, are stored inside in the directory structure of the STEAM folder. Any presets that are saved or loaded are files on the hard drive.

#### Windows OS

Save Preset - [C:\Program Files\Spectrasonics\S	TEAM\Omnisphere\Settings Lib	orary\Presets\Oscillator]	<b>—</b> X
Save in: 🚺 Oscillator			
Name Desktop Network Detu Octo Slow Slow Docto Docto Program Files Spectrasonics STEAM Omnisphere Settings Library Presets DVD RW Drive (D:) Cubase Projects Installation Test Folder Live RMX Multi Kt Project ableton_live_demo_702_en Live RMX Multi Kt Project BVX Template - Senarate GM	Size Detuned Waves.osc Organ Sines1.osc Stock.osc	Harmonia FM Example.osc RS-09 Waveshaping Organ.osc Wider Sync.osc	
File name: Wider Sync			Save
Save as type: (.osc)		•	Cancel

Mac OS



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# **EDIT PAGE - Oscillator Sub-Pages**



Each of the five sub-pages contain a wide set of synthesis functions that can applied to the Oscillator. The default sub-page is MAIN.

MAIN	The Oscillator modifiers
FM	Frequency Modulation synthesis
RING	Ring Modulation synthesis
WS	The Wave Shaper
MULT	The Voice Multiplier

#### INDICATOR SWITCHES

The Indicator Switches below the sub-pages indicate activity in that area. They also double as minipower-switches for those functions, so that quick comparisons can be made. It's also useful to see at a glance which features are currently in use. Selecting the Oscillator sub-page buttons will not enable their functions, but selecting the small indicator switches below the sub-pages will.

NOTE: The MAIN sub-page's indicator is unique because it doesn't function as a switch and will remain unlit until the default settings are changed.

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## **EDIT PAGE - Oscillator Sample Mode**



When in SAMPLE mode, the OSCILLATOR plays back Soundsources from Omnisphere's massive corelibrary. Soundsources range from complex, multi-sampled sounds to single sample mapped across a keyboard.

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#### Soundsource Display

The Soundsource Display area contains an image of the loaded Soundsource, and provides controls to access to the Soundsource Browser and Soundsource Zoom View

#### Image

Whenever you load a Soundsource into the Layer, it will include an image representing the Soundsource. This makes it convenient to see at a glance the type of Soundsource that is loaded.

#### **Browser Access**

Selecting the Folder icon, the Soundsource Name Display, or the Soundsource Image will open the Soundsource Browser.

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#### TIMBRE CONTROL



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# **EDIT PAGE - Oscillator Timbre Control**



The TIMBRE slider varies the harmonic tone quality of the Soundsource by altering the tonal characteristics of the original sample(s) in different ways. There are two TIMBRE modes, CRUSH and SHIFT. The center-point of this bidirectional slider is the null point – meaning no TIMBRE change will occur.

**TIMBRE CRUSH MODE** – Polyphonic Bit-Crushing (Distortion) and filtering are applied to the Soundsource. Bit-Crushing with a Low-Pass Filter is applied left of the center-point. Right of the center-point, Bit-Crushing with a High-Pass filter is applied. Timbre Crushing works effectively with any Soundsource.

**TIMBRE SHIFT MODE** - Transposes the mapping of the samples in one direction and changes the pitch in the opposite. This results in significant harmonic changes in the Soundsource. Moving the TIMBRE slider to the right will transpose the sample mapping down and the pitches up and vise versa when moving it to the left.

When SHIFT is applied, in either direction, the character of the Soundsource can change significantly. And when the SHIFT is used as a modulation target, the character of the Soundsource can change dynamically.

NOTE: The more samples the Soundsource has mapped across the keyboard, the more effective that TIMBRE SHIFT will be. Conversely, with a texture or other Soundsource that only contains a single sample, SHIFT will have no effect.

TIP: To see how many samples the Soundsource uses, select the <u>Soundsource Zoom</u> icon at the top of the OSCILLATOR header and refer to the 'SPECS'.

NOTE: Because of the way TIMBRE SHIFT works, changes to the modulation of the TIMBRE slider must be retriggered to hear the effect. TIMBRE changes can't be heard on a sustained note.

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# **EDIT PAGE – Oscillator Sample Start**



The START control determines at what point in the sample that it begins when the oscillator is triggered. This setting will vary depending on the number of samples in the Soundsource.

This feature has several applications. First, it can remove sharp attacks or clicks at the start of a sample.

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Soundsources can have a single sample mapped across the entire keyboard (Textures are a typical example of this). Other types of Soundsources often have many samples mapped to different ranges on the keyboard. These ranges are called 'zones'

The number of zones determines the maximum range of the Start slider. If the Soundsource has more than 12 zones mapped, the range of the START slider is 1 second. If it has less than 12 zones, then the START slider's range can be up to 90 seconds. The .60 range is especially useful when modulating long evolving Texture Soundsources and using the <u>Arpeggiator</u>.

#### SAMPLE START FADE



These are mode switches that control the shape of the sample start point. This can be useful for eliminating clicks that might happen at certain sample start offsets. These three mode switches set the duration of fade-in;



No Fade-in





 $EDIT \ PAGE-Oscillator \ Sample \ Start$ 

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# **EDIT PAGE - Sample Oscillator Key Tracking**



If the TRACKING (also known as Keyboard Tracking) switch is enabled then the pitch of the Soundsource will track the keyboard, meaning the root pitch of the samples will be changed with each key.

When TRACKING is disabled, the Oscillator will not track the keyboard and depending what kind of Soundsource is loaded, some keys may have static pitches.

»Getting Started	Single Sample	All of the keys will play the same pitch	
»Concepts	Single Sample	An of the keys will play the same pren	
» <u>The Browsers</u>	Multi-Sample	The range of each sample will have the same pitch. For example, if there is a different sample mapped to each	
» <u>The Main Pages</u>		octave, then each octave will only play a single pitch.	
» <u>The Edit Page</u>	Chromatic Sample	Since every key has a sample, there is no apparent change when Keyboard Tracking is disabled.	
<u>Oscillator Presets</u> Sample & Synth Mode Oscillator Sub-Pages Sample Mode Sample Timbre Control	Disabling Keyboard Tracking can be useful for drones, unusual sound effect or strange tonal combinations.		
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Soundsource Zoom Thinning Synth Mode Synth Waveforms Synth Shape			
Synth Symmetry Synth Hard-Sync Synth Analog Synth Phase Frequency Modulation			
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### **EDIT PAGE - Soundsource Zoom - Mix**



When using <u>Omnisphere Library integration</u> it is possible to load Trilian Soundsources in Omnisphere. Most Trilian Soundsources are multi-channel, and these controls allow you to mix the output channels. In some cases, the two channels are used for double tracking instruments (such as in Trilogy's Fretless section).

The Soundsource Mix section provides level faders for both channels. Mixing the two sources can have a strong affect on the sonic characteristics of the instrument and how it sits in your mix. Moving the faders to the left lowers the level, moving them to the right increases the level.

If you only want to hear one of the channels, simply move the level for the other channel all the way to the left.

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# **EDIT PAGE - Soundsource Zoom - Special Articulations**

SPECIAL ARTICULATIONS				
USE LEGATO SS	Chapman Stick Release TS V			
RELEASE LI	EVEL TRANSITION TIME			

Special Articulations are additional Soundsources loaded in the background that will be automatically triggered depending on how a passage is performed. The Special Articulations are Legato Soundsources (samples of actual Legato performances), and Release Noise articulations.

Omnisphere Soundsources don't use Special Articulations, but most Trilian Soundsources do. When using <u>Omnisphere Library Integration</u>, the Special Articulations section lets you control how these articulations are applied to the primary Soundsource.

*NOTE:* It is possible to apply Trilian Release Noises to Omnisphere Soundsources by selecting from the available Release Noises in the drop down menu.

Use Legato SS / Legato Rules

When Legato Soundsources are available and loaded, enabling the Use Legato SS button will automatically trigger these Special Articulation samples when playing legato-phrased notes a half step or a whole step apart, providing added realism and nuance to the instrument sound.

NOTE: Omnisphere sounds don't currently include Legato Soundsources, so this control will have no effect on Omnisphere Soundsources. It is most useful when loading Trilian sounds into Omnisphere.

In Trilian Soundsources where Legato Soundsources are available, the Use Legato SS feature enables very realistic hammer-on, pull-off and other types of performance phrasing. It allows for a very natural playing style, and great sounding Legato trills!

Enabling Use Legato SS will change the way the instrument responds to notes that are played Legato. Successive Legato notes that are played half step or a whole step apart, will behave much like a lead synth using SOLO mode. That is, the next note played will cut-off the previously played note. If you sustain the cut off note, it will sound again when you release the successive note. The key difference is that Legato Mode is actually polyphonic!

Notes played Legato, but more than a whole step apart will not trigger the Use Legato SS behavior.

NOTE: The Use Legato SS button only changes the behavior of the Part. In order to hear the Legato Soundsources, make sure "No Limit" is selected in the Sample Thinning - Legato menu. This will allow the Legato Soundsources to load, and can add a very live, dynamic quality to the sound during performance.

NOTE: Use Legato SS is a Patch Common parameter. Changing its setting will affect both Layers in the Patch.

**Release Soundsource Menu** 

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Release Soundsources are triggered only after a note has been released.

This menu lets you select the Soundsource used for Release Noises. You can also select "No Release Soundsource" if none are desired. Some Soundsources have multiple sets of Release Noises (e.g. a softer set), and you can try mixing the Release Noises from sounds other than the one loaded.

### **Release Key Tracking**



When the Release Key Tracking Button is enabled, the pitch of the Release Noise will track the keyboard. If it is disabled, the Release Noise will only play at the pitch of the root note.

#### Release Level



This level fader is used to mix the level of the Release Soundsource. Use it together with the Soundsource Mix faders to set the balance you prefer.

When experimenting with mixing Release Noises, try mixing them louder for up-tempo tunes, and lower them for tunes with slower tempos.

If the fader is all the way to the left, no Release Soundsource will be heard. Moved all the way to the right, will make the Release Soundsource very prominent. A setting of around -3dB is usually a good starting point for a natural sound.

*NOTE:* The Amp Envelope Release Time must be set long enough to hear the decay of the Release Noise Soundsource.

NOTE: Legato and Release Noise Soundsources load after the primary Soundsource samples have finished loading. If you have Release Noise Soundsources enabled, you can start playing before they have loaded, but you will hear long sustains ringing instead of the noises. This is because release times for the amp envelope are set long to let the full Release Noises through.

#### **Transition Timing**



This fader affects the transition time between the sustained sample release and the Release Noise Soundsource. At higher settings you will hear an overlap of the sustained sample release time, and the trigger of the release noise. This can be a desirable effect in some circumstances.

If the fader is all the way to the left, there will be no overlap. The farther to the right you move the fader, the more overlap will be heard.



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## **EDIT PAGE - Oscillator Synth Mode**



The SYNTH waveforms are DSP-generated, and are similar to classic analog waveforms, but with a greater level of dynamic control. SYNTH mode features an oval representation of the waveshape, called the Waveform Display. Changes that are made to the three unidirectional sliders in the MAIN section below will dynamically and visually alter the contour of the waveform.

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# EDIT PAGE – Oscillator Synth Waveforms



By selecting anywhere in the Waveform display a drop-down menu will appear with a list of the five available waveform types. All five waveforms are hybrids, meaning they are mixtures of different waveshapes and their contours can be changed dynamically.

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#### SawSquare Fat Waveform



#### SawSquare Bright Waveform



These two waves can be traditional Sawtooth or Square waves – and anything in between – which is why they are both called SawSquare. Moving the SHAPE slider in the MAIN sub-page will demonstrate the continuous contour change from a Sawtooth to Square.

The Bright and Fat versions of the SawSquare waveform are similar, but with a different character. The SawSquare Bright has a bit leaner and buzzier timbre and is excellent for polyphonic applications. The SawSquare Fat has a thicker sound, especially in the low end and is ideal for monophonic lead sounds.

**Triangle Waveform** 

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A Triangle wave is more symmetrical than the SawSquare waveforms and has a mellower character, because of fewer overtones. By moving the SHAPE slider towards maximum it will sound richer and more like a Square wave.

### Sine Waveform



The sine wave is the most symmetrical and since it has no overtones, it sounds very pure. But with the SHAPE, SYMMETRY and HARD SYNC controls, overtones can be added to alter its character.

### Noise Waveform



White Noise contains all frequencies, which therefore is pure noise. Since changing the wave's contour with the SHAPE control would not normally make any difference to noise, the three sliders in the MAIN section have different functions when the Noise waveform is selected.



# EDIT PAGE – Oscillator Synth Analog



The Analog control allows inconsistency to be introduced into the pitch and phase of the oscillator, which makes Omnisphere sound and behave more like a vintage analog instrument. When the Analog control is set to 50% and lower, it destabilizes the phase of the oscillator. After 50% it will also destabilize the pitch. As the Analog control is increased past 75% the pitch will become heavily detuned.

*NOTE:* The Analog control has an affect on <u>Unison</u> voice too, of if Unison detuning is too drastic, it may be desirable to reduce the Analog control.

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# **EDIT PAGE – Oscillator Synth Phase**



The PHASE control will only have an audible effect when it is heard combined with another layer, as phase changes can only be perceived when they are in relation to another audio signal.

The best way to understand the PHASE control is to set up a SYNTH sound on Layer A (with the ANALOG control to zero). Then, from the UTILITY menu select the Copy Layer option and select Layer B and select the Paste Layer option from the UTILITY menu. This way two identical Oscillator Layers will be sounding and changes in the Phase can easily be heard.

If the PHASE control is at minimum, then the Oscillator will be triggered at the start of the waveform. As the value is increased, the point in the waveform that the Oscillator will be triggered will be moved and it will be out of phase with the other Layer. When the horizontal slider is set to maximum, it will be 180 degrees out of phase the other Layer's Oscillator.



Many interesting composite waveforms can be created with the Phase control this way, and this technique is particularly useful for Synth Bass sounds.

NOTE: The PHASE is best utilized when the ANALOG control, also in the MAIN section, is set to a minimum value.

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FM stands for Frequency Modulation. FM has been a feature on synthesizers since the 1960s, but it was most famously realized in Yamaha's DX/TX series of digital synthesizers in the 1980s. It was well known for producing glassy, metallic sounds and for creating sound that are more harmonically complex.

FM is a form of audio synthesis where the timbre of one waveform, called the "carrier", is changed by modulating it with the frequency of another waveform, called the "modulator" – hence Frequency Modulation synthesis.

FM can take simple waveforms, like sine waves, and make them sound quite complex. In Omnisphere, the exciting thing is that any Soundsource or DSP waveform in Omnisphere can be modulated with FM.

Each Layer in Omnisphere has a dedicated, hidden FM oscillator, which acts as the modulator; so the other Layer's Oscillator is not required for FM synthesis to work. This dedicated Modulation Oscillator can utilize different waveforms and both its frequency and depth can be shifted and modulated.

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# **EDIT PAGE – Oscillator FM Controls**

#### FM POWER SWITCH



Turns the FM modulating oscillator on or off.

#### FM KEYBOARD TRACKING



The small music-keyboard switch enables or disables Keyboard Tracking. The Keyboard Tracking button determines whether the modulator oscillator tracks the keyboard.

If the Keyboard Tracking is turned on, then the modulator oscillator will track the keyboard, meaning it will change pitch with the keyboard. If Keyboard Tracking is off, the modulation oscillator will not change pitch with the keyboard, it will stay the same pitch no matter what key is played. This can be useful for more clangorous sounds.

#### **FM FREQUENCY**



Controls the frequency of the modulator oscillator. Because the modulator is unheard, it does not change the pitch of the original Oscillator. Instead it alters the timbral characteristics of the Oscillator's waveform.

When this horizontal slider is set to just above the minimum, it can produce LFO-type pitch effects. Moving the slider towards the maximum increases the frequency and begins to oscillate fast enough that it will introduce timbre changes.

The notches along the FREQUENCY slider are markers for the frequency ratios that will produce the most musically useful results.

These musically useful values at the notches are decimal versions of these ratios - 1/4, 1/2, 3/4 and 1 - represented as .250, .500. .750 and 1.00.

Range 0.000 to 1.000

#### FM DEPTH



Controls the modulator's depth. The higher the DEPTH slider is set, the more the dedicated modulator is affecting the timbre of the OSCILLATOR.

Range 0.000 to 1.000

#### FM WAVEFORM



Many FM synthesizers use only Sine waves, but Omnisphere's modulator can use any one of four different waveforms. The four mode switches are for Sine, Triangle, Sawtooth and Noise. Each successive waveform has more overtones and so will add a brighter timbre.

In general FM works better when beginning with a simpler, more pure sound than a sound with a lot of complexity to start with.

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## **EDIT PAGE – Oscillator Ring Modulation**



RING is short for Ring Modulation, which is similar in concept to FM (and the parameters are exactly the same as those in the FM sub-page). In Ring Modulation the frequencies of both oscillators are multiplied, which changes their overall amplitude, so it's can also be referred to as Amplitude Modulation.

Traditionally Ring Modulation is used as an effect to create high-frequency, clangorous overtones. However, Omnisphere's Ring Modulator is polyphonic and can track the keyboard – meaning the pitch does not have to be fixed; it can follow the pitch of the keyboard. The result is something much more musical and useful than a traditional Ring Modulator.  $EDIT\ PAGE-Oscillator\ Ring\ Modulation$ 

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#### **RING MOD POWER SWITCH**



Turns the modulator oscillator On or Off.

### RING MOD KEYBOARD TRACKING



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The Keyboard Tracking for the Ring Modulator works just like it does in the FM section. Most Ring Modulators do not track the keyboard, which is part of the character of their sound, but Omnisphere provides the option to enable Keyboard Tracking if required.

If the Keyboard Tracking is turned on, then the Ring Modulator oscillator will change pitch with the keyboard. If Keyboard Tracking is turned off, the modulation oscillator will remain the same pitch no matter what key is played.

#### RING MOD FREQUENCY



Controls the frequency of the modulation oscillator. When the FREQUENCY slider is set to minimum value, very slow modulation is heard. Sweeping thru the different values will cause different overtones become more pronounced, because the modulator oscillator is in the audio range.

The notches along the FREQUENCY slider are markers for the frequency ratios that will produce the most musically useful results. Just like in the FM section, the most musically useful values are at the notches. They are represented as .250, .500. .750 and 1.00.

Range 0.000 to 1.000

#### **RING MOD DEPTH**



This horizontal slider controls the depth of the Ring Modulation, meaning how much interaction occurs between the Oscillator and the modulation oscillator.

Range 0.000 to 1.000

#### RING MOD WAVEFORM



Ring Modulators typically only use a Sine wave. The dedicated RING oscillator in Omnisphere can use any one of four waveforms; Sine, Triangle, Sawtooth and Noise. Each successive waveform has more overtones and will introduce a brighter, more harmonically rich character to the OSCILLATOR's waveform.

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# **EDIT PAGE – Oscillator Wave Shaper**



Omnisphere's Wave Shaper takes the Oscillator's waveform and passes it thru mathematically generated curves that add various types of distortion, which changes the waveform's harmonic content.

Instead of being a stand-alone effect, Omnisphere's Wave Shaper is part of the Oscillator, and is polyphonic, making it a synthesis function and not just an effect. This means that the Oscillator's can have more harmonic richness without the clashing sound heard when playing chords thru a monophonic distortion (such as a fuzz box). Polyphonic distortion is far more versatile musically.

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The mix mini-slider controls the balance between the original Oscillator's signal and the Wave Shaped sound. If the mix is at minimum setting, then the effect Wave Shaper is not heard. When set to maximum, only the Wave Shaped signal is heard. The Waveshaper mix control is modulatable.

Range 0.000 to 1.000

### WAVE SHAPER GAIN



The Gain mini-slider controls the amount of gain that's applied to the to the output.

Range 0.000 to 1.000



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### **EDIT PAGE – Oscillator Voice Multiplier**



The MULT sub-page contains all the unique, polyphonic Voice Multiplier functions of Omnisphere. The Voice Multiplier adds richness and variety with three versatile modes; Polyphonic Unison, Granular Synthesis or Harmonia. All three modes work via the same basic principle of multiplying the number of oscillator voices to achieve different types of sonic enrichment.

The modes of the Voice Multiplier are exclusive; meaning only one of these features can be active at a time. When the OSCILLATOR is in SAMPLE mode, all three Voice Multiplier modes are available; GRANULAR, HARMONIA and UNISON.

In SYNTH mode, only two of the Voice Multiplier modes are available; HARMONIA and UNISON. However, the SYNTH Voice Multiplier modes have some extra features not available in SAMPLE mode.

*NOTE:* The three Voice Multiplier functions; Unison, Granular and Harmonia, can be very CPU-intensive, so make account for this when setting the Voice count and envelope Release times.

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The Octave switches specify at which octave the unison notes will sound, up to two octaves above or two octaves below. This is not a traditional transpose control, as it only pitches the UNISON voices up or down – the pitch of the Oscillator will still be at the same pitch.

#### UNISON DEPTH



The DEPTH slider controls the amount of UNISON voices added. Increasing the setting of this slider increases the number of UNISON voices. The more Unison voices used, the richer the sound, but the higher the demand on the CPU.

The maximum number of Unison voices is eight.

### UNISON SPREAD

SPREAD	

UNISON voices can panned across the stereo image. Spread controls the extent of the stereo imaging. When the mini-slider is at minimum setting, the UNISON voices are all in the center of the stereo image. When set to maximum value, the UNISON voices are panned across the stereo field.

Both the UNISON DEPTH and SPREAD are modulatable.

Range 0.000 to 1.000


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## EDIT PAGE – Oscillator Voice Multiplier - Harmonia™



HARMONIA[™] is one of Omnisphere's most exciting and unique new features. While it may in intuitively look like it shares the same functionality of the traditional Harmonizer effect, it's actually far more powerful because it's built into Omnisphere's OSCILLATOR as a polyphonic synthesis component, and not just as an audio effect.

HARMONIA[™] adds four additional oscillators to the layer. Since each Layer has it's own HARMONIA section, it can add up to ten additional oscillators per patch!

EDIT PAGE – Oscillator Harmonia  $^{\rm TM}$ 

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## EDIT PAGE – Oscillator Voice Multiplier - Harmonia™ Controls

#### HARMONIA PRESETS



A complete set of HARMONIA presets can be accessed by selecting the menu arrow. Any factory presets can be copied, pasted or saved as well as any custom settings.

## HARMONIA VOICES 1-4

C	1
C	2
	3
E	4

Up to four HARMONIA voices can be stacked on top of the OSCILLATOR'S voice by selecting the numbered switches in HARMONIA.

Keep in mind the more additional voices are added, the higher the demand on the CPU.

#### HARMONIA LEVEL



Controls output level of the HARMONIA voices, so the effect of each Harmonia voice can be subtle or pronounced.

Range 0.000 to 1.000

#### HARMONIA PAN



Each of the HARMONIA voices can be individually positioned in the stereo field with the PAN

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controls.

Range 0.000 to 1.000

## HARMONIA DETUNE



Each of the HARMONIA voices can be detuned by +/- 100 cents. When the knobs are centered, there is no detuning of the HARMONIA voices.

#### HARMONIA INTERVAL

1	+9 ‡
1	-12 ‡
	-12 ‡
	0 \$

Each of the HARMONIA voices can be transposed over a four-octave range. Selecting the INTERVAL switch will bring up a drop-down menu of half-step transpositions, either up or down by two octaves.

Range -24 to +24



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## EDIT PAGE – Oscillator Voice Multiplier - Harmonia[™] (Synth-Mode Special Features)



When the OSCILLATOR is set to SYNTH mode, all of the HARMONIA features in SAMPLE mode are available, as well as a second set of options that are unique to SYNTH mode. This special "Page II" set of controls allows full independent waveform control over each Harmonia voice!

The two small triangles below the HARMONIA header toggle back and forth between two pages of HARMONIA controls. Selecting the right triangle will bring up the second HARMONIA page, with the SYNTH-only features.

#### HARMONIA PHASE



Like the Phase Control option in UNISON, this is unique to the SYNTH Oscillators. The Phase Control means the initial phases of the HARMONIA voices can be randomly spread across a range. The width of the range is controlled by stepping through the five Phase Control options, which range from In-Phase to totally out of Phase.

	All Unison voices perfectly in phase.
<b>\$</b>	Unison voices slightly Out Of Phase
$\sqrt[m]{} m \approx 10^{-10}$	Unison voices 90° Out Of Phase
1000° ‡	Unison voices Out Of Phase
~000^÷	Unison voices completely Out Of Phase (180°)

HARMONIA SHAPE



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This is the same as the SHAPE control on the MAIN OSCILLATOR page, so each of HARMONIA's four voices can have it's own offset to the shape setting in the main Synth Oscillator. The center position indicates that the shape is identical to the shape on the OSC MAIN sub-page.

NOTE: To learn more about the SHAPE functionality, check out the description in the <u>OSC</u> <u>MAIN</u> chapter.

Range 0.000 to 1.000

HARMONIA SYM



SYM is short for SYMMETRY, and like SHAPE, the HARMONIA voice's symmetry can be controlled in the same way as they are on the OSCILLATOR'S MAIN page. The center position indicates that the Symmetry is identical to the Symmetry on the OSC MAIN sub-page.

NOTE: To learn more about the SYMMETRY functionality, check out the description in the <u>OSC SYMMETRY</u> chapter.

Range 0.000 to 1.000

HARMONIA SYNC



SYNC is short for HARD SYNC and is the same parameter on the MAIN page for the OSCILLATOR and has the exact same function. The center position indicates that the Sync is identical to the Hard Sync on the OSC MAIN sub-page.

NOTE: To learn more about the HARD SYNC functionality, check out the description in the <u>OSC HARD SYNC</u> chapter

Range 0.000 to 1.000

## HARMONIA WAVESHAPE

$\sim$	¢
~	•
<b>₽</b> ₽₽	¢
OSC	÷

The waveshape of each of the four HARMONIA voices can be set from these steppers. Four of the waveshapes are the same as those available in the Waveform Selector in **SYNTH MAIN**; Triangle, Sine, SawSquare Bright & SawSquare Fat. The fifth waveshape, called OSC, means the HARMONIA waveform will follow as the primary Oscillator's current waveform selection.



NOTE: To learn more about the SYNTH WAVESHAPE functionality, refer to the <u>OSC SHAPE</u> chapter



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Granular synthesis is a powerful method of fragmenting pieces of sound into very small bits of audio called 'grains'. Since each grain can have its own duration, amplitude and envelope, they can create a layered 'soundscape' of overlapping tones. The composer Innas Xenakis first conceptualized Granular synthesis in the 1970s. It's a useful technique for everything from evolving soundscapes to edgy, gritty glitchiness.

Omnisphere contains a fully implemented set of granular controls. Soundsources turned into grains can be manipulated by altering their pitch, duration, envelope and position in the stereo field. Up to eight voices of granularity are available per Layer.

*NOTE:* Granular requires a great deal of processing power, so apply it according to the capability of the system that Omnisphere's being used on.

EDIT PAGE - Oscillator - Granular

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## EDIT PAGE – Oscillator Voice Multiplier – Granular Controls

**GRAIN DEPTH** 



By moving this mini-slider to maximum, an increasing number of grains will be taken from the Soundsource. The higher the number of grains added, the higher the demand on the CPU. Excellent results can usually be obtained without using a lot of Grain Depth, so use it wisely.

Range 0.000 to 1.000

#### PITCH GRAINS

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Harmonia Synth Mode

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**Modulation** 

**Filters Envelopes LFOS** 



Sets how often the grains will be transposed in pitch. The Pitch Grains parameter and the two below it, INTERVAL and GLIDING, are all related - which is why they all have a small grey dash next to them.

If the PITCH GRAINS parameter is set to 0, then neither the INTERVAL nor the GLIDING parameters will have any effect.

#### PITCH GRAINS DIRECTION



Between the eight mini-sliders in the GRANULAR section are four small mode switches with directional arrows. These determine which direction the PITCH GRAINS will go. That is why there is a small line extending from the PITCH GRAINS slider to these four buttons.

These are the four PITCH GRAIN DIRECTIONS available;

- The PITCH GRAINS will only go up
- The PITCH GRAINS will only go down
- The PITCH GRAINS will only go up or down - so they will never got up and ¢ down on the same note.
- The PITCH GRAINS will randomly go up and down on the same note.

11

INTERVAL

This slider determines what musical interval the PITCH GRAINS will use. The INTERVAL can be set

**GRANULAR INTERVAL** 

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Range 1 to 12 semitones

from one to twelve semitones.

This parameter will not have any effect if the PITCH GRAINS slider is set to zero.

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#### GRANULAR GLIDING



GLIDING determines how often the grains will glide between the note that is played and the transposed interval of a pitch grain.

This parameter will not have any effect if the PITCH GRAINS slider is set to zero.

Range 0.000 to 1.000

#### GRANULAR INTENSITY



When the sample has been sliced into grains, the size of the grains can be altered, which gives the impression of a change in speed and intensity. When the INTENSITY slider is lower, the length of the grains is longer and therefore a slower transition between each of the grains. When the INTENSITY mini-slider is higher, the length of the grains is shorter and results in the grains moving faster.

GRAIN Intensity is a Modulatable parameter.

Range 0.000 to 1.000

#### **GRANULAR DETUNING**



The grains can be detuned from each other by increasing this control. The higher DETUNING is set, the more variation in pitch will be heard in the grains. This does not affect the pitch of the Soundsource itself, just the grains.

Range 0.000 to 1.000

#### **GRANULAR SMOOTHING**



Since the grains can be changed in pitch and amplitude, the change from grain to grain can be abrupt and jarring. Increasing the value of this mini-slider softens the sharp transitions between the grains. Think of SMOOTHING as cross-fading between the grains.

Range 0.000 to 1.000

#### **GRANULAR SPREAD**



Controls the placement of the grains within the stereo image - the higher the Spread, the more grains will be panned across the stereo field.

Range 0.000 to 1.000



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10		
1	Reset to Default Value	
	Modulate 🕨 🕨	Modulate with LFO
A	Show Modulation	Modulate with Envelope
1	Unmodulate	Modulate with Velocity
	MIDI CC Learn MIDI CC Learn Inverted MIDI Note Learn MIDI Program Change Learn Enable Host Automation	Modulate with Wheel Modulate with Key Tracking Modulate with Randomize Modulate with Alternate Modulate with Controller All Mod Sources
	the beauty	

The quickest way to set up a modulation routing is by right clicking on the control to be modulated*. From the menu, select from the list of available sources.

The first group of modulation options in the list is commonly used sources. If there's more than once source available of a given type, the next available source will be used automatically. This approach saves a lot of time that used to be wasted trying to find an unused source.

For example, when "Modulate with LFO" is selected, the next available LFO will automatically be routed to the target parameter. This means if LFO1 is already being used as a modulation source, the Flex-Mod system will automatically assign LFO2. Of course any of these automatic routings can be overridden as well.

A complete list of all of the Modulation sources is provided at the bottom of the menu as "All Mod Sources", so specific sources can be chosen if that's preferred.

After the target parameter's modulation source has been selected, the routing is then displayed in the MODULATION section of the EDIT page.

* Not all controls are Modulatable, but the majority are.

NOTE: If all six LFOs have been routed as modulation sources, and "Modulate with LFO" is selected it will default to LFO1. This is the same with the modulation envelopes – after four are in use all additional "Modulate with Envelope" routings will default to MOD Envelope 1.

## EDIT PAGE - Flex Mod[™]



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#### **EDIT PAGE - Modulation Section**



The Modulation section has two functions; to display any existing modulation routings and also to create new routings. Existing routings can also be edited here. The key concept of the Modulation section of the EDIT page is that only one modulation routing is displayed at a time (the Mod Matrix Zoom shows many routings simultaneously)

New Modulation Routing	
Remove Modulation Routing	
	au
LFO1 -> Amplitude	
Random -> LFO1 Depth	
Mod Envelope1 -> Resonance	
Aftertouch -> FM Frequency	1
Filter Envelope -> Waveshaper Depth	
✓ Wheel -> Spread	
	-

Selecting the drop down arrow on the MODULATION header will bring up a menu that allows new modulation routings to be created as well as the removal of existing routings. All of the modulation routings set up in the currently selected Layer are visible from this list. Selecting any of these routings will allow them to be displayed and modified in the Modulation section of the EDIT page.

#### Source Depth



This slider controls the amount of modulation that will be sent from the source to the modulation target. If the slider is set to minimum, the modulation source will have no effect on the modulation target. The higher the setting, the more the source will be affecting to the target. This is useful in controlling the subtlety of the modulation. However it is possible to send too much signal from the source, which causes unusual behavior in the target because the values are out of range.

**Target Parameter** 



This slider is a duplicate of the target parameter – meaning it's another representation of the parameter that's being modulated.

Inside the parameter 'slot' is a dual indicator. The blue line represents the range of the modulation and the white point indicates the current value of the modulation.

## Mute



The currently displayed modulation routing can be muted with this switch. This is a quick way to hear the Patch with and without the modulation routing.

#### Invert

	INVERT
--	--------

The Invert button changes the modulation source by reversing the values so it will have the opposite effect on the modulation target.

For example, if the modulation source is an LFO with an ascending ramp wave as its waveform, it will invert the signal to that of a descending ramp waveform.



file:///Users/...CTRASONICS/INSTRUMENTS/OMNISPHERE/REF%20GUIDE/REF%20GUIDE%20LOCAL/edit_page/modulation/page04.html[6/8/10 6:18:18 PM]



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#### SWEEP LFO Ċ, 0. WAH WAH 2000 9 ETROPHASED ARTO DEPTH SYNC POLES MANUR FEEDBRCK INVERT G 6 FLUTTE 0 DELAY PLEX VARI-SPEED FEEDBAC TAPE M SPEED YEAR WIDT ж

The fact that Omnisphere can modulate nearly fifty synthesis parameters is only part of the story. Any of Omnisphere's modulation sources can be applied to the myriad of FX parameters as well. Just about every single parameter in all of Omnisphere's 33 effects modules can be modulated, which means there are over 200 effects parameters available on top of all of the synthesis parameters. In total, Omnisphere has nearly 300 available modulation targets!

Effects Modulation can be set up quickly using the same flex-mod system available on the MAIN and EDIT pages.

#### Modulation Effects Menu

Any effect that's added to a Layer Effect rack (A or B) is available as a modulation target. After any Effect has been added to a Layer rack, a new category called "Layer Effects" will appear at the bottom of the list of target categories.

NOTE: Only FX assigned to a Layer Rack are available as Modulation Targets - FX in the COMMON rack are not.

When any modulatable parameter is right-clicked, the same list of Modulation options appears when a synthesis parameter is right-clicked. All of the Modulation options are the same.

## **EDIT PAGE - Effects Modulation**



After a parameter has been assigned as a Modulation Target, the control will become shaded with a bluish tint (in the example below, the Delay control is now blue).





These parameters will be available as long as the effect module is assigned to the Patch – meaning they will no longer appear if they effect is removed from that Layer's rack.



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			MOD MATRIX ZOOM	IQ	
SMOOTH	STATUS	SOURCE	DEPTH	TARGET	TARGET PARAMETER
01	MUTE	Amp Envelope		Synth Shape	·
<b>II</b> ——	MUTE INVERT				· · · · · · · · · · · · · · · · · · ·
<b>m</b> ——	MUTE INVERT				· III
<b>II</b> ——	MUTE	Amp Envelope		Resonance	
<b>II</b> ——	MUTE	LFO1 •	<b>     </b>	Synth Symmetry	· · · · · · · · · · · · · · · · · · ·
<b>II</b>	MUTE INVERT				·
-01	MUTE INVERT				· · · · · · · · · · · · · · · · · · ·
III	MUTE INVERT	LFO4 ·		Filter 2 Spread	·
III	MUTE INVERT	Mod Envelope1		Cutoff	·
11	MUTE INVERT	Mod Envelope2		Cutoff	·
II.——	MUTE INVERT	Off -		Off	·
0	MUTE INVERT	Off		Off	·
			LAYER A LAYER B		

Selecting the Zoom icon on the Modulation header will open the Mod Matrix Zoom view. The Mod Matrix view offers precise control over all of the modulation routings in the Patch. The advantage of this zoom view is that the many routings can be displayed for editing simultaneously.

There are the same Source/Target sections, Depth and Target Parameter controls from the EDIT overview page, as well as some controls unique to the Mod Matrix Zoom, like smoothing. There are two sub-pages in Mod Matrix Zoom, each with twelve modulation routings making for a total of 24 possible modulation routings available per Patch.

It's important to note that Omnisphere also has a number of fixed modulation routings as well. Many of the typical routings have already been hardwired in the STEAM engine, so they don't have to be assigned. These include Velocity control over Envelope depth, Key Tracking of Filter depth, Filter Envelope to Cutoff, and so on.

#### Page Switch



Toggles between the two Mod Matrix sub-pages. It's generally a good rule of thumb to fill up the first modulation page before any mod routings are added on the second modulation page. Each page displays twelve routings at a time. The Mod Matrix shows modulation routings for both Layers simultaneously.

#### Smoothing



The modulation Smoothing control takes the incoming modulation source and slows the sharper points down, smoothing them out. This means that the character of the modulation source will not have quite as drastic or harsh an effect on the modulation destination. It works in a similar way to the Lag processors on some vintage synthesizers. This is the same principle that is used in Glide/Portamento, but applied to any source and target.

## EDIT PAGE - Mod Matrix Zoom

Status

STATUS	
MUTE INVERT	

This is a shared area with two switches, Mute & Invert.

The Mute control virtually disconnects the modulation routing. This is a quick way to hear what kind of effect it's having on the part.

The Invert control allows toggles between positive or negative modulation.

Source



The source area displays and selects the modulation source to control a target. Selecting the source will open up a menu of 28 modulation sources and "Off" – which negates any modulation source.

#### Depth



This control determines to what degree the source affects the modulation target. The higher the setting, the more the Source will affect the target. Depending on the kind of Modulation Source used, it is possible to send too much signal from the Modulation Source, which causes unexpected results in the target. This is explained in the section below on the Target Parameter.

#### Target



The Target is the destination for the Source's modulation output. Omnisphere has a large number of modulation targets, including synthesis parameters as well as effects parameters.

The full list of Targets is listed in the MODULATION section here

#### **Target Parameter**



This control represents the setting of the target parameter – meaning it's another representation of it.

Inside the parameter 'slot' is a dual indicator. The blue line represents the range of the modulation and the white point indicates the current value of the modulation.

#### Layer Display Switches



These buttons allow viewing the active modulation routings on either layer. When Layer A or Layer B is selected, that layer's modulation routings are shown in bright blue text, while the other layer's routings are disabled.

LF01	 Synth Hard Sync	



## **EDIT PAGE - Filter Power Switch**



Enables or disables the Filter.

NOTE: Turning the Filter OFF saves CPU power, since every voice played has it's own dualfilter per Layer.

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Save Filter Preset ... **Copy Filter Preset** Paste Filter Preset SawSquare Fat MAIN FM BING WS MULT **Bandpass Filters** ► **Highpass Filters** Dual Hipass Þ Lowpass Filters Dual Resonant Juicy HPF ► Specialty Filters HPF Crisp ► HPF Juicy 12db HPF Juicy 24db HPF Juicy 36dB HPF Juicy 48dB HPF UVI VELO Wide HPF Juicy

Omnisphere has a wide variety of customized filter configurations, called presets. The presets represent the settings of Omnisphere's complex dual stereo filter. Filter presets can be selected, copied, pasted and saved from this menu.

TIP: If you find a Patch that has an interesting custom filter configuration, you can save it into your preset library to use with your own patches!

The Presets are categorized into several sub-categories; Bandpass Filters, Highpass Filters, Lowpass Filters and Specialty Filters. For the sake of space, the preset names are abbreviated, but this is what the different abbreviations mean;

BPFBand Pass FilterHPFHigh Pass FilterLPFLow Pass Filter

- UVI UVI Filter from Atmosphere®
- db Short for Decibel. Names like 12db, 24db, refer
  - to the roll off slope of the filters.

*NOTE:* Filter presets are not the same as Filter types. Filter Presets include the settings for Filter type. Filter types are covered in the <u>FILTER ZOOM</u> section.

#### FILTER PRESET MENU

After a Preset has been chosen from the drop-down menu, the name will be displayed in the preset display window:



If the filter types are changed in the Zoom view, then the display will be changed to "Modified" until the Filter settings are saved as a preset or another preset is selected.



**EDIT PAGE - Filters Presets** 

NOTE: Filter presets intentionally do not recall CUTOFF, RES, KEY and ENV settings. This is done because it's the best way to audition the different Filter Presets within the context of your current Patch.



## **EDIT PAGE - Filter Cutoff**



The primary function of the filter is to remove, hence "cut off", frequencies from a sound. Omnisphere's filter can remove frequencies in a variety of ways, via its numerous different filter types; Lowpass, Highpass, Bandpass, Notch and several specialized ones. Depending on the Filter type, the Cutoff will remove different types of frequencies in various ways.

For example, if a Low Pass filter is used, turning the control counter-clockwise will remove the higher frequencies. If a High-Pass Filter is used, turning it clockwise will remove low frequencies. Experiment with cutoff control with the wide variety of filter presets and types

Range 00.05Hz to 19.00kHz

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## **EDIT PAGE - Filter Key Tracking**



The Filter Tracking is a dedicated modulation control. It determines to what extent the cutoff frequncy will track the keyboard. The higher the KEY value is set, the more the filter will open over the upper range of the keyboard and close in the lower ranges of the keyboard.

For example, If a low pass filter is loaded and the cutoff is set below 1.00KHz, the notes played below middle-C will become increasingly darker in tone, and keys above middle-C will be increasingly brighter. At the minimum setting, higher and lower notes have no effect on the cutoff frequency.

Range 0 to 127

## FILTER KEY TRACKING INVERT SWITCH



Key Tracking can be inverted simply by selecting the word "Key" below the control. This switch will change to inverted text when Key tracking is inverted and the sonic result will be the opposite of standard Filter Key Tracking.



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## **EDIT PAGE - Filter Envelope Depth**



The Filter Envelope Depth is a dedicated modulation control. It sets the amount that the Filter Envelope controls the cutoff frequency. At minimum setting, the Filter Envelope has no affect on the cutoff. The higher the setting, the greater effect the Filter Envelope's contour has in opening and closing the Filter.

NOTE – If both the Filter Cutoff and Filter Envelope Depth are set to minimum values, little to no sound will be heard. If the Filter Cutoff is at the maximum value, then the ENV DEPTH knob will have no effect, since the cutoff is already wide open. A good starting point is to keep the ENV control at the middle point.

Range 0 to 127

## ENV INVERT SWITCH

ENV

This control inverts the Filter Envelopes contour and so it will have the effect of closing the filter (lowering the cutoff frequency). This switch will change to inverted text when Env tracking is inverted.

TIP: Inverting the Filter's Envelope can be useful for creating unusual contours, such as double triggering and release effects



## **EDIT PAGE - Filter Gain**



By default the FILTER GAIN is set at 0.0db. Changing this control alters the output level of the Filters. One application would be if the Filter is closed down, and the tone is quite dark and rather low in output, the level could be compensated for by using the FILTER GAIN control. More commonly, Filter combinations with Resonances can get too loud, causing distortion and clipping. The GAIN slider is very useful to reduce the overall level in these cases.

Range between - inf (0) and +9.54.dB

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Filter Zoom - Shared

Filter Zoom - Spread

Filter Zoom - Mix Filter Zoom - Gain Filter Zoom - Pre/Post Filter Zoom - Cutoff

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## **EDIT PAGE - Filter Cutoff Spread**



The SPREAD control in Omnisphere's Filter is not typically found on most synthesizers. Since Omnisphere's filter is stereo, the SPREAD control can move the cutoff frequency in one direction on one side of the stereo field while moving it in the opposite direction in the other side of the stereo field

For example, the filter would be opening on the right channel while closing on the left channel. This can create unique panning effects that are more dramatic than the standard audio panning approach - particularly when SPREAD is modulated.



NOTE: Unlike the other filters, the Power filter is not a pair of L/R mono filters. Instead, it's a stereo filter with no spread capability. In the case of the Power Filter, the Spread control does the same function as the Width control in the Power Filter effect unit.

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## **FILTER ZOOM - Power Switches**

**Dual-Filter Power Switch** 



Enables or disables the entire Filter. It is a duplicate of the power button on the EDIT page. The entire Dual-Filter can be turned on and off with this switch, which provides a quick way to compare the sound with and without filtering.

#### FILTER 1 & FILTER 2 Power Switches

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Enables or disables Filter 1 and/or Filter 2.

NOTE: If both Filter 1 and Filter 2 are turned off, the only control on the Filter Zoom page that will still change the sound is the GAIN slider.



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## FILTER ZOOM – Filter Type



The Filter Type menu allows you to select the actual Filter algorithm to be used in Filter 1 or Filter 2. Omnisphere comes with a wide range of filter types. Each of the two stereo filters has the same twentyfour filter types available.

Because of the flexible dual-filter system in Omnisphere, these different filter types can be combined, routed in series or parallel, allowing for hundreds of possible filter configurations.

The extent to which the frequencies are removed is based on the roll-off slope (measured in dB) of the filter type. This means a Lowpass filter with a 24dB roll-off is going to allow less sound to pass through than a filter with a 12dB roll-off.

Once a customized filter configuration has been created, the settings can be saved as a Filter Preset and loaded it from the FILTERS section on the EDIT overview page.

OFF		The Filter is off.
LOW PASS	Gentle 6db	A subtle, 1-pole low pass, useful for acoustic sounds
	Crisp 12db	
	Warm 12db	
	Juicy 12db	This new 2-pole Low Pass filter has a very smooth response at high resonances.
	Warm 24db	
	Smooth 24db	
	Colorful 24db	
	Edge 24db	
	Juicy 24db	This new 4-pole Low Pass filter has a very smooth response at high resonances.
	Power LP24	This is the Low Pass 24db filter from the Power Filter FX module
	UVI 1	The 4-pole 24db Low Pass filter used in Atmosphere (can self-oscillate)
	UVI 2	The 3-pole 18db Low Pass filter used in Atmosphere
	UVI 3	The 2-pole 12db Low Pass filter used in Atmosphere
HIGH PASS	UVI	The 2-pole 12db High Pass filter used in Atmosphere
	Crisp	
	Juicy 12db	This new 2-pole High Pass filter has a very smooth response at high resonances.
	Juicy 24db	This new 4-pole High Pass filter has a very smooth response at high resonances.
OTHER	Bandpass	All frequencies above and below a certain range are removed.
	Bandpass Juicy 12db	This new 2-pole Band Pass filter has a very smooth response at high resonances.
	Bandpass Juicy 24db	This new 4-pole Band Pass filter has a very smooth response at high resonances.
	Notch	Frequencies pass thru a narrow 'notch', also known as a 'band-reject' filter
	Allpass	All frequencies are passed equally, but it changes the phase relationship between the frequencies.
	Metal Pipe +	A complex stereo comb-filter that produces flanger-like metallic overtones
	Metal Pipe -	A complex stereo comb-filter, inverted



## FILTER ZOOM – Cutoff Offset



The Filter Cutoff settings affect both FILTER 1 and FILTER 2. The CUTOFF OFFSET counterbalances the Cutoff for FILTER1 and FILTER2 independently. These are not separate filters controls; they simply increase or decrease the Cutoff frequency of that particular Filter Type, relative to the primary Cutoff control.

When the slider is centered in the middle, there is no offset to the Filter Cutoff. Moving the control to the right increases the Filter Cutoff and moving it to the left decreases the cutoff.

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## FILTER ZOOM – Resonance Offset



As Filter Resonance settings affect both FILTER 1 and FILTER 2, the RES OFFSET (meaning Resonance Offset) allows the depth of the resonance for FILTER1 and FILTER2 to be set independently. This control decreases or increases the amount of Resonance of that particular Filter Type.

When the slider is centered in the middle, there is no offset to the Filter Resonance. Moving the slider to the right increases the Filter Resonance and setting it farther left decreases the Resonance.

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## FILTER ZOOM – Spread Offset



As both of Omnisphere's filters are stereo, they are both capable of offsetting their stereo position with this control. Like the other Offset controls in Filter Zoom, this counterbalances the setting of the primary control, in this case is the Spread control.

*NOTE: Since Spread moves the cutoff between Right and Left, the Spread Offset can counteract the Spread's setting for each Filter if moved in the opposite direction.* 

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The central part of the FILTER ZOOM section is dedicated for controls that are common to both of the Filters, including the ability to route to two Filters in parallel or in series and to place them before or after the Amplifier.



Aside from the Series/Parallel and Mix option, the remaining four knobs (CUTOFF, RES, SPREAD, KEY, ENV) are exactly the same as those in the Filter section on the EDIT page. So any changes that are made on these controls will be reflected on the Edit page as well.



## FILTER ZOOM – Series / Parallel



When Omnisphere's two Filters are in "Series", it means that the output of Filter 1 is feeding into Filter 2 – and thus affects the character of Filter 2. When the two Filters are in Series, the Mix control is not in use. "Parallel" means the two Filters are both working, but they are not directly affecting the other; they are operating side-by-side and mixed together. The Mix slider controls the balance between the two filters.

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## **FILTER ZOOM - Mix**



In Parallel mode, each of the two Filters pass thru the Filter Mixer, and the Mix control determines how much of each filter is heard. Centering the slider will allow both filters to be heard equally, and sliding it to the right or left will favor one over the other.

Range 100.00 to 00.100 (50.50 is the center point)

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# FILTER ZOOM – Gain



The Gain adjusts the level of the input, or output of the Filter Module. Range between - inf (0) and +9.54.dB

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# FILTER ZOOM – Pre / Post



The Dual-Filter can be placed before or after the Gain Control. These switches determine if the gain control will be used before or after the Filter. Aggressive Filter sounds will have a different character depending if PRE or POST is enabled.

FILTER 1

PRE

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The Gain Control is applied before the Filters.

POST





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# FILTER ZOOM - Cutoff



The primary Cutoff control is identical to the Cutoff control on the EDIT page. The primary function of the filter is to remove, hence "cut off", frequencies from the sound. Omnisphere's filter can remove frequencies in a variety of ways, from Lowpass, Highpass, Bandpass, Notch and also specialized filter types. When different Types are loaded, the Cutoff will remove different frequencies from the sound.

Depending what Filter preset is chosen, the Cutoff control will remove different frequencies in various ways.

For example, if a Low Pass filter is used, turning the control counter-clockwise will remove the higher frequencies. If a High-Pass Filter is used, the opposite will happen. It's best to experiment with cutoff control with the wide variety of Filter Types.

The Filter's roll off slope is measured in dB, and is sometimes expressed in "poles". The higher the dB value, the greater the extent of the filtering, but this should not be confused with sounding "better". Filters with fewer poles can often sound more appropriate than those with more poles.

6dB =	1 Pole
12dB =	2 Pole
18dB =	3 Pole
24dB =	4 Pole

Range 00.05Hz to 19.00kHz



# FILTER ZOOM – Resonance



The Resonance control on the FILTER ZOOM page is identical to the RES knob on the EDIT page. Resonance is also called 'Q' or Emphasis in synthesizers, because it emphasizes the cutoff point of the filter. Resonance can often increase the loudness of the Filter, so its a good idea to use this control along with the Filter Gain, so that audio clipping does not occur.

TIP: Omnisphere's UVI1 filter can self-oscillate. If the Resonance is set to maximum, the filter can be 'tuned' by the cutoff control.



Range 0 to 127

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# **FILTER ZOOM - Spread**



The SPREAD control on the FILTER ZOOM page is identical to the SPREAD slider on the EDIT page. The SPREAD control in Omnisphere's Filter is not typically found on most synthesizers. Since Omnisphere's filter is stereo, the SPREAD control can move the cutoff frequency in one direction on one side of the stereo field while moving it in the opposite direction in the other side of the stereo field.

For example, the filter would be opening on the right channel while closing on the left channel. This can create unique panning effects that are more dramatic than the standard audio panning approach – particularly when SPREAD is modulated.

Range L to R

NOTE: Unlike the other filters, the Power filter is not a pair of L/R mono filters. Instead, it's a stereo filter with no spread capability. In the case of the Power Filter, the Spread control does the same function as the <u>Width</u> control in the Power Filter effect unit.



# FILTER ZOOM – Key Tracking



The KEY control on the FILTER ZOOM page is identical to the KEY slider on the EDIT page. The Filter Tracking is a dedicated modulation control. It determines to what extent the cutoff frequency will track the keyboard. The higher the KEY value is set, the more the filter will open over the upper range of the keyboard and close in the lower ranges of the keyboard.

For example, if a low pass filter is loaded and the cutoff is set below 1.00KHz, the notes played below middle-C will become increasingly darker in tone, and keys above middle-C will be increasingly brighter. At the minimum setting, higher and lower notes have no effect on the cutoff frequency.

# KEY INVERT SWITCH



The KEY INVERT switch on the FILTER ZOOM page is identical to the KEY INVERT switch on the EDIT page. Key Tracking can be inverted simply by selecting the word "Key" below the control. This switch will change to inverted text when Key tracking is inverted and the sonic result will be the opposite of standard Filter Key Tracking.

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# FILTER ZOOM - Envelope



The Filter ENV control is identical to the ENV control found on the EDIT page. The Filter Envelope Depth is a dedicated modulation control. It sets the amount that the Filter Envelope controls the cutoff frequency. At minimum setting, the Filter Envelope has no affect on the cutoff. The higher the setting, the greater effect the Filter Envelope's contour has in opening and closing the Filter.

NOTE – If both the Filter Cutoff and Filter Envelope Depth are set to minimum values, little to no sound will be heard. If the Filter Cutoff is at the maximum value, then the ENV DEPTH knob will have no effect, since the cutoff is already wide open. A good starting point is to keep the ENV control at the middle point.

### ENV INVERT SWITCH

ENV

The Filter ENV INVERT switch is identical to the Filter ENV INVERT switch on the EDIT page. This control inverts the Filter Envelopes contour and so it will have the effect of closing the filter (lowering the cutoff frequency). This switch will change to inverted text when Env tracking is inverted.

TIP: Inverting the Filter's Envelope can be useful for creating unusual contours, such as double triggering and release effects

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# **EDIT PAGE – ADSR Controls**



The ADSR Envelope slider interface operates the same way for all the different envelope types in Omnisphere.

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The screenshot above is from the Envelopes Zoom page, but illustrates what a standard ADSR Envelope looks like. The first to second point (or Stage) is the Attack time; the second point is the decay time, which ends at the third point, the Sustain level. After the note is released, the Sustain level drops away based on the Release time.

When viewed on the MAIN page, the ADSR looks like this;









The 'A' stands for ATTACK, which means the attack time of the envelope. At minimum setting, the Attack is immediate, so the Envelope will start as soon as a controller triggers it. Higher settings will delay the Attack time, so the Envelope will gradually fade in.

Range between 0 to 20 seconds.

D - Decay



The 'D' is the DECAY time, which begins after the Attack has reached its maximum level. At minimum settings, the Decay will be zero, which means there is no Decay after the Attack and the Envelope goes straight to the Sustain stage. At the maximum setting, the DECAY can be about twenty seconds before the Sustain stage starts.

Range between 0 to 20 seconds

S - Sustain



'S' is the Sustain Level. Unlike A, D & R, Sustain is not a time value; it's a level value. Sustain determines at what level the Envelope's output remains constant while a note is held. At the minimum setting there is no sustain, so the envelope's output will stop until it's been retriggered. Higher sustain settings mean the Envelope's output will be constant as long as a note is held down.

R - Release

4	
11 E.	
R	

'R' is the Release time value. After a note has been let go, the sound will continue to decay for the duration of the Release time. Raising this fader lengthens the Release time. Lowering it decreases Release time.

Range 0 to 20 seconds.



# EDIT PAGE – Velo (Envelope Velocity)



VELO is short for Velocity Sensitivity. The Velocity knob controls how much MIDI velocity will affect the output signal of the Envelope. Moving the control counter-clockwise decreases the dynamic sensitivity of the envelope and clockwise changes increases the sensitivity.

NOTE: Each of the VELO (Velocity) controls for the two AMP and two FILTER envelopes are independent. The VELO control will only affect the selected envelope.

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# **EDIT PAGE – Envelope Depth**



The DEPTH controls are dedicated to the four MOD Envelopes. Turning this knob clockwise increases how much of the modulation envelope is sent to the modulation target. The default setting is at maximum.

NOTE: The DEPTH controls for the Modulation Envelopes are independent. The DEPTH control will only affect the selected envelope.

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# **EDIT PAGE – Envelope Types**



Since each Envelope is capable of having either simple or complex contours, Omnisphere displays the status of the envelope shape with two icons:

The Simple icon looks like the four ADSR sliders, and will be displayed as long as the envelope has only 4 stages.

When an envelope has more than 4 stages, its icon will change to display the Complex icon, which looks like a Complex envelope, and includes an "X" button.

### **X BUTTON**



When the X button is selected, it will revert the complex envelope contours to a SIMPLE one, and the icon will revert to the SIMPLE icon.

When you want to simplify an envelope, you can use the X button to quickly reset a complex envelope to a simple ADSR style envelope. This can't be undone, so use it with caution!

NOTE: Changing an Envelope's shape to complex can only be done by accessing the Envelope Zoom page and adding stages/points.

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# EDIT PAGE – Envelopes Zoom



The ENVELOPE ZOOM page provides precise editing of the eight available envelopes in a Part. Complex envelopes can be created with hundreds of stages. Each envelope segment can have one of nine different curve presets applied to it. These include bumps, spikes, pulses, curves and linear transitions. It is not necessary to choose between a simple or complex envelope, since they both exist simultaneously. Any changes made to the ADSR sliders on the MAIN page will be reflected on the Envelopes Zoom page.

A complex envelope can be further configured via a dedicated set of editing options that can finetune, scale and modify specific parts of the envelope. Envelope contours can be repeated or 'unrepeated' to easily add or remove more stages.



Envelope Zoom has a special CHAOS feature, which can randomize the envelope's shape. Chaos can also be set to automatically change on every cycle, creating constantly changing envelopes. The degree that CHAOS will affect the Envelope is determined with dedicated probability mini-sliders.

You can also create a Groove Lock[™] envelope simply by dragging and dropping a standard MIDI file (for example, from Stylus RMX) onto the Envelope Display. This will automatically create a rhythmic envelope matching the groove contained in the MIDI file.



# **EDIT PAGE – Envelope Page Buttons**

- LAYER E	NVS —			VELOPES	
MP	FILTER	MOD 1	MOD 2	MOD 3	MOD 4

Above the Envelope Display area are six buttons that select the controls for the six Envelopes available in the current Layer.

NOTE: the AMP and FILTER Envelopes displayed are only for the current Layer, the other Layer must be selected to see the other two AMP/FILTER envelopes.

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# EDIT PAGE – Mod Envelopes Timeline

The four MOD Envelopes each have an LED indicator that tracks the time it takes to play through the Envelope contour. The rate of the Envelope's contour will make these LEDs trace along as a visual guide. The LED timeline display is also helpful in monitoring the different types of Envelope triggering.

For example, if "NOTE" triggering is enabled, the LED display will start at the beginning of the Envelope every time a note is triggered. If "LEGATO" is selected, the LEDs will continue to along the timeline even when new legato notes are triggered.

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NOTE: Until a MOD envelope has been set up as a modulation source to a target in Omnisphere, the LED display will be off.



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# EDIT PAGE – Envelopes Zoom Edit



There are four different automated Envelope adjustments, which provide a simple way to double and/or half the total number of Envelope points. These options can quickly change the playback rate of the Envelopes as well.

EDIT +	
Repeat	
Unrepeat	Ľ
Half time	
Double time	

»The Edit Page 🚳		
Introduction Oscillator Modulation Filters	Repeat	Every time 'Repeat' is selected, all of the stages in the Envelope will be duplicated, doubling the number of points.
Envelopes Introduction ADSR Controls Velo Depth	Unrepeat	Can undo any Repeats that have been done. Unrepeat can also be used to "halve" the number of segments in an envelope.
Envelope Zoom Zoom Presets Zoom Page Buttons	Half time	Each time this is selected, Half time will change the speed of the Envelope's contour by half.
Zoom Edit Zoom Curves Menu Zoom Editing Controls Zoom Chaos Zoom Chaos Zoom Speed Zoom Velocity Zoom Depth Zoom Trigger Zoom Auto-Zoom Groove Lock Envelopes LFOS Common Controls	Double time	The speed of the Envelope's contour will double every time this is selected.
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# 

The contour of the current Envelope can be modified from this display. The point to the extreme left is always the Attack time and on the last two points on the right are the Sustain level and the Release time stages. Time is represented horizontally and Level is on the vertical axis.

To add an additional stage to the Envelope, right-click (Control-Click) and select "add" from the pop-up menu. When an additional point is added, all points to the right are shifted to make room for the new stage. When selecting between two points, a new point is inserted in the middle of the stage and the points to the right are not shifted.

Selecting and dragging any point in the display will change the position of the point. Selecting anywhere there is no line or point will move the background grid forward and back.

When any point has been selected a small numerical window will appear above the display that indicate the level settings for that point (0.000 is minimum and 1.000 is maximum).

Right Clicking (or Control-Clicking) in the display area will bring up the Envelope Point menu, which is explained next.

# EDIT PAGE – Envelope Display



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Remove Add Curve1 Curve2 Pulse	
Spike	
✓ Step	
Linear	
Bump	
Four Pulses	
Three Pulses	

All of Omnisphere's eight dedicated Envelopes are capable of generating contours with hundreds of points. Right/Control-clicking anywhere in the Envelope display are will bring up a list that allows points to be added or removed, followed by a list of preset curves.

Clicking and dragging directly on the curve can change the orientation and position of the curves. A cross hair will appear that will move the curve in any direction within the limits of the curve.

Some presets automatically have maximum level settings, such as Spike, Pulse and Bump. To reduce the levels, click and drag and the cross hair will appear that will allow the amplitude of the curve to be changed.

Remove		Deletes the currently selected point
Add		Puts a new point at the place in the Envelope display.
Curve1		A gradual slope between the points
Curve2		A steeper, more exponential slope between the points.
Pulse		Places a three-angle pulse shape between two points.
Spike	$\square$	A sharp point with a gradual slope on one side.
Step		Adds a right angle between the points.
Linear		Places a straight line between the points.
Bump	$\sim$	A rounded bump that rises and falls between the points.

Four

Introduces four pulses between the points



Three Pulses Introduces three pulses between the points

NOTE: Envelopes can never have fewer than four points, as they correspond to the ADSR of the simple envelope. Attempting to remove these ADSR points will be ignored.

TIP: Double-clicking on any point in the Envelope will remove it.

NOTE: Whether an Envelope is considered SIMPLE or COMPLEX depends on the number of points (or stages) it has. Since there are many preset curves available, it's possible to have a SIMPLE envelope, but with a complex shape, as it only has four points;





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# **EDIT PAGE – Envelope Editing Controls**



These mode switches offer several methods for precise editing of the Envelopes.

# ENVELOPES ZOOM SNAP



When SNAP is selected, any horizontal repositioning of a point is limited to 16th notes. The Envelope Display has vertical reference lines, which are helpful when using SNAP to line up the points at the 16th note divisions.

If the Envelope is short, under a few seconds, the SNAP points are correspondingly small. When an Envelope is long, the snap points appear to be greater in scale.

Keyboard Shortcut - Option/Alt

# ENVELOPES ZOOM LOCK



When LOCK is enabled, all the points to the right of the point selected can be moved as one single group of stages. The only restriction is the current range of the Envelope Display.

Keyboard Shortcut -Command/Control

# **ENVELOPES ZOOM X/Y**



This will constrain the movements vertically or horizontally.

Keyboard Shortcut - Shift

# **ENVELOPES ZOOM FINE**



Movement of points will be at a higher resolution than normal when FINE is enabled. The numbers in the value window will be correspondingly small as long as FINE is in use.

# ENVELOPES ZOOM SCALE



The range of the Envelope will be increased by dragging any of the points within it (except the first

one). Scaling the Envelope beyond the limit of Envelope Display will appear to 'squish' many of the points together, but selecting AUTO ZOOM will expand the view to fit them all.

NOTE: When zoomed in, clicking and dragging in an empty region of the envelope display will drag the display left or right.



# EDIT PAGE – Envelope Chaos

AUTO - CHAOS	AUTO	CHAOS	CURVES
--------------	------	-------	--------

The envelope contour can be randomized with the special CHAOS feature. CHAOS can change the level settings for all the points in an Envelope as well as the curve transitions between the points.

Chaos works by taking the existing points in an Envelope and randomizing their Levels and Curves based on two controls. The two sliders in the CHAOS section, CURVES and LEVELS, control the probability of randomization. Also, the four Modulation Envelopes have an automatic feature that randomizes the CHAOS on every cycle of the Envelope.

# CHAOS AUTO



When enabled, the Level and Curve settings will be re-randomized with every cycle of the Envelope. For example, if an Envelope's cycle lasts for two seconds, then every two seconds the contour will change according to the settings of the CURVES and LEVELS probability sliders.

NOTE: The AUTO switch is only available on Modulation Envelopes 1 - 4.

# CHAOS SWITCH



Each time the CHAOS button is selected, it will randomize the Envelope's contour. The two adjacent mini-sliders, CURVES and LEVELS, determine the probability of randomization made when CHAOS is selected.

NOTE: CHAOS only affects the existing points in an Envelope; it will not add or remove any stages.

### **CHAOS CURVES**



The higher the Curves probability slider is set, the greater the likelihood of variance in the curves between the stages. Higher settings will also smooth out the sharper Envelope transition types, such as bump, pulse, spike, linear and the three and four pulses curves.

### CHAOS LEVELS



The amplitude of the Envelope points will be changed more or less frequently, depending on the setting of this control. At minimum setting, the levels of the points will only change slightly. Maximum settings will produce more dramatic shifts in the Level values of the stages.

NOTE: LEVEL changes are strictly vertical; no point is moved horizontally with CHAOS.

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# **EDIT PAGE – Envelopes Speed**



Controls how quickly the envelope will cycle. This is a rate-based control, based on the duration of the Envelope.

For example, if the Envelope's cycle is 2 seconds, and the SPEED slider is set to 0.50, the Envelope will take 4 seconds to complete its cycle. If the SPEED slider is set to 5.00, the Envelope will cycle 3 times every second. This control can be modulated.

Range 0.10X-10.0X (1.00X is the default)

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# **EDIT PAGE – Envelope Velocity**



This knob controls the effect of MIDI Velocity on the output of the envelope. Moving the slider to the left decreases the dynamic sensitivity of the envelope. Moving the slider to the right increases the sensitivity.

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# **EDIT PAGE – Envelopes Depth**



The Depth slider is a duplicate of the knob found on the MODS sub-page. At the minimum settings, little to no modulation will be sent to the target. At the maximum setting the full output of the Modulation Envelope will be affect the modulation target.

Range 0 to 1.00

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# EDIT PAGE – Envelope Trigger



Several modes are available to determine how the Envelope is triggered and cycled. The NOTE/LEGATO/SONG modes are only available on the Modulation Envelopes.

# LOOP



This switch toggles Envelope looping. When selected the Envelope will continually repeat.

# SYNC



The Envelope will sync to the song's tempo. Both LOOP and SYNC can be selected at the same time so the Envelope will cycle and sync to the song's tempo.

# NOTE/LEGATO/SONG



These three mode switches are only available on the Modulation Envelopes as they are related to the Modulation Envelopes Timeline display.

**NOTE** – With every note played, the Envelope will be retriggered.

LEGATO – The Envelope is only retriggered on the first note of a legato passage.

SONG - The Envelope will follow the song position in the host.

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# EDIT PAGE – Envelopes Zoom – Zooming

AUTO ZOOM



Selecting the button will auto-fit all of the points into the Envelope Display.

NOTE: If the Envelopes contour is very short, less than 1/4 of a bar, the Envelope Zoom will not fill the Envelope Display area with the full Envelope.

# ZOOM



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This slider controls the how much of the Envelope Display is seen. At the minimum value it will display a small part of the first segment and a maximum setting all 100 bars are visible.

If your mouse has a scroll wheel, you can use it to zoom. Mouse-over the envelope display and move your scroll wheel to zoom.

NOTE: If the Envelopes contour is very short, less than 1/4 of a bar, the Zoom slider will not be able to fill the Envelope Display area with the full Envelope.



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# EDIT PAGE – Groove Lock™ Envelopes

# Watch the Tutorial Video for Groove Lock™ Envelopes

Groove Lock[™] is one of Omnisphere's most innovate features. With Groove Lock[™] you can lock the groove of the Envelopes to the feel of any Stylus RMX or Standard MIDI file. This dramatically expands the rhythmic potential of the Omnisphere Envelopes. You can instantly create a Groove Lock[™] envelope by simply dragging and dropping any standard MIDI file (for example, from Stylus RMX) onto the Envelope Display. This can be applied to any of the available envelope types; AMP, Filter and Mod.

When you drop a MIDI file onto the Envelope Display, it imports the rhythmic information contained in that MIDI file, resulting in a complex rhythmic envelope.

This is a very fast and convenient way to create complex envelopes, and can dramatically reduce the time required to create such envelopes from scratch.



### **Original ADSR Envelope**

Complex Envelope after Groove Lock[™]applied



Using MIDI files provides a great starting point for creating interesting new envelopes. It allows envelopes to be Groove Locked to other Spectrasonics plug-ins, or to any MIDI-based musical phrase in your project.

HINT: When you drop a MIDI file onto the Envelope Display, it will replace the existing envelope. If desired, you can save your current envelope as an <u>Envelope Preset</u> before creating the new Groove Lock envelope.



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**EDIT PAGE – LFO Presets** 



Selecting the menu arrow in the section header will display a drop down menu that allows copying, pasting and saving of LFO settings as presets. Below that is the list of available LFO presets, which can be applied to the currently selected LFO. When the LFO is set up to modulate an Omnisphere parameter, these presets can be auditioned.



# **EDIT PAGE – LFO Number**



Underneath the section header are page buttons numbered 1-6, each of which represents an LFO. Selecting a button displays the current values of that LFO's parameters.

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# **EDIT PAGE – LFO Waveforms**

Each of Omnisphere's LFOs can have its own waveshape. There are nine available LFO waveforms.



**Sine** – A smooth curved shape that begins positive and then curves negative and back again. Useful for sweeps and vibrato.



**Triangle** – Is a positive/negative shape like the Sine, but without curvature. Useful for sweeps and vibrato.



**Square** – Starts at maximum positive value and then drops to maximum negative value. Useful for trills and pulsing effects.



**Rounded Square** – A smoothed Square wave. Useful for smooth pulsing.



**Ramp** – A linear slope from highest to lowest value. This waveform is also frequently referred to as a sawtooth wave. Useful for sweeps.



**Reverse Ramp** – A linear slope from lowest to highest value. This waveform is also frequently referred to as an inverted sawtooth wave. Useful for reverse sweeps



**Sample and Hold** – Steps through random values. Useful for classic analog synth effects.



Heartbeat – Modeled after a human heartbeat



**Noise/Random** - Similar to Sample and Hold, with random values, but doesn't step, the values change immediately. Useful for adding chaos.

The waveforms can be changed by selecting the stepper buttons or by dragging the cursor on the LFO waveform display



# **EDIT PAGE – LFO Depth**



This knob controls LFO depth. The higher the setting, the greater the amount of the LFO signal is sent to the modulation matrix.

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# **EDIT PAGE – LFO Delay**



The Delay slider determines the how quickly the LFO's depth will reach its maximum strength after a note has been triggered. This allows the modulation to be introduced gradually, for example, to achieve delayed vibrato.

When the slider is set to maximum, it will take approximately 5 seconds for the LFO depth to reach maximum value.

The LFO Delay always works in a "legato" style trigger mode, where subsequent legato notes do not retrigger the start of the LFO delay. The LFO Trigger Mode has no affect on the Delay slider, since it is always in "legato" triggering mode.

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# EDIT PAGE – LFO Trigger Mode



The LFO trigger mode determines how the LFO will begin its cycle. There are four available LFO Trigger Modes:

Free – The LFO will independently cycle regardless of when a note is triggered.

Note - The LFO will restart its cycle with every new note that is played.

**Legato** – The LFO will start its cycle when the first note is played, but will continue its cycle when additional notes are played. If staccato notes are played, the LFO will restart its cycle with each note.

**Song Pos** – The LFO will track the bars and beats of the song. This 'Song Position' mode is the best to use if repeatable results are required for playback.

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# **EDIT PAGE – LFO Unipolar Switch**



The Unipolar switch is represented by a small (+) button. When it is not selected, the LFO will be in Bipolar mode. In Bipolar mode the modulation corresponds to the mid-point of the LFO, meaning that the LFO's output will stay above and below the mid-point. When the Unipolar switch is selected, the LFO is Unipolar, the LFO will above the mid-point and will double the range of its amplitude.



In this example, the oscillator's pitch is being modulated with a Sine wave from LFO1. If LFO1 is in bipolar mode, the pitch will go above, then below, the pitch of the note that was triggered. In Unipolar mode, the pitch would only rise above the pitch of the note being triggered – and the range of the change in pitch would be greater.

For example, a Unipolar LFO applied to Oscillator pitch is great for simulating guitar-string bending, as guitarists typically bend strings only in one direction. Another use is for a Unipolar LFO to modulate the filter-cutoff. This will often create better filter sweeps than a bipolar LFO, as a bipolar LFO cycles below the mid-point – so no result is heard if the cutoff frequency is low.

NOTE: If it's desired to have the value needs to go negative instead of positive, simply select the INVERT button in the <u>MODULATION</u> section.

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# **EDIT PAGE – LFO Phase**



The small LFO Phase slider determines the point at which the LFO waveform will begin its cycle. If the slider is set to minimum, the LFO will begin its cycle at the start of the waveform. As the phase is increased, the point in the waveform that the LFO will begin its cycle will be changed.

For example, if the Phase control is in the center of the slider, the LFO will trigger from the middle of the waveform. In the screenshot above, the LFO's waveform is a ramp wave, and if the Phase control is in the center, the waveform will start at the point where the slope goes below the center-point.

NOTE: If all six LFOs have been routed as modulation sources, and "Modulate with LFO" is selected on any additional parameters, they will all default to LFO1. These routings to LFO1 can be overridden in the Mod Matrix Zoom page.

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# **EDIT PAGE - Selecting & Linking Layers**



The Layer Selection Tabs & Buttons toggle between the controls for each Layer in a Patch. The parameters in the center section of the EDIT page will change when toggling between Layers. The common parameters in the Footer and on the far left and far right will not change when switching Layers.

The Layer selection controls will highlight to indicate the selected Layer.

NOTE: The Layer Selection Buttons in the Footer will remain visible when the Soundsource Browser is open. You can use the Layer Selection Buttons to toggle between Layers while browsing Soundsources, which makes it very convenient to quickly load or replace Soundsources for both Layers.

# Linking Layers



The LINK Button makes it possible to lock the controls of both Layers together. When enabled, any parameter changes made in one Layer will be exactly mirrored in the other.

The LINK Button will highlight when enabled, to indicate that the Layers are linked.

When the LINK Button is disabled, changes made to Layer parameters will only affect the selected Layer.

For example, if you select Layer A and enable the Link Button, moving the Timbre slider on Layer A to the far left will cause the Timbre slider on Layer B to also move to the far left.

NOTE: Layer On/Off, Pan, Level, Transpose, Coarse Pitch and Fine Pitch are not linked when linking layers.

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# **EDIT PAGE - Latch & Trigger Modes**



### Latch & Trigger Modes

The Latch Mode and Trigger Mode features extend the performance capabilities of Omnisphere, especially when used together with Live Mode or Stack Mode.

Used together, they enable a wide range of creative performance, live remixing, and composition techniques to discover and explore.

NOTE: Be sure to check out the "Latch and Trigger Modes" tutorial, and the in-depth sections of the Reference Guide for using Latch & Trigger modes together with <u>Live Mode</u> and <u>Stack Mode</u>.

Watch the Tutorial Video for Latch & Trigger Modes

### Latch Mode



When Latch Mode is enabled for a Part, repeatedly playing a note will toggle the note on and off. When it is toggled on, the note will continue to sustain, even if the note is released. Playing the same note again will toggle it off. This allows quick triggering of rhythmic phrases or sustained sounds, while freeing the hands to play additional notes for layering, or for switching to other Parts to play new phrases on top.

The Latch Mode button allows you to toggle Latch Mode on and off for the selected Part.

Selecting the Latch Mode button will enable Latch Mode. The button will highlight to indicate that Latch Mode is enabled for the Part.

If you are already holding sustained notes when you enable Latch Mode, those held notes will be latched.

Selecting the Latch Mode button again will disable Latch Mode for the part.

NOTE: Disabling Latch Mode for a Part while it's playing will immediately send an "All Notes Off" message to the Part. The tails from FX and release stages from envelopes will continue to decay. The All Notes Off command will apply to all notes that are playing on that Part.

NOTE: A Part's Latch Mode status can also be viewed or changed from the LIVE MODE or STACK MODE pages.

**Trigger Mode** 



Trigger Mode enables real-time quantization of incoming MIDI notes, so that Parts will always play in sync. This makes it very easy to experiment and improvise along with other clocked sources without losing synchronization. These features are a lot of fun to use for jamming and building up

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# ideas quickly!

The Trigger Mode icon displays the current Trigger Mode for the selected Part, and allows you to access the Trigger Mode menu for that Part.



To change Trigger Modes, select the Trigger Mode icon and choose the desired Trigger Mode from drop-down menu. A checkmark will appear next to the selected option, and the Trigger Mode icon will change to reflect the selected Trigger Mode.

# **Trigger Modes**

**Immediate**: This is the default Trigger Mode. MIDI input is not quantized, and playback of MIDI notes is immediate.

**Next 16th:** this option delays the playback of incoming MIDI notes to the next 16th note. In other words, notes are quantized in real time to the next 16th note. If you play ahead of the next 16th, there may be a slight delay before the note sounds. This delay will be a maximum of a 16th note at the current tempo. This mode makes it easy to play quick phrases in perfect sync with other Parts or clocked sources.

**Next Beat:** this option delays playback to the next beat. If incoming MIDI notes arrive ahead of the next beat, the delay is a maximum of one beat. Next Beat mode makes it very easy to trigger rhythmic patches in perfect sync, and when used together with Latch Mode, for layering phrases that are quantized to the beat in real time.

**Next Bar:** delays playback until the next bar. If MIDI messages arrive ahead of the next bar, the delay is a maximum of one bar. This mode is especially useful if you want to synchronize phrases on the downbeat of a measure. You can press a note anytime in the previous bar and it will wait until the next bar to play.

NOTE: The selected Trigger Mode also affects a Part's Arpeggiator, LFOs and Envelopes. These will also be delayed until the note itself is triggered.

NOTE: A Part's Trigger Mode can also be viewed or changed from the LIVE MODE or STACK MODE pages.



# 0

Sustain Modes

# **EDIT PAGE - Sustain & Expression**





There are two Sustain modes available in the Footer, Standard Sustain (Mode 1) and Alternate Sustain (Mode 2). The Sustain Mode selection switches (numbered 1 and 2) allow you to switch between modes, and are MIDI-learnable switches.

### Standard Sustain (Mode 1)

When the Standard Sustain Mode is selected, using your Sustain pedal will behave like a normal Sustain function. Notes played then released will be sustained, and additional notes played will overlap and sustain. Sustains will be heard until the sound decays or the pedal is released.

# Alternate Sustain (Mode 2)

When the Alternate Sustain Mode is selected, when your Sustain pedal is pressed, notes played then released will sustain as normal, but additional notes played will cut off the previously played notes. This is especially useful when playing Rock style bass lines, and is great for certain chorded phrases as well.

The last notes played will continue to sustain until the sound decays or the pedal is released.

NOTE: Notes that are still held when playing additional notes won't be cut off. If you play and hold a note, then play another note, both will be heard and sustained.

# Sustain Pedal Icon



The Sustain Pedal Icon is an on/off toggle. It defaults to on (enabled). When this switch is enabled, the Sustain pedal will always affect Sustain (CC#64).

When this switch is disabled, the Sustain pedal will still send CC#64 messages, but will not be applied to Sustain. This allows the Sustain pedal to be used exclusively for modulating other parameters using the Mod Matrix, or by MIDI-learning controls such as on/off switches for FX modules, or Layer on/off controls.

*NOTE:* When the Sustain Icon is enabled, the Sustain pedal can still be used to modulate or control other parameters, however those additions will act in combination with the Sustain function.

**Expression Pedal Icon** 



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The Expression Pedal Icon is an on/off toggle. It defaults to on (enabled). When this switch is enabled, the Expression pedal will always affect Expression (CC#11).

When this switch is disabled, the Expression pedal will still send CC#11 messages, but will not be applied to Expression. This allows the Expression pedal to be used exclusively for modulating other parameters using the Mod Matrix, or by MIDI-learning controls such as FX or Filter parameters, or Layer mix controls.

NOTE: When the Expression I con is enabled, the Expression pedal can still be used to modulate or control other parameters, however those additions will act in combination with the normal Expression function.



The MIX and PITCH section offers controls for the levels, panning and pitch of Layer A and Layer B.

# LAYER MIXER LEVELS



The level sliders are used to blend the two layers, oftentimes, even a subtle change in level can make the patch sound very different.

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The Layer mixer level sliders cover a range of -inf dB (silence) to +9.54dB.

To quickly set the Level to 0dB (unity gain), select the slider when holding down the Command key (Mac) or Control key (Windows). It will snap to the 0dB Unity gain position.

Range -inf dB (silence) to +9.54dB

### LAYER ON/OFF



Below each of the Layer Mix sliders are two on/off buttons that determine if a Layer is active or not. They also can be used to mute either layer to make comparisons without having to adjust the Layer Mix faders. If the button is light blue, the layer is active, if it's gray, it's inactive and no sound will be heard.

# **EDIT PAGE - Layer Mixer**



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# **EDIT PAGE - Pitch**



The PITCH area has three sets of controls for changing the pitch of both Layers; TRANSPOSE, COARSE & FINE. The COARSE and TRANSPOSE controls are shared by the same knob. Selecting the label switch below the PITCH knobs will toggle between COARSE and TRANSPOSE.

# TRANSPOSE



The Transpose controls work like MIDI transposition and pitch changes are made in semitones. Changes in pitch don't affect the sound quality of the Oscillator. Transpose is most often used to set the oscillators at different semitone values, such as octaves or different intervals. Transpose offers the best available sound quality but it is not Modulatable.

Range -24 semitones to +24 semitones

### COARSE



Coarse operates in a similar way to a fine pitch control, but with a much larger range. Unlike Transpose, using Coarse tuning does affect the sound quality of the Oscillator, but it is a Modulatable control. COARSE is very useful for wide-range pitch modulation FX.

Range -4800 cents to +4800 cents

*NOTE:* Changing from Coarse to Transpose (or vise versa) will not reset the pitch values because they are separate parameters.

FINE



The fine pitch controls are the most precise, changing the pitch in 1-cent increments. The Fine controls can shift the pitch 100 cents up or down, or one semitone each way.

The most common use of fine pitch controls is to 'de-tune' one oscillator a small amount (less that 15 cents) that makes the oscillators sound richer because of the chorusing effect it provides.

EDIT PAGE - Pitch

Range -100 cents to +100 cents



# **EDIT PAGE - Velocity Curves**



The "V" stands for Velocity. Omnisphere has four velocity curve presets available on the CONTROLS screen. The first curve is linear, then two exponential curves and the last is flat. These curves are provided to quickly adjust the dynamic response of the current Patch to your MIDI controller and playing style.

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The linear curve is the most commonly used velocity setting. Playing harder on the keyboard will have a direct effect on any parameter that is modulated with velocity in an even and linear way.

### **EXPONENTIAL POSITIVE**



The Exponential Positive curve means that when playing softly not much effect will be heard, but when playing at a moderate intensity on the keyboard the velocity modulation will be more dramatic than with a linear curve.

### **EXPONENTIAL NEGATIVE**



Exponential Negative has the opposite effect of Exponential positive – meaning that it's better suited for more intense touch and provides the widest musical dynamic range.

# FLAT



Omnisphere will receive the same velocity value with this flat curve. Useful if a totally consistent and predictable result is desired.

# V-CURVE ZOOM



The V-Curve Zoom button provides access to the <u>Velocity Curve Zoom</u>, for precise editing of the Patch's Velocity response.



### SOLO



**EDIT PAGE - Solo & Glide** 

Solo allows the Patch to play monophonically. SOLO mode is most effective when playing lead or bass lines. It works in conjunction with the LEGATO button below it, which determines how the sound is triggered.

# LEGATO



Legato is a triggering mode that allows the envelope and Soundsource to run through their settings instead of re-triggering with every new note that is played. If LEGATO is not selected, then each new note played will retrigger both the envelopes and the Soundsource.

NOTE: In vintage synths, Legato 'ON' would be referred to as "Single Trigger" while Legato 'OFF' would be "Multi Trigger"

GLIDE



Glide is a portamento effect, which adds a pitch slide from one note to the next. Omnisphere's Glide function is polyphonic, which means that every note that's played will have a sliding pitch. Selecting the SOLO button above it enables monophonic Glide.

The control slider next to the GLIDE button determines how slowly or quickly that the pitches slide from one note to the next. The higher the control slider is set, the slower the pitch glide between notes.

Range 0 to 2 seconds

# GLIDE LEGATO

Glide Legato will change the criteria for when GLIDE is enabled. If legato notes are played, then GLIDE will be activated. If quick, staccato notes are played, the Glide effect will not be heard.

### GLIDE A B (LAYER BUTTONS)



GLIDE can be used on just one Layer if desired. By default, when GLIDE is selected, both A & B will active. If neither A or B is selected, no GLIDE effect will be heard, and the GLIDE button will turn itself off.

Gliding on one Layer only can be an interesting musical effect.

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# EDIT PAGE - Voice, Octave & Gain

VOICES



The VOICES parameter determines the number of simultaneous notes (also called polyphony) that are playable in a single Part. Omnisphere is capable of up to 64 voices of polyphony per part, and the VOICES selector determines the maximum number of voices that the Part will have.

The higher the number of voices that the Patch has, the more CPU power it will use, so this is a very important parameter in Omnisphere. The best approach is to only set it to the maximum number of notes that are needed for the given musical application.

The factory Patches have all been set conservatively, so if more polyphony is needed, increase the number of voices.

*NOTE:* Voices applies to all sounding notes, not just the ones that are currently being played. This is important to consider when playing sounds with longer release times

Range 1-64

### OCTAVE



This function raises or lowers the overall pitch by transposing the patch in 12-semitone increments. There is a total range of five Octaves.

Range -2 to +2

GAIN



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The output level of the part can be controlled in 1db increments. The default is -6db.

Range +10db to -24db

# CHANGING AN FX UNIT



# **FX BASICS - Changing An FX Unit**



To select a different FX Unit in the same FX Slot, click the same downward arrow and choose a different one from the drop-down menu list.

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**Reverbs** 



# FX BASICS - Bypassing An FX Unit

An FX Unit is active when the oval FX Name Window is lit up with a light blue color.



To Bypass an FX Unit, click the oval FX Name Window. The name window darkens when bypassed.



Clicking the window again will reactivate the FX Unit.

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NOTE: Bypassing an Effect DOES save CPU power.

### REMOVING AN FX UNIT



# FX BASICS - Removing An FX Unit



To remove an FX Unit from the rack, click the downward facing triangle on the active slot and choose NO EFFECT from the top of the list.

NOTE: Removing any unneeded FX Units saves memory when the patch is loaded. It is recommended to remove any unnecessary FX before saving Patches, Multis or Songs.

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# **FX PRESETS - Saving**

Saving an FX Preset allows you to give a Preset a custom name and recall it later from a list of Presets. This is a convenient way to build a custom library of FX that you like to use.

To Save a Preset:

- Select the drop-down arrow to the left of the unit.
- A drop-down menu will appear.
- Select SAVE EFFECTS PRESET.

for renaming Presets.

• A Save dialog box will appear allowing you to name the FX Preset. The Save dialog box defaults to the directory for that particular FX Unit.

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NOTE: There is no Delete Preset command. To remove a Preset, you must navigate to the Preset via your computer's directory structure and remove it manually. The same is true



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# FX PRESETS - Copying & Pasting Units

Copying an FX Unit, along with all of its current parameter settings and Pasting it into another slot is a quick and useful way of reorganizing the order and placement of FX Units. It's not required to Save a Preset in order to use it in another other FX Slot. You can simply Copy the FX Unit with its current settings and simply Paste it into any other FX Slot to change the order of effects. You can also Paste over an existing FX Unit with a different FX Unit and new settings.

To Copy and Paste an Effect:

- Select the drop-down arrow to the left of the FX unit you'd like to copy.
- A drop-down menu will appear.
- Select COPY EFFECT PRESET.
- $\bullet$  Choose any other FX Slot. (It does not matter whether or not the targeted FX Slot currently has an Effect on it.)
- Select the drop-down arrow to the left of the unit.
- From the drop-down menu will Select PASTE EFFECT PRESET.

This FX Slot now has the exact same FX Unit and settings as the original FX Unit.



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# **FX PRESETS - Saving Racks**

Saving a full Rack Preset allows you to give the Preset a custom name and recall it for future use. This is a convenient way to build a custom library of Rack Preset sthat you like to use.

To Save an FX Rack:

• Select the PRESETS menu arrow above the FX rack.

A drop-down menu will appear like the one below.

	Save Rack Preset (Infi	nite Bees)
	Copy Rack Preset	
	Paste Rack Preset	
	00 - Empty Rack	
	01 - Ambient Spaces	•
	02 - Colorizers	•
~	03 - FX oriented	•
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• Select SAVE EFFECT RACK PRESET

• A Save dialog box will appear allowing you to name the FX Rack Preset. The Save dialog box defaults to the Omnisphere/Settings Library/Presets/Effects/Racks directory on your drive.



All FX Racks Presets appear in the Omnisphere interface in the drop-down menu. It's possible to setup as many sub-directories for Presets as you like, as long as the sub-folders are nested in the "Racks" directory on your drive. FX Rack Preset have the extension **.fxr_rmx** 

NOTE: There is no Delete Preset command. To remove a Preset, you must navigate to the Preset via your computer's directory structure and remove it manually. The same is true for renaming Presets.

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# **FX PRESETS - Loading Racks**

Loading FX Rack Presets from the menu is an easy way to use your favorite FX combinations at any time. Also, it allows you to quickly experiment with many combinations of different settings in different musical contexts.

To Load an FX Rack Preset:

- Select the PRESETS menu arrow above the FX rack.
- A drop-down menu will appear.
- Select a Rack Preset from the menu to load the new Rack.





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# FX PRESETS - Copying & Pasting Racks



Copying an FX Rack along with all of its current parameter settings and pasting to a different Rack is a quick and useful way of working with FX Racks. It's not required to Save a Preset in order to copy it to another Rack. You can simply Copy the Rack with its current settings and Paste it into any other Rack. You can also Paste over an existing Rack.

To Copy and Paste an FX Rack:

- Select the PRESETS menu arrow above the FX rack.
- Select COPY EFFECT RACK.

 $\bullet$  Choose another FX Rack. (It does not matter whether or not the targeted Rack currently has any FX Units in it.)

- Select the PRESETS menu arrow above the FX rack.
- Select PASTE EFFECT RACK.

This FX Rack now has the exact same Effects and settings as the original FX Rack.



# **FX - Tape Slammer**



The Tape Slammer FX Unit is designed to simulate the effects of different types of analog tape compression, saturation and age. It's very versatile and is the perfect unit to add when you need a little more edge, grit or warmth. It's also ideal to make something sound more retro, and even works well as a normal compressor/limiter too!

# • PAGE ONE CONTROLS

### SATURATE

Controls the amount of the tape saturation/distortion effect. Range: 0 to 100%

### AGE

Allows you to control how "old" the "tape stock" is. Range: Bright to Dark

### THRESHOLD

Sets the audio level at which the unit starts to simulate the tape compression. If the input signal is below the Threshold level, the unit does not apply any compression. Once the level crosses the Threshold, then the compression begins to affect the signal. Range: 0 to -60db

### ATTACK

Adjusts the amount of time that the compressor takes to start compressing once the audio has gone above the Threshold level. Range: 0.1ms to 400ms

### RELEASE

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the Threshold level. Range: 10ms to 5000ms.

### GAIN

A make-up gain stage that adjusts the overall output volume to compensate for compression level reduction. Range 0 to 24 db.

### • PAGE TWO CONTROLS

# LIMIT

Engages and Disengages an additional Brick wall limiter at the output. The compression controls continue to work regardless of whether the brick wall limiter is engaged or not.

# PEAK/RMS

Allows the choice of PEAK Limiting or RMS Compression curves. Peak Limiting detects audio transients that are louder than the set Threshold level and applies compression to control those Peaks to whatever level you've set. RMS Compression detects an audio signal's average level and applies Compression to the overall signal. This helps make the whole audio signal louder. With RMS, there is no specific ceiling for the audio as there is with Peak Limiting.

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# **FX - Modern Compressor**



The Modern Compressor FX unit has a bright, "solid-state" sound character with a very fast and snappy response curve. The Modern Compressor was modeled after the legendary SSL[™] compressors found in their renowned consoles that are responsible for many hit records. This compressor is great for the stereo master buss if you want a very clear bright sound, or works equally well in bringing out the presence of any individual element in a mix.

# THRESHOLD

Sets the audio level at which the unit starts to compress the signal. If the input signal is below the Threshold level, the unit does not apply any compression. Once the level crosses the Threshold, then the compression begins to affect the signal. Range: 0 to -60db

### RATIO

The range of dynamic compression once the compressor engages. Range is 1:1 to 8:1

# GAIN

A make-up gain stage that adjusts the overall output volume to compensate for compression level reduction. Range 0 to 24 db.

# PEAK/RMS

Allows the choice of PEAK Limiting or RMS Compression curves. Peak Limiting detects audio transients that are louder than the set Threshold level and applies compression to control those Peaks to whatever level you've set. RMS Compression detects an audio signal's average level and applies Compression to the overall signal. This helps make the whole audio signal louder. With RMS, there is no specific ceiling for the audio as there is with Peak Limiting.

### ATTACK

Adjusts the amount of time that the compressor takes to start compressing once the audio has gone above the Threshold level. Range: 0.1ms to 400ms

### RELEASE

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the Threshold level. Range: 10ms to 5000ms.

### LIMIT

Engages and Disengages an additional Brick wall limiter at the output. The compression controls continue to work regardless of whether the brick wall limiter is engaged or not.

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# **FX - Vintage Compressor**



Although the Modern and Vintage Compressor units have nearly identical controls, the sound and response characteristics couldn't be more different. The Vintage Compressor was modeled on vintage UA LA-2A[™] and 1176[™] style response curves, but given more flexibility to tailor the sound. This unit is very warm and musical sounding and works best with individual elements.

# THRESHOLD

Sets the audio level at which the unit starts to compress the signal. If the input signal is below the Threshold level, the unit does not apply any compression. Once the level crosses the Threshold, then the compression begins to affect the signal. Range: 0 to -60db

### RATIO

The range of dynamic compression once the compressor engages. Range is 1:1 to 16:1

### GAIN

A make-up gain stage that adjusts the overall output volume to compensate for compression level reduction. Range 0 to 24 db.

### PEAK/RMS

Allows the choice of PEAK Limiting or RMS Compression curves. Peak Limiting detects audio transients that are louder than the set Threshold level and applies compression to control those Peaks to whatever level you've set. RMS Compression detects an audio signal's average level and applies Compression to the overall signal. This helps make the whole audio signal louder. With RMS, there is no specific ceiling for the audio as there is with Peak Limiting.

# ATTACK

Adjusts the amount of time that the compressor takes to start compressing once the audio has gone above the Threshold level. Range: 0.1ms to 400ms

# RELEASE

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the Threshold level. Range: 10ms to 5000ms.

# LIMIT

Engages and Dis-engages an additional Brick wall limiter at the output. The compression controls continue to work regardless of whether the brick wall limiter is engaged or not.

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# **FX - Gate Expander**



The Gate Expander FX unit is a traditional Noise Gate type of effect. It also works well as a Dynamic Expander, which is the inverse of a compression effect.

# THRESHOLD

Controls the audio level at which the Gate starts to open. Range: 0 to 35db

# ATTACK

Adjusts the speed at which the gate opens. Range: 0.1 ms to 400ms

# HOLD

Adjusts how long the gate remains open. Range: 0 to 2000ms

# RELEASE

Adjusts the speed at which the gate closes. 0.1 to 4000ms

# RANGE

Controls the dynamic range of the attenuation of the gate. Range: -90 to Odb

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# FX - Imager



The Imager is a very useful "swiss army knife" utility device that can be used as stereo image widener, phase corrector, monoizer, panner, channel inverter, leveler, gain booster and more!

# PAN

Controls the spatial placement and stereo balance of the audio within the stereo field.

Range: -100%Left to 100%Right.

# IMAGE

Controls the stereo width of the audio. Center is normal stereo.

Range: Mono to Wide Stereo +100%

# SWAP L/R

Allows you to swap the Left and Right Channels of a stereo audio source.

Options: L/R, R/L.

# PHASE

Allows control over phase relationship between Left and Right Channels.

Menu options: Normal, Inverted, Inverted-Left Channel, Inverted-Right Channel.

# [AUTO PAN] RATE

Controls how fast or slow the auto panning will occur.

When Synced: 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/2D, 1/4D, 1/8D, 1/16D, 1/2T, 1/4T, 1/8T, 1/16T.

Unsynced: 0 to 8.8Hz

# [AUTO PAN] DEPTH

Controls how much auto panning occurs. Range: OFF to 100%.

# [AUTO PAN] SYNC

Engages and Disengages auto-pan synchronization with the host's tempo.

# GAIN

Adjusts the overall output volume. Range: 0 to 13 dB.

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# FX - Vintage 3-Band EQ



The Vintage 3-Band Equalizer FX unit was modeled after the great fixed frequency design of the vintage Pultec[™] EQP series tube equalizers, which are renowned for their extremely musical and fat tones that can have a lot of gain without getting harsh.

# [LOW] FREQ

Drop-down menu that provides Frequency options of 20, 30, 50, 60, 75, 100, 200 Hertz

# [LOW] GAIN

Adjusts the gain of the Low Band. Range: -20 to +20 dB

# [MED] FREQ

Drop-down menu that provides Frequency choices. Choices: 300, 500, 800, 1200, 1600 Hz

# [MED] GAIN

Adjusts the gain of the Mid Band. Range: -20 to +20 dB

# [HIGH] FREQ

Drop-down menu that provides EQ frequency choices of 2000, 3000, 4000, 5000, 8000, 10000, 12000, 140000, 16000, 18000 Hertz

# [HIGH] GAIN

Adjusts the gain of the High Band. Range: -20 to +20 dB

# LEVEL

Adjusts the overall output volume. Range: 0 to 13 dB.

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# FX - Graphic 7-Band EQ



The 7 Band Graphic Equalizer is very useful for tailoring a full spectrum audio source with broad control of multiple bands. With the Q control, it is much more versatile than an average graphic EQ - capable of achieving comb filter FX and even basic speaker simulation effects.

# • PAGE ONE CONTROLS

50Hz, 100Hz, 500Hz, 1k, 5k, 10k, 15k

Each knob controls the gain of the corresponding frequency. Range: -18 to +18 dB

# PAGE TWO CONTROLS

# Q

Controls the Resonance or EQ Bandwidth of all seven frequency bands. Range: 0.1 to 2  $\,$ 

# LEVEL

Adjusts the overall output volume. Range: 0 to 13 dB.



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# FX - Graphic 12-Band EQ



The 12-Band Graphic Equalizer is very useful for tailoring a full spectrum audio source with fine controls of multiple bands for precision control. With the Q control, it's much more versatile than an average graphic EQ - capable of comb filter FX and even basic speaker simulation effects.

# 63Hz, 125Hz, 250Hz, 400Hz, 630Hz, 1k, 1.6k, 2.5k, 4k, 6.3k, 10k, 16k

Each knob controls the boost or cut gain of the corresponding frequency. Range: -16 to +16 dB

# Q

Controls the Resonance or EQ Bandwidth of all twelve frequency bands. Range: 0.1 to 2

# LEVEL

Adjusts the overall output volume. Range: 0 to 13 dB.

### Parametric 2-Band EQ



# FX - Parametric 2-Band EQ



The 2-Band Parameter Equalizer has the benefit of precision frequency control, with two fully sweepable, overlapping bands. This type of EQ is best suited for "surgical" equalization, particularly in pinpoint cutting or reducing of an undesirable frequency in the source audio.

# [LOW] FREQ

Selects a Frequency. Range: 30 to 7000 Hz

# [LOW] Q

Controls the Resonance or EQ Bandwidth. Range: 1.9 to 0.1

# [LOW] GAIN

Adjusts the gain of the Low Band. Range: -20 to +20 dB

# [HIGH] FREQ

Selects a sweepable frequency. Range: 1000 to 16000 Hz

# [HIGH] Q

Controls the Resonance or EQ Bandwidth. Range: 1.9 to 0.1

# [HIGH] GAIN

Adjusts the gain of the High Band. Range: -20 to +20 dB

# LEVEL

Adjusts the overall output volume. Range: 0 to 13 dB.

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# FX - Parametric 3-Band EQ



The 3-Band Parameter Equalizer has the benefit of precision frequency control, with three fully sweepable, overlapping bands. This type of EQ is best suited for "surgical" equalization, particularly in pinpoint cutting or reducing of an undesirable frequency in the source audio.

# [LOW] FREQ

Selects a Frequency. Range: 30 to 600 Hz

# [LOW] Q

Controls the Resonance or EQ Bandwidth. Range: 1.9 to 0.1

# [LOW] GAIN

Adjusts the gain of the Low Band. Range: -20 to +20 dB

# [MID] FREQ

Selects a Frequency. Range: 100 to 6000 Hz

# [MID] GAIN

Adjusts the gain of the Mid Band. Range: -20 to +20 dB

# [HIGH] FREQ

Selects a Frequency. Range: 1000 to 16000 Hz

# [HIGH] Q

Controls the Resonance or EQ Bandwidth. Range: 1.9 to 0.1

# [HIGH] GAIN

Adjusts the gain of the High Band. Range: -20 to +20 dB

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The Format Filter adds characteristics of the human voice to a sound. It accomplishes this by chaining a narrow set of bandpass filters, set at specific frequencies, which reflect the formants of the human voice.

# • PAGE ONE CONTROLS

# **HEADSIZE**

Simulates the resonating qualities, based on the size of a human head. Higher values will have a deeper resonance. Range: 0.00Cm to 1.00Cm

# VOWEL

Selects the type of vocal formant, or vowel character, that will affect the sound. Sweeping the control will gradually change between the different vowel sounds. Range: 0.00Hz to 1.00Hz

# **RES** (Resonance)

Emphasizes the formant's frequency. Range: 0.00 to 1.00

CAUTION: High RES levels can cause loud oscillations.

# BLEND

Blends in the higher frequencies of the original sound, to add clarity to the filtered result. Range: 0.00Amp to 1.00Amp

# LEVEL

Determines the overall Formant Filter effect level. Range: -infdB to OdB

# • PAGE TWO CONTROLS

These are two dedicated modulation LFOs for both the HEADSIZE and the VOWEL controls on Page One.

# [HEADSIZE] RATE

Controls the speed of the Headsize modulation. The rate types are either in Hz or in rhythmic values depending on whether the Sync button is enabled or not.

Range:

Synced: 32x, 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

# [HEADSIZE] DEPTH

Controls the amount of the modulation. Range: 0 to 1

# **FX - Formant Filter**

# [HEADSIZE] SYNC

There are two ways to control the rate of the Headsize modulation, by Hz and by various sync rates with the host. When the Sync button is enabled, the values will change to musical rates.

# [VOWEL] RATE

Controls the speed of the Vowel modulation. The rate types are either in Hz or in rhythmic values depending on whether the Sync button is enabled or not.

Range:

Synced: 32x, 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

### [VOWEL] DEPTH

Controls the intensity of the Vowel modulation. Range: 0 to 1

# [VOWEL] SYNC

There are two ways to control the rate of the Vowel modulation, by Hz and by sync rates with the host. When the Sync button is enabled, the values will change to musical rates.

### Flame Distortion



# **FX - Flame Distortion**



Flame is an extremely versatile distortion unit capable of anything from mild tube overdrive to nasty bit crushing and radical fuzzbox effects. The Driver has many different types of waveshaping types and the unique structure of not only pre/post gain, but pre and post filtering with mixable LP/HP filters on each side of the Drive circuit. All of which makes for a killer distortion processor!

# MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%Wet

# [PRE] GAIN

Adjusts the amount of gain BEFORE being processed by the Flame Driver. Range: -200 to +10 dB

### [PRE] TYPE

Adjusts the balance of two filter types applied to the audio BEFORE being processed by the Driver.

Range: 100% Low Pass to 100% High Pass.

# [PRE] FILTER

Controls the Cutoff Frequency of the Filter. Range: 100 to 21924.17 Hz

# **DRIVER**

Drop-down menu with different waveshaping drive options.

Choices: Warm, Heat, BURN, Fuzzy, Scorch, Loud, Glow, Roast, Toast, 2 Bits, Torch, Bake, Ignite, Gater, Psycho, Cook, Blaze, Smoke, MELT, Topkill, Tube, Valve

CAUTION: Some of these drivers can produce extremely loud sounds, so watch out!

# [POST] GAIN

Adjusts the amount of gain AFTER being processed by the Flame Driver. Range: -200 to +10 dB

### [POST] TYPE

Adjusts the balance of two filter types applied to the audio AFTER being processed by the Driver.

Range: 100% Low Pass to 100% High Pass.

### [POST] FILTER

Controls the Frequency of the Filter. Range: 100 to 21924.17 Hz

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**FX - Smoke Amp Simulator** 



The Smoke Amp Simulator has a full set of amplifier controls, speaker combinations and modeled versions of several classic guitar amplifiers.

# • PAGE ONE CONTROLS (AMP)

# AMP

Enables or disables the amplifier model. If the switch is off, then none of the amplifier models will be active (although the Speaker, Gain, Drive and Master controls will still be operational).

### MODEL

These are representations, or models, of well-known guitar amplifiers;

USA – Fender[™] Deluxe Plexi – Marshall[™] Plexi British – VOX[™] AC-30 Chief – Matchless[™] Chieftain Rectify – Mesa Boogie[™] Rectifier

Twin – American Fender Twin ™

### MIC

This is a switch to control on-axis versus off-axis micing of the speakers.

### SPEAKER

There are three different algorithms that simulate the number of speaker cones in an amplifier housing. If OFF is chosen, no speaker modeling will be heard.

1X12 – one active 12-inch speaker

2X12 - two active 12-inch speakers

4X12 - four active 12-inch speakers

# GAIN

The Gain switch introduces a XXdB boost into the guitar amp, like a "High Gain" switch.

# DRIVE

Sometimes referred to as Overdrive, Drive represents the amount of overloading of the amplifier – which is what creates distortion. The higher this control is set, the more distorted the signal will be. Range: 0-100

# MASTER

This is the output level of the amplifier. When set to a minimum setting, no signal will be heard. Range: 0-100

# • PAGE TWO CONTROLS (TONE)

# TONE

This switch enables the four tone controls. When turned off, the settings of the Bass, Mid, Treble and Presence are disabled.

# BASS

Controls the amount of low frequencies. Range: 0-100

# MID

Controls the amount of mid-range frequencies. Range: 0-100

# TREBLE

Controls the amount of high frequencies. Range: 0-100

# PRESENCE

Sometimes referred to as Brilliance or Edge, Presence boosts very high frequencies. Range: 0-100



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# **FX - Retro Phaser**



A Phaser with a vintage, low-fi vibe, the Retro Phaser. On the surface it looks similar to the EZ-Phaser, but has more features, and a dedicated page for tone shaping.

# • PAGE ONE CONTROLS

### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

# RATE

Controls how fast the LFO cycles. The value of the Rate control is determined by the Sync control. If Sync is engaged, then the vales of Rate will be in musical time. If Sync is not engaged, Rate's values will be in Hz.

Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

# DEPTH

Controls the sweep range of the modulation. Range: 0 to 1

# SYNC

Engages and disengages synchronization of the LFO rate with the host's tempo.

# POLES

Drop down menu that selects how many stages or "poles" the phaser uses. More poles equal a more resonant sound character.

Range: 4, 6, 8 or 12 poles

# MANUAL

Controls the center point of the phaser. Range: 0-100%

# FEEDBACK

Controls the amount of resonance/feedback of the phaser. High settings will oscillate.

Range: 0-100%

# INVERT

Changes the phase angle of the Phaser by 180, which changes the tone character of the Phasing.

# PAGE TWO CONTROLS

DIRT
Adds subtle overdrive to the Phaser's signal

#### TONE

This control is a simple tone filter control. Range: Tone Dark - Tone Bright

#### TONE FX

Applies the Tone setting to both the wet and dry signals, or just the wet signal. Range: WET/DRY or WET

# WIDTH

Controls the width of the stereo image of the phasing signal. Range: 0-100%

#### LEVEL

Adjusts the overall output volume. Range: 0 to 13.0 dB.



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#### 9

Engages and Disengages synchronization of the LFO rate with the host's tempo.

#### WIDTH

Controls the width of the stereo image of the phasing signal. Range: 0 to 360 degrees

# FEEDBACK

Controls the amount of resonance/feedback of the phaser. High settings will oscillate.

Range: 0 to 100%

# • PAGE TWO CONTROLS

FX - PRO Phaser



The PRO-Phaser FX unit is one of the most versatile and richest phaser designs ever. It is also capable of producing a wide array of unique sounds beyond traditional phaser effects - including tuned resonances, strange pitch bending effects and envelope followed phasing - to name a few!

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

#### • PAGE ONE CONTROLS

#### [LFO] RATE

Controls how fast or slow the LFO cycles.

#### Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

#### [LFO] MIN

Controls the minimum point of modulation depth of the LFO. Range: 0 to 100%

#### [LFO] MAX

Controls the maximum point of modulation depth of the LFO. Range: 0 to 100%

#### POLES

Drop down menu that selects how many stages or "poles" the phaser uses. More poles equals a more resonant sound character.

Choices: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 poles

# SYNC

# SOURCE

Continuous mix control to blend between LFO and Envelope Follower modulaion sources.

Range: 0 to 100%

#### [ENVELOPE] ATTACK

The time of the Envelope Follower modulation beginning slope. Range: 0 to 400ms

#### [ENVELOPE] RELEASE

The time of the Envelope Follower modulation ending slope. Range: 0 to 1000ms

#### [ENVELOPE] MIN

Controls the minimum point of modulation depth of the Envelope. Range: 0 to 100%

#### [ENVELOPE] MAX

Controls the maximum point of modulation depth of the Envelope. Range: 0 to 100%

#### **DRIVE**

Controls the amount of overdrive at the final output. Range: 0 to 100

# LEVEL

Adjusts the overall output volume. Range: -200 to +10db



# FX - EZ Phaser



Contrary to what you might expect, EZ-Phaser is not a simplified version of the PRO-Phaser, but an entirely different phaser design with it's own unique sonic character. EZ-Phaser is best suited to recreating classic phaser effects and it is very simple to use and understand.

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 1

#### RATE

Controls how fast or slow the Phaser cycles.

Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

#### DEPTH

Controls how wide the sweep range of the LFO will be. Range: 0 to 1

#### SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.

#### POLES

Drop down menu that selects how many stages or "poles" the phaser uses. More poles equals a more resonant sound character.

Choices: Four or Eight poles

#### MANUAL

Controls the center frequency of the phaser. Range: 0.005 to 0.1

#### FEEDBACK

Controls the amount of resonance/feedback of the phaser. Range: 0 to 1

#### LEVEL

Adjusts the overall output volume. Range: -infinity to 0 Unity gain.

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# **FX - Retro-Flanger**



Flanging is a sweeping, comb-filter type effect. The Retro-Flanger has special features that give the sound a more lo-fi, vintage character.

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 1

#### • PAGE ONE CONTROLS

#### RATE

Controls how fast or slow the Flanger cycles. This is the Retro-Flanger's LFO rate control.

Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

#### DEPTH

Controls how wide the sweep range of the LFO will be. Range: 0.01 to 1

#### SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.

#### DELAY

Controls the center frequency/delay time of the flanger. Range: 0.005 to 0.1ms

#### FEEDBACK

Controls the amount of delay feedback, which produces a stronger flanging resonance

Range: 0.01 to 0.99

#### INVERT

Reverses the phase of the delay feedback signal, producing a throatier flanging tone.

#### LEVEL

Adjusts the overall output volume. Range: -infinity to 0 Unity gain.

#### PAGE TWO CONTROLS

#### DIRT

Adds overdrive to the Retro-Flanger's signal

#### TONE

This control is a simple tone filter control that adjusts the brightness of the signal.

Range: Tone Dark – Tone Bright

#### TONE FX

Applies the Tone setting to both the wet and dry signals, or just the wet signal. Range: WET/DRY or WET

#### WIDTH

Controls the width of the stereo image of the Retro-Flanger signal. Range: 0-100%



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# FX - Flanger



The simple to use Flanger unit provides many types of traditional flanging and tuned resonance effects. The invert switch allows for a wider range of sound characteristics than most flangers offer.

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 1

#### RATE

Controls how fast or slow the Flanger cycles.

Range:

Synced: 32x,16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet.

Unsynced: 0.00Hz to 15.000Hz

#### DEPTH

Controls how wide the sweep range of the LFO will be. Range: 0.01 to 1

#### SYNC

Engages and Disengages synchronization of the LFO rate with the host's tempo.

#### DELAY

Controls the center frequency/delay time of the flanger. Range: 0.005 to 0.1ms

#### FEEDBACK

Controls the amount of delay feedback, which produces a stronger flanging resonance

Range: 0.01 to 0.99

#### INVERT

Reverses the phase of the delay feedback signal, producing a throatier flanging tone.

#### LEVEL

Adjusts the overall output volume. Range: -infinity to 0 Unity gain.

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The BPM Delay offers a single "true-stereo" delay unit that is always in-sync with the host's tempo. The feedback and drive controls can produce some cool sounds with the built-in resonant filtering.

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

#### • PAGE ONE CONTROLS

#### LEVEL

Adjusts the overall output volume. Range: 0 to 1

#### PAN

Controls the spatial placement of the delayed audio in the stereo field.

#### BOUNCE

Controls how much the delayed audio bounces between the left and right channels.

Range: 0 to 100%

#### DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

#### TONE

Controls whether the delayed audio goes through a high-pass or low-pass filter. In the center, the filter is turned off, similar to the Master Filter on the Edit Page. Range: 0 to 1

#### EMPH

Controls the resonance of the Tone control cutoff frequency in the delayed signal.

```
Range: 0 to 1
```

# FEEDBACK

Feeds the delay signal back to the input for echo repeats. Range: 0 to 1

#### • PAGE TWO CONTROLS

#### [OVERDRIVE] FEEDBACK LOOP

Inserts the Overdrive and Tone Filter into the Feedback Loop. This is useful for producing echoes that get darker with each successive repeat, and also for creating infinite dub-style echo feedback.

# FX - BPM Delay

CAUTION: Turning this switch ON can produce extremely loud and powerful howling feedback signals which can damage your ears and your speakers is watch out!

#### [OVERDRIVE] TYPE

Selects between Odd or Even harmonic distortion for the delayed signal.

#### [OVERDRIVE] DRIVE

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1

#### [OVERDRIVE] PRE/POST

Selects between the overdrive circuit being placed before the Tone Control filter (PRE), or after the Tone control filter (POST).



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# FX - BPM Delay X2



The BPM DelayX2 offers dual monoaural delays that are always synchronized to the host's tempo. The feedback and drive controls can produce some cool sounds with the built-in resonant filtering.

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

#### PAGE ONE CONTROLS

#### [DELAY1] LEVEL

Controls the volume of the delayed audio. Range: -inf to OdB

#### [DELAY1] DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

#### [DELAY1] PAN

Controls the spatial placement of the delayed audio in the stereo field.

#### [DELAY2] LEVEL

Controls the volume of the delayed audio. Range: -inf to OdB

#### [DELAY2] DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

#### [DELAY2] PAN

Controls the spatial placement of the delayed audio in the stereo field.

#### FEEDBACK

Feeds the delay signal back to the input for echo repeats. Range: 0 to 1

#### PAGE TWO CONTROLS

#### [COLOR] TONE

Controls whether the delayed audio goes through a high-pass or low-pass filter. In the center, the filter is turned off, similar to the Master Filter on the Edit Page. Range: 0 to 1

#### [COLOR] EMPH

Controls the resonance of the Tone control cutoff frequency in the delayed signal.

Range: 0 to 1

#### [COLOR] FEEDBACK TONE

Inserts the Overdrive and Tone Filter into the Feedback Loop. This is useful for producing echoes that get darker with each successive repeat, and also for creating infinite dub-style echo feedback.

CAUTION: Turning this switch ON can produce extremely loud and powerful howling feedback signals which can damage your ears and your speakersÉso watch out!

#### [OVERDRIVE] TYPE

Selects between Odd or Even harmonic distortion for the delayed signal.

#### [OVERDRIVE] DRIVE

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1

#### [OVERDRIVE] PRE/POST

Selects between the overdrive circuit being placed before the Tone Control filter (PRE), or after the Tone control filter (POST).

#### GAIN

Adjusts the overall output volume. Range: 0 to 1



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# FX - BPM Delay X3



The BPM DelayX3 offers triple LCR mono delays that are always synchronized to the host's tempo. The feedback and drive controls can produce some cool sounds with the built-in resonant filtering.

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

#### • PAGE ONE CONTROLS

#### [LEFT] LEVEL

Controls the volume of the delayed audio. Range: -inf to OdB

#### [LEFT] DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

#### [CENTER] LEVEL

Controls the volume of the delayed audio. Range: -inf to OdB

#### [CENTER] DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

#### [RIGHT] LEVEL

Controls the volume of the delayed audio. Range: -inf to OdB

#### [RIGHT] DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

#### FEEDBACK

Feeds the delay signal back to the input for echo repeats. Range: 0 to 1

#### PAGE TWO CONTROLS

#### [COLOR] TONE

Controls whether the delayed audio goes through a high-pass or low-pass filter. In the center, the filter is turned off, similar to the Master Filter on the Edit Page. Range: 0 to 1

#### [COLOR] EMPH

Controls the resonance of the Tone control cutoff frequency in the delayed signal.

Range: 0 to 1

#### [COLOR] FEEDBACK TONE

Inserts the Overdrive and Tone Filter into the Feedback Loop. This is useful for producing echoes that get darker with each successive repeat, and also for creating infinite dub-style echo feedback.

CAUTION: Turning this switch ON can produce extremely loud and powerful howling feedback signals which can damage your ears and your speakers - so watch out!

#### [OVERDRIVE] TYPE

Selects between Odd or Even harmonic distortion for the delayed signal.

#### [OVERDRIVE] DRIVE

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1

#### [OVERDRIVE] PRE/POST

Selects between the overdrive circuit being placed before the Tone Control filter (PRE), or after the Tone control filter (POST).

#### GAIN

Adjusts the overall output volume. Range: 0 to 1



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**FX** - Retroplex

The Retroplex delay unit is specially modeled after the old Tape Echo units of the 60's and 70's like the Echoplex[™], with some modern enhancements. It's a lot of fun and unpredictable!

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

#### • PAGE ONE CONTROLS

#### VARI-SPEED

Smoothly controls the tape speed/delay time of the echoes. Range: 1% to 10%

#### FEEDBACK

Feeds the delay signal back to the input for echo repeats. Range: 0 to 100%

#### TAPE MODE

Drop-down menu offering different preset types of echo and delay ranges.

Choices: ECHO 1, ECHO 2, DELAY 1, DELAY 2

#### [FLUTTER] AMOUNT

Simulates the tape flutter motor instability effect of vintage tape echo machines that make the echoes vary in pitch from one repeat to the next. Range: 0 to 100%

**[FLUTTER] SPEED**Controls how fast the motor instability affects the tape flutter pitch modulation of the echoes. Range: 0 to 100%

#### YEAR

Drop-down menu that contains a list of "years" from 1960-2000. Choosing a year simulates the fidelity of the chosen era. Earlier years have less fidelity than later years.

#### WIDTH

Controls the width of the echo stereo imaging. Range: 0(mono) to 100%(full stereo)

#### • PAGE TWO CONTROLS

#### **DRIVE**

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1

#### SMASH

Adjusts the bit resolution of the delayed audio for additional distortion. Range: 32bit to 4bit

#### FREEZE

Locks the echo buffer for a continuous playback loop of what is in the echo buffer. Useful for simulating sound on sound style tape looping techniques.

NOTE: The Freeze buffer is cleared when Omnisphere is closed. To save the Freeze buffer, you need to render Omnisphere to an audio file.

#### GAIN

Adjusts the overall output volume. Range: 0 to 100



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# FX - Radio Delay



Radio Delay is essentially a hybrid of a Dual mono BPM-style delay, but with the delayed signals running through the Valve Radio distortion filter. This produces cool, dual-filtered echo effects that sound like they are coming from distorted old speakers or radios. Another cool trick with this delay is that it can be "de-synced" from the host's tempo and set to a completely different tempo, so that the delays don't always have that "perfect" sound to them. A very useful and interesting effect!

NOTE: The Radio Tuner graphic on Page 2 is not functional - it's just there for fun!

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

#### • PAGE ONE CONTROLS

#### [FILTERS] HPF

Controls the cutoff frequency for the high pass filter. Range: 20 to 10000Hz

#### [FILTERS] LPF

Controls the cutoff frequency for the low pass filter. Range: 100 to 22000Hz

#### [FILTERS] Q

Controls the resonance of the cutoff frequency of the filters in the delayed signal.

#### Range: 0 to 1

#### [DELAYS] LEFT

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

#### [DELAYS] TEMPO

Controls the speed of the delays from host Sync to any independent tempo setting.

Range: SYNC, 42.30 to 500 BPM

#### [DELAYS] RIGHT

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1dot, 1/2dot, 1/4dot, 1/8dot, 1/16dot, 1/1triplet, 1/2triplet, 1/4triplet, 1/8triplet, 1/16triplet

#### FEEDBACK

Feeds the delay signal back to the input for echo repeats. Range: 0 to 100%

#### PAGE TWO CONTROLS

#### FEEDBACK LOOP

Inserts the Overdrive and Tone Filter into the Feedback Loop. This is useful for producing echoes that get darker with each successive repeat, and also for creating infinite dub-style echo feedback.

CAUTION: Turning this switch ON can produce extremely loud and powerful howling feedback signals which can damage your ears and your speakers - so watch out!

#### **DRIVE**

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1

#### WIDTH

Controls the stereo width of the delay and dry signal. Range: 0 to 100%

#### GAIN

Adjusts the overall output volume. Range: Odb to 12db



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ang different o
0 to 1000
0 10 1000
-18 to +6 dB
-18 to +6 dB

# Chooses the low crossover frequency of the reverb signal. Range: 25 to 1000Hz

#### [REVERB SHAPING] LO TIME

Controls the specific length of the reverb's Low Frequencies. Range: 10 to 400

# FX - PRO Verb



PRO-Verb is the premier, studio-quality reverb unit in the Omnisphere FX arsenal. It's very versatile and can achieve not only great Room, Plate and Hall simulations, but it's also capable of producing unusual metallic resonances and special effects. Be sure to check out the large array of Factory Patches for PRO-Verb, as they demonstrate the range of possibilities very well.

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

#### TROLS

# Hall size of the reverberation. Range: 0 to 100 length of the reverb. Range: 100 to 20000ms t it takes for the first reflection to appear. Range: 0 to 500ms of the reverb by allowing to plug-in to use more or less CPU power to create a lity of reverb effect. Also very useful for making different density variations. nness or coarseness of the reflections. Range: 0 to 1000 f the low frequencies of the reverb. Range: -18 to +6 dB

file:///Users/...nt/SPECTRASONICS/INSTRUMENTS/OMNISPHERE/REF%20GUIDE/REF%20GUIDE%20LOCAL/fx_page/reverb/page35.html[6/8/10 6:21:30 PM]

PRO Verb

#### [REVERB SHAPING] HI FREQ

Chooses the high crossover frequency of the reverb signal. Range: 500 to 22000Hz

#### [REVERB SHAPING] HI TIME

Controls the specific length of the reverb's High Frequencies. Range: 10 to 400

#### WIDTH

Adjusts the stereo width of the Wet signal. Range: 0 to 100%

# DIFFUSION

Controls the amount of chaotic variation in the reverb reflections. Range: 0 to 100

#### FREEZE

Locks the reverb signal that is currently in the buffer to create an infinite reverb effect.

NOTE: The Freeze buffer is cleared when Omnisphere is closed. To save the Freeze buffer, you need to render Omnisphere to an audio file.



# FX- EZ Verb



The EZ-Verb is a simple to use, basic reverb unit with tone controls.

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (Wet) signal. The percentage indicated is the amount of the signal that is Wet. Range: 0 to 100%

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TIME
Controls the length of the Reverb. Range: 0 to 0.98
PREDELAY
Controls the amount it takes for the first reflection to appear. Range: 0 to 100ms
HF DAMP
Controls the amount of High Frequency Dampening of the Wet signal. Range: 1 to 0.013824
LF DAMP
Controls the amount of Low Frequency Dampening of the Wet signal. Range: 0 to 0.328509
LEVEL
Adjusts the overall output volume. Range: 0 to 1



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# **CONCEPTS - CPU Optimization & Conservation**

One of the most difficult questions to answer is how much CPU power Omnisphere uses. The reason it's so difficult to answer is because STEAMï was designed as a very flexible and open system, which allows you to freely add FX and more editing power based on the needs of what you want to create. This means that Omnisphere is capable of using all available CPU power and then some!

It's to be expected that the average patch in Omnisphere uses more CPU than the average patch in most other synths. That's for the simple reason that the average patch in Omnisphere has more things going on than the average patch in most other synths. Simple bread and butter sounds have been done...we're aiming for something beyond that with Omnisphere. However, we are always striving to improve CPU performance and hope to further improve performance in future updates.

There are a large number of features that you can enable in Omnisphere, and if you turn enough of them on you'll eventually overload any CPU. The point at which that happens depends on a lot of things: the number of Omnisphere parts in use, the number of plugins in use, the CPU power, etc. As a result it's impossible to predict what represents a reasonable number of enabled features for every given situation. If you are running into performance issues, it's best to turn off unnecessary features. Here's a summary of example things to try:

- Turn down polyphony.
- Turn down amplitude envelope release.
- · Look for effects that can be turned off.
- · Look for oscillator section features that can be turned off.
- In the case of Unison, try turning down the depth.
- Metal Pipe and AllPass filter types use more CPU than other filter types.
- Use one filter instead of 2.
- Glitching in the absence of a CPU overload might indicate a streaming underrun. If that's the case, try turning up the Pre-load memory size.

As you can see, there are several ways to help conserve CPU power in Omnisphere. The following detailed tips and techniques are especially useful in busy sessions when trying to make the most of your computer's resources.

#### Host Buffer Size

Performance and CPU load with all virtual instrument plug-ins are sensitive to the host's audio buffer size - particularly with an instrument as powerful as Omnisphere. If you experience performance issues with Omnisphere such as audio drop-outs, you can gain further Performance headroom by raising your host's audio buffer setting. A setting of 256 is usually a good compromise between good performance and acceptable latency, but you may wish to increase the buffer size if you need more CPU power. Omnisphere will also work with larger buffer sizes, so you can try adjusting this setting in your host.

#### Host Sample Rate

Omnisphere has been designed for optimal playback at 44.1k or 48k sample rate. If a host's project sample rate is higher than this, (88.2k, 96k, 192k, etc) it can have a significant impact on reducing Omnisphere's performance, without any real sonic benefit to Omnisphere. In fact, certain patches may not sound correct at higher sample rates. So we recommend keeping your host's sample rate at 44.1KHz or 48KHz for the optimal experience with Omnisphere.

#### Multi-Instance vs Multi-timbral

On single and dual-core systems, it's best to load multiple Parts (on different MIDI channels) within a single instance of Omnisphere, before opening any additional instances of the intrument. This is the best way to utilize the available CPU power for Omnisphere.

However, if a multi-core system is used, it can be beneficial to open multiple instances of Omnisphere to distribute the processor load between the cores. The resource handling is done by the host, so in this case it's useful to open more than one instance of Omnisphere. So the most efficient use on a multicore machine is to use a couple of instances multitimbrally - if assigning all

Parts to a single instance is using up all the resources of a single core. Consult your host's documentation to make sure that it has support for multi-core/multi-processor systems.

Limiting Voices



Omnisphere allows up to 64 voices of polyphony per Part. This can put tremendous demand on the CPU, so limiting polyphony is one of the most important things you can do to manage CPU usage.

As a general principle, set the voice count according to the type of Patch you are working with. For example, Texture or SFX Patches typically don't need 16 or even 8 voices of polyphony. Anytime you are running low on CPU power, this is the first area to look at for conserving CPU.

To adjust polyphony for a Part, use the VOICES stepper on either the Main or Edit Pages.

#### **Voice Multipliers**



When using Granularity and Unison, the Depth sliders control the number of simultaneous voices that are playing, and so can have a big impact on CPU usage. You can often achieve the desired effect using a lower Depth setting.

#### Oscillator Sub-Pages (FM, RING, WS, MULT)

FM RING WS MULT

It's easy (and fun!) to use all of the oscillator sub-pages at the same time, but used together these can demand a significant amount of CPU power. Using them sparingly will often lead to better sonic results and be easier on the CPU load.

#### Single Layer vs Dual Layer Patches



There's a lot that can be done with a single Layer. If you can achieve the desired sound or complexity using one Layer instead of two, it's likely that a significant amount of CPU power can be conserved.

#### Common FX vs Layer FX



Using Common FX whenever possible is a great way to save CPU power. Instead of loading separate delay units into each Layer FX Rack, try sharing a single unit in the Common FX Rack.

#### Waveshaper



The Waveshaper is a great feature, but it can be very CPU intensive, because it is polyphonic. To save CPU, you can try alternate approaches to achieving the desired sound. For example, try experimenting with the Flame Distortion unit first. You could get similar results without putting as much demand on the CPU.

#### FM/Ring Mod



Both FM and Ring Mod have dedicated oscillators, thus using additional CPU power. Combining these with additional oscillator features like Waveshaping or Unison can add a lot of required processing.

#### **Unused Modulation Routings**

		1	MOD MATRIX ZOOM	e,	< >
SMOOTH	STATUS	SOURCE	DEPTH	TARGET	TARGET PARAMETER
u—		LF05		Sample Start	
u	HOTE INVENT	Velocity ·		Morphing Input A	• •
u—	HUTE INVERT	Mod Envelope3	II	Unison Depth	·
u—					·

Modulation routings sometimes use CPU power, so be sure to remove any unused routings. For example if you are modulating FM Depth with a Mod Envelope, but then decide to turn FM off, remove the modulation routing to further reduce demand on the CPU.

#### **Bypass Unused FX**



When Bypassed, FX Units do not consume CPU power. To conserve CPU power, Bypass any loaded FX when they are not in use. This especially applies to Aux Send FX, since the entire Aux Send system is enabled even if you are only using one Send.

#### EZ-Verb vs. PRO-Verb



EZ-Verb doesn't necessarily use less CPU power than PRO-Verb. PRO-Verb has a variable CPU Power parameter, where EZ-Verb's CPU Power is fixed. This parameter changes the number of reflections in the reverb signal, and a higher setting is not always a "better" sound -but more reflections require a higher amount of power to achieve. Sometimes lower CPU settings will produce a more desirable result. If PRO-verb is set to maximum CPU, it takes much more power than EZ-Verb - while lower PRO Verb CPU settings (like the default settings) can actually require *less* power than EZ-Verb.

#### Sharing FX with Aux Racks



When using FX like reverbs, it's often better to use the reverb on an Aux Rack, instead of as an Insert. There are times when several sounds need reverb, and instead of inserting 6 reverbs into 6 individual Parts, you could instead place only one reverb on an Aux Rack and then use the Aux Sends to send all six sounds to the single reverb unit. This is far more efficient on the CPU.

#### Aux Sends



If you are not using the AUX Sends on the Mixer Page, make sure all of them are off (all knobs turned fully counter-clockwise). When all of the Aux Sends are off, the entire AUX system is disabled, which saves CPU power. If any of the Aux Sends is on, the entire Aux Send system on all Racks and Parts is enabled, even if no audio is passing through it.



# **GROOVE LOCK™** - Strength

Strength is a blend control that determines how much the imported MIDI groove will affect the feel of the Arpeggiator's pattern. At minimum setting, Omnisphere will ignore the imported MIDI groove in favor of a standard, straight 'grid' feel. With Strength set to maximum, the imported MIDI groove will completely override the grid and base the feel of the Arpeggiator's pattern on the imported groove.

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**GROOVE LOCK™ - MIDI File Browsing** 

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In addition to drag and drop, it's also possible to click inside the Groove Lock[™] field to open a file dialog, which allows browsing to any .MID file on your computer that you wish to import into the Arpeggiator.

NOTE: Omnisphere will only recognize the first 128 MIDI note events in a .MID file, so any subsequent notes are ignored.



**GROOVE LOCK™** - Indicator Dots

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When a MIDI file has been imported or dragged into the Groove Lock[™] field, a series of small blue dots will appear directly below the Arpeggiator steps. These dots serve a dual purpose. They confirm that Groove Lock[™] has received MIDI data and provide a visual reference for the feel of the MIDI content. Changing the Arpeggiator's Clock value will change the resolution of the blue dots.

Arpeggiator Clock set to 1/8

Arpeggiator Clock set to 1/16

The Groove Lock[™] feature uses the timing and note values of the MIDI content, not the melodic value. This means that Omnisphere locks to the feel or groove of the clip, not to the musical pattern itself. This applies to polyphonic MIDI files as well.



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When NOTES is selected, Part Regions are mapped to a MIDI Note range, allowing you to map splits, layers and positional crossfades across the keyboard. Each of the 128 lines in the grid correspond to a MIDI Note number, and Regions can be mapped over a ten-octave range. When NOTES is selected, a mini-keyboard is displayed at the bottom of the Stack Mode Grid

*NOTE:* The mini-keyboard will highlight notes in blue as they are played. Notes highlighted in red are notes that have been MIDI Note Learned in <u>LIVE MODE</u>, and are shown for reference only.

STACK MODE OPERATIONS MODES - Notes



# **STACK MODE OPERATIONS MODES - Velocity**

When VELO is selected, Part Regions are mapped to a specific Velocity range. The mini-keyboard is not displayed. Instead, the horizontal axis represents the 128 Velocity values. This allows Velocity switching and crossfading of Parts. For example, which Part is played depends on how hard or soft the MIDI keyboard is played.

The horizontal axis shows white reference numbers for Velocity values and also displays incoming MIDI Note messages. The markers on the horizontal axis range from 1-127. When you play notes, their Velocity values will be displayed by blue vertical bars.

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Parts on the left side of the Grid will be triggered at lower Velocity levels, while at higher Velocity, Parts on the right side of the Grid will be triggered.

In the example below, all the Parts will be triggered except the Region at the far right, which is mapped to a Velocity range of 109-128.

In this example, playing at lower Velocity values triggers the two Parts on the left.

In this example, playing at medium Velocity values crossfades to the Region in the center of the Grid.

Finally, as Velocity increases further, the next Region to the right will be triggered by higher Velocity values.

STACK MODE OPERATIONS MODES - Velocity



# **STACK MODE OPERATIONS MODES - CC**

When CC is selected, Part Regions can be switched or crossfaded using MIDI CC messages. This is useful for crossfading patches from a MIDI hardware slider or knob. Each Region can be mapped to specific values across the MIDI CC's range. The MIDI Control Change number that STACK MODE uses is chosen from the MIDI CC menu on the STACK MODE page.

Once the MIDI Control Change Number has been chosen, all of the Regions will respond to that CC number. The current MIDI CC value is displayed at the bottom of the Stack Mode Grid, similar to VELO mode, but only the current value is visible. While holding notes down, the value display will update as you sweep across the range of CC values.

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NOTE: When using CC, all Parts added to the Stack Mode Grid will be triggered simultaneously when notes are played, even if their Regions are outside the CC value range, and not outputting audio. Therefore, this feature can put a high demand on the <u>CPU</u>.

NOTE: MIDI CC 32 (bank select) is not available.



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# Half Time Malevolence 2 (latch) Ebowed Plano Zing Swell (latch) Mid Range Echoes (latch, next beat)

**STACK MODE - Latch Mode** 

When Latch Mode is enabled for a Part, repeatedly playing a note will toggle the note on and off. When it is toggled on, the note will continue to sustain, even if the note is released. Playing the same note again will toggle it off.

When the Stack Mode page is open, you can access the Latch Mode setting for a Part by right/control-clicking on the Part Region. Select "Latch Mode" from the context menu to toggle Latch Mode on or off for the Part.

NOTE: A Part's Latch Mode status can also be viewed & changed from the EDIT Page using the controls in the Footer or from the LIVE MODE page using the Latch Mode View button. The Latch Mode I cons are MIDI-learnable, so you can assign a hardware control to remotely enable or disable Latch Mode for a Part.

Latch Mode allows rapid and creative layering of multiple notes or Parts. Using splits, you can also play along using other unlatched Parts in Stack Mode. Latch Mode is extremely useful when working with rhythmic sounds, and used together with Trigger Modes allows one-shot triggering of sounds quantized in real-time.

Latch Mode is set independently for each of the eight Parts. It is also independent from Stack Mode, so Stack Mode does not need to be enabled for Latch Mode to be active.

#### Viewing & Enabling Latch Mode



To enable Latch Mode for a Part, control/right-click its Part Region, and select the "Latch Mode" option from the context menu.

When Latch Mode is enabled for a Part, a checkmark will appear next to the Latch Mode menu option, and the word "Latch" will be appended to the Part Name on the Stack Mode grid.

To disable Latch Mode for a Part, select "Latch Mode" again from that Part's context menu.

When Latch Mode is disabled for a Part, the Latch Mode menu option will be unchecked, and the word "Latch" will no longer be appended to the Part Name.

NOTE: Disabling Latch Mode for a Part while it's playing will immediately send an "All Notes Off" message to the Part. The tails from FX and release stages from envelopes will continue to decay. The All Notes Off command will apply to all notes that are playing on that Part.

#### **All Notes Off**



Sometimes when using Latch Mode, it's possible to lose track of which notes are latched, or you might have multiple Parts playing in Latch Mode that you want to stop simultaneously.

The All Notes Off command will send an "All Notes Off" message to all 8 Parts at once. All Parts will stop playing, regardless of their Latch status. FX tails and release stages from envelopes will continue to decay, so that the cut off is not unnaturally abrupt.

To access the All Notes Off command, control/right-click on a Part Region, and select "All Notes Off" from the context menu.

NOTE: You can also access the All Notes Off command by using the All Notes Off button on the LIVE MODE page. The All Notes Off button is MIDI-learnable, which allows you to trigger it using a hardware controller. This is especially useful when using Latch Mode together with Stack Mode.

NOTE: If you have multiple Parts playing using Latch Mode and only want to stop one Part, disable Latch Mode only for that Part.



# **STACK MODE - Trigger Mode**



Trigger Mode controls the playback timing of incoming MIDI notes, providing real-time quantization as those notes are played.

When the Stack Mode page is open, you can access the Trigger Mode settings for a Part by right/control-clicking on the Part Region.



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NOTE: Trigger Mode can also be accessed from the LIVE MODE page using the Latch Mode View button, or from the EDIT Page using the controls in the <u>Footer</u>.

When playing complex phrases or rhythmic sounds along with other sequences, it can be difficult to sync those performances. Trigger Mode solves these problems by quantizing live MIDI input. With Trigger Modes other than Immediate selected, the playback from each incoming MIDI note is delayed until the the next point on the bar/beat grid is reached. This makes it much easier to play in a live performance setting with complete synchronization.

Trigger Mode controls the playback start time of MIDI notes played live via a MIDI controller or from MIDI notes sent from a MIDI track in the host sequencer.

Trigger Modes are set independently for each of the eight Parts. Trigger Modes are also independent from Stack Mode, so Stack Mode does not need to be enabled for Trigger Modes to be active.

#### Using Trigger Modes in Stack Mode

Using the splits, layers and crossfades in Stack Mode together with Trigger Mode quantizing allows for very complex and interesting performance possibilities.

One simple example is to setup a split with an arpeggiated synth bass on the lower keys, and another arpeggiated sound on the upper keys. Playing them together in sync can be really difficult. Setting the Trigger Modes to Next 16th for both Parts would quantize them together in real time as you played, so your arpeggiated phrases will always sync perfectly.

Trigger Modes can also be used while browsing and auditioning sounds. If you have selected a Trigger Mode other than Immediate for the Part, the sounds will be real-time quantized and will play in sync with the host or other clocked source as you audition them.

#### **Viewing & Selecting Trigger Modes**

When a Trigger Mode other than Immediate is selected for a Part, the name of the selected Trigger Mode will be appended to the Part Region name.



To select or change the Trigger Mode for a Part, control/right-click its Part Region, and select the desired Trigger Mode from the context menu. A checkmark will appear next to the selected Trigger Mode.

Remove this part				
Latch mode				
All notes off (panic)				
Trigger immediate				
Trigger next 1/16				
✓ Trigger next beat				
Trigger next bar				
Add part 1 - Half Time Malevolence 2	2			
Add part 2 – Ebowed Piano Zing Swel				
Add part 3 - Mid Range Echoes				
Add part 4 - Undercover Operation				
Add part 5 - Resonant Space Click				
Add part 6 - Pulsing Resonance				
Add part 7 - Adagio Expressivo				
Add part 8 - Grooving Metallophone				

#### **Trigger Modes**

**Immediate**: This is the default Trigger Mode. MIDI input is not quantized, and playback of MIDI notes is immediate.

*NOTE:* When Immediate is selected, no Trigger Mode name will be appended to the Part Name.

**Next 16th:** this option delays the playback of incoming MIDI notes to the next 16th note. In other words, notes are quantized in real time to the next 16th note. If you play ahead of the next 16th, there may be a slight delay before the note sounds. This delay will be a maximum of a 16th note at the current tempo. This mode makes it easy to play quick phrases in perfect sync with other Parts or clocked sources.

**Next Beat:** this option delays playback to the next beat. If incoming MIDI notes arrive ahead of the next beat, the delay is a maximum of one beat. Next Beat mode makes it very easy to trigger rhythmic patches in perfect sync, and when used together with Latch Mode, for layering phrases that are quantized to the beat in real time.
**Next Bar:** delays playback until the next bar. If MIDI messages arrive ahead of the next bar, the delay is a maximum of one bar. This mode is especially useful if you want to synchronize phrases on the downbeat of a measure. You can press a note anytime in the previous bar and it will wait until the next bar to play.

NOTE: The selected Trigger Mode also affects a Part's Arpeggiator, LFOs and Envelopes. These will also be delayed until the note itself is triggered.



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### LIVE MODE - Latch Mode

14+4	LATCH	LIVE MODE	Đ,	PREVIOUS
6		SHOW: Part Numbe	т	NEXT 🖤
/* 1 E	Half Time Malevolence	e 2 5		Resonant Space Click
، د 2 د	Ebowed Plano Zing Sv	vell 6		Pulsing Resonance
• · 3 1	Mid Range Echoes	1 ¹ 7		Adagio Expressivo
4	Undercover Operation	on 8		Grooving Metallophone

When Latch Mode is enabled for a Part, repeatedly playing a note will toggle the note on and off. When it is toggled on, the note will continue to sustain, even if the note is released. Playing the same note again will toggle it off.

Latch Mode is accessed from the LIVE MODE page, using the Latch Mode View button.



NOTE: A Part's Latch Mode status can also be viewed & changed from the LIVE MODE page using the Latch Mode View button, or from the EDIT Page, using the controls in the Footer.

Latch Mode allows rapid and creative layering of multiple notes or Parts, which you can then play along with by switching to other Parts in Live Mode. Using Latch Mode is extremely useful when working with rhythmic sounds, and used together with Trigger Modes, allows one-shot triggering of sounds quantized in real-time.

Latch Mode is set independently for each of the eight Parts. It is also independent from Live Mode, so Live Mode does not need to be enabled for Latch Mode to be active.

#### Viewing & Enabling Latch Mode

To view or adjust the Latch Mode status for a Part, open the LIVE MODE page, and select the Latch Mode View button to open the Latch Mode View.

NOTE: The Latch Mode View button toggles between the Latch Mode and Live Mode views. Closing the Latch Mode View does not change or disable the Latch Mode or Trigger Mode settings.



When the Latch Mode View is open, you will see the Latch & Trigger Mode Part Controls.

Selecting the Latch Mode Icon for a Part will enable Latch Mode for that Part. The Icon will highlight to indicate that Latch Mode is enabled for the Part.

If you are already holding sustained notes when you enable Latch Mode, those held notes will be latched.

Selecting the Latch Mode Icon again will disable Latch Mode for the part.



NOTE: Disabling Latch Mode for a Part while it's playing will immediately send an "All Notes Off" message to the Part. The tails from FX and release stages from envelopes will continue to decay. The All Notes Off command will apply to all notes that are playing on that Part.

Latch Mode Icons are MIDI-learnable, so you can assign a hardware control to remotely enable or disable Latch Mode for a Part.

#### All Notes Off



Sometimes when using Latch Mode, it's possible to lose track of which notes are latched, or you might have multiple Parts playing in Latch Mode that you want to stop simultaneously.

The All Notes Off button will send an "All Notes Off" message to all 8 Parts at once. FX tails and release stages from envelopes will continue to decay, so the cut off is not unnaturally abrupt. Notes being played on all Parts will be stopped, regardless of their Latch status.

The All Notes Off button is  $\ensuremath{\mathsf{MIDI}}\xspace$  -learnable, which allows you to trigger it using a hardware controller.

NOTE: If you have multiple Parts playing using Latch Mode and only want to stop one Part, disable that Part's Latch Mode Icon to send an All Notes Off message only to that Part.



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## LIVE MODE - Trigger Mode

[ <del>1</del> ]	Цатен	LIVE MODE	Ð	
		SHOW: Part Number	Y	$\mathbf{\nabla}$
2 * 1 C	Half Time Malevolence 2	1 * 5 5		Resonant Space Click
J * 2 L	Ebowed Plano Zing Swel	II 6		Pulsing Resonance
• * 3 L	Mid Range Echoes	: * 7 L		Adagio Expressivo
• * 4 C	Undercover Operation	1 * 8 1		Grooving Metallophone

Trigger Mode enables real-time quantization of incoming MIDI notes, so that multiple Parts will always play in sync.

Trigger Mode is accessed from the LIVE MODE page, using the Latch Mode View button.



NOTE: Trigger Modes can also be viewed & accessed from the STACK MODE page using Part Regions and their context menus, or from the EDIT Page using the controls in the Footer.

When playing complex phrases or rhythmic sounds along with other sequences, it can be difficult to sync those performances. Trigger Mode solves these problems by quantizing live MIDI input. With Trigger Modes other than Immediate selected, the playback from each incoming MIDI note is delayed until the next point on the bar/beat grid is reached. This makes it much easier to play in a live performance setting with complete synchronization.

Trigger Mode controls the playback start time of MIDI notes played live via a MIDI controller or from MIDI notes sent from a MIDI track in the host sequencer.

Trigger Modes are set independently for each of the eight Parts, and Trigger Modes are independent from Live Mode, so Live Mode does not need to be enabled for Trigger Modes to be active.

#### Using Trigger Mode in Live Mode

Using the switching and layering capabilities of Live Mode together with Trigger Mode quantizing allows for some exciting performance possibilities. For example, you can easily switch between or layer two different arpeggiating sounds, without worrying about falling out of sync as you play.

Trigger Modes can also be used while browsing and auditioning sounds. If you have selected a Trigger Mode other than Immediate for the Part, the sounds will be real-time quantized and will play in sync with the host or other clocked source as you audition them.

#### Viewing & Selecting Trigger Modes



To view and select the Trigger Mode for a Part, open the LIVE MODE page, and select the Latch Mode View button to open the Latch Mode View.

NOTE: The Latch Mode View button toggles between the Latch Mode and Live Mode views. Closing the Latch Mode View does not change or disable Latch Mode or Trigger Mode settings.



When the Latch Mode View is enabled, you will see the Latch & Trigger Mode Part Controls. The Trigger Mode Icon will display the currently selected Trigger Mode for the Part, and allows you to access the Trigger Mode menu for that Part.



Select the Trigger Mode icon, and choose the desired Trigger Mode from drop-down menu. A checkmark will appear next to the selected option, and the Trigger Mode icon will change to reflect the selected Trigger Mode.

#### Trigger Modes

Immediate: This is the default Trigger Mode. MIDI input is not quantized, and playback of MIDI notes is immediate.

**Next 16th:** this option delays the playback of incoming MIDI notes to the next 16th note. In other words, notes are quantized in real time to the next 16th note. If you play ahead of the next 16th, there may be a slight delay before the note sounds. This delay will be a maximum of a 16th note at the current tempo. This mode makes it easy to play quick phrases in perfect sync with other Parts or clocked sources.

**Next Beat**: this option delays playback to the next beat. If incoming MIDI notes arrive ahead of the next beat, the delay is a maximum of one beat. Next Beat mode makes it very easy to trigger rhythmic patches in perfect sync, and when used together with Latch Mode, for layering phrases that are quantized to the beat in real time.

**Next Bar:** delays playback until the next bar. If MIDI messages arrive ahead of the next bar, the delay is a maximum of one bar. This mode is especially useful if you want to synchronize phrases on the downbeat of a measure. You can press a note anytime in the previous bar and it will wait until the next bar to play.

NOTE: The selected Trigger Mode also affects a Part's Arpeggiator, LFOs and Envelopes. These will also be delayed until the note itself is triggered.



# SYSTEM - MIDI Controller

The choices for MIDI modulation source in Omnisphere include a variety of standard MIDI controllers such as Wheel, Expression, Soft Pedal, etc. You can use these options on the System Page to map those sources to other MIDI controls. This can be useful if you don't have a particular physical controller such as an Expression Pedal. For example, if you map Wheel to Breath Control, you can use a Breath Controller in any patches that use the Wheel as a modulation source.

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To re-map any of these controllers, select a menu in the MODULATION column and move the controller that you want to assign to modulation type.

NOTE: The remapped control will only be visible on the System Page. In the Modulation Matrix and Modulation Source menu of the Edit Page the original Modulation Source name will be shown. For this reason, it's recommended to use the 'User CC' source, since that's not used in any factory patches.