
OMNISPHERE
2.6

Omnisphere 2

2.6 — Last update: Mar 02, 2021

Spectrasonics

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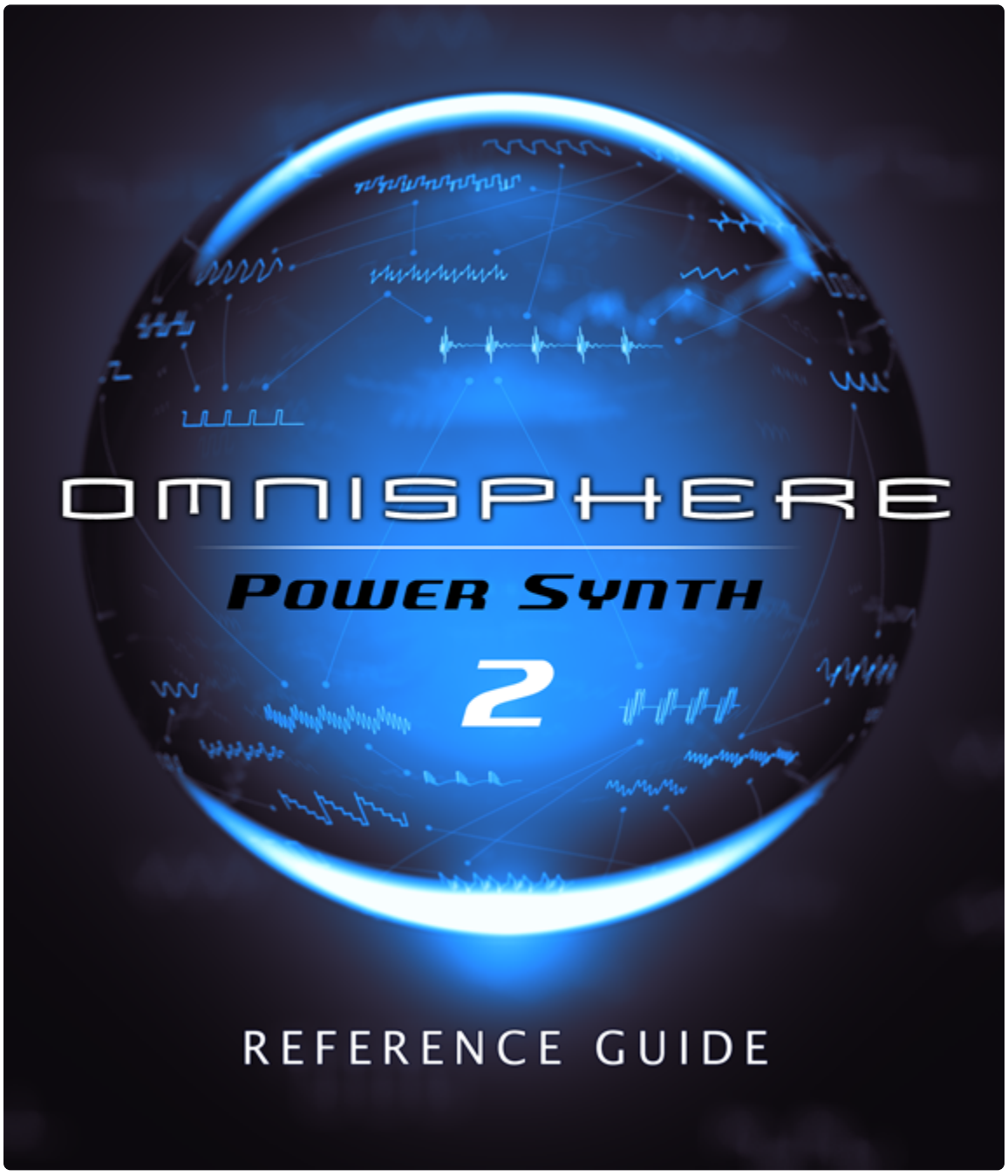
1. Getting Started



Welcome to Omnisphere Reference Guide 2.6!

Software	Soundsources	Patches
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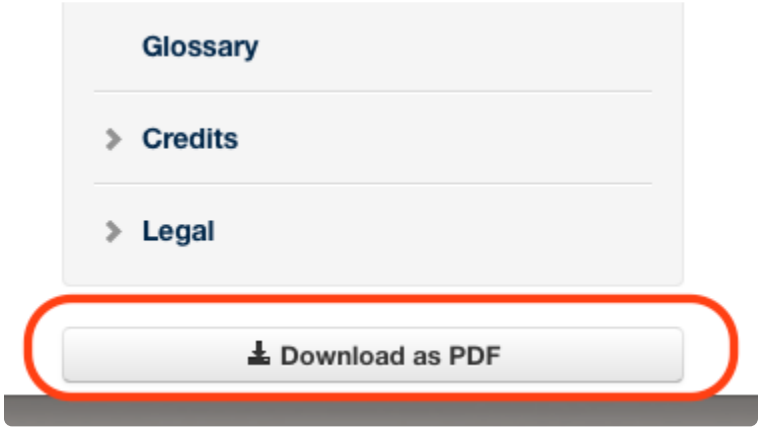
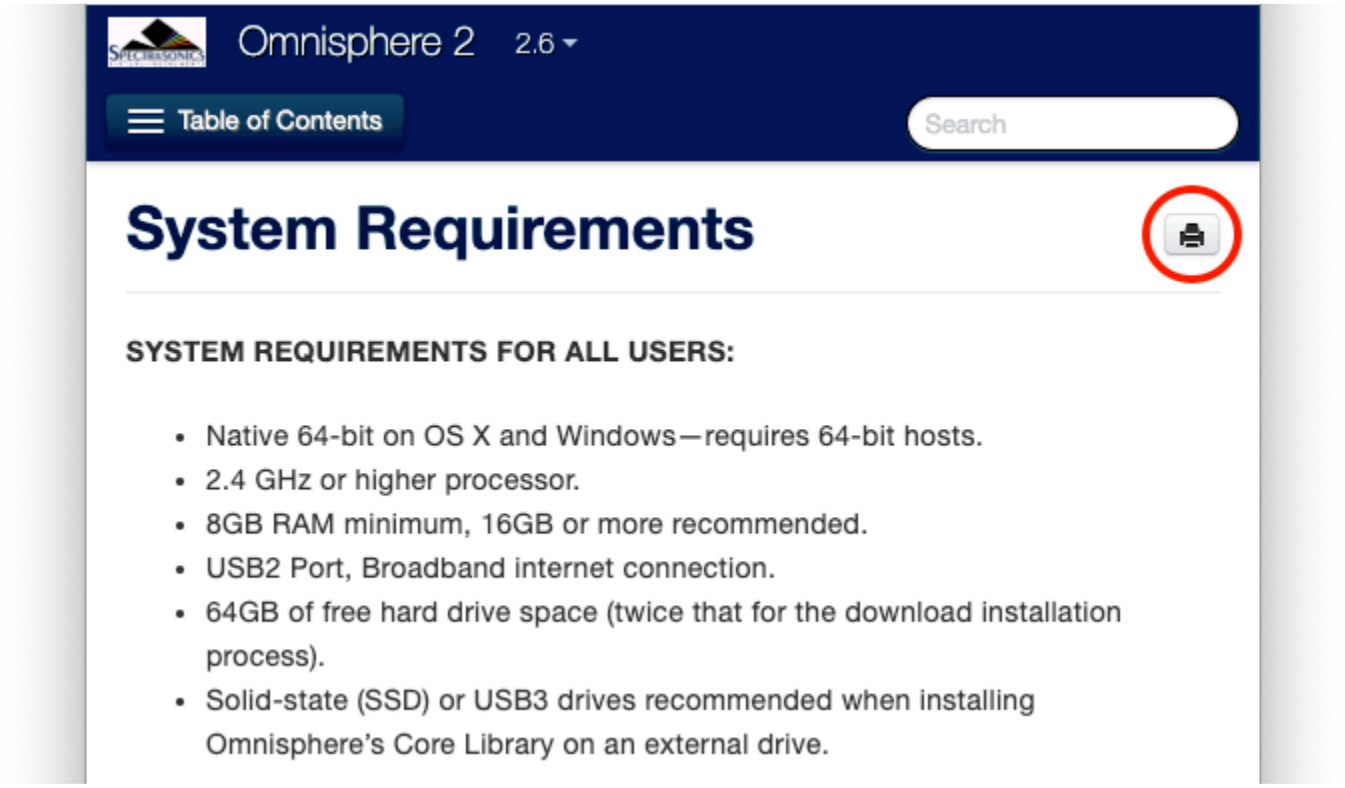
This Reference Guide is your source for comprehensive information about the functions and features of the Omnisphere system and all its components.

Selecting “Reference Guide” from the Utility Menu will open the online Omnisphere Reference Guide — it will be displayed using your default Web Browser, and is also viewable on mobile devices.

The Reference Guide is indexed, so you can search the Guide. The complete Omnisphere Reference Guide also is available in PDF by selecting the “Download as PDF” button at the bottom of the Directory:



You can also print just the page you are reading by clicking the small printer icon in the upper right of each page.



If you’d like to hide the Table of Contents sidebar in order to display any of the images in a larger format, click on the “collapse” arrow located on the top right of the sidebar.

NOTE: Be sure to check out the Tutorial Videos on our website for visual and practical learning examples.

Enjoy the learning process and we hope you make some great music using Omnisphere!

– *The Spectrasonics Team*

1.1. QuickStart

This QuickStart provides an overview of the essential things you'ill need to know in order to get started using Omnisphere.

- Omnisphere is a powerful software instrument and can be run as a standalone application or hosted in any software DAW.
- Omnisphere can be a memory-intensive instrument, especially when using Multis. A system with plenty of RAM will greatly enhance performance. Be sure and check out the **Concepts: Performance Optimization** chapter.

1. Install Omnisphere

Installation time will vary, depending on the installation type (USB drive or download). Once installed, the

library will require about 64 GB of free hard drive space for the USB drive and DVD installation process and approximately 128 GB of free space for the download installation process.

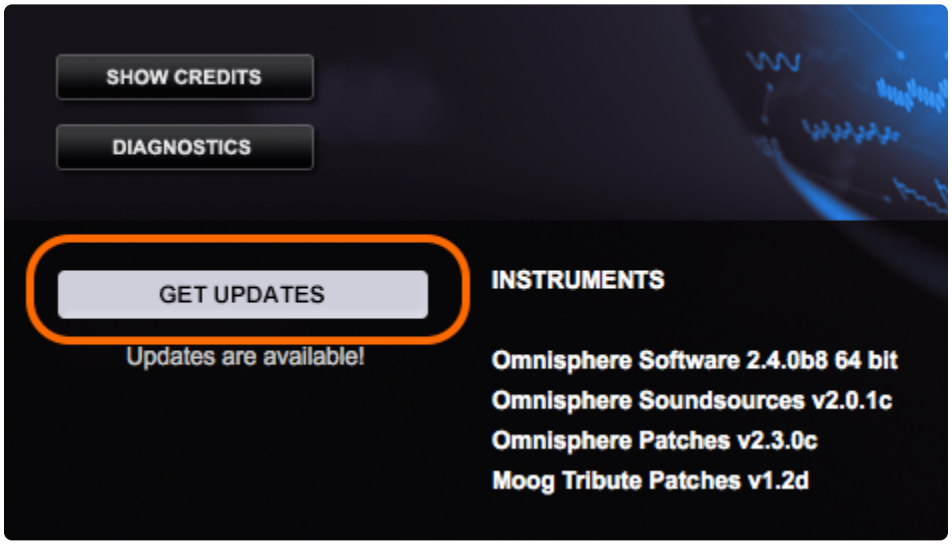
2. Authorize the Plug-In

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 look at the left side of the splash screen.
- If updates are available, you will see a “Get Updates” button with an “Updates are available!” note. If it says “You are up to date” then no updates are necessary.



- If updates are needed, click “Get Updates” and you will be taken to the System Status page in your web browser.
- 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 Multi-timbrally

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

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
  - Select a Patch in the Mini-Browser displayed on the left.
- 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. Explore and Learn

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

- If you’re new to synthesis, we recommend starting with the chapters on **Concepts**, **The Mixer**, **Browsers**, **Main Page**, **Arpeggiator**, and **Live Mode**.
- If you have some experience with synthesis, be sure to check out the chapters on **The FX Rack**, **Automation & MIDI Learn**, **Layer Pages**, and **Stack Mode**.
- Experienced synthesists can go in-depth with zooming concepts that are covered in the chapters on **Modulation**, **Oscillators**, **Filters**, **LFOs**, and **Envelopes**.

7. Support Resources

Online resources are available that can answer most technical questions. Please log in and visit our *Knowledge Base.”

8. Have Fun!

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

-The Spectrasonics Team

1.2. System Requirements

System Requirements for All Users:

- Native 64-bit on OS X and Windows—requires 64-bit hosts.
- 2.4 GHz or higher processor.
- 8 GB RAM minimum, 16 GB or more recommended.
- USB 2 Port for boxed media, Broadband internet connection for download.
- 64 GB of free hard drive space (twice that for the download installation process).
- Solid-state (SSD) or USB 3 drives recommended when installing Omnisphere's Core Library on an external drive.

Mac Users:

- MacOS 10.13 High Sierra or higher
- AU, VST 2.4 or higher, AAX capable host software
- 64-bit host

Windows Users:

- Microsoft Windows 7 or higher
- VST 2.4 or higher, AAX capable host software
- 64-bit host

Hi-Res Monitor (recommended)

- Omnisphere supports high-resolution monitors, but will also work with any modern monitor.

Special System Capabilities

- Omnisphere supports Wacom tablet/pen devices and Windows Multitouch / Microsoft Surface devices, including 2-finger scrolling for browsers, 2-finger tapping for buttons, and 1-finger press+hold for right-click action (context menus).

1.3. Installation

Omnisphere can be installed from a USB drive or direct download.

The following pages have instructions for performing default and custom installations for both Mac and Windows.

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

1.3.1. USB Drive (Mac)

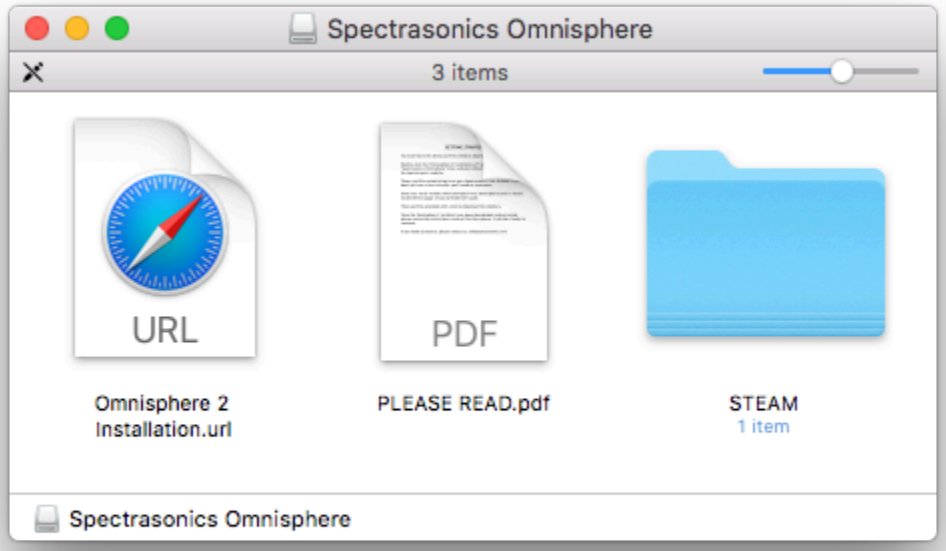
Follow this set of instructions to install Omnisphere 2 from your USB installation drive on to your Mac system. You'll need over 64GB of free space available on your hard drive in order to install the instrument.

NOTE: These screen shots are taken in macOS 10.10 (Yosemite). Installation on other versions of macOS may look somewhat different.

Omnisphere 2 Installation

1. Connect the Omnisphere installation drive into a USB port. Open the drive "Spectrasonics Omnisphere.url."

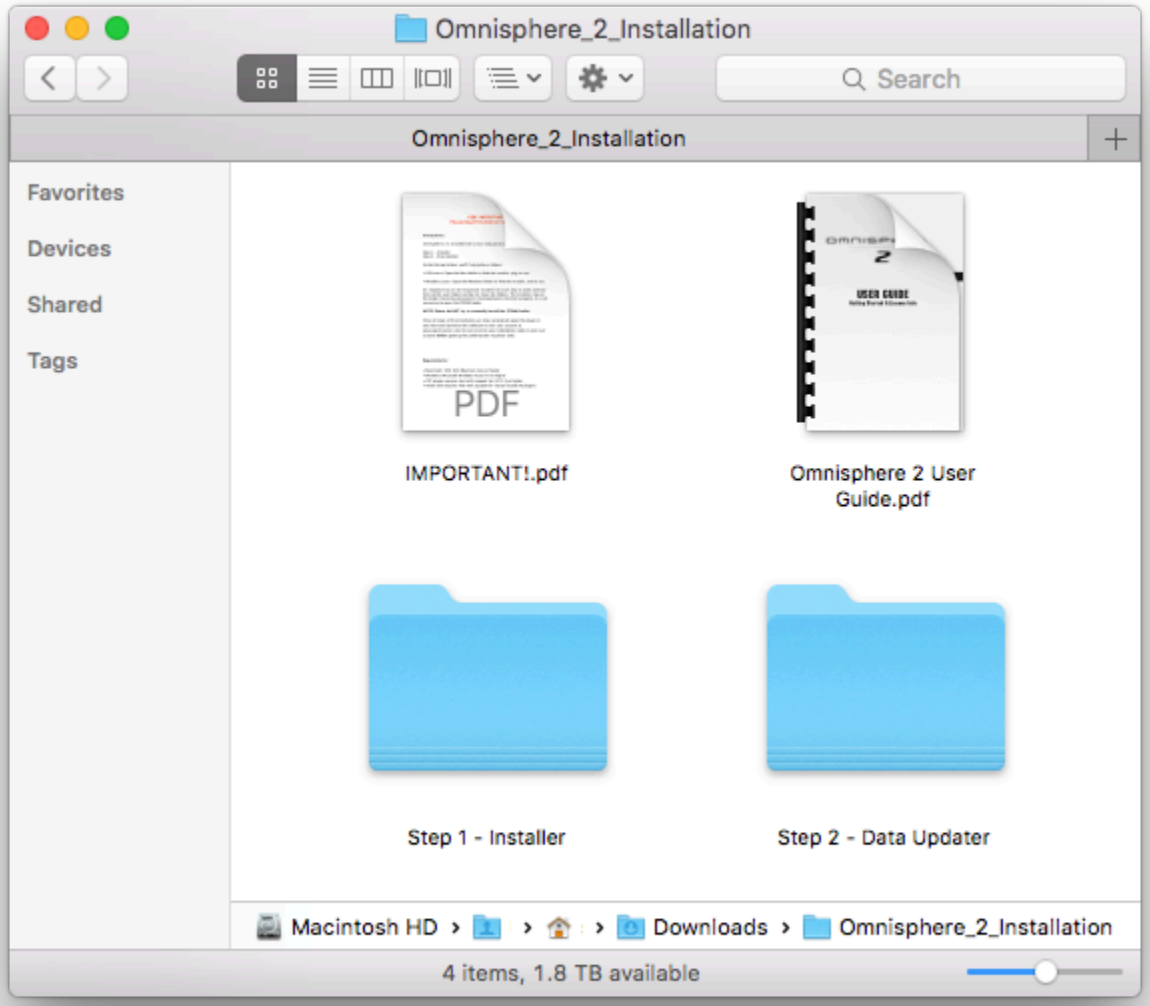
2. Double-click the file "Omnisphere 2 Installation.url."



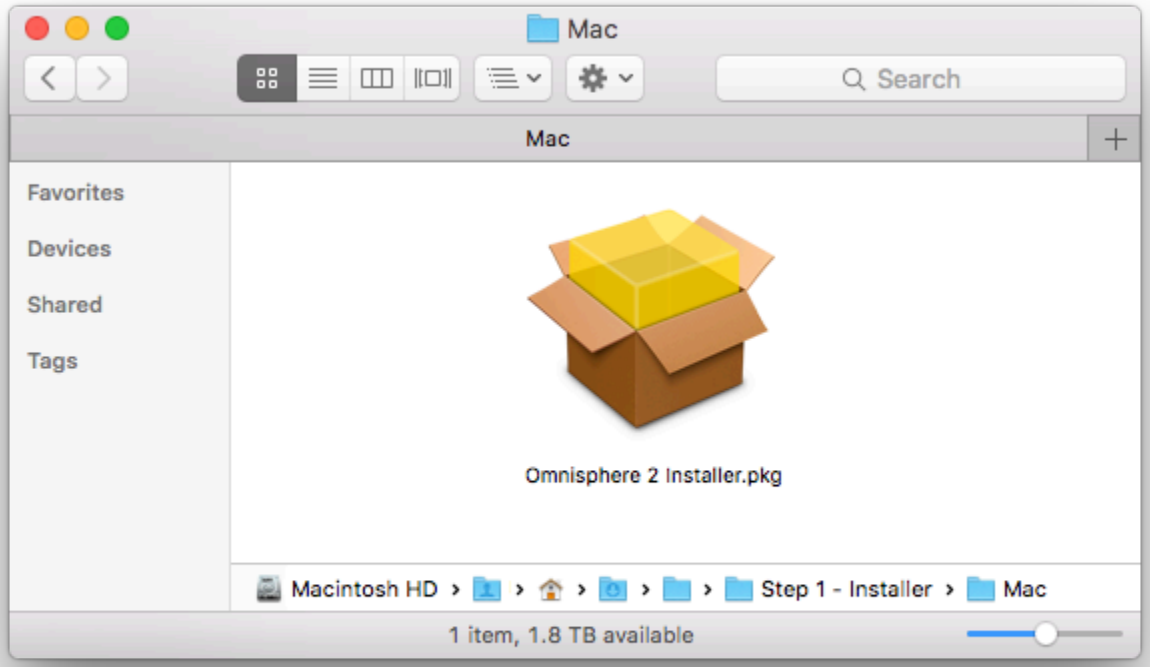
3. Log in to your Spectrasonics User Account and select the DOWNLOAD button to download the current installers to your Mac.

4. From your Mac's Downloads folder open the "Omnisphere_2_Installation" folder, then open the "Step 1 –

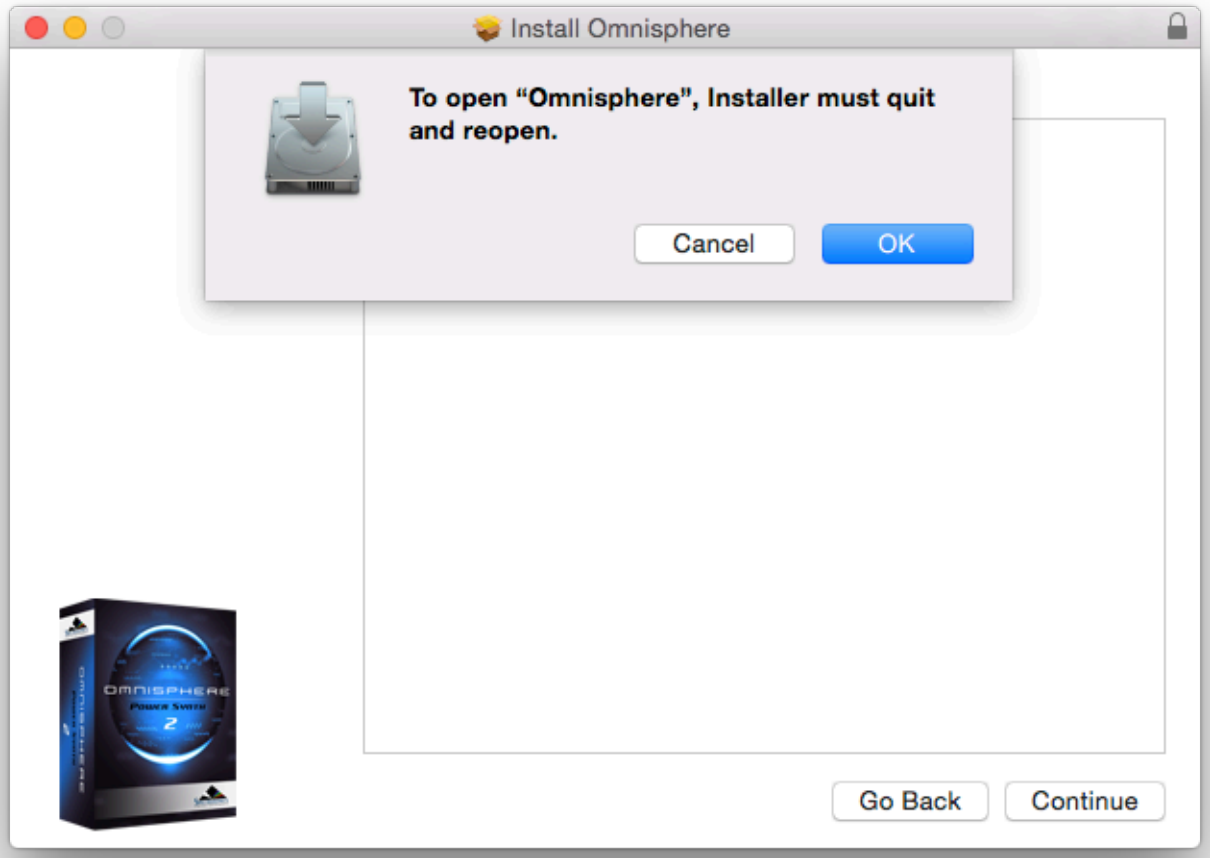
Installer” folder.



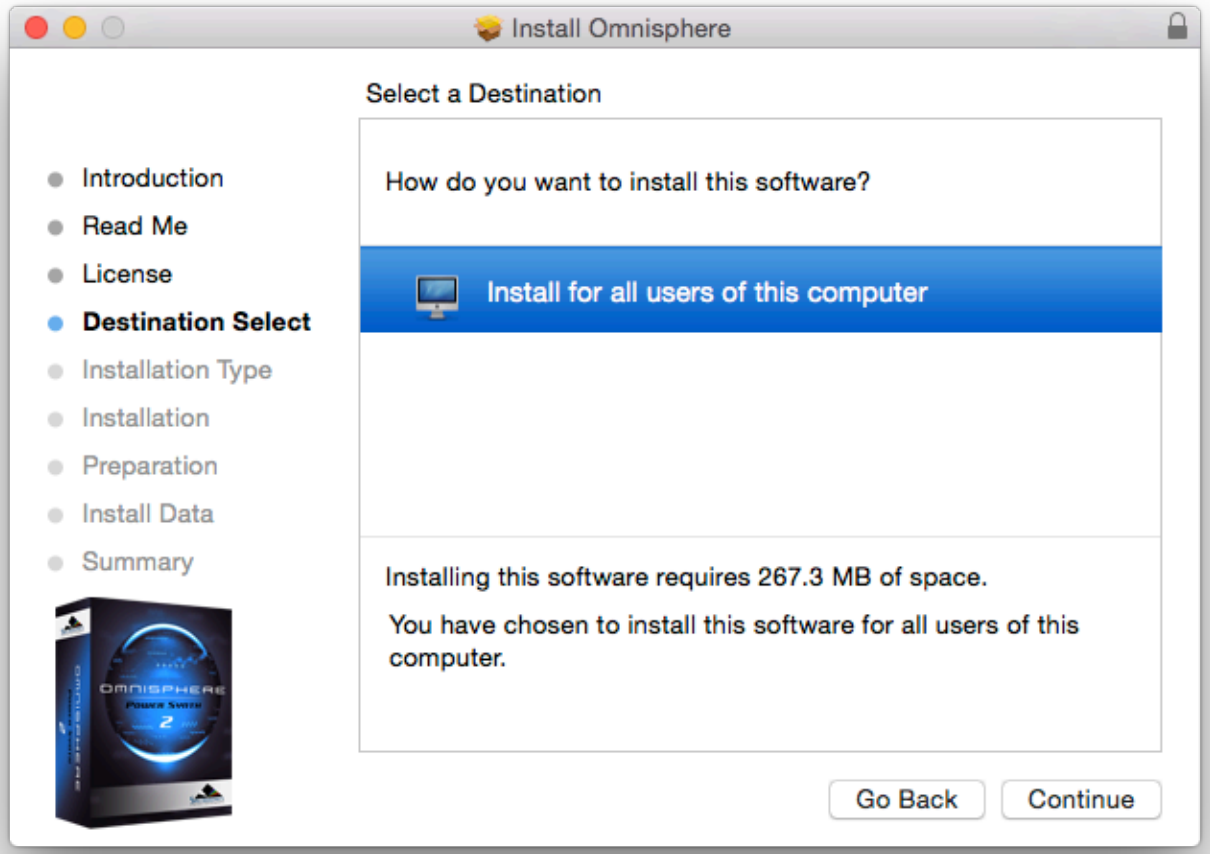
5. Open the “Mac” folder inside of “Step 1 – Installer.” Double-click “Omnisphere 2 Installer.pkg” to begin the installation.



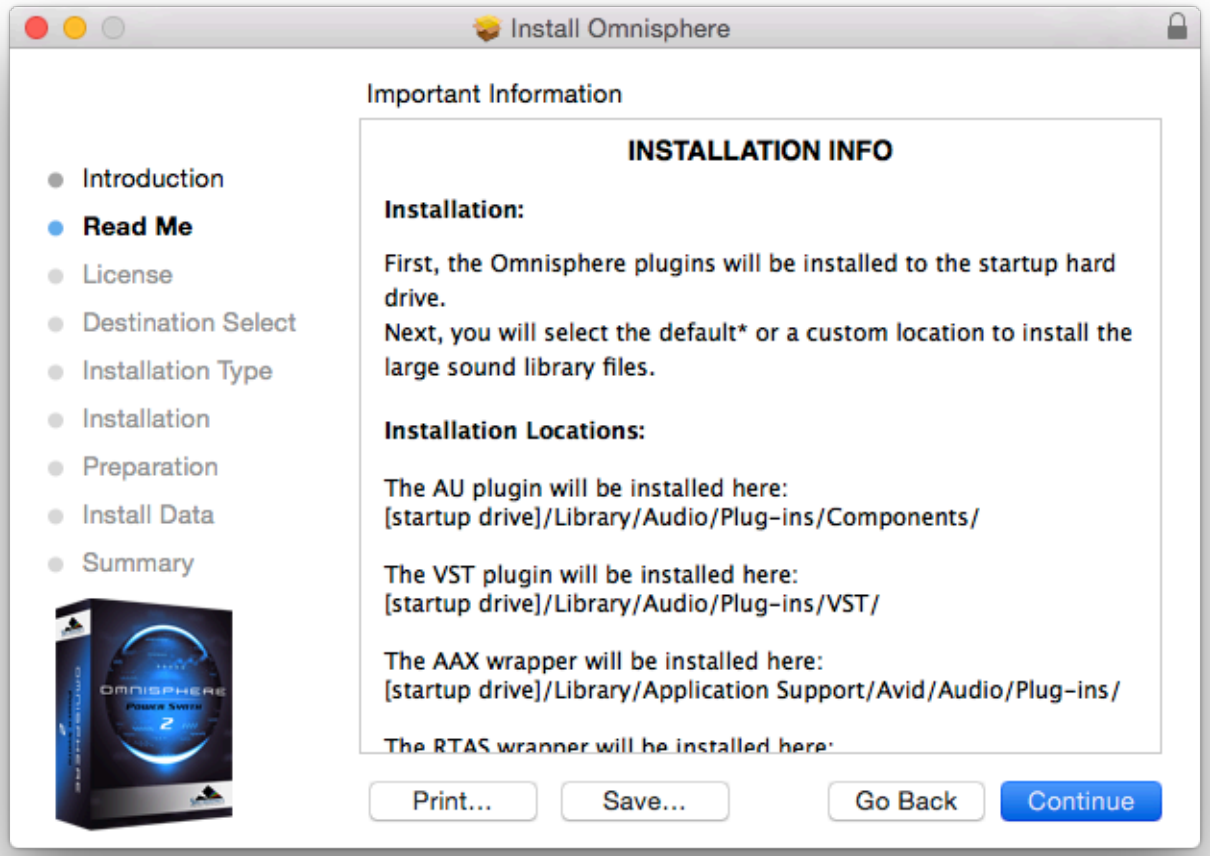
6. The installer might need to quit and reopen to ensure support for older versions of OS X, so just click “OK.”



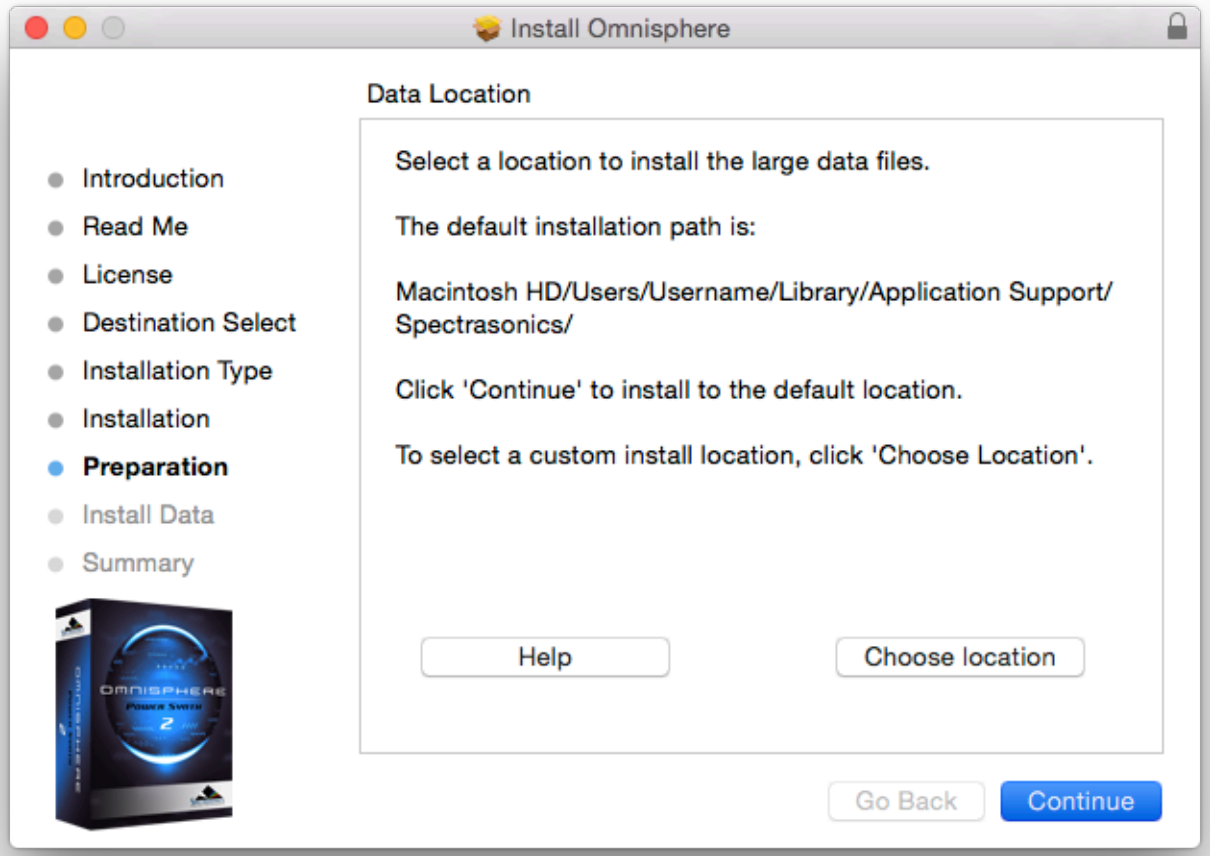
7. Follow the steps as you’re guided through the installation process. Make sure to review the Installation Info and Licensing FAQ. Then at the “Destination Select” step, choose the option “Install for all Users of this computer.” After the Installation Type information you’ll enter your system password to start the install process.



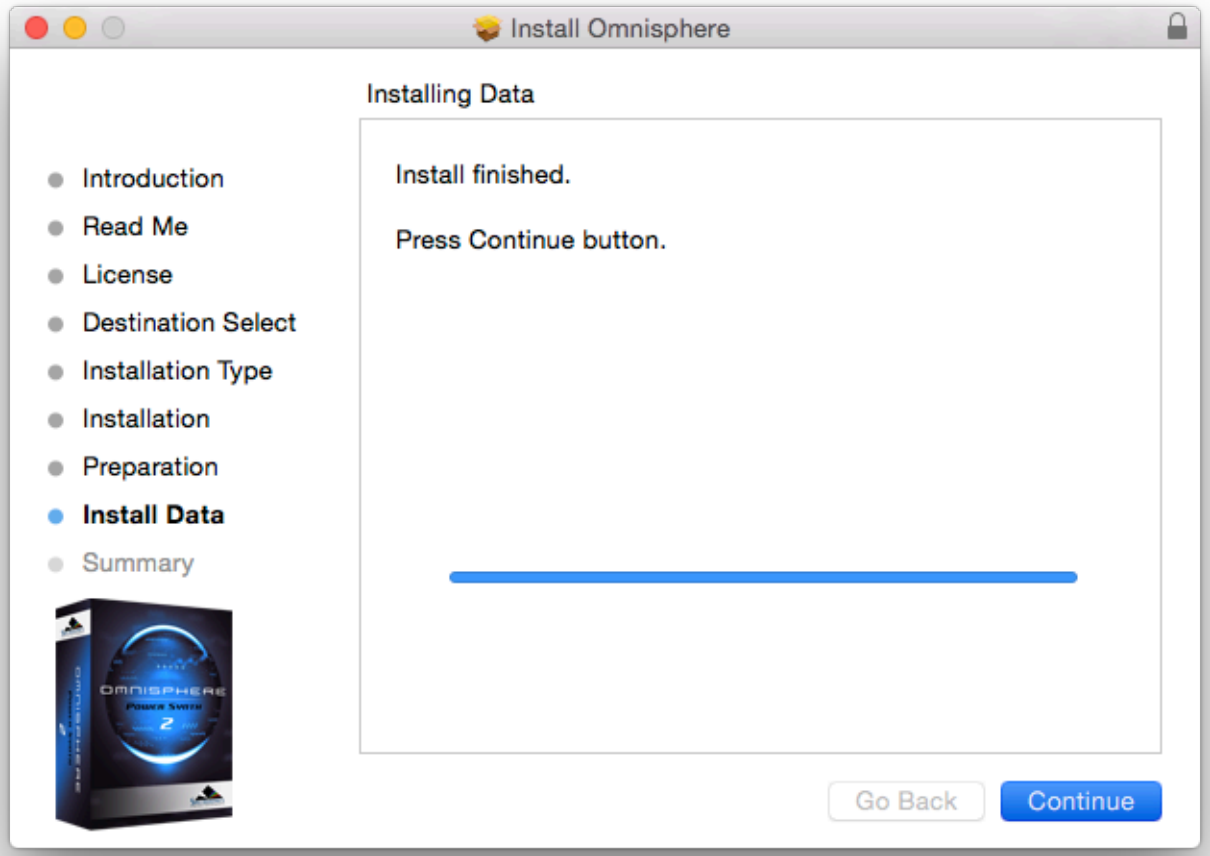
8. The plug-in files will then be installed on your Mac's system drive.



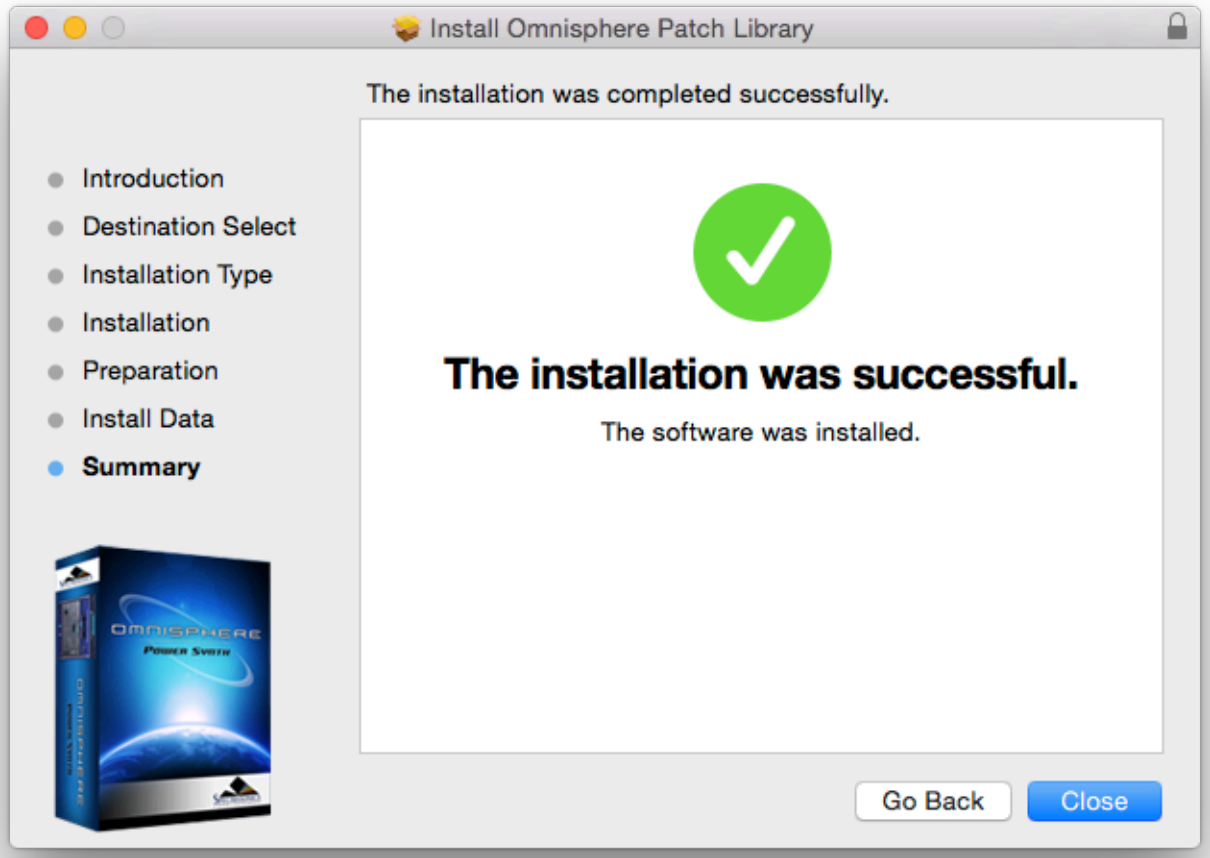
9. Next, at the Preparation step, you'll select where to install the large Core Library files. By default they will be installed to your system drive or you may choose a secondary drive by selecting the button "Choose Location."



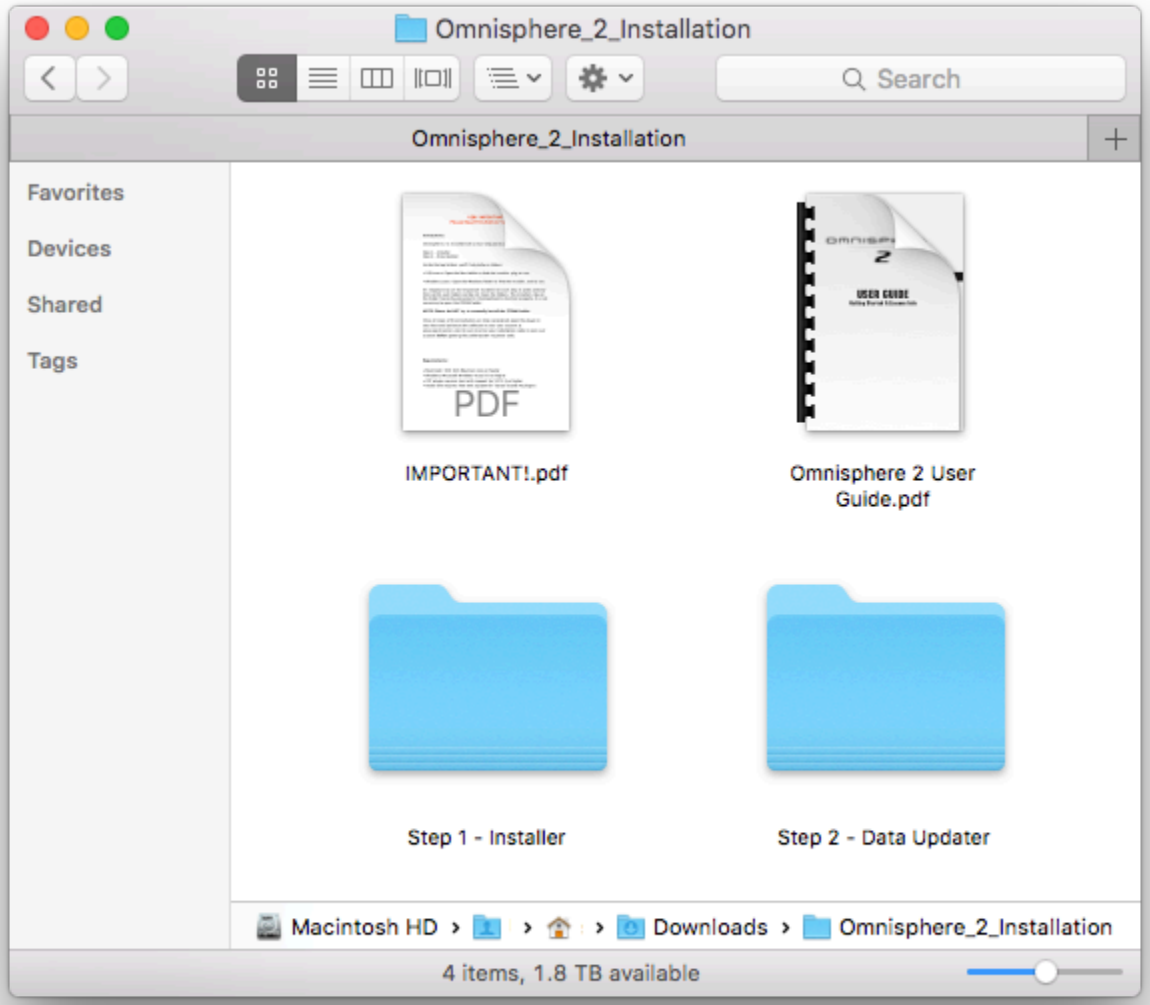
10. The large data files will now be copied to your selected drive. Allow for 30-60 minutes to install all of the data.



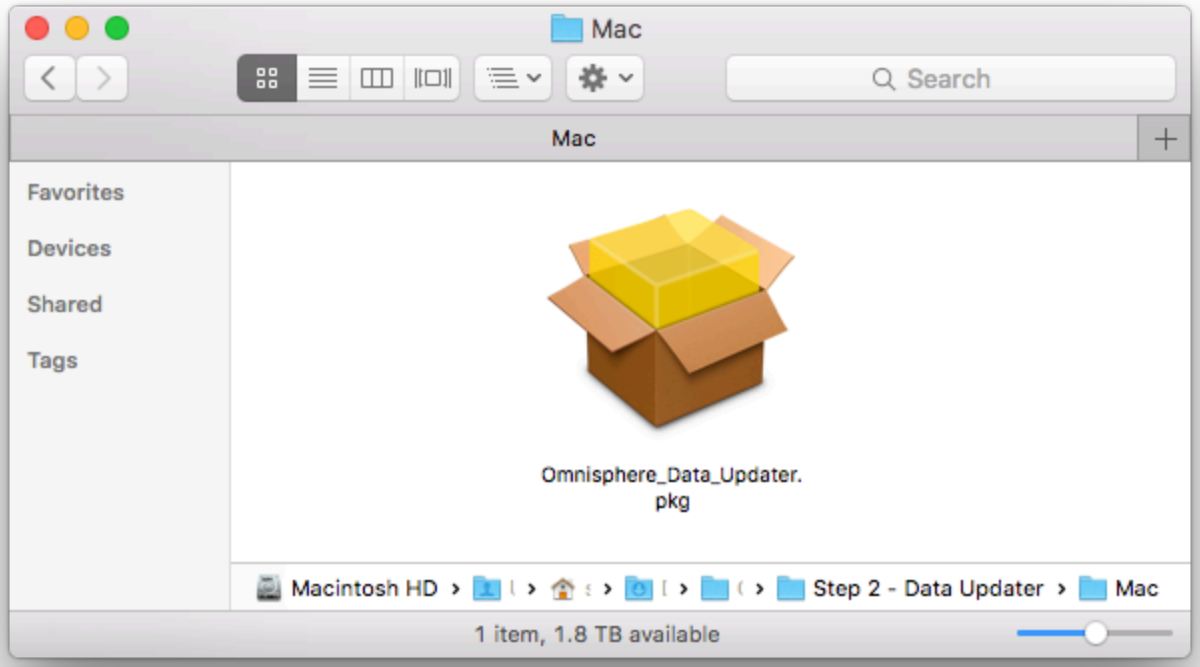
11. After the installation of Step 1 is complete, select “Close.”



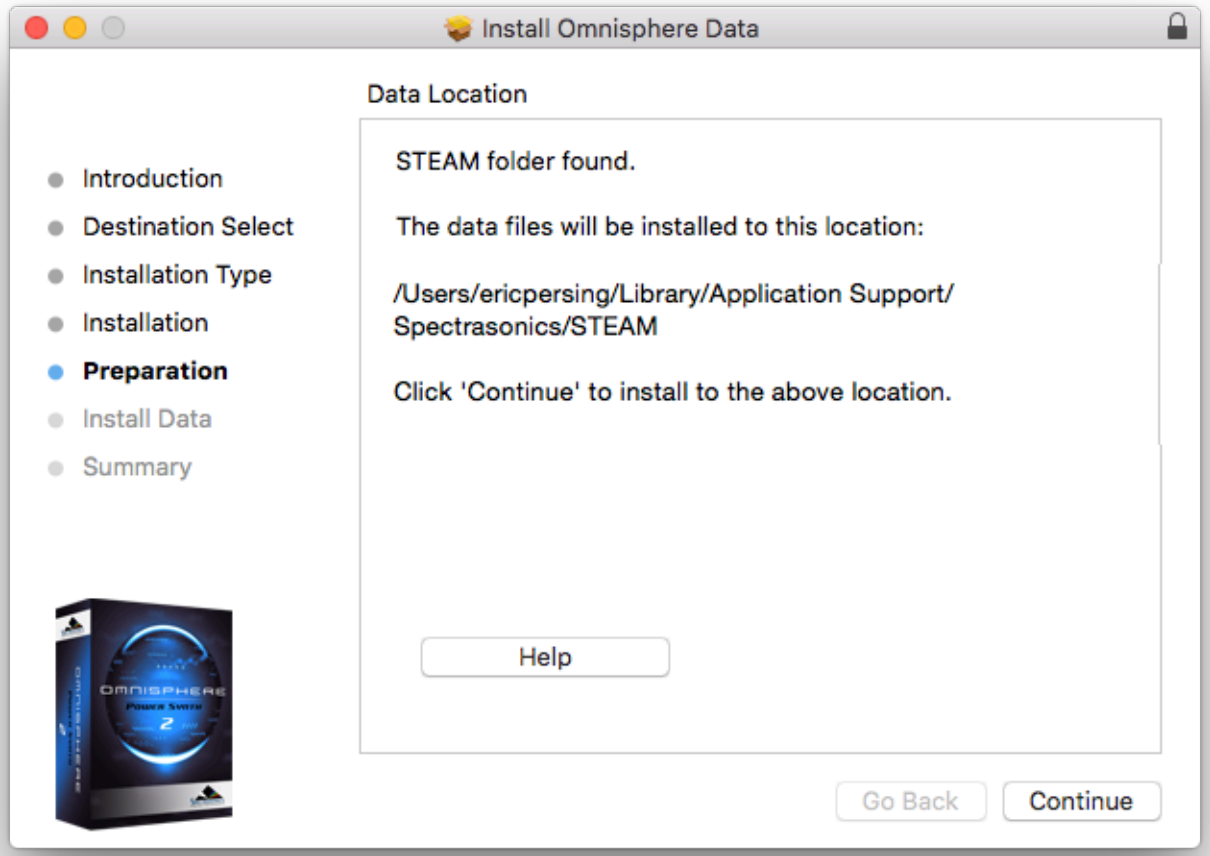
12. From the Omnisphere_2_Installation folder open the “Step 2 – Data Updater” folder and then open the “Mac” folder.



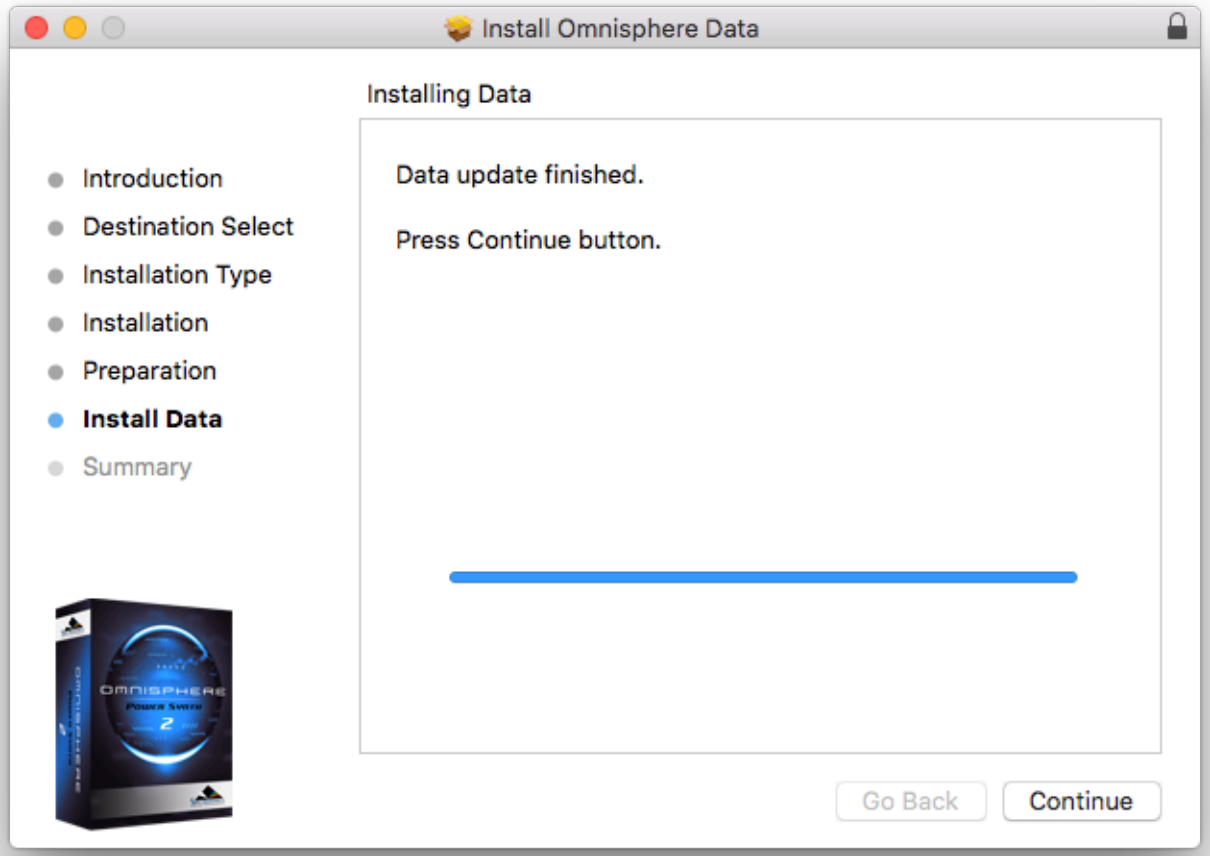
13. Run the “Omnisphere_Data_Updater.pkg” from inside the “Mac” folder.



14. Follow the default steps of the data updater, making sure that it locates your STEAM folder.



15. When the update has been installed, select “Close.” Now it’s time to open Omnisphere 2 in your host and authorize it.



Please consult the **Authorization** section for assistance with authorizing Omnisphere.

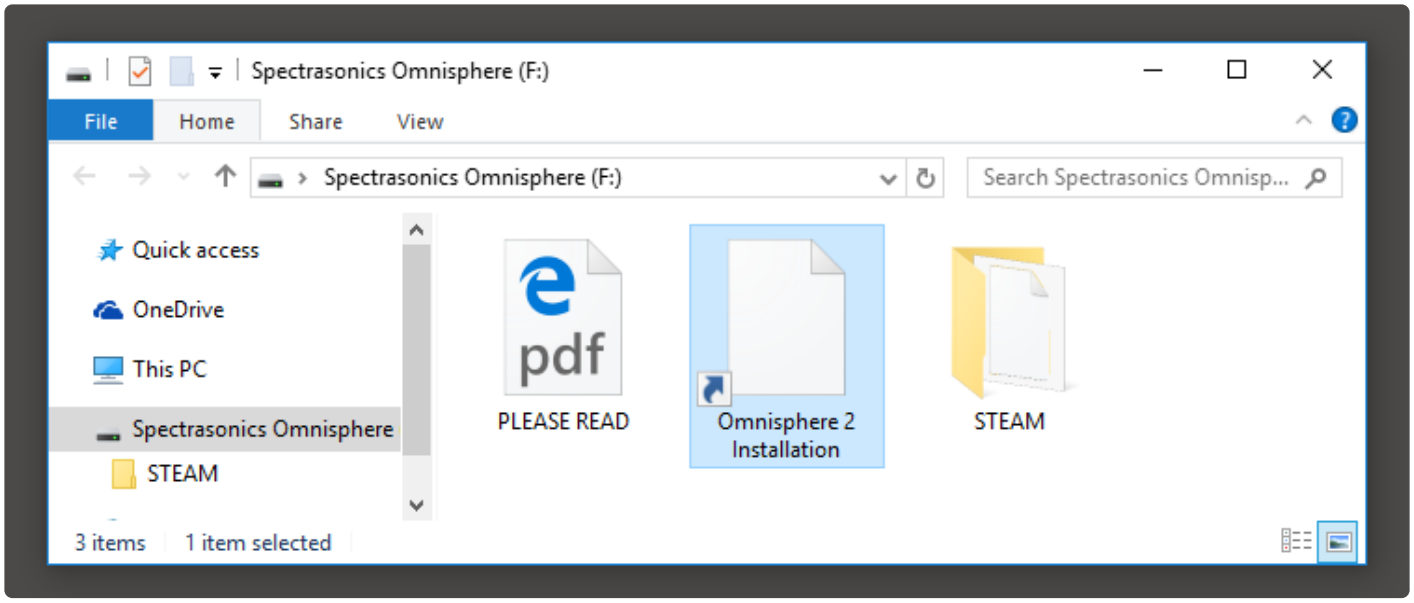
1.3.2. USB Drive (Win)

Follow this set of instructions to install Omnisphere 2 from your USB installation drive to your Windows system. You'll need over 64GB of free space available on your hard drive in order to install the instrument.

NOTE: These screen shots are taken in Windows 10. Installation on other versions of Windows may look somewhat different.

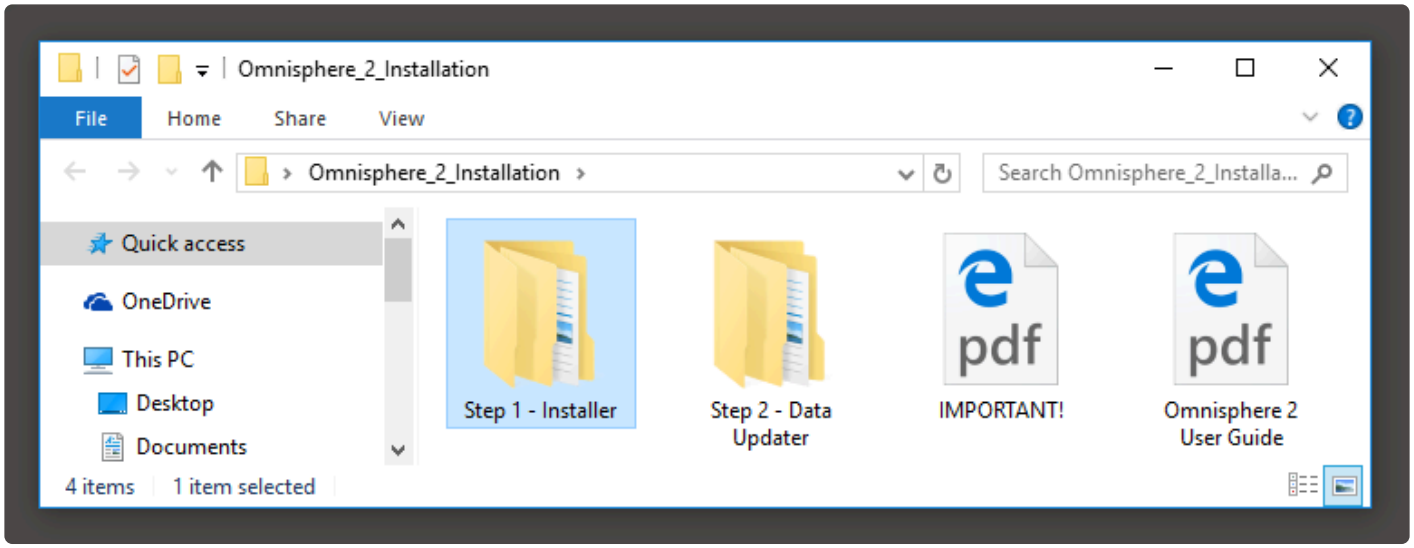
Omnisphere 2 Installation

1. Connect the Omnisphere installation drive to a USB port. Open the drive "Spectrasonics Omnisphere" and double-click the file "Omnisphere 2 Installation.url."

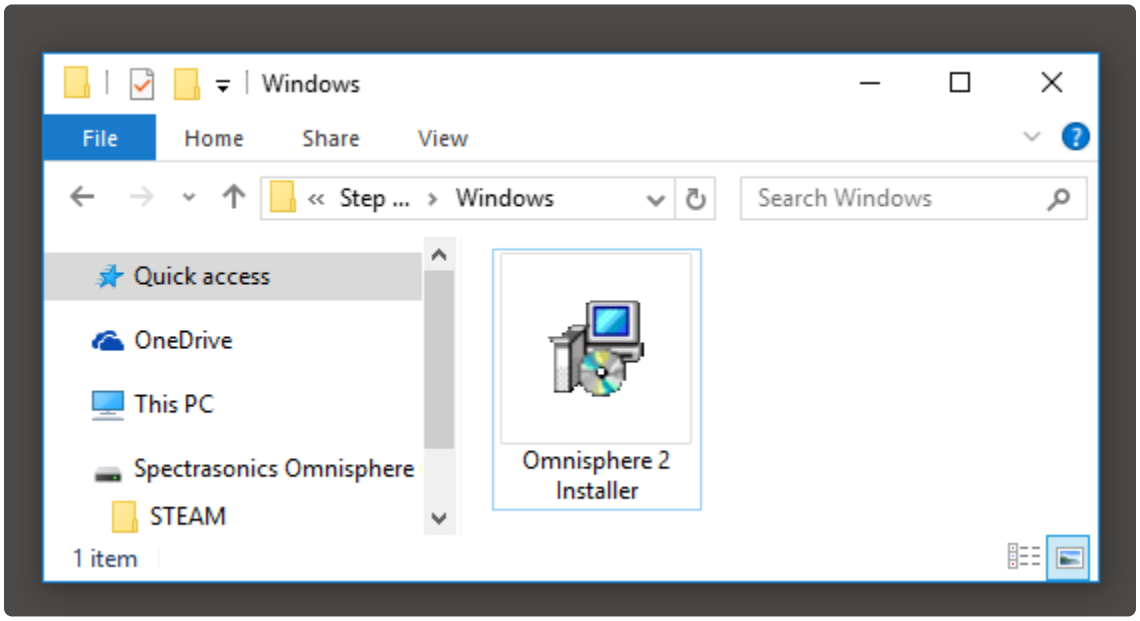


2. Log in to your Spectrasonics User Account and select the DOWNLOAD button to download the current installers to your PC.

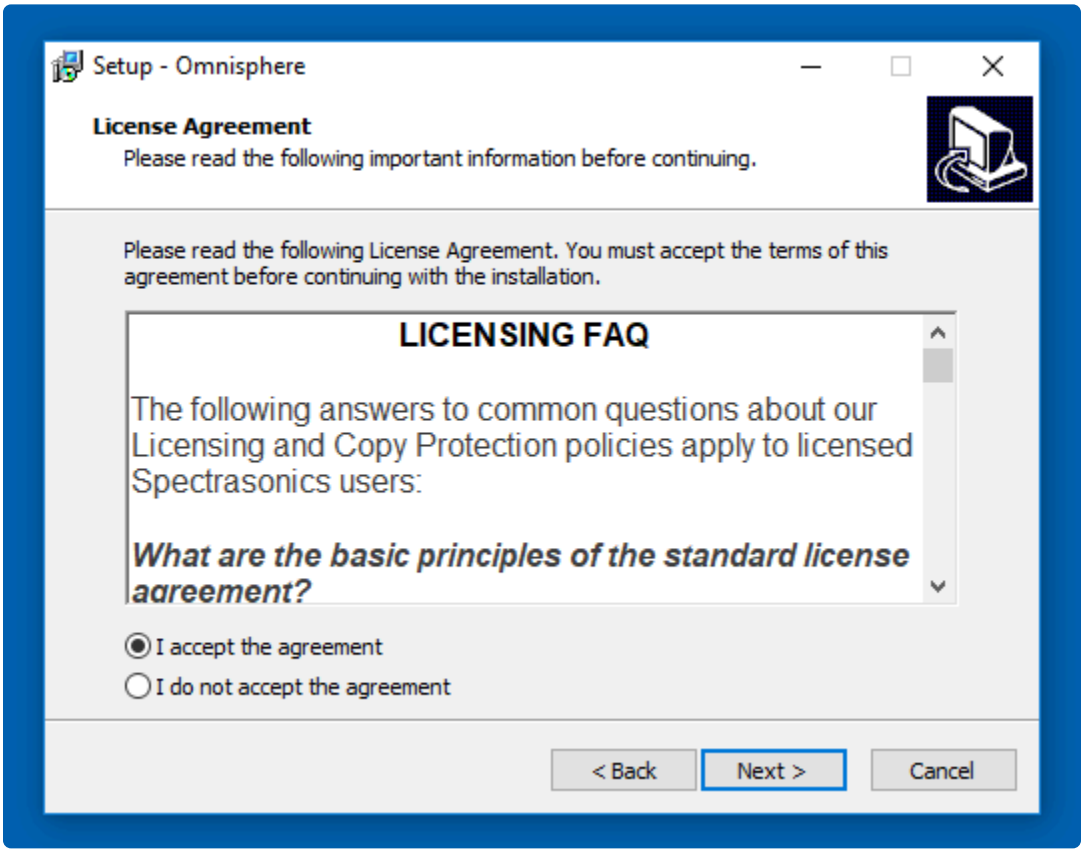
3. From your Downloads folder, open the “Omnisphere_2_Installation” folder, then open the “Step 1 – Installer” folder.



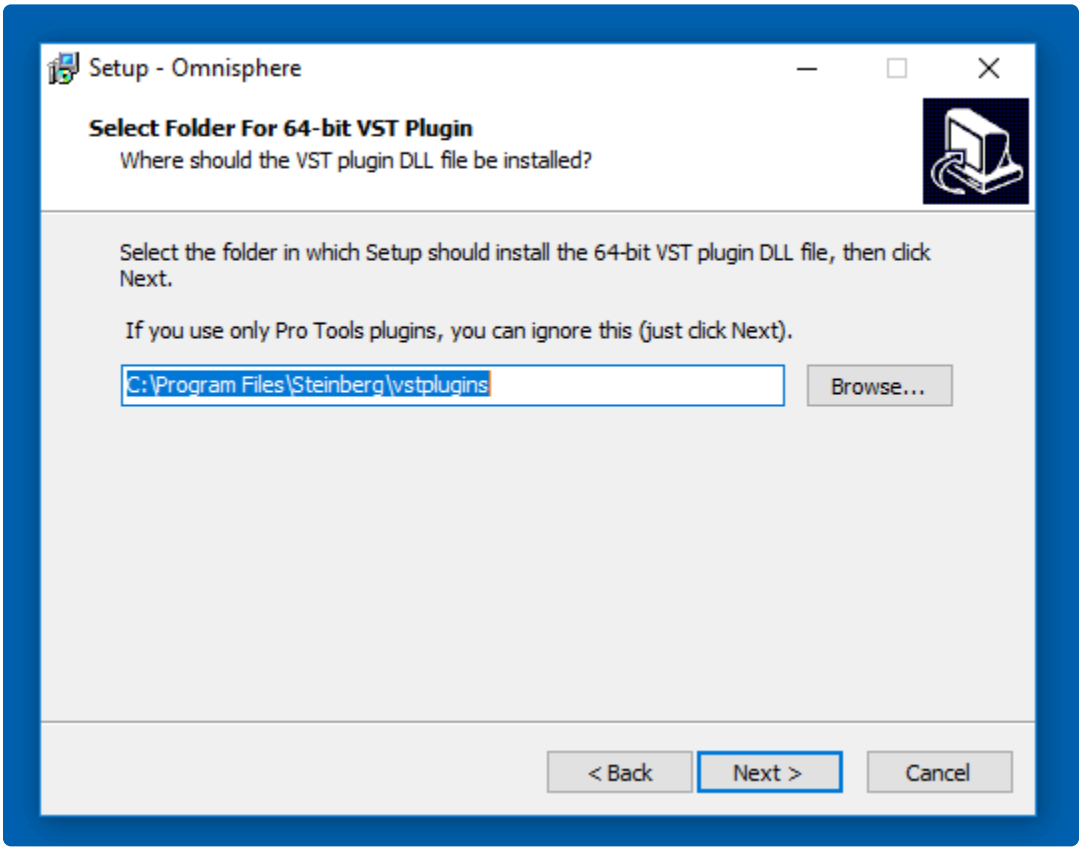
4. Open the “Windows” folder inside of “Step 1 – Installer.” Double-click “Omnisphere 2 Installer.exe” to begin the installation of Omnisphere 2.



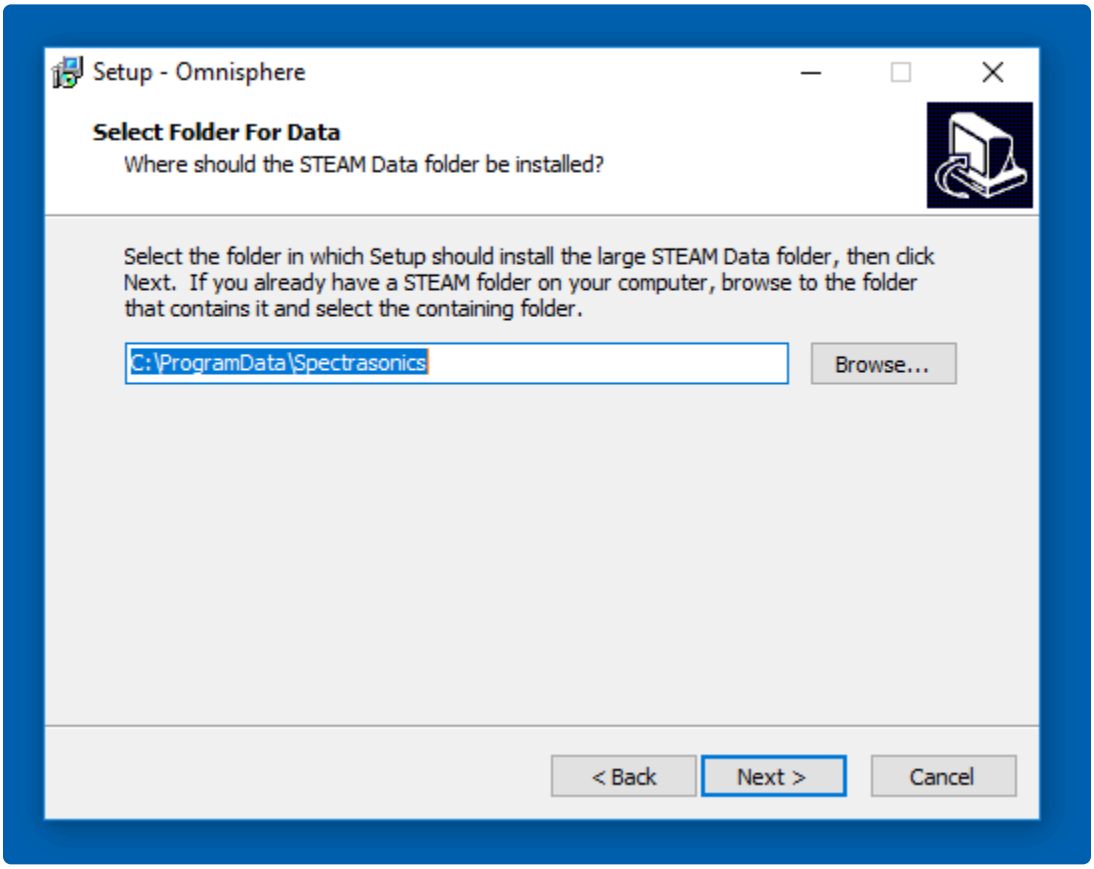
5. Follow the steps as you’re guided through the installation process. Make sure to review the Installation Info and Licensing FAQs and accept the license agreement.



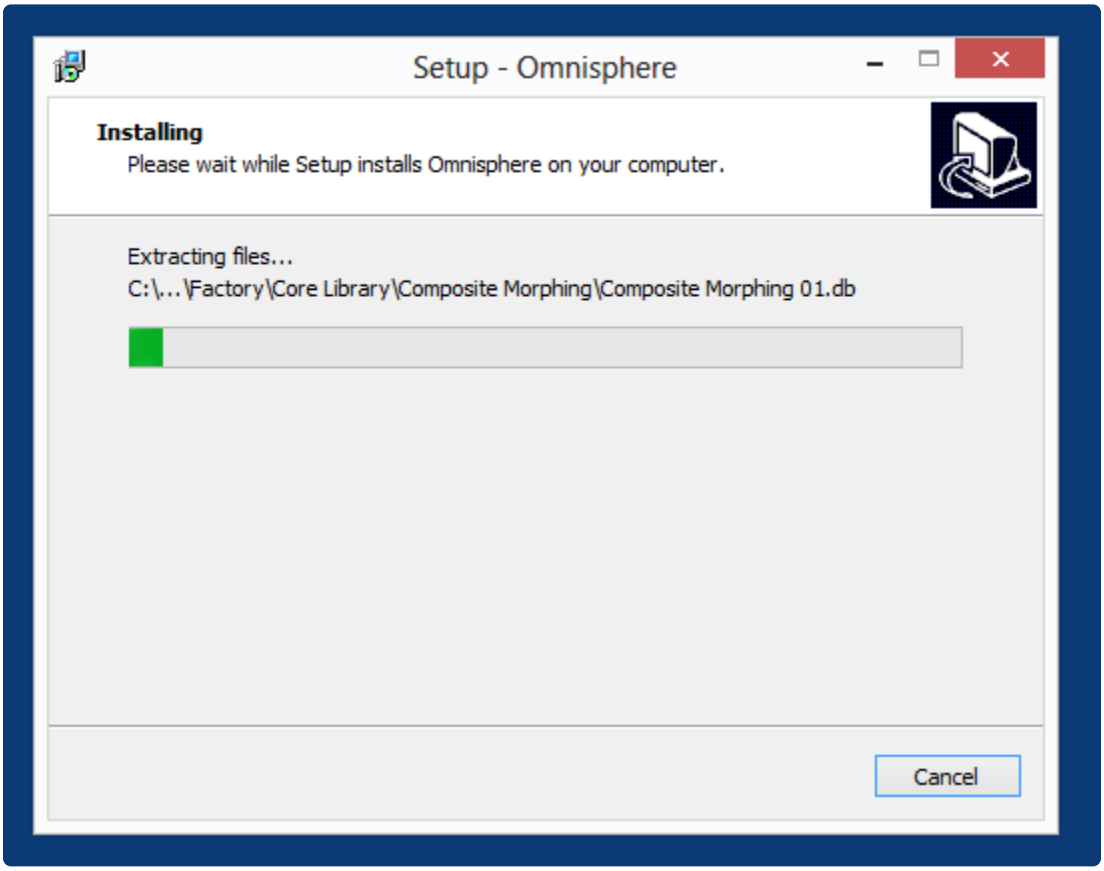
6. At the “Select Folder For 64-bit VST Plugin” step select the VST plug-in path on your system to install Omnisphere into. By default the 64-bit plugin will be installed in **C:ProgramData\Steinberg\vstplugins** but you can choose a different path (your host must support 64-bit plug-ins.)



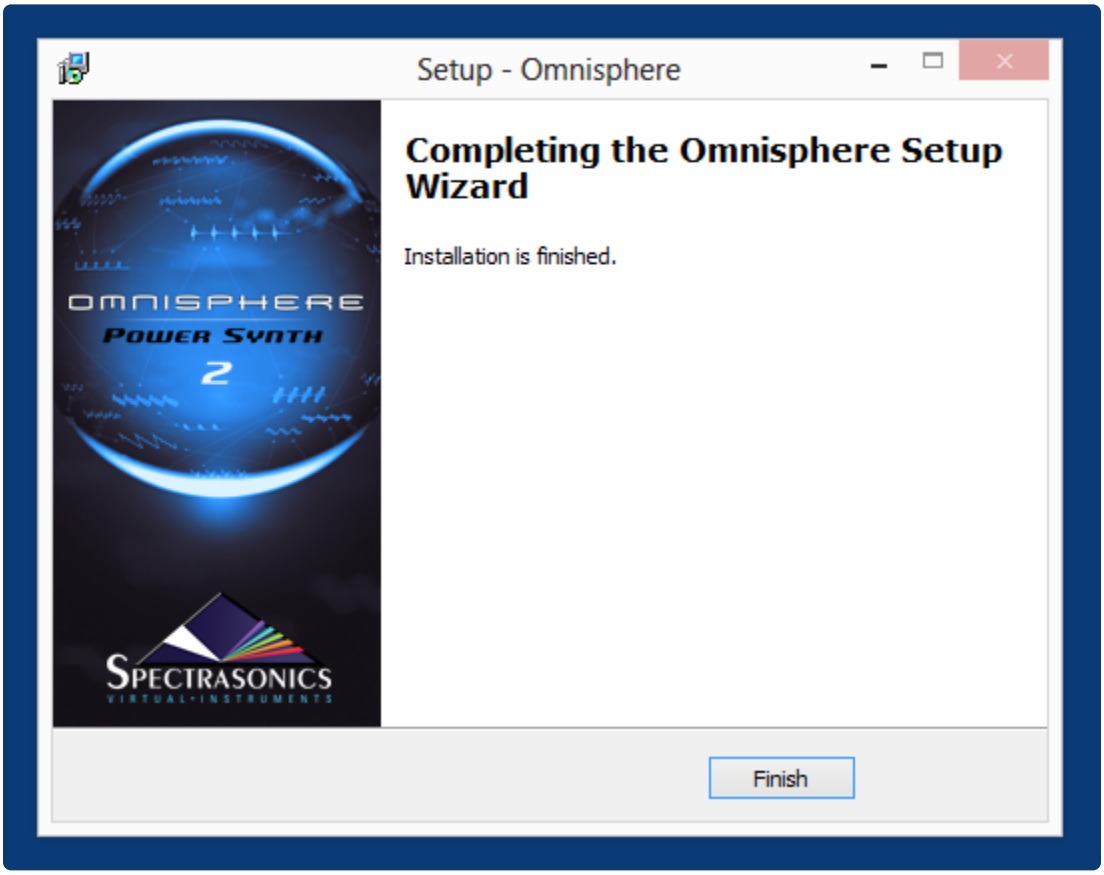
7. The default location of the large Omnisphere data files will be displayed next. If you wish to install the large Core Library files to a secondary drive, click the “Browse” button and choose a different location.



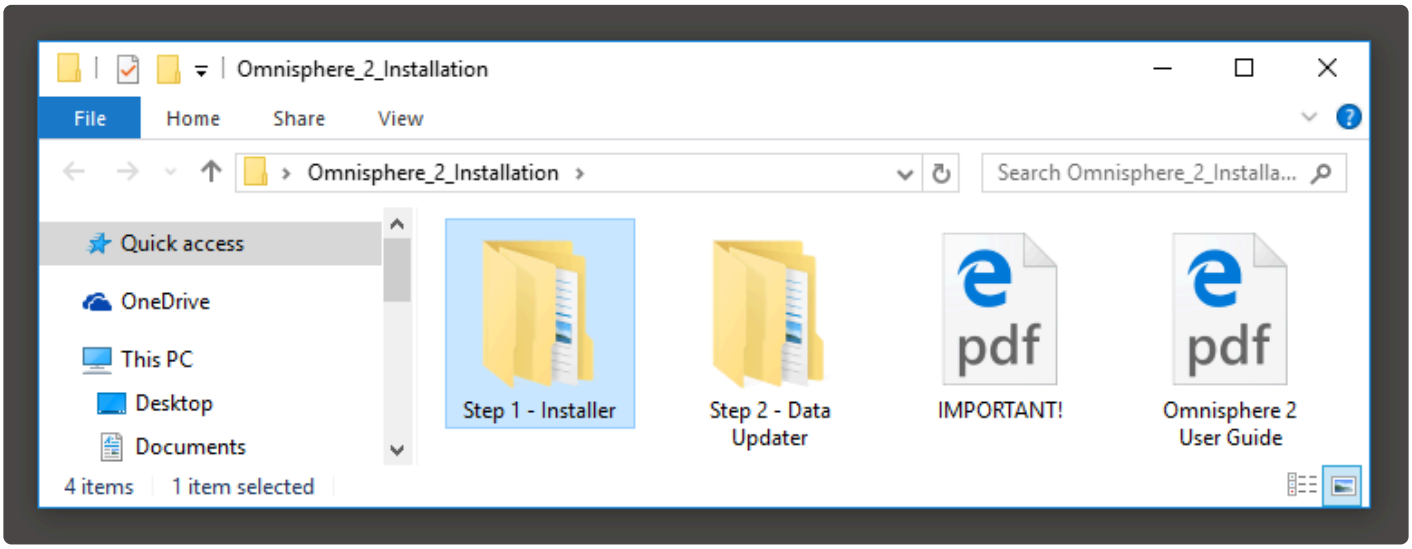
8. Once the installation paths have been confirmed, the installation will begin.



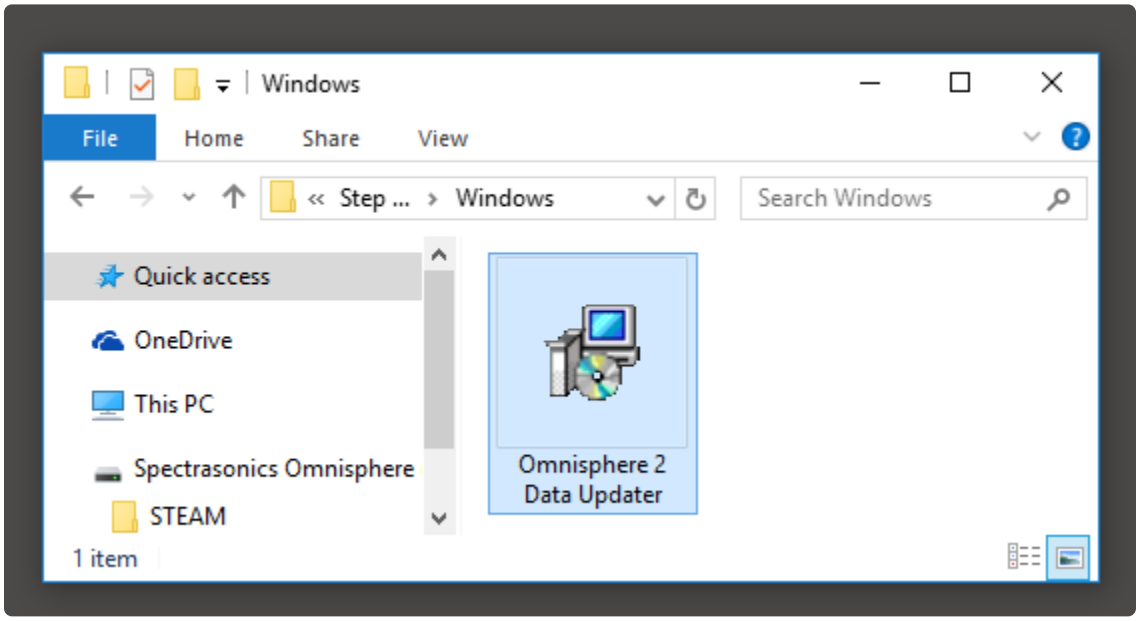
9. After the installation is complete, select “Finish.”



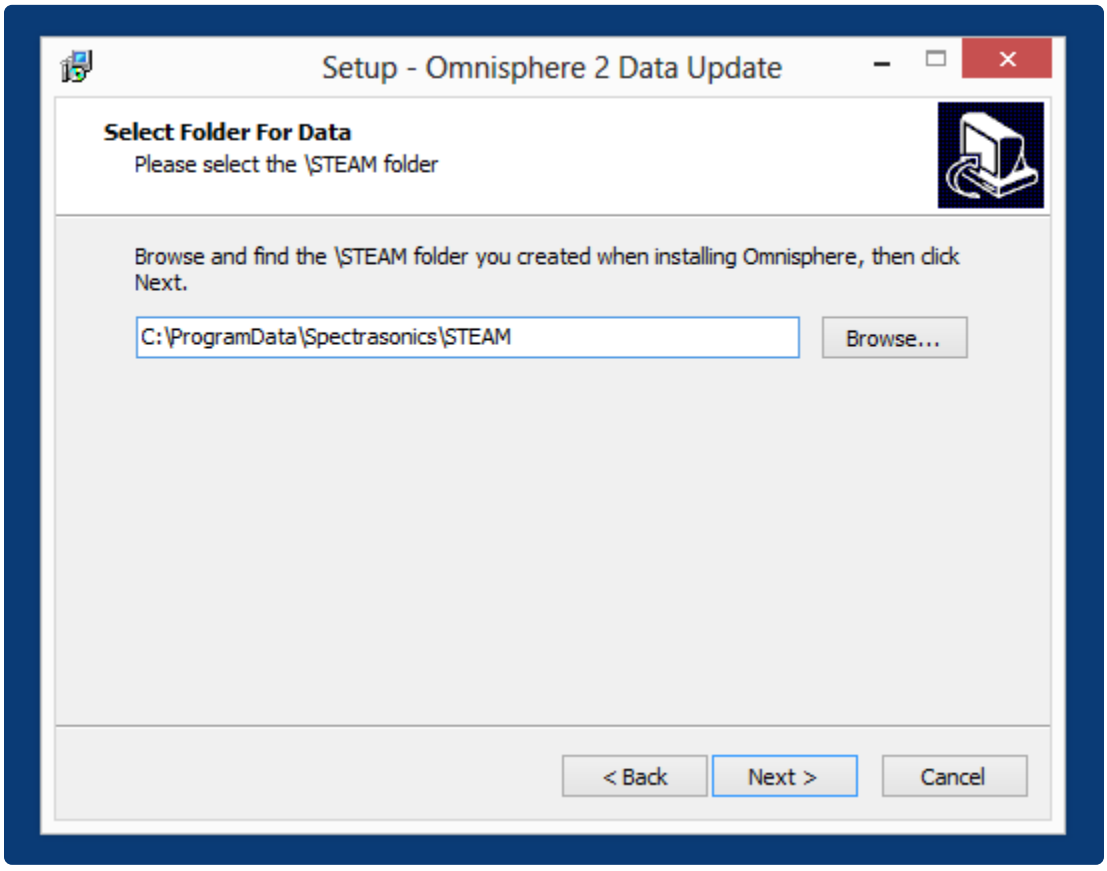
10. From your Downloads folder re-open the “Omnisphere_2_Installation” folder, then open the “Step 2 – Data Updater” folder.



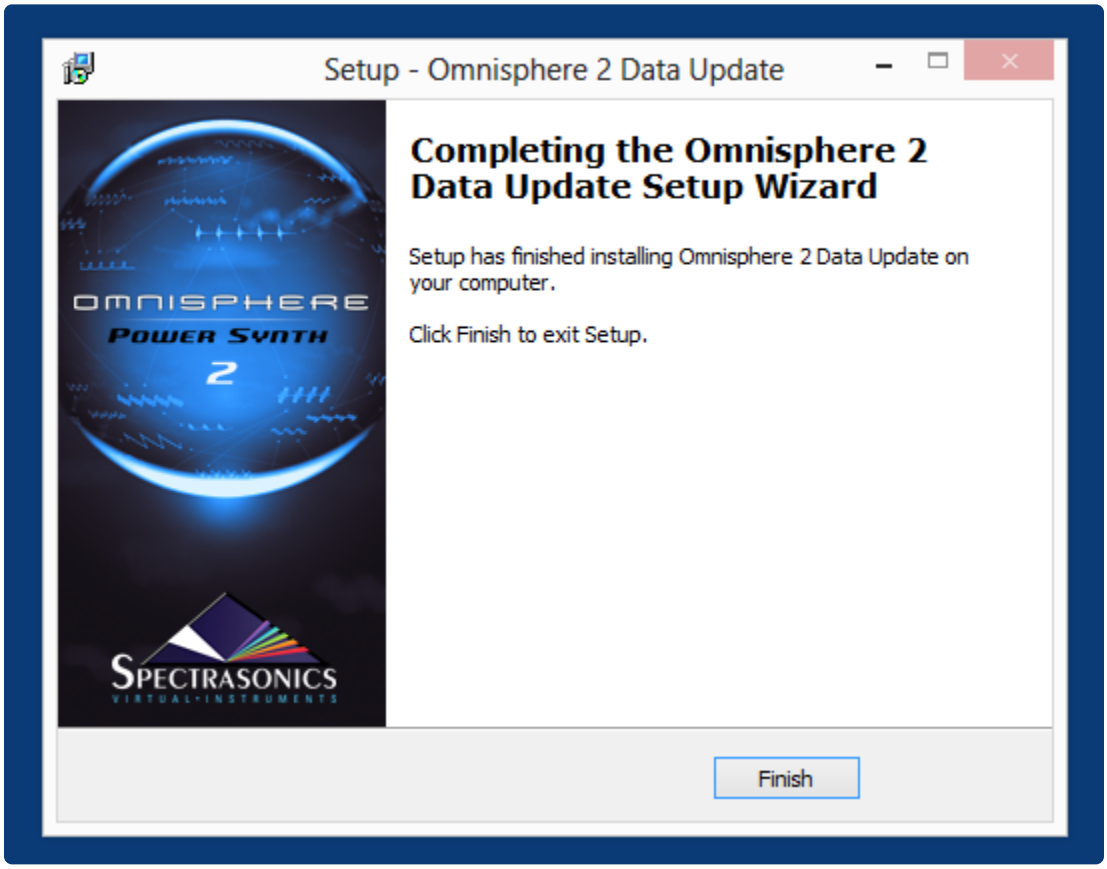
11. Run the “Omnisphere 2 Data Updater.exe.”



12. Make certain that the Omnisphere 2 Data Updater selects the correct STEAM folder.



13. When the update has been installed, select “Finish.” Now it’s time to open Omnisphere 2 in your host and authorize it.



Please consult the **Authorization** section for assistance with authorizing Omnisphere.

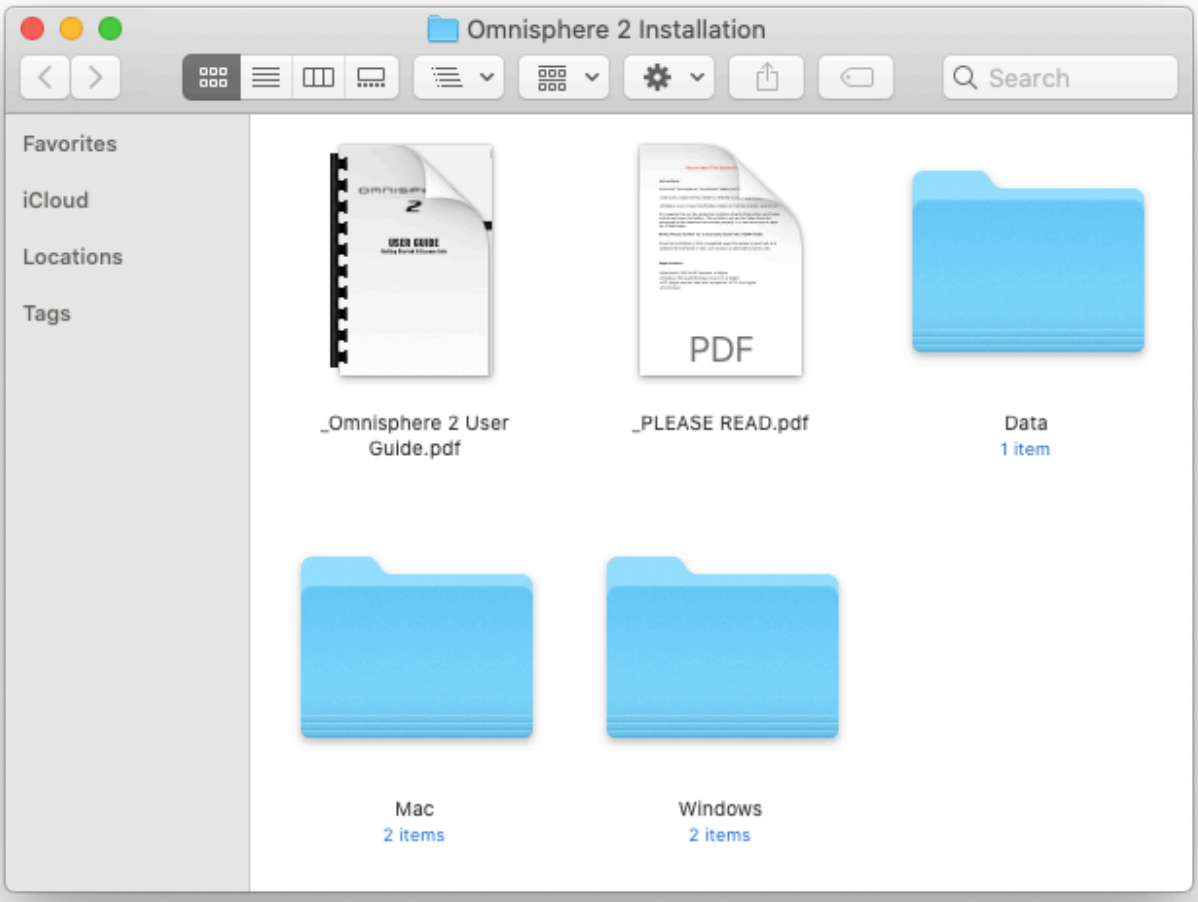
1.3.3. Download (Mac)

Omnisphere 2 is available as a download for registered users through our **Webstore/Techshop**. Once you download Omnisphere 2 via the Download Manager, follow this set of instructions to install it on your Mac system. You'll need roughly 128GB of free space available on your hard drive in order to continue (64GB for Omnisphere and 64GB for the downloaded installer, which can be removed, later).

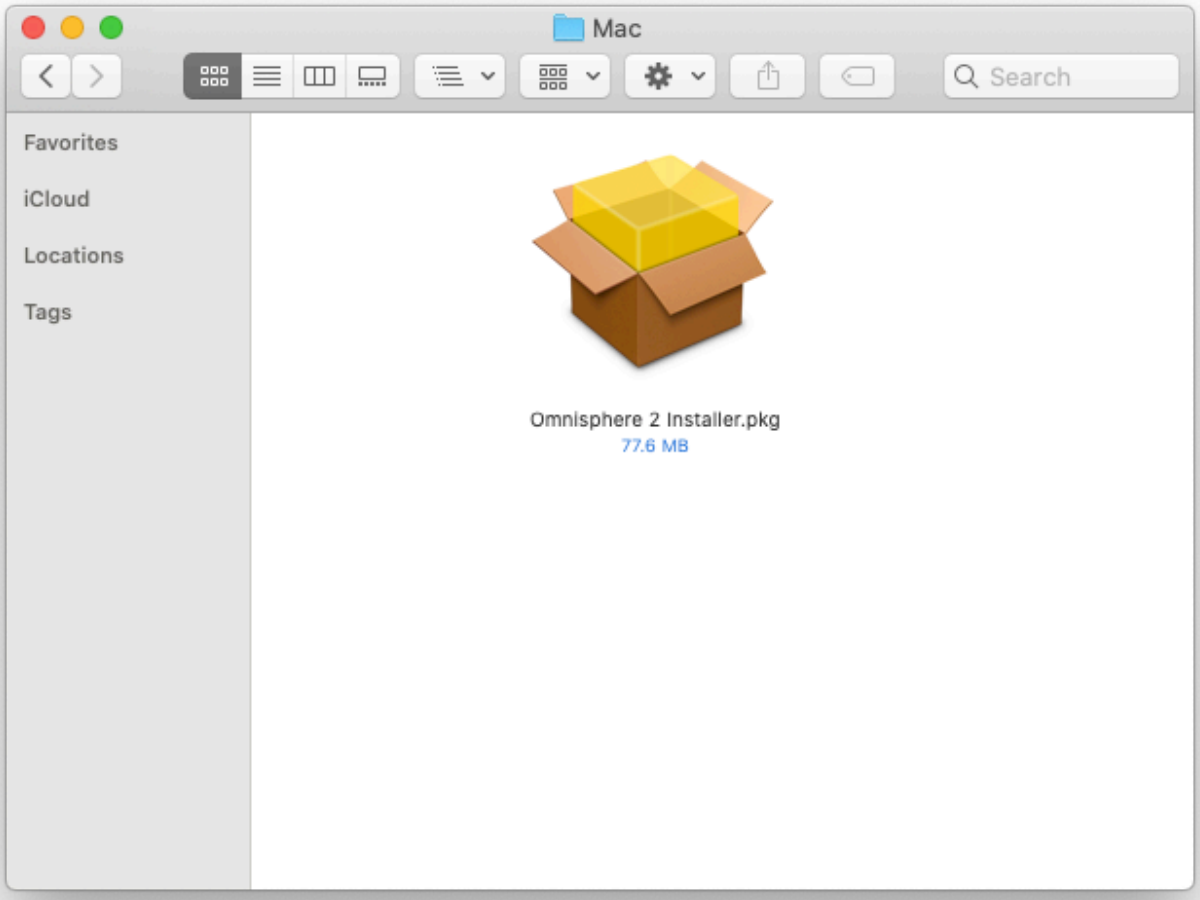
NOTE: These screen shots are taken in macOS 10.15 (Catalina). Prior versions of macOS may have different options when installing.

Omnisphere 2 Installation

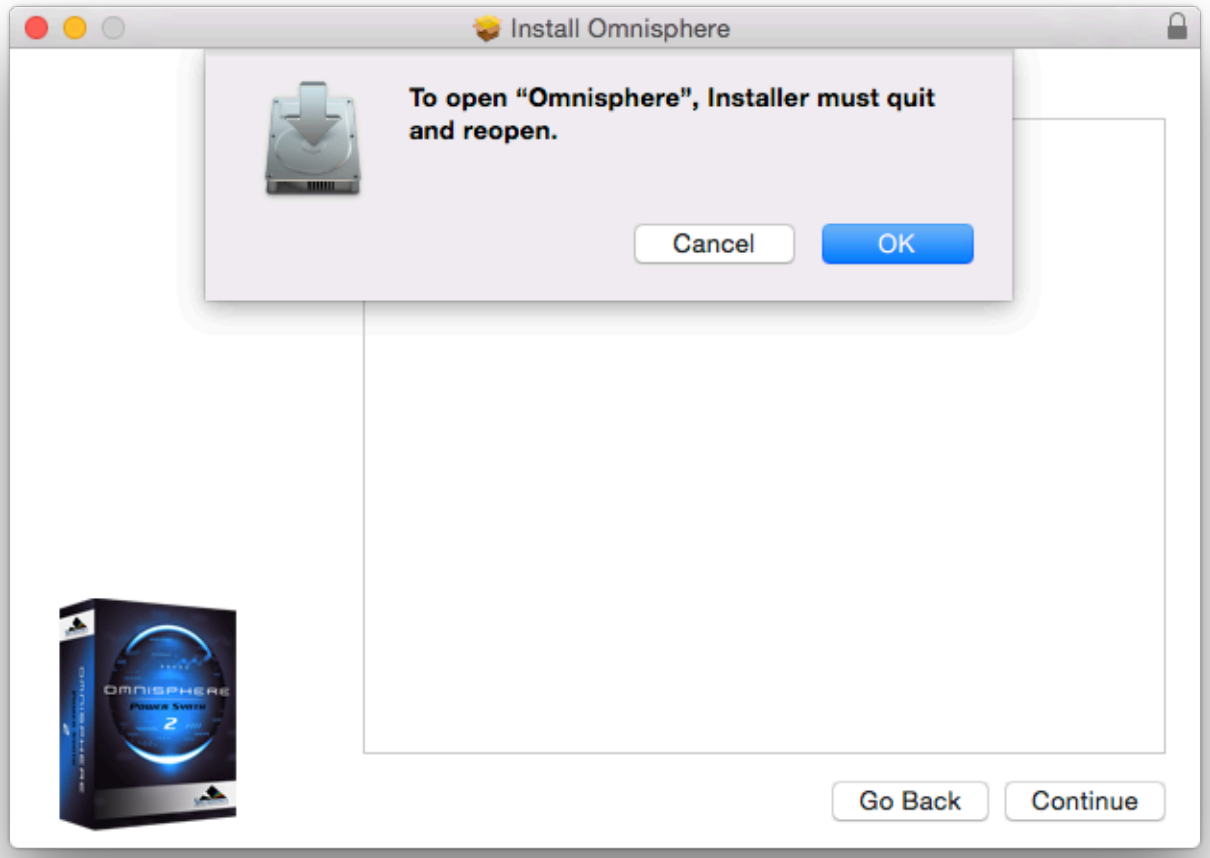
1. Open the folder "Omnisphere 2 Installation."



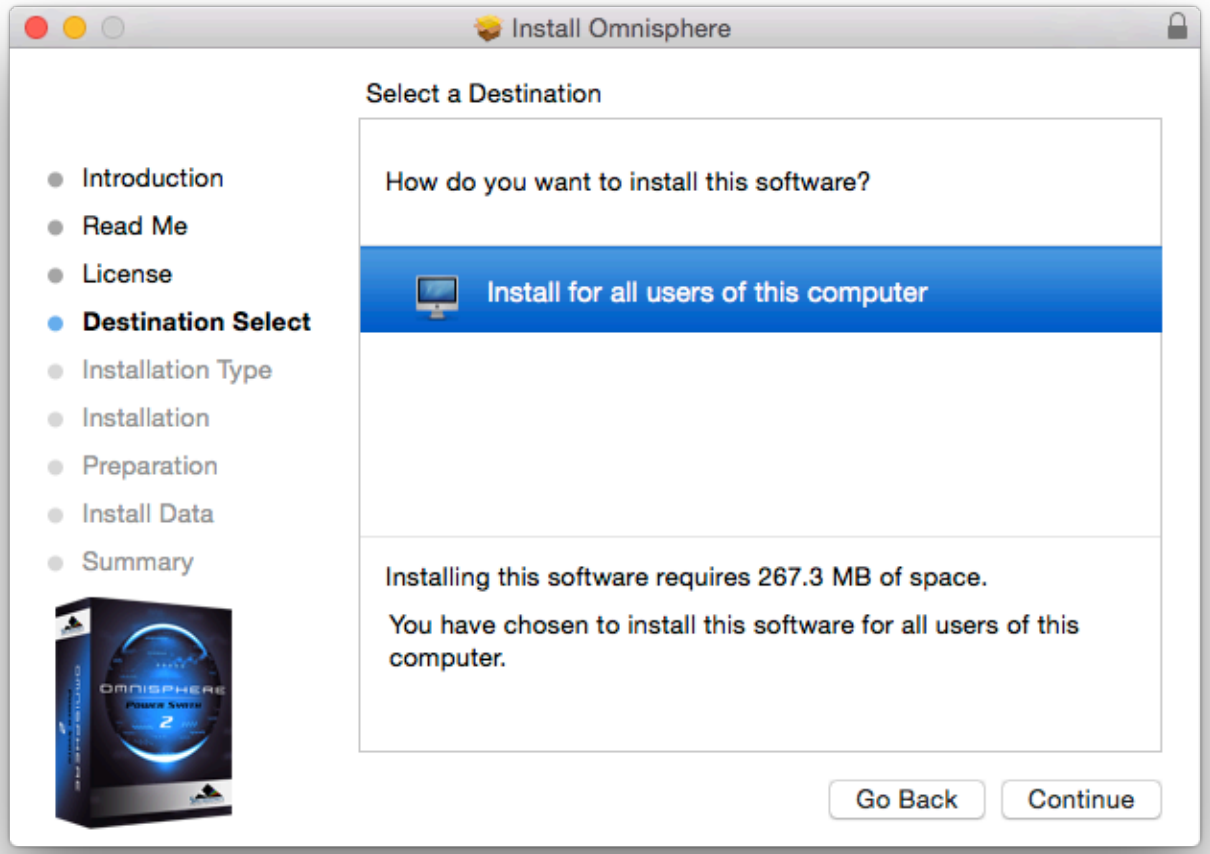
2. Open the Mac folder, then double-click "Omnisphere 2 Installer.pkg" to begin the installation.



3. Double-click the file “Omnisphere 2 Installer.pkg.” The installer might need to quit and reopen to ensure support for older versions of OS X, so just click “OK.”



4. Follow the steps as you’re guided through the installation process. Make sure to review the Installation Info and Licensing FAQ. Then at the “Destination Select” step, choose the option “Install for all Users of this computer.” After the Installation Type information you’ll enter your system password to start the installation process.



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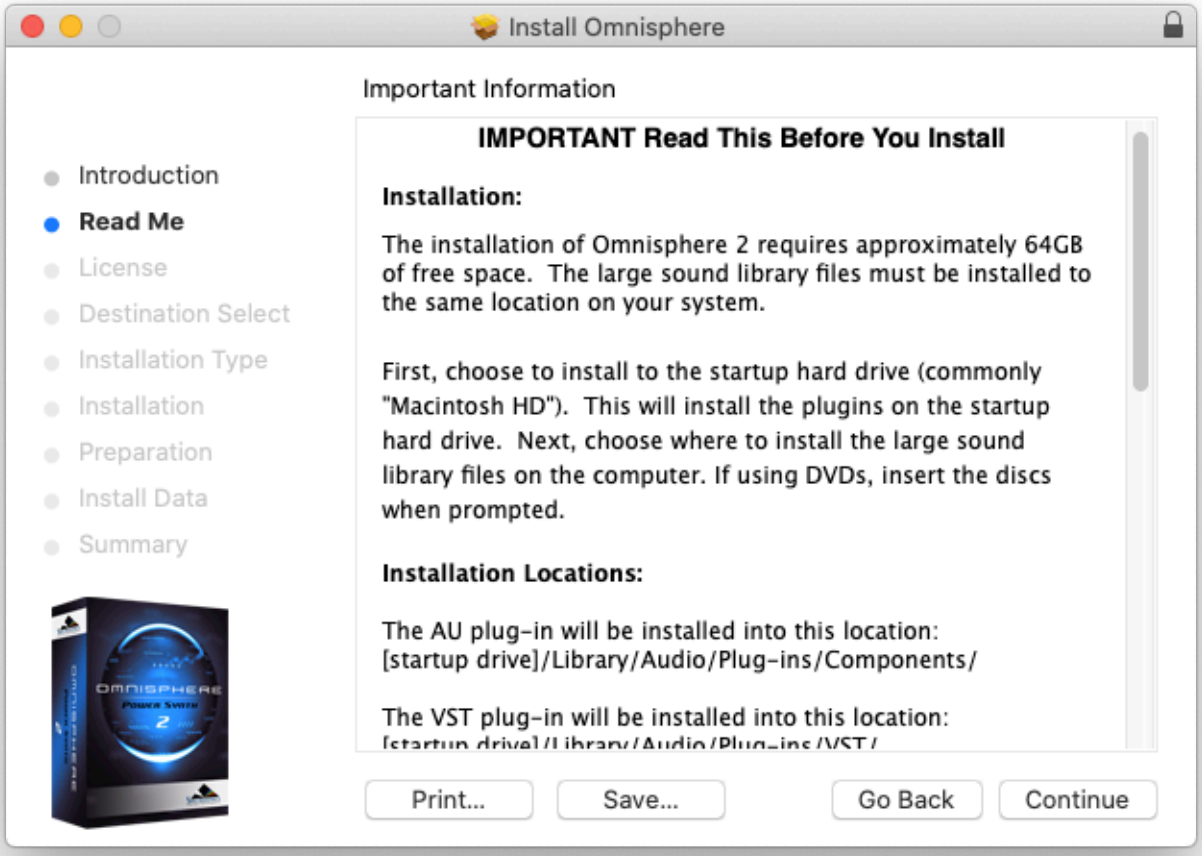
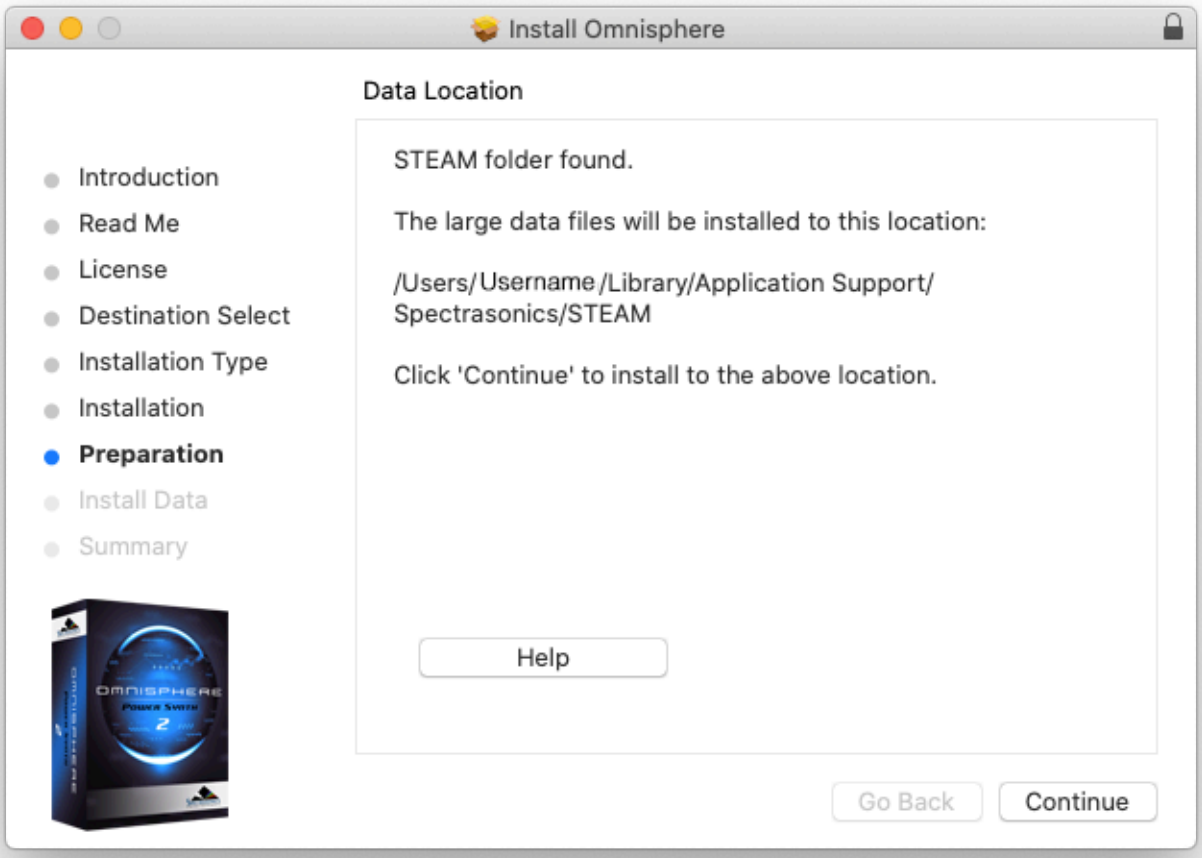
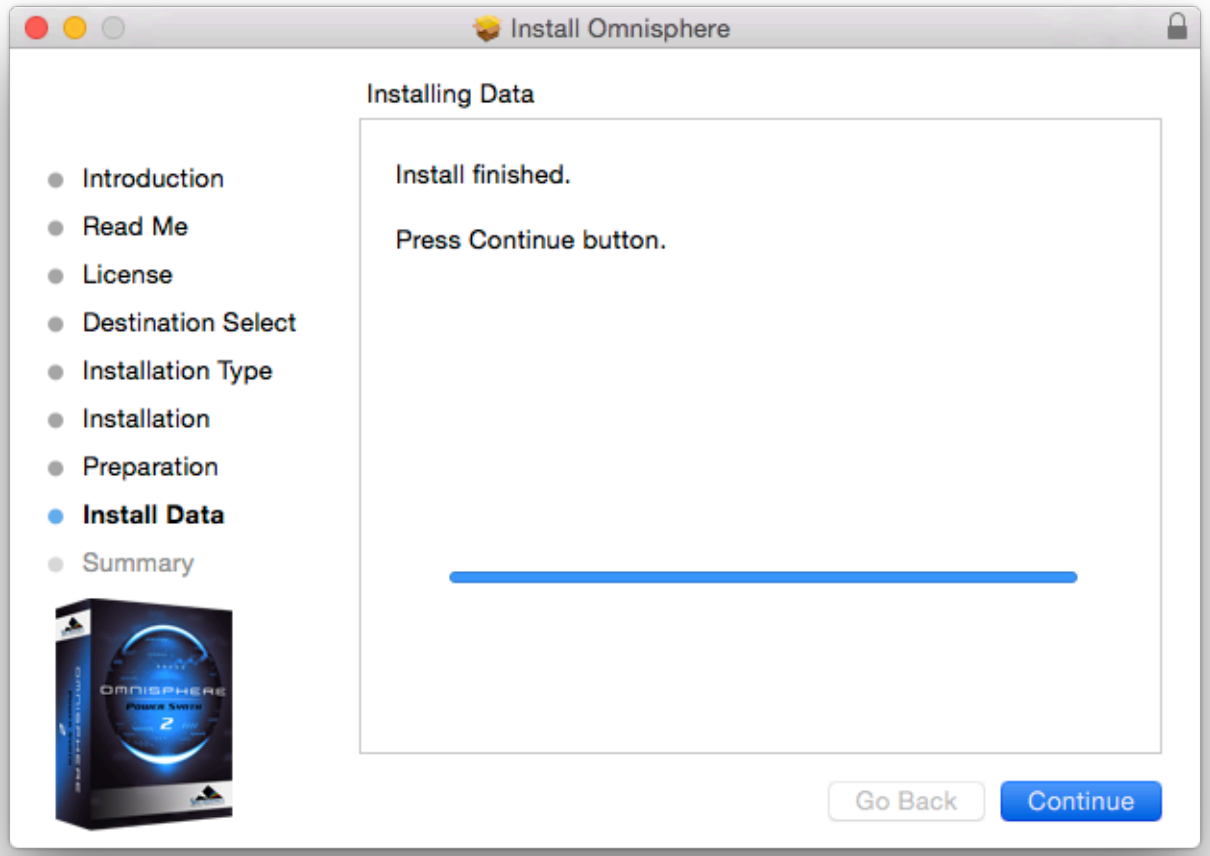


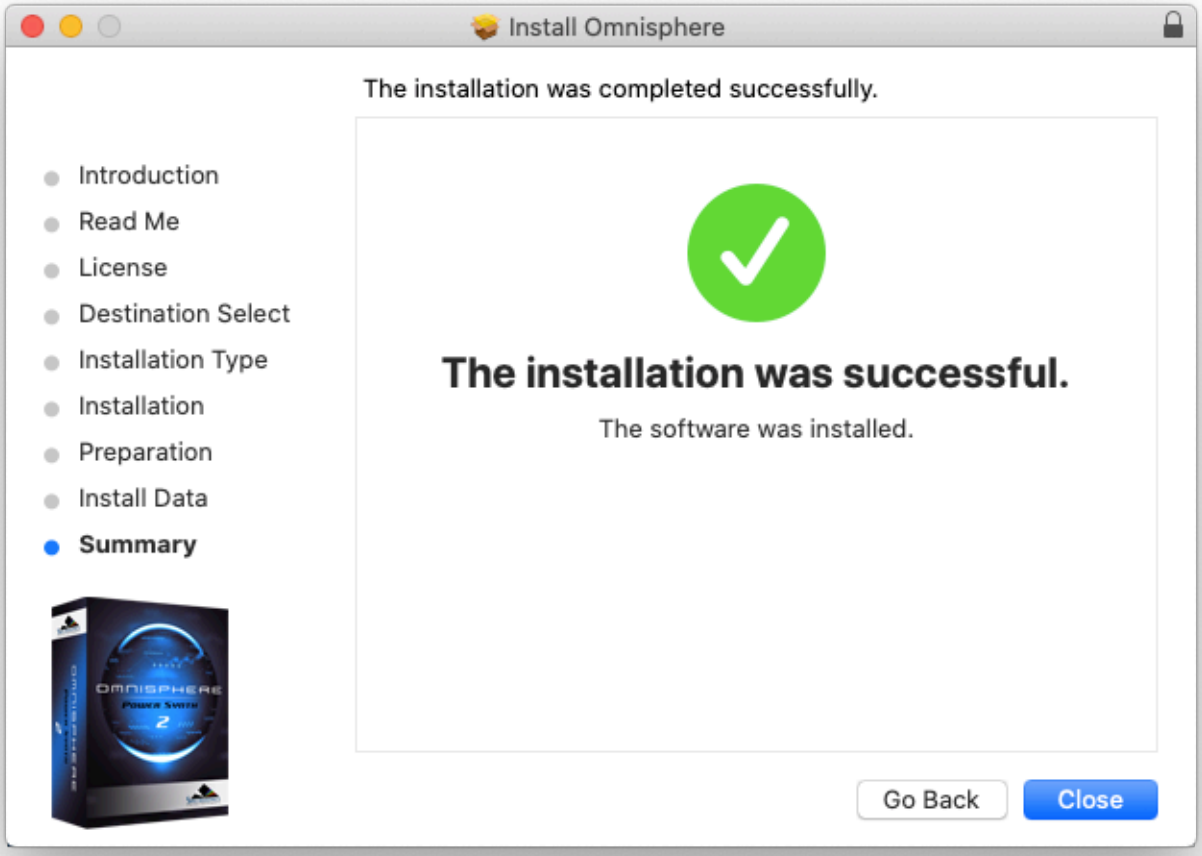
6. Next, at the Preparation step, you'll select where to install the large Core Library files. By default they will be installed to your system drive or you can choose a secondary drive by selecting the button "Choose Location."



7. The large data files will now be copied to your selected drive. Allow for 30–60 minutes to install all of the data.



8. After the installation is complete, select “Close.” Now it’s time to open Omnisphere 2 in your host and authorize it.



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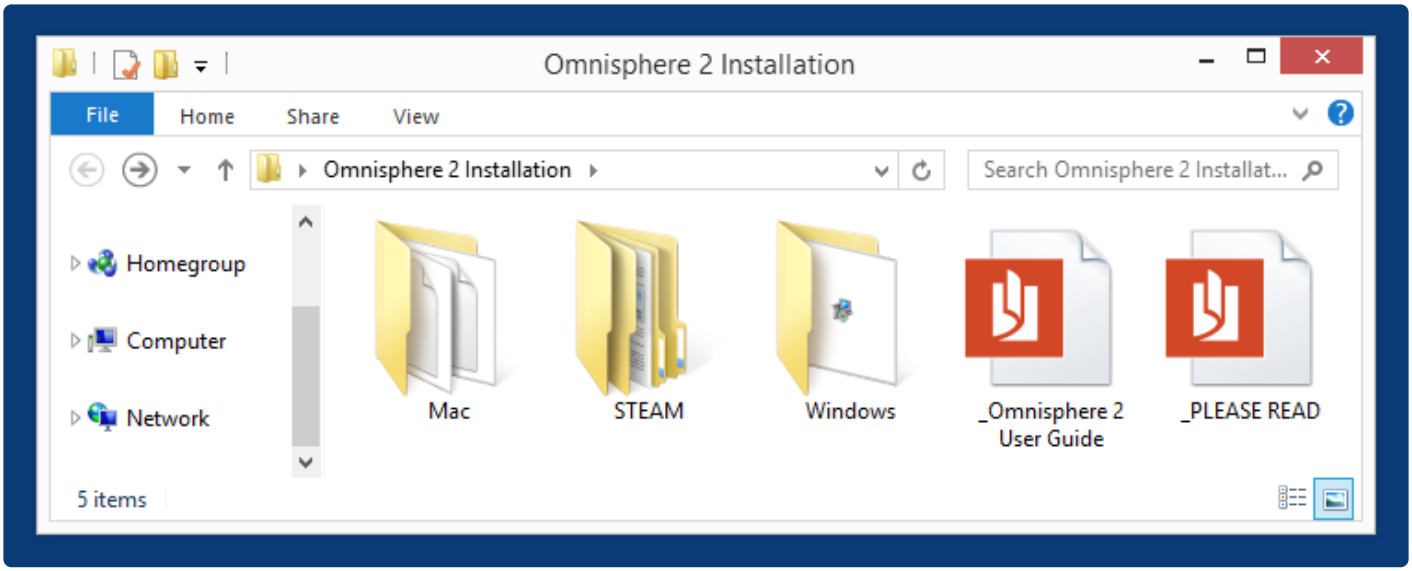
Omnisphere 2 is available as a download for registered users through our **Webstore/Techshop**. Once you downloaded Omnisphere 2 via the Download Manager, follow this set of instructions to install it on your Windows system. You'll need roughly 128GB of free space available on your hard drive in order to continue (64GB for Omnisphere and 64GB for the downloaded installer, which can be removed, later).

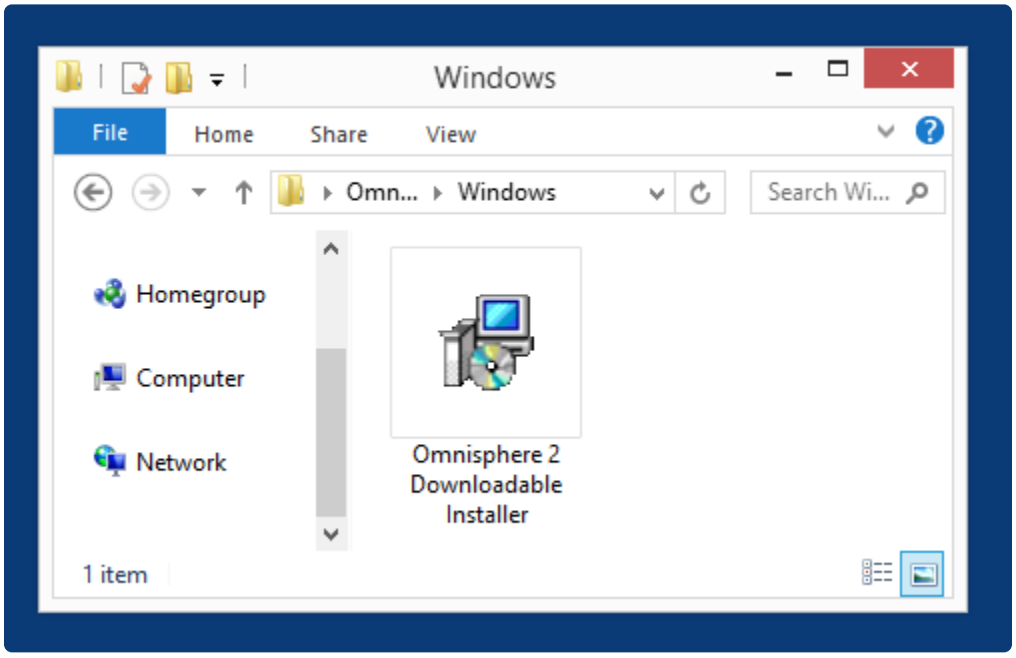
NOTE: These screen shots are taken in Windows 10. Installation on other versions of Windows may look somewhat different.

Omnisphere 2 Installation

1. From your Downloads folder, open the "Omnisphere 2 Installation" folder and then the folder called "Windows."

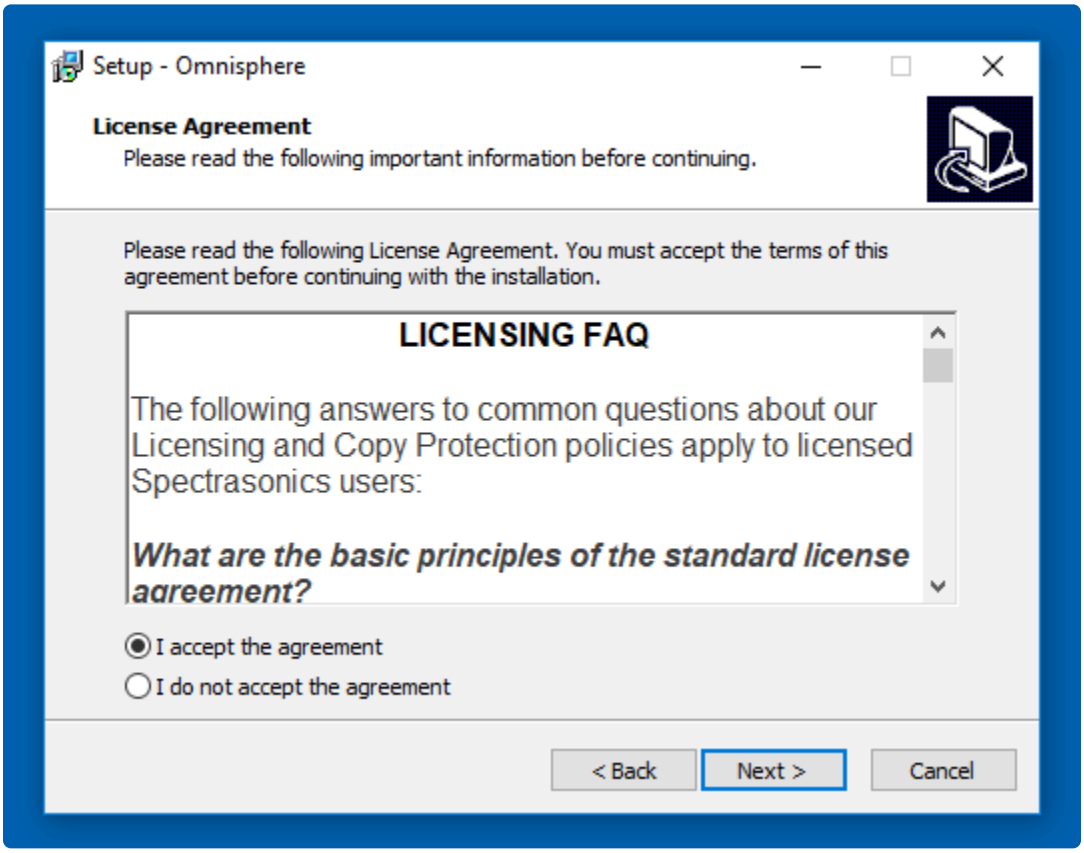


2. Double-click the file "Omnisphere 2 Downloadable Installer.exe."

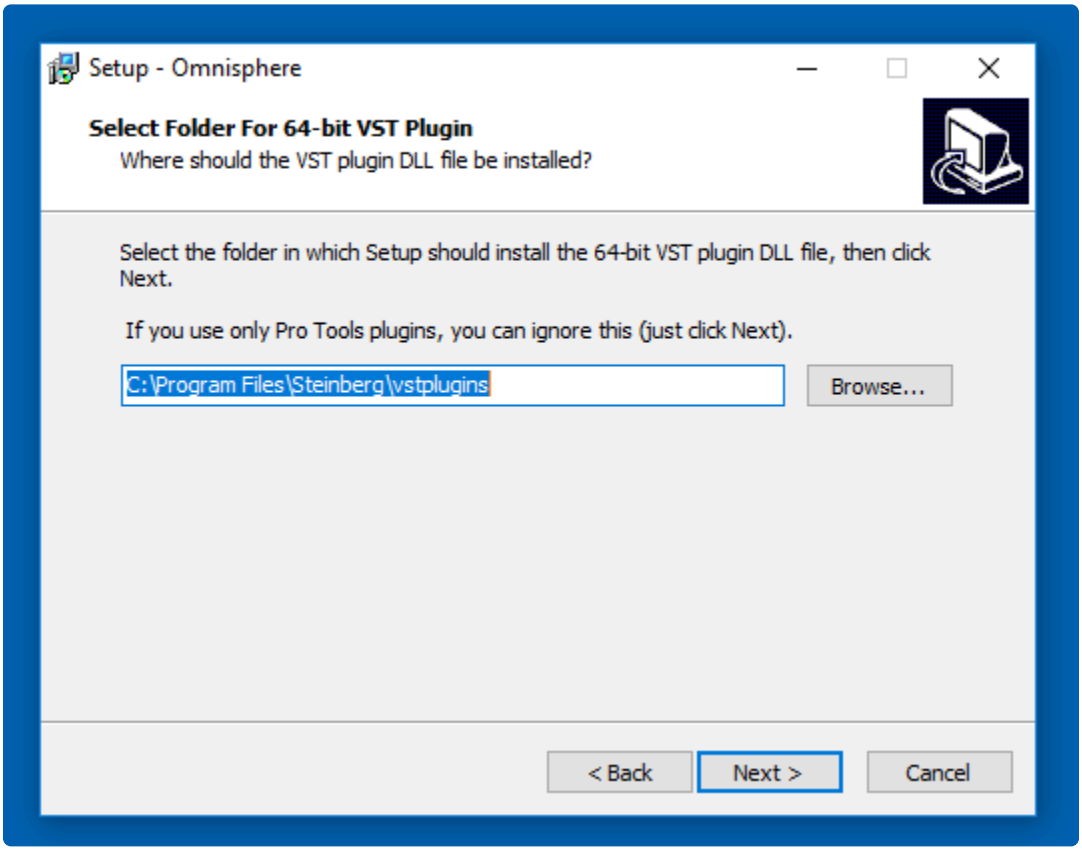


3. Click “Next” to begin the Omnisphere 2 installation process.

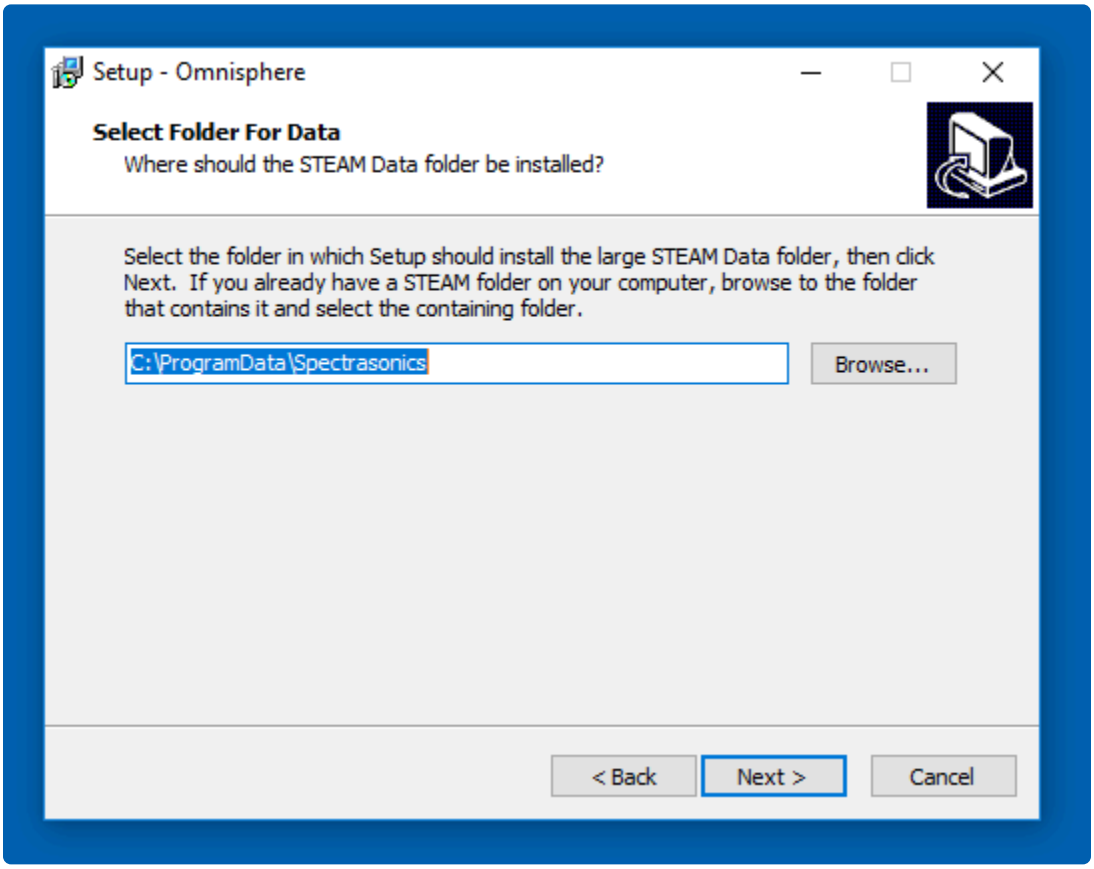
4. Follow the steps as you’re guided through the installation process. 5. Make sure to review the Installation Info and Licensing FAQs and accept the license agreement.



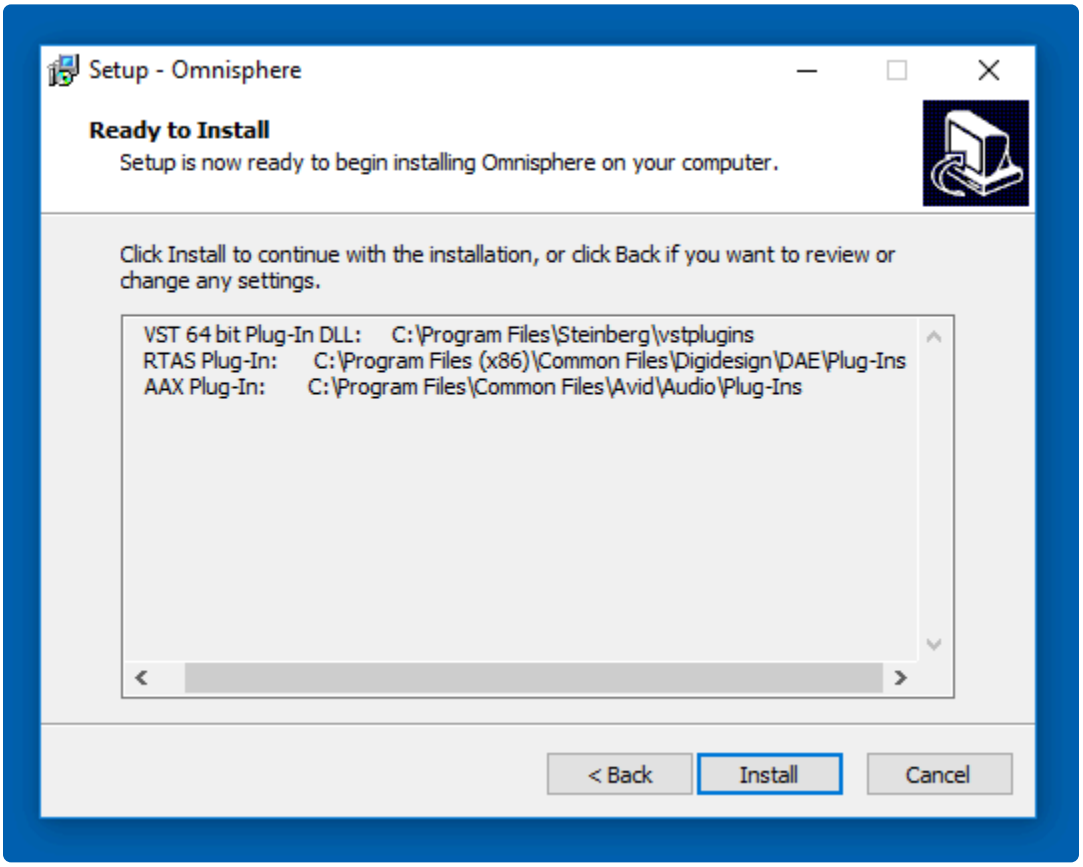
5. At the “Select Folder For 64-bit VST Plugin” step select the VST plug-in path on your system to install Omnisphere into. By default the 64-bit plugin will be installed in **C:ProgramData\Steinberg\vstplugins** but you can choose a different path (your host must support 64-bit plug-ins.)



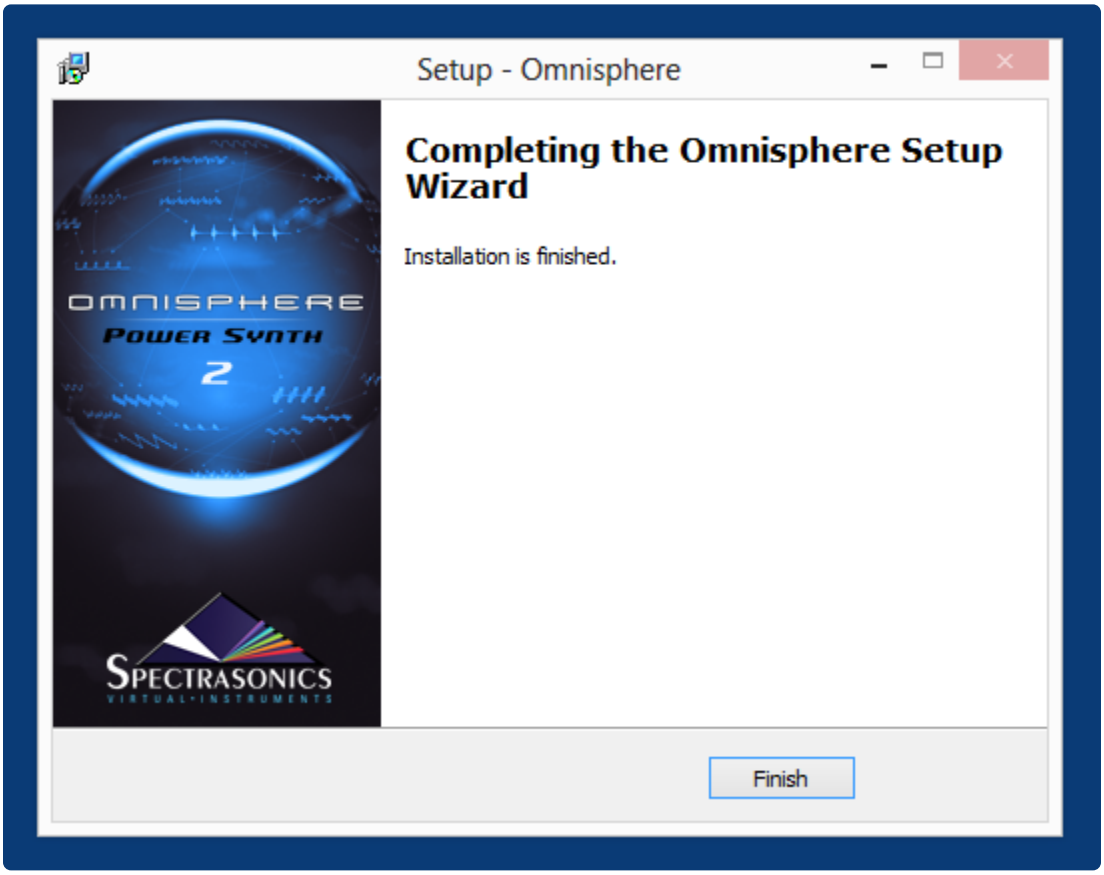
6. The default location of the large Omnisphere data files will be displayed next. If you wish to install the large Core Library files to a secondary drive, click the “Browse” button and choose a different location.



7. The “Ready To Install” step will confirm the installation paths, click the “Install” button to start the installation.



8. After the installation is complete, select “Finish.” Now it’s time to open Omnisphere 2 in your host and authorize it.



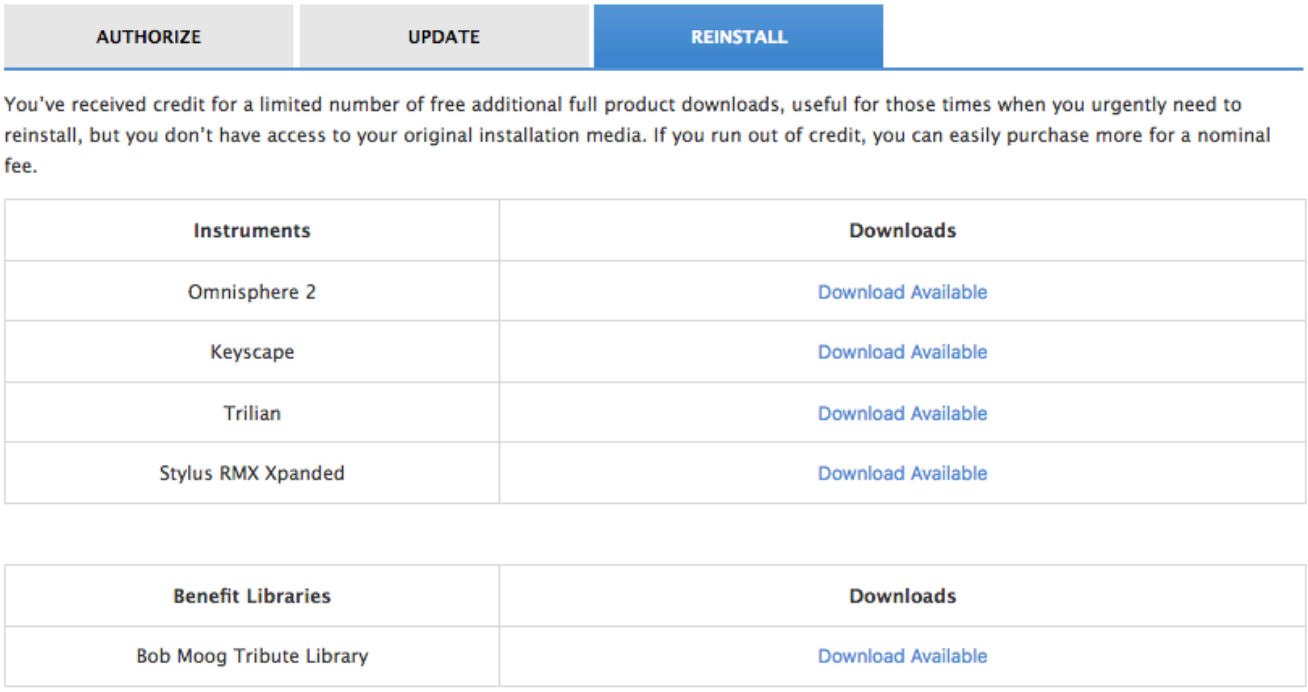
Please consult the **Authorization** section for assistance with authorizing Omnisphere.

1.3.5. Re-installing Omnisphere

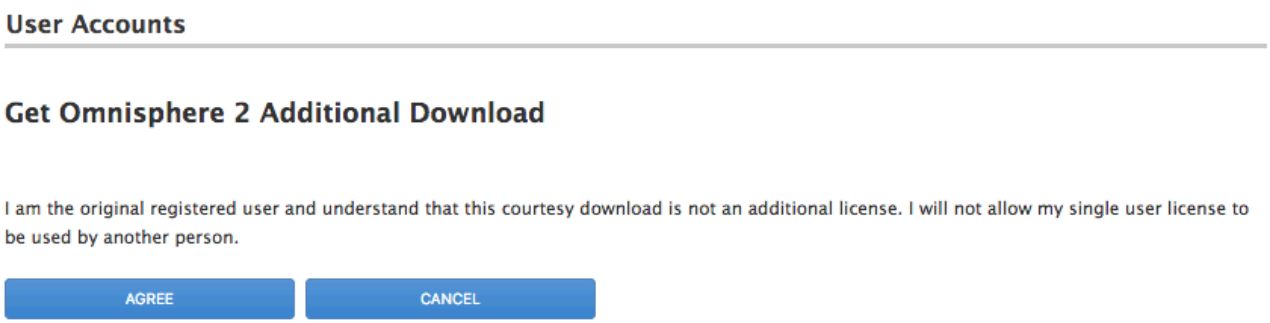
If ever you need to re-install Omnisphere and don't have access to your original installation media, we've provided a simple and easy solution.

Every Omnisphere user receives credit for a limited number of additional full product downloads.

Simply log in to your **User Account**, select the "REINSTALL" tab, then click on "Download Available."



Click on "AGREE" to signify you understand the terms of our our license.



Select the DLM for your computer's OS and follow the prompts—that's it!

User Accounts

Omnisphere 2 Additional Download

Below are the links for your additional download:

Omnisphere 2 Download Manager for WIN

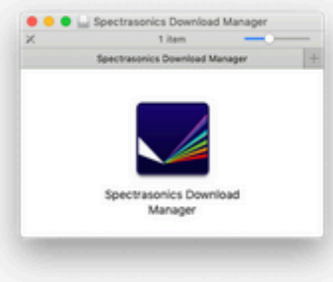
Omnisphere 2 Download Manager for MAC

INSTRUCTIONS:

1. Click the link above for the Download Manager (DLM) you need
2. Locate and run the DLM application
3. When prompted, select the location to download the 61GB Omnisphere installer
4. When download is complete, unzip and run the installer with your host closed
5. Please backup the download to external media for future installations/additional computers

IMPORTANT NOTE: This additional download allows for ONE (1) complete download. Please be sure to backup your download on external media for additional installations.

MAC USERS: Please be sure to double-click the DLM app from WITHIN THE DMG file you downloaded from the link above. Do not remove the icon from the window below.



For technical assistance, please contact Spectrasonics Support by sending an email to info@spectrasonics.net

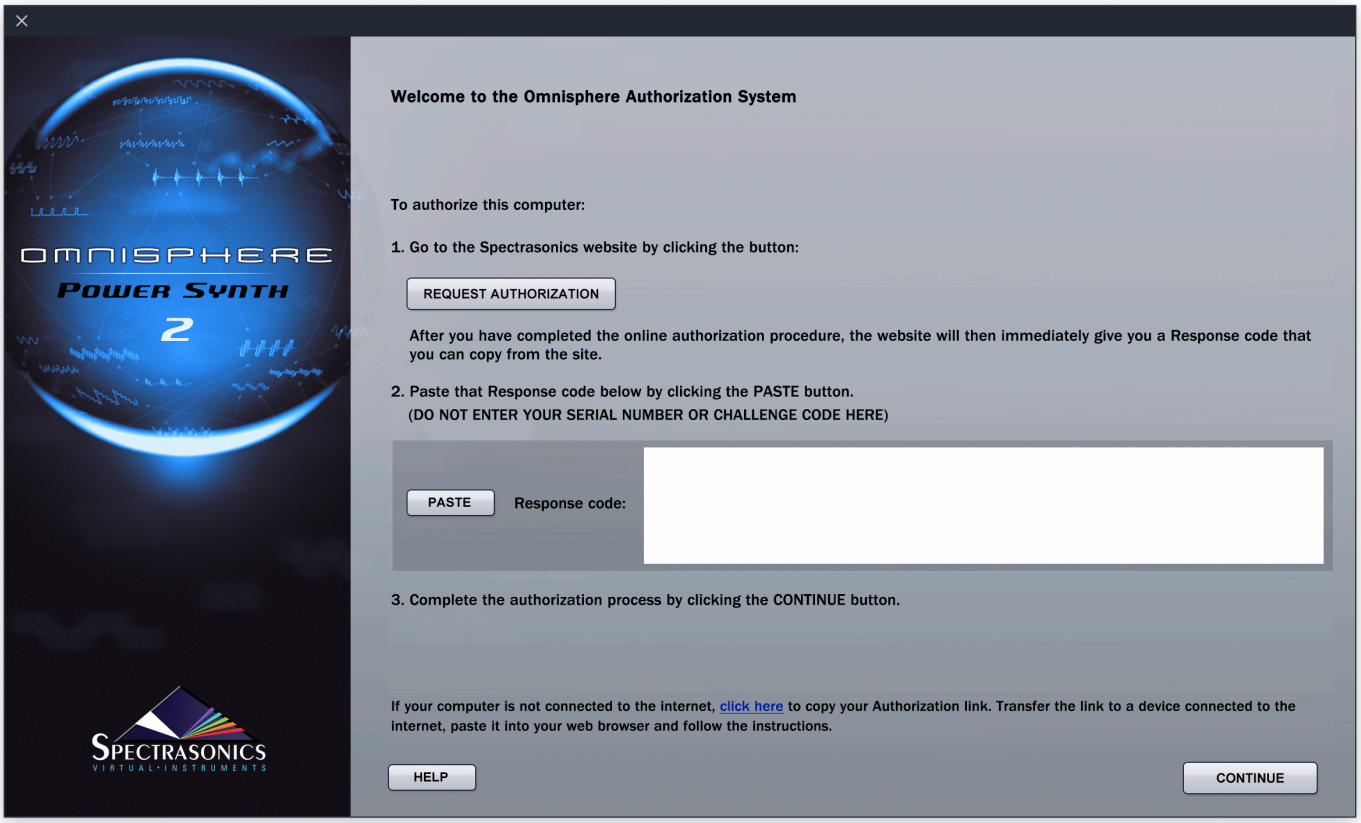
NOTE: If you run out of download credits, you can easily purchase more for a nominal fee.

1.4. Authorization

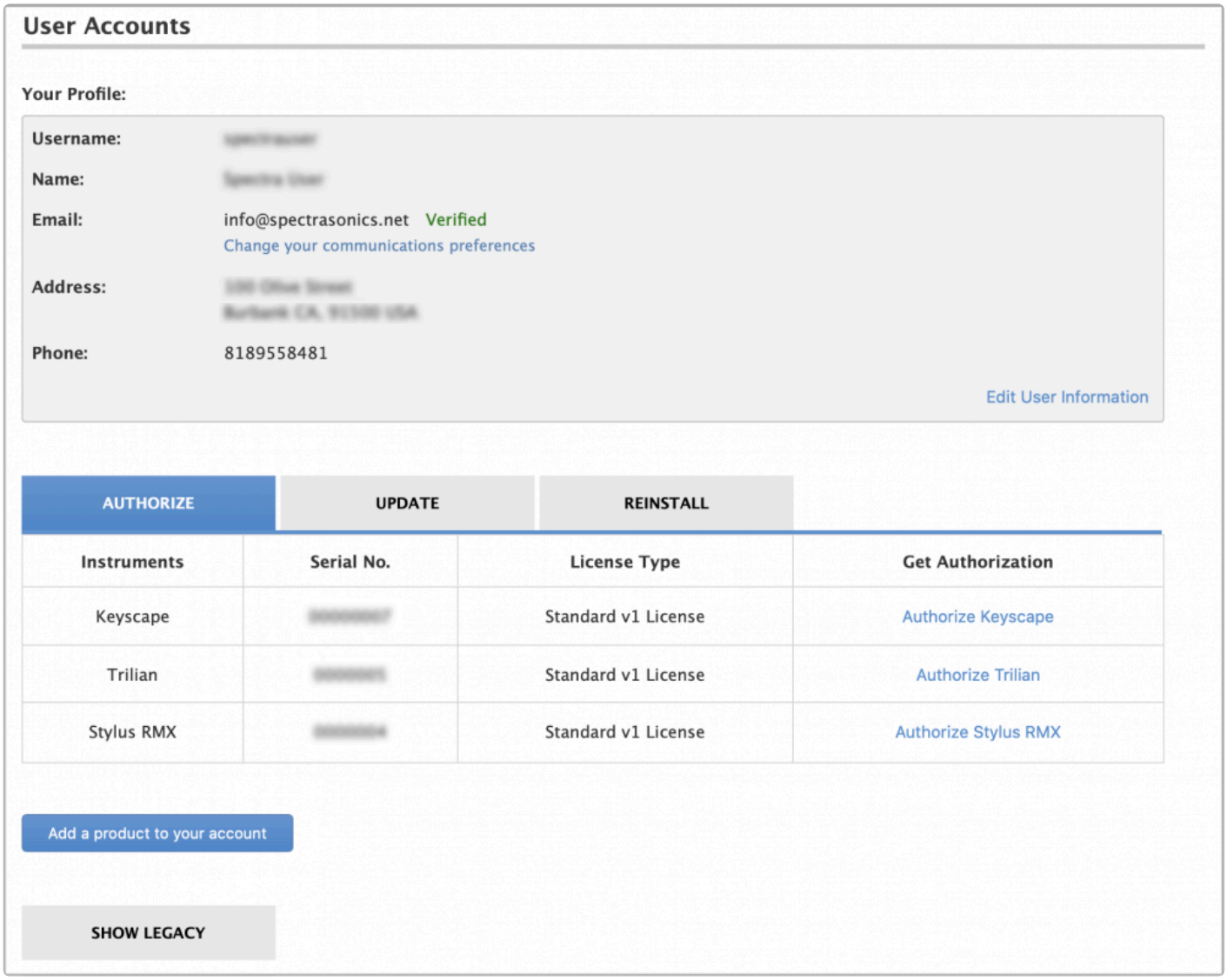
Omnisphere authorization can be done immediately from any computer connected to the Internet.

1. After instantiating Omnisphere in your host or running the standalone, click the Omnisphere Splash Screen.

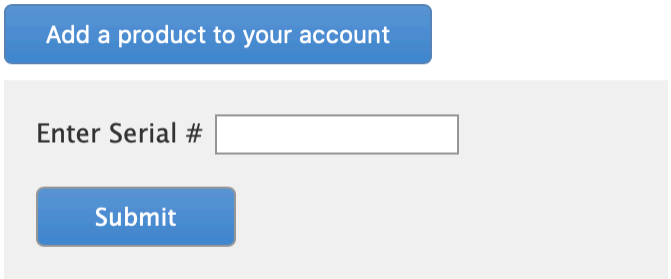
You will now see the Omnisphere Authorization System window:



2. Click the REQUEST AUTHORIZATION button to be taken to the Spectrasonics website. Log in to your User Account. If you don't yet have a User Account, you can create one.



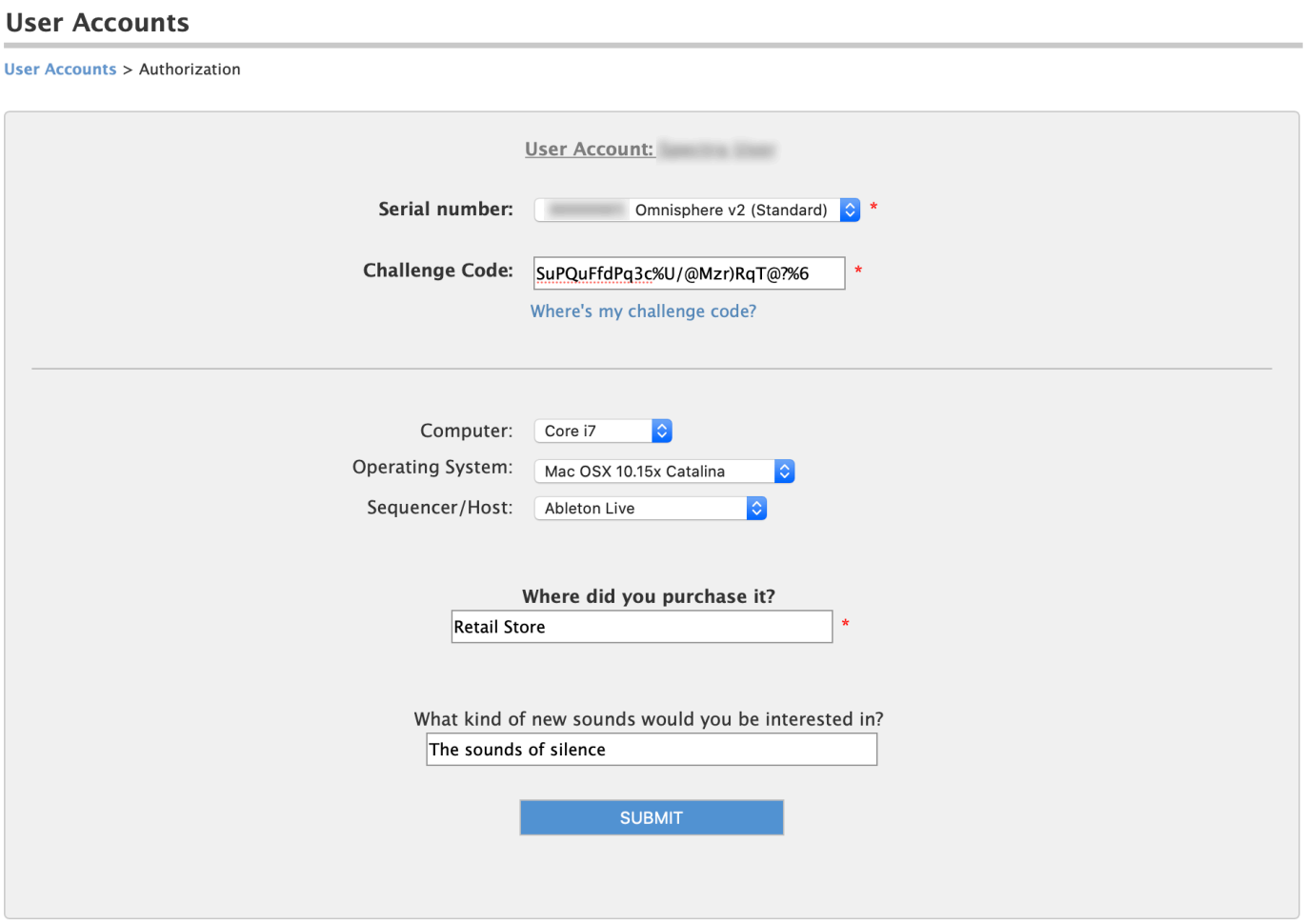
3. If this is your first authorization of Omnisphere, you'll need to add it to your account by pressing the "Add a product to your account" button under the Registered Products table.



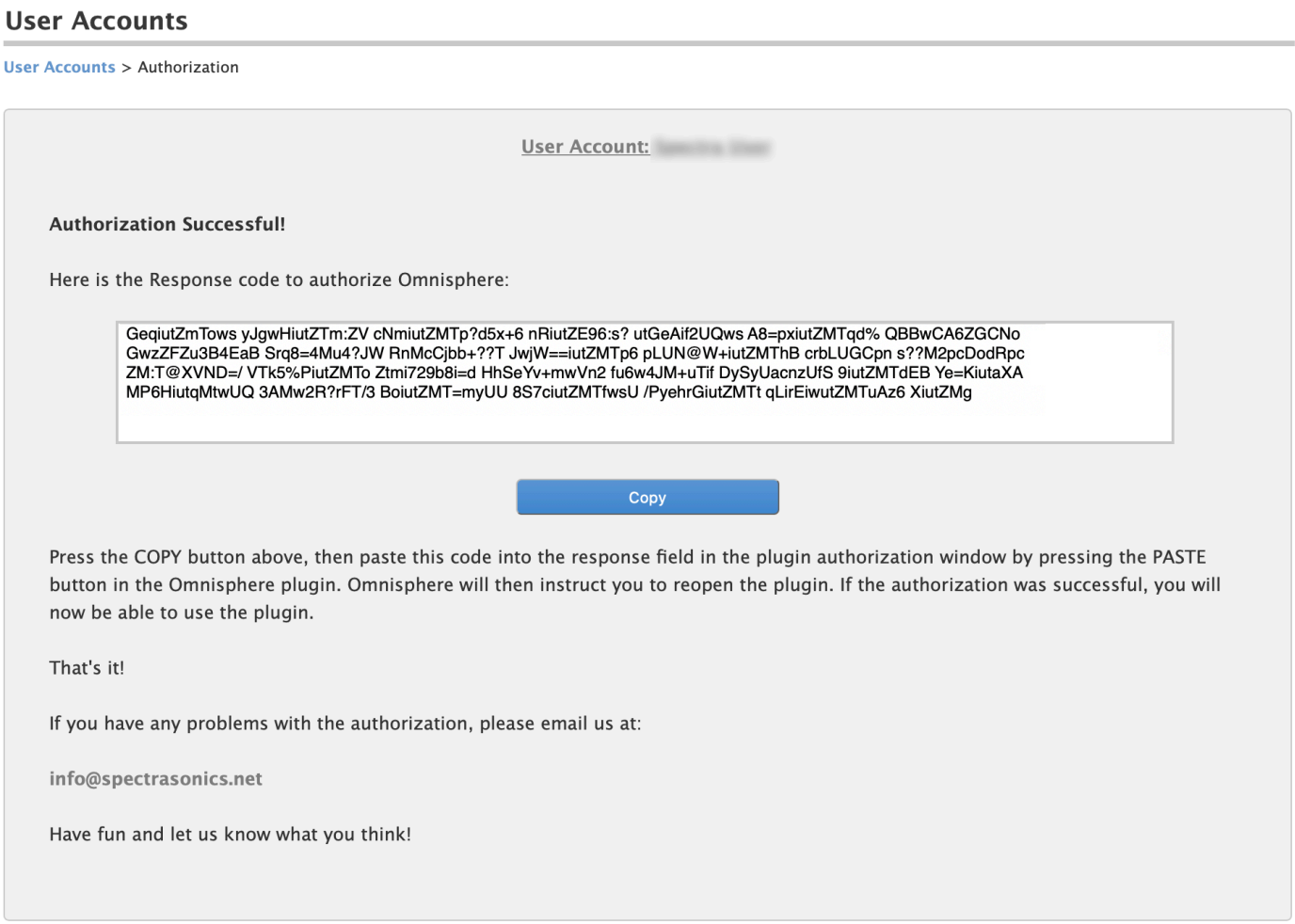
4. Fill out all of your personal information on this page. Select Omnisphere as your product. When finished, click "Next" at the bottom of the page.

5. Go back to Omnisphere and press the REQUEST AUTHORIZATION button once again and your

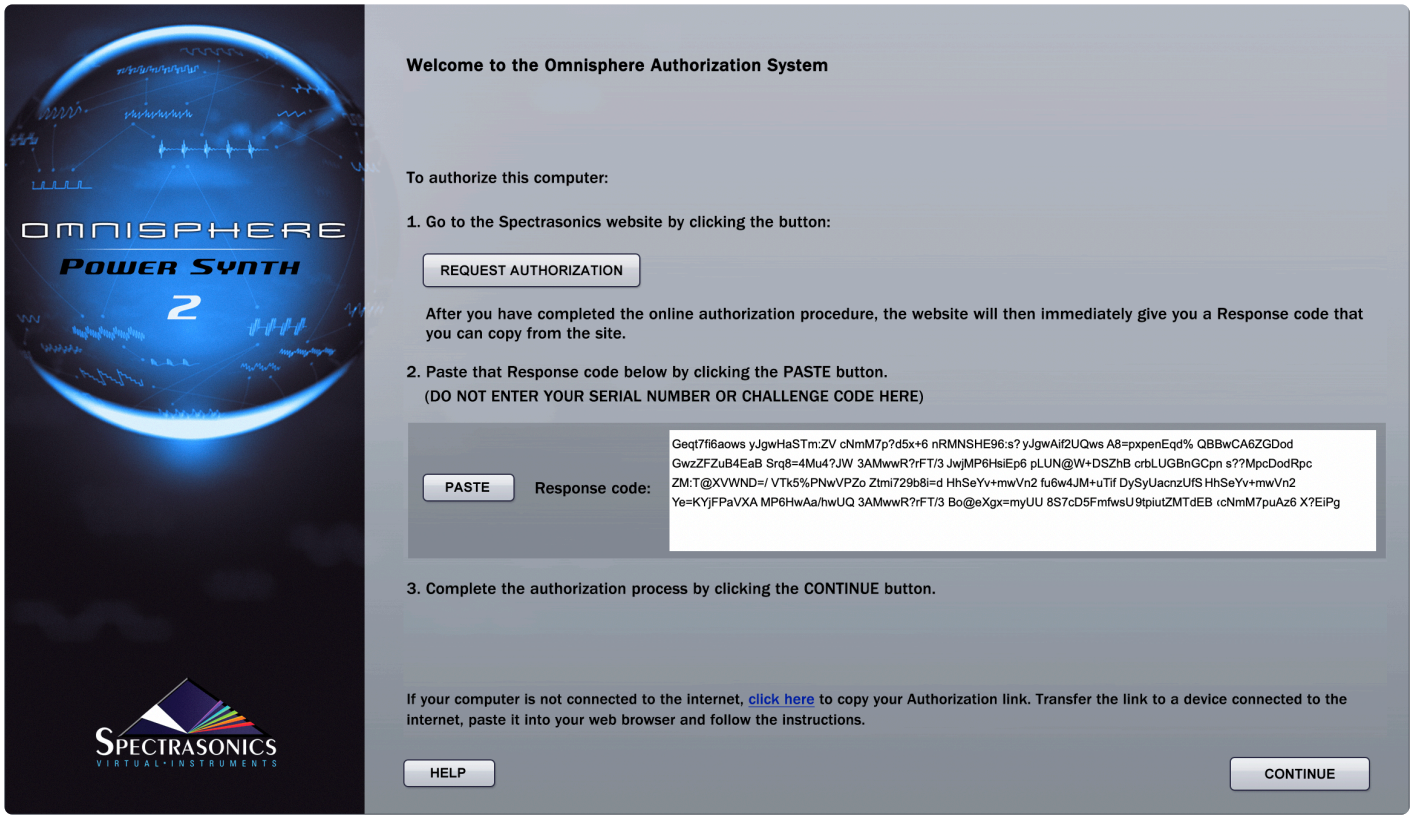
Challenge code will automatically be pasted on the Authorization page. Please enter the details about your computer as well, as it will be necessary if you should require tech support. Press the “SUBMIT” button to continue.



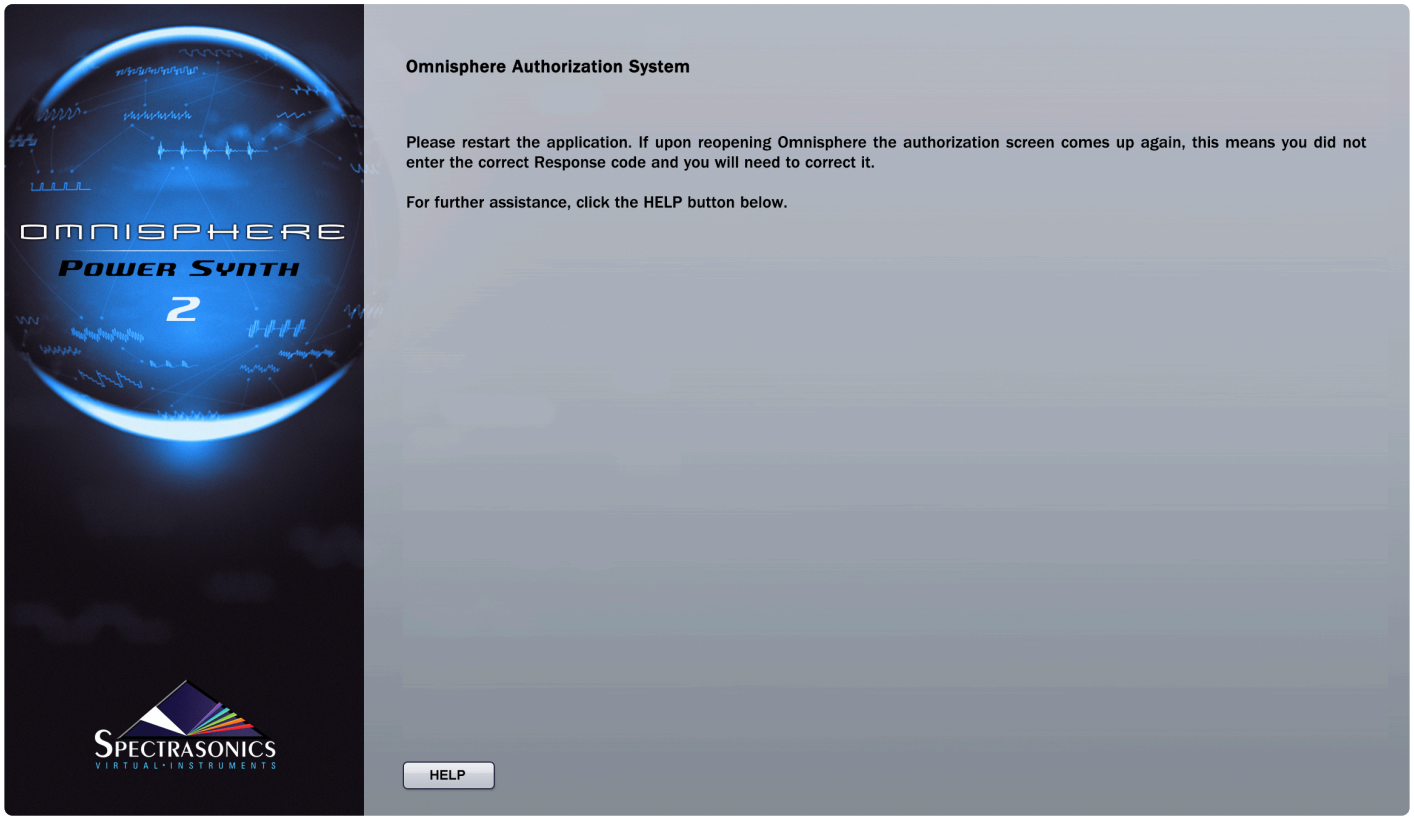
6. Below your Response code select the “Copy” button and return to Omnisphere:



7. Click the PASTE button and the Response Code will now be displayed in Omnisphere.



8. Select the CONTINUE button.

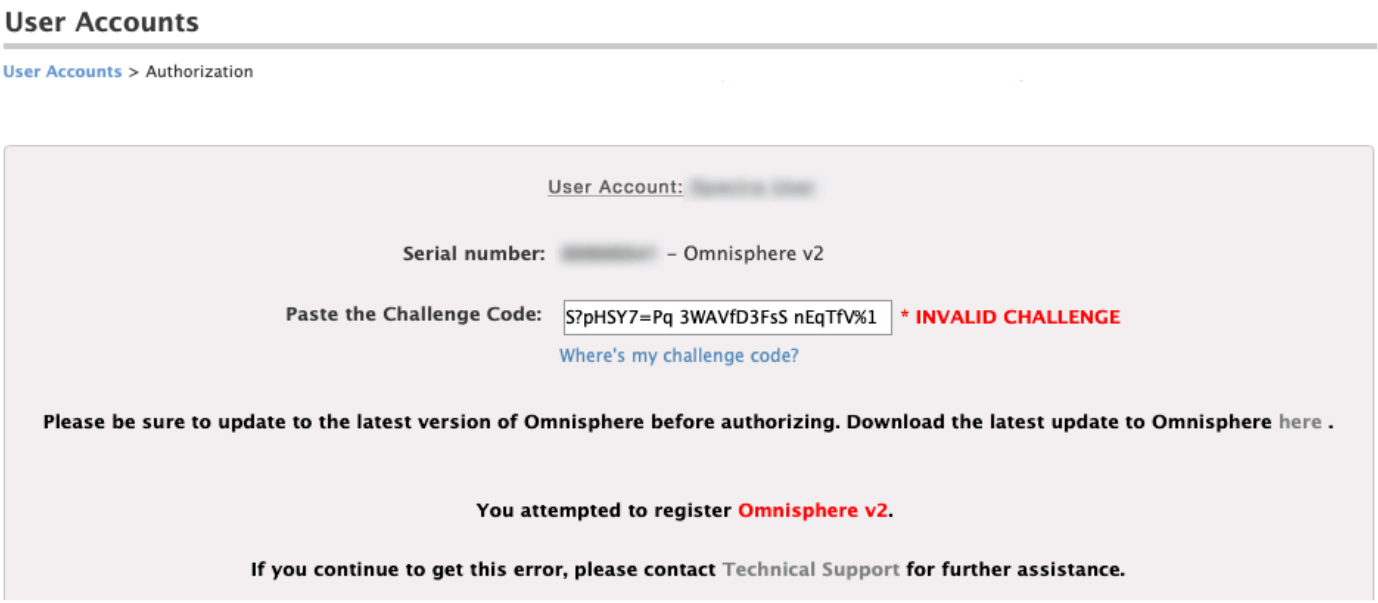


9. Now remove the instance of Omnisphere from your host sequencer or quit the standalone.

10. Re-insert an instance of Omnisphere into your host or restart the standalone.

Omnisphere will now be authorized and fully functional.

1.4.1. Authorization Troubleshooting



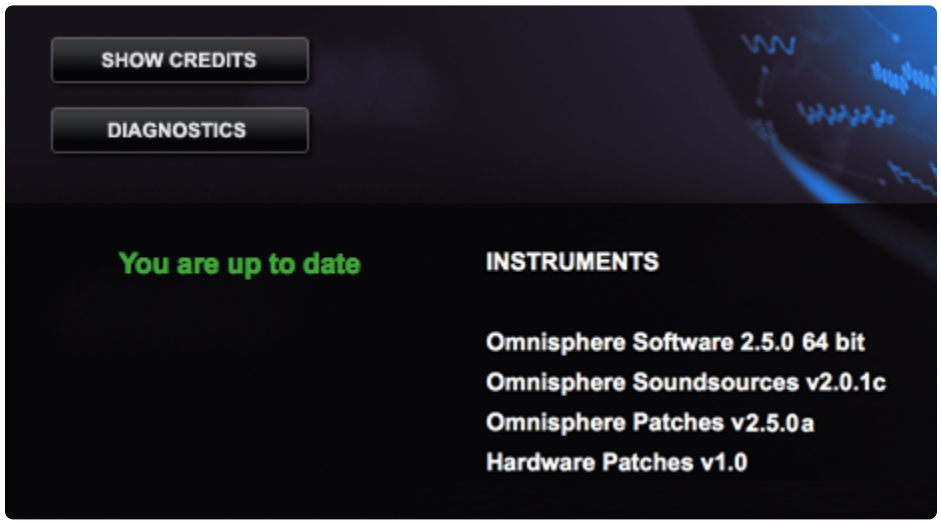
If you are returned to the Welcome to the Omnisphere Authorization System after reopening the instrument, that means the plug-in did not accept the Response Code and it may have been incorrectly entered. Try authorizing again with the instructions given in the **Authorization** section. Make sure you are entering the code given by the website and NOT the serial number from your user guide.

*NOTE: If you need further assistance, please contact **Technical Support** at* **info@spectrasonics.net**

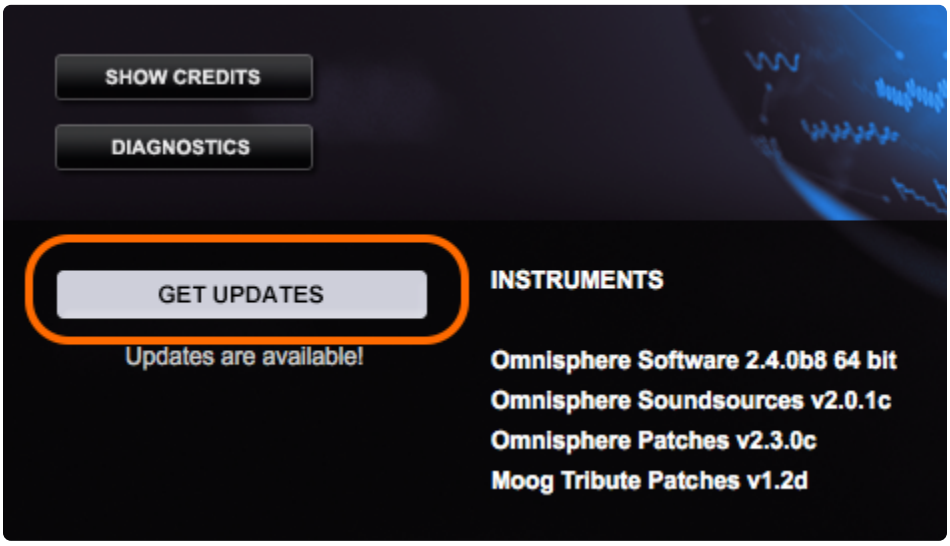
1.5. Smart Update

Omnisphere 2 includes our “Smart Update” system which makes it easy to keep your collection of Spectrasonics instruments up to date. This efficient system will automatically compile any needed updates into a single download. Running one installer will get your entire Spectrasonics system up-to-date!

With an active Internet connection, when you first open Omnisphere it will automatically check for any available updates for all the Spectrasonics instruments and libraries installed in your computer. If everything is up-to-date, Omnisphere’s splash screen will display “You are up to date” in green text below the DIAGNOSTICS button:



If the software detects that there are updates available, the splash screen will display “Updates are available!” in gray text below the GET UPDATES button:

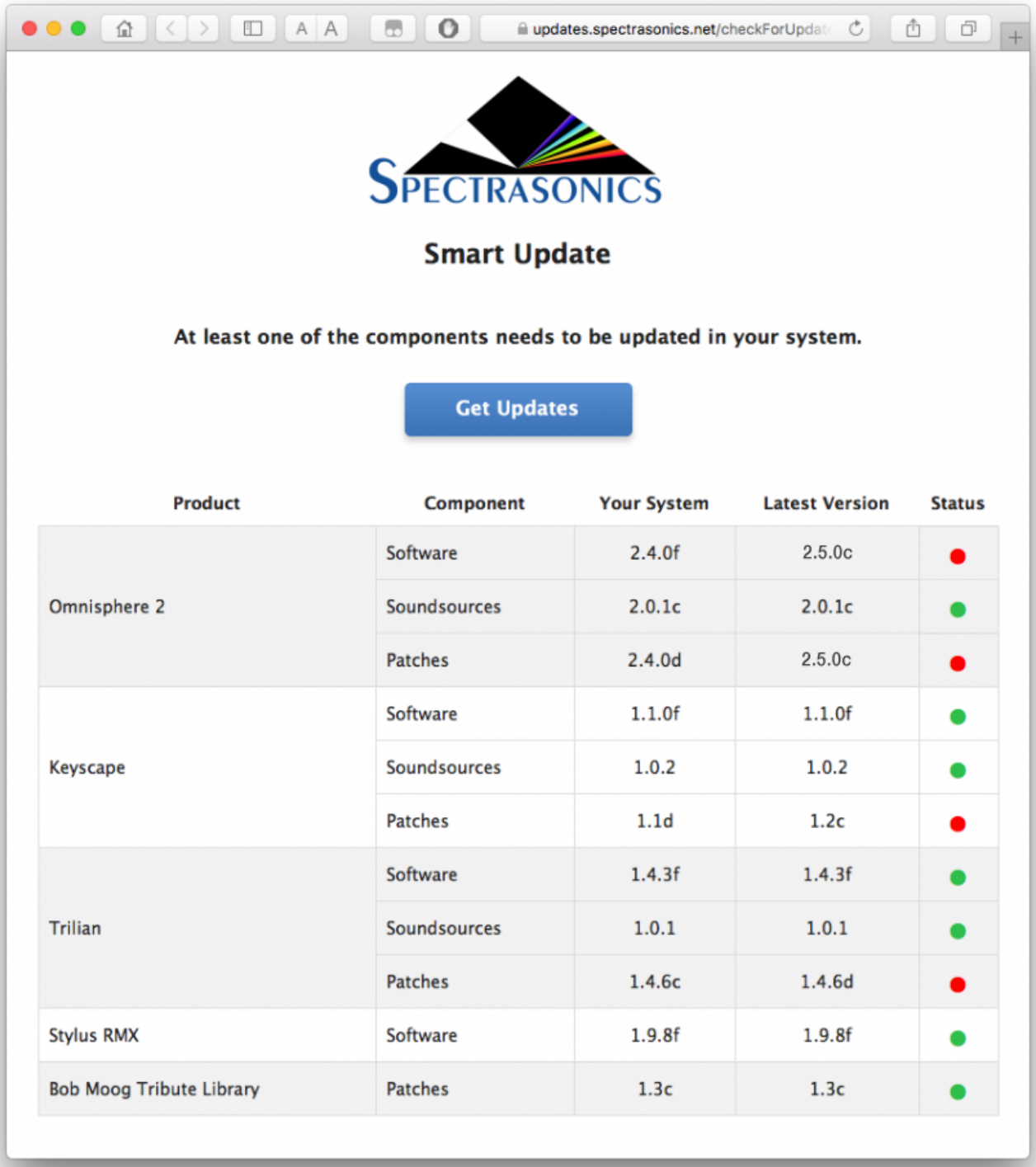


Click on the GET UPDATES button and you’ll be taken to the Smart Update page on the Spectrasonics

website.

NOTE: You can access the splash screen at any time by clicking on the Spectrasonics “prism” logo in the upper right corner.

The Smart Update page will list your current Software, Patch, and Soundsource versions for each of the instruments and libraries installed on your computer as well as the latest versions. The Status column will indicate any components that need updating with a red dot. A green dot indicates that the component is up-to-date.

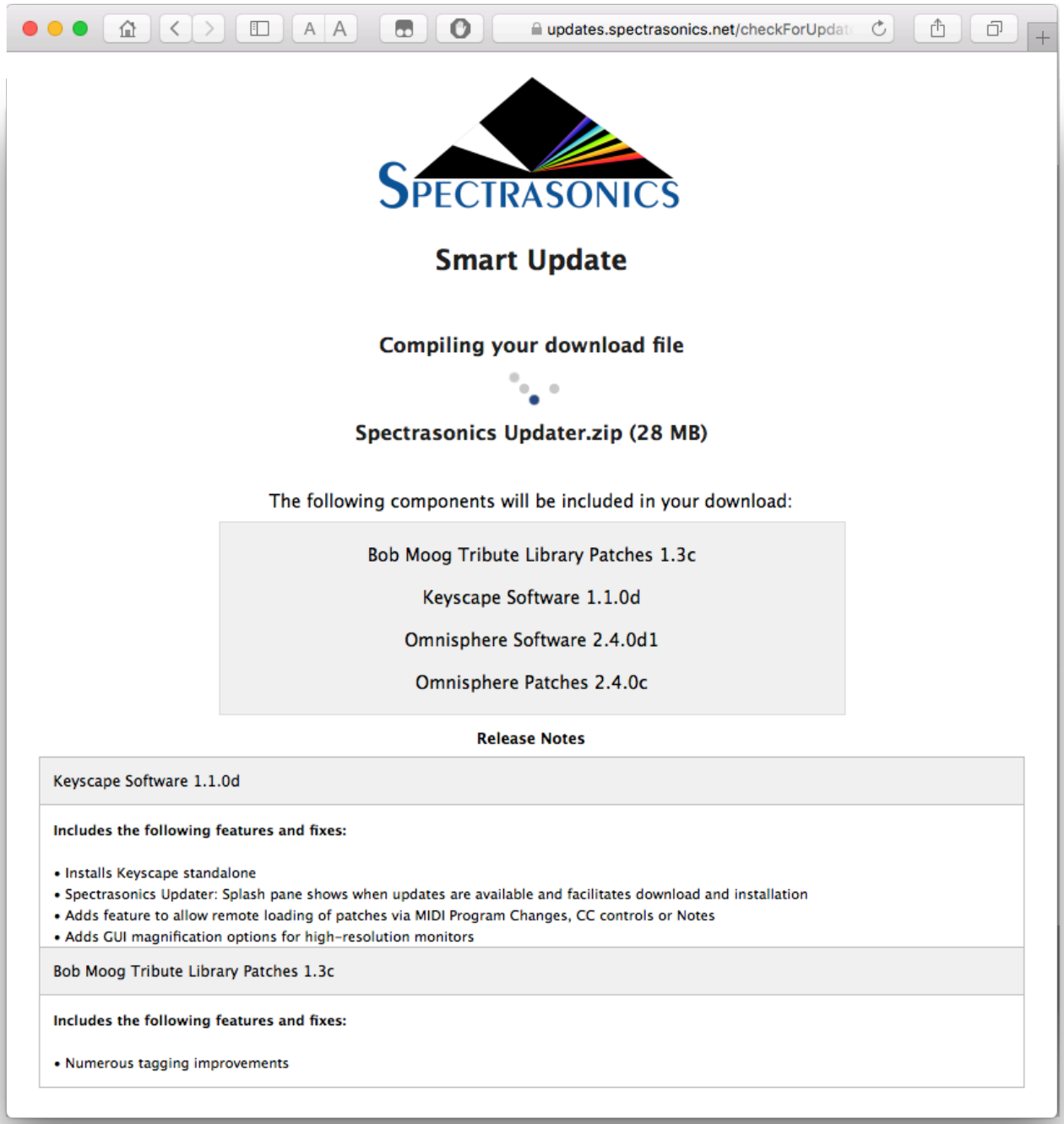


Product	Component	Your System	Latest Version	Status
Omnisphere 2	Software	2.4.0f	2.5.0c	
	Soundsources	2.0.1c	2.0.1c	
	Patches	2.4.0d	2.5.0c	
Keyscape	Software	1.1.0f	1.1.0f	
	Soundsources	1.0.2	1.0.2	
	Patches	1.1d	1.2c	
Trilian	Software	1.4.3f	1.4.3f	
	Soundsources	1.0.1	1.0.1	
	Patches	1.4.6c	1.4.6d	
Stylus RMX	Software	1.9.8f	1.9.8f	
Bob Moog Tribute Library	Patches	1.3c	1.3c	

After clicking the “Get Updates” button you will be asked to log in to your Spectrasonics account (if you are not already logged in(. Once logged in, a single “bundle” will be compiled that contains all the updates required for your system.

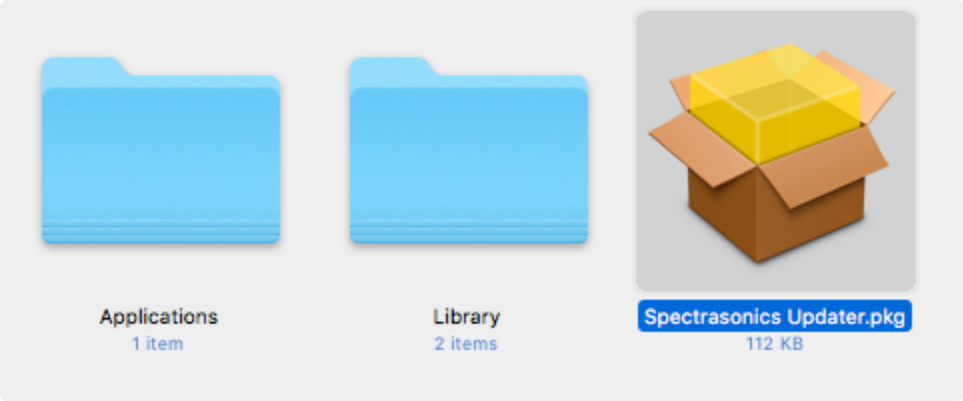
The release notes for each of the relevant updates are displayed on the page while the bundle is being compiled. We recommend you review the changes at this time.

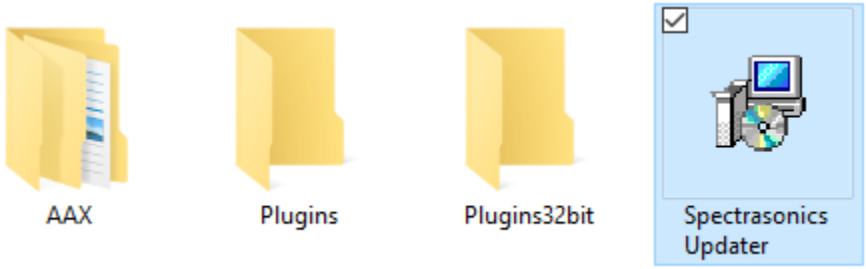
When finished, the update installer will be automatically downloaded to your Downloads folder.



If you're using a Mac, the .zip file will automatically unzip and create a folder called "Spectrasonics Updater." In Windows you'll need to extract the .zip file to create the "Spectrasonics Updater" folder.

Open the "Spectrasonics Updater" folder, then the appropriate OS sub-folder, and then, after making sure your DAW is closed, run the installer that corresponds to your system. When the installation is complete, all your Spectrasonics instruments will be up-to-date.





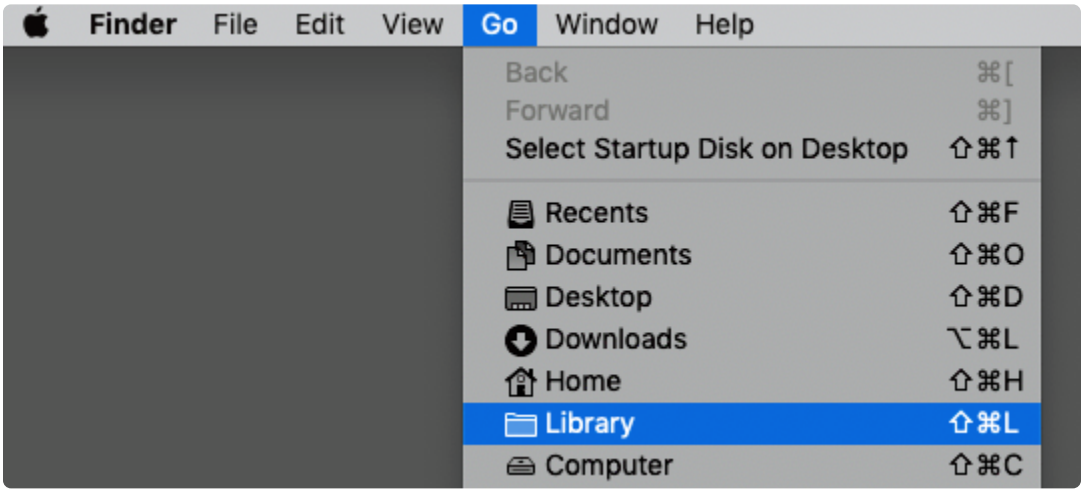
NOTE: It is always possible to download individual updates by accessing the "Updates" tab in your User Account.

1.6. Moving the STEAM Directory

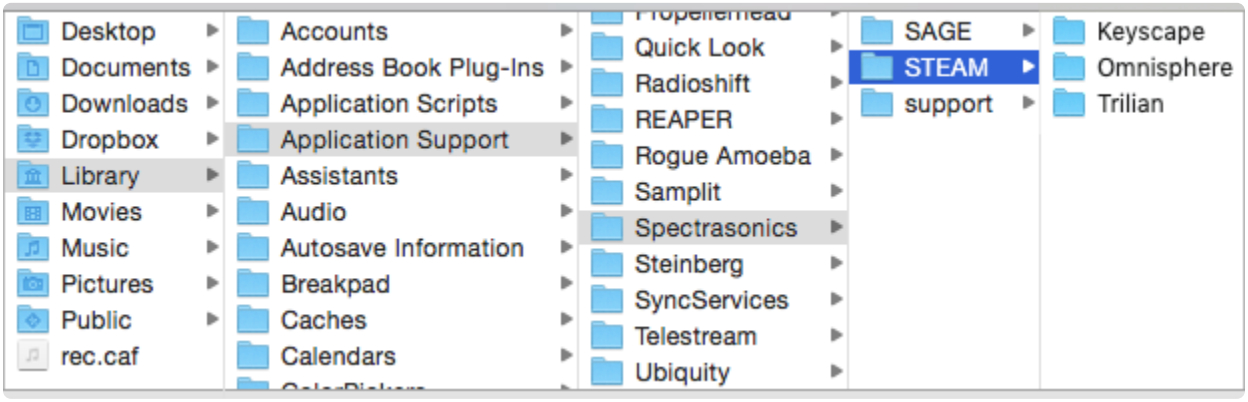
After installation, you might want to move the large STEAM folder directory (containing all the sound files) to a secondary drive in order to free up space on your internal drive.

Locating STEAM

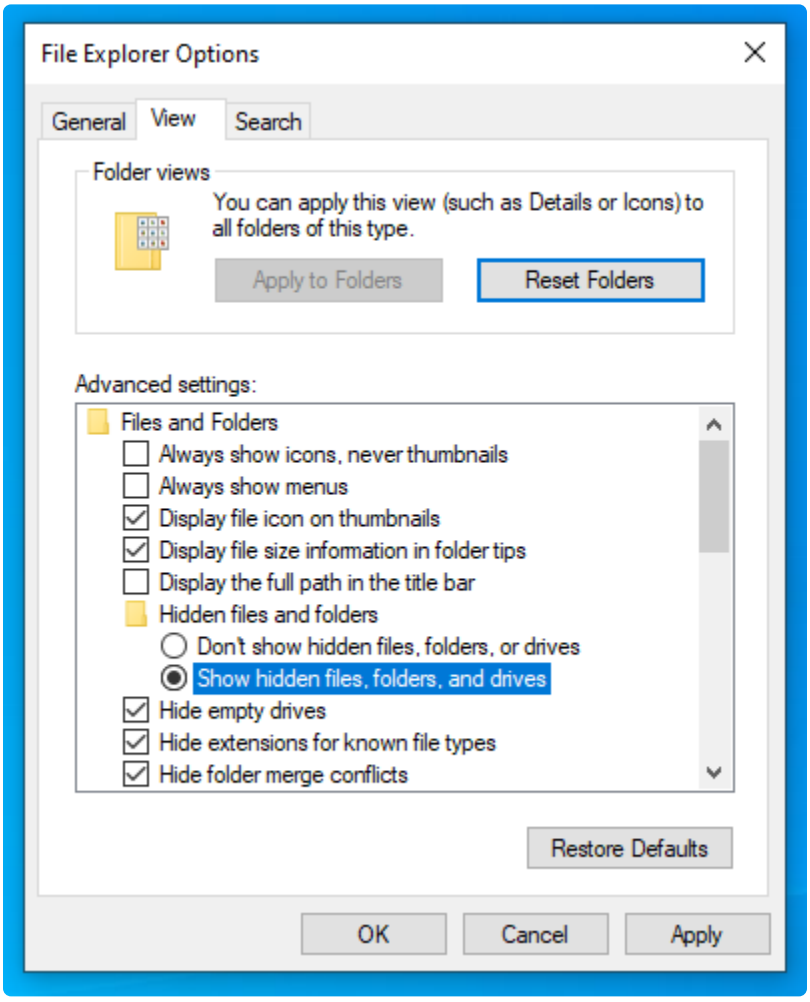
macOS 10.12 (or later)
Select the **Go** menu at the top of your screen while using the Finder and chose “Library” from the menu.



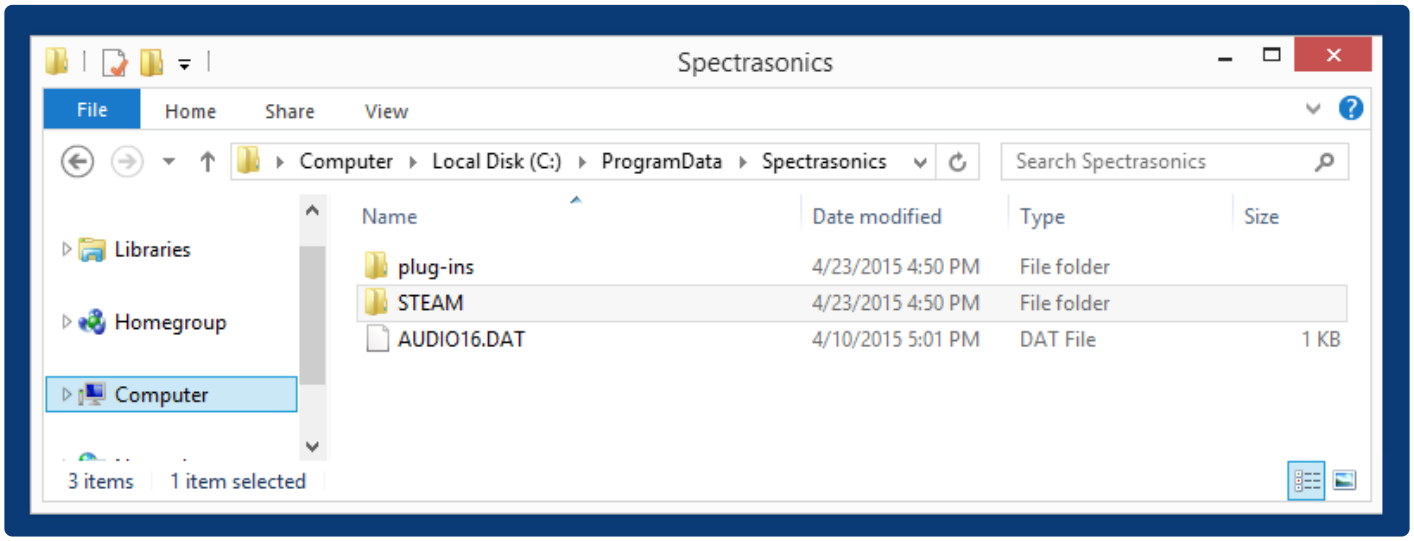
The **macOS** default location is here: *Macintosh HD/ Users/ Username/ Library/ Application Support/ Spectrasonics/*



Windows 7 (or later)
The **ProgramData** folder is a hidden folder by default on Windows, so you’ll need to “Show Hidden Files and Folders” in your Control Panel / Folder Options.



The **Windows** default location is here: *C:\ProgramData\Spectrasonics*



Moving STEAM

1. Copy your STEAM folder from its current location 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 an SSD, Thunderbolt, or USB hard drive, etc.).

2. Once the copy is complete, confirm that both STEAM folders (original and copy) are the same size, then delete the original STEAM folder from the default location.
3. Open Omnisphere and you will be prompted to locate the STEAM folder.
4. Browse and select the new STEAM folder (you might see some error messages, but close these messages and continue to the final step). The link to the new location has now been created.
5. Close and re-open Omnisphere for the changes to take effect.

NOTE: You can also see the Knowledgebase article HERE for some nifty animations that further explain the process.

1.7. Omnisphere Standalone

There are times when you want to play Omnisphere but you don't need all the tools included with a full-featured DAW. It can be time-consuming to open a DAW and set up a session just to access your favorite sounds / keyboards. You just want to sit down and play!

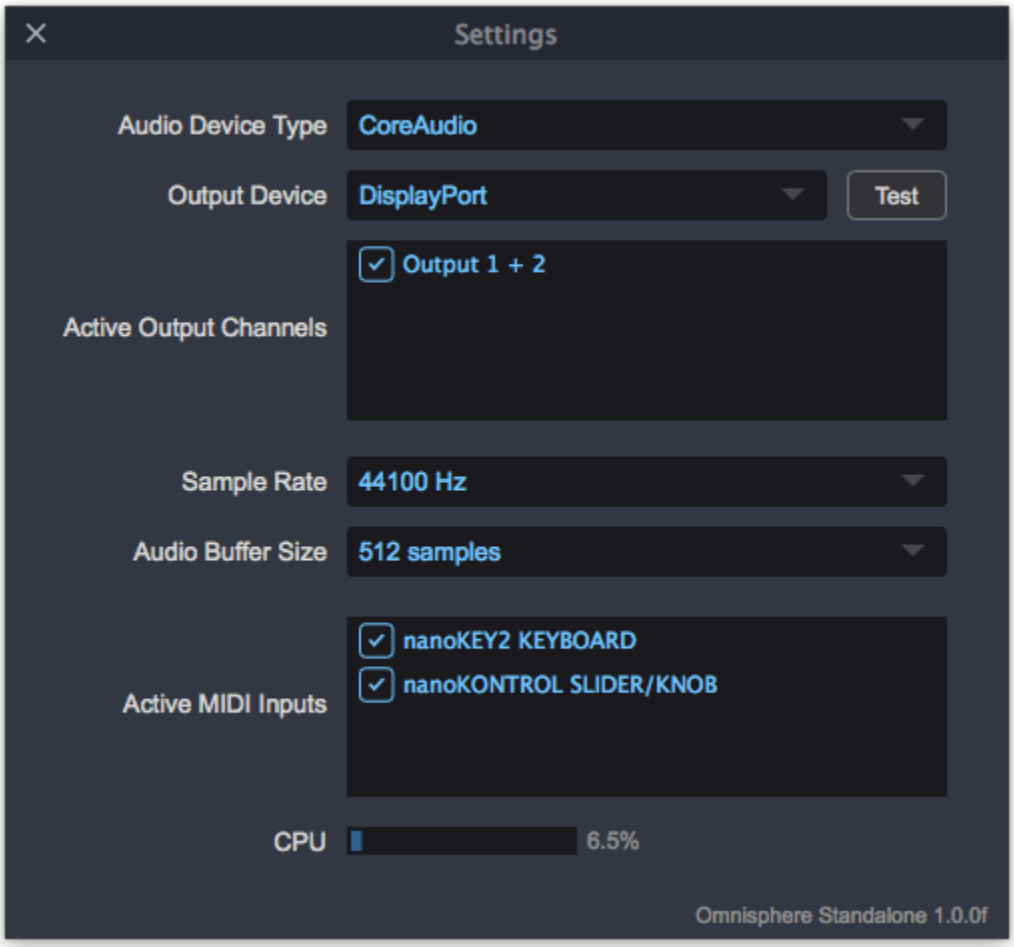
With that in mind, we created the Omnisphere Standalone.

Ideal for live and studio situations, you can edit and save your Patches just like you do when using Omnisphere in your DAW.

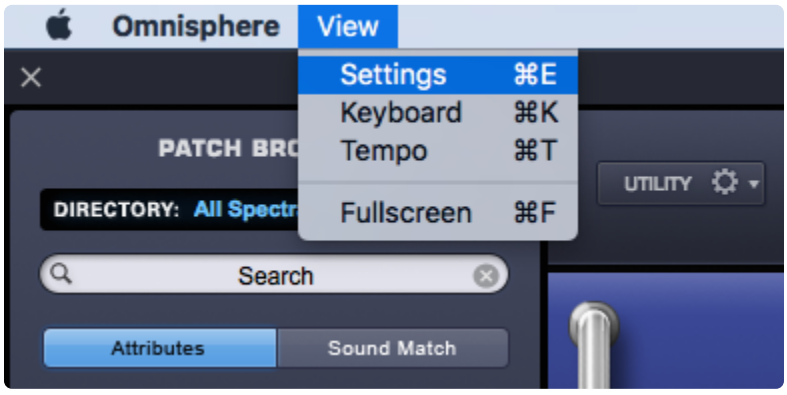
The Omnisphere Standalone is installed in the Mac Applications folder and the Windows ProgramData folder.

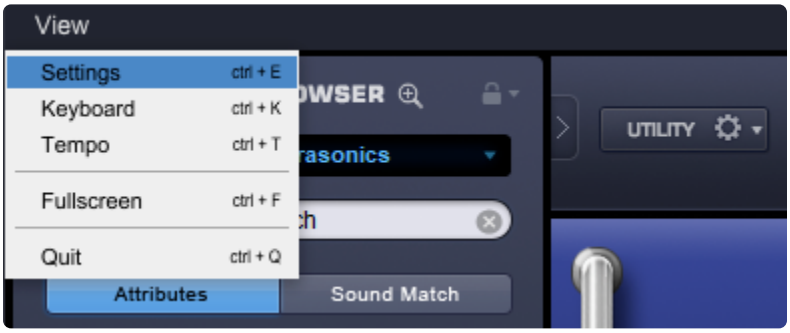
TIP: For quick access on a Mac, you might want to place the Omnisphere Standalone in the Dock. A Windows shortcut is automatically placed on the desktop.

1.7.1. Settings



Click on the View Menu to select “Settings” or simply click “Command/Control-E” to bring up the Settings window.





When you open the Settings window, it reflects your current settings and allows you to view and set your audio / MIDI preferences for the Omnisphere Standalone.

Audio Device Type – Sets which audio driver is used by Omnisphere. Mac systems typically use CoreAudio and Windows systems typically use some variant of the ASIO drivers (we recommend **ASIO4ALL**.)

Output Device – Determines which audio device is used by Omnisphere. This can be an internal speaker, an audio card, or a dedicated audio interface.

Active Output Channels – Determines which audio output on your interface is used by Omnisphere.

Sample Rate – Omnisphere's sample rate can be set to either 44.1k, 48k, 88.2k, or 96k.

Audio Buffer Size – Determines the amount of latency in the Omnisphere Standalone. Lower buffer settings have less latency, but tax your system resources to a greater extent (you might experience audio glitches or pops at lower buffer settings.) We recommend experimenting to find a good balance between latency and performance. Omnisphere's Audio Buffer Size can be set from 32 to 1024 samples.

Active MIDI Inputs – Lists the active MIDI devices connected to your computer. Here, you can select the MIDI input you want to trigger Omnisphere.

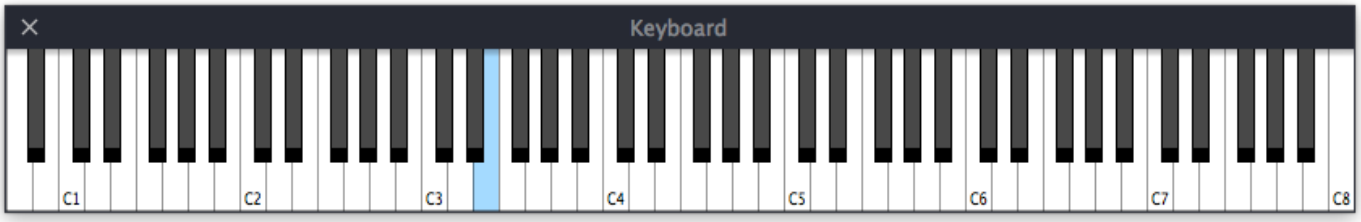
CPU – Measures the percentage of the computer's processing power being used by Omnisphere.

Clicking "Command/Control-E" again or clicking on the "X" in the upper left corner closes the Settings window.

NOTE: "Command/Control-W" also closes the Settings window when it is in-focus.

NOTE: Settings made to the Omnisphere Standalone do not affect how Omnisphere works as a plug-in within any host.

1.7.2. Keyboard



The Omnisphere Standalone comes with an optional on-screen keyboard. From the View Menu, select “Keyboard” or hit “Command/Control-K.”

The Keyboard opens along the bottom edge of the interface, but it can be moved anywhere on your desktop. Its position will be recalled the next time you open the standalone.

In addition to triggering Omnisphere from your MIDI controller, you can play the keyboard with your mouse as well as your computer’s QWERTY keyboard. The range defaults to a starting note of Middle C / C4. You can change the octave with the number keys (1–7) along the top of your QWERTY keyboard.

The MIDI velocity is set to 90 and the Spacebar works as a sustain pedal.

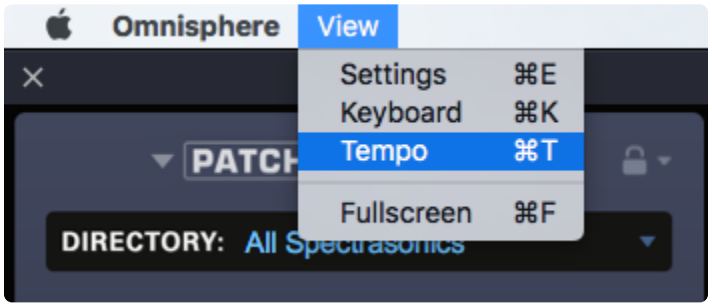
Hitting “Command/Control-K” again or clicking on the “X” in the upper left corner closes the Keyboard window.

NOTE: “Command/Control-W” also closes the Keyboard window when it is in-focus.

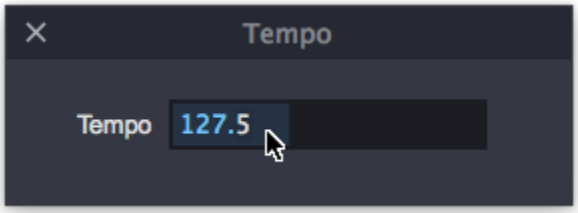
1.7.3. Tempo

The Omnisphere Standalone has the ability to set the instrument's internal clock **Tempo.** This controls time-based operations such as the Arpeggiator, LFOs, and Mod Envelopes.

Click on the View Menu to select "Tempo" or simply hit "Command–T / Control-T" to bring up the Tempo window.



You can manually enter any tempo value to one decimal place (from 20 bpm up to 300 bpm) by double-clicking in the Tempo Rate field:



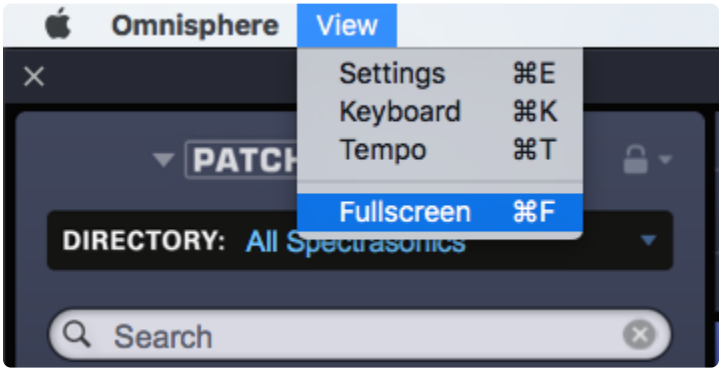
Hitting "Command–T / Control-T" again or clicking on the "X" in the upper left corner closes the Tempo window.

NOTE: "Command–W / Control-W" also closes the Tempo window when it is in-focus.

1.7.4. Fullscreen

Sometimes you might want the Omnisphere Standalone to be the only thing on your screen. Fullscreen mode hides your desktop and places Omnisphere on a simple black background for a clean look with no distractions.

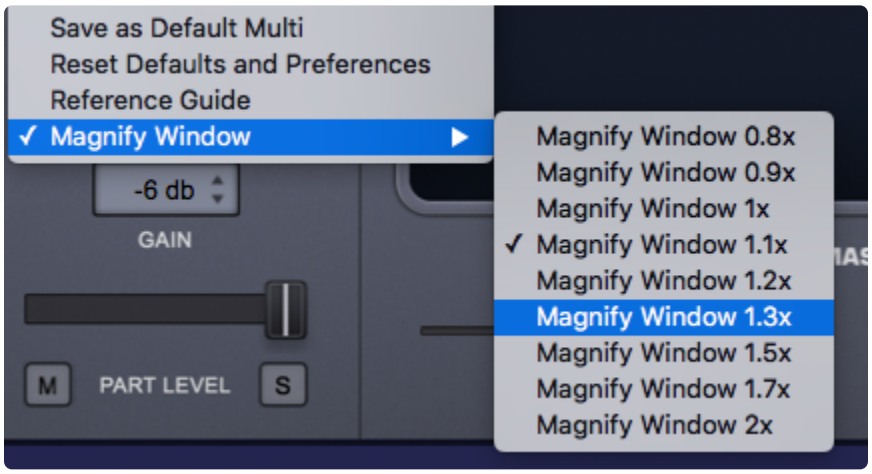
Select “Fullscreen” from the View menu or simply hit “Command–F / Control-F” to enter Fullscreen mode.



Hitting “Command–F / Control-F” again or pressing the ESC (Escape) key exits Fullscreen.

TIP: By using Fullscreen in conjunction with “Magnify Window” in the Utility Menu, you can set up a

large, easy-to-see interface.



2. Concepts

Omnisphere has been designed to accommodate a wide range of operations, from basic interaction with Factory Patches to comprehensive and complex sound design. The Omnisphere interface provides an intuitive workflow which offers all the depth and flexibility you need.

2.1. STEAM Engine

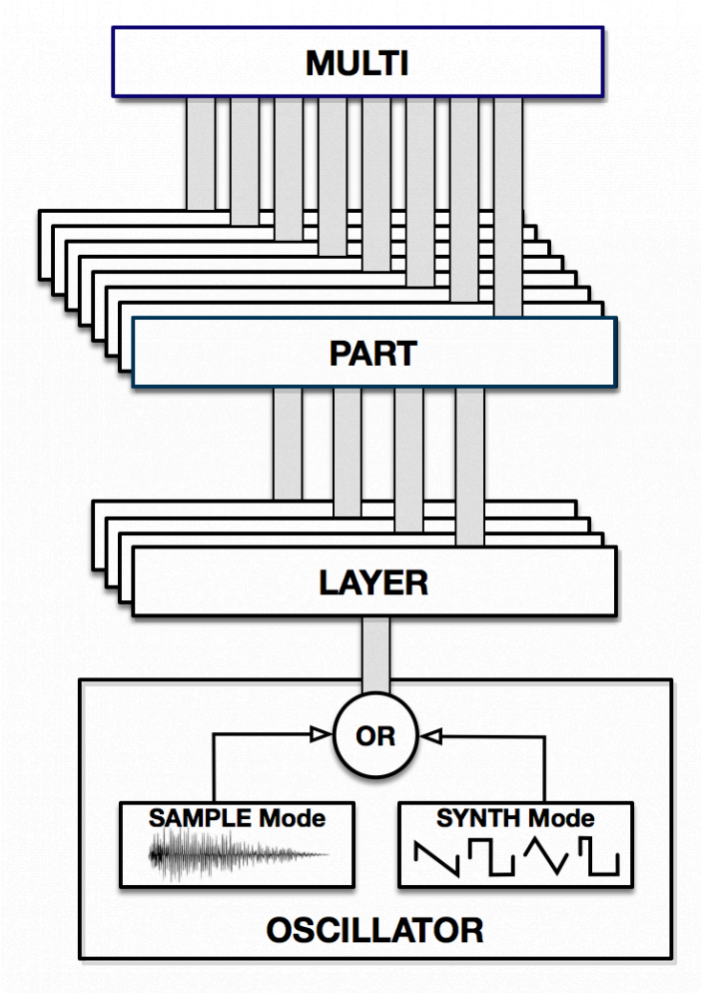
The STEAM Engine® is the core technology created by the Spectrasonics in-house development team, and is used as the basis of all Spectrasonics performance instruments, including Omnisphere, Keyscape, and Trilian. Like our core S.A.G.E. technology, used for groove-based instruments like Stylus RMX, STEAM completes the technology transition from earlier performance virtual instruments that were based on the licensed UVI Engine.

Virtual instruments built with the STEAM Engine® offer a wide variety of development possibilities in 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.

Using the STEAM Engine®, 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. Our instruments are fully supported across industry changes and this flexible software permits more innovations and quick adaptations in the future.

Virtual instruments powered by STEAM have unlimited expansion possibilities. The core software is flexible and open, allowing sounds to be shared across hosts and computer platforms. New sounds can be added to the Core Library via Patch and Soundsource updates, **User Audio** import, **Sharing**, as well as via Satellite Instruments like Keyscape or Trilian. In addition, all Spectrasonics virtual instruments based on S.A.G.E. and STEAM technologies can interact in musically useful and innovative ways.

2.2. Architecture and Hierarchy



Omnisphere is a uniquely powerful synthesizer that takes well-known elements of synthesis a step further to provide inspiration for any level of musician, producer, composer, or sound designer.

Omnisphere can quickly provide production-ready sounds with its factory library, serve as a great entry point for learning synthesis, or be used to create a full sonic universe comprising sounds never yet heard!

A single oscillator in Omnisphere can provide a surprising amount of sonic power, though its full strength is attained when standard synthesis components are creatively combined with those that are exclusive to Omnisphere.

For instance, you could start with a couple of detuned sawtooth oscillators, layer them with a granulated Bowed Kalimbadrum **Soundsource**, mix in some stereo white noise and then run all of that through an analog-modeled 24db low-pass filter before further processing the sound through a tape delay, stompbox-modeled distortion and some vintage-style compression.

It’s important to learn the structure of Omnisphere to truly unleash the vast amount of available sound-

creation possibilities. The better you understand its features, layout, and potential, the more your own unique musical voice will shine through!

While Omnisphere is a vast world made for a lifetime of exploration, it is organized in a way that intuitively builds on familiar concepts, such as a Patch, to create something more extensive and inspiring, such as a Multi.

Arguably, the most identifiable aspect of a synthesizer is the **Oscillator**. An oscillator is, more often than not, where sound originates within a synthesizer, affecting all other aspects that come after it in the signal path.

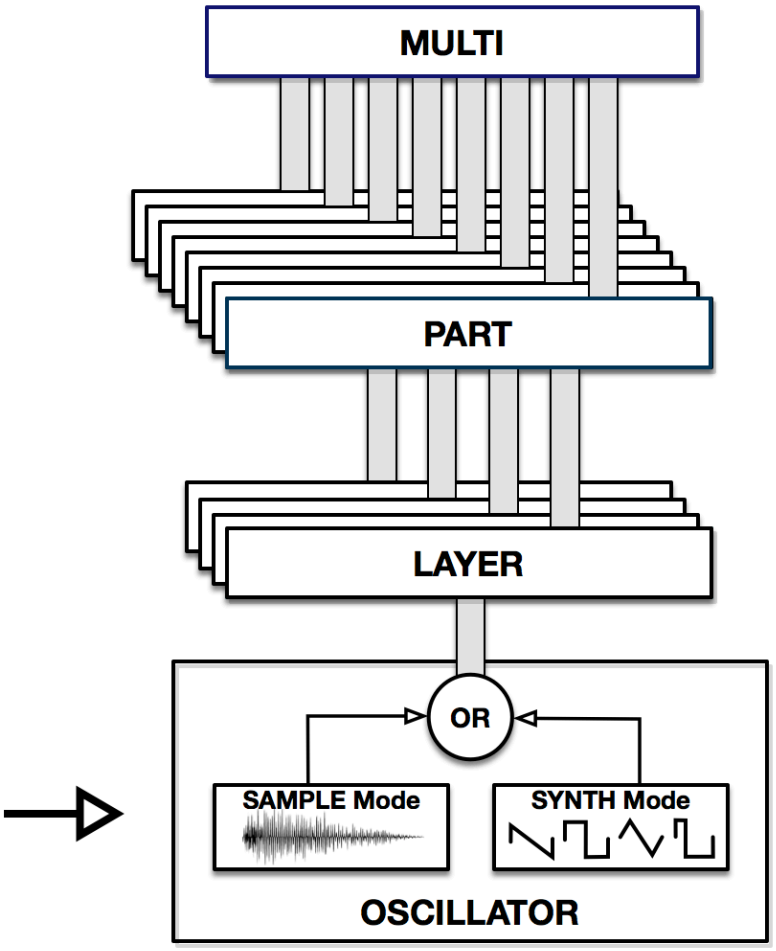
In Omnisphere, an oscillator exists in a **Layer**, which also includes its own filters, envelopes, effects, etc. You can combine up to four Layers to create a **Patch**, opening up a wide array of possibilities for creating new sounds. While working with a single Patch is a common way to use Omnisphere, its capabilities do not end there.

Patches can be loaded into any of Omnisphere's eight **Parts**, with each Part essentially operating as an individual synthesizer. Having eight Parts means a single instance of Omnisphere can play up to eight Patches at the same time! If you assemble a collection of Patches you like, you can save them all at once into a Multi.

The **Multi** is at the top of Omnisphere's hierarchy and can be thought of as saving the entire state of the instrument. Using Multi's to utilize different types of sounds, such as a soft pad, a percussive ARP and a deep bass, gives you the ability to cover a huge amount of musical ground, which is especially applicable to live use.

Through a totally unique approach to sound and music creation, Omnisphere continues to forge new sonic territory previously never thought possible. Its place as the go-to instrument for producers, composers and sound designers is further solidified through continual creative development and refinement. We are always working to take things a step further and we hope you join us in doing so by using Omnisphere to its fullest potential!

2.2.1. Oscillators



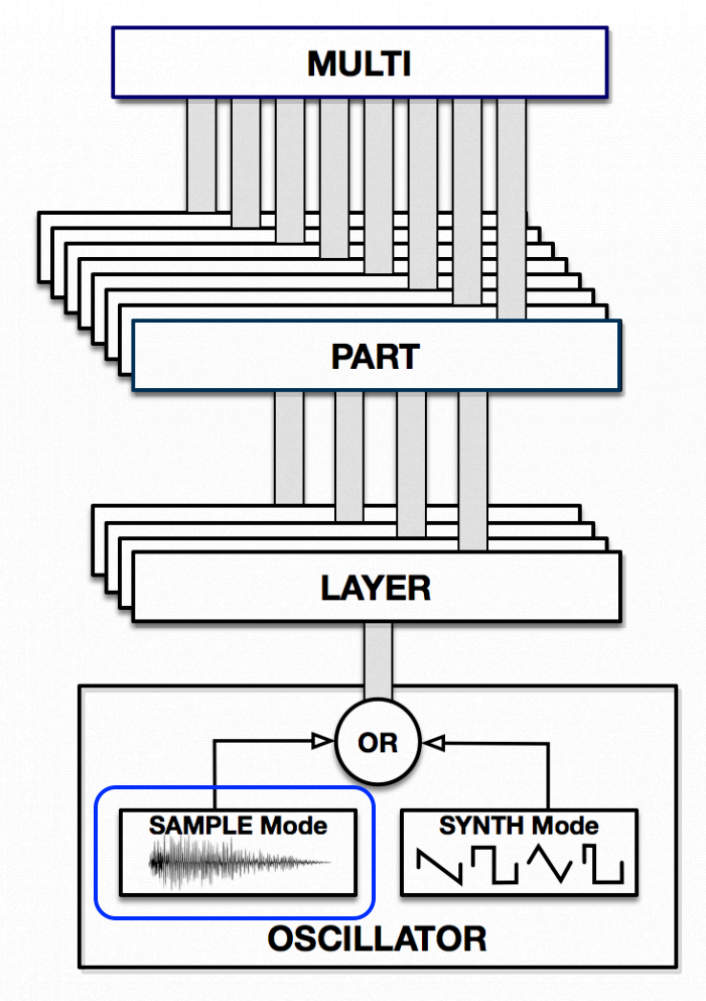
An oscillator can be thought of as the smallest building block of a sound and the best place to start when creating a new Patch from scratch in Omnisphere. The signal path of Omnisphere starts with its oscillators, so oscillator settings will affect all of the other components that come afterward and drastically influence the resulting sound.

An easy way to explore the impact the oscillator selection can have on Omnisphere's sound is by loading a Patch from its Factory library and then changing oscillator settings. It's surprising how dramatic the results can be when making minimal adjustments at this stage.

An oscillator in Omnisphere has two selectable modes: Sample Mode, which uses recorded sounds called Soundsources, and Synth Mode, which uses DSP Wavetables that are generated by your computer in real-time.

Due to their nature and implementation, these two modes sharply contrast each other and in turn, perfectly complement one another when used in tandem. In fact, it is the combination of Sample Mode and Synth Mode oscillators that provides the foundation for Omnisphere's distinct sonic signature.

2.2.1.1. Sample Mode / Soundsources



Soundsources allow Omnisphere's signal path to begin with sampled sounds instead of DSP waveforms.

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, round robin multi-samples with multiple microphone layers—like you'd find in a modern sample library.

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

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.

Soundsources do not include envelopes, filters, LFOs, FX, or any modulation settings – those are stored in the Patch.

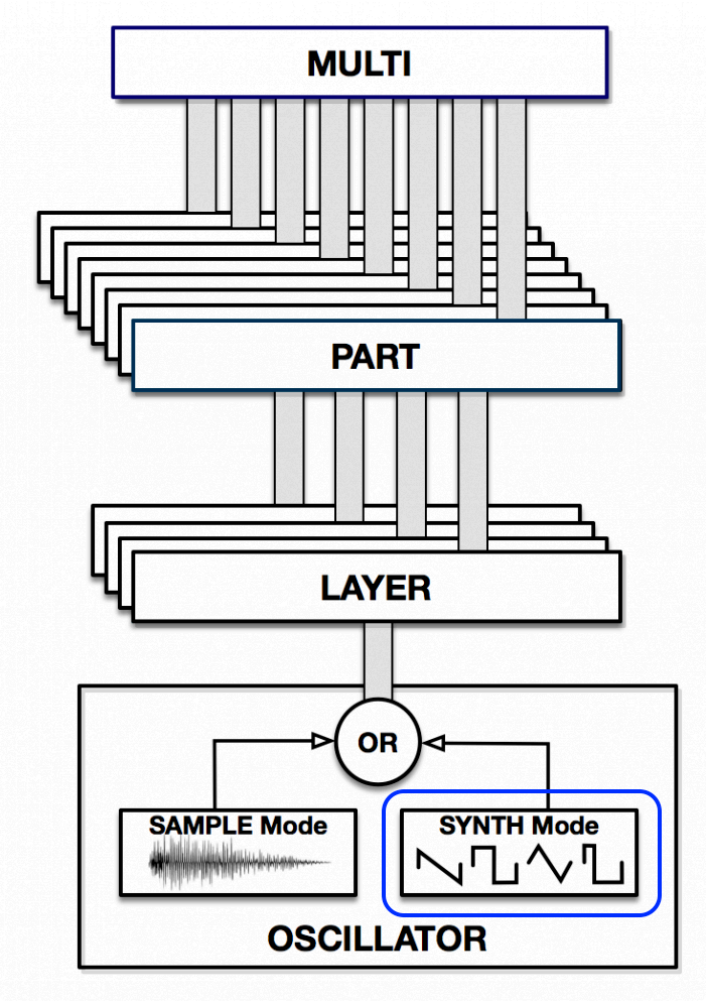
For this reason, you can load a new Soundsource into a Layer without changing any of the Layer's synthesis settings, allowing you to quickly create your own variations of any Patch.

The Factory Core Library of Omnisphere is almost 60 GB and includes over 4800 Soundsources specifically designed for compatibility with STEAM engine synthesis. This massive 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 via Satellite Instruments such as Keyscape or Trilian. The User Audio import feature allows users to add their own audio and manipulate it by taking advantage of Omnisphere's powerful synthesis capabilities.

Spectrasonics is constantly improving and adding to the Factory Soundsource Library, so make sure you stay up to date with the Smart Update feature.

2.2.1.2. Synth Mode / DSP



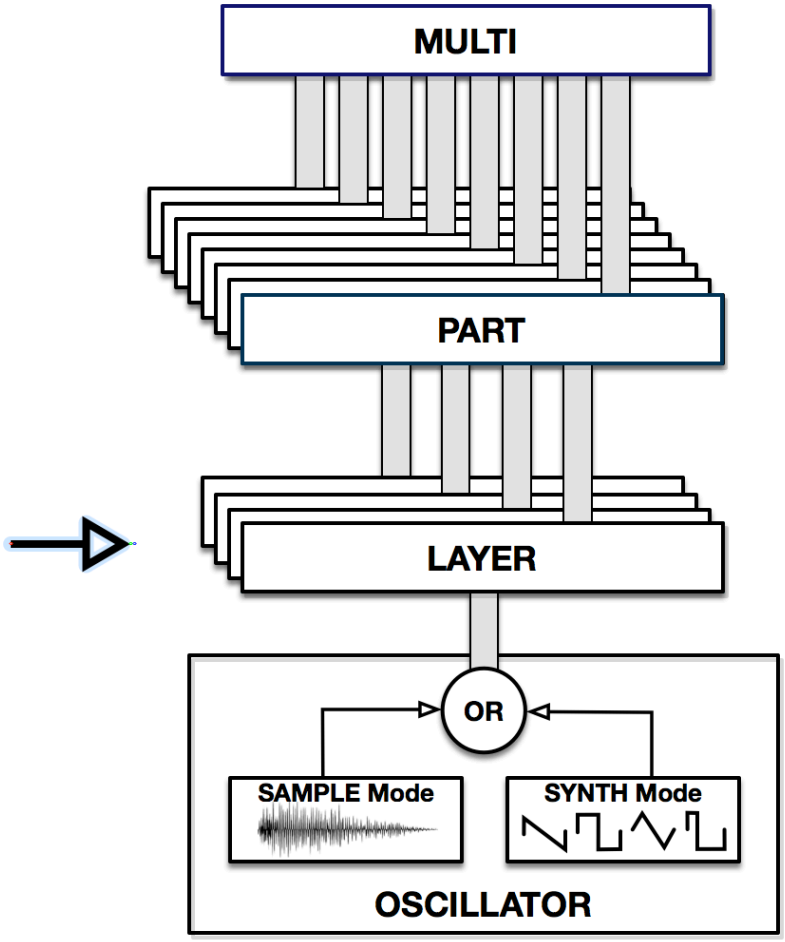
Synth Mode employs your computer's processor through the use of DSP (Digital Signal Processing) to synthesize wavetables in real-time.

A wavetable is a collection of single-cycle waveforms that can be swept through smoothly (using the Shape slider), creating dynamic timbral changes. These changes can be subtle or dramatic, depending on the timbral variety of the waveforms in a wavetable. There are over 500 wavetables in Omnisphere, ranging from classic vintage synthesizer waveforms to aggressive, digital waveshapes.

In addition to Shape, parameters such as Symmetry, Hard-Sync, Analog, and Phase can be used to further manipulate and tweak the timbre of the oscillator.

Working exclusively with Synth Mode oscillators in Omnisphere (along with Shared Signal Path) offers a more traditional approach to synthesis and a workflow similar to that of analog hardware synthesizers.

2.2.2. Layers



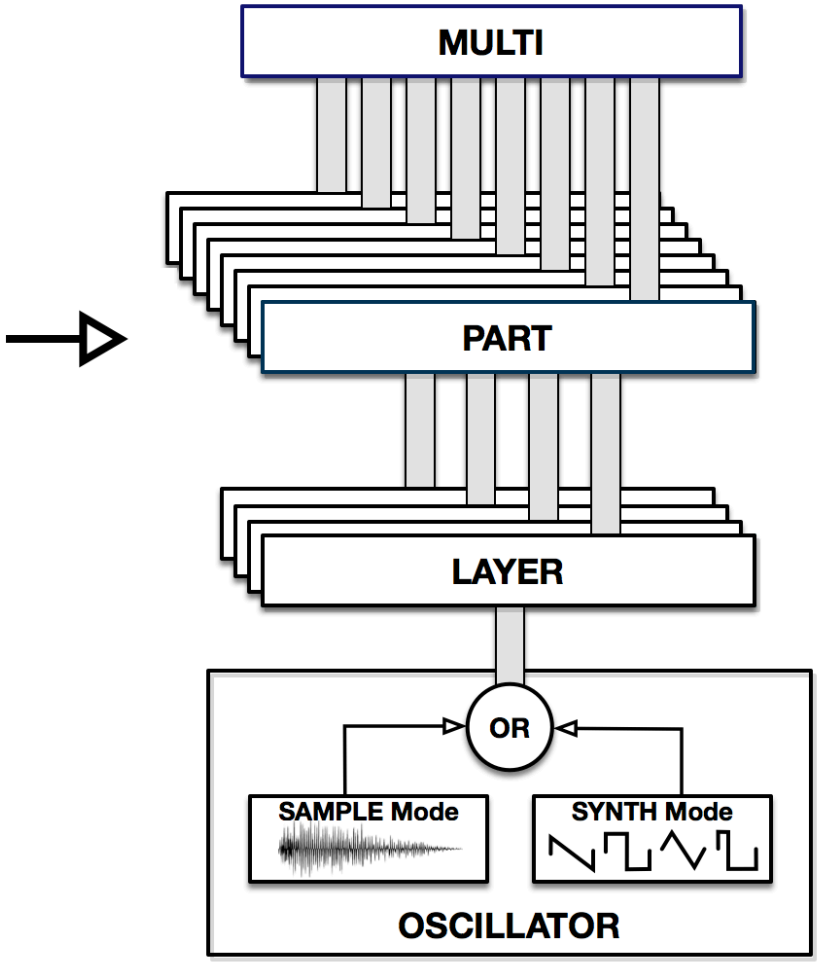
Omnisphere's Layer pages are where the majority of sound design and editing decisions are made.

Each Layer has an independent set of synthesis controls that will only affect the individual Layer. These include oscillator selection, a dual-filter section, Amp/Filter envelopes, FM (Frequency Modulation), Ring Modulation, Waveshaper, Unison, Harmonia, Granular and their own dedicated FX.

There are also several Common Parameters that are shared by all four Layers. If a parameter is numbered, then it's a Common Parameter that can be used by all Layers (ex: LFO 1 ~ 8, Mod Env. 1 ~ 4). If it isn't numbered, then it's specific to the Layer (ex: Amp Env., Filter Env.).

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

2.2.3. Parts and Patches



In Omnisphere, a Part can be thought of as an entire synthesizer, complete a multitude of parameters: oscillators, modulation routings, FX etc. A Patch is a snapshot of settings for those parameters and is loaded into a Part. A Patch is the most commonly used type of sound in Omnisphere.

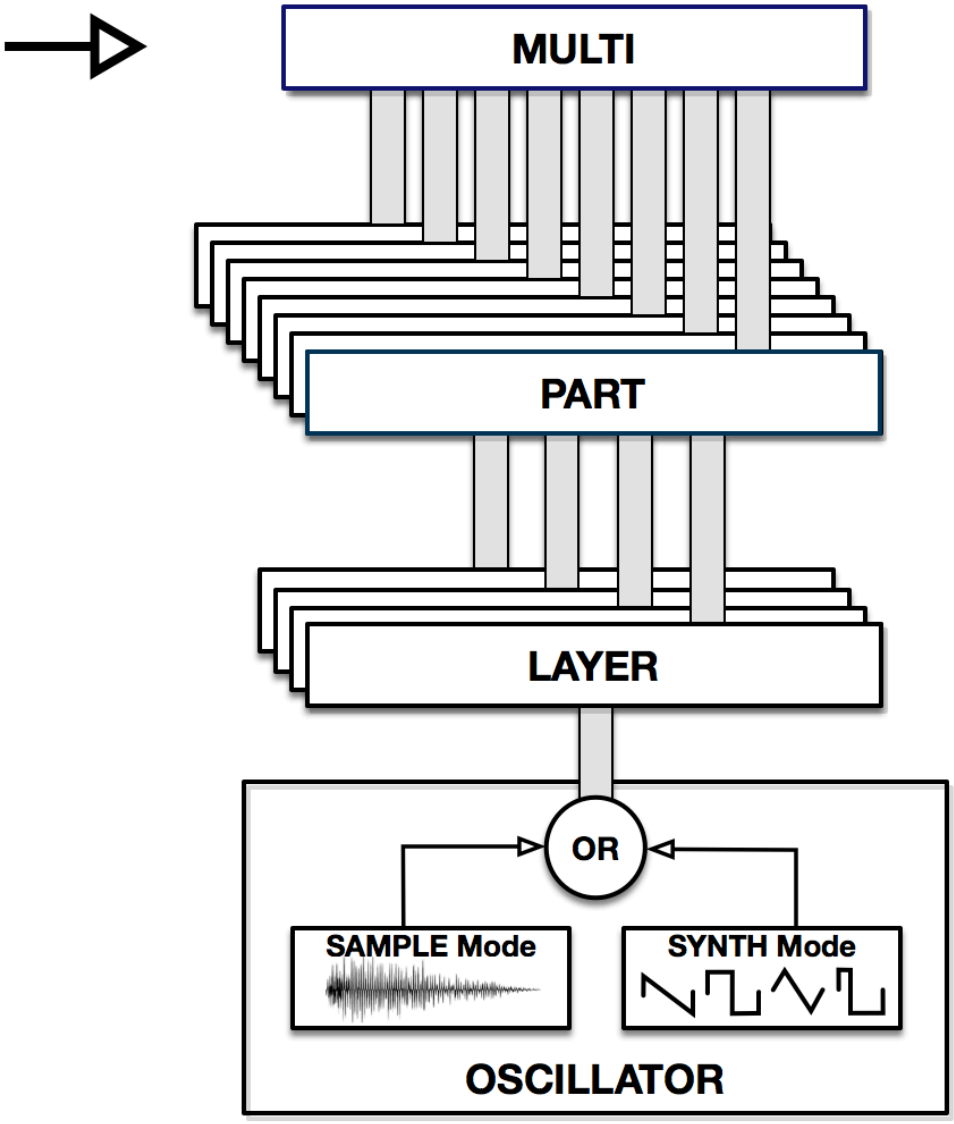
Patches can range from a very simple signal path, utilizing a single oscillator in one Layer, to incredibly complex virtual connections, with all four Layers combining to create an entire soundscape at the press of a single note.

Omnisphere comes with a vast factory library of Patches that is regularly updated with new sounds. Users can also save custom Patches or import Patches available in third-party libraries or those created by other Omnisphere users.

Omnisphere has eight Parts, which means you can load up to eight different Patches in a single instance and play them simultaneously in a variety of ways.

This multi-timbral functionality leads to the top of the Omnisphere hierarchy, the Multi.

2.2.4. Multis



A Multi is comprised of all eight Parts, four Aux FX Racks, a Master FX Rack and a Master Mixer. It also includes any **Live Mode** and **Stack Mode** settings, and all **MIDI Learn** assignments.

Therefore, saving a Multi is saving the entire state of the instrument for future recall.

If you find or create a Patch or Multi that you would like to have loaded upon opening a new instance of Omnisphere or would like MIDI mappings you've made to be recalled by default, you can use the "Save as Default Multi" feature found in the Utility Menu.

There are many ways to utilize a Multi in Omnisphere. The most traditional approach is as a truly multi-timbral synthesizer, with separate Patches loaded into Parts and each Part responding to a different MIDI channel.

Using Live Mode you can load different articulations into each Part, such as Sustains, Staccatos, and Slides and switch between them on the fly.

Using Stack Mode you can split and/or layer Omnisphere’s eight Parts in real-time, which is extremely useful during a live performance.

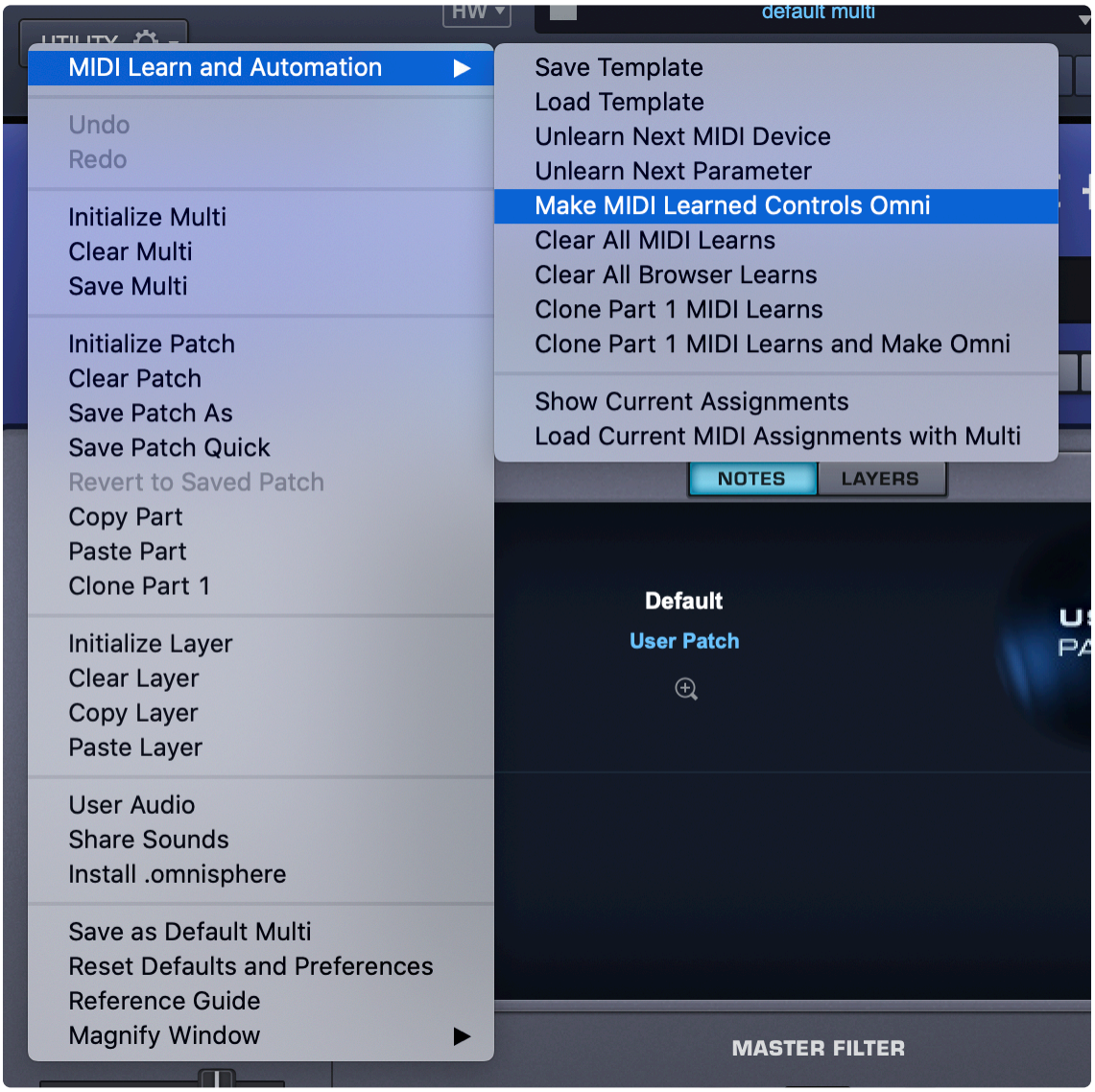
Learning to master the Multi’s many creative applications can lead to inspiring ideas that are only possible at the top of the Omnisphere hierarchy.

2.3. The Header

The top area of the Omnisphere interface is the Header. The Header is visible from any page in Omnisphere (except when any Full Browser is open) and is the primary navigation area of the interface.

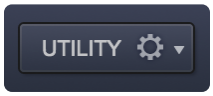
The Header contains the Utility Menu, Multi Information, (including the Multi Name Display) and access to the **MULTI Browser**, the **Hardware Profiles**, indicators for when **LIVE MODE** or **STACK MODE** are enabled, and Navigation Buttons for selecting any of the 8 Parts, the **MULTI** Section or the **SYSTEM Page**. Finally, there is a Master Volume Control for adjusting the overall output level and a “collapse” arrow to the left of the Utility Menu which allows you to open or close the sidebar.

2.3.1. MIDI Learn

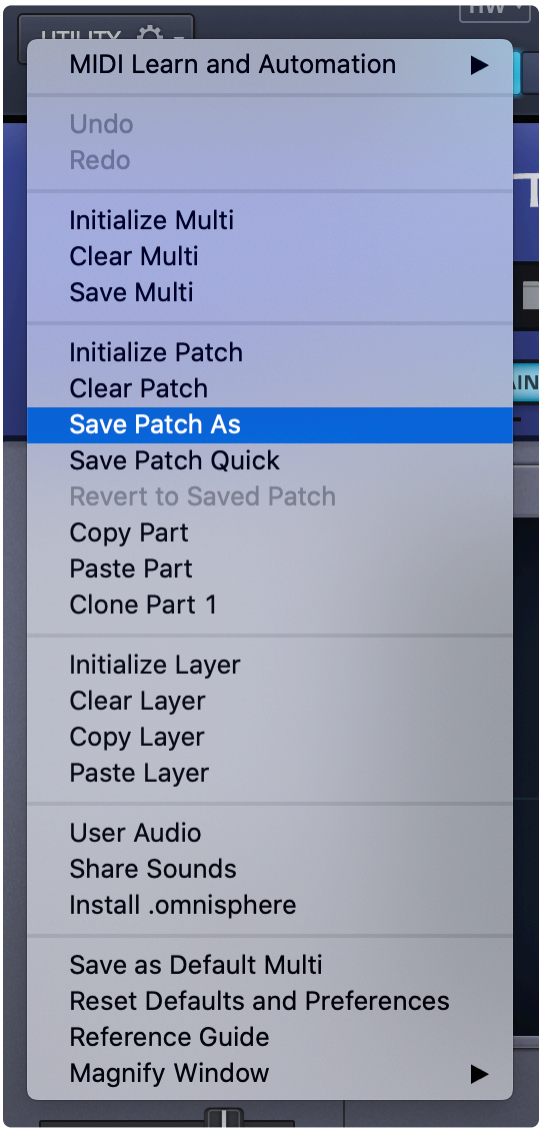


The Utility Menu provides the MIDI Learn and Automation options that apply to the entire plug-in. These include MIDI Learn Templates, Unlearn All, and access to a 'Current Assignments' Report. See the **MIDI Learn & Automation** section for details.

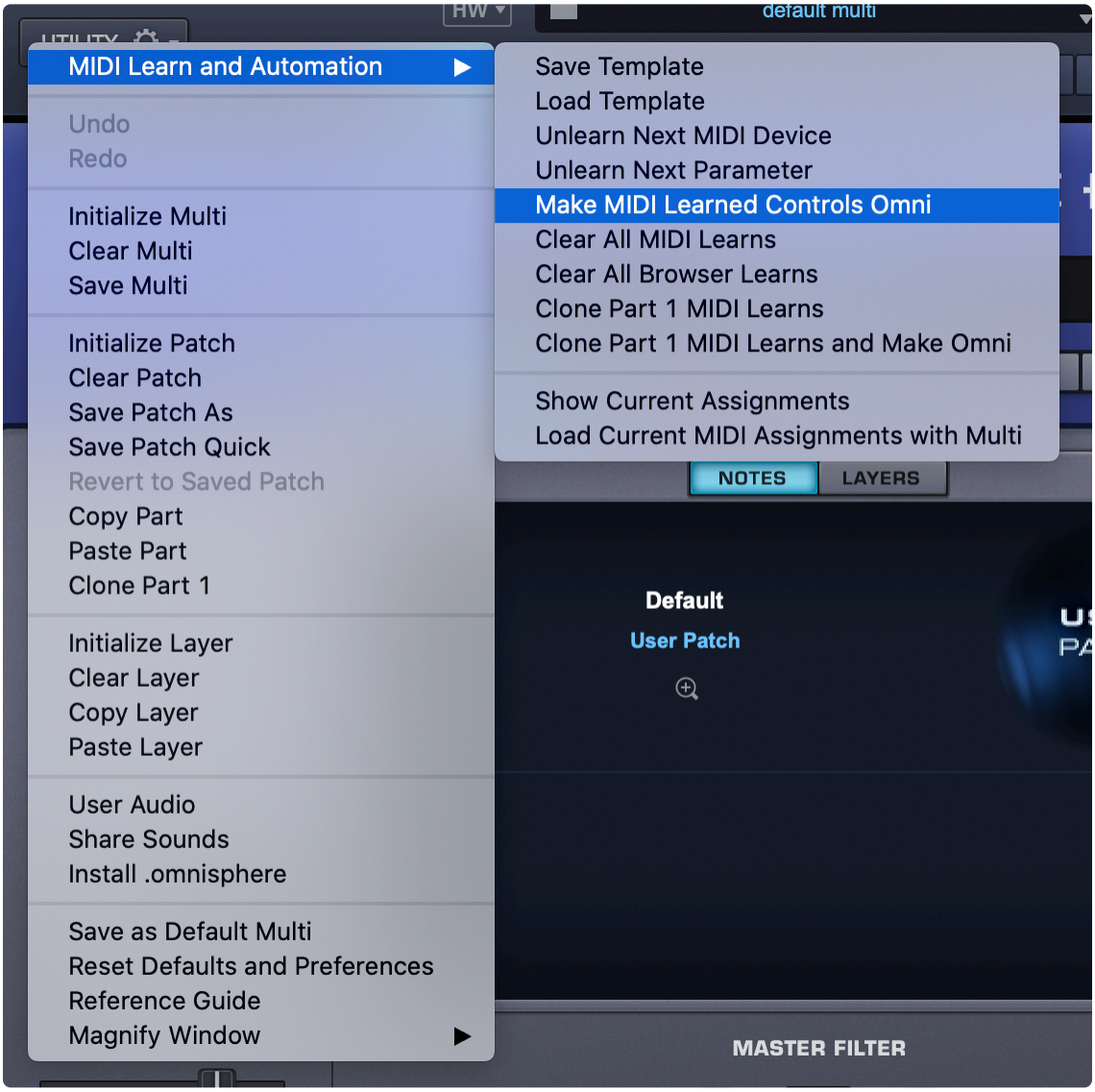
2.3.2. Utility Menu



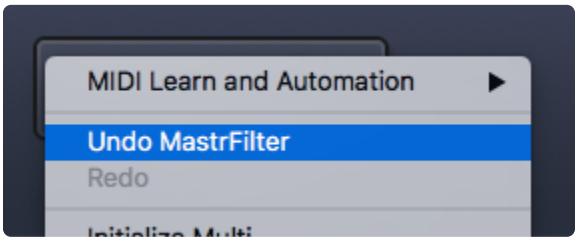
The **Utility Menu** is located in the upper left hand corner of the Header and is divided into seven sections.



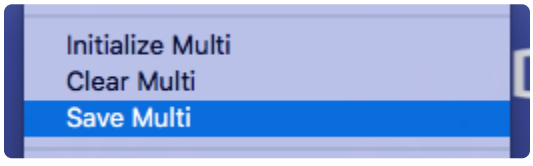
The first section contains a **MIDI Learn and Automation** sub-menu.



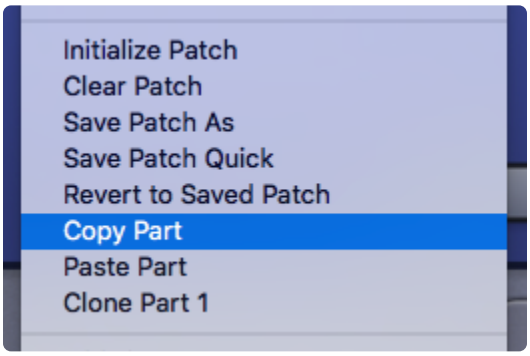
The second is for Undo and Redo commands.



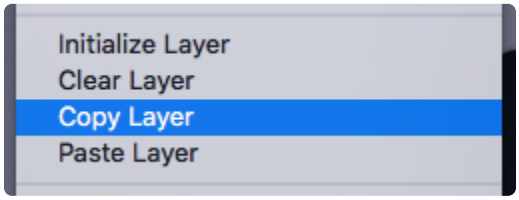
The third section lets you Initialize, Clear, and Save **Multis**.



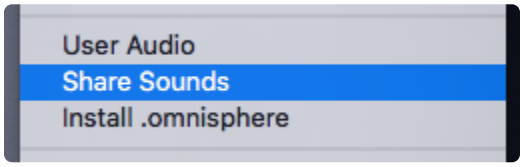
The fourth section provides Initialize, Clear, Save, Copy, and Revert functions for **Patches**, as well as Copy, Paste, and Clone functions for **Parts**.



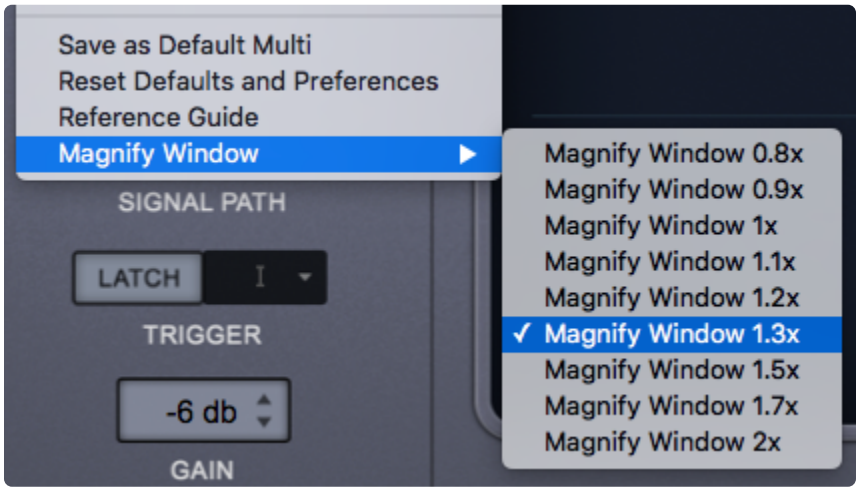
The fifth section allows you to Initialize, Clear, Copy, and Paste **Layers**.



The sixth section is for **sharing and adding sounds**.

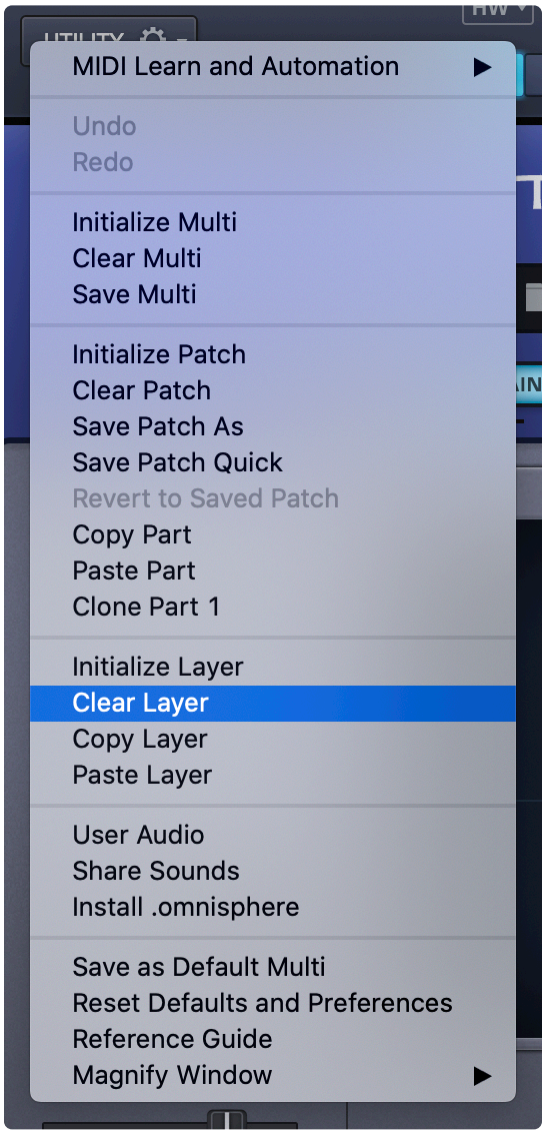


The seventh section lets you save your global settings as a **Default Multi**, provides a “factory reset“ option, gives you direct access to this Reference Guide and the **Magnify Window** options. To accommodate different display resolutions, the Omnisphere interface can be scaled up or down.



NOTE: Depending on your host, it may be necessary to close and reopen the magnified instance of Omnisphere to fit properly in the plug-in's window inside your host.

2.3.2.1. Clear, Save, Copy, and 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, will be restored to an unedited 'default' state and a default waveform 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 reset, and will use no memory.
- When Clearing or Initializing a Patch or Layer, 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.

Clear Patch

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

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.
- 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.

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.

Save Patch As

- Selecting the Save Patch As 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

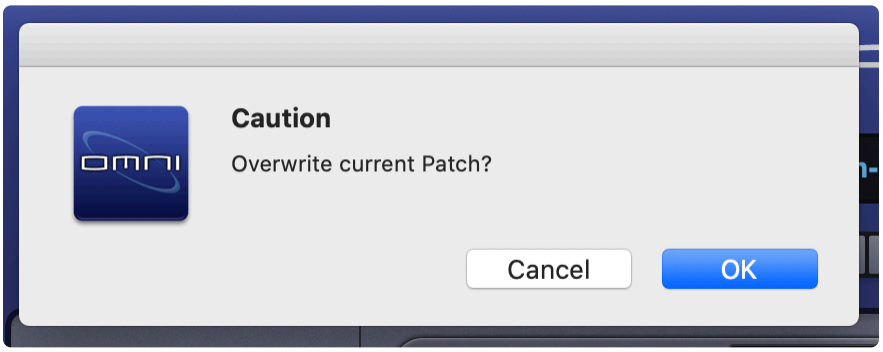
NOTE: Users can type in non-English characters and words in any language when saving Multis, Patches, or adding tags. These non-English characters or words can also be searched. All other text and warnings in the interface remain in English.

- 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.

NOTE: Patches or DAW project files saved with Omnisphere 2.5 cannot be read by previous versions.

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.



Revert to Saved Patch

- Reverts the Patch to the saved parameters.

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.

Clone Part 1

- Selecting “Clone Part 1” copies Part 1 to Parts 2-8 and facilitates the use of Omnisphere with advanced MIDI controllers like a MIDI guitar, Haken Continuum, EigenHarp, MorphWhiz MIDI, etc., which have the ability to send MIDI messages in non-traditional ways. For example, on a MIDI guitar, each string is usually set to its own channel, and on the Haken Continuum and the Eigenharp, a new channel is picked for each successive note that is played.
- Using this feature with advanced controllers such as these expands the performance capabilities of Omnisphere by allowing pitch-bend and other Continuous Controller MIDI messages on individual notes. This is made possible by sending out consecutive notes on different MIDI channels.
- Also, if you make edits to the Patch in Part 1, you can easily copy the edited Patch to the other parts.

NOTE: Be sure to check the Clone Part 1 MIDI Learns and Make Omni section

Initialize Layer

- Initializes all settings for the selected Layer, restoring all synthesis parameters to an unedited ‘default’ state, and includes the default sound.

NOTE: Because modulation routings can transcend a single layer, the Mod Matrix is a property of the Part, not the Layer. For this reason, initializing a Layer does not affect existing modulation routings.

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

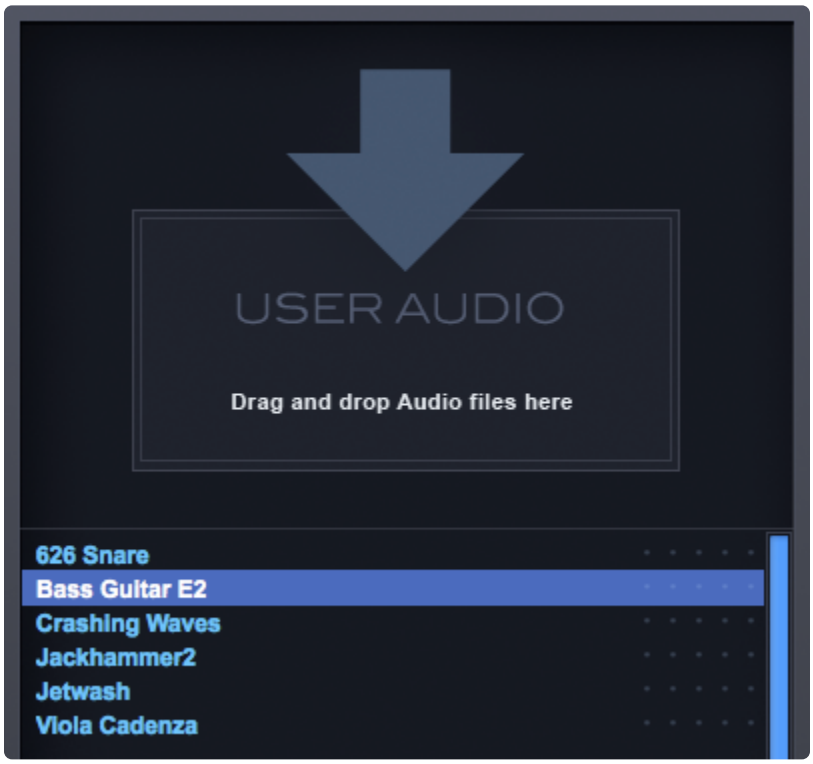
- After a Layer has been copied using the Copy Layer command, it can be pasted to another Layer. To paste a copied Layer, select the destination Layer using the Layer tabs in the Edit Page, and then select the Paste Layer command from the Utility Menu.

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

2.3.2.2. User Audio

Omnisphere allows you to import your own audio to use as Soundsources and to create your own Patches and Multis. You can process and manipulate your own audio in creative ways using Omnisphere's powerful synthesis capabilities. Each imported audio file will become a User Soundsource in Omnisphere.

Select "**User Audio**" from the Utility Menu and follow the instructions. After the import process is complete, the Soundsource Browser will be displayed and your audio (now an Omnisphere User Soundsource), will be automatically selected and played back at the note and duration set by the **Audition Note** settings.



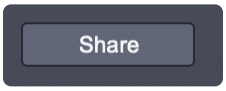
To delete the audio you imported, you can do so by locating it it on your hard drive in the following directory:

STEAM/Omnipshere/Soundsources/User/

After deleting it, you must click the "Refresh" button in your Soundsource Browser to reflect the changes.

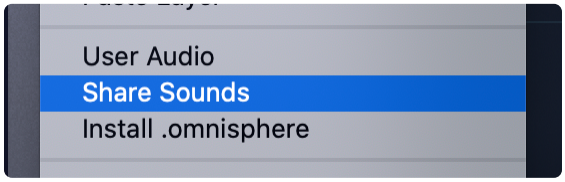
NOTE: Each imported audio file will become a User Soundsource in Omnisphere. The User Audio import function does not support zone-maps, round-robins, multiple velocities, etc. Remember, Omnisphere is not a sampler, is a synthesizer. The objective is not to play multi-sampled instruments like a sampler, but to be creative in transforming your own audio.

2.3.2.3. Share Sounds



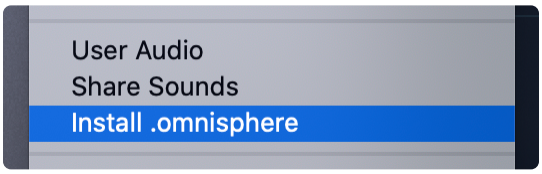
Using the **Sharing** feature, it's easy for you to share your custom Omnisphere sounds, no matter if they were created using Factory Soundsources, Wavetables, or your own audio. You can share any combination of Patches, Multis, and User Soundsources with a few simple steps. All the necessary components will be collected for you into a single .omnisphere file which others can open in Omnisphere on their computer.

This method is intended for casually sharing sounds. You can choose which sounds to share by selecting them in the Browser with Shift-click. Next, select "Share Sounds" from the Utility menu or press the "Share" button in the Full Browsers to create an .omnisphere package containing the sounds you selected. This method allows you to share only one type of sound of a time (Multis, Patches, or User Soundsources).



NOTE: If a Patch or Multi you are sharing includes User Soundsources, those will be included as part of the .omnisphere package.

2.3.2.4. Install .omnisphere



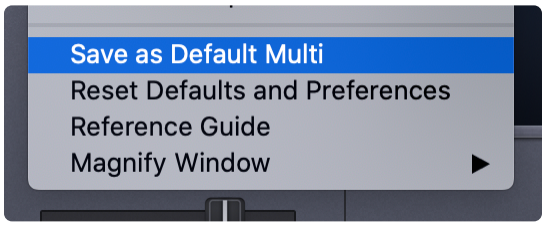
Adding sounds to your library that have been **Shared** by other Omnisphere users is simple!

Omnisphere sounds that have been shared using the **Sharing** feature are conveniently collected into a single .omnisphere file, which can be added to your library in a single operation.

This feature handles the file management for you—without you ever having to leave Omnisphere.

You can use “Install .omnisphere” in the Utility Menu to easily add sounds that have been shared by others.

2.3.2.5. Save as Default Multi



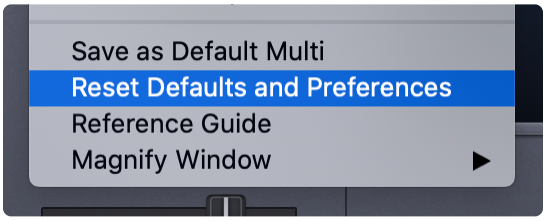
Saving a Multi preserves the entire state of the plug-in for future recall. A Multi stores all of the settings from the **MIXER** page, the **Multi FX**, the **LIVE MODE** and **STACK MODE** pages, all **MIDI Learn & Automation** assignments, as well as all of the settings (including any unsaved edits)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

For example, if you want to change the default Patch, set a specific Master Output level or retain a MIDI Learn assignment, “Save as a Default Multi” will allow you to load all of your preferred settings each time you open a new instance of Omnisphere.

NOTE: Selecting Reset Defaults and Preferences will take you back to factory settings.

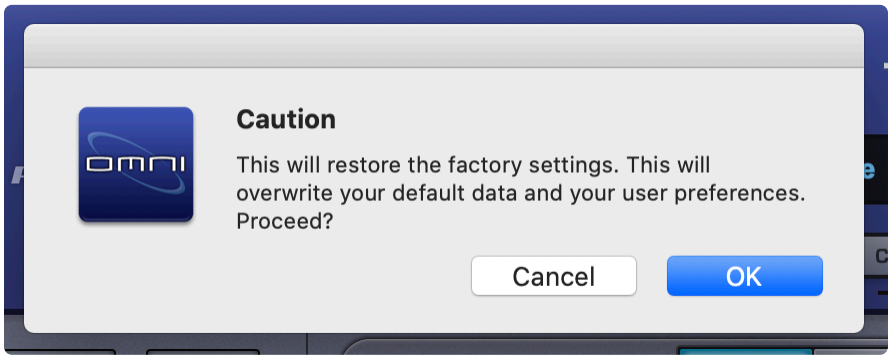
NOTE: For our visually-impaired users, we have created a special Default Multi with many useful parameters assigned to automation. These automated parameters can be used within your DAW. Please contact our Support team for more information.

2.3.2.6. Reset Defaults and Preferences

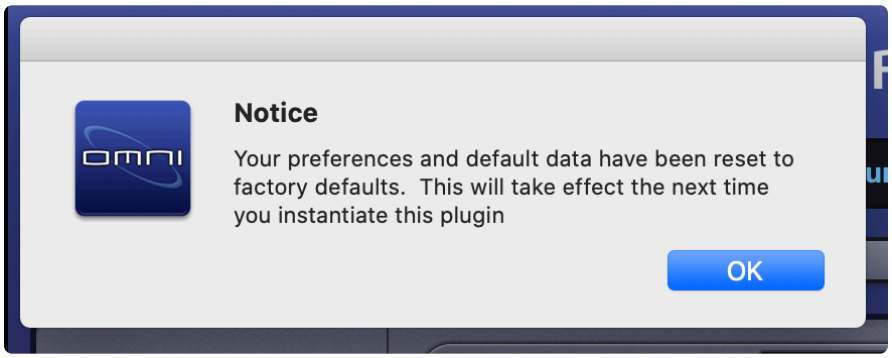


The Utility Menu lets you perform a “factory reset” by selecting “Reset Defaults and Preferences.”

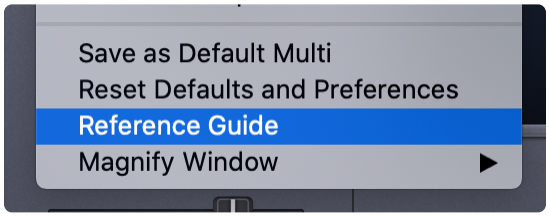
After selecting this option, a message will be displayed, warning you that this action will overwrite your default Multi and User Preferences.



A confirmation dialog will be displayed after the Default Multi and User Preferences are reset.



2.3.2.7. Reference Guide

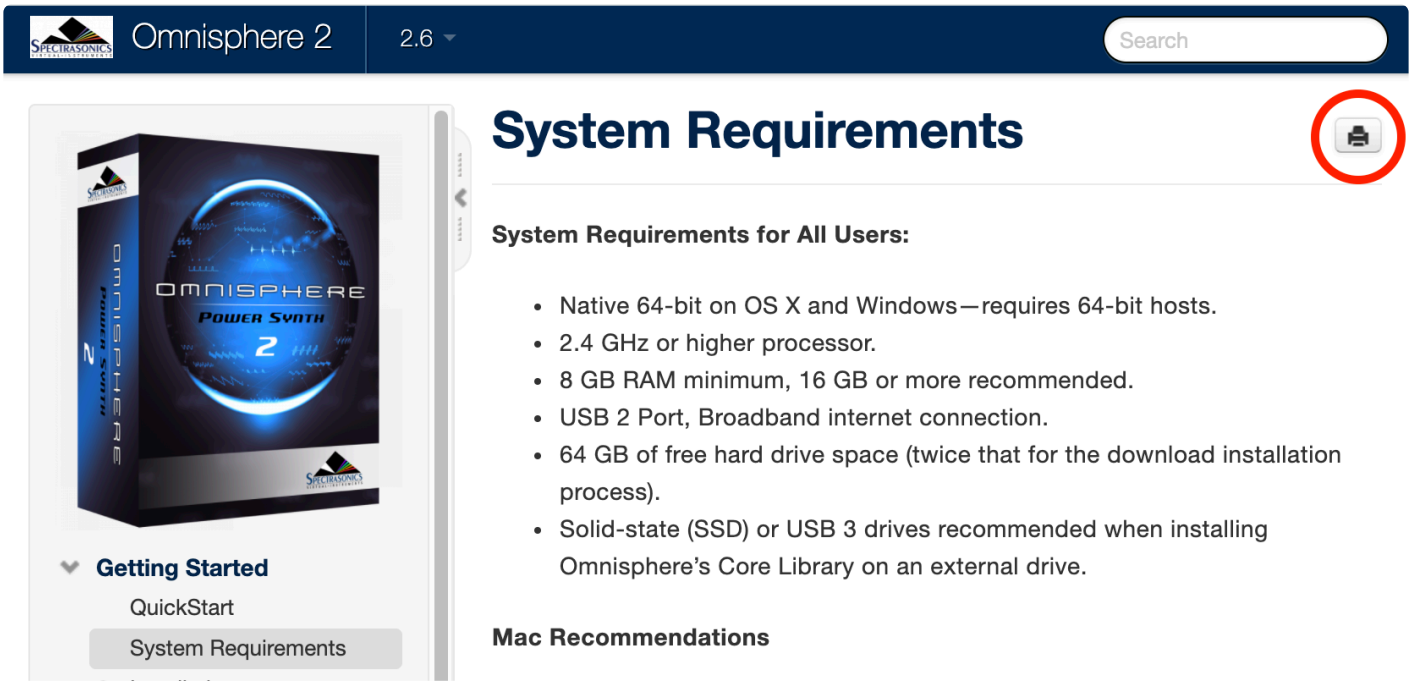


Selecting this option from the Utility Menu will open the online Omnisphere **Reference Guide**. The Reference Guide will be displayed using your default Web Browser.

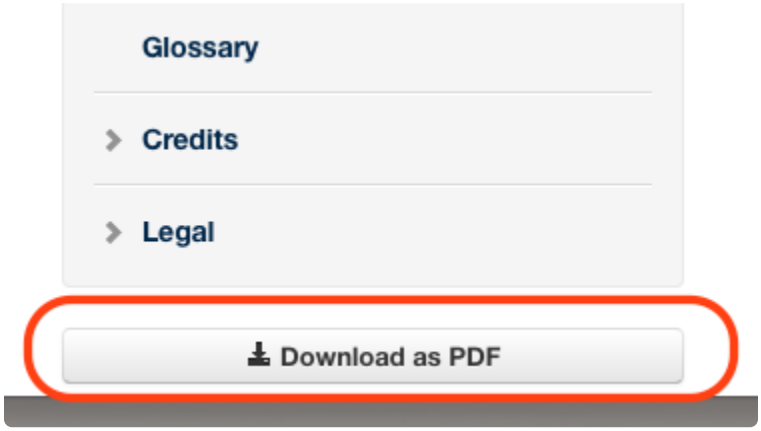
If you'd like to hide the Table of Contents sidebar in order to display any of the images in a larger format, click on the "collapse" arrow located on the top right of the sidebar.

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 which can be saved as PDFs.

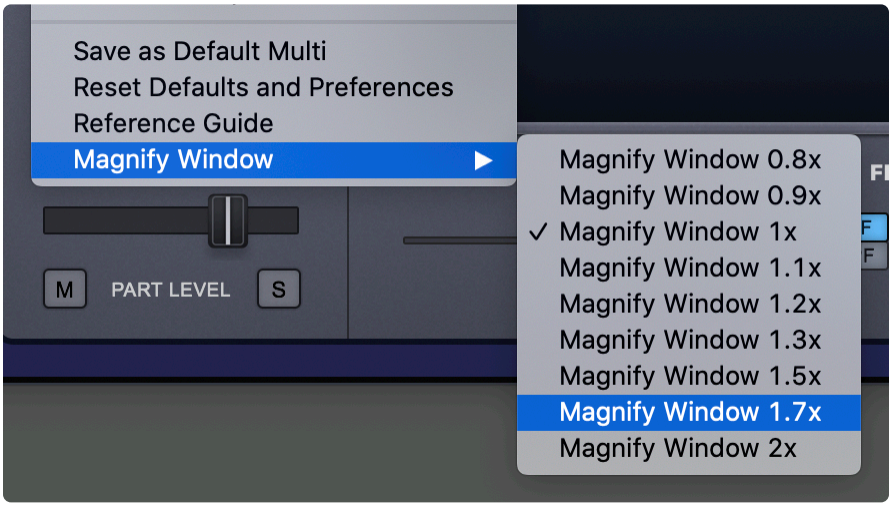
You can also print just the page you are reading by clicking the small printer icon in the upper right of each page.



The complete Omnisphere Reference Guide is also available in PDF format by selecting the "Download as PDF" button at the bottom of the Directory:



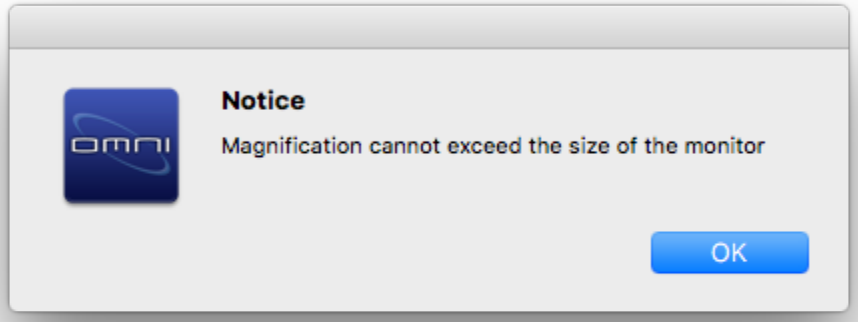
2.3.2.8. Magnify Window



Omnisphere's interface can be enlarged to accommodate different screen resolutions. Choose your preferred size in the Utility Menu / Magnify Window sub-menu:

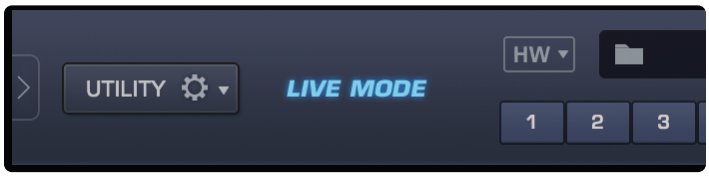
- **Magnify Window 0.8x** – Scaled down to 80%
- **Magnify Window 0.9x** – Scaled down to 90%
- **Magnify Window 1x** – Standard size.
- **Magnify Window 1.1x** – Scaled up to 110%.
- **Magnify Window 1.2x** – Scaled up to 120%. (Default for 2.5 and later)
- **Magnify Window 1.3x** – Scaled up to 130%.
- **Magnify Window 1.5x** – Scaled up to 150%.
- **Magnify Window 1.7x** – Scaled up to 170%.
- **Magnify Window 2x** – Double size.

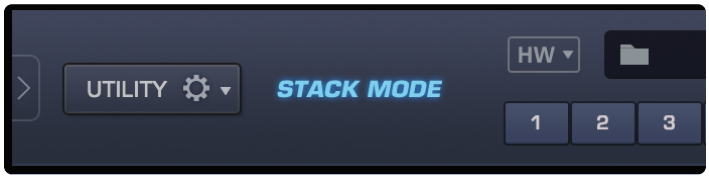
NOTE: If the selected magnification exceeds the size of your monitor, you will receive the following error message:


Notice
Magnification cannot exceed the size of the monitor
OK

2.3.3. Live / Stack Mode Indicators

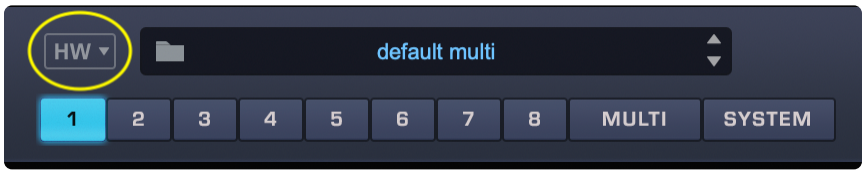
When either **LIVE MODE** or **STACK MODE** is enabled, you'll see the respective label displayed on the left side of the Omnisphere header.

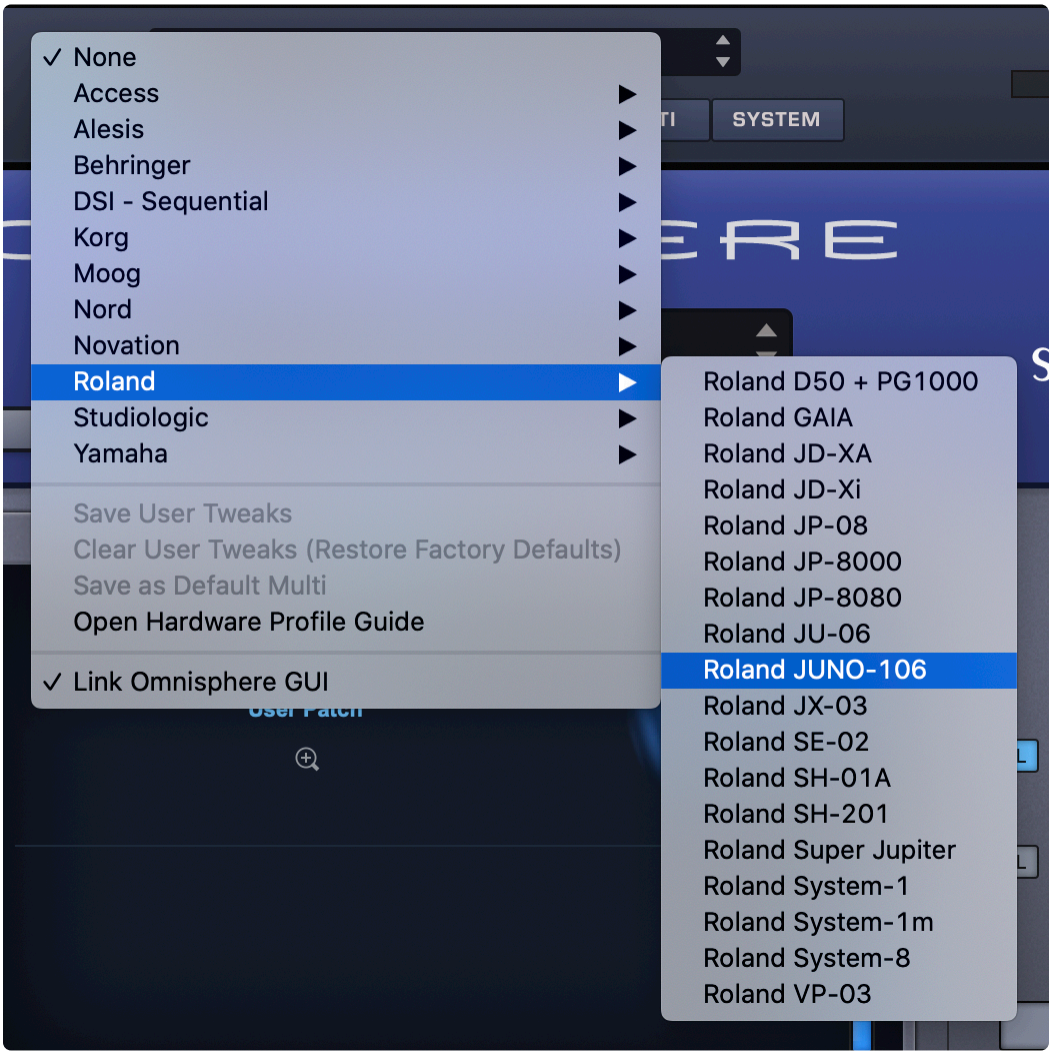




2.3.4. Hardware Profiles Menu

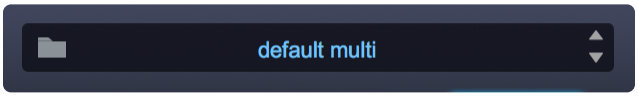
Clicking on the HW Menu button to the left of the Multi Name Display reveals the Hardware Profiles Menu.





From here, you may select or deactivate any of the **Hardware Profiles**, as well as **Save User Tweaks and Restore Factory Defaults**, save your changes to the profile as a **Default Multi**, open the **Hardware Profile Guide**, or control the activation of **Link Omnisphere GUI**.

2.3.5. Multi Display



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

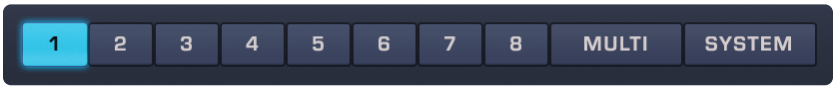
Selecting the Folder icon, or anywhere inside the Multi Name Display, will open the Multi Browser. After a MULTI has been loaded, the name of the MULTI will be displayed in the Multi Name Display.

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.

2.3.6. Navigation Buttons

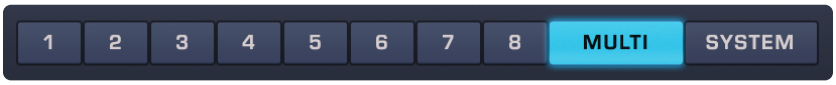
The **Navigation Buttons** in the header are used to select and view any of the eight **Parts**, the **Multi Section**, or the **System Page**. Only one button can be selected at a time.

Part Select Buttons (1 ~ 8)



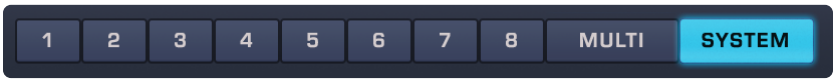
Buttons 1–8 are Part Select Buttons. Selecting a Part lets you access and view any of the pages for that Part, including the **Orb**, **Main**, **Layer A**, **Layer B**, **Layer C**, **Layer D**, **Patch FX** pages, and the **Arpeggiator** Page.

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.

SYSTEM Button



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

NOTE: Right-click on a Part Select Button to hear the currently loaded sound. It will play as long as the button is pressed (or until the sound decays). The "Audition Note" setting in the Browser Settings Zoom determines the pitch.

2.3.7. Master Volume Control

The **Master Volume** slider controls the output of the entire plug-in and includes a meter, providing a reference to the output signal.
Range -inf dB to 9.54 dB

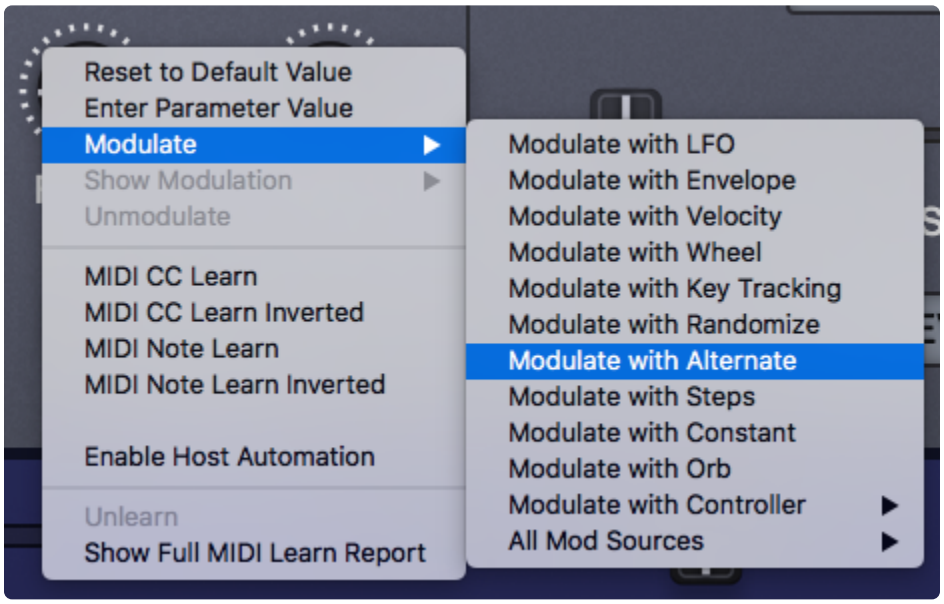
2.4. Interface Conventions

The Omnisphere interface is designed for all types of users, ranging from composers to performers to sound designers. This chapter explains important interface conventions that will help you get the most out of it.

2.4.1. Drop-Down Menus

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.

2.4.2. Contextual Menus



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, and Automation options.

2.4.3. 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.

2.4.4. Zoom Icon Buttons

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.

2.4.5. Folder Icon Buttons

Besides the Mini-Browser, there are three Full Browsers built into Omnisphere, one each for Multis, Patches, and Soundsources. All three Full 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 that 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

When any of the Multi pages are selected (MIXER, FX, LIVE, or STACK) the Mini-Multi Browser will be displayed on the left. The Full Multi Browser can be accessed from the Header, or by selecting the magnifying glass icon next to the Mini-Multi Browser name display.

Patch Browser

The Mini-Patch Browser is automatically displayed on the left area of the interface when any Part page is selected.

The Full Patch Browser can be accessed from any Patch Name Display (including the ones in the Mixer Page) from the LIVE MODE page when Mixer Controls are enabled and from the STACK MODE page by right-clicking on a region. It can also be accessed by selecting the magnifying glass icon next to the Mini Patch Browser name display.

Soundsource Browser

The Soundsource Browser is accessed by clicking on the Soundsource image (or folder icon) in the center of the Layer Pages when the Oscillator is in SAMPLE mode. It can also be accessed by clicking on the Soundsource image in the Main page under the Layers tab.

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

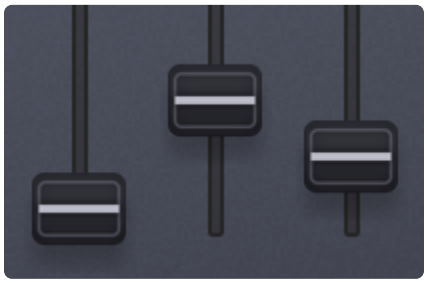
2.4.6. Knobs and Sliders

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

NOTE: Shift-click and drag for more precise adjustments.

Knobs

Vertical Sliders



Horizontal Unidirectional Slider

Horizontal Bidirectional Slider

Mini Sliders

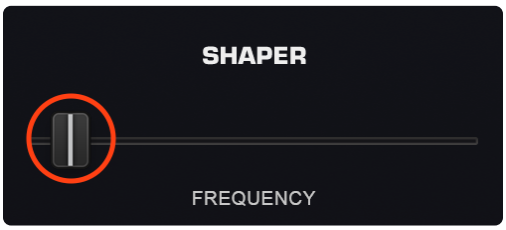
2.4.7. Parameter Values

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.

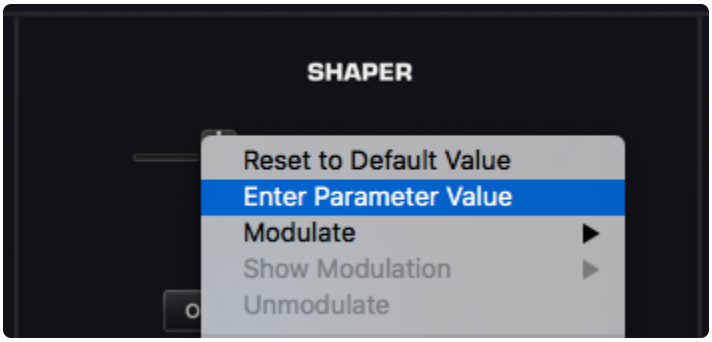
Enter Parameter Value

Precise settings can be manually entered by right-clicking on any of Omnisphere's parameters and selecting "Enter Parameter Value" from the menu.

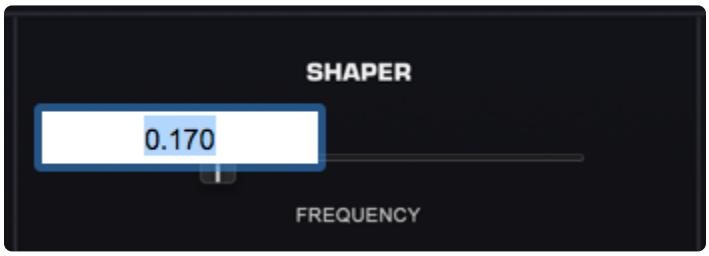
In this example, right-clicking FREQUENCY in the WAVESHAPER will bring up the menu.



Select "Enter Parameter Value."

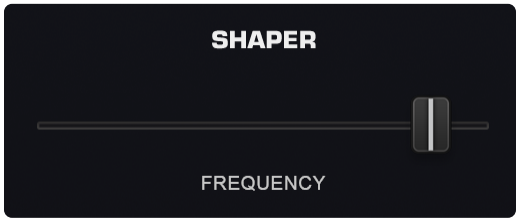


The currently set parameter value will then be displayed.



Enter the desired parameter value.

The new value will now be displayed when selecting the control.



2.4.8. 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 8 LFO buttons. When one of them is highlighted it means it is selected, and that LFO's settings are displayed.

Page Buttons

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

2.4.9. Switches

Switches let you toggle certain parameters ON/OFF or switch between multiple options. When a parameter is enabled or selected, the switch will be highlighted. For example on the Layer Pages, switches toggle between SAMPLE Mode and SYNTH Mode, toggle LFO Sync ON/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 (separate side-by-side buttons are Mode Switches)

Switches (buttons separated by lines are ON/OFF Switches)

Power ON/OFF Switches

2.4.10. Indicator Switches

The Indicator Switch LEDs found below the Page buttons can be both status indicators and toggles.

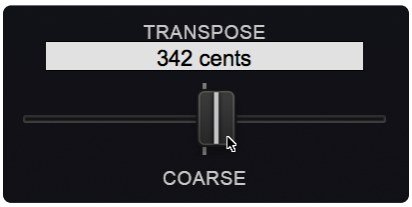
The blue LEDs below ORB, A, B, C, D, and ARP indicate whether the feature is enabled or not, and double as a toggle to enable/disable them.

The LED below MAIN lights up to indicate one or more of the following:

- SOLO is ON
- GLIDE is ON
- CLOCK is set to anything other than “Normal”
- SCALE is set to anything other than “Equal Temperament”

When the LED below FX is blue, it indicates that effects units are in use. Clicking on it will turn it red, which will cause all the FX units in a part to be **bypassed**. If the LED is OFF, it means no FX units are enabled in that part. If the LED below a Layer selector is yellow (instead of blue), it means Shared Signal Path is enabled.

2.4.11. Modifier Keys



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: Control-click to reset the slider or knob to a neutral or default position.
- Browsers: Control-click to allow selection of multiple Attributes.
- Envelopes (editing): Control-click and drag to engage the Lock function.

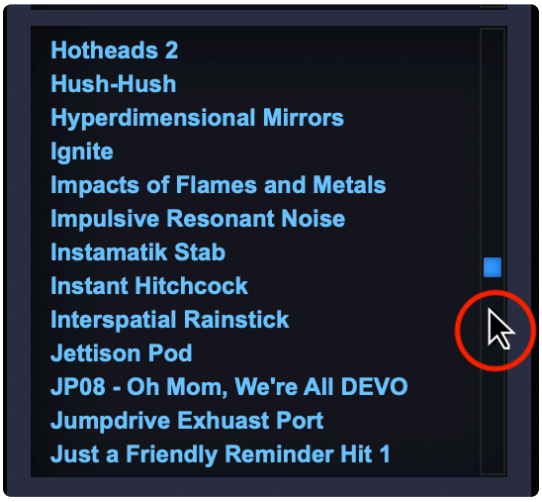
Shift-Click

- 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 (Windows users, use Alt-click)

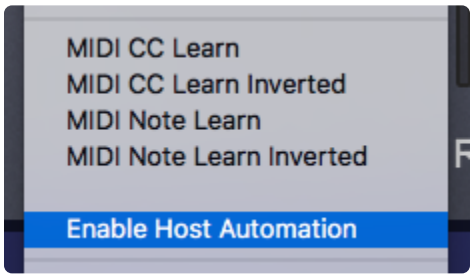
- Envelopes (editing): Option-click to engage the Snap function.

2.4.12. Parameter and Browser Scrolling



Omnisphere lets you adjust parameters by scrolling with your mouse, trackball, trackpad, or Windows MultiTouch when the cursor hovers over any scroll bar, knob, slider, menu, or browser.

2.5. MIDI Learn and Automation



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 or MIDI controller 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 (including FX menu selections) 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 MIDI Learn, 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.

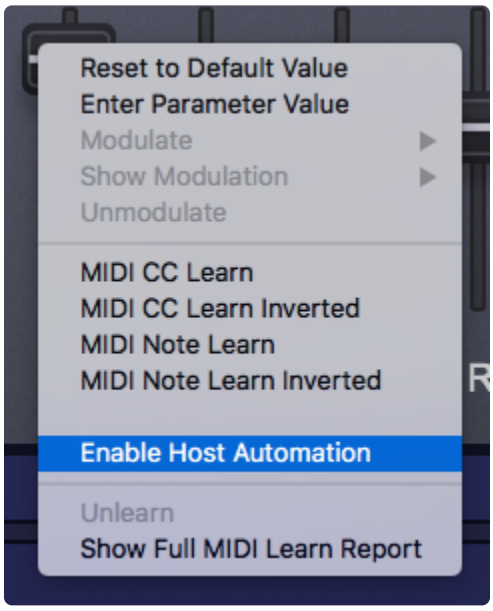
NOTE: For our visually-impaired users, we have created a special Default Multi with many useful parameters assigned to automation. These automated parameters can be used within your DAW. Please contact our Support team for more information.

2.5.1. 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, select "Show Current Assignments" 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 512 Host Automation parameters. If you need more than 512 assignments, consider using MIDI Learn together with Host Automation.

Technical Considerations

There are 512 parameter slots in Omnisphere that can be automated, numbered from 0 to 511. 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 Trilian 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.

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, many control surfaces with motorized faders automatically display and update parameter names in real-time, which is 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 automated by the host. 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 Omnisphere’s MIDI Learn feature to automate its 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. With Live 8, Ableton also offers a “Configure” mode, which allows you to assign host automation directly from within the host.

- **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 when loading.

2.5.2. MIDI Learn Concepts

MIDI Learn is an immensely powerful feature that allows you to remote control virtually any on-screen parameter (including FX menu selections) 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 MIDI-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:

1. Right/Control-click an Omnisphere parameter.
2. Select MIDI CC Learn (or MIDI Note Learn) from the menu. A flashing blue box will surround the control to indicate it is ready to be paired.

3. 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.

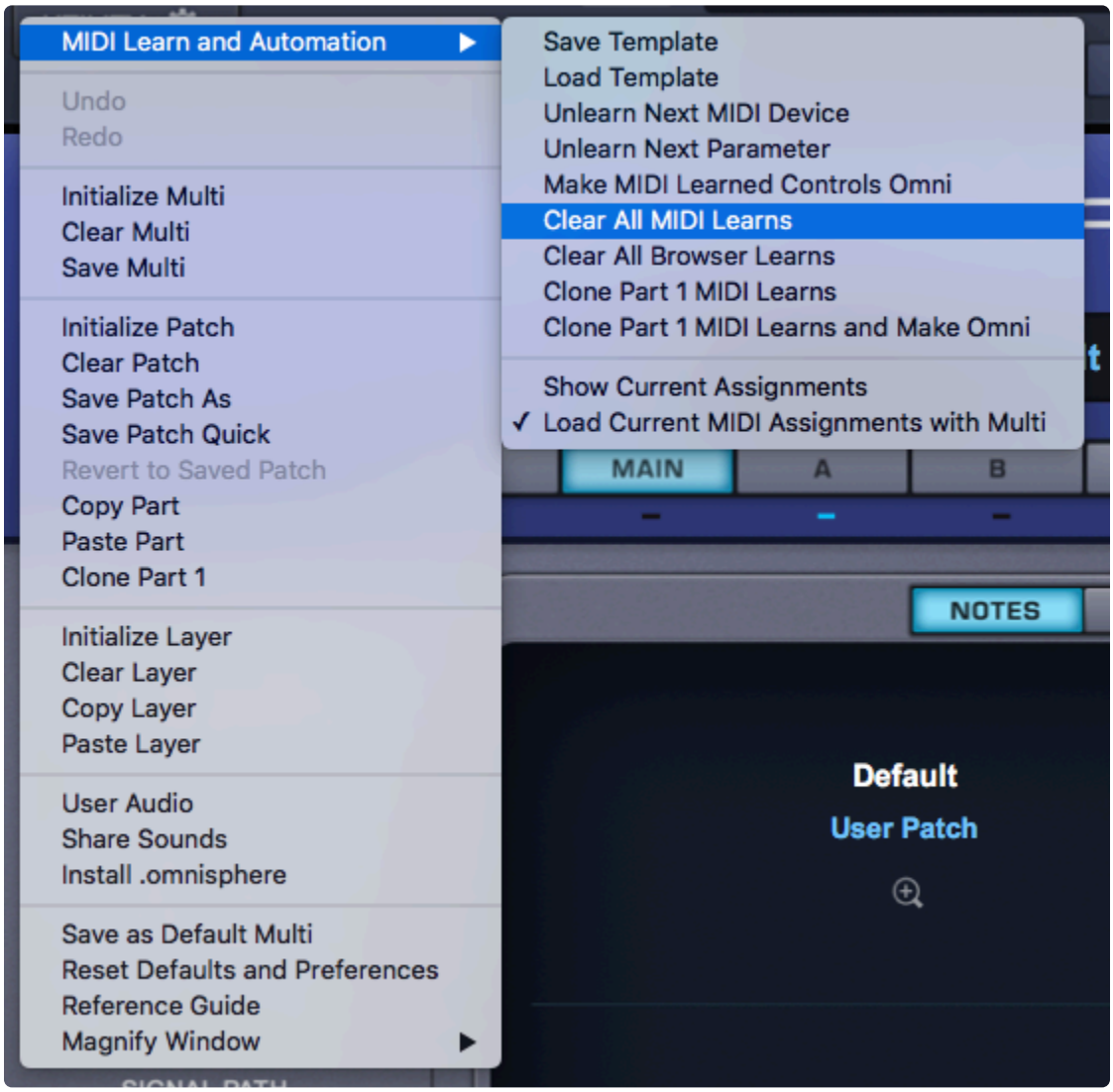
Key MIDI Learn Concepts

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

- All MIDI-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 set up 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 and 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’s 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, Note, and Program Change messages are supported, but Pitch Bend and Aftertouch messages are not currently supported in the MIDI Learn system.

2.5.3. MIDI Learn Menus

The **MIDI Learn Menu** provides MIDI Learn options that affect the entire plug-in.
It is accessed via the **Utility Menu** or by Right/Control-clicking any empty area of the Omnisphere interface.



MIDI Learn Template

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

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

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

Select “Load 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 the option Show Current Assignments (see below) to preview the settings 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 MIDI-Learned Controls Omni

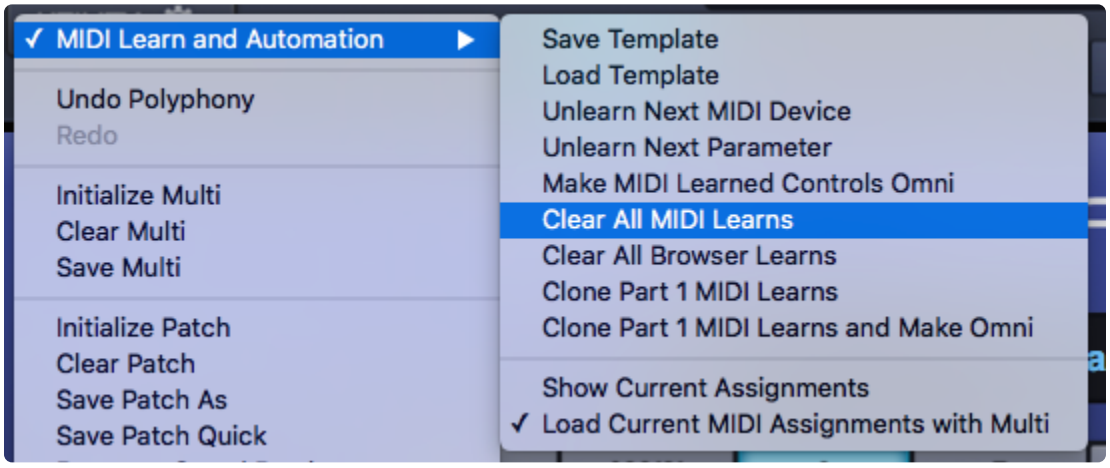
Assignments can be made to receive MIDI in Omni mode so that when a sequencer’s track is changed, all of the controls are still active regardless of the incoming MIDI channel assignment.

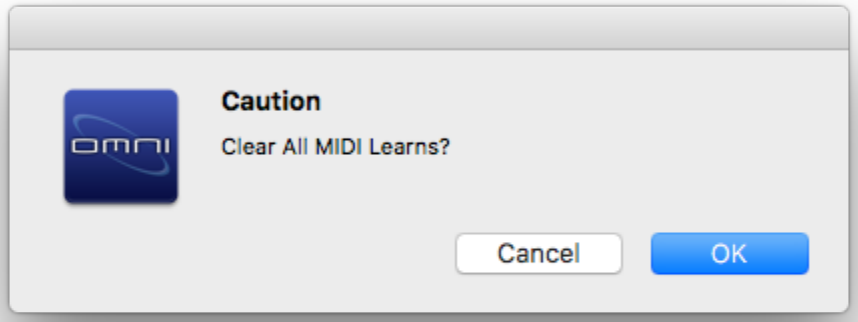
Omnisphere is MIDI input channel sensitive when MIDI-Learning. This means that it can distinguish between a button transmitting Ch 1 and the same button transmitting Ch 2.

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.

Clear All MIDI Learns

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





Clear All Browser Learns

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

Clone Part 1 MIDI 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.

Clone Part 1 MIDI Learns and Make Omni

This option clones all non-Omni Part 1 MIDI Learn assignments to all other Parts in the Multi across all other MIDI channels and makes them Omni. Use this option when you want your assignments to track the part selections made in LIVE MODE.

Show Current Assignments

Show Current Assignments displays all existing MIDI Learn and 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 and Automation assignments before saving a MULTI or a MIDI Learn and Automation Template, or to verify assignments after loading a MIDI Learn and Automation Template.

MIDI Learn Assignments

Parameter 1Pan	CC 10	Channel=1
Parameter 2Pan	CC 10	Channel=2
Parameter 1Level	Host Automation ID: 0	
Parameter 1Level	CC 7	Channel=1
Parameter 2Level	CC 7	Channel=2
Parameter 2Level	Host Automation ID: 1	
Parameter 1A CoarsePitch	CC 14	Channel=1
Parameter 1LFO1 Rate	CC 15	Channel=1
Parameter 1LFO1 Depth	CC 16	Channel=1
Parameter 1A Filt Cutoff	CC 17	Channel=1
Parameter 1A Filt Resonance	CC 18	Channel=1
Parameter 1A Symmetry	CC 19	Channel=1
Parameter 1A HardSync	CC 20	Channel=1
Parameter 1A AmpEnvAttack	CC 21	Channel=1
Parameter 1A AmpEnvDecay	CC 22	Channel=1

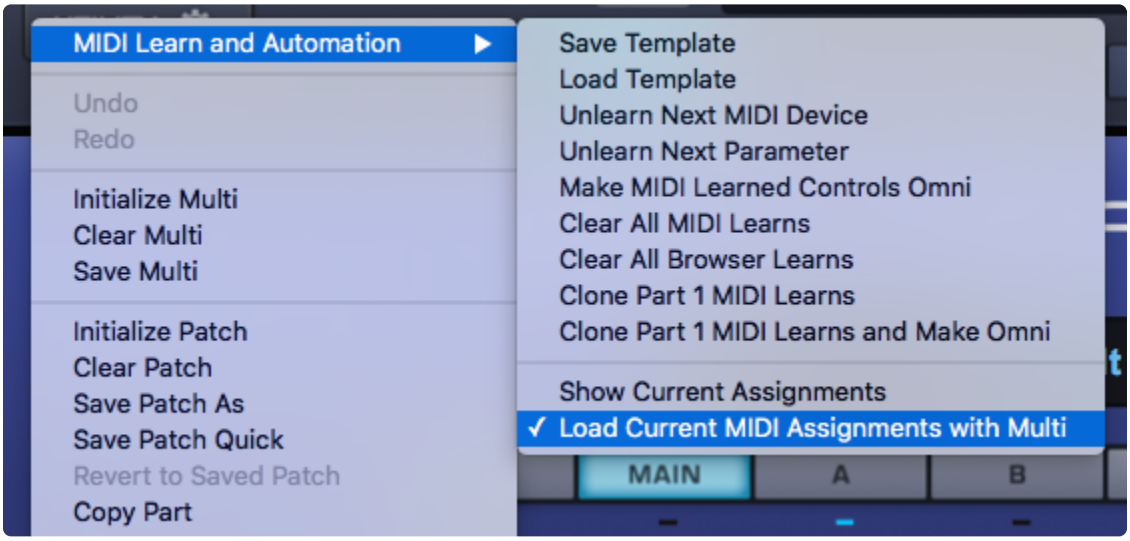
NOTE: If your host doesn't display Host Automation assignments by name, use Show Current Assignments to display the parameter names along with their corresponding Host Automation ID numbers.

Load Current MIDI Assignments with Multi (Toggle)

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

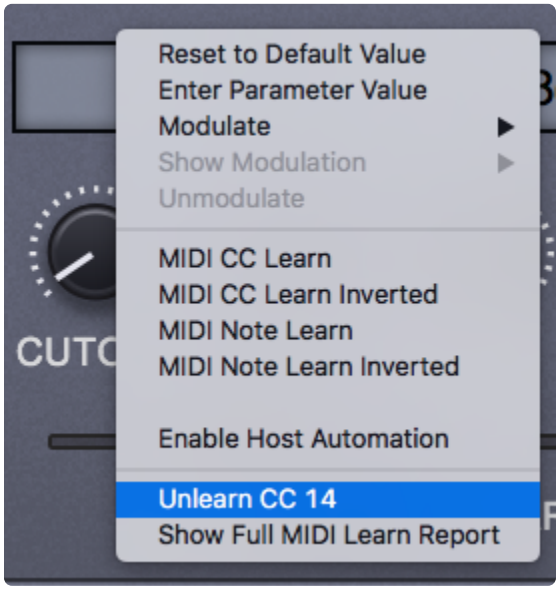
When the Load Current MIDI Assignments option is enabled (indicated by a checkmark in the menu), Omnisphere will replace all existing assignments with the MIDI Learn assignments that were saved with the MULTI.

When the Load Current MIDI Assignments option is disabled (no checkmark in the menu), Omnisphere will ignore any MIDI Learn assignments that were saved with the MULTI. Instead, all existing assignments will be retained.



NOTE: The Load Current MIDI 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 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 Full MIDI Learn Report

Displays the same report that is generated when you select “Show Current Assignments” (explained above).

2.6. Performance Optimzation

The vast majority of Omnisphere Patches will play comfortably within your host, without over-stressing the computer's CPU or memory. However some Patches employ sophisticated effects or large numbers of streamed samples, and those may require special attention. If your system is not configured properly, streaming some Patches may not be fast enough and may produce audio glitches. Additionally, some Patches use CPU-intensive FX units which might result in CPU overload, which can cause audio glitches. For this reason, we have included a number of memory management features that you can enable in Omnisphere to help manage your computer's resources.

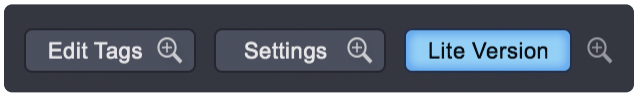
This section describes actions you can take to minimize audio glitches and CPU overload. You should consider all the actions listed, but note that some actions may not be appropriate for your circumstances. The actions are listed in roughly the order you should consider them—starting with the easiest and highest payoff actions. In some situations, you may need to perform several of these actions to remedy CPU overload issues.

Enable Sample Thinning

Sample Thinning is an important concept in Omnisphere, and allows Soundsources, Patches, and Multis to load with fewer samples, using less system memory and CPU.

When Omnisphere is loaded with a large number of samples, CPU overload or streaming issues may arise. This is most likely to happen when multiple large sample-based Patches have been loaded into multiple Parts, or when using patches originating from the Keyscape instrument. In these situations, if you encounter audio glitches related to streaming, the first step is to thin the samples. Thinning only helps for sample-based patches: it has no effect on synth-based patches.

The first thing to try is to enable Thinning by turning on the **Lite Version** button at the bottom of the Full Patch Browser window.



An alternative way to thin sample-based Patches is with the SAMPLE THINNING button in the Soundsource Zoom page. Select the THIN tab to access the SAMPLE THINNING page where you have detailed control of exactly how the samples are thinned.

There are four types of Sample Thinning available; **Round Robin, Legato, Velocities**, **Pitch Limiting** and **Training**.
Please see the Soundsource Zoom **Thinning** chapter for further details.

Alternatively, if you are using Keyscape Patches in Omnisphere, you can use the THINNING button on Keyscape's Settings Page. This will reload the Patch with a reduced number of samples. The thinned versions of the Patches have been optimized to maintain the highest possible quality for each sound. The THINNING button can also be locked, ensuring that all Keyscape Patches load the thinned version automatically.

Limit Voices

While Omnisphere allows up to 64 notes to be played simultaneously, not all sounds require a lot of

polyphony. You can adjust the maximum number of notes with the **Voices** menu on the Main Page. High values can put tremendous demand on the CPU, so reducing the Voices limit can significantly reduce CPU usage. Reducing “Voices” to 16, or 10, or even fewer is an early action you should take to eliminate CPU overload.

Terminate Other Applications

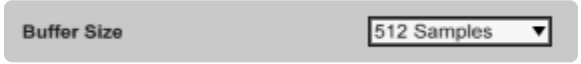
When using Omnisphere, it is prudent to terminate all non-essential applications except your host application. Each application consumes CPU power and RAM memory, and indirectly reduces the capabilities of the host. Terminate as many applications as you can, including browsers, mail tools, etc. Your computer may also be running several “background” applications, such as disk backup utilities and anti-virus utilities. These background applications also consume CPU and RAM. Background applications can be discovered by using the Activity Monitor (Mac) or Task Manager (Windows). Use the CPU tab to sort by % usage and search for background applications. Disable or terminate them while you are running your host.

TIP: Browsers with many open tabs can be CPU-intensive.

Increase 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 your song is overloading the CPU, the host’s CPU meter should indicate an overload condition and the host should notify you via a message. In this situation, audio glitches will likely occur. One solution is to increase the host’s audio buffer size. Increasing the buffer size diminishes the CPU load and reduces audio glitches, but at the price of increasing latency. A buffer size of 256 is usually a good compromise between good performance and acceptable latency, but a larger value can help if you need more CPU power. You set the host buffer size in the host, not in Omnisphere. Each host has a unique process for setting the buffer size, so consult your host’s documentation for details. For example, the Logic host uses the Preferences-Audio-Devices page, and the buffer size menu appears like this:

The Ableton Live host uses the Preferences-Audio page to set its buffer size, which looks like this:



NOTE: When mixing, you can set your host’s buffer size much higher without consequence.

Check 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 significantly reduce Omnisphere's performance, without any real sonic benefit. In fact, certain Patches may not play correctly at higher sample rates. We recommend keeping your host's sample rate at 44.1KHz or 48KHz for the optimal experience with Omnisphere. Each host has a unique process for setting the sample rate, so consult your host's documentation for details—typically it is within the host's Preferences page.

Disable Effects

Disabling some effects—particularly reverb effects—may greatly reduce CPU load. Effects are disabled in the FX Pages by clicking on the blue oval that contains the effect name. In the example below, the PRO-VERB effect is off, and the PRO-PHASER and RETROPLEX effects are on.

Prefer Common FX Rack Over A/B/C/D Racks

Using Common racks 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 or Aux FX Rack.

Sharing FX with Aux Racks

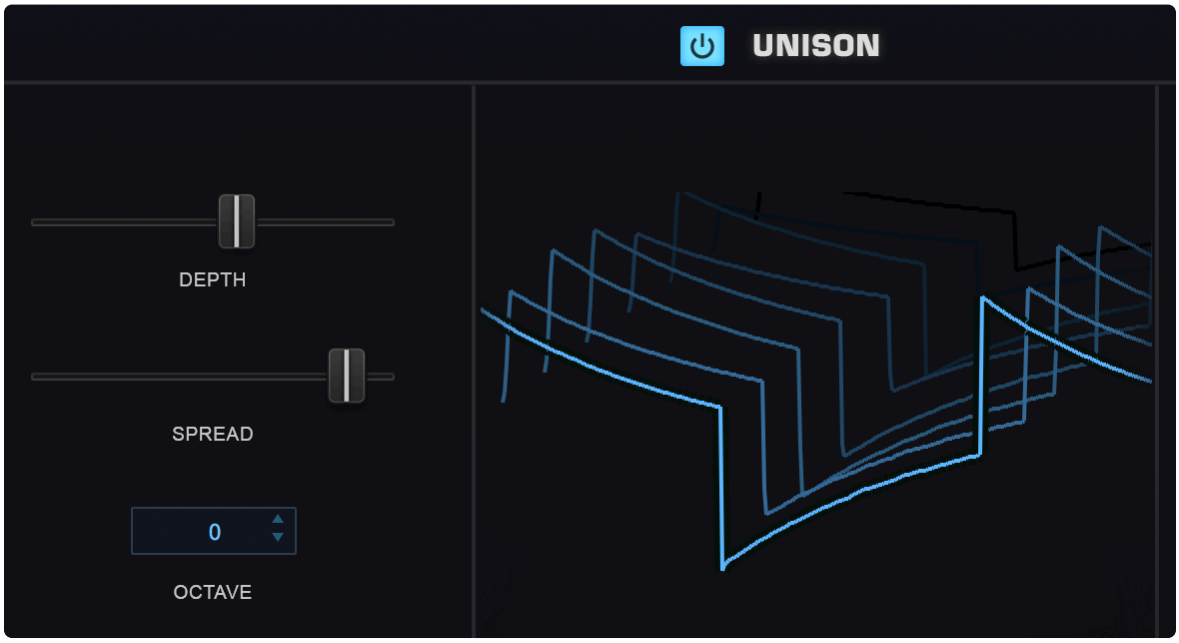
When using FX like reverbs, it's often better to place the reverb in an Aux Rack, instead of as an Insert. There are times when several sounds need reverb, and instead of inserting 6 reverbs into 6 individual Parts, you can instead place only one reverb on an Aux Rack and then use the Aux Sends to send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

Turn Unused Aux Sends Off

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, saving 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. View the Aux Sends on the MULTI MIXER page. If you are not using Aux effects, the knobs should look like this:

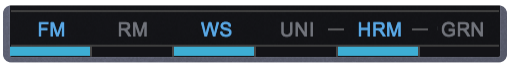
Adjust Unison and Granular

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



Review Oscillator Sub-Pages (FM, RING, WS, UNI, HARM, GRN)

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.



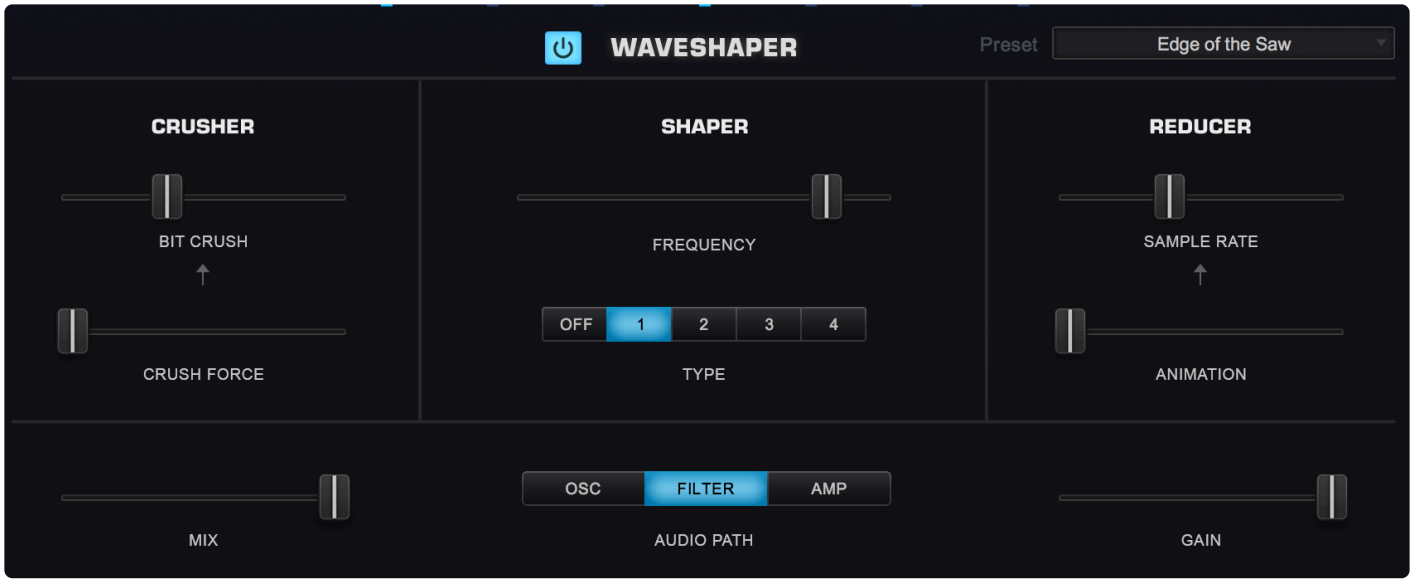
NOTE: When using Harmonia, the number of simultaneous voices that are playing can have an impact on CPU usage. You can often achieve the desired effect by using fewer voices.

Reduce Multiple Layers to One

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 or more, it's likely that a significant amount of CPU power can be conserved.

Adjust Waveshaper

The Waveshaper is a great feature, but it can be very CPU intensive, as it is polyphonic. To conserve CPU, you can try alternate approaches to achieving the desired sound. For example, try experimenting with the **Toxic Smasher**"":#fx-page-distortion-page24 FX unit first. You could get similar results without putting as much demand on the CPU.

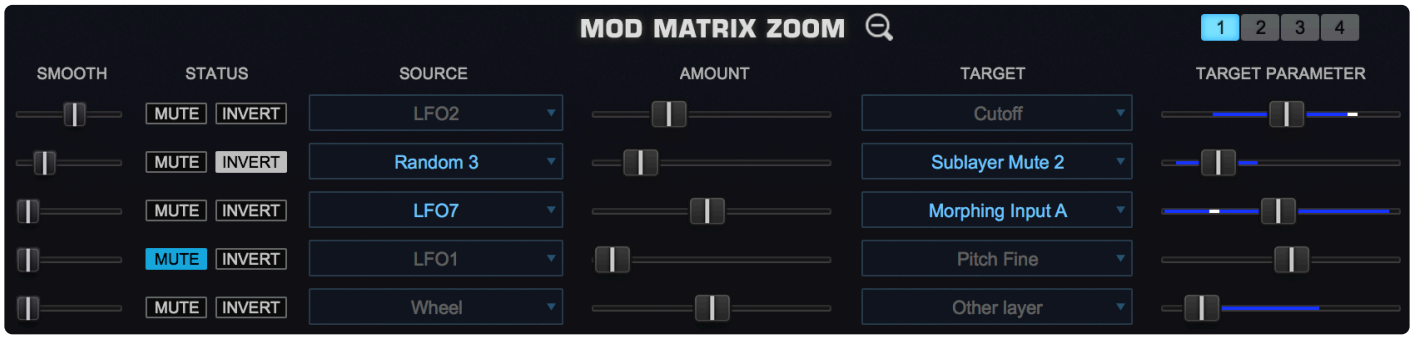


Adjust FM/Ring Mod

Both FM and Ring Mod have dedicated Oscillators, thus using additional CPU power. Combining these with additional Oscillator features like Waveshaping or Unison can require a lot of extra processing.

Remove Unused Modulation Routings

Modulation routings sometimes use CPU power, so be sure to remove any that are unused. 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.



Move STEAM Data to a Faster Drive

The performance of Omnisphere also depends on the speed of the drive on which the STEAM data is stored. The fastest drives are Solid State Drives (SSD), which are preferred over HD / disk drives which use a spinning platter. It is strongly recommended that the STEAM data be placed on an internal drive, using an internal bus such as PCIe or SATA, but if you decide to **place STEAM on an external drive**, we

recommend a fast connection such as Thunderbolt or USB3. If using USB3, make sure the computer supports the USB3 interface.

Add more RAM

The minimum RAM required for Omnisphere is 8 GB. Increasing RAM to 16 GB or more will generally improve streaming performance and is recommended if you are frequently encountering audio glitches.

Bounce / Freeze the Track

If you have finished arranging a track with Omnisphere, and are still encountering audio glitches, a solution you can consider is the host's bounce/freeze capability. Bouncing/freezing will convert the MIDI track containing Omnisphere into an audio track (WAV or AIFF). If you need to edit the track after bouncing/freezing, hosts generally have an "unbounce" or "unfreeze" capability. Each host has a unique process for bouncing or freezing a track, so consult your host's documentation for details. If the host provides two bounce/freeze modes (offline and realt-ime), try them both. Offline bouncing typically yields better results for streamed samples, but real-time mode may also be satisfactory.

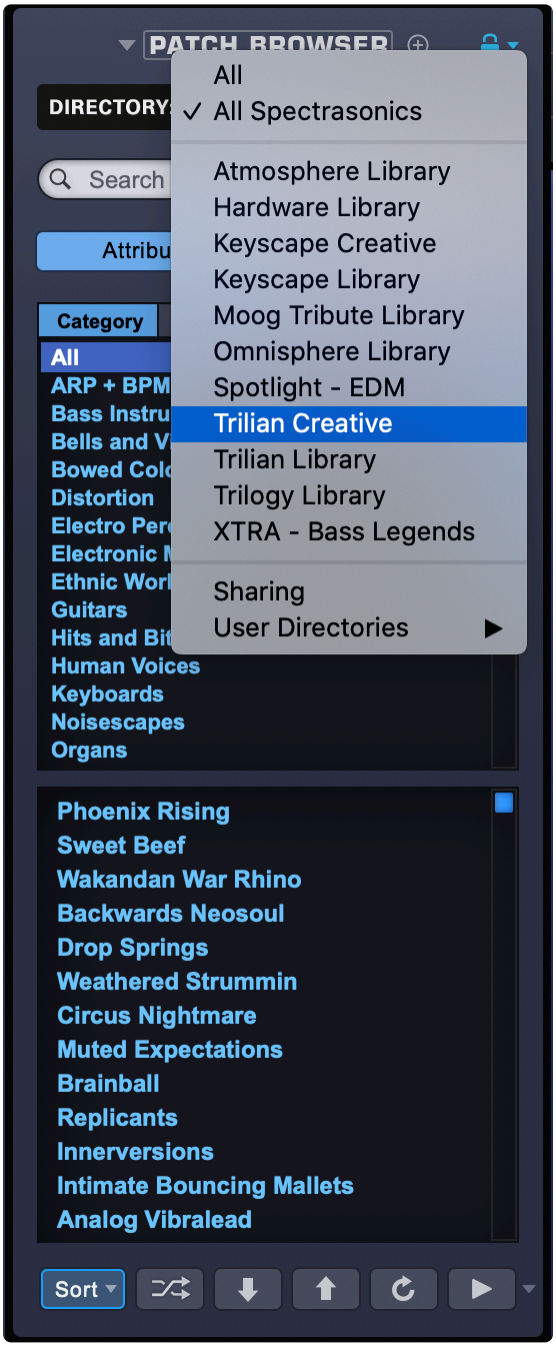
Multi-Instance vs. Multi-timbral

If you have multiple MIDI tracks each with a dedicated instance of Omnisphere and your host doesn't support multi-core processing, it may be more efficient to instead use a single instance of Omnisphere in multi-timbral mode. Load the various Patches into Omnisphere's Parts, and route the multiple MIDI tracks into the single Omnisphere instance using distinct Channels. This is an advanced technique, and instructions vary from host to host. Consult your host's documentation for details.

On the other hand, if your host supports multi-core processing, it may be advantageous to use multiple instances of Omnisphere and spread Patches across the multiple instances. The host may allocate each instance of the instrument to its own core, which could improve software performance. Distributing instruments across multiple cores is managed by the host (not the instrument). Consult your host's documentation for guidance.

2.7. Satellite Integration

Omnisphere 2 can fully integrate Trilian and Keyscape as Satellite instruments within the Omnisphere® interface. Not only is it a significant expansion of new Patches and Soundsources, this capability allows Omnisphere 2 users to harness and apply the full synthesis power of the STEAM Engine® to Trilian and Keyscape.



When Satellite Patches are loaded in Omnisphere, that Satellite's Custom Controls page will be automatically displayed when the Patch is loaded from the Mini-Browser or revealed when you close the Full Browser. The Satellite Patches contain their own layout that brings together all the most useful parameters of that Patch.

Satellites and Omnisphere Controls

To switch to the Omnisphere interface, just click on the “X” in the top left of Keyscape’s interface:

Or the “Omnisphere Controls” button in Trilian’s interface:

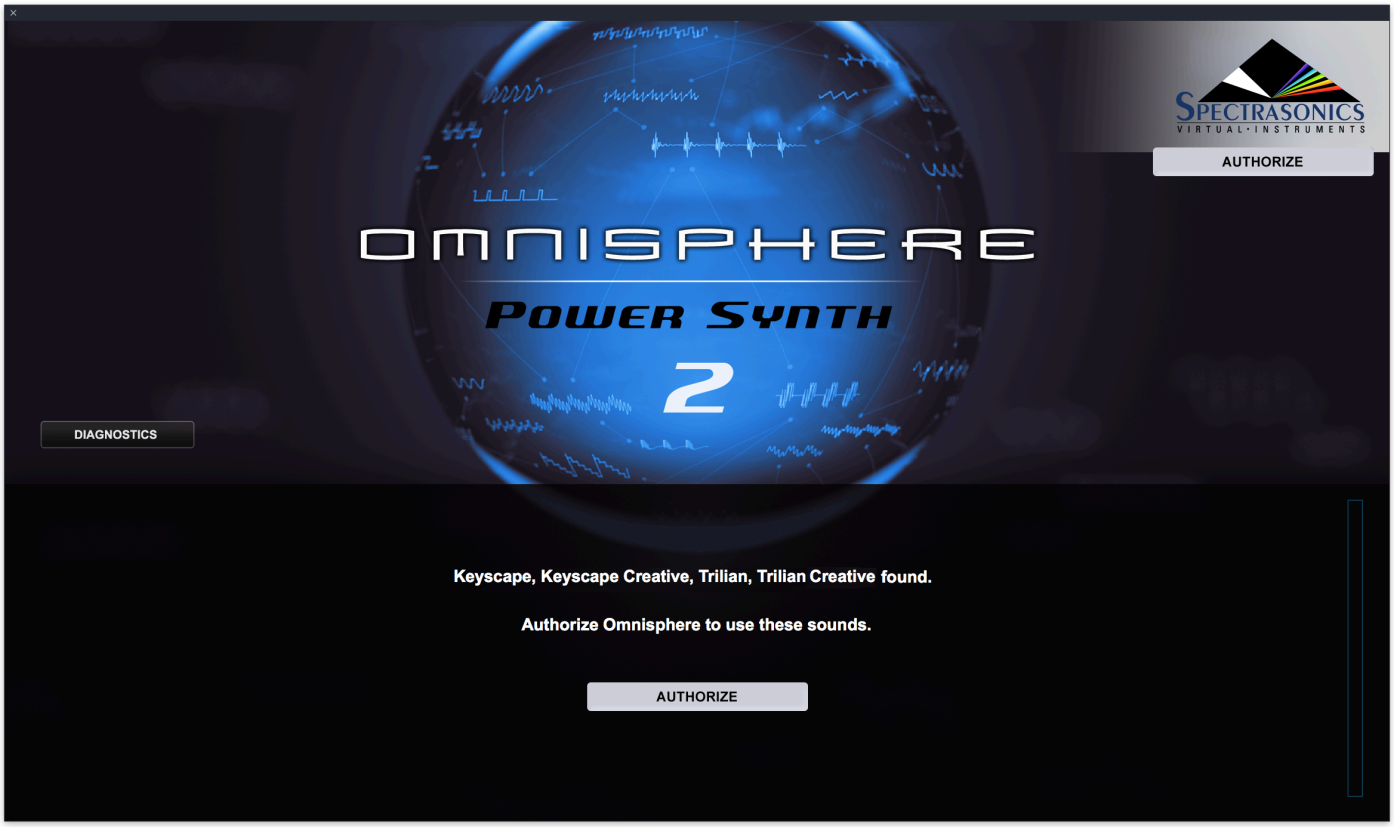
Conversely, selecting the Keyscape (or Trilian) button on the Omnisphere interface when a Satellite patch is loaded will return you to the Satellite instrument's Custom Controls page:

2.7.1. Setup

In order to enable Omnisphere Library Integration, you must have your Satellite Instrument registered in your Spectrasonics account and installed on your system.

If you already have Omnisphere on your system, you will be asked to reauthorize it after you have installed and registered the Satellite Instrument(s).

When you launch Omnisphere, you will see the Omnisphere Splash Screen. Click the Authorize button, and follow the normal steps for authorization.

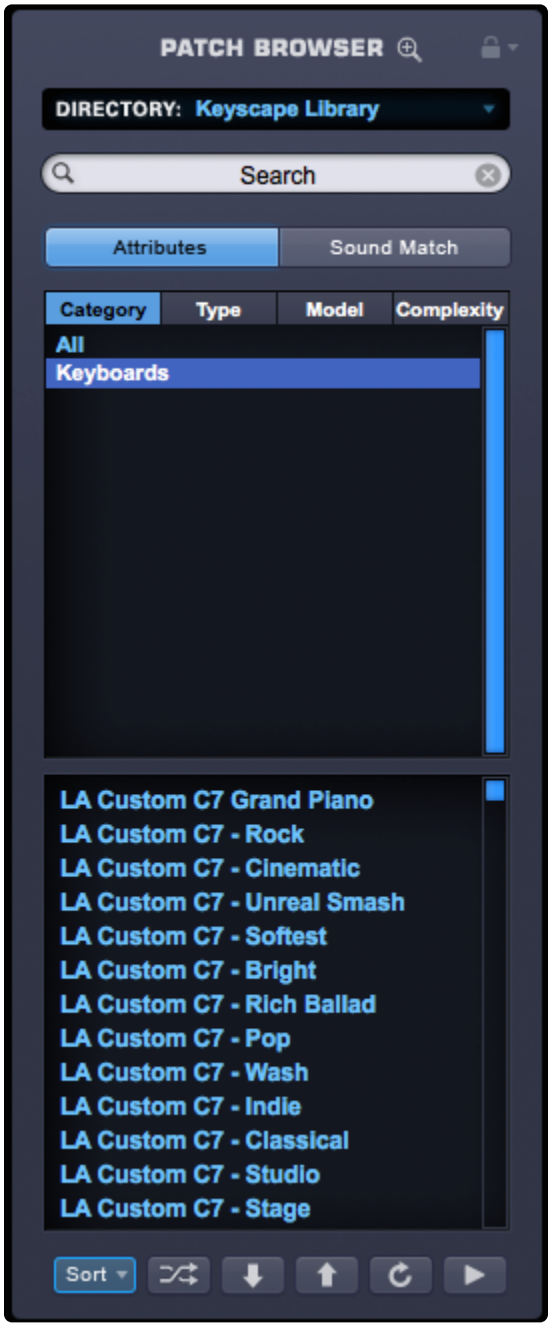


After (re)authorizing Omnisphere, the Trilian and/or Keyscape libraries will appear in your Omnisphere Browsers.

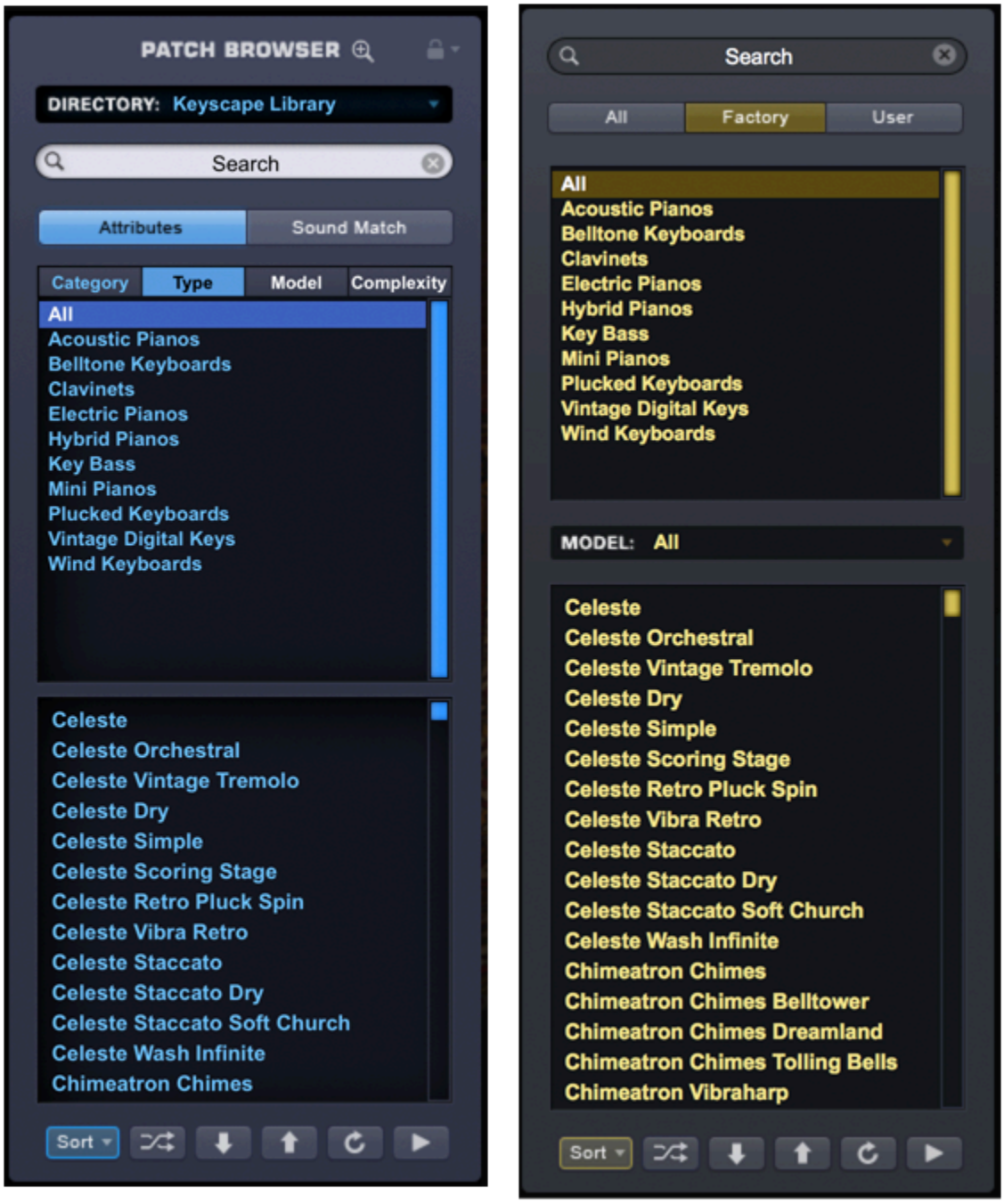
2.7.2. Browsing Sounds

While Trilian's browser operates in the same manner as the browser in Omnisphere, Keyscape's Patch organization is slightly different. When opening Keyscape sounds in Omnisphere, the sounds are presented in a manner that conforms to Omnisphere's Patch organization.

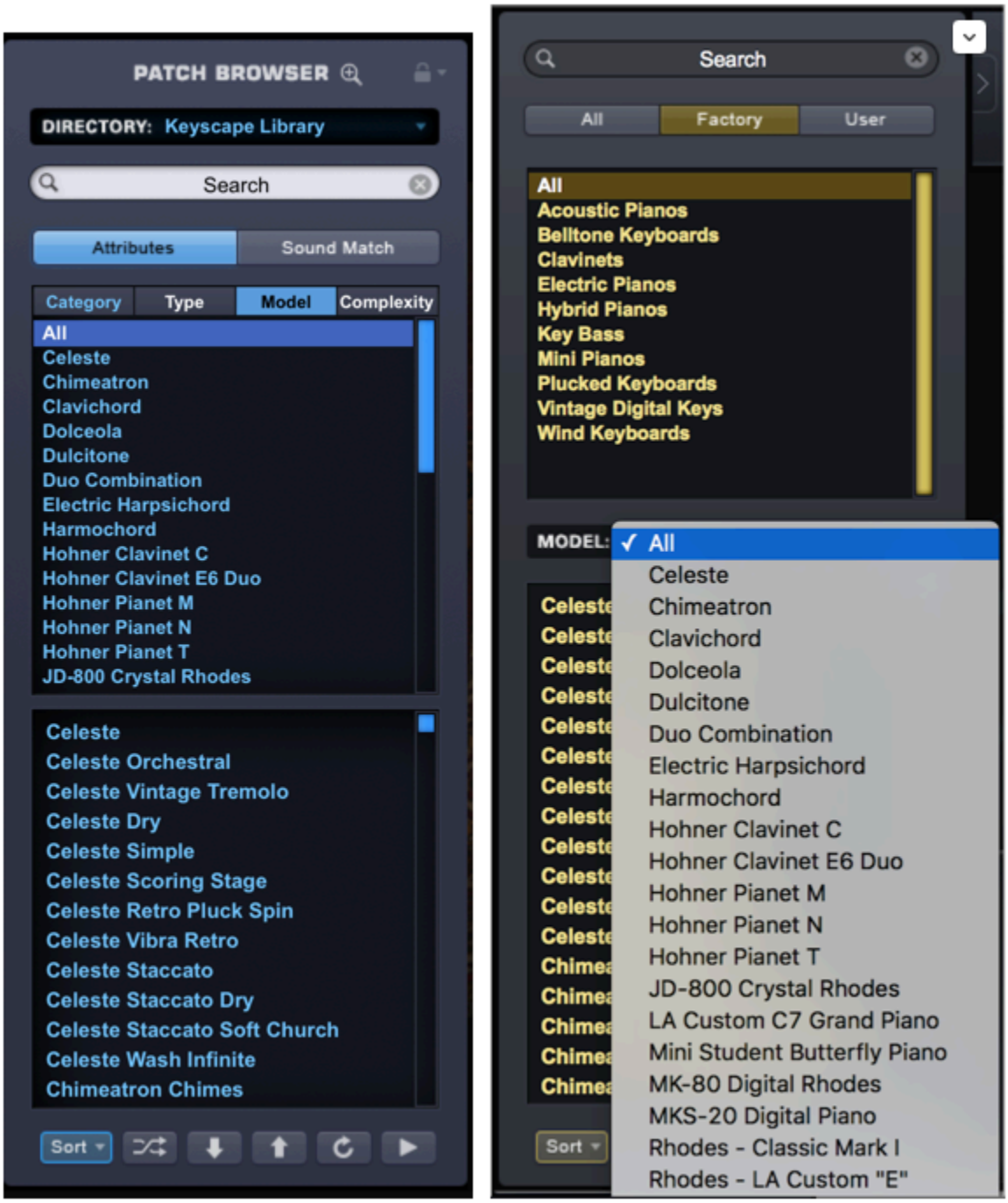
After selecting the Keyscape Library from the Directory menu, select "Keyboards" under Category.



The second Browser filter is Type, under which you'll see the list of types originally displayed in Keyscape's top pane.



The third filter is Model, which will display the list of models displayed in Keyscape's Model menu.


PATCH BROWSER
DIRECTORY: Keyscape Library
Search
Attributes
Sound Match
Category
Type
Model
Complexity
All
Celeste
Chimeatron
Clavichord
Dolceola
Dulcitone
Duo Combination
Electric Harpsichord
Harmochord
Hohner Clavinet C
Hohner Clavinet E6 Duo
Hohner Pianet M
Hohner Pianet N
Hohner Pianet T
JD-800 Crystal Rhodes
Celeste
Celeste Orchestral
Celeste Vintage Tremolo
Celeste Dry
Celeste Simple
Celeste Scoring Stage
Celeste Retro Pluck Spin
Celeste Vibra Retro
Celeste Staccato
Celeste Staccato Dry
Celeste Staccato Soft Church
Celeste Wash Infinite
Chimeatron Chimes
Sort
Search
All
Factory
User
All
Acoustic Pianos
Belltone Keyboards
Clavinets
Electric Pianos
Hybrid Pianos
Key Bass
Mini Pianos
Plucked Keyboards
Vintage Digital Keys
Wind Keyboards
MODEL:
All
Celeste
Chimeatron
Clavichord
Dolceola
Dulcitone
Duo Combination
Electric Harpsichord
Harmochord
Hohner Clavinet C
Hohner Clavinet E6 Duo
Hohner Pianet M
Hohner Pianet N
Hohner Pianet T
JD-800 Crystal Rhodes
LA Custom C7 Grand Piano
Mini Student Butterfly Piano
MK-80 Digital Rhodes
MKS-20 Digital Piano
Rhodes - Classic Mark I
Rhodes - LA Custom "E"
Sort

2.7.3. Using Satellite Instruments

Keyscape's keyboards and Trilian's basses come equipped with controls that permit you to modify them in many creative ways . For those who want to delve even deeper, users can open any of the sounds from the Keyscape and Trilian libraries inside our flagship instrument, Omnisphere 2! Omnisphere Integration lets you expand the sonic possibilities of Trilian and Keyscape by applying Omnisphere's sound-shaping and performance features. Here are just a few examples of the things you can do:

Combine Sounds

Using Omnisphere's multiple Parts, you can combine any of the Satellite sounds with Omnisphere sounds. It is important to remember that many Satellite and Omnisphere sounds contain thousands of samples and that certain synthesis tools and effects can be very CPU-intensive.

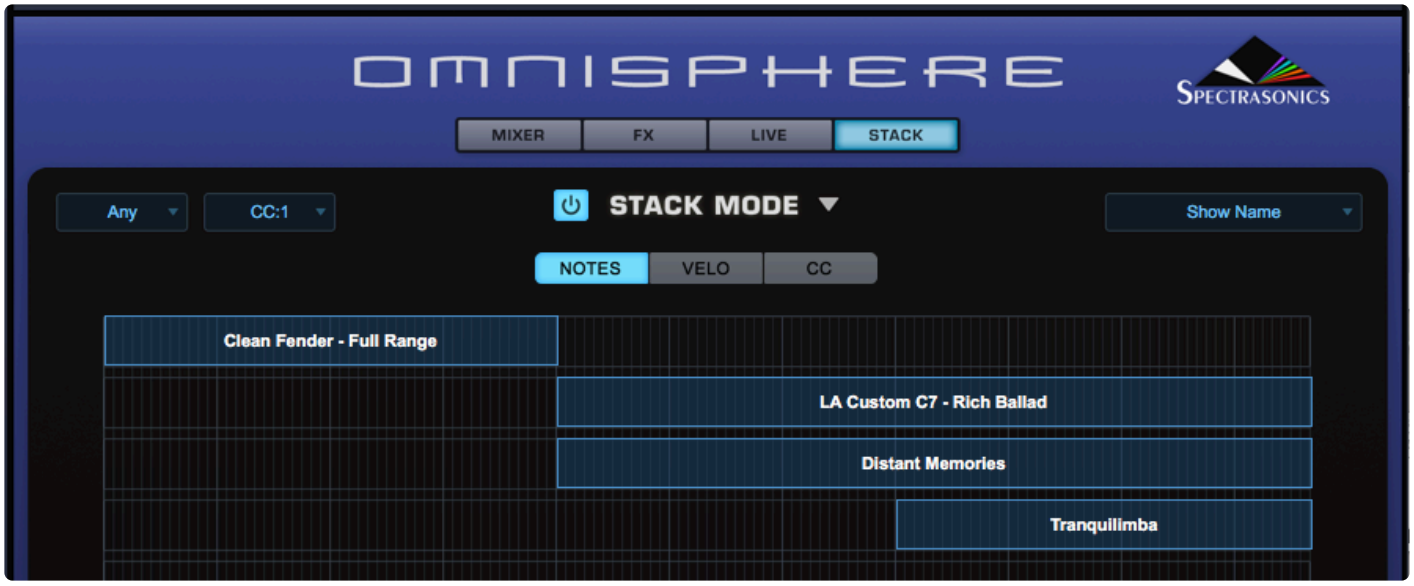
TIP: It can often can help to use the THINNING controls in the Soundsource Zoom to conserve CPU resources when combining Omnisphere and Satellite sounds.

NOTE: Of course you can also layer Keyscape sounds with each other, but be mindful of the fact that in addition to the CPU requirements, different Keyscape models are tuned differently. Certain models utilize stretch tuning—a type of tuning that accommodates the inharmonicity of certain acoustic and electro-mechanical keyboards that use strings, tines, and reeds.

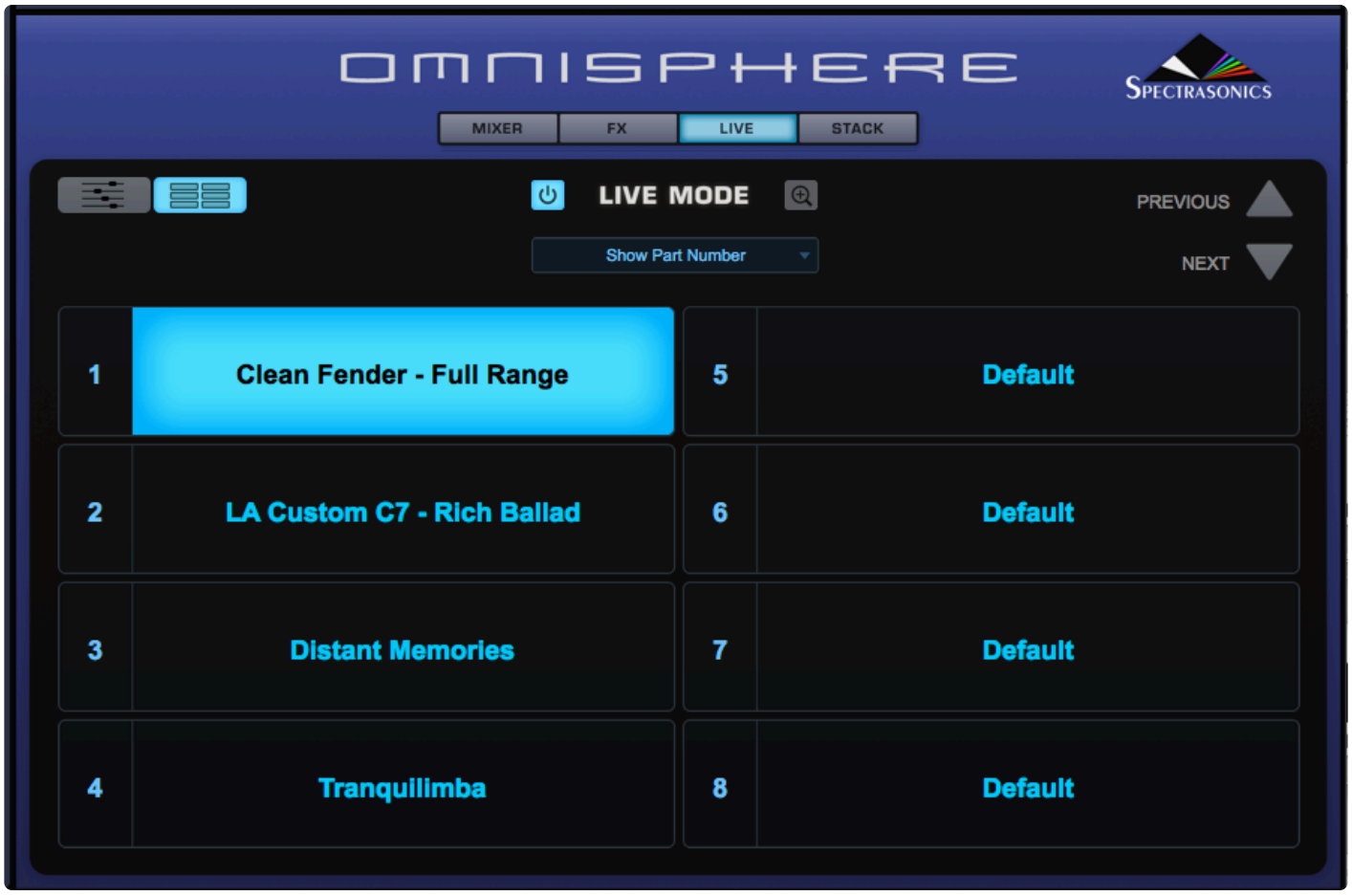
You can use **STACK MODE** or **LIVE MODE** to create useful combinations of sounds by using keyboard or velocity splits, layering, or applying Part-switching to a Multi in LIVE MODE.

In this example, we show Trilian's "Clean Fender – Full Range" loaded in Part 1, " Keyscape's "LA Custom C7 Grand" loaded in Part 2, Omnisphere's playable texture "Distant Memories" in Part 3, and Part 4 uses a rhythmic kalimba-based sound, also from Omnisphere.

Using STACK MODE, you can split the keyboard at any key and play the bass in Part 1 from the bottom part of the keyboard, and Parts 2, 3, and 4 play as one layered sound.



Using the same Multi in Live Mode, you can instantly switch between the four parts using keyswitches.



Use the Arpeggiator

You can apply Omnisphere's Arpeggiator to Satellite sounds to create rhythmic patterns. Here, the Trilian Patch, "Big Boy OSCar" uses Omnisphere's Arpeggiator.

Use Omnisphere's FX Units to Process Sounds

You can use any of Omnisphere 2's great-sounding FX units to modify Satellite sounds or get under the hood and tweak what is already in use. Keyscape and Trilian already utilize many of Omnisphere 2's FX Units, but there are lots more!

Try a wide variety of amps, stompboxes, and high-quality effects to create sounds that range from hard-hitting to ethereal.

In the example below, the Trilian Patch, "Chapman Stick Harmonics" has been processed with **Innerspace**, an FX unit that creates unique spaces and resonances, and then the signal was fed into a vintage **MXR stompbox**.

Apply Omnisphere's Powerful Synthesis Tools

Any of the synthesis features inside Omnisphere 2 can be used with Satellite Instrument Patches or Soundscources to create unique sounds. In the example below, **Granular** is applied to Keyscape's Classic Toy Piano sound to create a slowly evolving texture.


OMNISPHERE
KEYSCAPE
Toy Piano - Classic Octave Pluck
SPECTRASONICS
ORB
MAIN
A
B
C
D
FX
ARP
OSCILLATOR ZOOM
LEGACY
MAIN
FM
RING
WS
UNISON
HARM
GRAN
SPEED
POSITION
GRANULAR
Preset
Granular Presets
GRAIN DEPTH
INTENSITY
SMOOTHING
SPREAD
DETUNING
PITCH GRAINS
INTERVAL
GLIDING
Up
Normal
DIRECTION
MODE

2.8. Omni TR

The **Omni TR** (Touch Remote) iPad app uses the tactile advantages of the iPad as a performance-oriented touch surface—creating a true hands-on experience for musicians. One of the big differences between software and hardware synths is the hands-on aspect-the immediacy of being able to grab a knob or a fader—achieving instant results versus moving a cursor with a mouse. The Omni TR app bridges that gap and brings the sense of touch to our state-of-the-art, flagship virtual instrument, Omnisphere.

2.8.1. Omni TR – Getting Started

Omni TR brings Omnisphere's interactive features closer to the music creation process by letting you create setups and modify sounds very quickly. Your fingers can activate patches, tweak filters, re-mix, bend, and spin amazing performance possibilities from the innovative ORB circular controller. With its high-contrast interface, Omni TR is perfect onstage for live performance and in the studio when the controller keyboard is located apart from the studio computer. Best of all, the Omni TR app is extremely easy-to-use, offering full two-way communication with Omnisphere with a simple wireless connection to the computer running the plug-in.

Each of Omni TR's four pages can be accessed by selecting from the icons on the top-left. These icons appear on all pages.

The **Main** page is designed to give a quick overview of all 8 Parts in Omnisphere. From this page, you can browse and select Patches and Multis, latch and set the trigger modes for individual Parts, as well as mixing and editing with the multi-function faders.

The **Orb** is a unique circular controller that intelligently modifies Omnisphere's sounds in real time. Pressing the Dice button will give new variations and starting points. It is possible to record your modifications and realtime movements as part of the patch.

The **Controls** page offers fast access to some of the most useful performance parameters in Omnisphere and a has a fun and useful Pitch Ribbon.

The **Jumbo** page provides a large view of the Patch selections (ideal for use on stage), along with easy access to multi-touch Patch selection.

There are controls that are common to all four pages. For more information, visit the **Common Controls** section.

Now that you're free to move away from your computer, inspiration and creativity can happen anywhere!

NOTE: In addition to this reference guide, there is a quick and handy Omni TR manual, accessible from all pages via the "i" icon in the top-left.

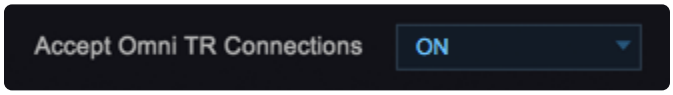
2.8.1.1. Omni TR Setup and System Requirements

System Requirements

The **Omni TR** iPad app requires iOS 4 (or higher) and is compatible up through iOS13 and iPadOS. OmniTR works with **Omnisphere 1.5** (or higher) on both macOS and Windows systems (Windows users will need to install **Bonjour** Printer Services from Apple).

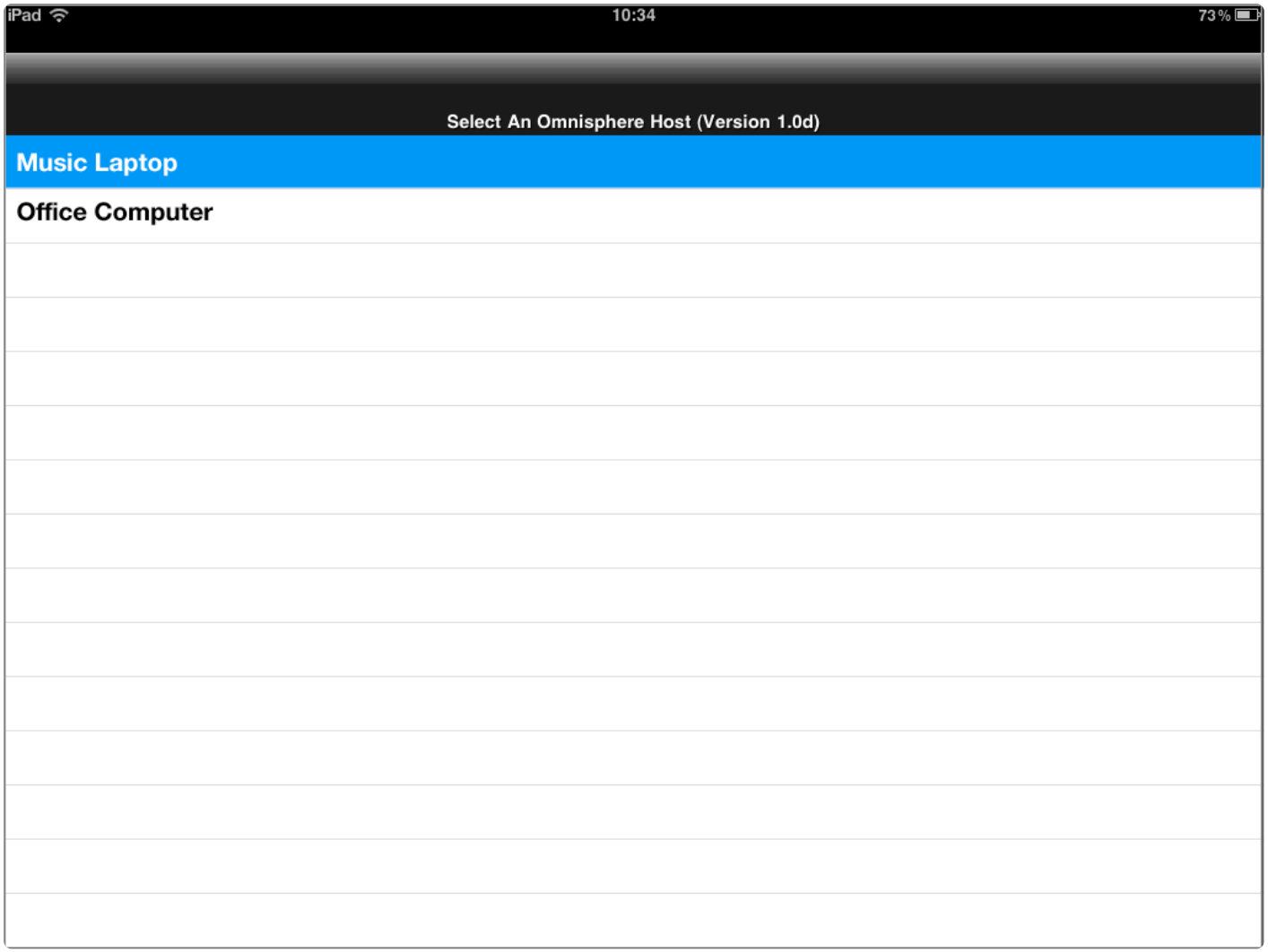
Setting up Omni TR

- Check that your iPad and computer are connected to the same wireless network.
- Make sure that Omnisphere is running on your computer and that the “Accept Omni TR Connections” option in Omnisphere’s **System** page is enabled.



- Launch the Omni TR app on the iPad and press “Connect.”
- Select your computer from the list which appears and Omni TR will establish the connection.

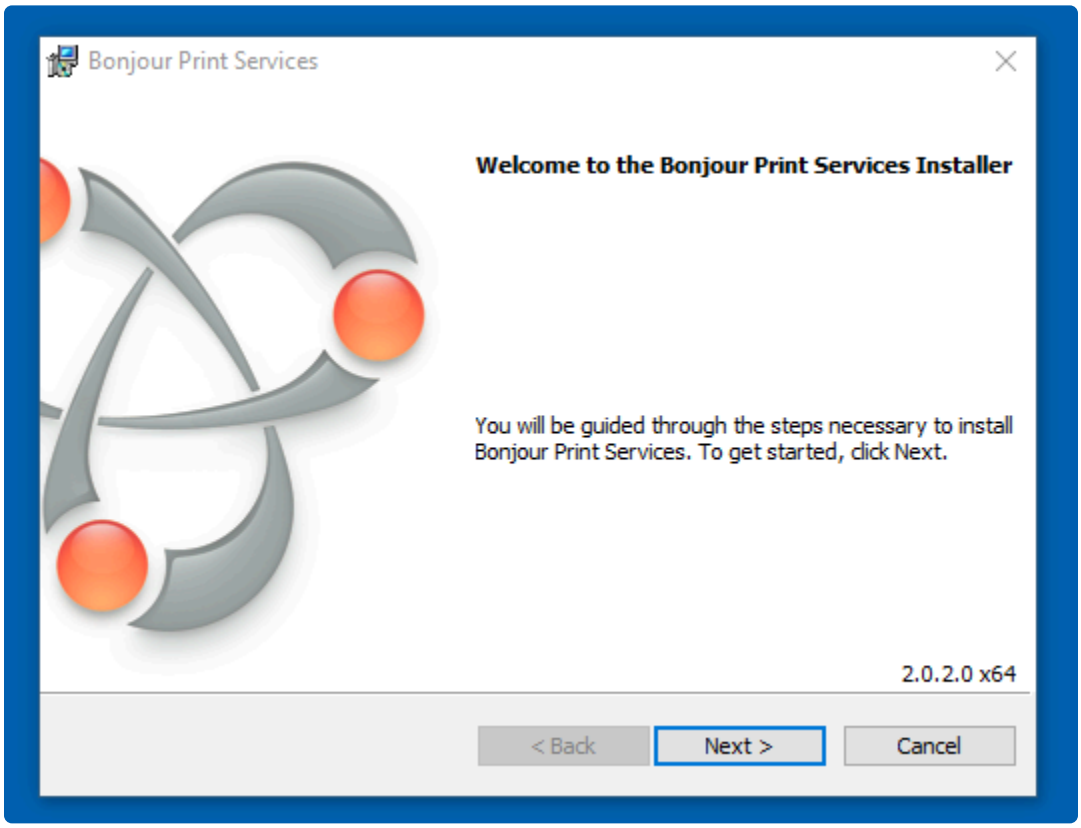
NOTE: If there are multiple instances of Omnisphere open in the host, Mac users can select from the list of instances upon launching the app; Windows users only have access to the first one listed.



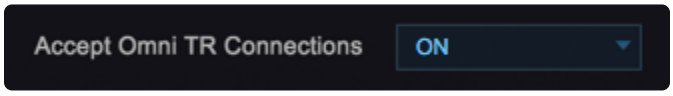
Omni TR will recognize and connect to your host computer and you'll have wireless, touchscreen control of Omnisphere.

2.8.1.2. Windows: Bonjour Installation

Windows users must install Bonjour to use Omni TR



- Please visit the **Apple download site**.
- Search for “Bonjour Print Services for Windows” and download the installer.
- Run the **BonjourPSSetup.exe** and follow the steps to complete the installation.
- Make sure to enable Omni TR support in Omnisphere by turning on the **Accept Omni TR Connections** option in Omnisphere’s **System** page and then re-instantiating Omnisphere.



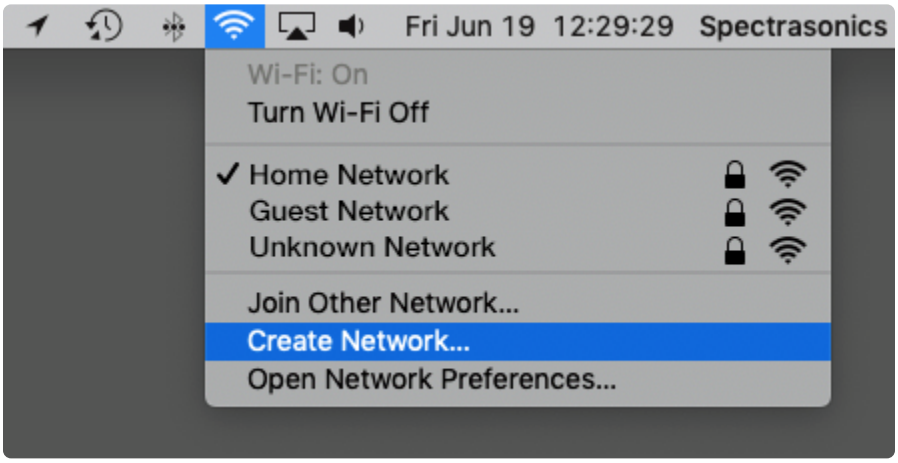
- Next, you’ll need to start the Omni TR app on your iPad (connected to the same WiFi network as your PC) and press “Connect.”

2.8.1.3. macOS Ad Hoc Network

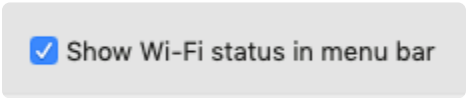
If your Mac is not on a network, but you'd still like to connect to an iPad, you can create what's called an **Ad Hoc Network** (aka: computer-to-computer network). This type of direct network actually provides the optimum wireless performance. Follow the instructions below to create an ad hoc network on your Mac, then connect to the new network with your iPad:

Creating a Computer-to-Computer Network

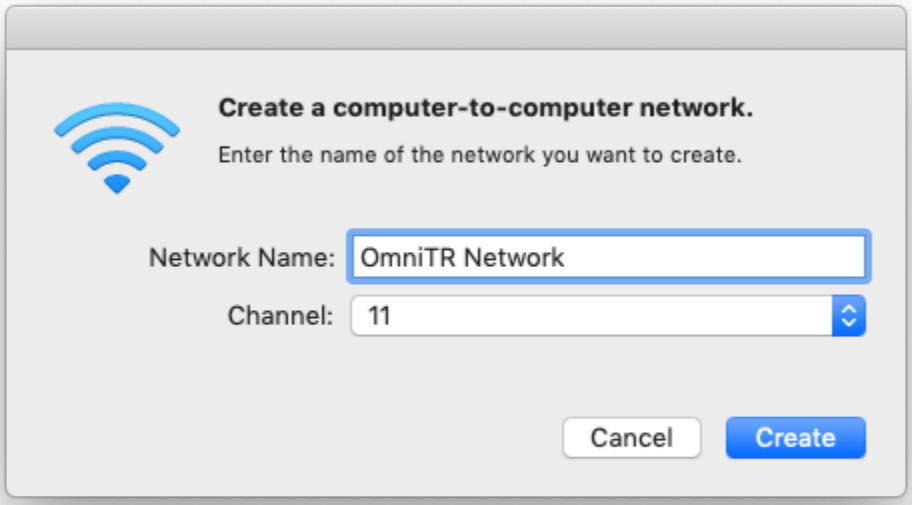
- Choose "Create Network" from the Wi-Fi status icon in the menu bar and Press OK.



- If the icon isn't in the menu bar, choose Apple > System Preferences, and then click Network. Click Wi-Fi and select the "Show Wi-Fi Status in Menu Bar" checkbox.

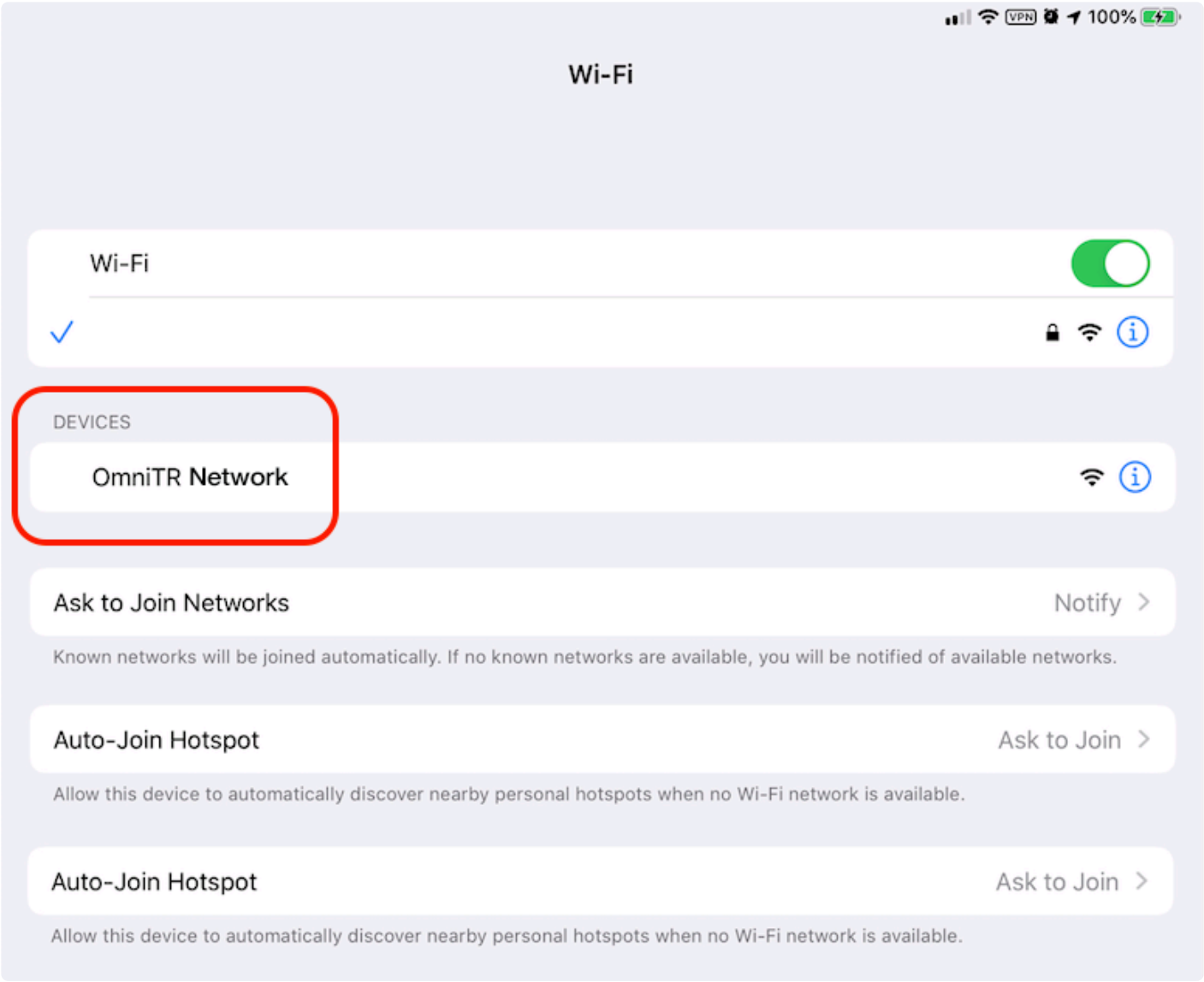


- You can name the ad hoc network whatever you wish, then select a channel from the pop-up menu. The default channel is 11, but you can also choose channel 1 or 2.



- Make sure your Mac is connected to the newly created ad hoc network.

- On the iPad, open Settings > Wi-Fi and select your ad hoc network.



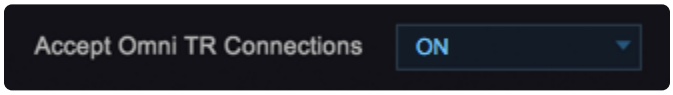
- Connect to your Mac from Omni TR's Connect screen.


iPad
10:33
73 %
Omni TR
Touch Remote for Omnisphere
SPECTRASONICS
Connect

2.8.1.4. Omni TR Troubleshooting

If you press the “Connect” button and don’t see your computer in the list, please take the following steps:

- Check to make sure you have **Omnisphere version 1.5** or newer installed on your computer.
- Check to make sure “Accept Omni TR Connections” is turned ON in Omnisphere’s **System** page. If not, you will need to turn it ON and restart your host.



- Make sure that both your computer and your iPad are connected to the same local Wi-Fi network and follow the the instructions in **Setup** to create an ad hoc network.
- Windows users will need to make sure **Bonjour** Printer Services is installed.

NOTE: Only one Omni TR/Omnisphere plug-in combination can be used together.

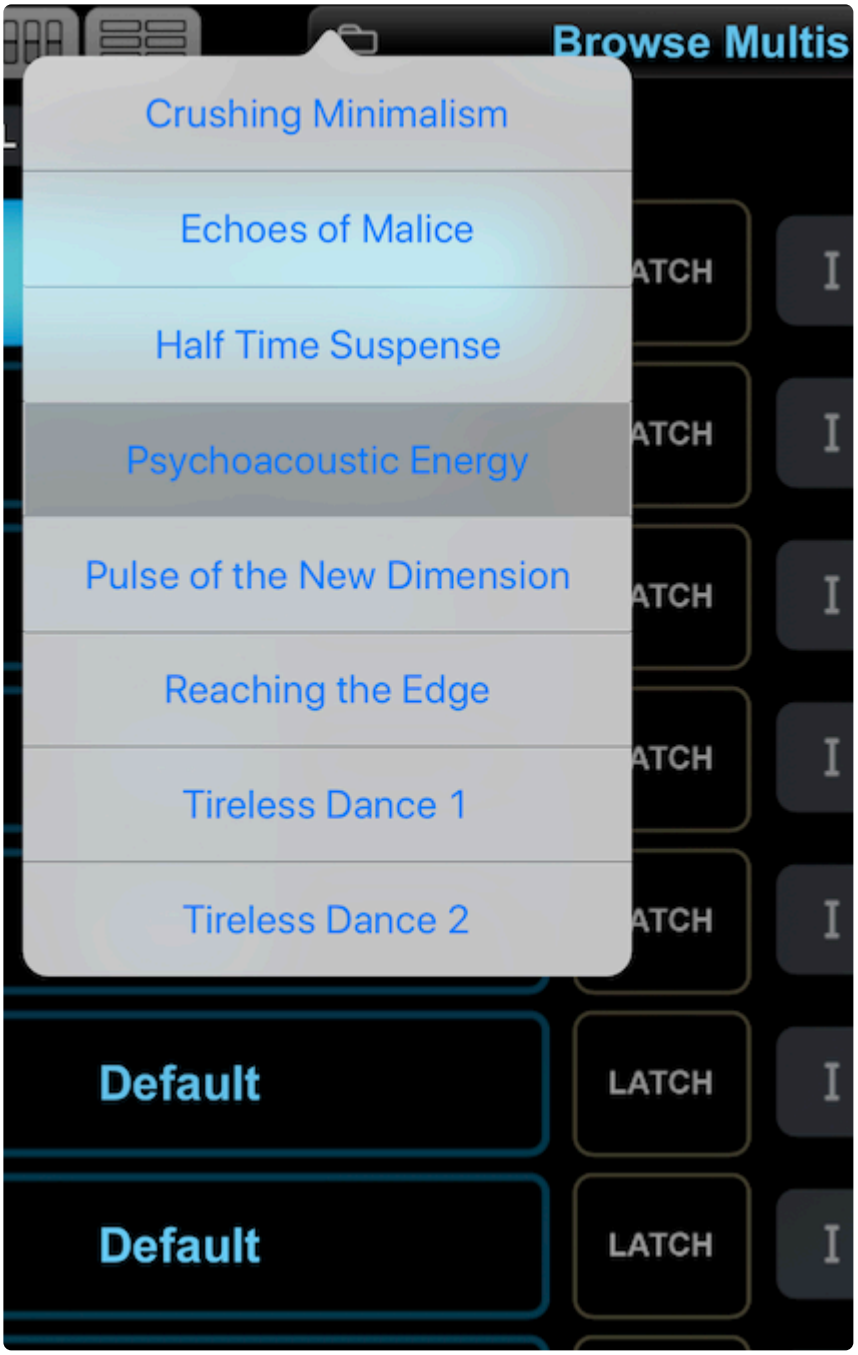
2.8.2. Browsing Patches and Multis

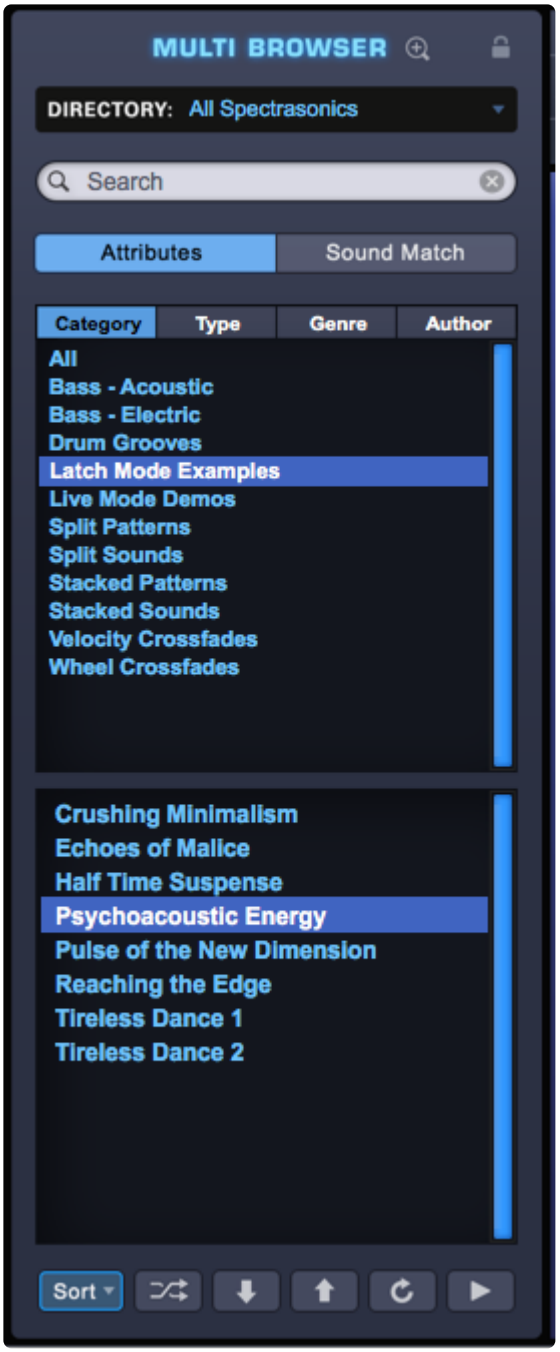
Omni TR gives you the convenience of browsing Omnisphere Patches and Multis remotely from your iPad.

Browsing Multis

You can browse Multis from every page in Omni TR. Touch the folder icon to the left of the “Browse Multis” display to reveal a list displaying the first 75 Multis currently shown in Omnisphere’s **Multi Browser**. Touch a Multi name to load it.

When you are performing live, you can use Attributes to filter the Multis for your live set in Omnisphere’s **Multi Browser** and the filtered list will be reflected in Omni TR’s Multi Browser.





Browsing Patches

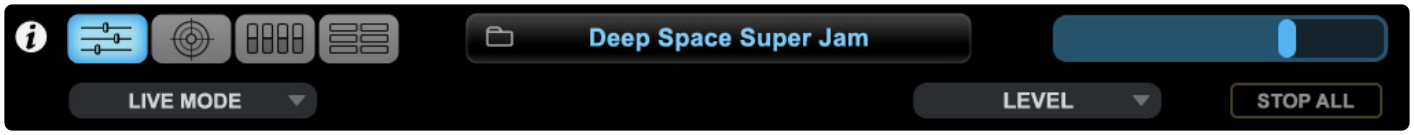
You can browse Patches from the **Main**, **ORB**, and **Controls** pages in Omni TR. Touch any of the folder icons to the left of the Patch names to reveal a list displaying the first 75 Multis currently shown in the respective **Patch Browsers** in Omnisphere. Touch a Patch name to load it into the selected Part.

One really useful feature is that you can set up each of Omnisphere's 8 Patch Browsers with different filtering. In other words, the Browser for Part 1 can be set to display ARP+Rhythm sounds, the Browser for Part 2 can be set to display Textures, Psychoacoustic sounds can be displayed in Part 3, and so on, for subsequent parts. This way each of the 8 Parts can have 75 different Patches available to choose from in Omni TR-a total of 600 at any given time.

NOTE: For details on how to use Omnisphere's Browsers, visit the Browsers section in Omnisphere's Reference Guide.

TIP: In order to display a random assortment of Patches in Omni TR, you can use the Shuffle button in Omnisphere's Patch Browsers.

2.8.3. Common Controls



The Common Controls are located in Omni TR's header and accessible from every page. These are used for navigation in Omni TR and for global control of Omnisphere.

Page Selectors

Each of Omni TR's four pages can be accessed by selecting from the icons on the top-left.

Multi Browsing

You can browse and select Multis by touching the folder icon to the left of the "Browse Multis" display. For more information on browsing, visit the B*rowsing Patches and Multis* section.

Master Volume

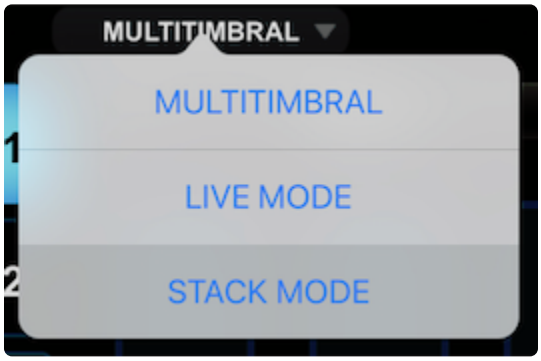
The Master Volume slider controls the output of the entire plug-in and can be found at the top-right of each page.

Stop All

The STOP ALL button, located directly below the Master Volume slider, sends an "All Notes Off" message to all 8 Parts at once.

NOTE: This function allows the sounds to decay naturally. After pressing the STOP ALL button, all of the FX tails and release stages from your envelopes will continue to decay, so the cutoff will not sound unnaturally abrupt.

Operation Modes



You can select one of three Operation Modes from each page in the drop-down menu directly below the page icons. Once you select an Operation Mode, it remains selected on all of the pages until you select a different mode.

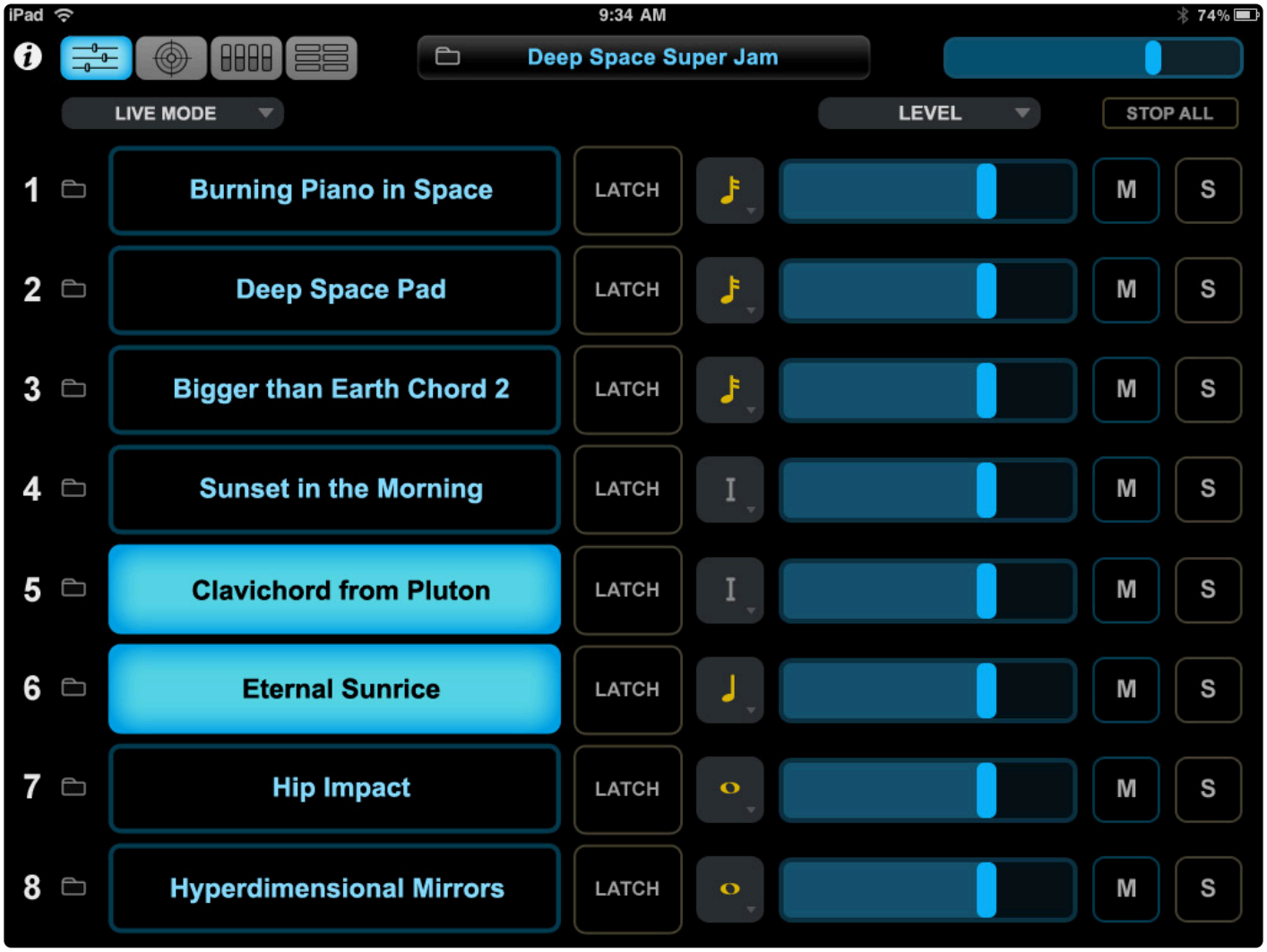
- **MULTITIMBRAL**
  Omnisphere is 8-Part Multi-timbral. This means it has the ability to operate on more than one MIDI channel (up to a total of 8) at a time. MULTITIMBRAL mode is useful when sequencing with multiple MIDI tracks in the host.

- **LIVE MODE**
  Live Mode allows you to instantly and remotely choose a Patch or combination of Patches simply by touching one or more of the Patch names on the display.
  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.

- **STACK MODE**
  Stack Mode is a powerful feature designed for creating splits, layers, and crossfades with up to 8 Parts laid out across the keyboard at once. STACK MODE offers a flexible environment for either live performance or composing. It can be especially useful for recording a multi-Part performance using a single MIDI track in your host sequencer.
  Using **Latch and Trigger** capabilities together with STACK MODE allows you to create complex multi-Part performances that can be layered and quantized in real time.
  If you want to create splits and crossfades with different sounds laid out across the keyboard, first visit

Omnisphere's **Stack Mode page** to set them up.

2.8.4. Main



The **Main Page** mirrors Omnisphere's unique Live Mode, offering eight Patch slots with Latch and Trigger modes, individual Mute and Solo, and Multi-Function Sliders. On this page alone, Omnisphere becomes a new performance instrument with the iPad sitting at the user's controller keyboard. By choosing Live Mode from the Omni TR Operation Mode menu, Patch names can be enabled by simply touching one or more at a time for layers and stacks. You can add sounds by holding down the ones already chosen and touching any you wish to add.

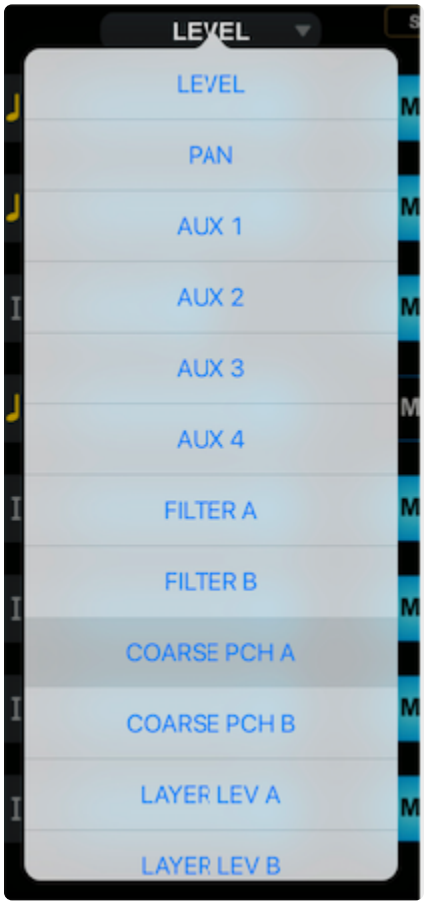
Users can also browse and select Multis and Patches directly from the iPad to instantly change sounds for a new song or live set.

Used together, the features on the Main page give you a tremendous range of creative performance, live-remixing, and inspirational compositional techniques to explore and discover.

2.8.4.1. Multi-Function Sliders

The vertical row of sliders on the right side of the page provides control of many of Omnisphere's important mixing and Patch-editing parameters.

From the pull-down menu above the sliders column, you can select which parameters they control (the default setting is LEVEL).



The options are:

- Part Level
- Pan
- Aux 1-4
- Filter Cutoff Layer A
- Filter Cutoff Layer B
- Coarse Pitch Layer A
- Coarse Pitch Layer B
- Layer Level A
- Layer Level B
- Filter Resonance Layer A
- Filter Resonance Layer B

2.8.4.2. Mute and Solo

MUTE and **SOLO** buttons for each Part can be found along the right side of the Multi-Function Sliders.

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.

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. You can Solo multiple Parts by selecting additional Solo buttons.

2.8.4.3. Latch and Trigger Modes

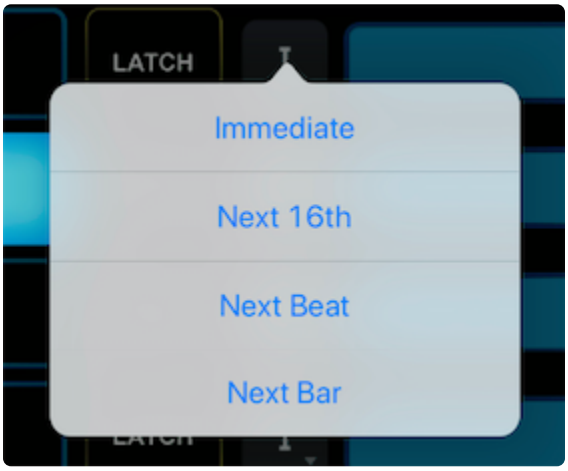
The **LATCH** and **TRIGGER** Modes extend the multi-timbral performance capabilities of Omnisphere, especially when used together with **Live Mode** or **Stack Mode**. They enable real-time creation of complex, multi-Part performances which synchronize with other Parts and clocked sources without the need for traditional sequencing techniques.

The Latch and Trigger Mode controls can be accessed directly to the left of the Multi-Function Sliders.

LATCH MODE

Latch Mode causes notes to be held when played (or toggled OFF when those notes are played again), allowing quick triggering of repeating arpeggiated phrases or sustained sounds, while freeing your hands to play additional notes for layering, or switching to other Parts to play new phrases on top.

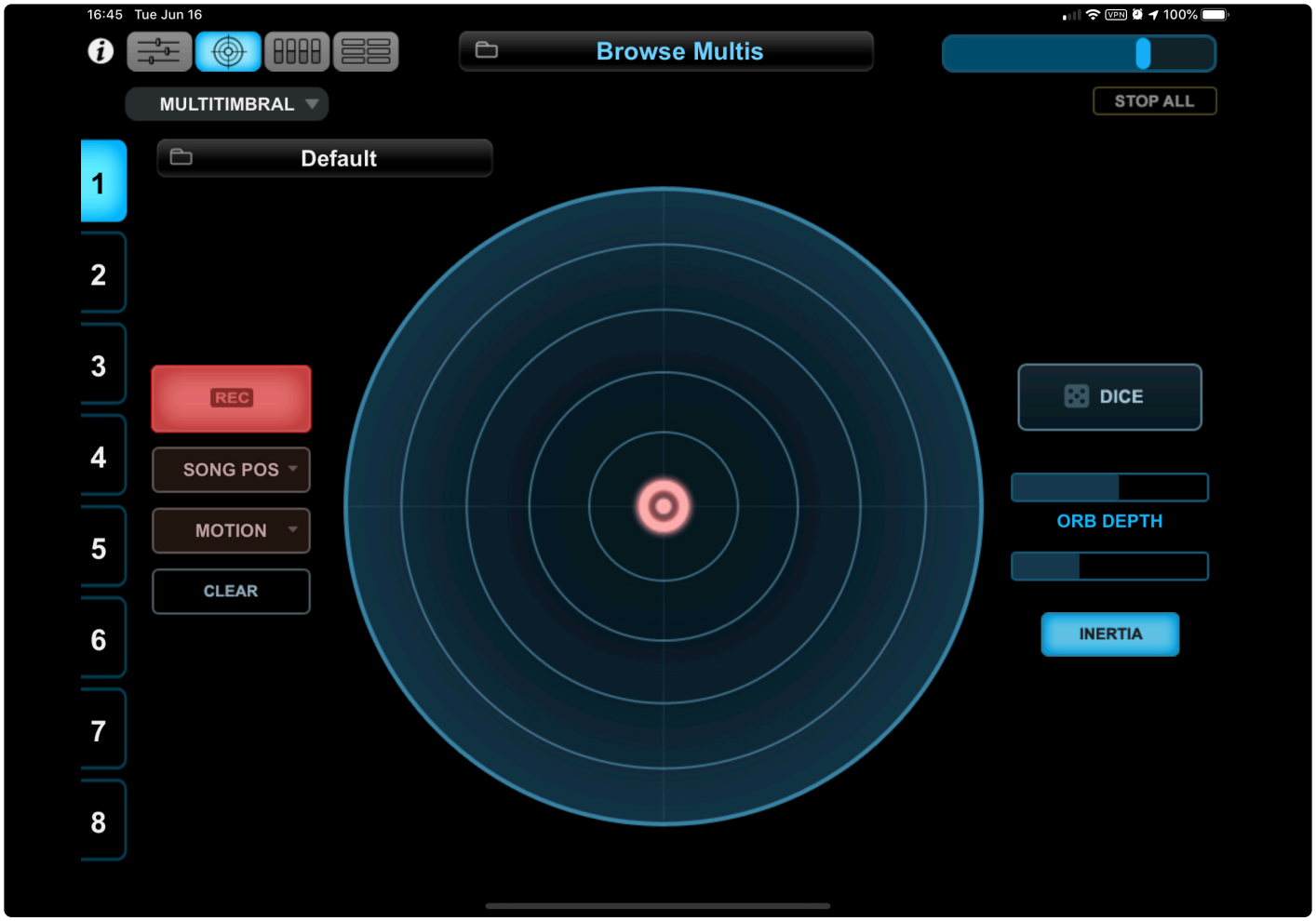
TRIGGER MODES



Using Trigger Modes, incoming MIDI notes can be quantized in real time, making it 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 quickly building up ideas!

2.8.5. The Orb



Omni TR was designed to make the iPad the ideal control surface for Omnisphere's innovative **ORB**. The ORB is both a remarkable sound manipulation tool and an intuitive performance interface—it can be thought of as a "circular controller." With a single gesture, you can instantly manipulate a sound in a variety of ways. Best of all, the ORB works automatically with every Patch, even User Patches, so there's no setup necessary.

The ORB is a fun and intuitive way of introducing movement and animation into the sound by simply moving the cursor with your finger. As the ORB moves around the concentric circles, it morphs between automatically generated parameter scenes in Omnisphere's STEAM engine in a highly intelligent and musical manner—all Patch dependent—manipulating the sound in either subtle or radical ways appropriate to that particular Patch.

The ORB's unique dynamic results are based on **Radius** and **Angle** controls. The Angle defines which scenes or sets of parameters it manipulates, and the Radius defines the intensity of those manipulations. The closer to the edges of the circle the cursor is moved, the more dramatic the changes will be. Moving the cursor to the center of the ORB or pressing the **CLEAR** button returns to the sound of the original Patch.

The overall intensity of the sound modifications can be determined with the **DEPTH** slider.

If you don’t like what the ORB has created, a complete new set of manipulations can be chosen by simply pressing the **DICE** button, which instantly creates a brand new group of intelligent sonic modifications and effects with which to experiment. There’s no limit to how many serendipitous sonic variations the DICE can create-opening up the vast power of the STEAM engine to every user, regardless of their synthesis knowledge. For advanced synthesists seeking maximum flexibility, the ORB can also be setup manually and used as a modulation source in Omnisphere’s Mod Matrix.

The **INERTIA** controls of the ORB allow the creation of a “movement trail” after releasing the cursor, just like a ball might roll and bounce off the walls of a circular enclosure. It is also possible to record performance movements directly into the ORB and play the performance back in sync with the host. The ORB’s movements and sonic results are saved within the Patch, Multi, or the host’s session for later recall. The movement of the ORB can also be automated in the host. Each Part in Omnisphere has its own ORB, which means that multiple ORBs can manipulate different sounds simultaneously.

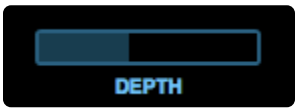
2.8.5.1. Dice, Depth, and Inertia

DICE

Pressing the DICE button will instantly create a brand new group of intelligent sonic modifications and effects to try. There's no limit to how many serendipitous sonic variations the DICE can create – opening up the vast power of the STEAM engine to every user, regardless of synthesis knowledge. You will be presented with a different idea or point of departure each time you press it.

NOTE: It's important to save your Patches once you are satisfied with the ORB's changes. Once you press the DICE button or select a different Patch in that Part, Omnisphere will not be able to recall any previous ORB settings unless they have been saved with the Patch or with the host's session.

ORB DEPTH



The overall intensity of the ORB's sound-manipulation can be controlled with the DEPTH slider. The higher the DEPTH slider is set, the more pronounced the changes will be to the Patch.

INERTIA

INERTIA is the resistance of any physical object to a change in its state of motion or rest. When using the

ORB with INERTIA enabled, you can set the cursor in motion in any direction. When INERTIA is not enabled, the cursor will stop when the finger is lifted, giving you the ability to jump from one stationary point to another for dramatic, instantaneous changes.

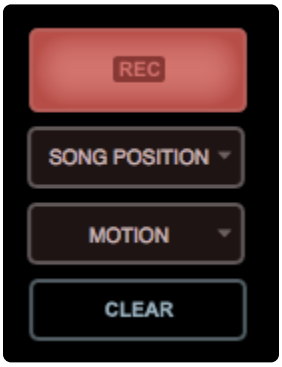
INERTIA Switch

This turns the Inertia ON or OFF.

INERTIA Amount

The INERTIA Amount controls the speed and duration of the cursor's movement after it is set in motion and released. The higher the INERTIA Amount slider is set, the faster and longer the cursor will bounce around. When turned all the way up, the cursor will continue to move indefinitely.

2.8.5.2. Recording



The Orb's movements, whether manual or INERTIA-based, can be captured with the ORB's built-in recorder. These movements can be saved as part of the Patch. This simple feature adds a dynamic quality to a sound that is unique and quite difficult to achieve with conventional controllers.

By using the RECORD button and its sub-menus, the built-in recorder can be programmed to capture a general idea of the movements (MOTION) or to record precise movements over 1, 2 or 4 Bars, relative to your sequence. The recordings can be set to play back synced to **LEGATO or SONG POSITION**.

In all cases, the ORB creates a looping cycle by smoothly connecting the trajectory of the end with the beginning of the move, no matter how complex.

2.8.5.2.1. Recording Modes

The four **Recording Modes** are: **MOTION**, **1**, **2**, or **4 BARS**.

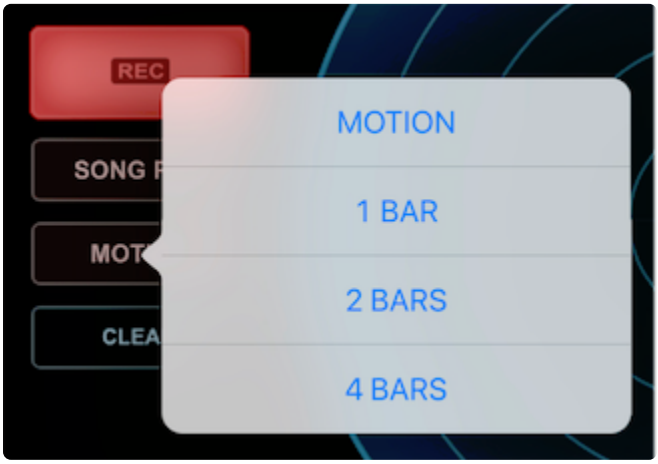
MOTION

MOTION will capture the speed and trajectory of the ORB for a few seconds and then generate a full orbit cycle out of those movements. MOTION mode is not intended to record precise movements that need to be synced with the song and tempo of the host.

To initiate recording, press the red RECORD button. The recording will begin as soon as the the cursor moves. The RECORD button will turn to solid red for a few seconds and a non-decaying Orbit will be created based on the recording.

NOTE: f the cursor is not moving when the RECORD button is pressed, the RECORD button will flash, waiting for the cursor to move. Recording will begin as soon as any movement is detected.

1, 2 or 4 BARS



Choose 1, 2, or 4 BARS for recording precise movements in those lengths that you would like to be synced with the host.

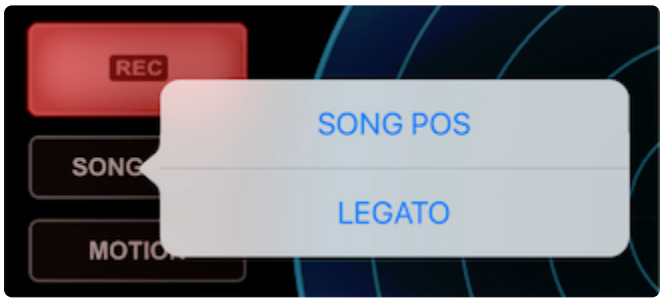
To initiate recording, press the red RECORD button. With the cursor in motion, the RECORD button will flash while waiting for the beginning of the next bar, whether or not the host sequencer is playing (Omnisphere's internal clock continues to run when the host is not playing). At the beginning of the next bar, the RECORD button will turn to solid red and begin recording. After the selected number of bars are complete, the recording stops and a loop of the movement is created. The cursor's location at the end of the

recording will be smoothly linked to the beginning to ensure there are no abrupt changes as the movement loops.

NOTE: If the cursor is not moving when the RECORD button is pressed, the RECORD button will flash and then start recording at the beginning of the next bar.

If you're not satisfied with the movement that was recorded, press the **CLEAR** button to start over.

2.8.5.2.2. Trigger Modes



There are two available **Trigger Modes** that determine whether the recorded movements are synchronized with the host sequencer or with your playing.

NOTE: It is important to set the Trigger Mode before recording, as it cannot be modified afterwards.

LEGATO

When set to LEGATO, the recorded movements will start their cycle when the first note of a legato phrase is played. As long as the notes played are connected, the recorded loop will continue uninterrupted. Once all notes are released, the recorded loop restarts with the next note that is played. Playing in a detached manner will cause the loop to restart with each note.

SONG POSITION

When set to SONG POSITION, the recording will track the bars and beats of the song and play back the movements accordingly. This setting is useful if you're moving the cursor around in sync with the beat and you want in to play back in the same rhythmic way, regardless of when a note is triggered.

2.8.5.3. Clear

Pressing the **CLEAR** button will restore the Patch to its original state. The ORB's cursor will be returned to the center and any movements recorded in the built-in recorder will be cleared.

NOTE: The CLEAR button does not affect which parameters are modified by the ORB. The same parameters that were modified before pressing it will still be modified afterwards when the cursor is moved.

2.8.5.4. Automation

The ORB's movements can be automated in your host sequencer by enabling Host Automation in Omnisphere's **ORB** page.

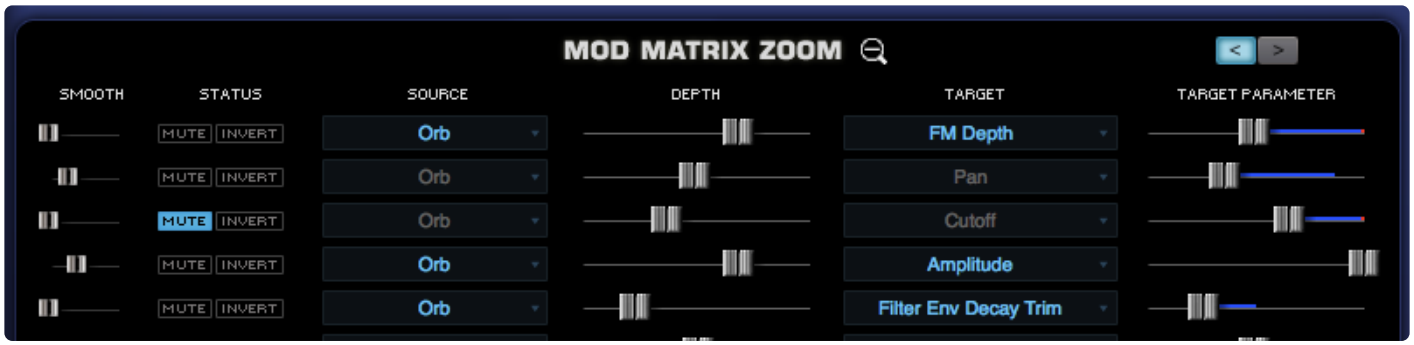
Since the ORB's movements are plotted on two planes, **Angle** and **Radius**, they must be enabled independently.

To enable the ORB's host automation, follow these steps:

1. Open the Orb page in Omnisphere, right-click on the Orb and choose "Enable Host Automation" to enable the Angle (the default setting) for automation.
2. Right-click again on Omnisphere's Orb and choose "Switch to Radius."
3. Right-click once more on the Orb and choose "Enable Host Automation" to set the Radius for automation.
4. Enable automation record in your host and hit **PLAY**.

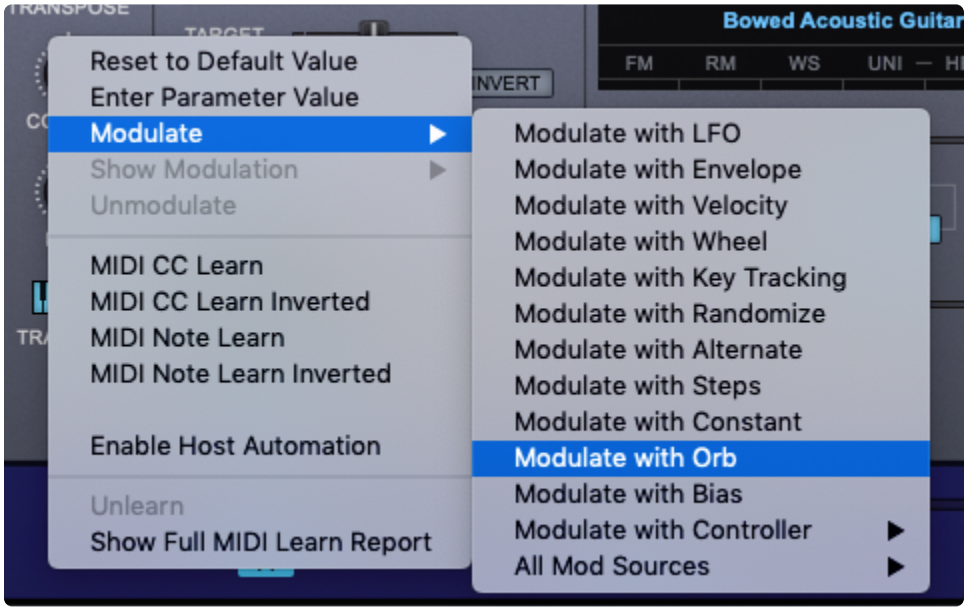
Any movements that occur in the Orb, whether manual dragging or INERTIA-based, will now be recorded into the host's session. Play it back to hear a faithful reproduction of your ORB performance and use your host's automation editing features if you'd like to edit it.

2.8.5.5. Orb as Mod Source



The ORB can be used as a modulation source. Using the **DICE** creates interesting and surprising results instantly, however using the ORB as a modulation source gives the user flexibility and full control over the parameters it modulates.

The ORB is seamlessly integrated to Omnisphere's **Flex-Mod** system. In Omnisphere, by right-clicking on the parameter to be modulated, the available modulation sources will appear under the "Modulate: All Mod Sources" sub-menu. By selecting "ORB," the ORB's movement will be automatically routed to the target parameter.



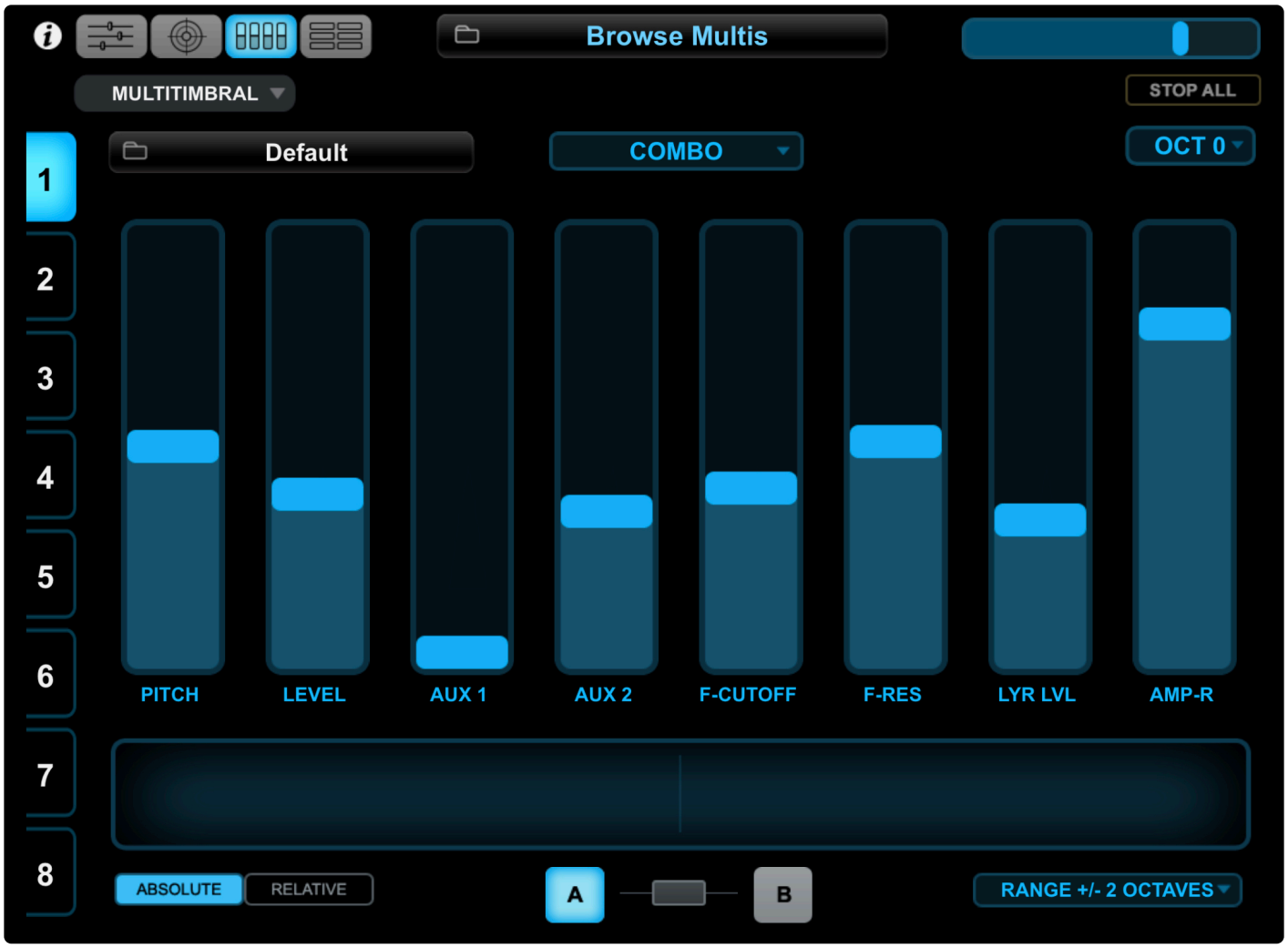
Please check the **Modulation** section for more information.

ORB as a Modulation Source vs. the DICE button

The ORB can generate sound modifications automatically by using the DICE button, or manually by user-defined modulation routings. Each method has its pros and cons and they cannot be used simultaneously. When using the ORB as a modulation source, keep in mind the following rules:

1. Creating a modulation routing where the ORB is the source overrides any sound modification that was automatically generated.
2. If you press the DICE button after using the ORB as a modulation source, the routings will be overridden. However, they will not be lost. In order to enable them again, simply re-select the ORB as a modulation source for any of them.

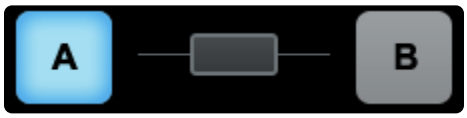
2.8.6. Controls



The **Controls** page features a touch-based **Pitch Ribbon** performance controller and eight **Touch Sliders** assigned to the most useful performance/editing parameters for each Omnisphere layer.

The **A/B Link** buttons at the bottom of the page determine which Layer's parameters are displayed and edited. You can select the keyboard range from the **Octave Shift Menu** in the upper-right.

2.8.6.1. Selecting and Linking Layers



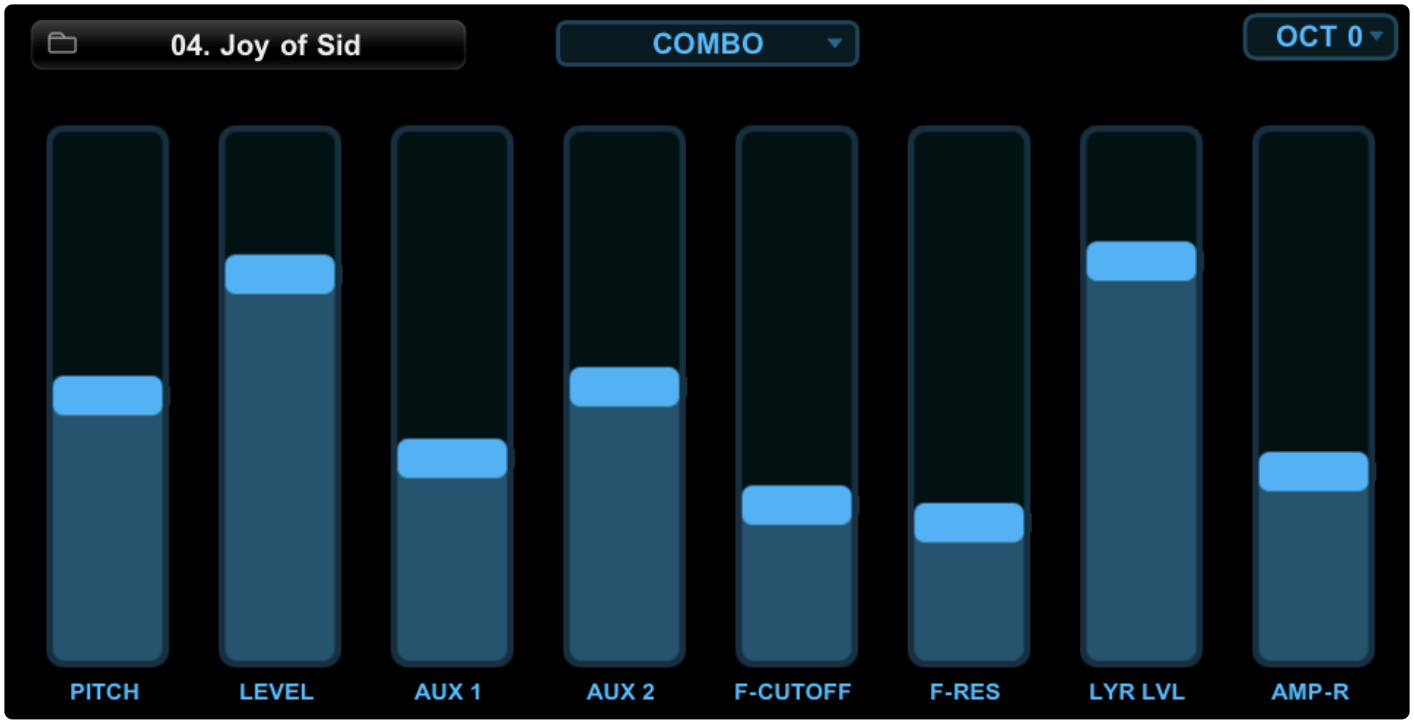
The **Layer Selection Buttons** toggle between the controls for each Layer in a Patch. The Layer selection controls will be highlighted to indicate the selected Layer.

The **LINK Button** in the center allows you to lock the controls of both Layers together. When enabled, any parameter changes made in one Layer will be mirrored in the other.

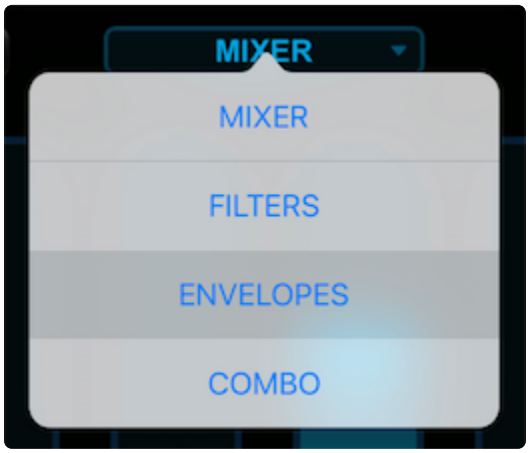
The LINK Button be highlighted when enabled, indicating the Layers are linked.

When the LINK Button is disabled, changes made to Layer parameters will only affect the selected Layer.

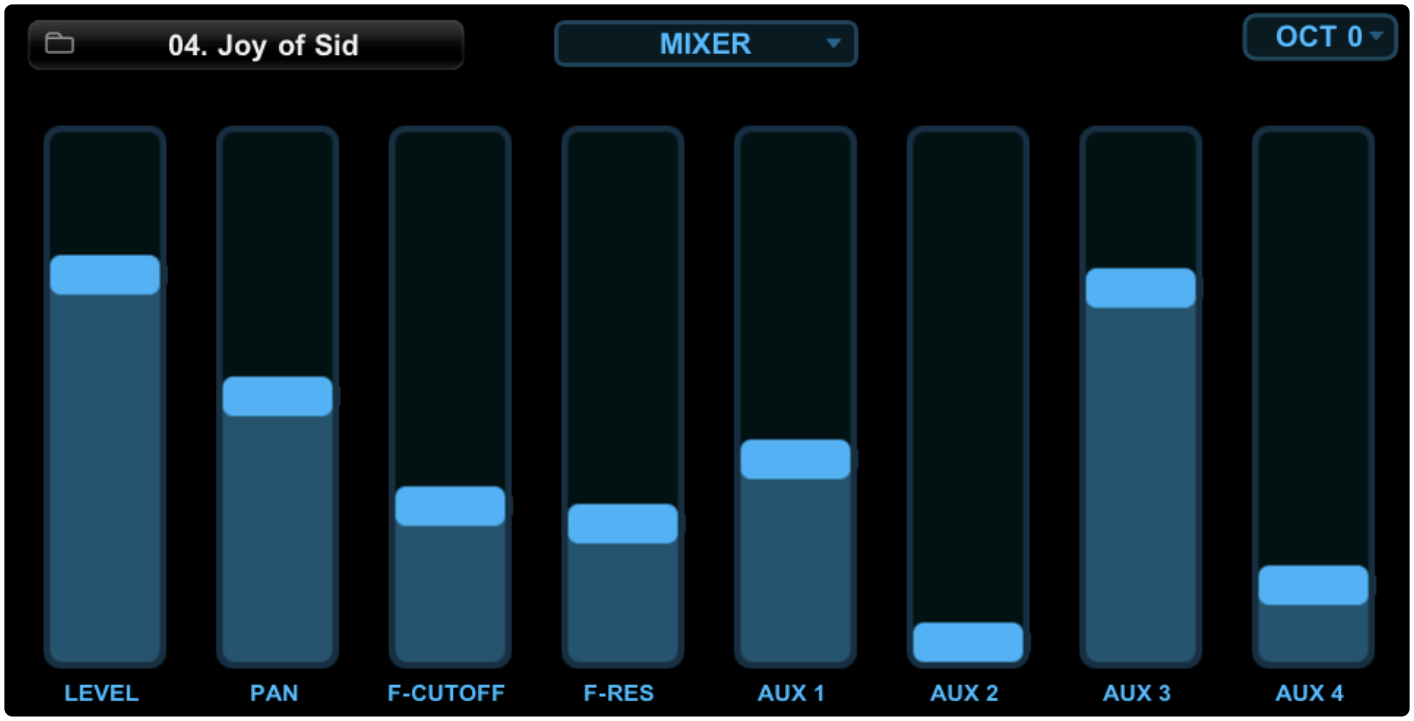
2.8.6.2. Touch Sliders



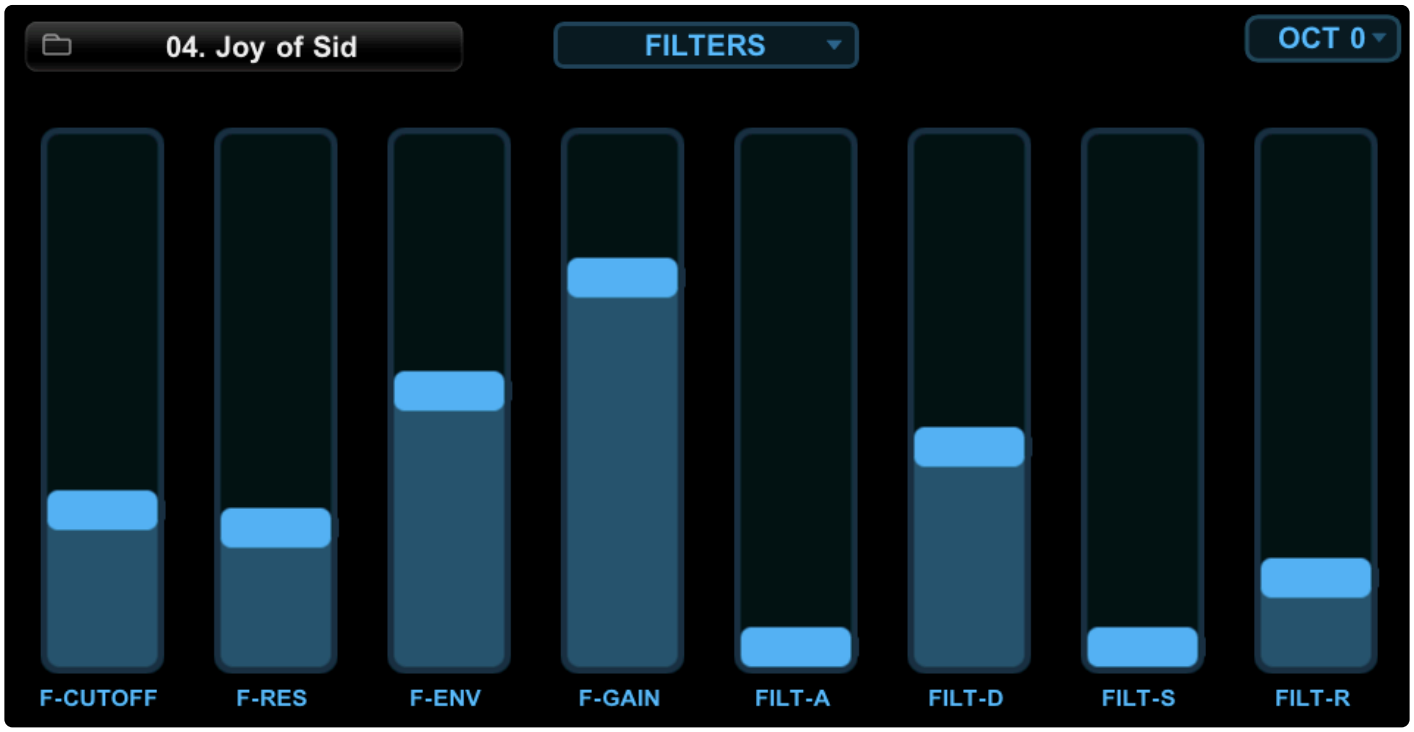
The Controls page features eight **Touch Sliders** assigned to groups of the most useful performance/editing parameters for each Omnisphere Layer. The different groups can be chosen from the drop-down menu above the sliders to set which Omnisphere parameters you wish to control.



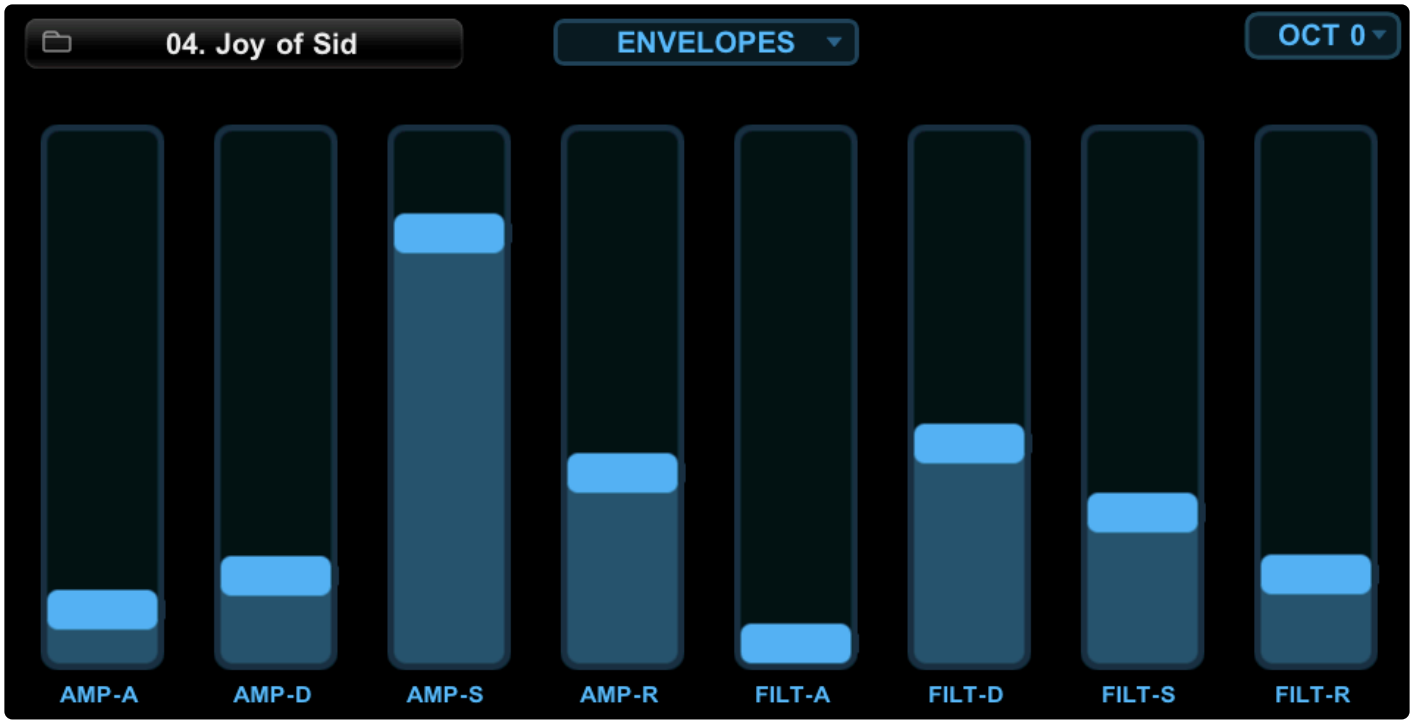
Select **MIXER** (the default template) to set the sliders to control Level, Pan, Filter Cutoff, Filter Resonance, and Aux Sends 1~4.



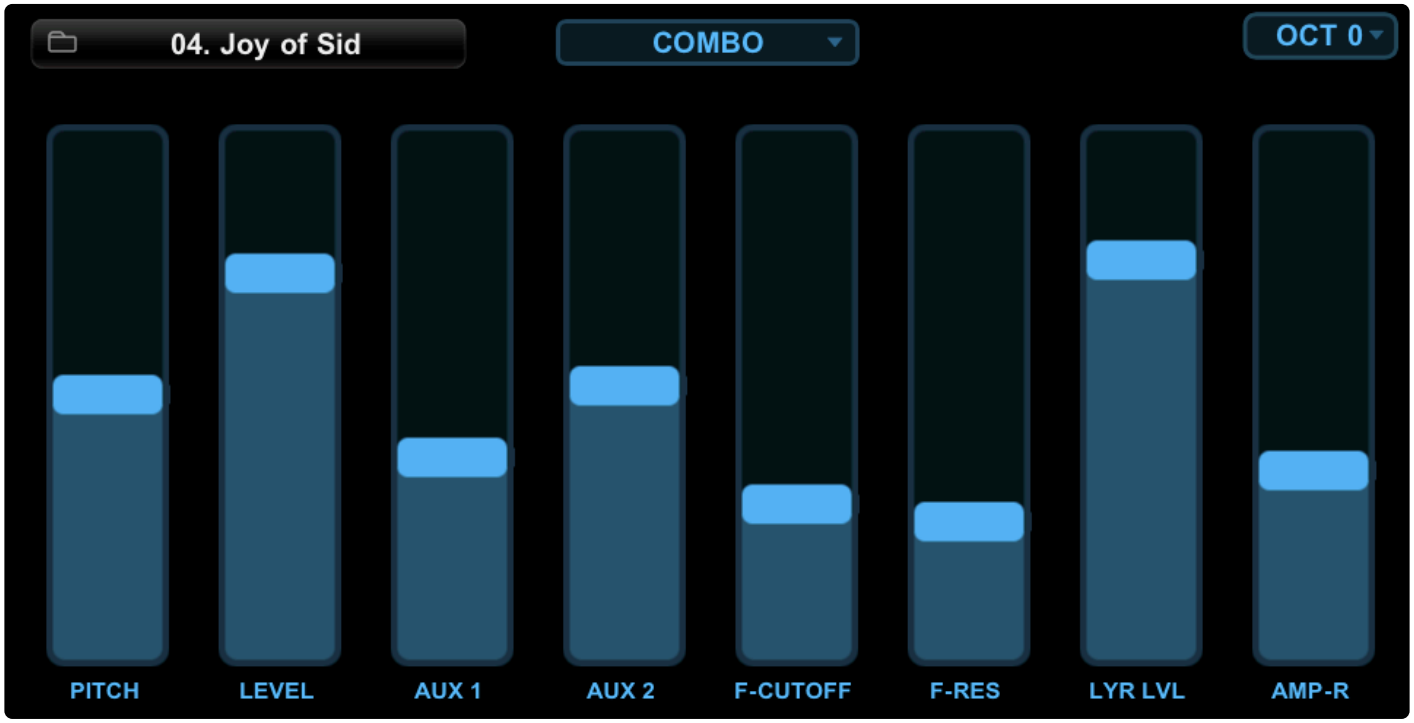
Select **FILTERS** to set the sliders to control Cutoff, Resonance, Filter Envelope Depth, Filter Gain, and Filter Envelope ADSR.



Select **ENVELOPES** to set the Sliders to control Amplitude Envelope ADSR and Filter Envelope ADSR.



Select **COMBO** to set the sliders to control Pitch, Level, Aux Sends 1 & 2, Filter Cutoff, Filter Resonance, Layer Level, and Amplitude Envelope Release.



2.8.6.3. Pitch Ribbon and Octave Shift

The pitch of a Patch can be expressively bent and manipulated from the **Pitch Ribbon Controller**, which is located along the bottom of the page. This works in a similar fashion to the ribbon controller on a Yamaha CS-80. It can be set to **Absolute Mode**, where the null point (original pitch) is in the middle, or **Relative Mode**, where the null point is wherever you place your finger.

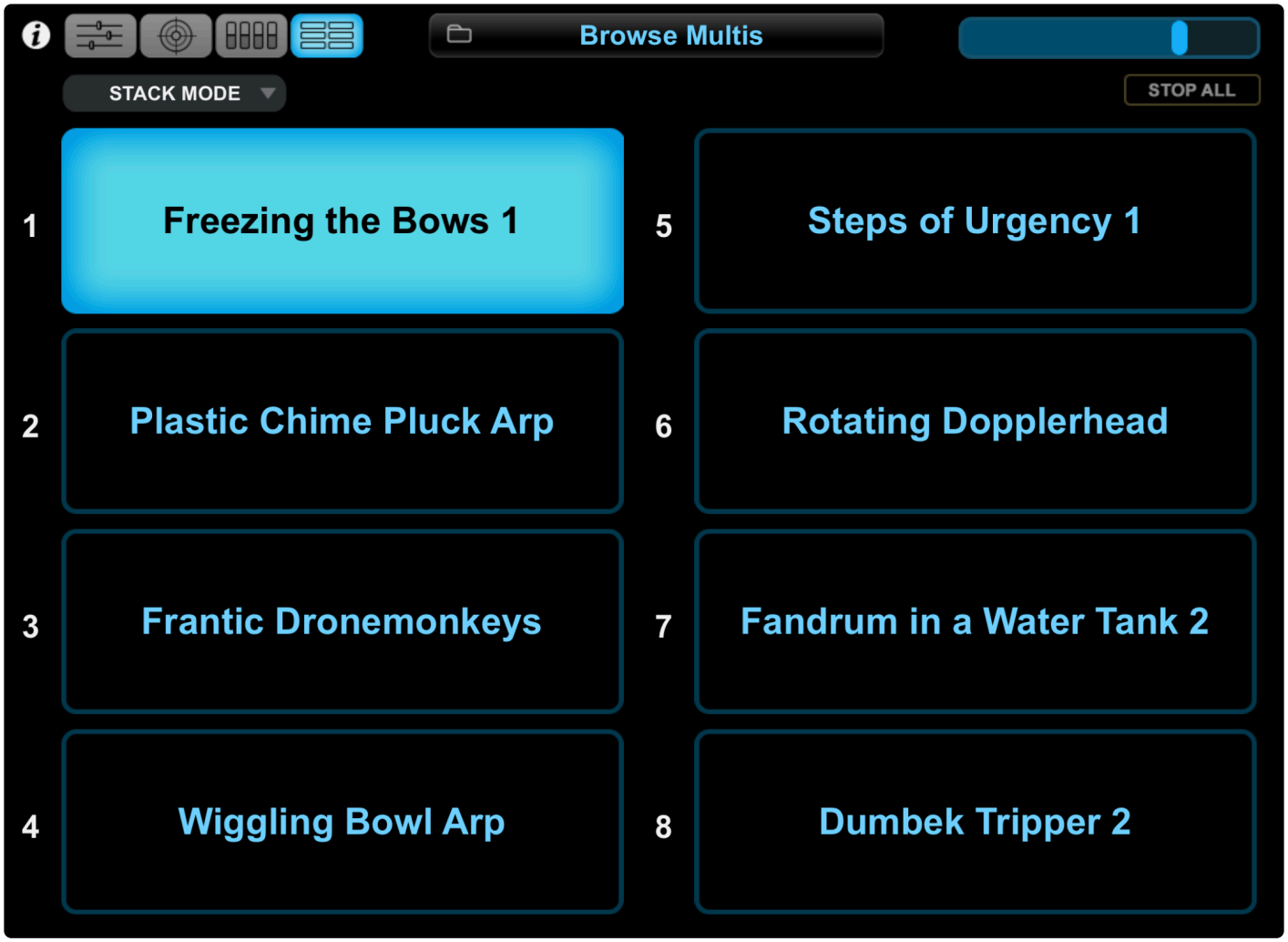
When you select **Absolute Mode**, you can cause the Pitch to jump up or down, depending on where you place your finger along the ribbon, in relation to the null point in the center. When you are playing a Patch and touch the Pitch Ribbon, the pitch will change as soon as you touch the ribbon. As soon as you lift your finger, the pitch will return to center. This can be useful for creating trilling effects or to bend from above or below the pitch.

When you select **Relative Mode**, you can begin bending the pitch from wherever you place your finger. You can constrain the Pitch Bend range to either +/- 1 Octave, 2 Octaves, or 4 Octaves.

The **Octave Shift Menu** is located in the upper-right. The Patch keyboard range can be set from this menu by raising or lowering the overall pitch in one-octave increments. *There is a total range of five octaves.*


OCT +2
OCT +1
OCT 0
OCT -1
OCT -2

2.8.7. Jumbo



Omni TR's **Jumbo** page is a two-way, touchscreen remote control for **Live Mode**. The Patch selection buttons on the Jumbo page are large and easy-to-read, making it ideal for stage use. Since Omnisphere's Live Mode already allows multiple sound selection, the multi-touch display in Omni TR makes a useful and convenient control surface. By choosing "Live Mode" from the **Omni TR Operation Mode menu**, Patch names can be enabled by a simple touch—one or more at a time for Layers and Stacks. You can add a sound by holding down the already-selected Patch name(s) and touching any others you wish to add.

The Jumbo page frees players from sitting in front of their computer and allows them to load Multis and select and layer Patches on-the-fly from anywhere on stage.

2.9. Windows MultiTouch

Intended especially for live performance, Omnisphere's **Windows MultiTouch** functionality allows you to quickly and easily operate Live Mode with MultiTouch-equipped screens.

- It allows for selecting and layering Parts in Live Mode by clicking on two Part buttons simultaneously.

- In addition, you can scroll quickly through the browser by swiping up or down with 2 fingers.

- You can control one parameter at a time across the rest of Omnisphere's interface, including pressing and clicking buttons, moving faders and knobs, and dragging a scroll bar.


PATCH BROWSER
DIRECTORY: All Spectrasonics
Search
Attributes
Sound Match
Category
Type
Genre
Author
All
ARP + BPM
Bass Instruments
Bells and Vibes
Bowed Colors
Distortion
Electro Perc
Electronic Mayhem
Ethnic World
Guitars
Hits and Bits
Human Voices
Keyboards
Noisescapes
Organs
Phoenix Rising
Sweet Beef
Wakandan War Rhino
Backwards Neosoul
Drop Springs
Weathered Strummin
Circus Nightmare
Muted Expectations
Brainball
Replicants
Innerversions
Intimate Bouncing Mallets
Analog Vibralead
Sort
UTILITY
HW
default multi
1 2 3 4 5 6 7 8 MULTI SYSTEM
OMNISPHERE
POWER SYNTH
Default*
SPECTRASONICS
ORB MAIN A B C D FX ARP
PITCH
0
TRANSPOSE
COARSE
FINE
TRACKING
MODULATION
OFF
SOURCE
OFF
TARGET
MUTE
INVERT
LFOS
1 2 3 4 5 6 7 8
Free
RATE
DEPTH
SYNC
DELAY
OSCILLATOR
SAMPLE SYNTH
SawSquare Bright
FM RM WS UNI HRM GRN
SHAPE
SYMMETRY
HARD SYNC
ANALOG
PHASE
FILTER
Basic 12db Lowpass
CUTOFF
RES
KEY
ENV
GAIN
VARIANT
ENVELOPES
AMP FILTER MODS
A D S R
SIMPLE
VELO
AMP
PAN
A
B
C
D

3. Hardware Synth Integration

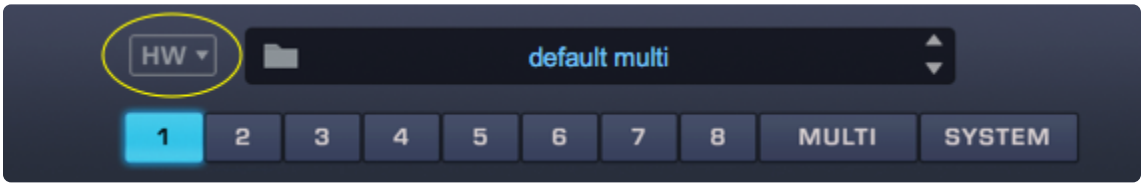
Hardware Synth Integration transforms popular hardware synthesizers into hands-on controllers for Omnisphere's extensive synthesis capabilities.

Bridging the gap between software and hardware, this feature allows users to create and modify Omnisphere sounds in an intuitive way by using the familiar controls and layout of their supported hardware synths — all with minimal setup.

Going far beyond the typical "MIDI Learn" approach that most software synthesizers employ, there is a unique Hardware Profile for each supported hardware synthesizer—allowing the special features of that hardware to work seamlessly with Omnisphere by translating MIDI messages from the hardware into carefully crafted sonic results in Omnisphere.

Hardware Synth Integration allows Omnisphere users to experience the easy workflow of a hardware synth and hardware synth users to expand their capabilities into the vast sonic world of Omnisphere!

3.1. What is a Hardware Profile?



Omnisphere Hardware Profiles convert the supported hardware synths into hands-on controllers for Omnisphere. When a Hardware Profile is loaded, Omnisphere is instantly linked to that hardware synth. By translating MIDI messages from the hardware, it triggers sophisticated and carefully crafted interactions from a single touch of a knob, and Omnisphere automatically switches to the correct interface page. By touching a control on your synth, you can recall entire FX racks, assign multiple scaled parameters, and even create complex modulation matrix routings on-the-fly.

When designing Hardware Profiles, we make decisions that balance faithfulness to the hardware synth's operation with creative use of its panel to make the most of Omnisphere's power. For instance, the Moog Sub 37 has neither Unison nor effects, so we re-purposed controls on the Sub 37 panel to control Omnisphere's Unison and FX send. The Korg Prologue only has one LFO, but when using it to control Omnisphere you have control over three LFOs. The Moog Voyager is a classic monophonic synth, but by using a control in its panel, you can switch between playing Omnisphere monophonically or polyphonically. You can even use the Voyager's Touch Surface to control Omnisphere's Orb for radical sound manipulations not possible in the Voyager.

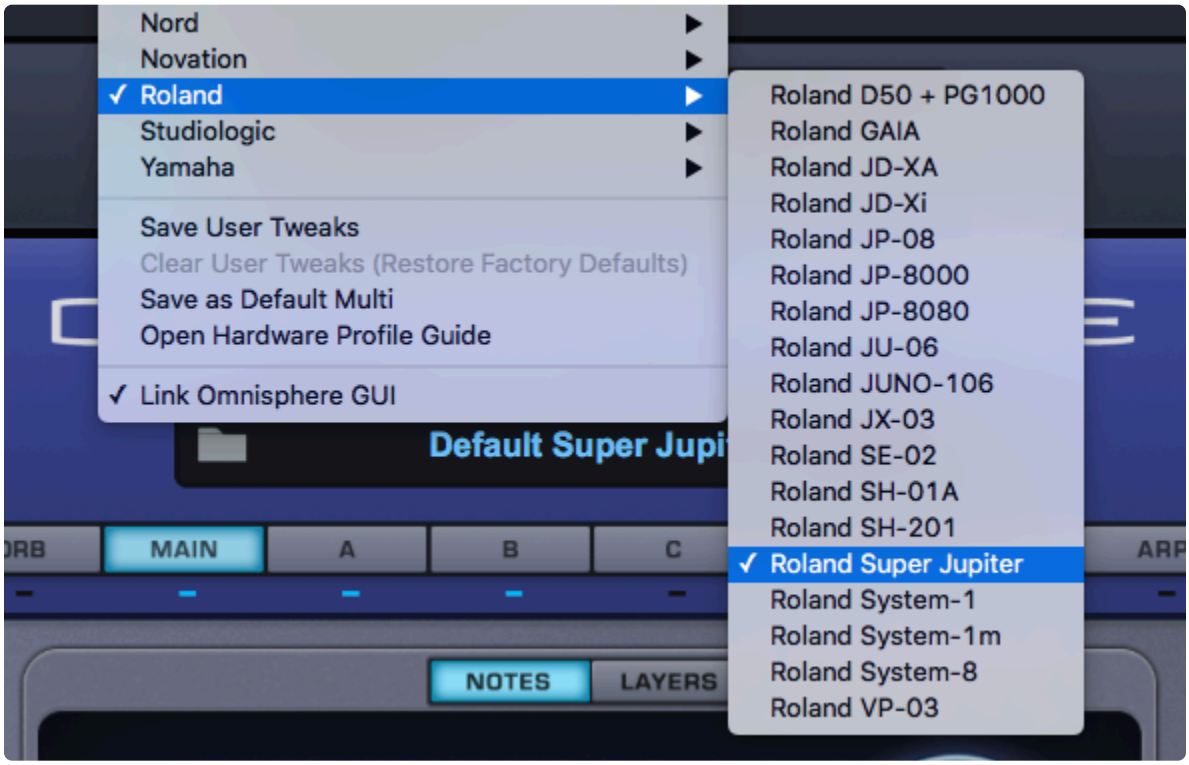
This process required us to develop many features to adapt Omnisphere to operate like hardware synths. These range from adding a new Shared Signal Path, to creating new State Variable Filter types for use with the OB-6. We even added over 100 new wavetables modeled after many of the supported hardware synths. Hardware Profiles not only allow you to control Omnisphere but permit Omnisphere to capture a surprising amount of the sonic character of the hardware.

Each hardware profile has a corresponding set of sounds in the Hardware Library which were specially designed using that hardware synth as an Omnisphere controller. The Hardware Library contains over 1,000 Patches, featuring a wide range of categories—many with a distinctly classic-analog flavor. These sounds are available for ALL users, regardless whether you use the hardware or not!

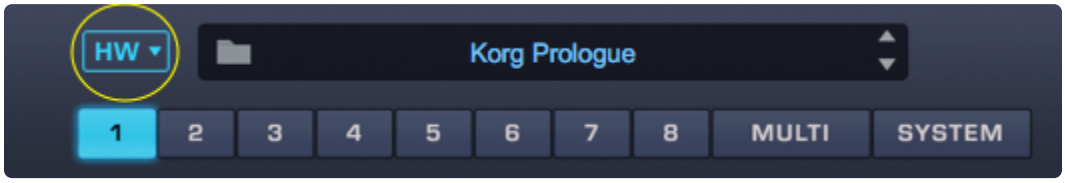
3.2. Loading Hardware Profiles

You can access Omnisphere's list of Hardware Profiles by clicking on HW button in the header.

From the drop-down menu, select the hardware synth you want to use to control Omnisphere.

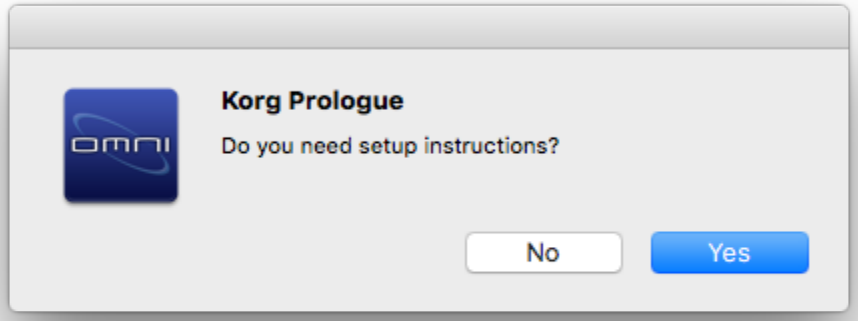


When a profile is selected from the HW Menu, the HW menu button is highlighted in blue and the hardware name will appear in the Name Display.

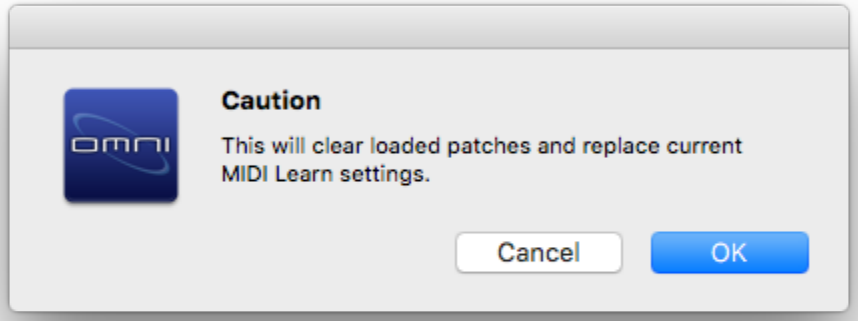


A dialog box will appear with the name of the hardware synth you have selected, asking "Do you need setup

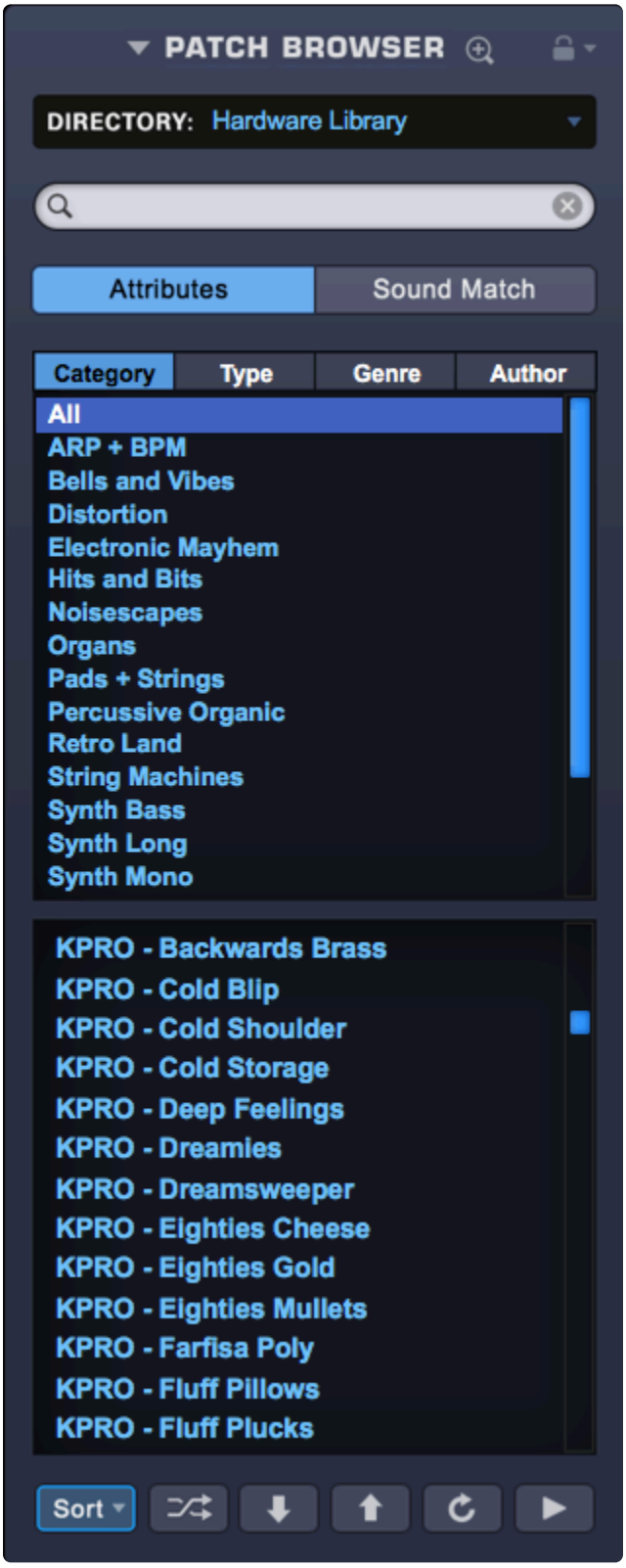
instructions?” This will only happen the first time you load the profile. If you would like to see these instructions again, simply select “Open Hardware Profile Guide” from the HW menu and you will be automatically directed to the guide for the currently selected HW Profile.



Next, a warning dialog appears, cautioning you that “This will clear loaded patches and replace MIDI Learn settings.” Click “OK.”



Once the Hardware Profile is loaded, the Patch browser automatically displays Patches created specifically with that hardware synth.



You can now use your hardware synth to control any Patch in Omnisphere in any of its eight parts! Simply change the hardware MIDI channel to correspond with the channel in any of Omnisphere's Parts.

To unload a profile, select "None" from the HW menu.


✓ None
Access
Alesis
Behringer
DSI - Sequential
Korg
Moog
Nord
Novation
Roland
Studiologic
Yamaha
Save User Tweaks
Clear User Tweaks (Restore Factory Defaults)

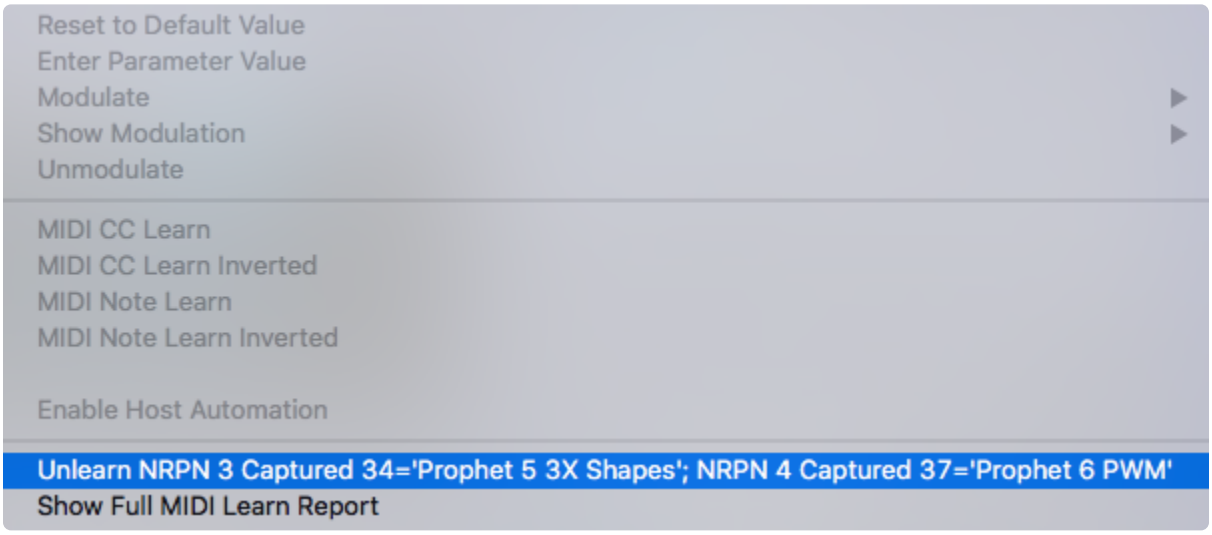
3.3. Save User Tweaks

When you load a HW profile, Omnisphere is instantly set up to perform a large number of sophisticated actions with the touch of a knob. You might be using your hardware synth to instantiate Omnisphere effects, create modulation routings, control multiple scaled parameters, or recall specific filter types. Still, there could be cases where you want to customize a hardware profile.

For example, when using the Sequential Prophet 6 profile, the Shape knobs on the hardware perform two functions—they control the Shape parameter of Omnisphere's corresponding oscillators and also automatically load specific wavetables modeled after the Prophet 6. This is great if you want Omnisphere to have the sonic character of the Prophet 6, however, this might not always be convenient. You might be playing a Patch from "Spotlight – EDM" that uses a radically different set of digital wavetables. You want to control Omnisphere's Shape parameter using the Prophet 6, but at the same time keep the digital wavetables.

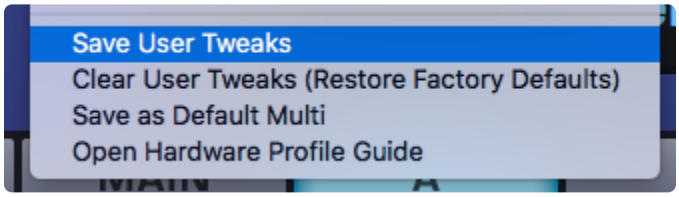
There's a quick and easy solution.

Right-click on the Omnisphere control you wish to change and select "Unlearn…" from the HW Profiles menu.



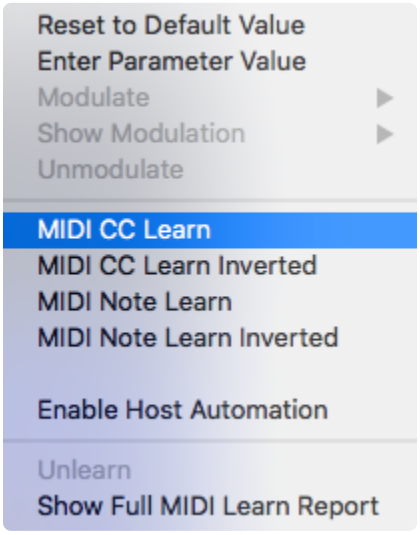
From now on, the Shape knob on the Prophet 6 will still affect the shape slider in Omnisphere, but you are free to use any other wavetables.

Select "Save User Tweaks" from the Hardware Profile menu—the next time you load the profile, your changes will be retained.

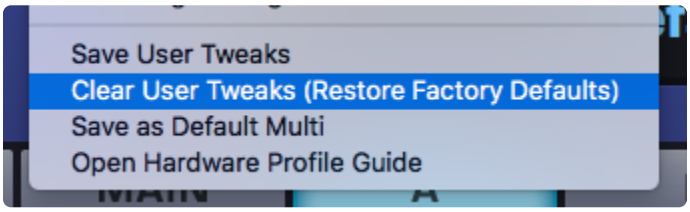


Here's another scenario—you love using your Roland SE-02 to control Omnisphere, but since the SE-02 doesn't send MIDI from its volume control, Omnisphere's Master Volume is not mapped in its profile. However, if you have another keyboard controller next to your synth, you can assign one of its knobs to control it.

Right-click on the Omnisphere Master Volume slider in the upper right corner and select "MIDI CC Learn" from the menu. Next, move the desired knob or slider on your keyboard controller. It now controls Omnisphere's volume and you can save that with your SE-02 profile.



If you ever wish to clear your tweaks and restore the factory default settings for any profile, re-open the HW menu and select "Clear User Tweaks (Restore Factory Defaults)."



3.4. Link Omnisphere GUI

When a Hardware Profile is loaded, Omnisphere follows your moves on the hardware synth by automatically switching to the relevant page. If you adjust the envelope on the hardware synth, Omnisphere will display that envelope's zoom page. If you adjust an effect from the hardware, you'll be taken to the applicable FX rack in Omnisphere.

This behavior is enabled by default and can be controlled by selecting or de-selecting "Link Omnisphere GUI" from the HW menu.

After accessing Omnisphere's pages from a hardware synth, you can make even more detailed edits inside Omnisphere. For example, each FX unit in Omnisphere can have up to 15 parameters. Most hardware synths don't have that many controls dedicated to effects, but with automatic access to the relevant Omnisphere page, you can use the mouse to adjust parameters the hardware can't control. After all, Omnisphere has more than 20,000 parameters!

This makes the "Link Omnisphere GUI" feature a key part of bridging the gap between software and hardware.

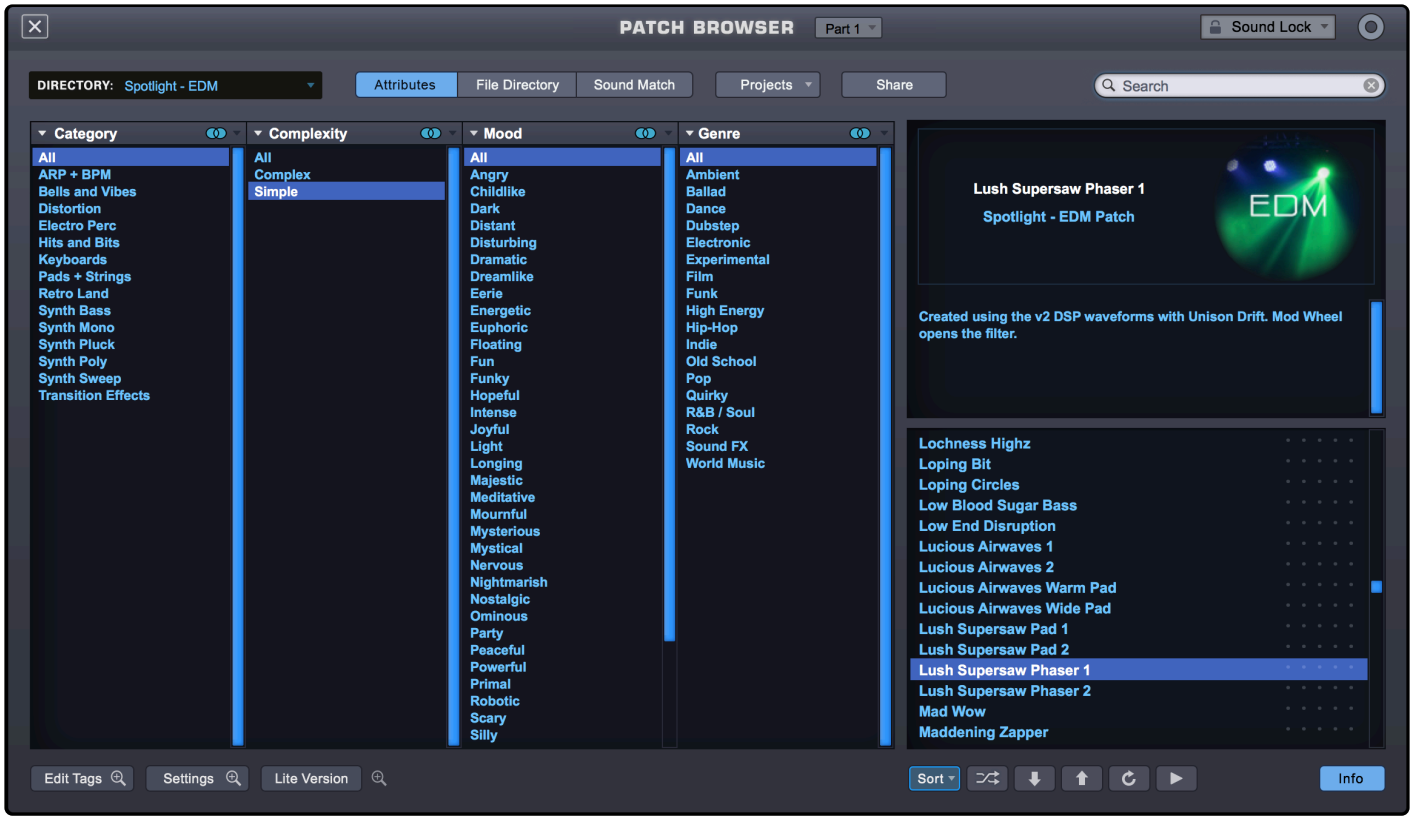
3.5. Supported Hardware Synths

These are the models currently supported by Omnisphere's Hardware Synth Integration.

- Access Virus A
- Access Virus B
- Access Virus C
- Access Virus Indigo 1
- Access Virus Indigo 2
- Access Virus T1
- Alexis Andromeda A6
- Behringer DeepMind
- DSI – Sequential Mopho
- DSI – Sequential OB-6
- DSI – Sequential Pro 2
- DSI – Sequential Prophet 6
- DSI – Sequential Prophet 08
- DSI – Sequential Prophet 12
- DSI – Sequential Prophet X
- DSI – Sequential REV2
- Korg microKorg
- Korg microKorg XL
- Korg Minilogue
- Korg Minilogue XD
- Korg Monologue
- Korg MS-20ic
- Korg MS-2000
- Korg Prologue
- Korg Radias
- Moog Little Phatty
- Moog Minitaur
- Moog Sirin
- Moog Slim Phatty
- Moog Sub 37
- Moog Sub Phatty
- Moog Subsequent 37
- Moog Voyager
- Nord Lead 1
- Nord Lead 2
- Nord Lead 3
- Nord Lead 4
- Nord Lead A1

- Nord Stage 3
- Nord Wave
- Novation Bass Station II
- Novation Circuit Mono Station
- Novation Mininova
- Novation Peak
- Roland D50 + PG1000
- Roland GAIA
- Roland JD-XA
- Roland JD-Xi
- Roland JP-08
- Roland JP-8000
- Roland JP-8080
- Roland JU-06
- Roland Juno-106
- Roland JX-03
- Roland SE-02
- Roland SH-01A
- Roland SH-201
- Roland Super Jupiter
- Roland System-1
- Roland System-1m
- Roland System-8
- Roland VP-03
- Studiologic Sledge
- Yamaha Reface CS

4. The Browsers



Omnisphere ships with a large library of sounds, so it requires sophisticated search, filtering and browsing capabilities. The Browsers in Omnisphere were designed to provide an intuitive and convenient way to quickly find exactly what you need from a library containing many thousands of sounds.

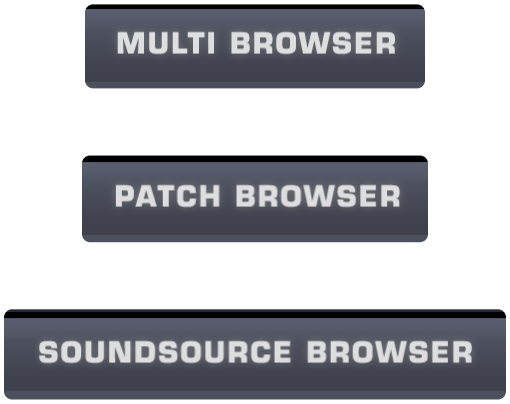
Using categories, searchable attributes called **Tags**, as well as **Projects** and **Sharing**, the Browsers add a powerful and important feature to the workflow in Omnisphere. The more you understand about how the Browser works, the better you will be able to utilize and enjoy the Omnisphere sound library.

Multis, **Patches**, and **Soundsources** have their own Browsers with the same layout and identical functions, but they interact with different parts of the library. For example, when the Multi Browser is open, only Multis will be accessible in the Browser.

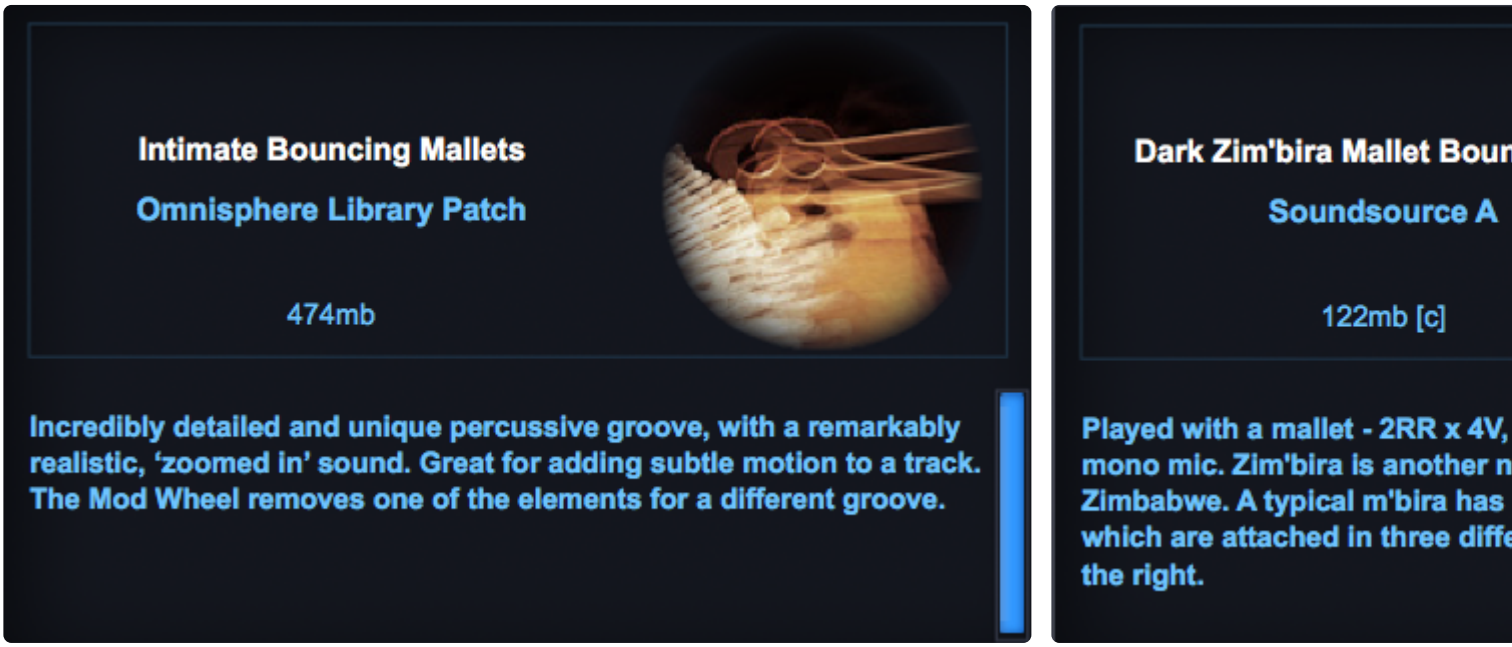
There are two types of Browsers in Omnisphere: the Full Browser and the Mini-Browser. The Full Browser uses the entire Omnisphere user interface, which allows for more refined searches and results. The Mini-Browser uses only the left-most area of the interface, making the controls still accessible—convenient for editing sounds while browsing.

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

1. The titles in each Browser's Header.



2. The images in the Info Areas.



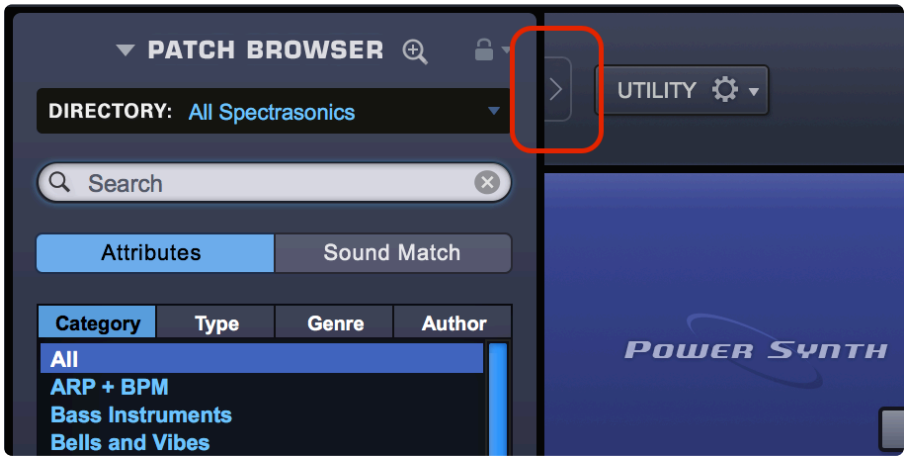
While the Multi and Patch images are named respectively, some Patches display unique images. In the Soundsource Browser you will find unique images for each Soundsource, giving you a visual representation of what to expect from the sound.

4.1. Mini-Browser Overview

The Mini-Browser lets you browse and edit sounds without switching pages. It is displayed in the left-most area of the Omnisphere interface and provides convenient Patch and Multi browsing with the Omnisphere controls still easily accessible.

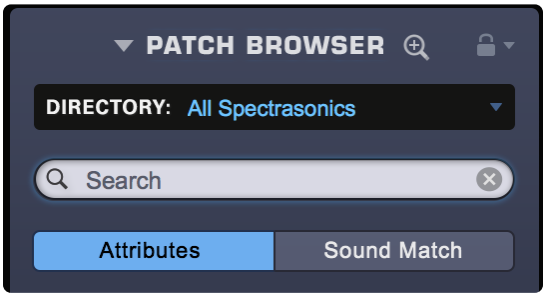
Mini-Browsers are available for Patches and Multis. The Patch Mini-Browser is displayed when Part pages are selected and the Multi Mini-Browser is displayed when Multi or System pages are selected. You can select which mini-browser you are viewing by clicking on the down arrow next to the mini-browser name.

The Mini-Browser can be closed to save screen space by clicking on the arrow to the left of the Utility Menu:



Clicking the arrow again reopens the Mini-Browser.

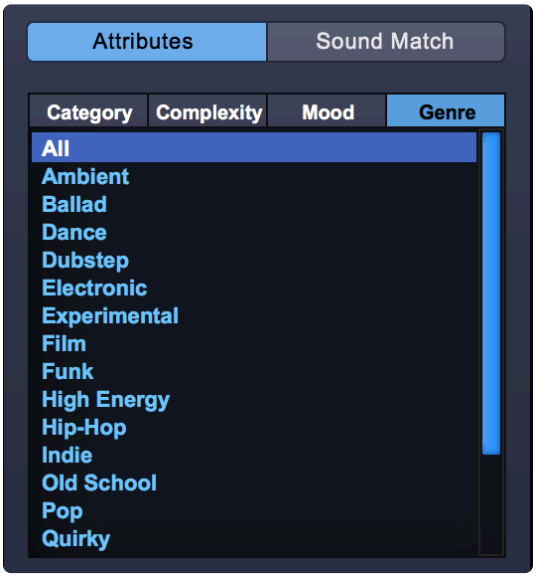
4.1.1. Browser Header



The Mini-Browser Header contains the Browser Title, access to the Full Browser via the magnifying glass, Sound Lock, Directory Menu, Search Field, and tabs for selecting Attributes-based browsing or Sound Match.

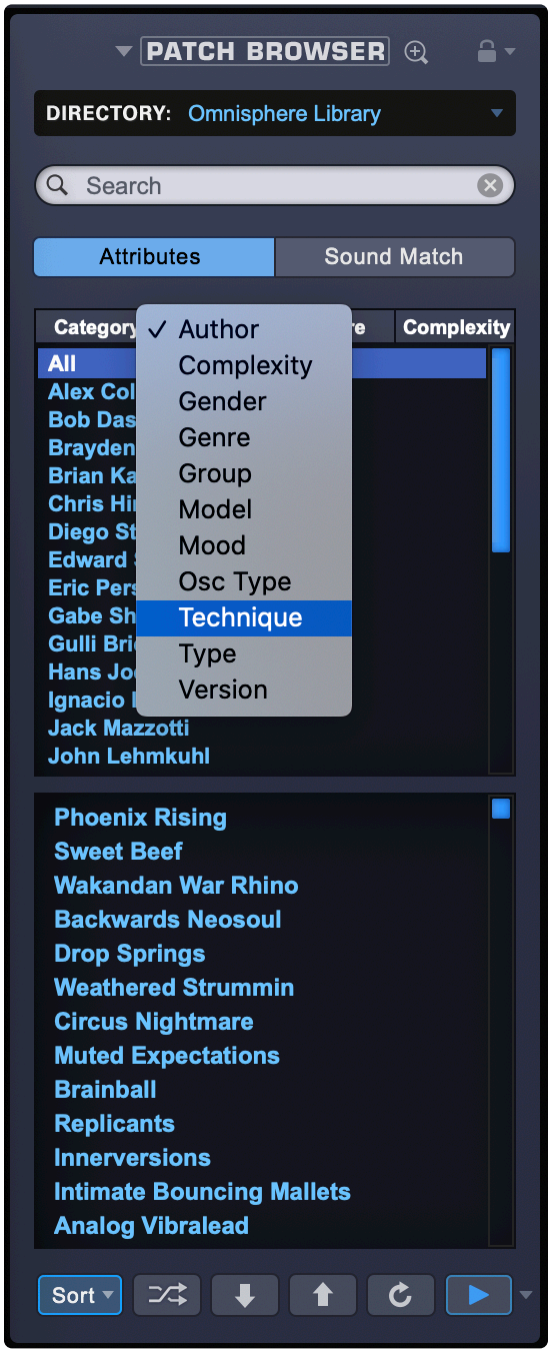
You can select which mini-browser you are viewing by clicking on the down arrow next to the mini-browser name.

4.1.2. Browser Filters

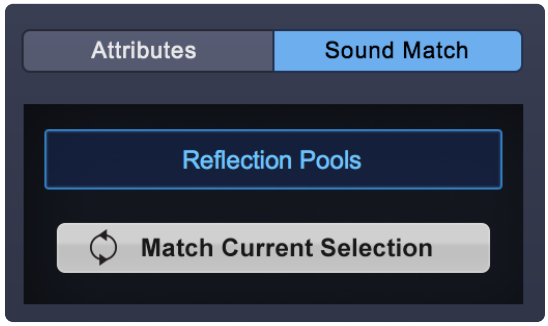


In **Attributes Mode**, there are four selectable Browser Filters, which display Category and three context-sensitive Attributes for searches based on the tags that have been added to the sounds. When a Category or an Attribute has been changed from All, the title changes to blue, to let you know it is filtered.

You can right-click on the Attribute Types to make a different selection from the list.

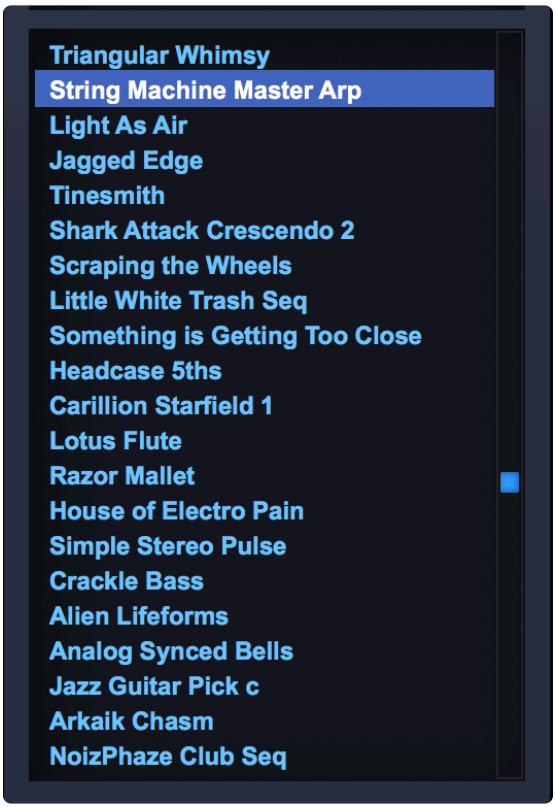


Sound Match lets you find sounds that are similar with a simple click by analyzing the tags of every sound and finding others with similar characteristics.



4.1.3. Results and Info

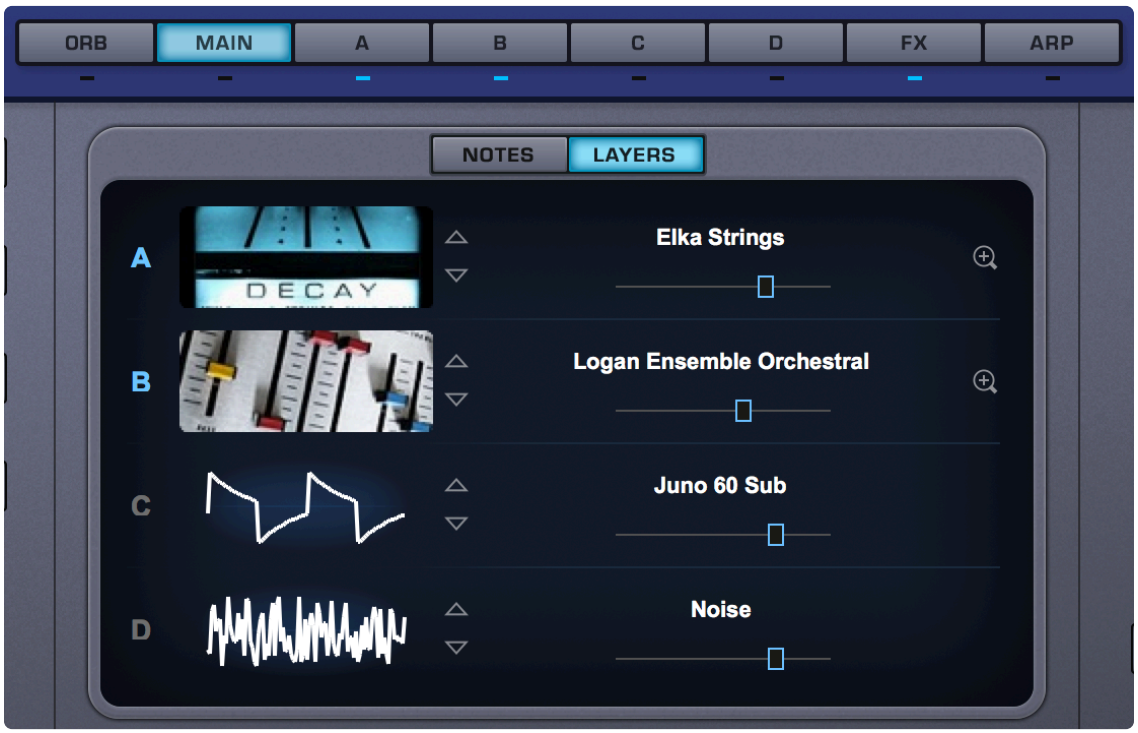
After filtering using Attributes Mode or using Sound Match to find similar sounds, the list of results is displayed in the lower area of the Mini-Browser.



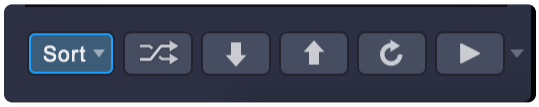
Information about the loaded Patch and is displayed in the middle area of the Main Page.

- When this area is set to NOTES View, a visual representation of the Patch is displayed along with useful information, performance suggestions, and access to the Patch Zoom.

- When this area is set to LAYERS View, it provides the names and a visual representation of the Waveforms or Soundsources that make up the Patch. It also displays other basic Layer controls, like Soundsource/Wavetable steppers, Layer ON/OFF switches and Layer Level sliders.



4.1.4. Browser Footer

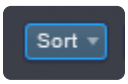


The Mini-Browser footer provides additional sorting options, a Shuffle button, Up/Down stepper arrows, and an Audition button.

Mini-Browser Up/Down Arrow Keys

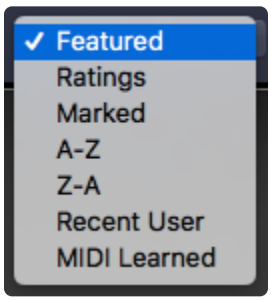
When enabled you can use the arrow keys in your ASCII keyboard to step through Patches or Multis in the Mini-Browser. Sometimes it is preferable to have them disabled so you can use the arrow keys to step through tracks in your host.

Sort Menu



The Sort Menu includes seven ways to sort the list of sounds.

Featured



We're continually adding new sounds to Omnisphere and the number of available sounds is pretty massive! In order to make it easier to find the best examples of the newest sounds in the Library, Featured sounds are displayed by default at the top of your list. This list is updated with each Patch update.

Selecting the "Featured" sort option will display Featured sounds at the top of the sounds list.

You will also find a special selection of Featured sounds when you're browsing the library by Category. For example, with the Featured sort option selected, if you select Synth Bass in the Category column, you'll see

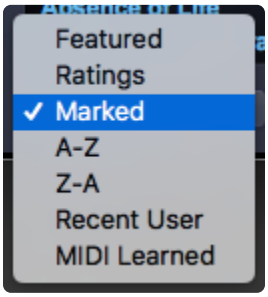
a specially-selected list of Featured Synth Bass sounds displayed at the top of the list.

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 displays rated sounds at the top of the Browser list, in order of their Ratings. 5-star sounds are listed first, followed by 4–star sounds, and so on.

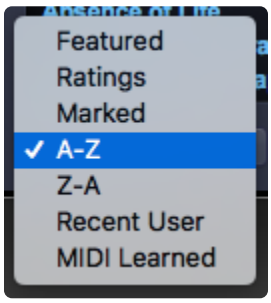
Marked

You can use shift+click to mark sounds in the browser in order to share them or add them to Projects. This sorting option puts the marked sounds at the top of the list (sorted alphabetically).



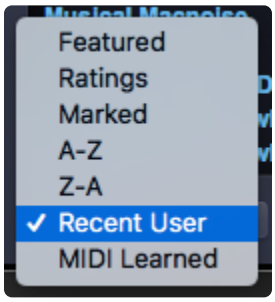
A-Z and Z-A

The A-Z & Z-A options provide a simple way to reverse the alphabetization of the sounds. Select Z-A to reverse the order, and A-Z to restore it.



Recent User

This feature is only useful when the Directory is set to “User.” When this option is selected, the newest User sounds are displayed first.



NOTE: This feature does not show the most recently added Patches to the Factory Library, just the User Library. If you want to view the most recently added Patches to the Factory Library, enter the version number of the current Patch Library in the Search field (e.g. 2.6).

MIDI-Learned

When sounds are sorted by “MIDI Learned” order, the MIDI Learned sounds will move to the top and their assigned MIDI message will be displayed underneath their names.

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 are controlled from the up and down arrows of your keyboard. They can also be MIDI-Learned, and those assignments will apply to the Stepper buttons in all three Full Browsers, as well as the Mini-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.

Sometimes it is preferable to have this disabled so you can use the arrow keys to step through tracks in your host. This behavior can be disabled from the Browser Settings.

TIP: Using your keyboard arrows or MIDI-Learning the Browser steppers to switches on your MIDI controller is a great way to speed up the auditioning process, especially with the "Auto-Play" and "Preview Load" options enabled.

Refresh Button

Click this button to refresh the display of sounds in the Browser. When moving, renaming or deleting sounds using the Finder (Mac) or Explorer (Windows), use the Refresh Button to update the Browser display.

TIP: Depending on how many user libraries you have, the refresh process can take long. Using Option / Alt-Refresh can be quicker, as it refreshes only the Directory that is currently selected.

Audition Button / Auto-Play

This button allows you to preview a Patch by internally triggering it with a single note (C4 by default). The included drop-down menu adds the ability to toggle Auto-Play ON and OFF (it is ON [blue playhead] by default). When enabled, selecting a sound will automatically audition it.

For more options that will effect the Auto-Play function, including which note is used to preview and note length, see the **Browser Settings Zoom** page located in the Full Browser.

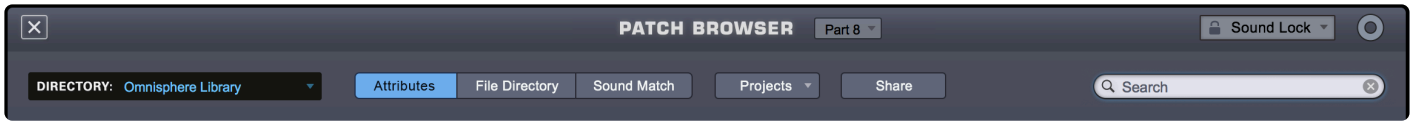
4.2. Full Browser Overview

The layout is the same for all three Full Browsers. Once you familiarize yourself with the layout and operation of any Full Browser, you will be comfortable with all of them.

NOTE: When using Satellite Instruments inside Omnisphere, its Soundsources, Patches, and Multis will also display unique images which identify the instrument or feel of the selected sound. When you open a Keyscape or Trilian Patch in Omnisphere, the Custom Controls will become available.

NOTE: The Soundsource Browser does not contain the Lite Version Button or Lite Version Zoom Icon.

4.2.1. Browser Header

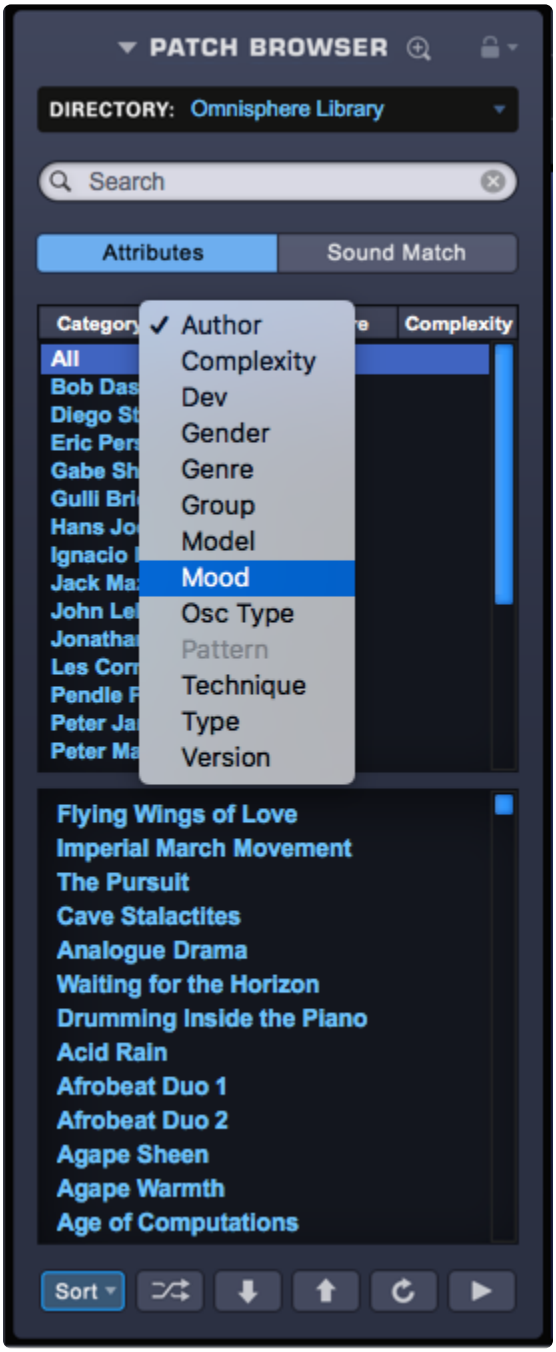


The Full Patch Browser Header contains the Browser Title, the Part selector drop-down menu, a Memory Meter, controls that let you apply filtering options using the Directory Menu, buttons that allow selection of the three browsing modes (Attributes, File Directory or **Sound Match**), the **Projects** menu, the **Sharing** menu, and **Sound Lock**, as well as the Search field.

4.2.2. Browser Filters

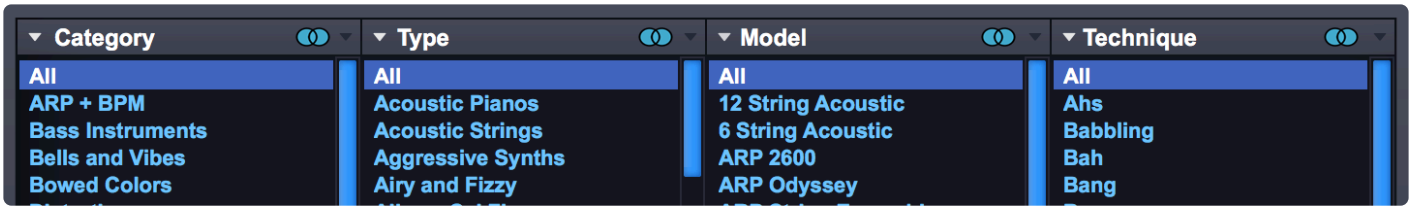
The four-column layout of the Full Browser Filters provides both hierarchical and Attributes-based filtering functions, and operates in two distinct modes.

In **Attributes Mode**, the Full Browser Filters display selectable Category and context-sensitive Attributes columns based on the tags that have been added to the Multis, Patches, or Soundsources.

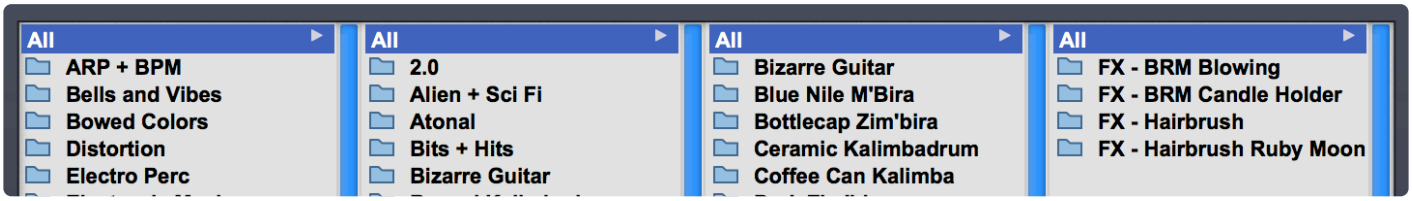


With a simple click **Sound Match** lets you find sounds that are similar by analyzing the tags of every sound and finding others with similar characteristics. Pressing the SOUND MATCH button will hide the Browser

Filters and and display the name of the selected sound. All the similar sounds in your libraries will show up in the results list.

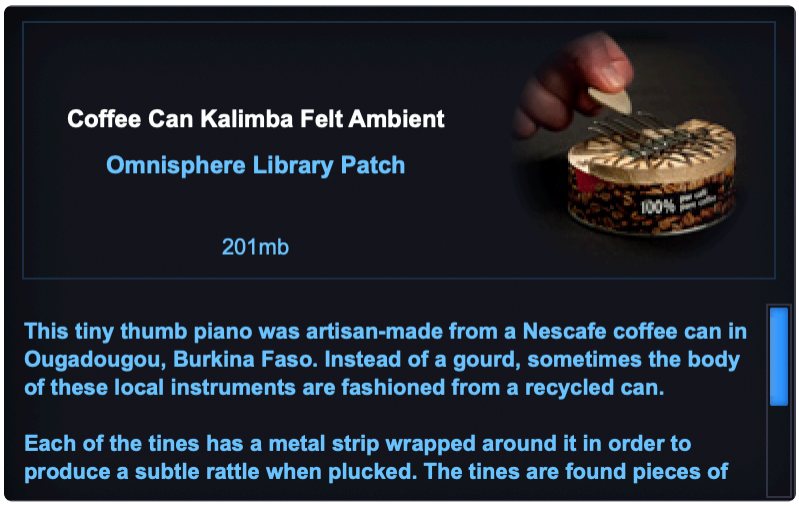


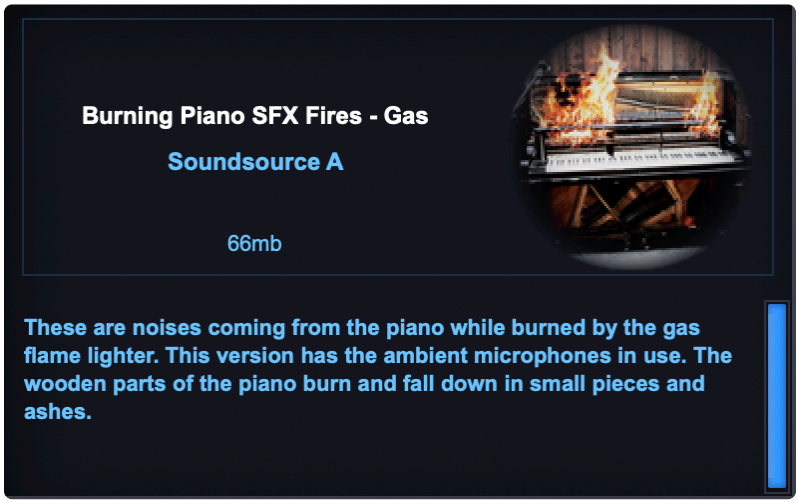
In **File Directory Mode**, the Full Browser Filters display folders and files just as they are stored in the directory on your computer's hard drive. This is useful for browsing User sounds in a way that mirrors the file/folder organization you may have chosen in the Mac Finder or Windows File Explorer.



4.2.3. Results and Info

The Full Browsers have 4 columns for search criteria and the results are displayed in the 5th column on the right.





When the Info View is selected, 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 are using. This is the default View Mode for all Browsers.


Category
All
ARP + BPM
Bells and Vibes
Bowed Colors
Distortion
Electro Perc
Electronic Mayhem
Ethnic World
Guitars
Hits and Bits
Human Voices
Keyboards
Noisescapes
Organs
Pads + Strings
Percussive Organic
Retro Land
String Machines
Synth Bass
Synth Mono
Synth Pluck
Synth Poly
Synth Sweep
Textures Playable
Textures Soundscape
Transition Effects
Trons and Optical
Type
All
BPM Analog
BPM Arps
BPM Bass
BPM Bells
BPM Combo
BPM Distortion
BPM Electronic
BPM FX
BPM Guitar
BPM Harmony
BPM Hits
BPM Keys
BPM Leads
BPM Mallets
BPM Melodic
BPM Organic
BPM Pads
BPM Perc Organic
BPM Perc Synthetic
BPM Plucked
BPM Polyphonic
BPM Pulsing
BPM Retro
BPM Reverse
BPM Sequence
BPM Sidechain
BPM Strings
BPM Sweep
BPM Textures
BPM Vox
BPM Wobble
Mood
All
Angry
Childlike
Dark
Distant
Disturbing
Dramatic
Dreamlike
Eerie
Energetic
Euphoric
Floating
Fun
Funky
Hopeful
Intense
Joyful
Light
Longing
Majestic
Meditative
Mournful
Mysterious
Mystical
Nervous
Nightmarish
Nostalgic
Ominous
Party
Peaceful
Powerful
Primal
Robotic
Scary
Silly
Genre
All
Ambient
Ballad
Dance
Dubstep
Electronic
Experimental
Film
Funk
High Energy
Hip-Hop
Indie
Old School
Pop
Quirky
R&B / Soul
Rock
Sound FX
Traditional
World Music
Cosmic Bass and Filters Groove
Omnisphere Library Patch
12mb
OMNISPHERE
ARP + Rhythm patches make use of the Arpeggiator, Envelopes, and LFOs, which are great tools for achieving complex, rhythmic patterns. The Mod Wheel modulates Resonance.
Flying Wings of Peace
Phlutterphase Hang
Rolling Hangdrum Accel
Beat The Pipes
Bouncing Metal Strings Arp
Brazilian Bandpass Thipper
Bubbling Analog Brew
Chip Seq 2
Chip Seq 3
Circadian Groove
Cosmic Bass and Filters Groove
Dancing Molecules
Electro Ebow 1
Mazz the Spazz
Modular Crush

4.2.4. Browser Footer

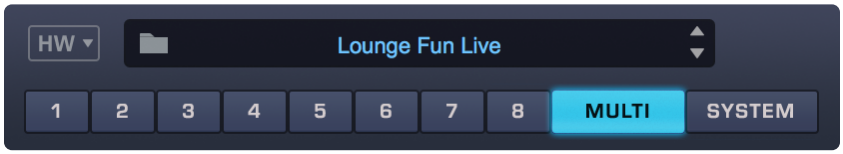
The Browser Footer provides access to the **Tag Editor** and **Browser Settings**, access to the Lite Version Options, a menu with multiple sorting options, a Shuffle button, Up/Down steppers, Refresh and Audition buttons, and access to the Info View, which shows more detailed information about the selected Sound.

4.2.5. Browser Access

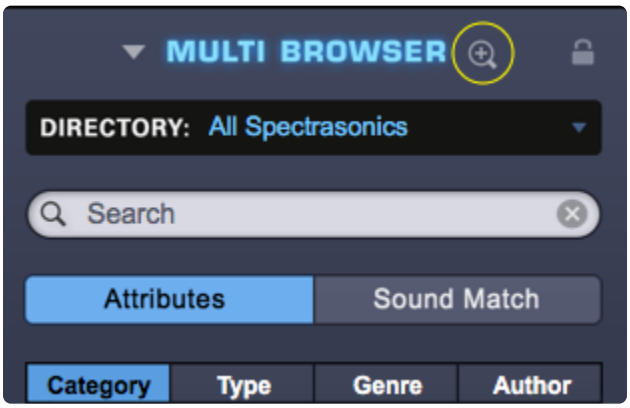
Anywhere that you see a Folder Icon Button, you can access Omnisphere's Full Browser by clicking on the Folder. If there is a Name Display next to the Folder, you can also click inside the Name Display to open the Full Browser.

4.2.6. Multi Browser

The Full Multi Browser is accessed using the Multi Display in the Header, which is visible and accessible from most pages in Omnisphere (it is not accessible from the Full Patch or Soundsource Browser pages). Select the Folder Icon Button or click inside the Multi Name Display to open the Full Multi Browser.

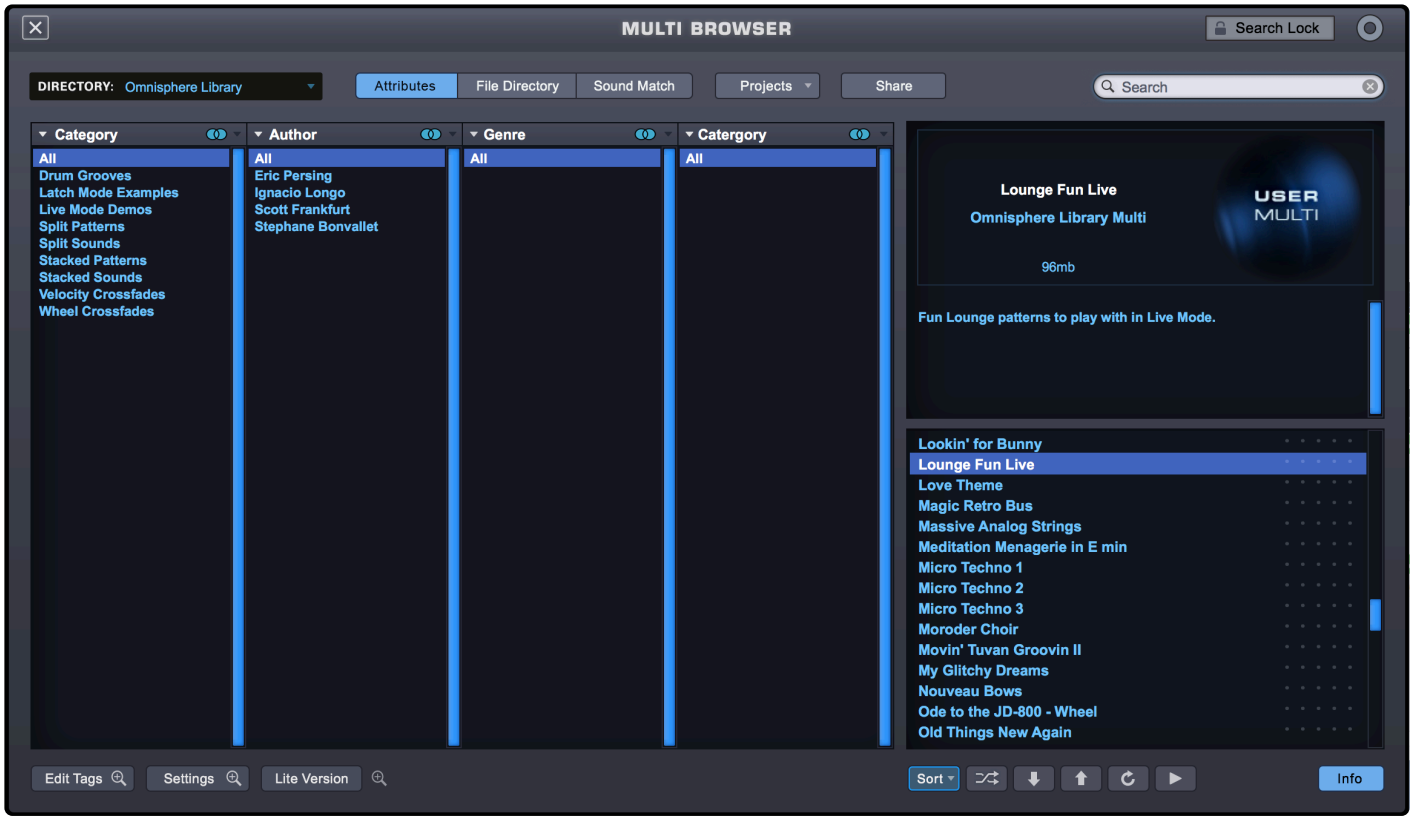


When the Multi Mini-Browser is open on the left, clicking on the magnifying glass at the top of the browser will open the Full Multi Browser.



NOTE: The Multi button does not have to be selected to access the Full Multi Browser. You can access the Full Multi Browser from most pages in the plug-in.

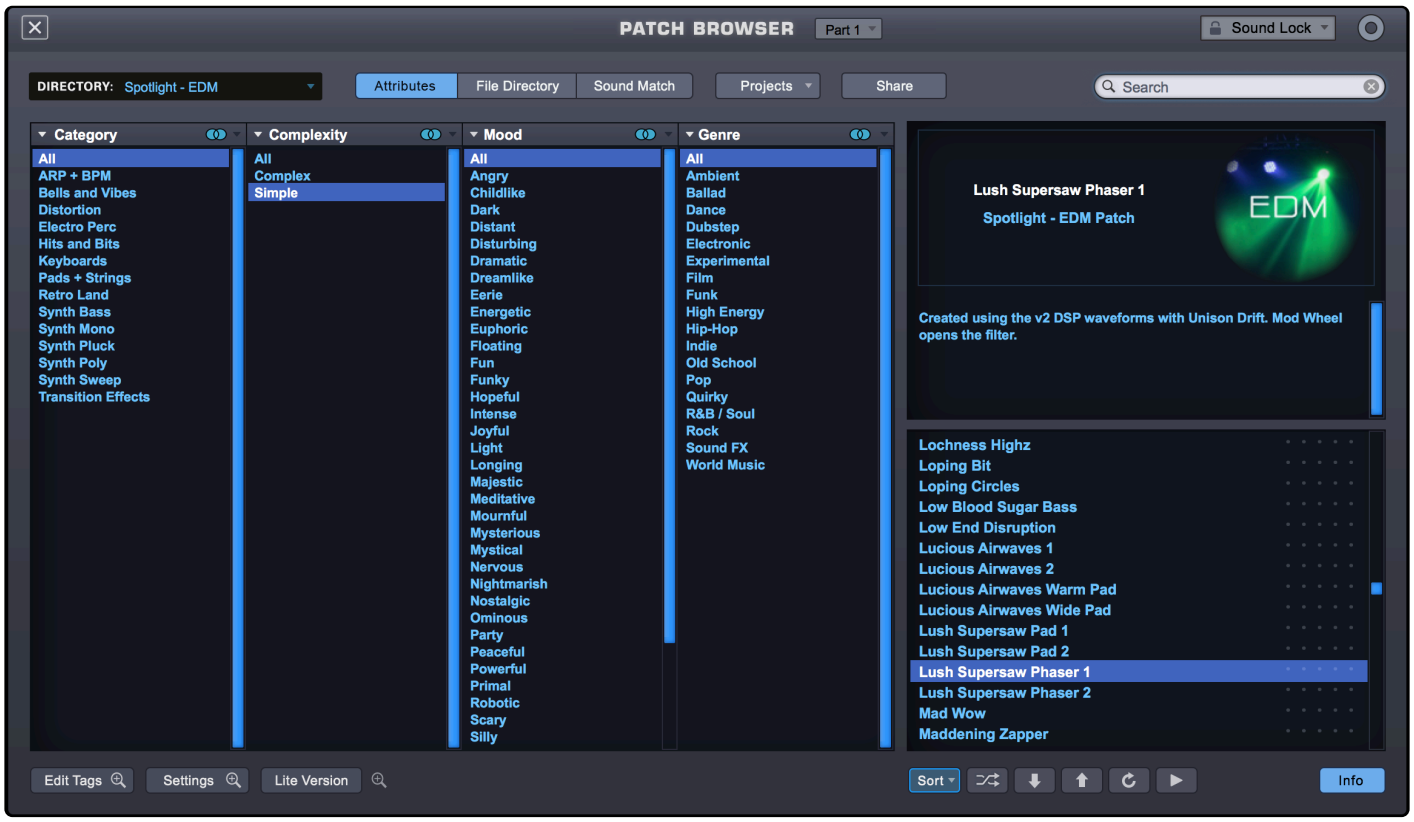
The Multi Browser


MULTI BROWSER
Search Lock
DIRECTORY: Omnisphere Library
Attributes
File Directory
Sound Match
Projects
Share
Search
Category
All
Drum Grooves
Latch Mode Examples
Live Mode Demos
Split Patterns
Split Sounds
Stacked Patterns
Stacked Sounds
Velocity Crossfades
Wheel Crossfades
Author
All
Eric Persing
Ignacio Longo
Scott Frankfurt
Stephane Bonvallet
Genre
All
Catergory
All
Lounge Fun Live
Omnisphere Library Multi
96mb
USER
MULTI
Fun Lounge patterns to play with in Live Mode.
Lookin' for Bunny
Lounge Fun Live
Love Theme
Magic Retro Bus
Massive Analog Strings
Meditation Menagerie in E min
Micro Techno 1
Micro Techno 2
Micro Techno 3
Moroder Choir
Movin' Tuvan Groovin II
My Glitchy Dreams
Nouveau Bows
Ode to the JD-800 - Wheel
Old Things New Again
Edit Tags
Settings
Lite Version
Sort
Info

4.2.7. Patch Browser

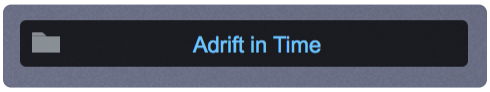
The Full Patch Browser is accessed from the Patch Name Display, which is always visible and available from any of the Part pages. Select the Folder Icon Button or click on the Patch Name Display to open the Full Patch Browser.

Full Patch Browser



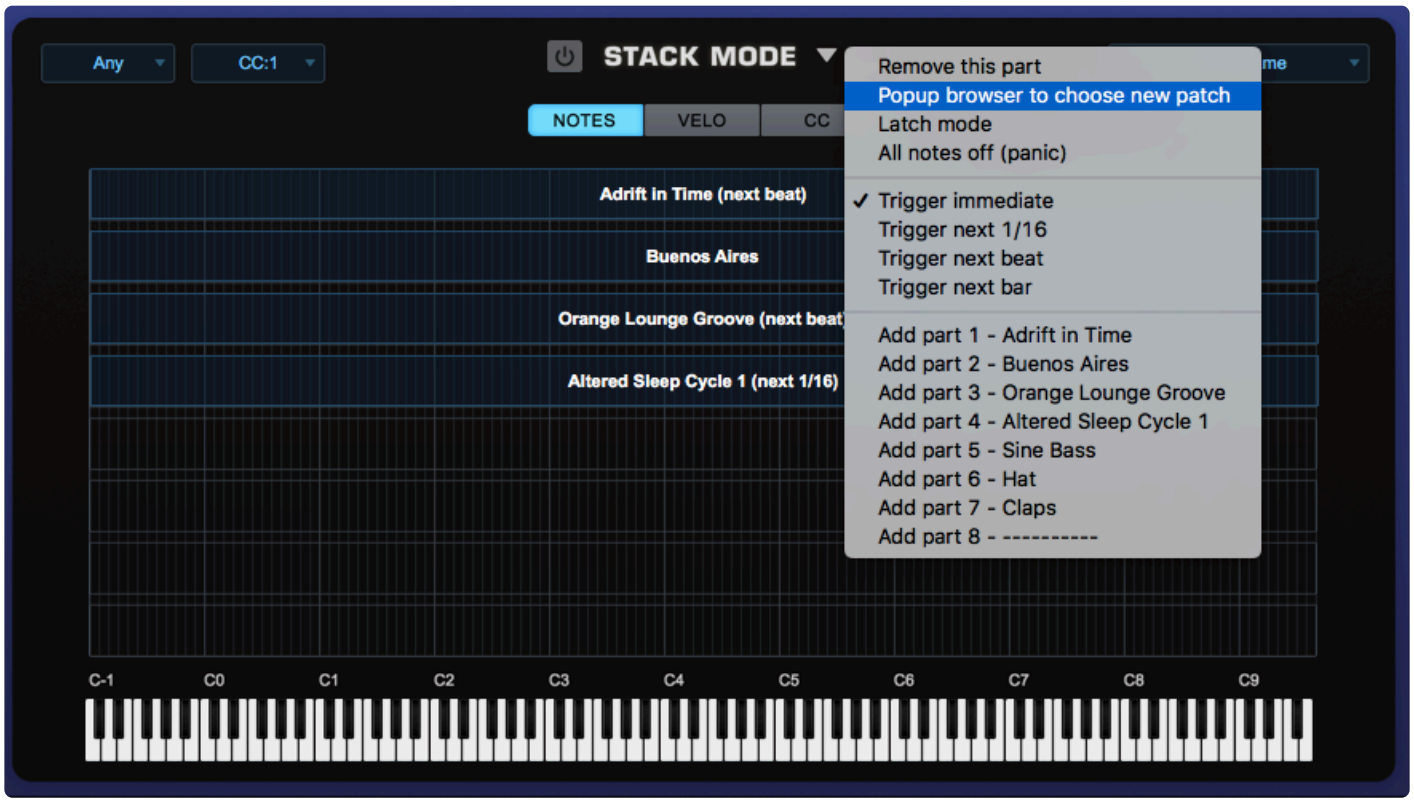
The Patch Browser can also be accessed from the Mixer page (Patch Name Displays), from the LIVE MODE page when Mixer Controls are enabled, and from the STACK MODE by control/right-click its Part Region and selecting the “Popup browser to choose new patch” option from the context menu.

Mixer Patch Name Display



Patch Browser Access from LIVE MODE

Patch Browser Access from STACK MODE



4.2.8. Soundsource Browser

The Soundsource Browser is accessed from the Layer pages, as well as the Main Page.

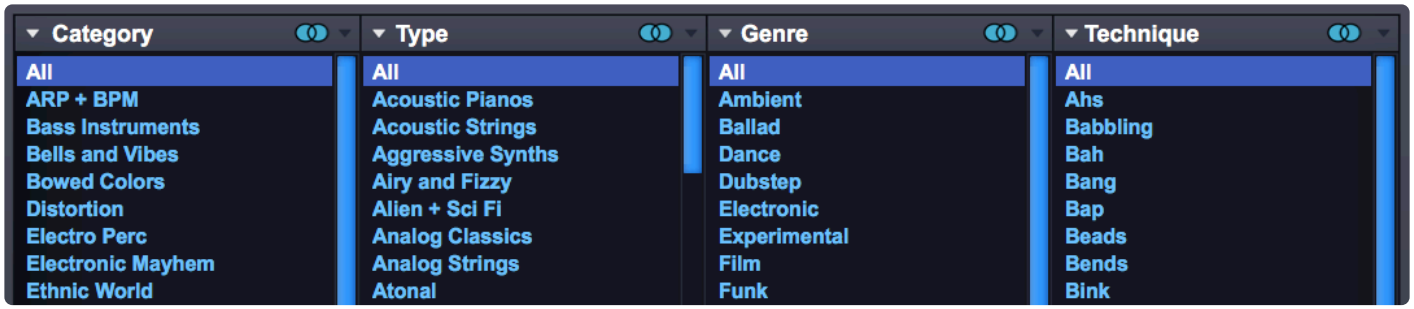
On the Layer pages, select the SAMPLE tab in the **OSCILLATOR** section, then click on the image or the folder icon in the display to open the Soundsource Browser.

On the Main page, select LAYERS in the central Info section, then click on the image to open the Soundsource Browser.


ORB
MAIN
A
B
C
D
FX
ARP
NOTES
LAYERS
A
Outglassed
B
Crystal Cloud
C
Juno 60 Sub
D
Aluminum AC Scrape 2

4.3. Operation

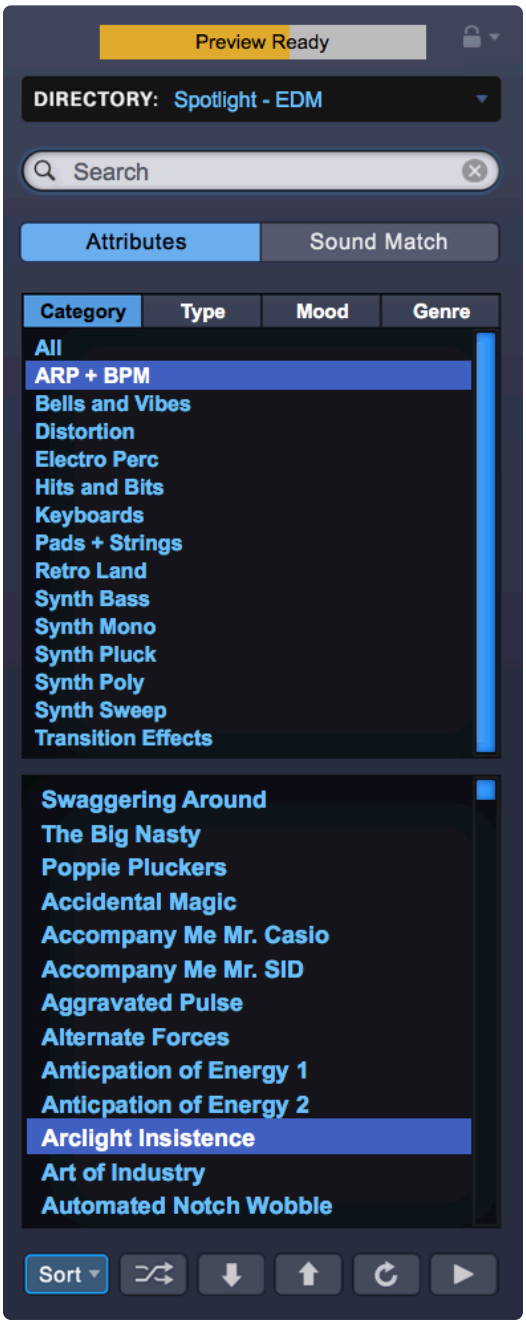
Searching and filtering is done from the Mini-Browser and the Full Browser Header, using the Directory Menu, the Search Field, and the Browser Filter columns. There are several options available for filtering the results (including **Boolean Expressions**, and choosing how sounds are browsed, displayed, and previewed.



The Directory Menu, Search Field, and Browser Filters work in combination with each other to further refine the results. You can apply selections and criteria in any order.

4.3.1. Loading Sounds

Selecting a sound in the Browser also loads it. How quickly it loads depends on the amount of samples the sound has and how they are mapped, and whether Progressive Loading or **Lite Version** are enabled.



Progressive Loading

Omnisphere's Progressive Loading system works by letting you play and hear the sound as soon as the first samples are loaded. As new samples are loaded, they become immediately available for playing.

The Progressive Loading status in indicated in the top left area of the browser:

- Red – Loading is in the early phases (no audio yet).
- Yellow – Audio still loading (preview audio available).
- Green – Loading is finished.

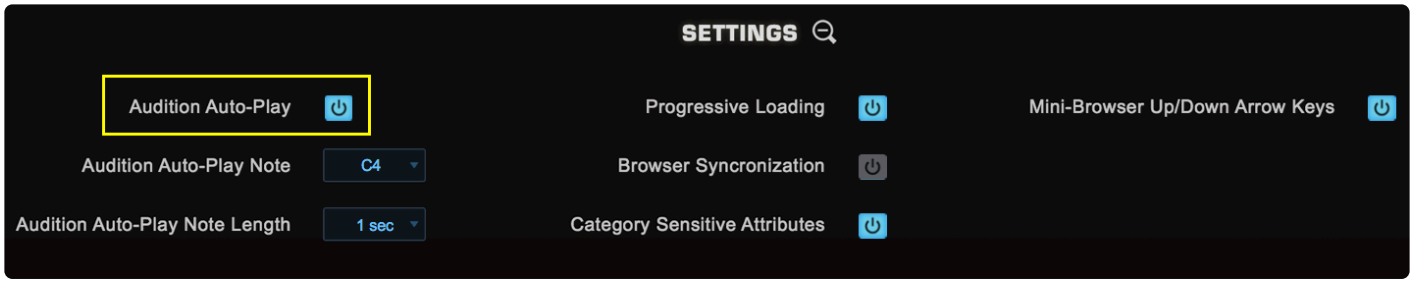
Progressive Loading is enabled by default. You can disable if from the **Browser Settings Zoom**.

Remote Loading

Omnisphere's Patches can also be remotely loaded via MIDI Learn using Program Changes, CC, and MIDI notes. This is covered in the **Remote Loading** section of the guide.

4.3.2. 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 and Lite Version button with multiple thinning settings available in the Lite Version Options Zoom. Options to set up Audition and Progressive Loading can be accessed by pressing the Settings button.

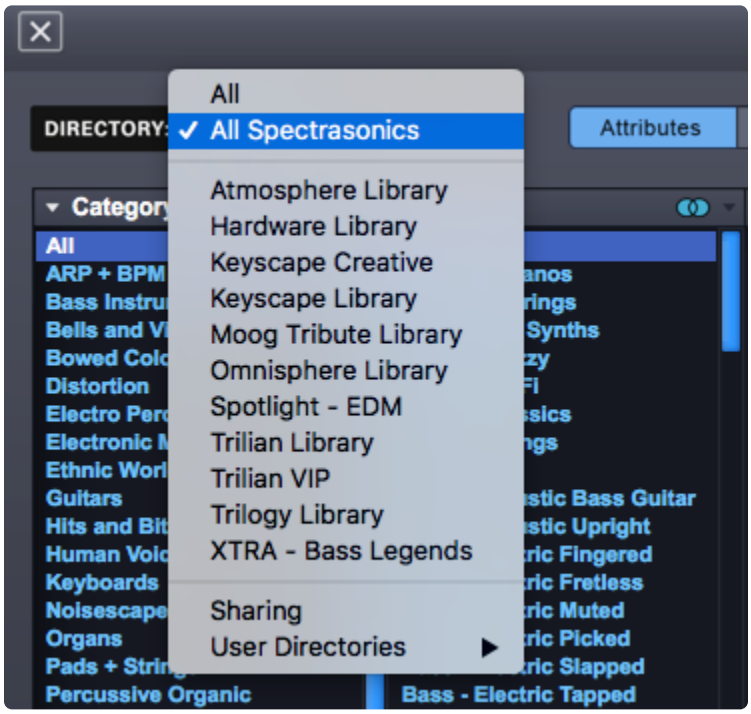


If Audition Auto-Play is enabled in the Browser Settings, then selecting a sound will automatically audition it. The Audition Note and Audition Note Length settings determine the pitch and duration of the auditioned note.

Press 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 pressed (or until it decays).

The "Audition Note" setting in the Browser Settings Zoom determines the pitch of the note.

4.3.3. Directory Menu



The Directory Menu lets you filter 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 Full or Mini-Browsers.

You can further refine the search by using the Search Field and the Browser Filters. Selecting “All” will remove any Directory Menu filtering and show all Libraries simultaneously. Selecting “All Spectrasonics” will only show Spectrasonics sounds, filtering out third-party libraries and User sounds.

After saving custom Patches or Multis, the User library will be available from the menu. Selecting this library will display only custom User Patches or Multis in the Browsers.

For additional details refer to the **Saving and Managing Sounds** section.

NOTE: If you also have Keyscape or Trilian its libraries will also appear in the DIRECTORY Menu.

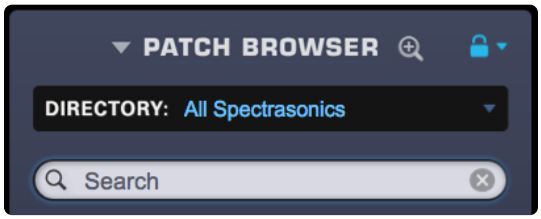
4.3.4. Search Field

Click anywhere in the Search Field to enter search text. Press the Enter/Return key to view the filtered results.

The Search function will check Names, Tags, Keywords, and even Notes to determine the search results.

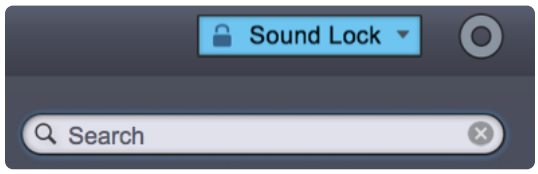
Selecting Attributes in the Browser Filters can refine the search even further. The more selections that are made, using Attributes and the Boolean Search capability, the narrower the search results will be. To search the entire Core Library, be sure to select “All” in each of the Browser Filter columns.

Search Lock

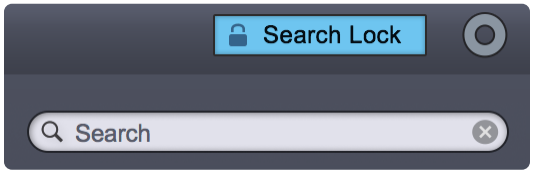


By default, when the Full Browser is closed, the Search text will be cleared. Search Lock allows search entries (and the filtered results) to be retained after the Browser is closed and re-opened.

You can lock and retain the Search text in the Patch Browsers via the Sound Lock menu.



In the Soundsurce and Multi browsers, Search Lock is enabled with the dedicated Search Lock icon.



For detailed information on the extent of the locking capabilities, please see **Sound Lock**.

NOTE: The Search Lock setting is saved as a global user setting. When you enable Search Lock, it

will remain enabled the next time you open an instance of the plug-in and when you change the Search Lock setting, that change is applied to all Browsers.

Search Clear

Select the Search Clear button to clear the Search Field. When you click the Search Clear button, the displayed sounds will update accordingly.

NOTE: You can apply the Search Clear button with Search Lock enabled. This lets you make changes to your search criteria without changing the Search Lock status.

Boolean Expressions

Boolean Search uses the criteria “Or,” “And,” and “Not” and lets you include or exclude certain Attributes to narrow your search. You can also type expressions into the Search field to filter your results.

4.3.5. Browser Filters

In the Full Browser, the filters can be used in two modes: Attributes and File Directory. When using the Mini-Browser, only Attributes Mode is available.

NOTE: Selecting Sound Match hides the browser filters and automatically finds sounds similar to the one that is loaded.

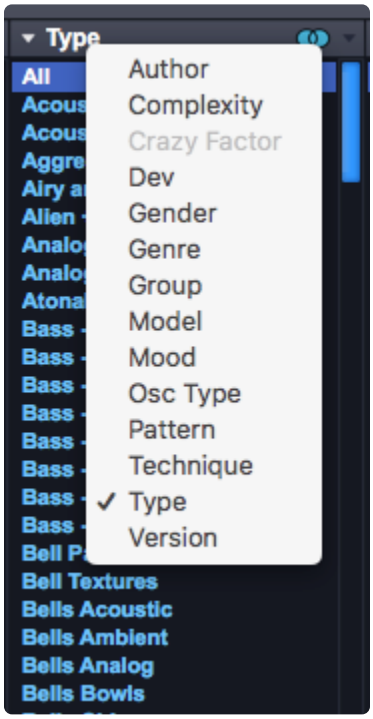
Attributes Mode

Using Attributes Mode, filtering is achieved by selecting Categories and Attributes to refine the list of sounds. The first column drop-down menu lets you select between “Category” and “Project” while the remaining Attribute columns may change their labels depending on the selected Category.

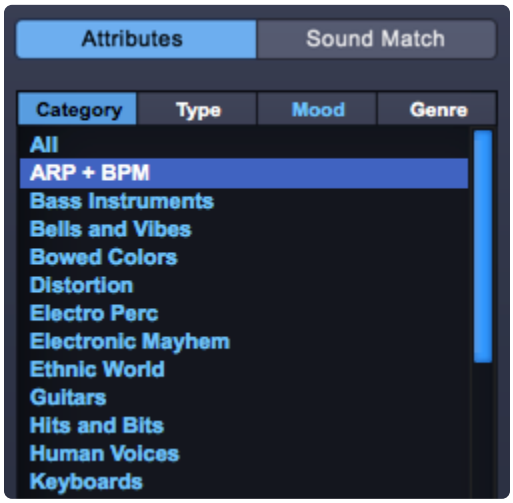
For example, in the Soundsource Browser, if the Category “All” is selected, the Attribute columns will automatically display Type, Genre, and Author.

If the Category “ARP + BPM” is selected, the Attribute columns will change to Type, Mood, and Genre.

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.



When using the Mini-Browser, the Attribute filters are displayed one at a time. If there is an assignment selected in one of the filters, the letters in the filter header will be blue. If nothing is selected, they will be white.



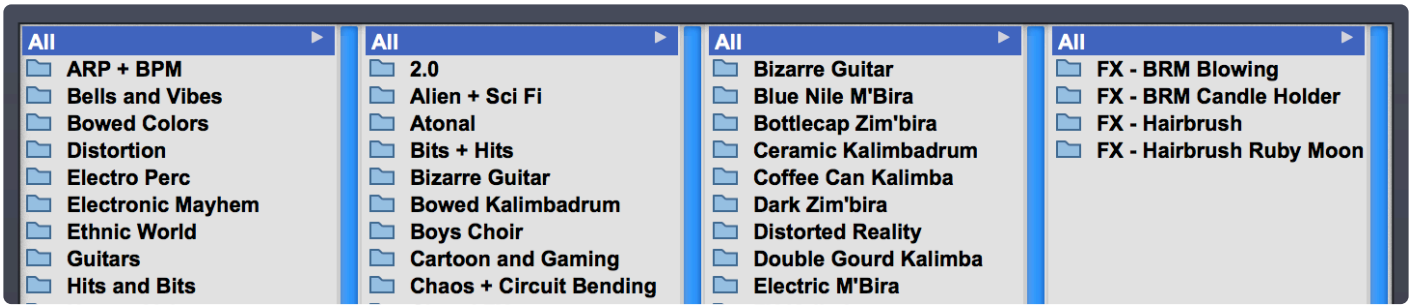
In the Mini-Browser you can right-click on the Attribute Types to make a different selection from the list.

NOTE: Automatic Attributes changes will only occur if [Category Sensitive Attributes] in the Browser Settings is enabled (the default state). If the setting is disabled, the labels will remain static when changing Categories.

File Directory Mode (Full Browsers Only)

Using File Directory Mode, the Browser Filters display a File Folder hierarchy that matches how they are

stored on your computer's hard drive.

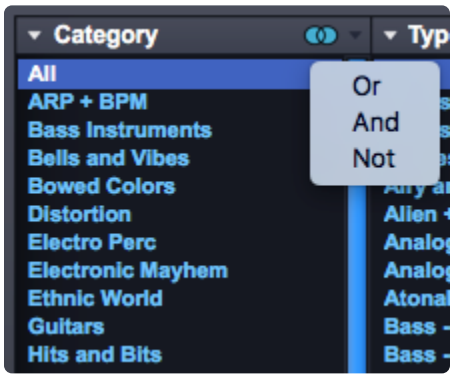


When you select a Folder in a column, the list of sounds will be filtered to include only the sounds that exist in the Folders below it in the file hierarchy.

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 needs.

NOTE: Most of Omnisphere's Factory Library does not rely on folders or sub-directories, so File Directory mode is not particularly useful for browsing Factory sounds.

4.3.6. Boolean Filtering

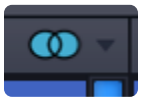


Boolean Filtering uses the criteria “Or,” “And,” and “Not” in order to include or exclude certain Attributes to narrow your search.

In addition to typing an expression into the Search field, you can filter search results using a combination of mouse clicks and key commands, or accessing the Boolean menus by clicking on the icons at the top-right corner of each filter (the icons are only available in the Full Browsers).

Depending on the Boolean expression you choose, the selected Attribute assignments will be displayed with different colors and outlines.

OR



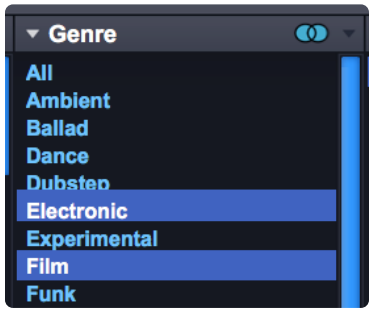
This option says, “Show me results that are tagged with either of these Attributes.”

Example: Within the Genre column, Command-click (Mac) or Control-click (PC) “Film” and “Electronic” to display only those sounds that are tagged with Film or Electronic tags.

To choose OR, simply select the Attribute (OR is the default filter state).

To make multiple selections us Command-click (Mac) and Control-click (PC).

The selection(s) in the column will be highlighted in blue and both circles in the icon will be filled in.

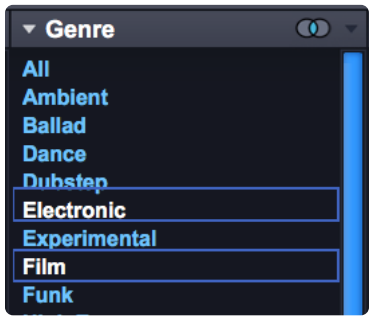


AND

This option says, “Show me results that are only tagged with BOTH of these Attributes.”

Example: Within the Genre column, Command-right-clicking/Command-Control-clicking (Mac) and Control-Right Click (PC) “Film” and “Electronic” will display only those sounds that are tagged with BOTH Film AND Electronic tags.

The selection(s) in the column will be bordered in blue and only the intersection of the circles in the icon is filled in.



NOT

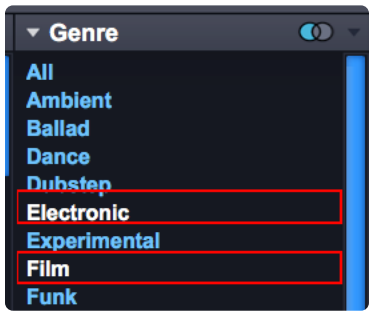
This option says, “Show only those results that are NOT tagged with these Attributes.”

Example: Within the Genre column, Option/Alt-click “Dance” to remove any sounds from the results that are tagged as Dance.

To choose NOT, use Option-click/Alt-click and select an Attribute.

To make multiple selections, use Command-Option-click (Mac) and Control-Alt Click (PC).

The selection(s) in the column will be bordered in red and only the left circle in the icon is filled in.



TIP: You can only choose one expression at a time in each Browser Filter. To use multiple expressions within the same Attribute Type, you can type the criteria into the Search field (e.g. Film and NOT Ambient).

You can also type expressions into the Search field to filter your results.

- For example:* Typing “Film **and** Electronic” will include Patches that fit both genres.
- Typing “Film **or** Electronic” will include Patches with either Attribute.
- Typing “Film **and not** Electronic” will include Patches suitable for Film, but not ones that are Electronic.
- Parenthesis can also be used for multiple criteria selection:
  (Film **or** Electronic) **and** (Dramatic **and not** Disturbing).

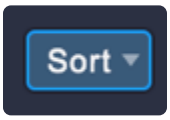
NOTE: Standard left-clicking deselects any blue or red-outlined selections and returns to the default OR selection within a column.

4.3.7. Displaying and Navigating Results

There are numerous options available for navigating through the sounds and changing how they are organized and displayed.

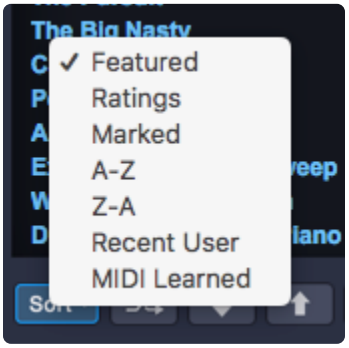
These tools let you sort sounds in various ways, and because there are many thousands of sounds to explore, these controls help you delve deeper into the Library. These Browser controls will also work on filtered results.

Sort Menu



The Sort Menu includes seven ways to sort the list of sounds.

- **Featured**



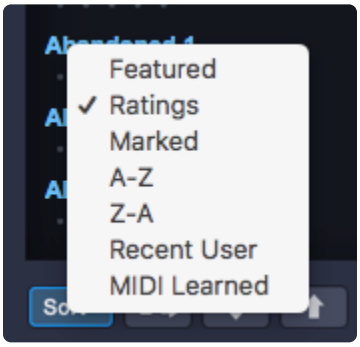
We're continually adding new sounds to Omnisphere and the number of available sounds is pretty massive! In order to make it easier to find the best examples of the newest sounds in the Library, Featured sounds are displayed by default at the top of your list. This list is updated with each Patch update.

Selecting the "Featured" sort option will display Featured sounds at the top of the sounds list.

You will also find a special selection of Featured sounds when you're browsing the library by Category. For example, with the Featured sort option selected, if you select ARP + BPM in the Category column, you'll see a specially selected list of Featured ARP + BPM sounds displayed at the top of the list.

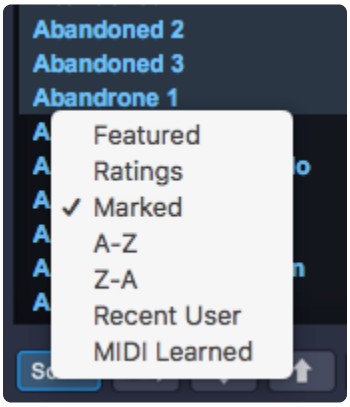
- **Ratings**

All sounds in the library can be given ratings from 1–5 stars using the **Ratings** system. Selecting Ratings from the Sort menu displays rated sounds at the top of the Browser list, in order of their Ratings. 5-star sounds are listed first, followed by 4–star sounds, and so on.



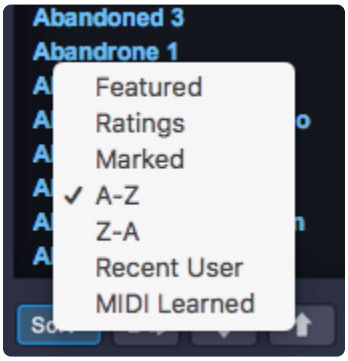
- **Marked**

You can use shift+click to mark sounds in the Browser in order to share them or add them to Projects. This sorting option puts the marked sounds at the top of the list sorted alphabetically.



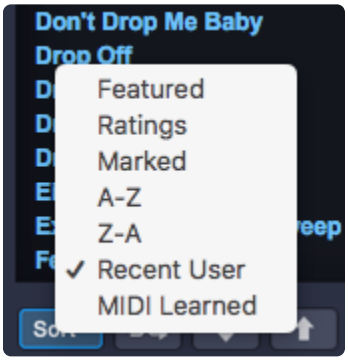
- **A–Z and Z–A**

The A–Z and Z–A options provide a simple way to reverse the alphabetization of the sounds. Select Z–A to reverse the order, and A–Z to restore it.



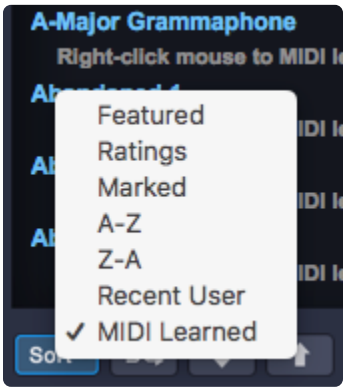
- **Recent User**

This feature is only useful when the Directory is set to “User.” When this option is selected, the newest User sounds are displayed first.



NOTE: This feature does not show the most recently added Patches to the Factory Library, just the User Library. If you want to view the most recently added Patches to the Factory Library, enter the version number of the current Patch Library in the [Search] field (i.e. 2.5).

- **MIDI-Learned**



When sounds are sorted by “MIDI-Learned” order, the MIDI-Learned sounds will move to the top and their assigned MIDI message will be displayed underneath their names.

Shuffle Button

It’s a common error to browse only 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.

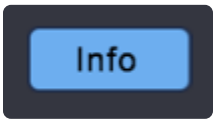
The Browser Stepper buttons are controlled from the Up/Down arrows of your keyboard. They can also be MIDI-Learned, and those assignments will apply to the Stepper buttons in all three Full Browsers, as well as the Mini-Browsers.

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.

Sometimes it is preferable to have this disabled so you can use the arrow keys to step through tracks in your host. This behavior can be disabled from the Browser Settings.

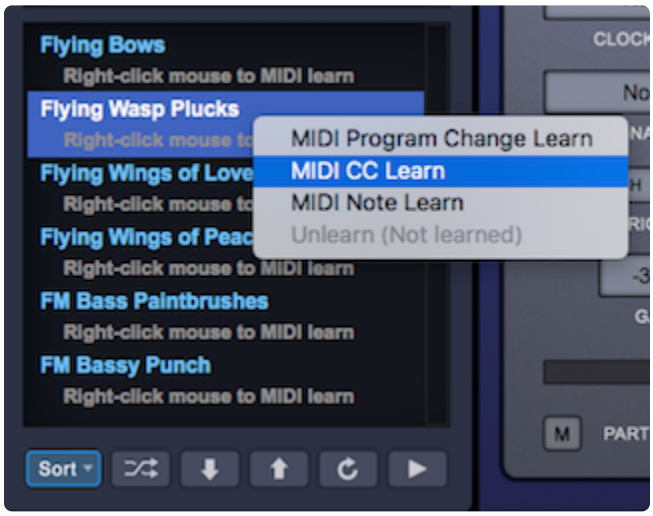
TIP: Using your keyboard arrows or MIDI-Learning the Browser steppers to switches on your MIDI controller is a great way to speed up the auditioning process, especially with the "Auto-Play" and "Preview Load" options enabled.

Info View (Full Browsers only)



When Info View is selected, the upper portion of the large 5th column displays an image and detailed information about the selected sound. It tells you the sound's disk size, provides notes on the particular sound, including the Soundsource and Patch authors, and you can view the Search Tags for that sound.

4.3.8. Remote Loading of Sounds



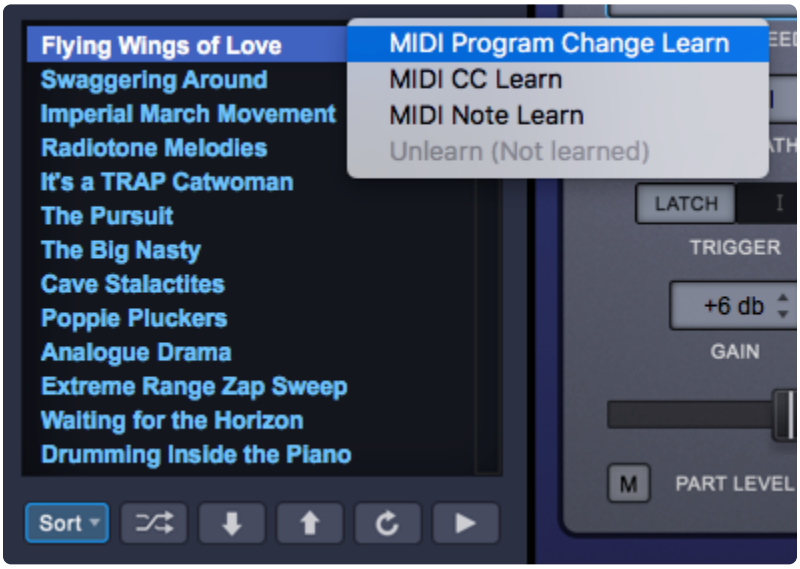
Loading sounds remotely can be very handy in live and studio situations. In addition to using Omni TR, you can achieve this by using any MIDI controller.

This section will cover how to do it via MIDI using a variety of messages: Program Changes, Continuous Controllers (CC), and Notes.

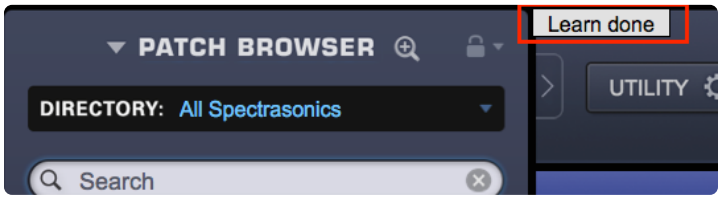
MIDI Learn

- **MIDI Program Change** — Allows Omnisphere's sounds to be mapped to MIDI Program Change messages, like those transmitted by dedicated Patch-selection buttons on keyboard controllers.
- **MIDI CC Learn** — CC (Control Change) messages are sent by a variety of hardware controllers (knobs, sliders, buttons, joysticks, etc.). Omnisphere's sounds can be loaded or changed by any controller that transmits CC.
- **MIDI Note Learn** — This option allows you to select specific sounds via any key on your MIDI controller.

1. Right-click on a Patch or Multi name in Omnisphere and select the type of MIDI message you want to assign from the MIDI Learn menu.

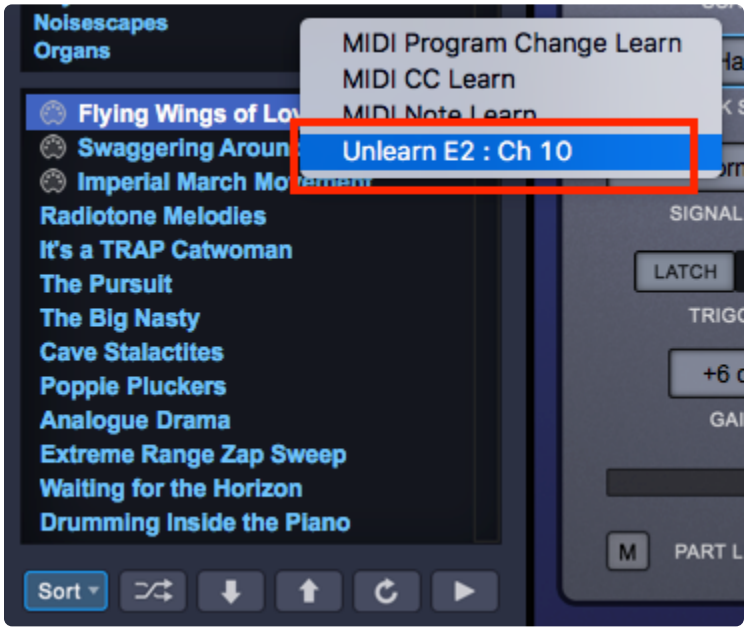


2. Next, send a program change, move a continuous controller or play a note (depending on the message selected in the previous step) on your controller. Omnisphere will display a brief message (“Learn Done”) above the Utility Menu.



3. You will see a MIDI icon displayed next to the sound name. This indicates that the Patch or Multi is now mapped to a MIDI message.

4. Right-click on the sound name and you’ll see the message type, value and MIDI channel assigned to that sound.

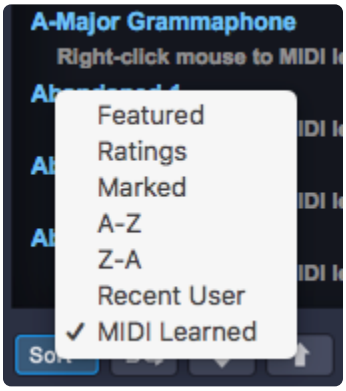


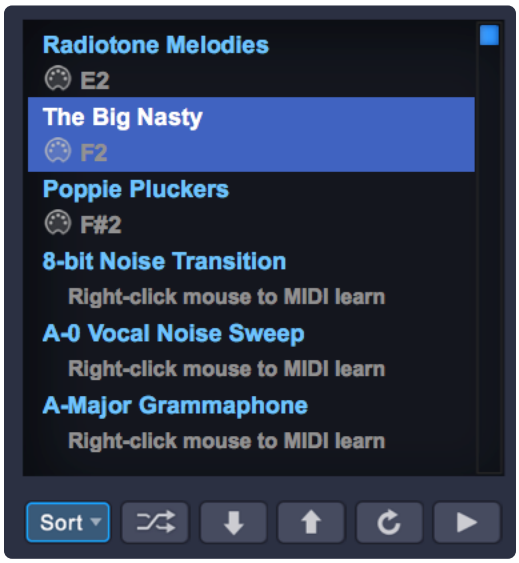
TIP: If you use Multis when playing live, try using this feature to load them remotely.

Sorting

It is possible to learn sounds across different categories and libraries using different kinds of MIDI message, so in order to keep track of your setup it is useful to employ the “Sort” feature.

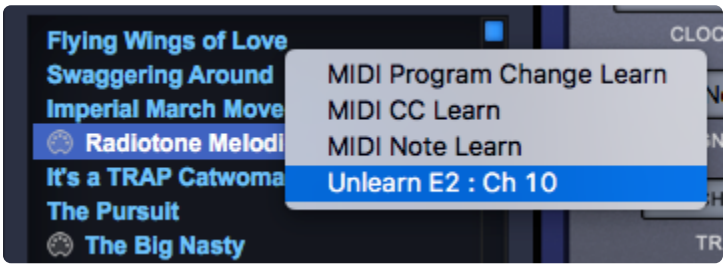
When sounds are sorted by “MIDI Learned” order, the MIDI-Learned sounds will move to the top and their assigned MIDI message will be displayed underneath their names.



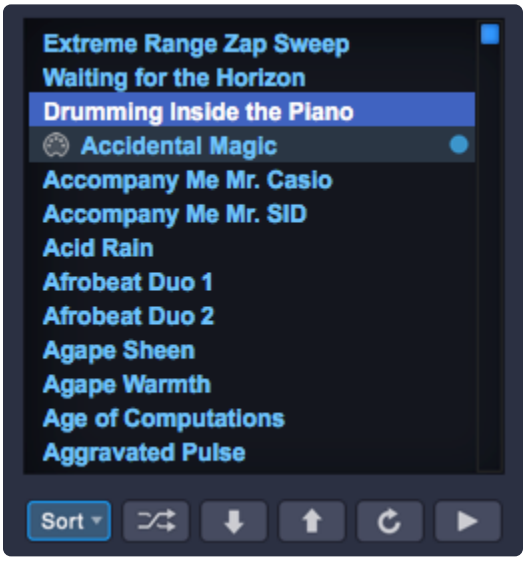


Unlearning

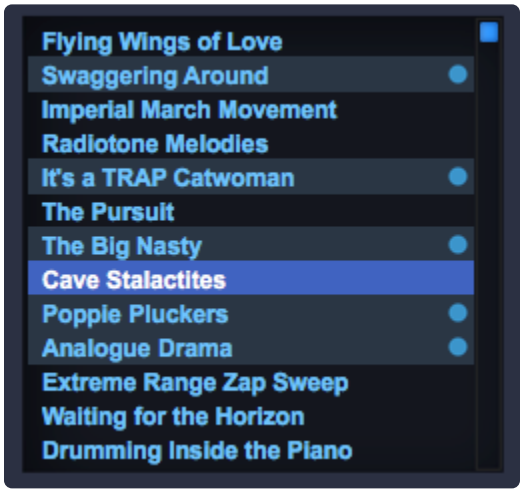
If you wish to delete the MIDI Learn assignment for a specific sound, right-click on the name and select “Unlearn” from the menu.



The MIDI connector icon will then be removed and the sound can then be assigned to another remote MIDI assignment.


Extreme Range Zap Sweep
Waiting for the Horizon
Drumming Inside the Piano
Accidental Magic
Accompany Me Mr. Casio
Accompany Me Mr. SID
Acid Rain
Afrobeat Duo 1
Afrobeat Duo 2
Agape Sheen
Agape Warmth
Age of Computations
Aggravated Pulse
Sort

4.3.9. Marking Sounds



Sounds can be marked with two purposes: for sharing them and for adding them to Projects.

- To mark a sound, shift+click on it in the Browser. The sound will be with highlighted with a pale blue bar and a dot.
- To unmark a sound, shift+click on it again.
- To clear all marks, Option / Alt-click on a sound.

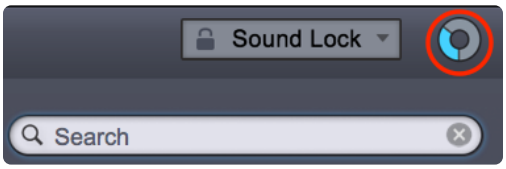
NOTE: Loading sounds works separately from marking sounds. Loading a sound does not affect marked ones, and marking a sound doesn't not affect the loaded one.

If you want to share the marked sounds, select "**Share Sounds**" from the Utility menu or press the "Share" button in the Full Browsers. After the sharing process is complete, the marks will be cleared.

NOTE: This method allows you to share only one type of sound of a time (Multis, Patches, or User Soundsources), depending on which browser you are working from. That said, if a Patch or Multi you are sharing employs User Soundsources, those will be included as part of the .omnisphere package.

If you want to add marked sounds to a **Project** go to the Full Browsers and from the Projects menu select "Add all marked items to project." When a sub-menu shows up listing your projects, select the project to which you want to add sounds. After doing this, the marks will be cleared.

4.3.10. Memory Meter



Memory Meter

The Memory Meter is a gauge that shows how much Virtual Memory is being used by the plug-in.

If the Memory Meter approaches full, you will see a pop-up warning, and may need to take steps to reduce memory usage, such as enabling the Lite Version of Patches, or reducing 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 0.50 Gb, and load 0.40 Gb of sample data, the gauge will show roughly 80 percent full, even if you have far more system memory available.

4.3.11. Lite Version

Some of the sounds included in the Omnisphere Factory Library are quite large, and can place a heavy demand on available memory and take a longer time to load.

Lite Version is a feature located in the Full Browsers and provides added flexibility when loading Patches and Multis—helping you manage your memory resources. It is especially useful for quick loading and auditioning sounds.

When this button is activated, the thinning settings from the Lite Version Options Zoom are applied, allowing you to reduce or “thin” the number of samples loaded with a Patch or Multi.

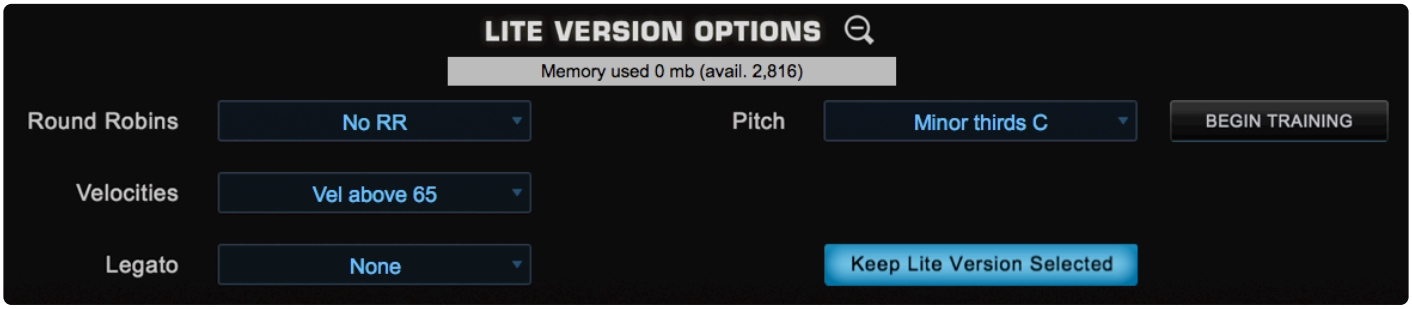
This feature is especially useful when loading **Satellite Instruments** (like Keyscape or Trilian) into Omnisphere. Many of those sounds can be quite large and contain thousands of samples, with some being over 2 Gigabytes in size. These can place a heavy demand on available memory and take longer to load.

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.

TIP: Even when Lite Version is not enabled, Omnisphere’s sounds can be heard and quickly auditioned. Omnisphere’s Progressive loading feature lets you play and hear the sound as soon as the first samples are loaded, letting you get to the music faster.

NOTE: The Lite Version Button will default to its 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

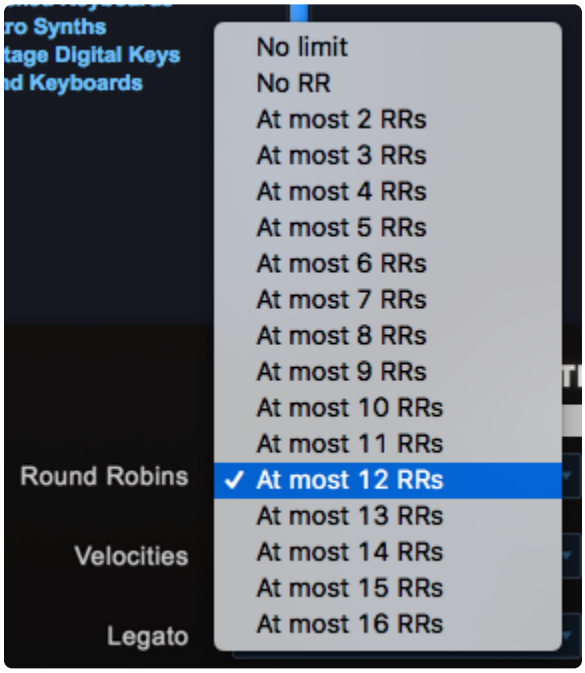


Selecting the Lite Version Zoom Icon provides access to a number of thinning options. At the top of the

Zoom window, there is a Memory meter which shows the 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.

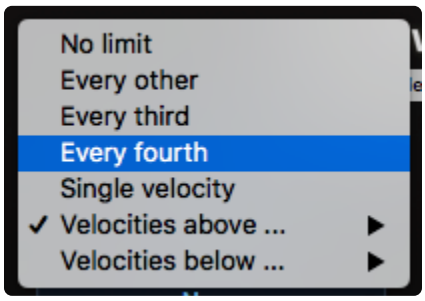
Round Robin



Soundsources can sometimes include a large number of **Round Robin** samples per zone, and 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 and selecting “No Limit” will load all of the Round Robin samples available.

Velocities



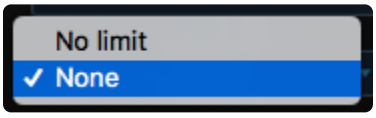
Soundsources may also contain a large number of velocity-switching samples mapped across many regions

of the entire keyboard range. This setting provides a variety of options for reducing the number of velocity-switched samples that are loaded with any Patch or Multi. To apply Velocity thinning, select from the options in the drop-down menu.

- **No Limit**
  Loads all Velocity-switched samples.
- **Every other**
  Loads every other Velocity-switched sample.
- **Every third**
  Loads only every third Velocity-switched sample.
- **Every fourth**
  Loads only 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

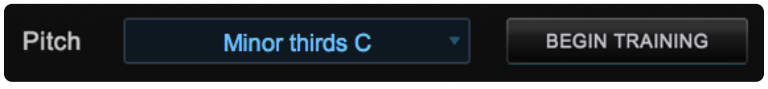


This option determines whether or not Legato Soundsources are loaded.

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 Keyscape or Trilian sounds in Omnisphere, this feature becomes very important for overall memory management.

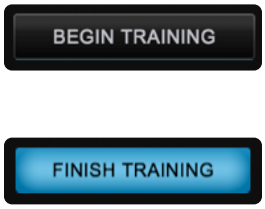
Pitch Thinning



Omnisphere Patches and Multis can contain a large number of samples mapped across the entire 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



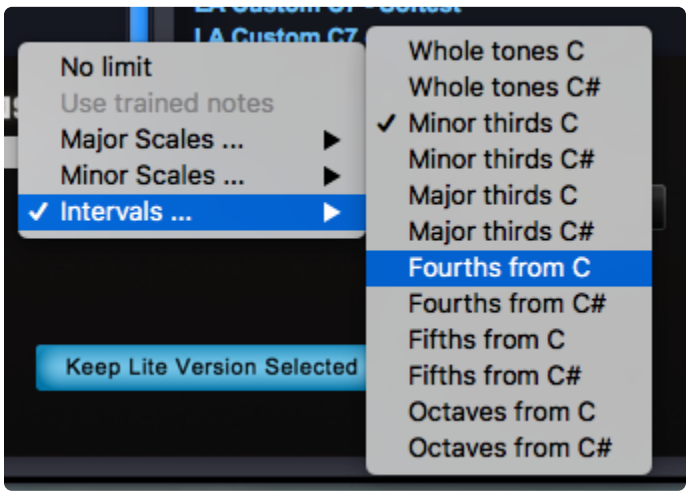
With Trained Pitch Thinning, you can load only the samples used during a performance.

For example, if you are working on a melodic phrase that has notes in a limited range, say from C2 to C4, you can speed up load times by using Trained Pitch Thinning. This reduces 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 notes 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 because the remaining zones will be stretched across the sample map.

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. Lite Version applies sample thinning, loads the sound across the entire keyboard range, and is immediately playable after loading.

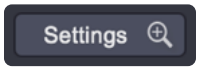
When Lite Version is enabled with the default settings, the following settings will be in effect:

- 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.

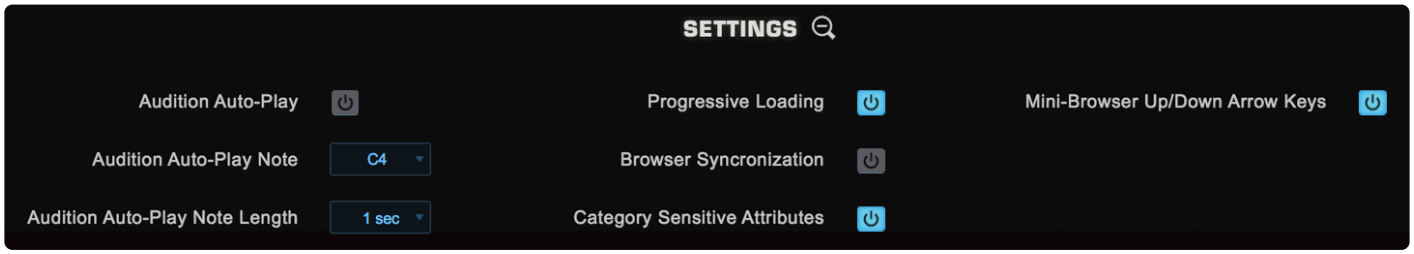
Keep Lite Version Selected Button

The Lite Version Button will default to its disabled state when you close the Full Browser. When this option is enabled, the Lite Version Button in the Full Browser will remain enabled, even after you close it. Think of it as changing the default state of the Lite Version Button to "enabled."

4.3.12. Browser Settings



Select the Settings Button to open the Browser Settings Zoom View. Settings are saved across sessions, and are restored the next time you load Omnisphere.



Audition Auto Play

When enabled, every time a Multi, Patch, or Soundsource is selected in the Browser, the Audition Note will sound.

This is useful for browsing sounds using the Browser Steppers as it allows rapid auditioning of multiple sounds.

NOTE: Audition Auto Play will reset each time Omnisphere is loaded.

Audition Auto-Play Note

Determines the pitch of the single note that will be played with Audition Auto-Play enabled.

Range C-1 ~ B8

NOTE: This setting also affects the pitch of the Audition Buttons in the Browser and on the Part pages.

Audition Auto-Play 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 ~ 9 seconds

Progressive Loading

Omnisphere’s Progressive Loading allows sounds (even those with thousands of samples!) to be played and auditioned while they are still being loaded.

Browser Synchronization

When enabled, the Browser Filters will retain their current Attribute selections when another Part or Layer is selected. This is useful when browsing a large number of Soundsources—the Attribute selections for all Layers will remain the same as you move between Layers and across different Parts.

For example, if you need to create a Multi and only want to check Soundsources in the “Textures” Category, set the first Part to view only the Textures category, All the subsequent Parts will open with the Textures 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, the Attributes columns will remain static as you change Categories.

Mini-Browser Up/Down Arrow Keys

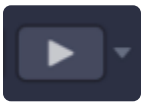
You can use the Up/Down arrow keys on a QWERTY keyboard to navigate through Patches in Omnisphere’s Mini-Browser.

4.3.13. Auto-Play

The Auto-Play ON/OFF selector (down arrow) is located to the right Audition button in the Browser Footer.

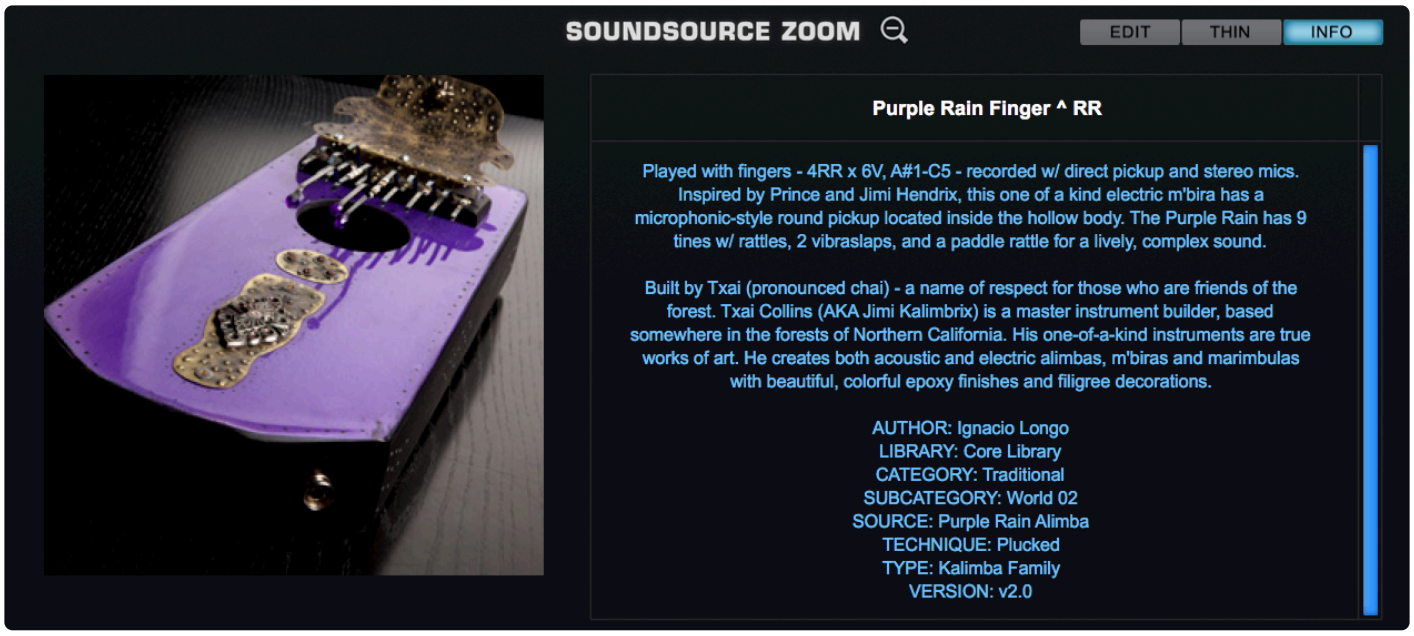
When Auto-Play is ON, the Audition play button is highlighted in blue.

When Auto-Play is OFF, the Audition play button appears white with no outline.



Further audition settings can be found in **Browser Settings**.

4.3.14. Info Zoom Views



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 contain 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 (THIN) 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.
(THIN is a sub-page in EDIT.)

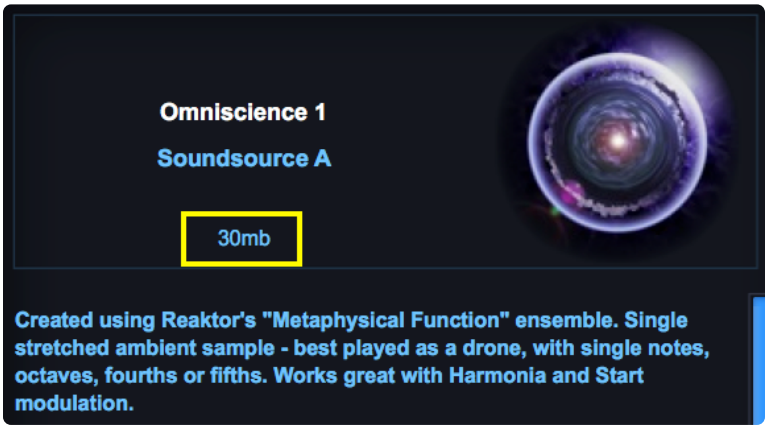
The Info Zoom pane shows the descriptions, keywords, and tags of the Soundsource. This is the default view when opening the Soundsource Zoom from the Soundsource Browser.

The Edit View provides access to the Sub-layer Mixer. Clicking on the **THIN** button accesses **Sample Thinning** controls for the Soundsource.

To learn more about the Soundsource Edit Zoom, see the Edit Page: Soundsource Zoom section.

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.

File Size



This is the total amount of memory that is used when the sound is loaded if streaming is not in use.

NOTE: If a Patch contains only DSP waveforms (no Soundsources), no size will be listed.

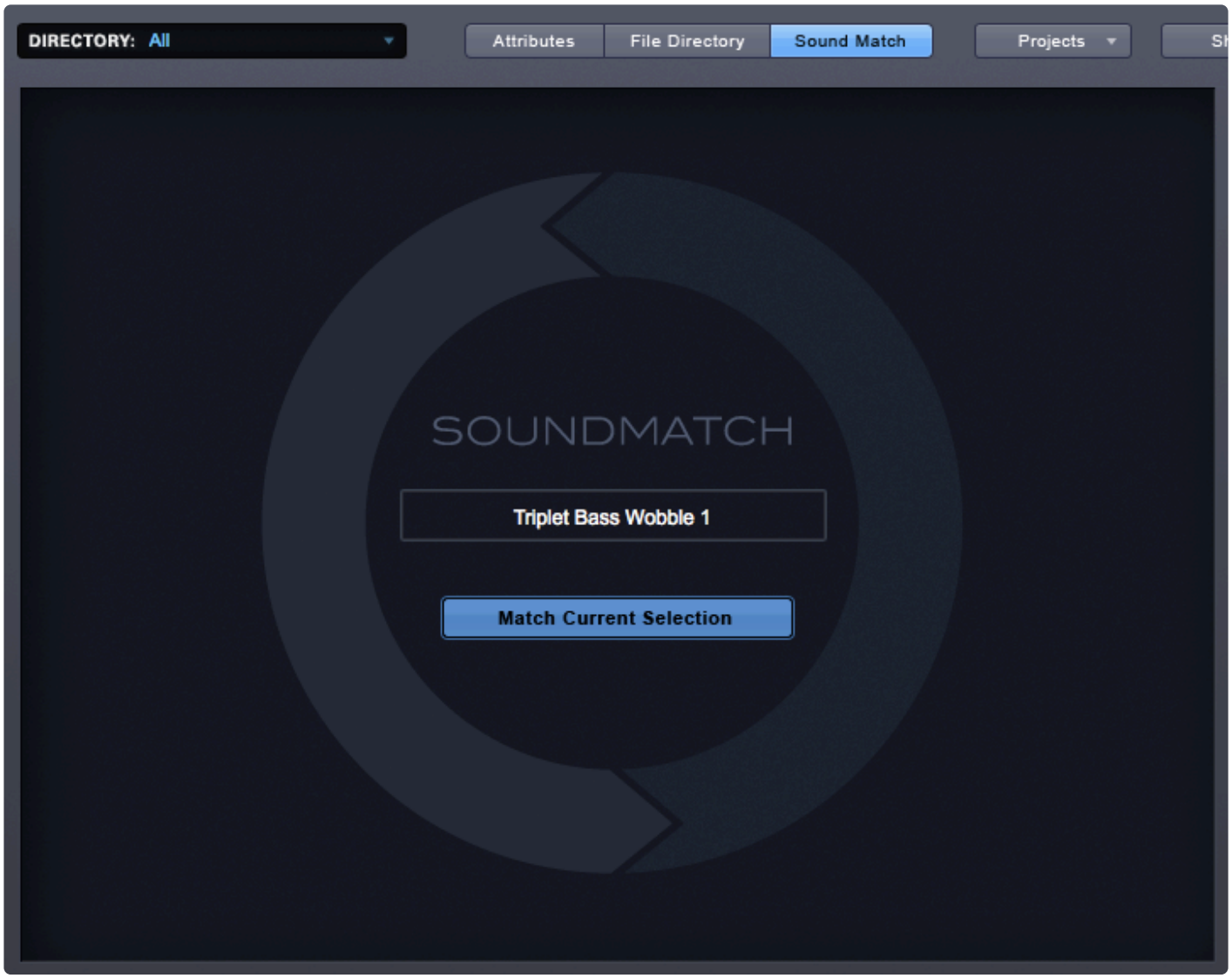
More Info + WWW

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 its 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 on how the samples and effects were obtained and licensed.

4.4. Sound Match



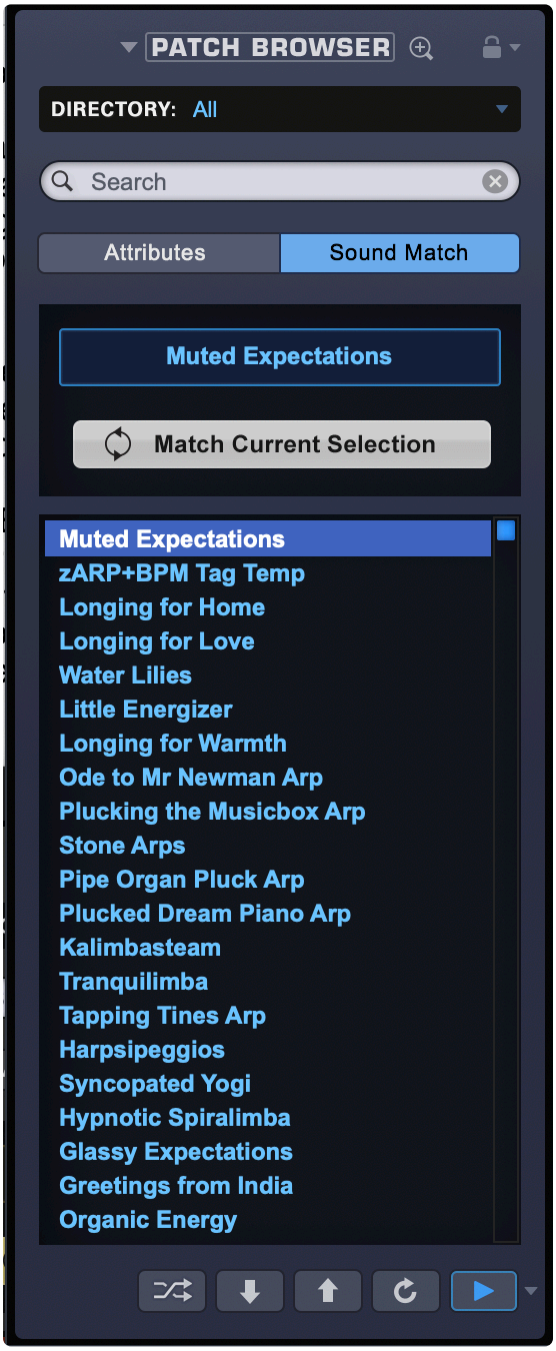
SOUND MATCH is a powerful browsing feature that lets you explore the library in a different way. It allows you to find similar sounds with one click.

After loading a sound, you might to want to search for related sounds to see if they might work better in a track. Selecting SOUND MATCH instantly gives you all the sounds that are similar byanalyzing the tags of every sound and finds ones with comparable characteristics.

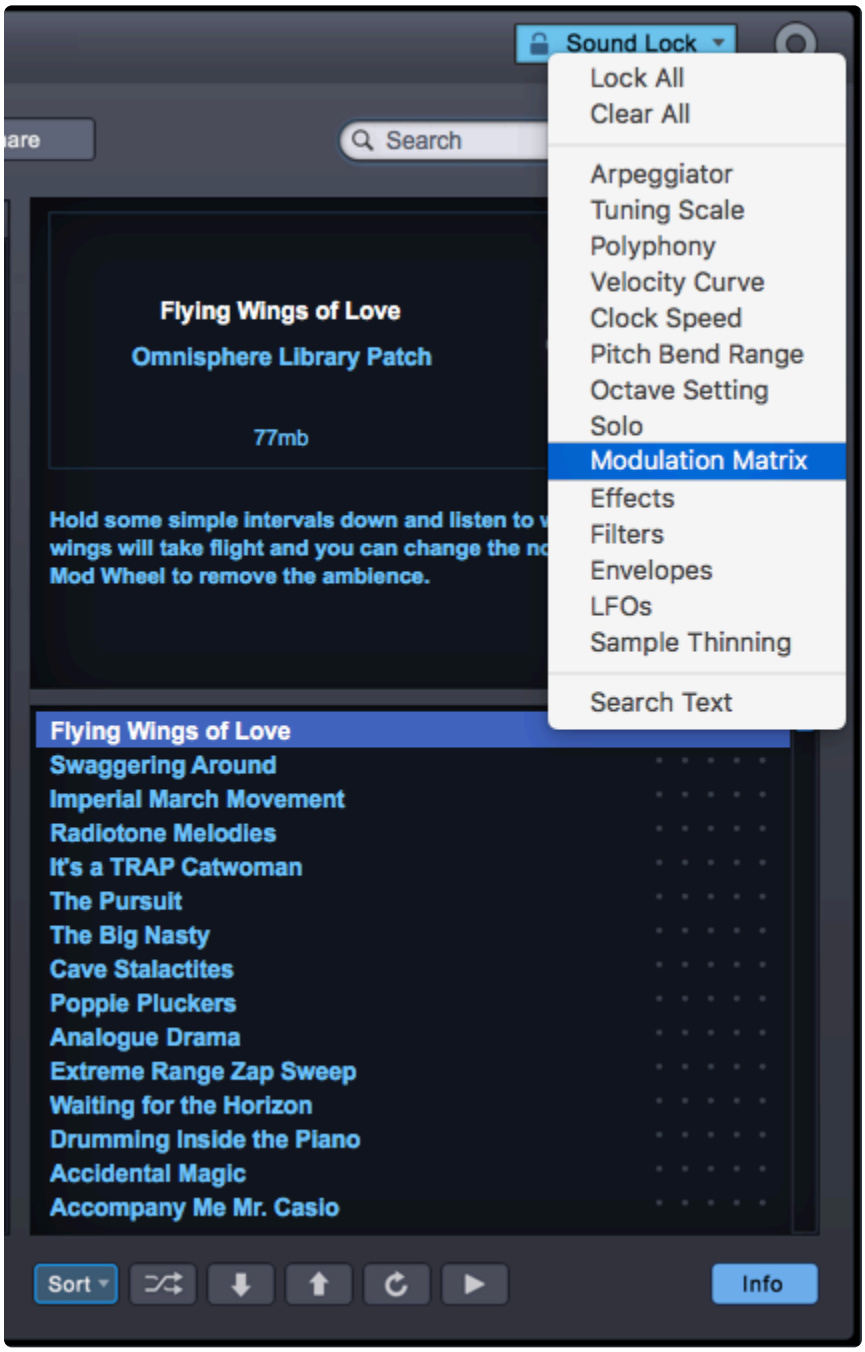
Pressing the SOUND MATCH button will hide the Browser Filters and and display the name of the selected sound. All the similar sounds in your libraries will show up in the results list. The higher in the list, the more closely related the sound. The match “strength” is shown on the right of the Patch name with a solid bar. As you select other sounds, you can find matches for them by pressing “Match Current Selection” to update your results.

NOTE: Pressing “Match Current Selection” again with the same Patch loaded will shuffle the order of the sounds while keeping them in their “strength” order.

NOTE: Sound Match is also available in the Mini-Browser.


PATCH BROWSER
DIRECTORY: All
Search
Attributes
Sound Match
Muted Expectations
Match Current Selection
Muted Expectations
zARP+BPM Tag Temp
Longing for Home
Longing for Love
Water Lilies
Little Energizer
Longing for Warmth
Ode to Mr Newman Arp
Plucking the Musicbox Arp
Stone Arps
Pipe Organ Pluck Arp
Plucked Dream Piano Arp
Kalimbasteam
Tranquilimba
Tapping Tines Arp
Harpsipeggios
Syncopated Yogi
Hypnotic Spiralimba
Glassy Expectations
Greetings from India
Organic Energy

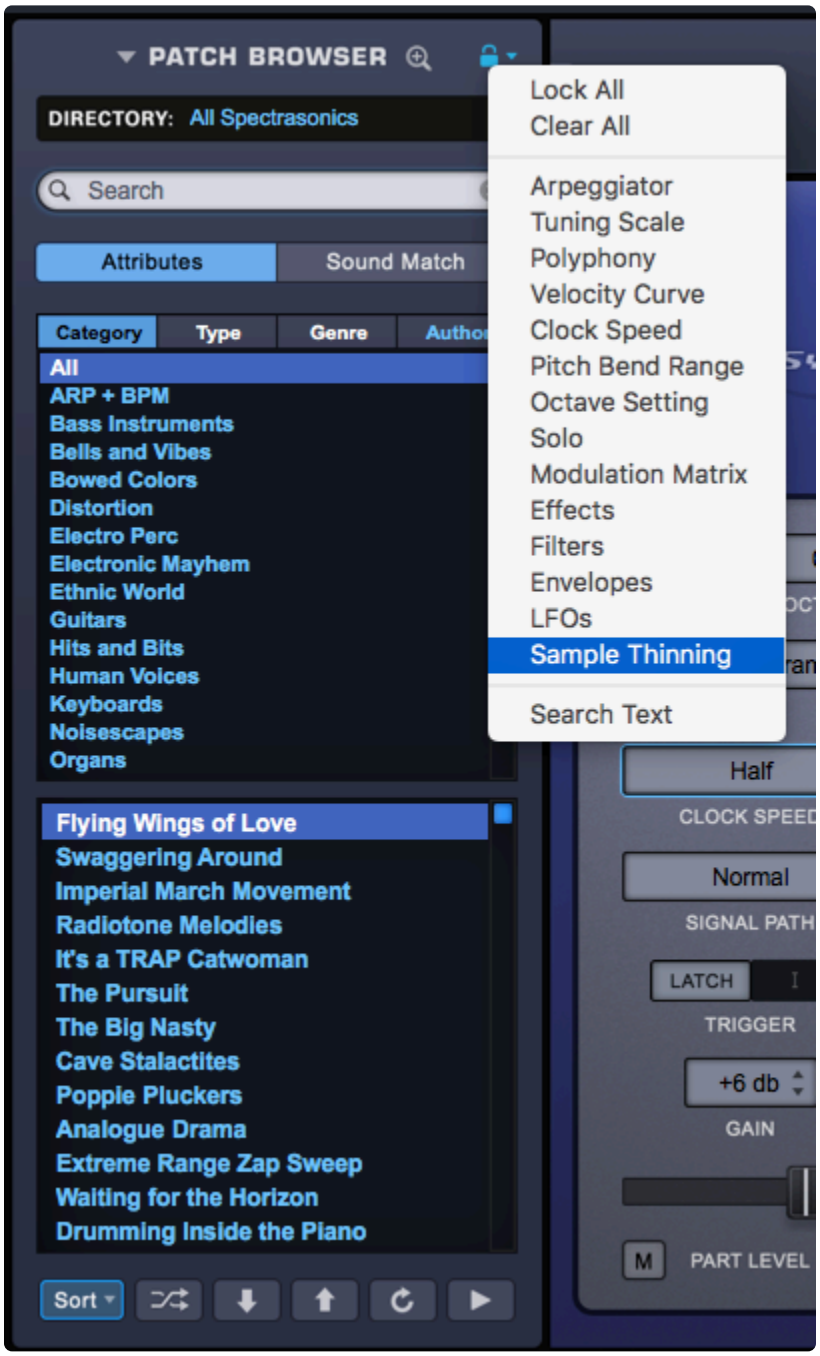
4.5. Sound Lock



Sound Lock lets you lock specific parameters of a Patch and apply them to other Patches as you browse. You can use the FX section of a Patch, the Arpeggiator pattern of another one and the Modulation Matrix of a third one. This mix-and-match approach makes browsing a fun and creative experience. It's easy to experiment with various combinations—this approach can be extremely valuable for creating new sounds that are far different from what you would normally come up with. You can save them as your own User Patches when you find combinations you like.

The Sound Lock menu is displayed by clicking on the lock icon in the top right corner of the Full Patch

Browser and Patch Mini-Browser. The menu displays all the sections that can be locked.

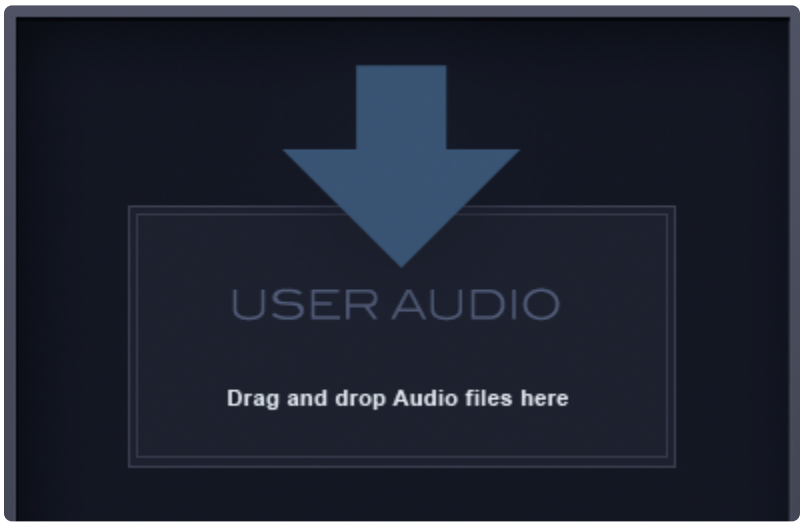


For example, if you are browsing Patches in the Arp + BPM section and select a sound that has an interesting arpeggiated pattern that you would like to apply to other Patches, select Arpeggiator from the Sound Lock menu. Now, any Patch you choose from from any Category (including non-rhythmic Patches!) will have the same arpeggiated rhythm. If the next Patch you select has some interesting FX, you can lock the Effects section, as well, from the Sound Lock menu. Any Patch you select after that will have the arpeggiated pattern from the first Patch and the Effects section from the second one. Locking further sections of different Patches as you browse (Filter, Mod Matrix, LFOs, Envelopes, etc.) will produce new Patches. Any combination you create as you browse can be saved as a new Patch. Sound Lock helps you expand your Patch libraries in a creative and inspiring way.

TIP: Working on a fast-tempo track and want to browse every Patch at half-speed? Set the CLOCK SPEED to "Half" from the Main Page and lock it from the Sound Lock menu. Want to browse Patches without any effects enabled? Make sure all the FX units in the Part's FX racks are disabled and lock "Effects" from the Sound Lock menu.

NOTE: Omnisphere is capable of creating rhythmic sounds using a variety of sources, including the Arpeggiator, LFOs, Mod Envelopes, etc., so if you are interested in locking the rhythm of a Patch it is sometimes necessary to look at the Modulation Matrix to see how it was created.

4.6. User Audio



Omnisphere is an extremely powerful synthesizer that allows you to import your own audio to use as Soundsources for the creation of your own Patches and Multis. This lets you creatively morph, meld, and mangle your own audio the same way you can with the included Factory Soundsources. Each imported audio file will become a User Soundsource in Omnisphere.

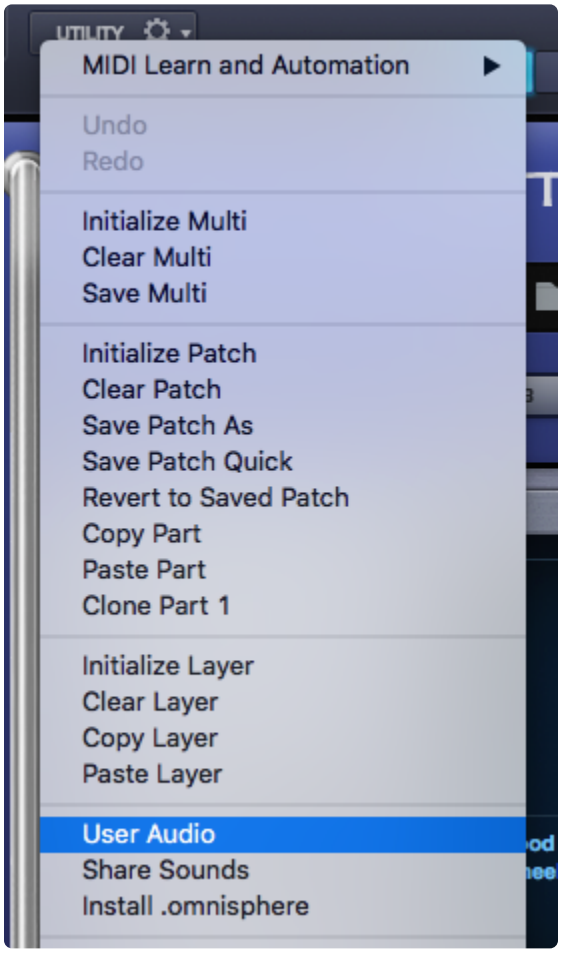
You might want to import a guitar track, a vocal, or even an entire mix and transform them into something completely different: a cinematic texture, a percussive sound or a synth lead. You can then save them as Patches and easily **Share** them with other users.

NOTE: The User Audio import function does not support zone-maps, round-robins, or multiple velocities, etc. Remember, Omnisphere is not a sampler, is a synthesizer. User Audio allows you to transform your own audio in creative ways with all the processing power Omnisphere has to offer.

IMPORTANT: Please respect all copyrights and import only material that you are licensed to use.

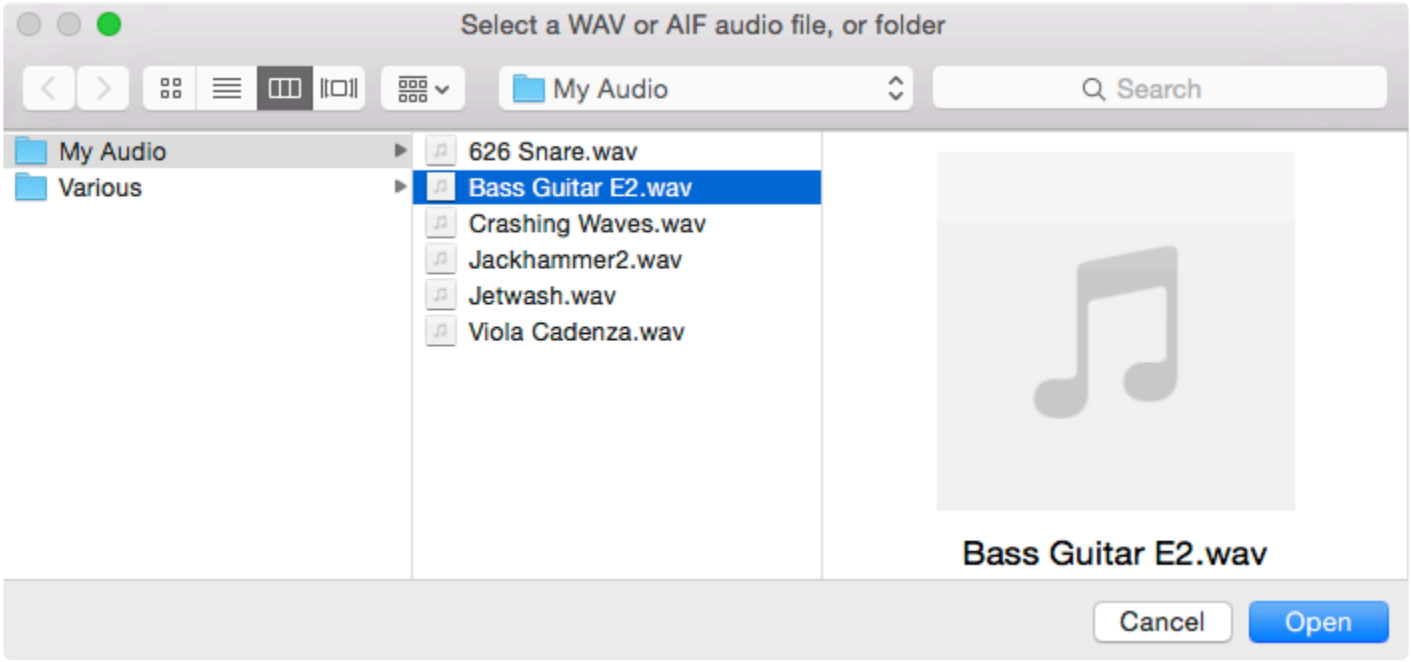
There are two places from which to import User Audio into Omnisphere: from the Utility Menu and from the Soundsource Browser.

Utility Menu Shortcut

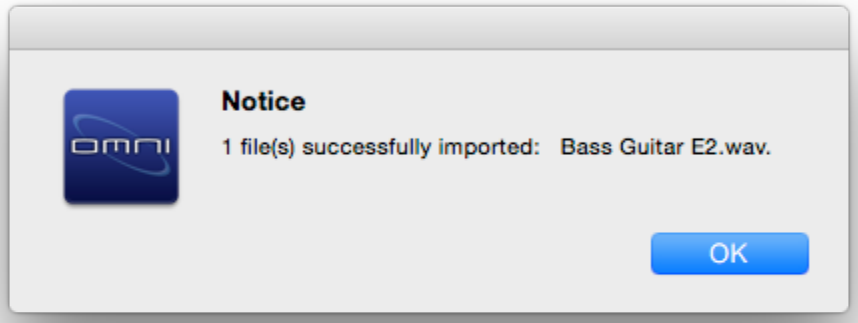


Selecting “User Audio” from the Utility Menu will display a File Dialog prompting you to navigate to the audio file or directory.

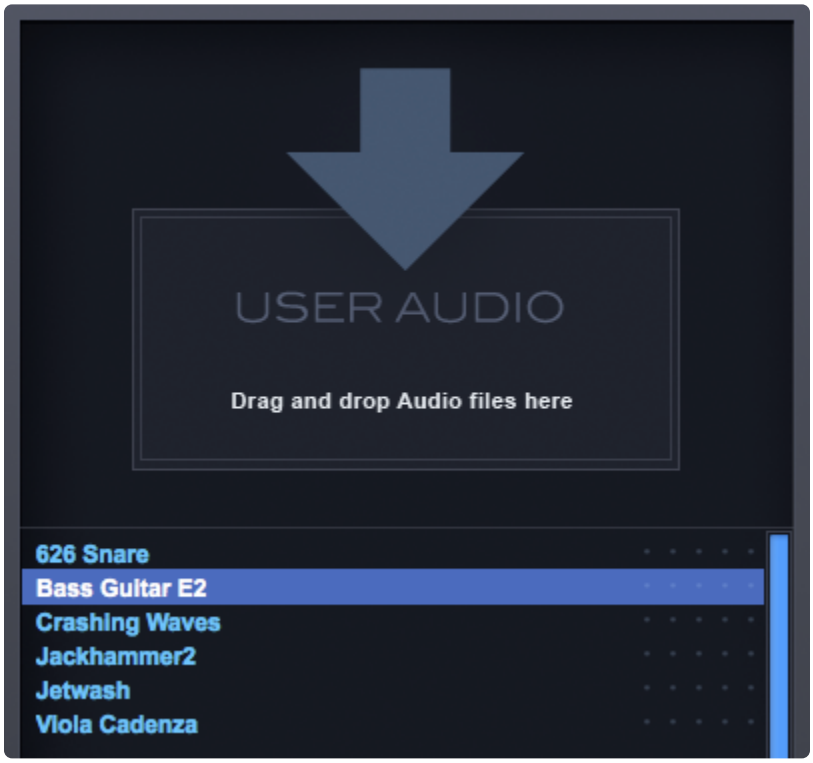
Navigate to the folder or file you wish to import and click “Open.” The import process will begin and they will be added to the User Soundsources directory in Omnisphere.



Once the audio has been successfully imported, you will get a confirmation notice.



After the import process is complete, the Soundsource Browser will be displayed and your audio (now an Omnisphere User Soundsource), will be automatically selected and played back at the note and duration set by the **Audition Note** settings.



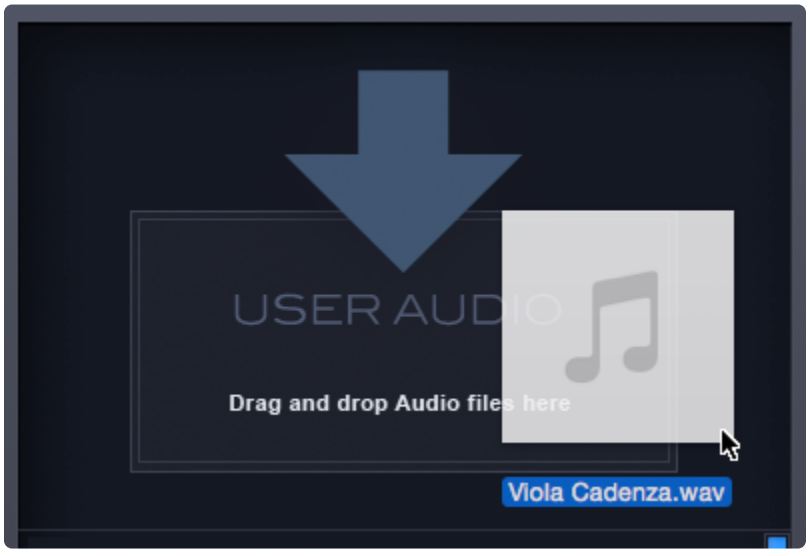
To delete the audio you imported, you can do so by locating it on your hard drive in the following directory:

STEAM/Omnipshere/Soundsources/User/

After deleting it, you must click the “Refresh” button in your Soundsource Browser to reflect the changes.

NOTE: If you batch convert a group of audio files, only the first imported file will be selected and played back.

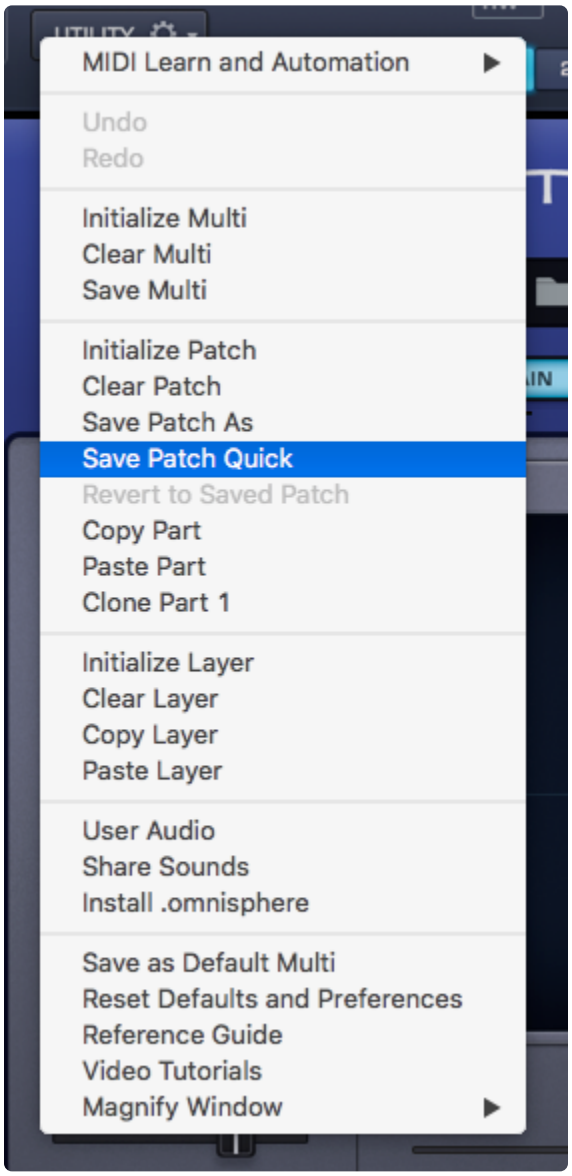
Soundsource Browser



Audio can be imported via the Soundsource Browser. You can drag and drop audio files or folders into this area to automatically start the import process. You can also click on the pane to open a File Dialog prompting you to navigate to the audio file or directory. Clicking “Open” will start the import process.

See **User Audio** for further details.

4.7. Saving and Managing Sounds

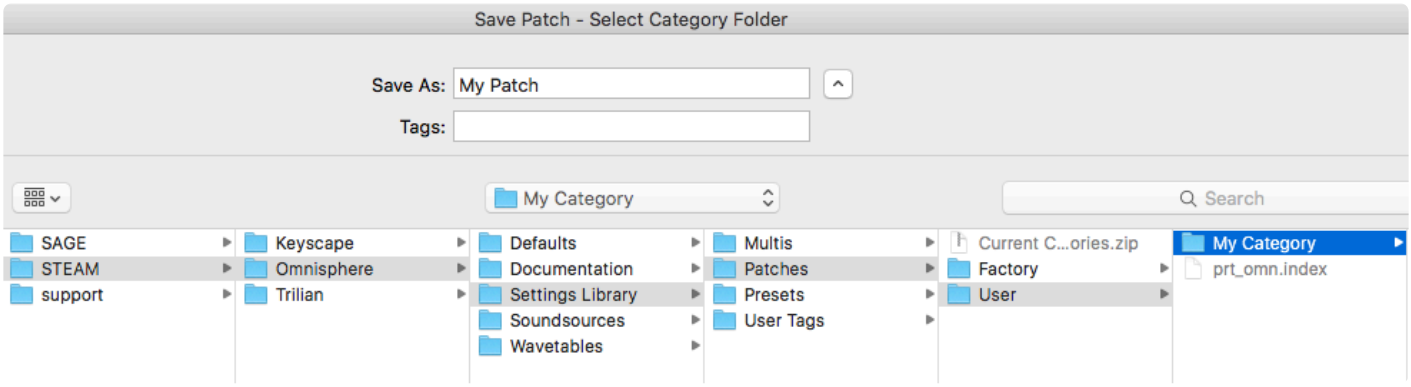


Omnisphere offers a flexible way to manage custom Patches and Multis. You can create custom collections of sounds organized by project or style and they can be searched, selected, filtered, or shared using the Full Browsers.

The process of saving and managing custom Patches or Multis in Omnisphere is essentially identical, the main difference being the locations of the User Libraries you create.

Folders created in the following directory: **Spectrasonics/STEAM/Omnisphere/Settings Library/Patches/** will be Patch Libraries, under which you need to organize your Patches into Categories. Folders created at this 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, letting you assign various Attribute Types and Assignments, custom Assignments, and add your own Keywords and Notes to the file. Once you have finished editing the tags, click SAVE. You can cancel the save process by clicking CANCEL.

NOTE: Patches and Multis must be saved into a Category folder inside a user Patch Library —you cannot save at the User folder level itself. This folder can be in an existing user directory, a newly created sub-folder inside the User folder, or a new user directory. There is no need to press the "Refresh" button in the Full Browser after saving a new Patch or Multi.

PROHIBITED TEXT CHARACTERS

NOTE: There are certain text characters that are OS-prohibited and if included in a Patch Name will cause problems when searching.

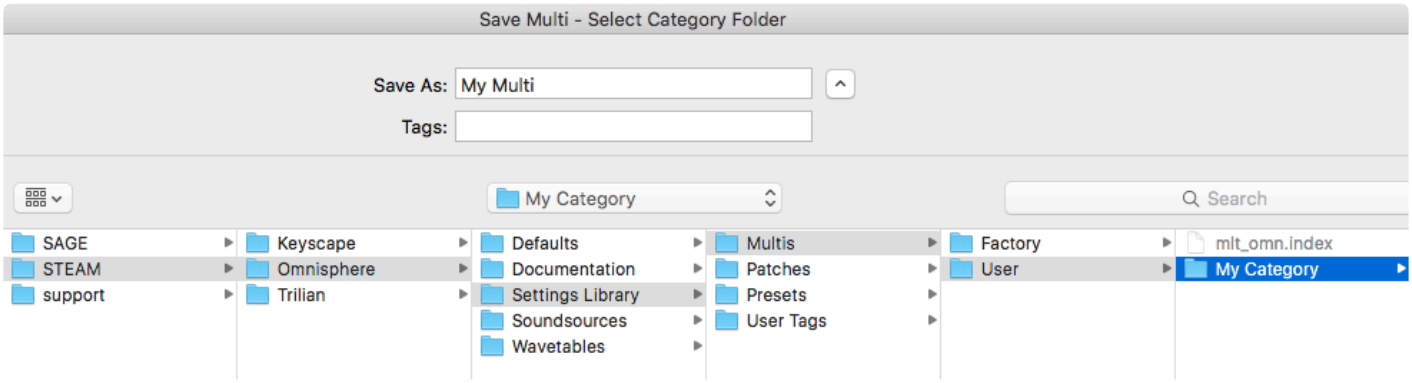
MacOS prohibits:

- : (colon)

Windows prohibits:

- < (less than)
- > (greater than)
- : (colon)
- " (double quote)
- / (forward slash)
- \ (backslash)
- | (vertical bar or pipe)
- ? (question mark)
- * (asterisk)

Managing Patches and Multis



The Browsers are designed to handle all aspects of searching, browsing, and loading 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 easy to manage your custom Patch and Multi Libraries by organizing them in a way that makes sense to you.

The default save location for Patches is inside a folder named "User" located here: **/STEAM/Omnisphere/Settings Library/Patches/User**

The default save location for Multis is inside a folder named "User" located here: **/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

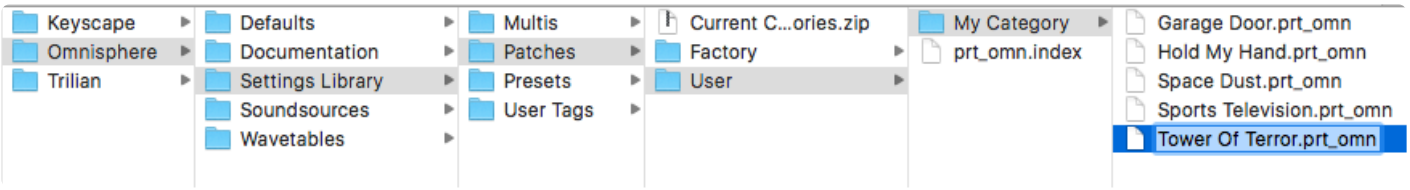
NOTE: When you rename or create new folders at the top level, you must re-instantiate Omnisphere, then select the Refresh button in order for them to appear in Omnisphere's Browser.

TIP: If you plan to create a new Patch Library, a good starting point is to unzip the "Current Categories.zip" file. This contains the most up-to-date categories used in Spectrasonics Factory Patch Libraries. If you wish to save your own Patches in categories that match the ones currently used by Spectrasonics, you can rename the "Current Categories" folder to anything you like and save your Patches to these new folders. The original User folder will still be available to you in the Directory.

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 when 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 Browser.

Once you have created a User library, you can set the File Directory Mode to browse your Patches and Multis within their folders, just as they are located on your hard drive.

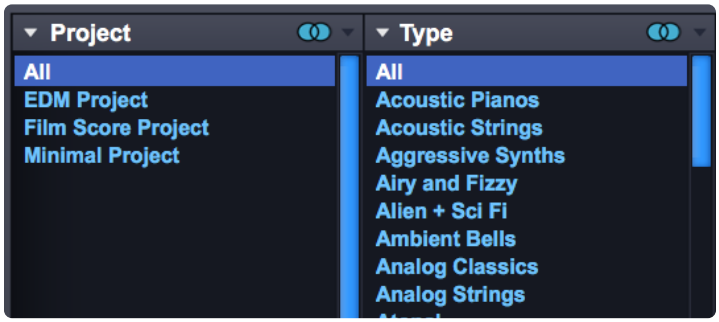
Renaming, Relocating, and Deleting Patches and Multis



To rename, relocate, or delete a user-saved Patch or Multi, you must use the Mac Finder or Windows Explorer. Navigate to the User folder, locate the desired files, and rename, relocate, or delete them using your file manager. Refresh the appropriate Omnisphere Browser(s) to reflect the changes by clicking on the “Refresh” button (the circular arrow in the footer of the Full Browsers).

NOTE: Option / Alt-Refresh can be quicker, as it refreshes only the Library in which you are working.

4.8. Projects



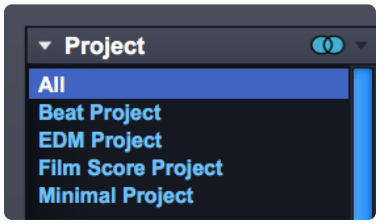
Projects are an excellent way to manage and organize your sounds, making it easier to work efficiently within Omnisphere's enormous library. Saving your sounds into Projects lets you collect and organize sounds together with a particular job or session and they can be recalled at any time.

Projects use global tags that are saved automatically, and are always available for later recall. They will be present in any open instance of Omnisphere.

Projects are also used to share sounds with other Omnisphere users.

Please see **Sharing** for more info.

4.8.1. Using Projects



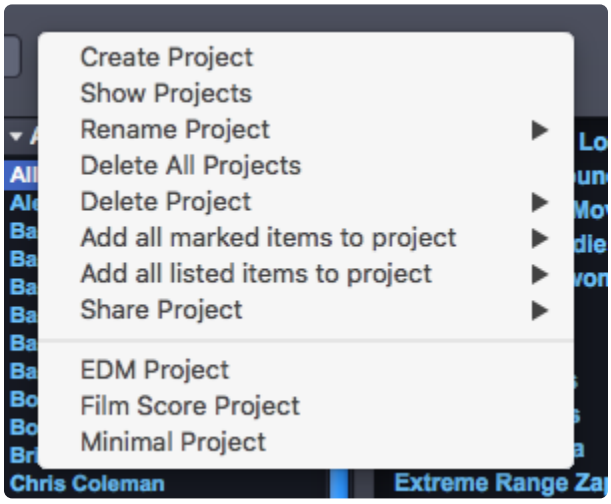
A Project is a user-defined collection of sounds, organized in a single group. This can be applied in many useful ways. For example, Projects can be created and named according to current jobs, different sessions, songs, or styles.

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, they can be organized in ways that are most meaningful to you.

When a Project is selected in the Full Browser, only the sounds that have been added to that Project will be displayed, giving you instant access to filtered and organized selections.

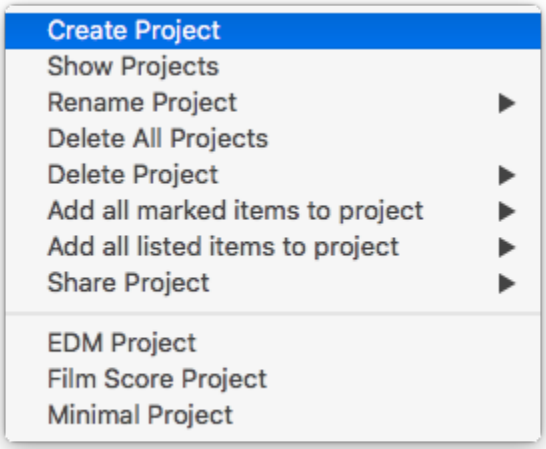
CREATING, MANAGING, and ACCESSING PROJECTS

The Project Menu

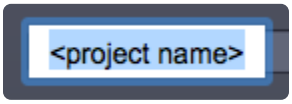


The Projects Menu provides all of the options needed to create and manage your Projects. You can Create, Rename, and Delete Projects, Show Projects in the Browser, add or remove sounds from a Project, and **Share** your projects with a collaborator.

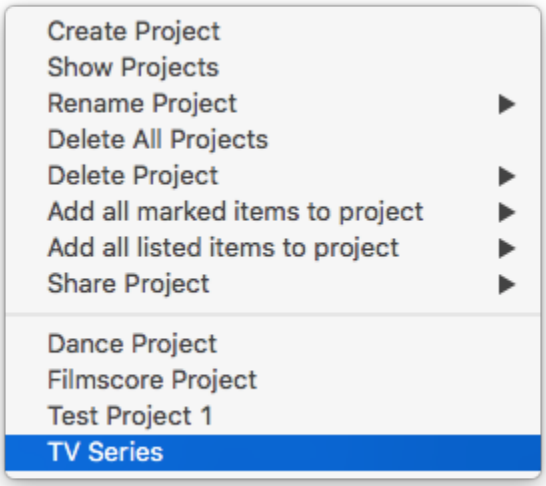
Create a Project



Select “Create Project” from the Projects Menu in the Full Browser, then type a name for the Project into the text field and press Return / Enter on your keyboard.

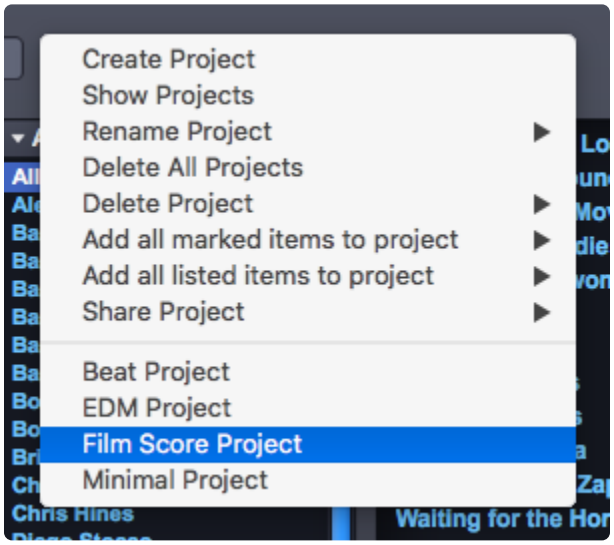


The Project is now created and available for adding sounds.



After creating a Project, its name will appear in the top section of the Project Menu.

Add a Sound to a Project

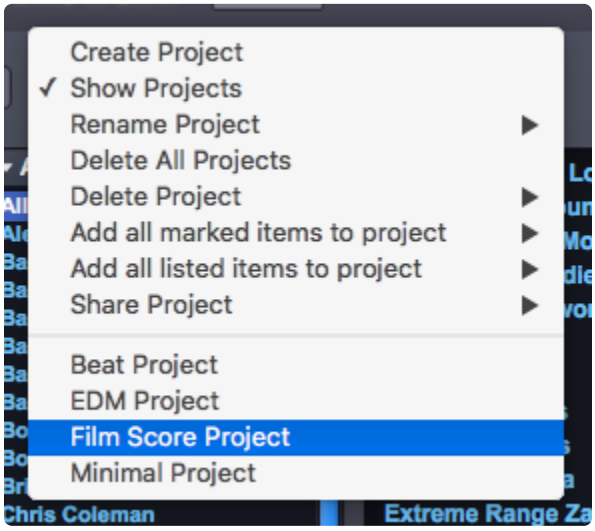


To add a sound to a Project, first select the sound you wish to add in the applicable Full Browser. Next, open the Project Menu and select the Project name to which you wish to add the sound. That's it!

Whenever that sound is selected and you open the Project Menu, you will see a checkmark next to that Project name, indicating that the selected sound is contained 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 to which it has been added.

Remove a Sound from a Project



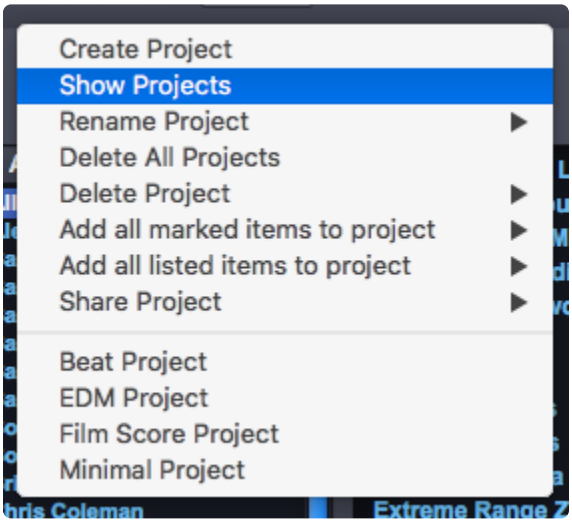
To remove a sound from a Project, first select the sound you wish to remove by selecting it in the Browser. Next, open the Project Menu and select the Project name from which you wish to remove the sound (there should be a checkmark next to the Project name). To confirm that the sound was removed from the Project,

select the Project Menu again and confirm that the checkmark was removed.

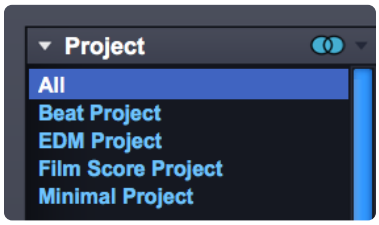
Show Projects

Once you have created one or more Projects and added sounds, you can browse them to select the specific sounds you've added.

To browse your Projects, select "Show Projects" from the Project Menu.



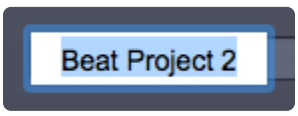
The left-most attribute filter will change from "Category" to "Project," and all of your Projects will show up in that column. Select a Project from the Project list, and your Browser will display only that Project's sounds.



Select "Show Projects" from the Project Menu again, and the attribute filter will return to the Category view.

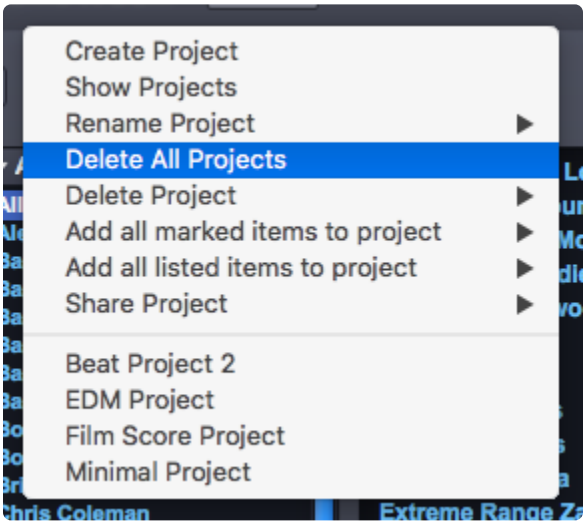
You can also switch between displaying Projects or Categories by selecting the left-most attribute filter menu, and selecting "Project" or "Category."

Rename Project

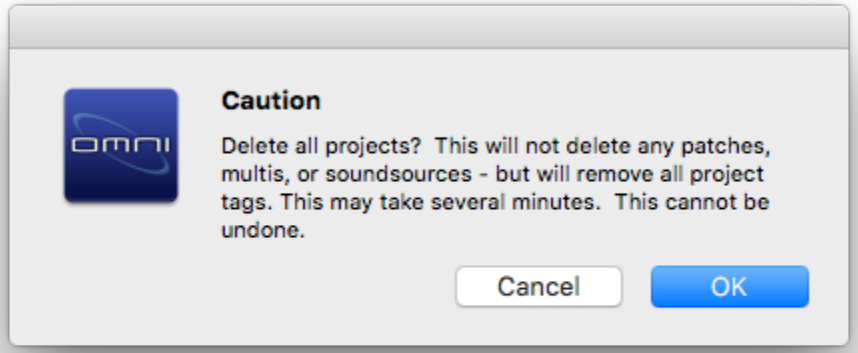


You can rename a Project by selecting it from the "Rename Project" sub-menu.

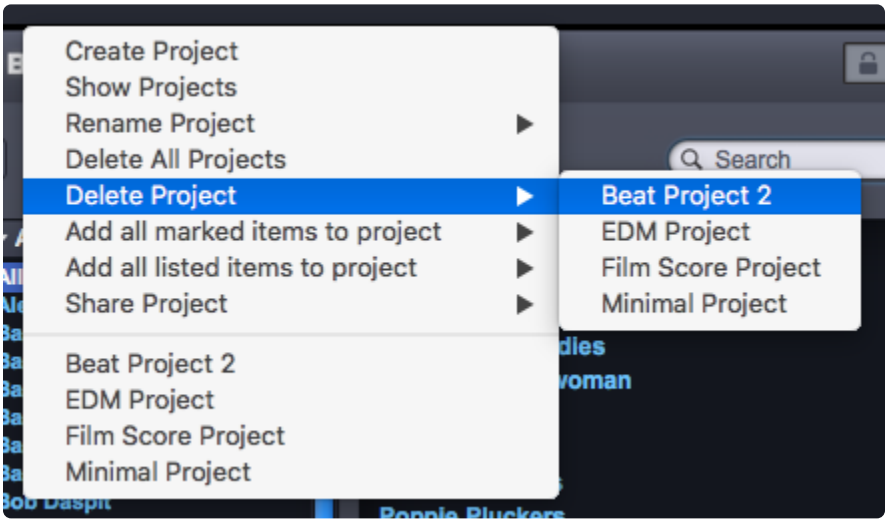
Delete All Projects



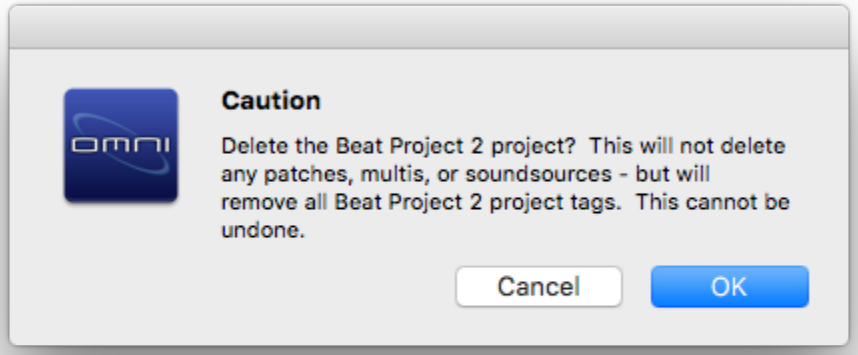
To delete all Projects, open the Project Menu and select “Delete All Projects.” A confirmation pop-up will appear, asking you to confirm the deletion. Selecting OK will delete the Project.



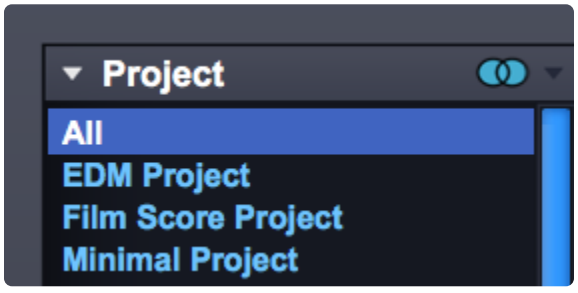
Delete Project



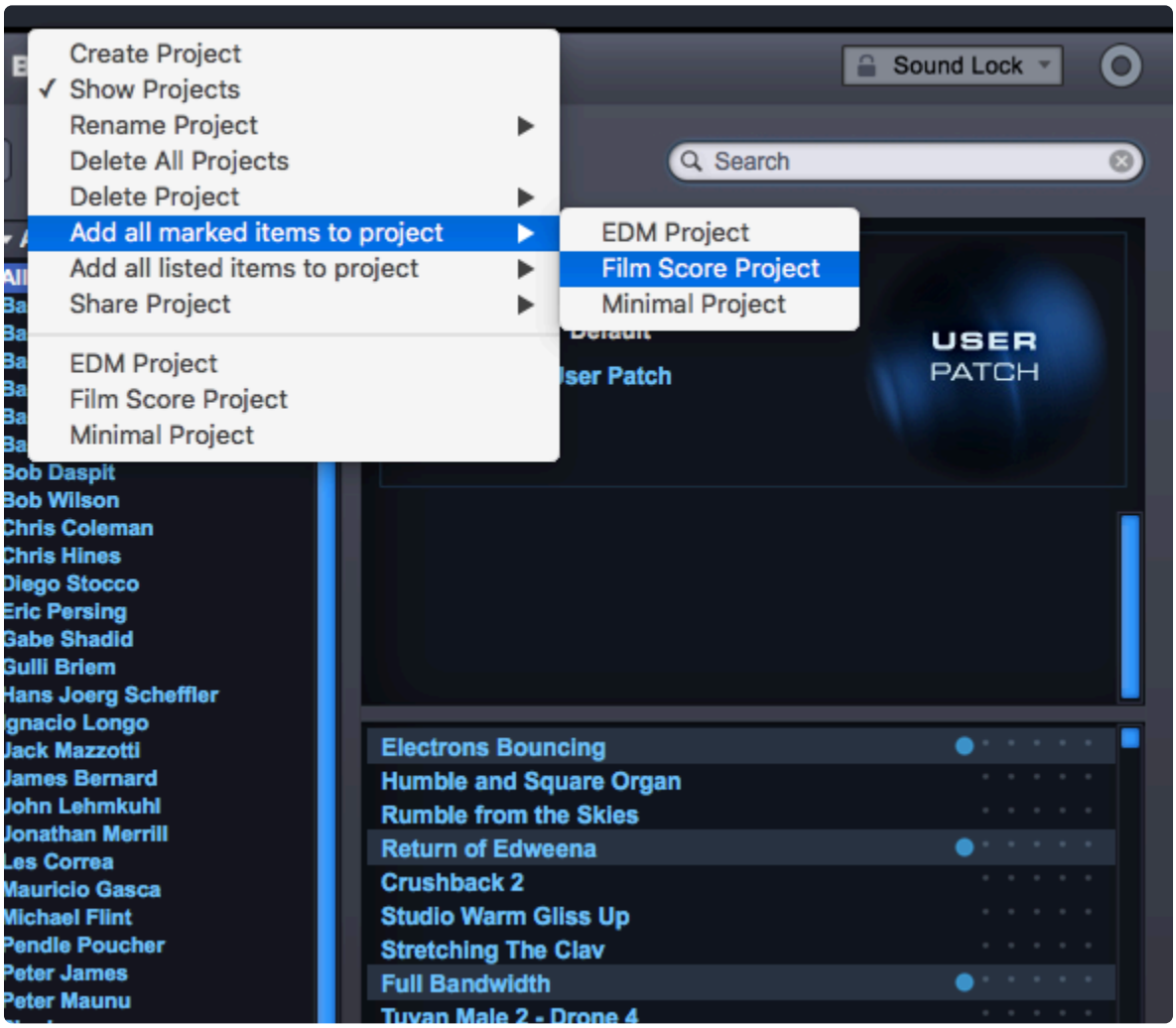
To delete a Project, open the Project Menu and select the Project you wish to delete from the “Delete Project” sub-menu. A confirmation pop-up will appear, asking you to confirm the deletion. Selecting OK will delete the Project.



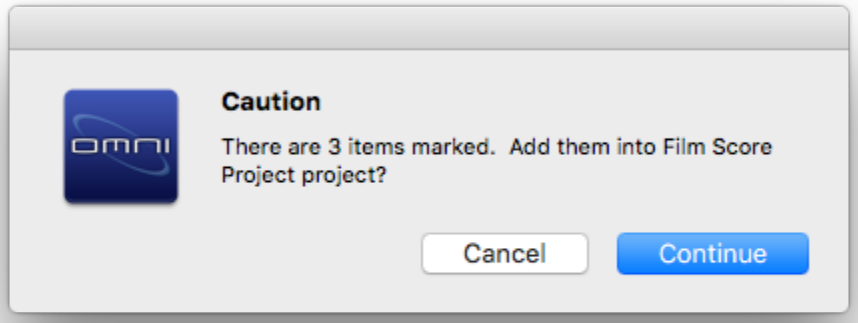
Deleting a Project doesn’t remove or delete any sounds from the library. It simply removes the tags assigned to that Project. If you have the same Project also being used in the Multi, Patch, and Soundsource Browsers, you will have to delete the Project separately in those Browsers.



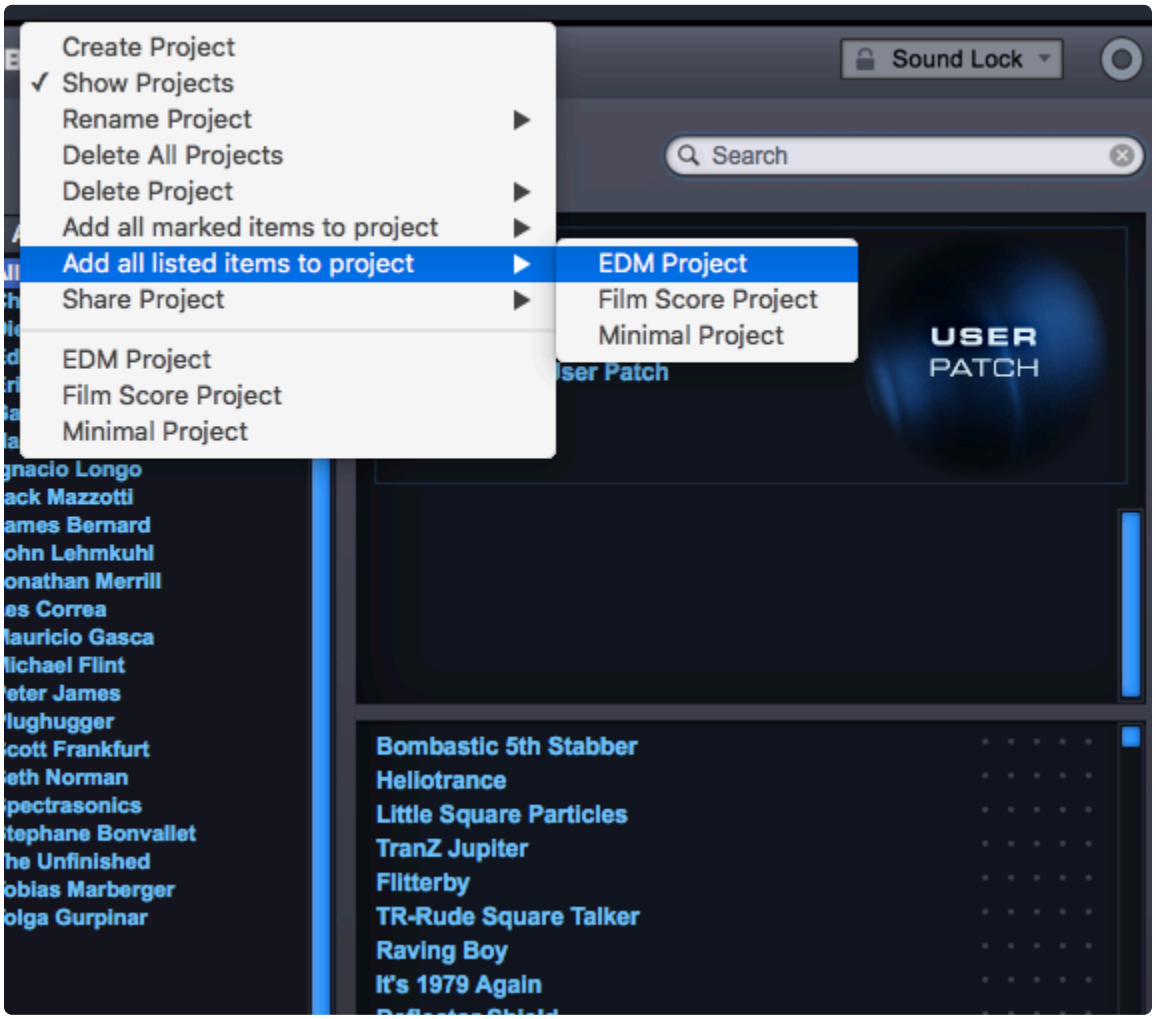
Add all Marked Items to a Project



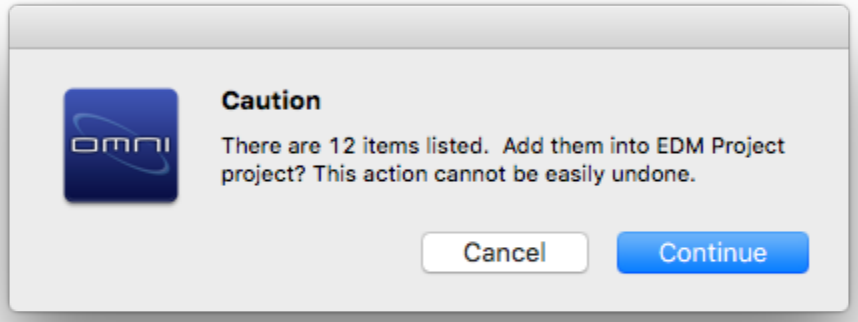
Sounds can be marked so multiple ones can be added to a Project in one step. Open the Project Menu and select “Add all marked items to Project.” From sub-menu that shows up select the Project to which you want to add the marked sounds. A confirmation pop-up will appear, asking you to confirm the action.



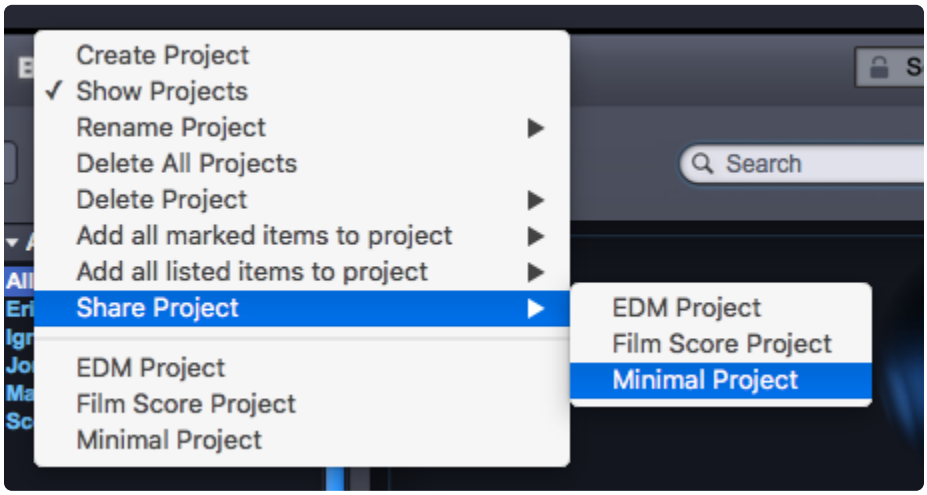
Add all Listed Items to a Project



Sometimes it can be useful to add all the results displayed in the Browser. For example, if the browser is filtered to show bowed, atonal, dark sounds, you can add all the results by opening the Projects menu, selecting “Add all listed items to Project” and then selecting your project.



Share Project



Select “Share Projects” and then a Project from the fly-out menu to create a .omnisphere file containing the project’s sounds to share with other Omnisphere users. See **Sharing Sounds** for more information.

4.9. Favorites

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. You can also sort sounds in the Browser by Ratings, bringing your favorite sounds to the top of the Browser list.

Used together with Projects, the Favorites feature 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.

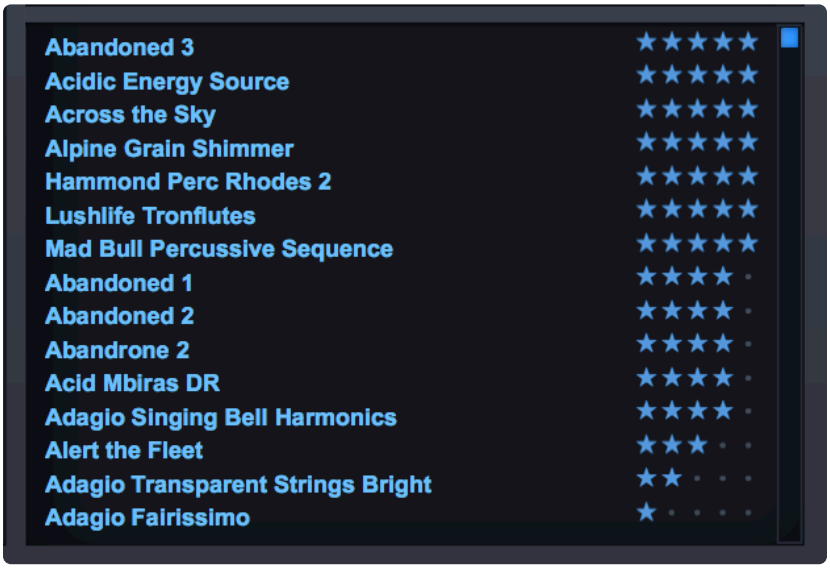
By selecting only the Rating Dots, you can rate sounds without loading them. This allows you to rate a large number of sounds very quickly, without having to load each one as you go along.

Changing or Removing a Rating

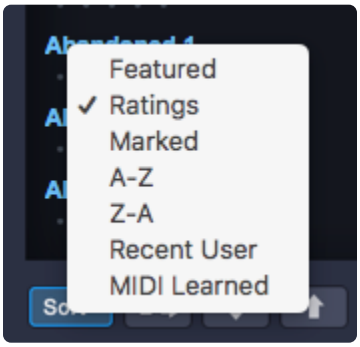
After you have added a Rating to a sound, you can easily change it by selecting more or fewer stars.

There are two ways to remove the Rating from a sound: either click in the empty space just to the left of the dots, or Command / Control-click on the stars themselves.

Sorting by Ratings



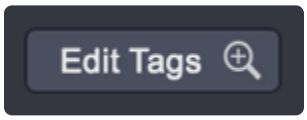
To see your Favorites sorted according to their Ratings, open the Sort Menu in the Browser Footer and select “Ratings.” The sounds in the Browser window will then be displayed with your favorite sounds at the top of the list, in order of their Rating. The top-rated (5-star) sounds will appear first, followed by 4-star sounds, then 3-star sounds, etc.



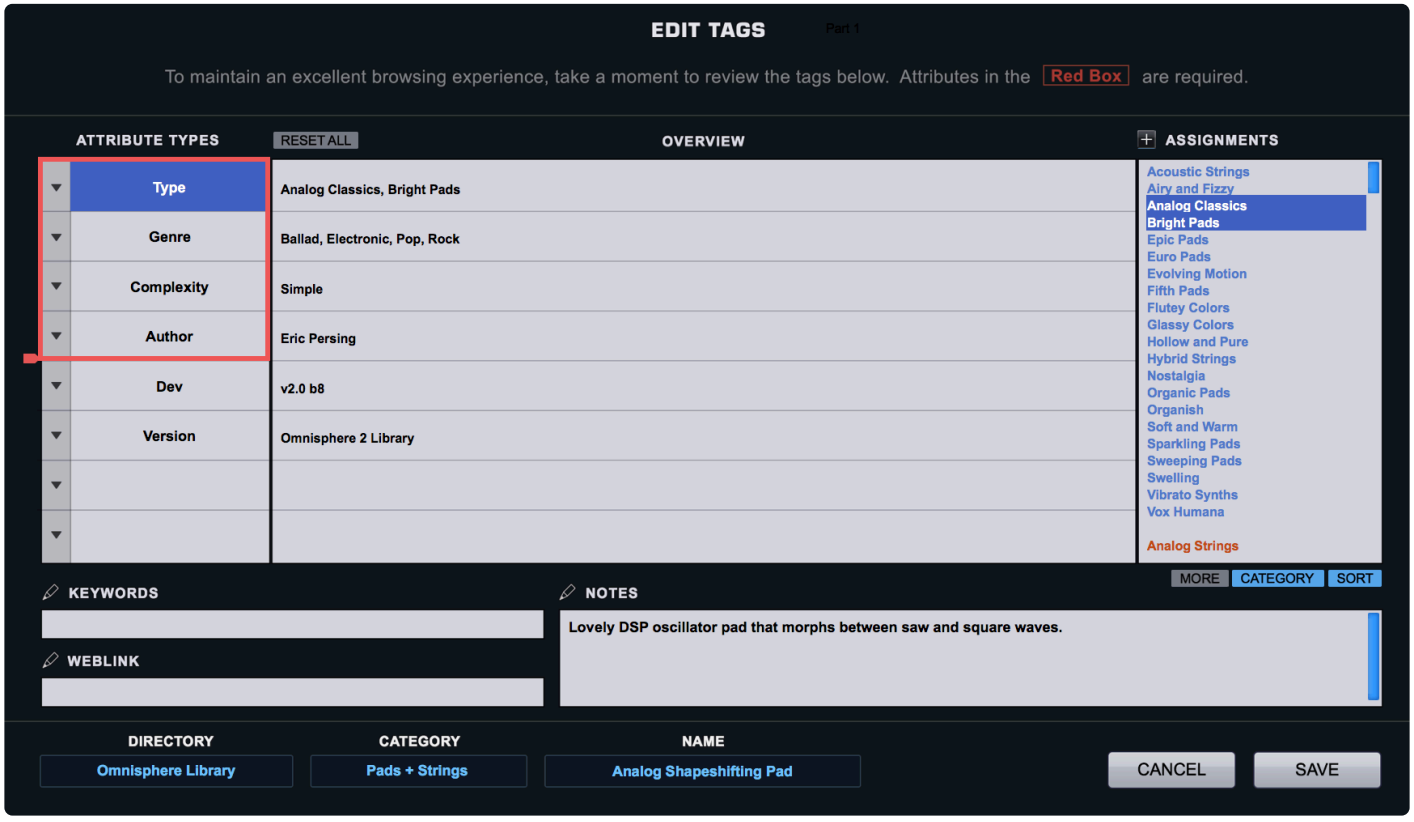
To return to an alphabetical list, open the Sort Menu again and select “A–Z.”

4.10. Edit Tags

Selecting the Edit Tags Button in the Browser Footer opens the Tag Editor.



Omnisphere's customizable tagging system allow sounds to be assigned Tags, categorizeing sounds and making them searchable and filterable. Tags are based on Attributes that can be customized by the User.



It is not required to create Tags for custom sounds, but it's recommended 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.

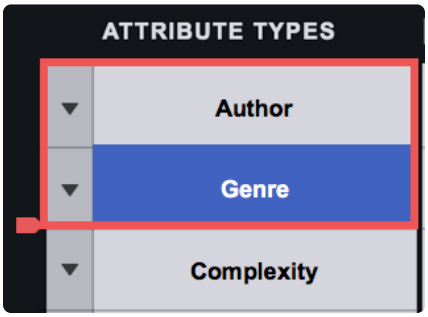
4.10.1. Attributes

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. 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.



Required Attributes work per category: all the sounds in the same category will require the same attributes when saving them.

If you are saving a sound in a category that already exists in the Omnisphere Library (i.e. Synth Poly), the required attributes will be those that Spectrasonics chose for that category and can't be changed. If you save sounds to category with a unique name, you can determine which attributes are required.

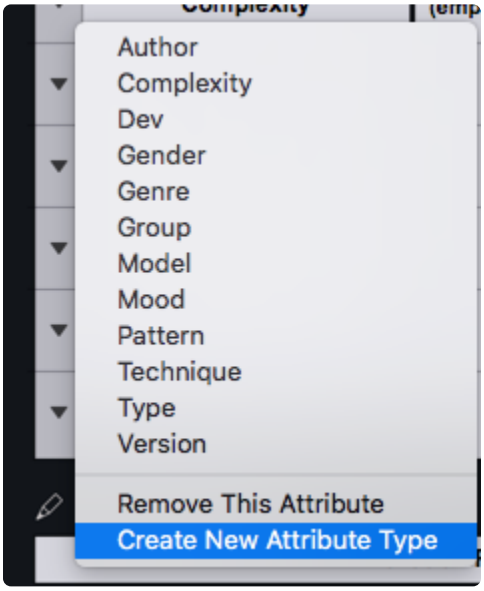
The Required indicator can be expanded or contracted on custom sounds, however Required ATTRIBUTE TYPES in factory presets cannot be changed.

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



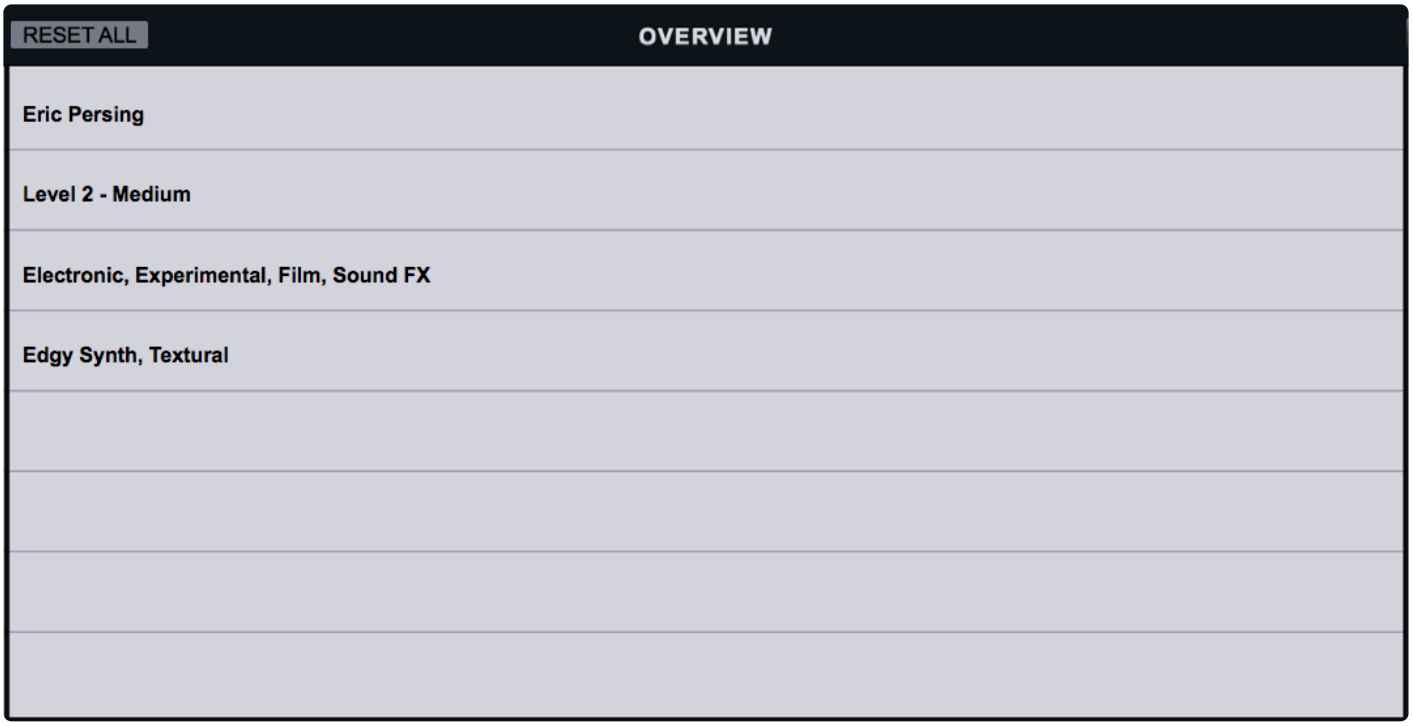
By selecting the drop-down menu next to any Attribute Type a custom Attribute Type can be created by selecting “Create New Attribute Type.”

Enter the name of the new Attribute Type in the field and it will be added to existing types in the ATTRIBUTE 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 **ASSIGNMENTS** for details.

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 it and all of its ASSIGNMENTS.

4.10.2. Overview

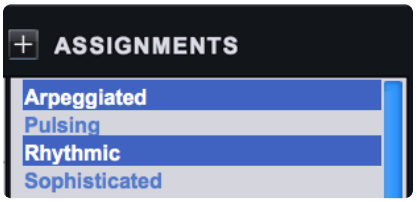


The Overview area displays all of the ASSIGNMENTS for each Attribute Type.

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 on the Edit Tags screen.

4.10.3. Assignments



The ASSIGNMENTS column displays a list of Tags that can be added to an Attribute Type.These are typically descriptive words or labels, and will change depending on the Attribute Type selected. When you add an ASSIGNMENT to a sound using the ASSIGNMENTS column, it will be added to the selected Attribute Type, and can be used later to locate the sound using the search feature of the Browser.

For example, if you add the “Arpeggiated” ASSIGNMENT to a sound, and later entered “arpeggiated” into the Browser search field, the sound will appear on the filtered list.

You are not limited to a single ASSIGNMENT for an Attribute Type. Multiple ASSIGNMENTS are permitted for all Attribute Types.

Adding Assignments

To add ASSIGNMENTS to an Attribute Type, first select the desired Attribute Type in the Attribute Types column. A list of Assignments related to that Attribute Type will appear in the ASSIGNMENTS list.

Select an ASSIGNMENT to add it to the current Attribute Type. When you add an ASSIGNMENT, it will be highlighted and will appear in the Attribute Type Overview. You can add any number of ASSIGNMENTS for a given Attribute Type.

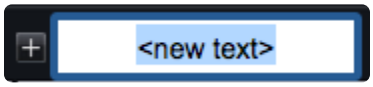
NOTE: If you have created a custom Attribute Type, it will have no preset ASSIGNMENTS. You will also have to create custom ASSIGNMENTS in order to add them to the custom Attribute Type.

Removing ASSIGNMENTS

To remove an ASSIGNMENT from an Attribute Type, first select the desired Attribute Type in the Attribute Type column. The list of ASSIGNMENTS related to that Attribute Type will appear in the ASSIGNMENTS list, and any ASSIGNMENTS that have been added to that Attribute Type will be highlighted.

Select a highlighted ASSIGNMENT to remove it from the Attribute Type, and it will no longer appear in the Attribute Types Overview.

Creating Custom ASSIGNMENTS



To create custom ASSIGNMENTS, you must first select an existing Attribute Type or create a custom one. ASSIGNMENTS can be created for both custom and factory Attribute Types.

After an Attribute Type has been selected or created, select the “+” button to create a new Assignment for that Attribute Type. Enter a name for the ASSIGNMENT into the text field, and press Enter/Return on your keyboard. The new ASSIGNMENT will be created and automatically added to the Attribute Type.

To create additional ASSIGNMENTS, press the “+” button again and repeat the process until all the desired ASSIGNMENTS have been created and added.

NOTE: If a custom ASSIGNMENT has been created but is not added to the Attribute Type, it will automatically be deleted after exiting the Edit Tags pane.

ASSIGNMENTS View

These switches determine how ASSIGNMENTS are viewed and sorted on the Edit Tags page.

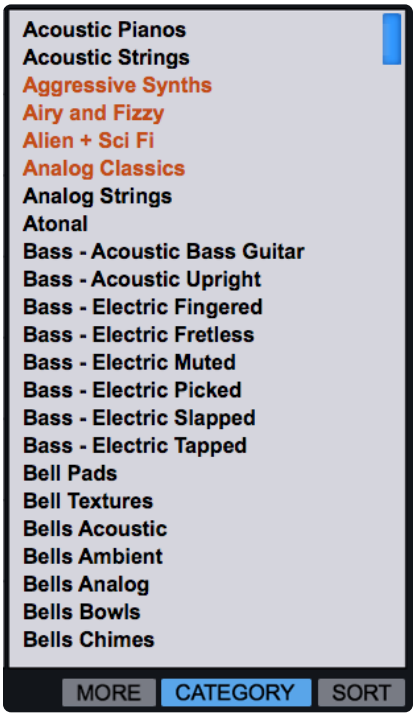
More

Selecting this option hides the Overview area so that more ASSIGNMENTS can be displayed at a time.

4.10.4. Category and Sort

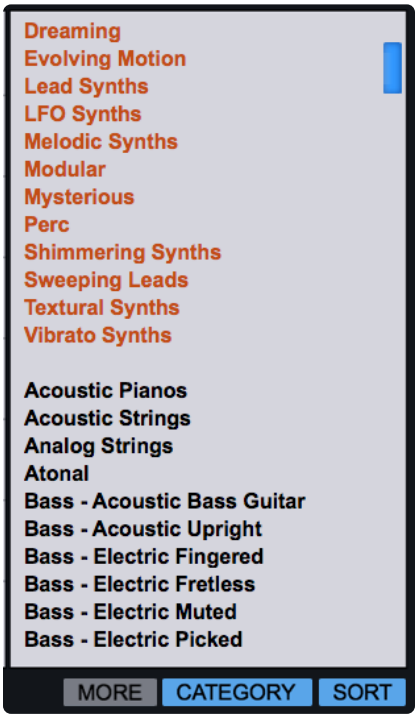
CATEGORY

Selecting this option will highlight all of the Assignments for the selected Attribute that have been used in the CATEGORY in which the loaded sound resides. The Assignments used for Omnisphere sounds will be highlighted in blue and the ones used on third party libraries or User sounds will be highlighted in orange.



SORT

The SORT function groups all Attribute Assignments that are in the same CATEGORY as the currently loaded sound. The Assignments used in Omnisphere's sounds will be grouped at the top of the list, followed by the ones used by third party or User sounds. The remaining unassigned Attributes are displayed below, and are sorted alphabetically.

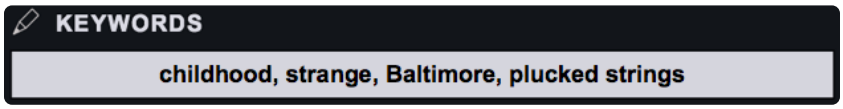

Dreaming
Evolving Motion
Lead Synths
LFO Synths
Melodic Synths
Modular
Mysterious
Perc
Shimmering Synths
Sweeping Leads
Textural Synths
Vibrato Synths
Acoustic Pianos
Acoustic Strings
Analog Strings
Atonal
Bass - Acoustic Bass Guitar
Bass - Acoustic Upright
Bass - Electric Fingered
Bass - Electric Fretless
Bass - Electric Muted
Bass - Electric Picked
MORE
CATEGORY
SORT

4.10.5. Keywords and Notes

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 with which the sound is associated.

To add Keywords, simply click the Keyword field, and type them in. Separate multiple Keywords with a comma. Select any Keywords that you wish to remove and hit "Delete."



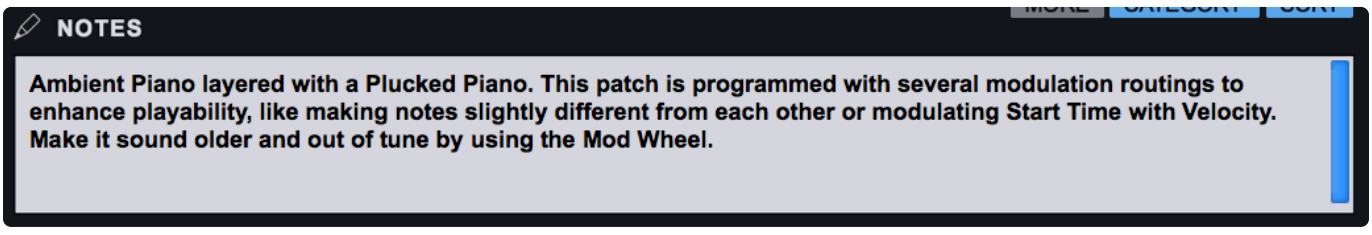
Weblink

This will configure the weblink 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.



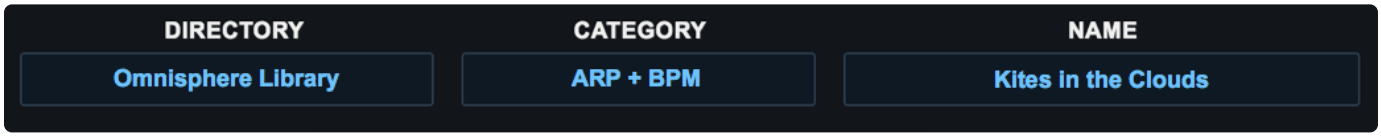
NOTE: All of the text in the Notes field will be checked during searches in the Browser.

4.10.6. 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.



Cancel / Save

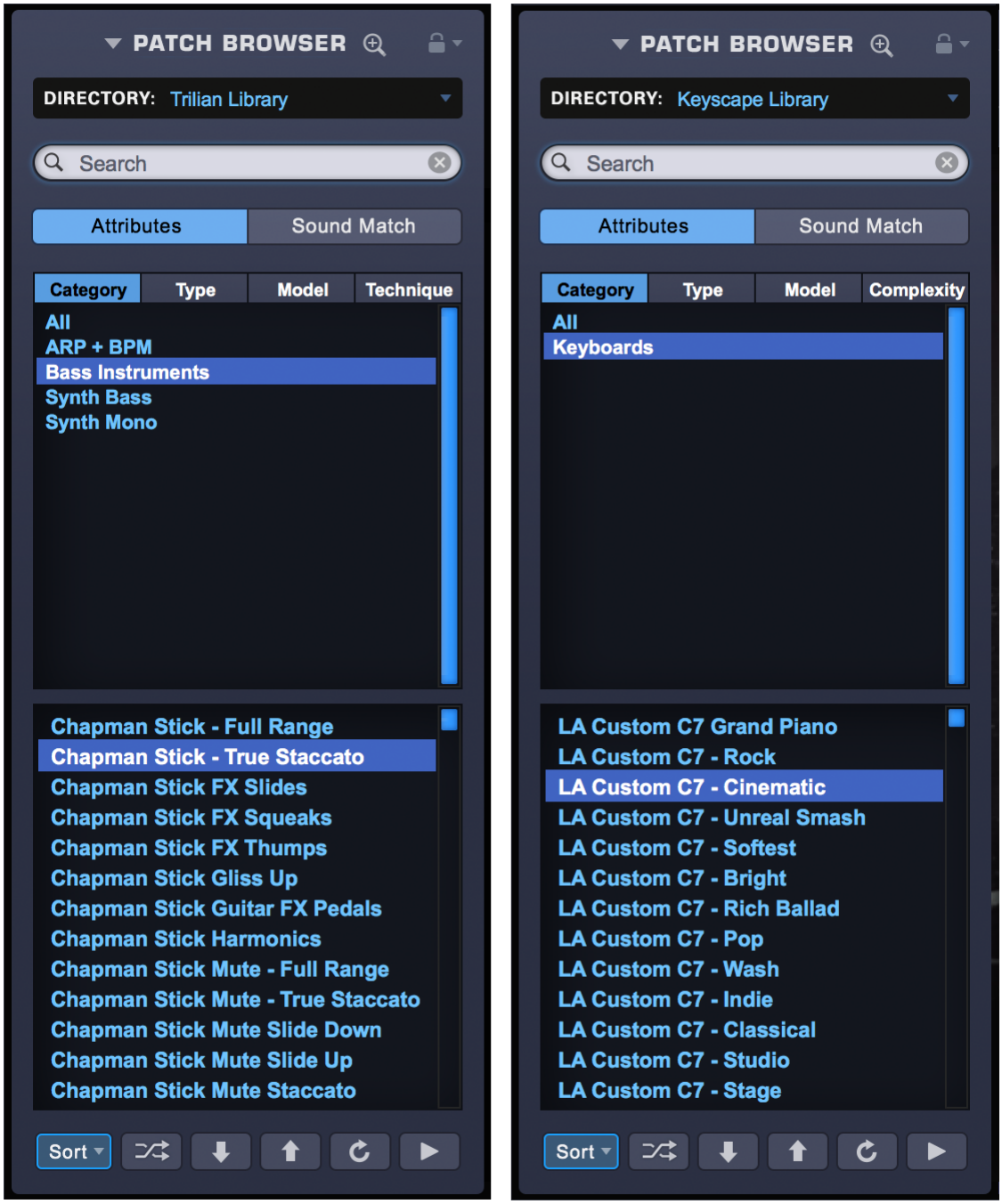
Any changes made in the Tag Editor can be saved or canceled.

NOTE: Saving the Tags also saves the Patch or Multi and any modifications.

4.11. Loading Satellite Sounds

One of the powerful features of Omnisphere is Library Integration.

If you also have Keyscape and/or Trilian installed, the libraries for those satellite instruments will appear in the Browser DIRECTORY menu along with your other Omnisphere libraries. The Soundsources, Patches, and Multis can be loaded directly into Omnisphere for further synthesis manipulation, or simply pure convenience!

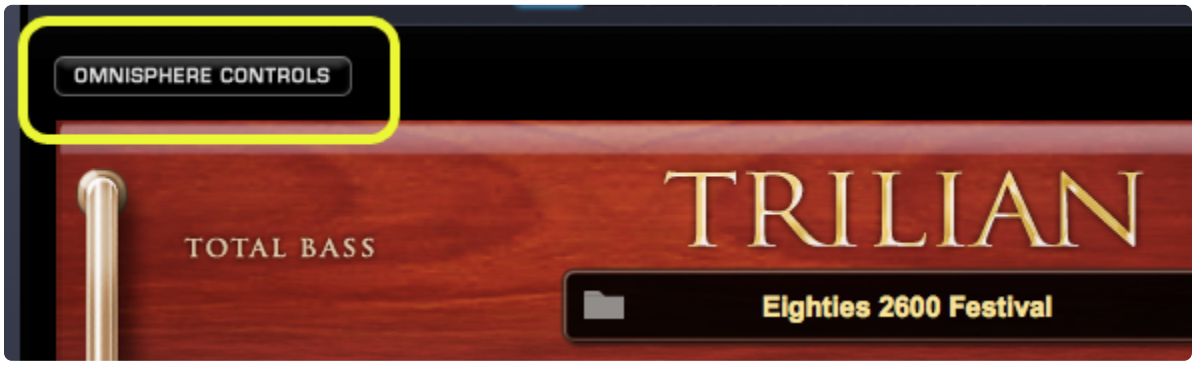


When either Keyscape or Trilian Patches are loaded in Omnisphere, the Main Custom Controls page will be automatically displayed when the Patch is loaded from the Mini-Browser or revealed when you close the Full Browser. Each Patch contains its own Custom Controls layout that brings together all the most useful parameters of that Patch in one page.

Satellites and Omnisphere Controls

To switch to the Omnisphere interface, just click on the “X” in the top left of Keyscape’s interface:

Or the “Omnisphere Controls” button in Trilian’s interface:



Conversely, selecting the Keyscape (or Trilian) button on the Omnisphere interface when a Satellite patch is loaded will return you to the Satellite instrument’s Custom Controls page:

4.12. Loading Third-Party Libraries

The most convenient method for sharing and/or adding third-party sounds is through the use of **.omnisphere** files (see **Sharing**), which contain all Patches and Soundsources being shared, as well as additional organization and information by the developer.

If your third-party library was delivered in the form of a folder containing individual Patches (.prt_omn files), there will be a few additional steps to follow to import them into Omnisphere.

For the new library to appear in Omnisphere, the folder containing the Patches must be placed at a **specific location** within the STEAM folder:

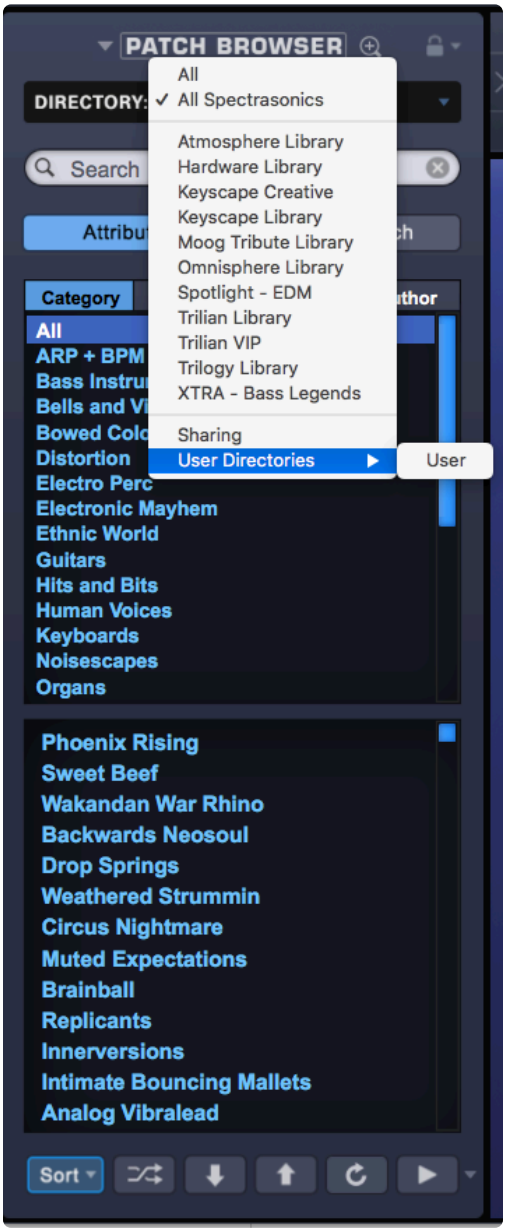
STEAM/Omnisphere/Settings Library/Patches/User

It's important to note that the entire folder must be placed there and not the individual sounds (.prt_omn files). So, it should look like this once the folder is moved:

STEAM/Omnisphere/Settings Library/Patches/User/(name of imported folder)

After the folder is moved to the correct location, Omnisphere's Patch Browser must be refreshed for the changes to take effect. The Refresh button is the circular arrow found on the Browser Footer of both the Full and Mini Patch Browsers similar—similar to the refresh page button you would find in a web browser.

To see the new sounds inside of Omnisphere, navigate to the “User Directories” sub-menu at the bottom of the **Directory** drop-down.



Lastly, since third-party libraries and Patches were not created by Spectrasonics, we cannot guarantee they will function properly inside of Omnisphere.

It is always best to purchase third-party libraries directly from a reputable developer.

If you've followed all of the steps above and you're still experiencing issues with a specific library, it's best to reach out to its developer for support.

5. The Main Page

The **Main Page** can be considered Omnisphere's "dashboard." It allows quick changes to the Patch that has been loaded and there are useful performance controls that appear here exclusively.

The parameter controls in the MAIN page affect the entire Patch (all four Layers).

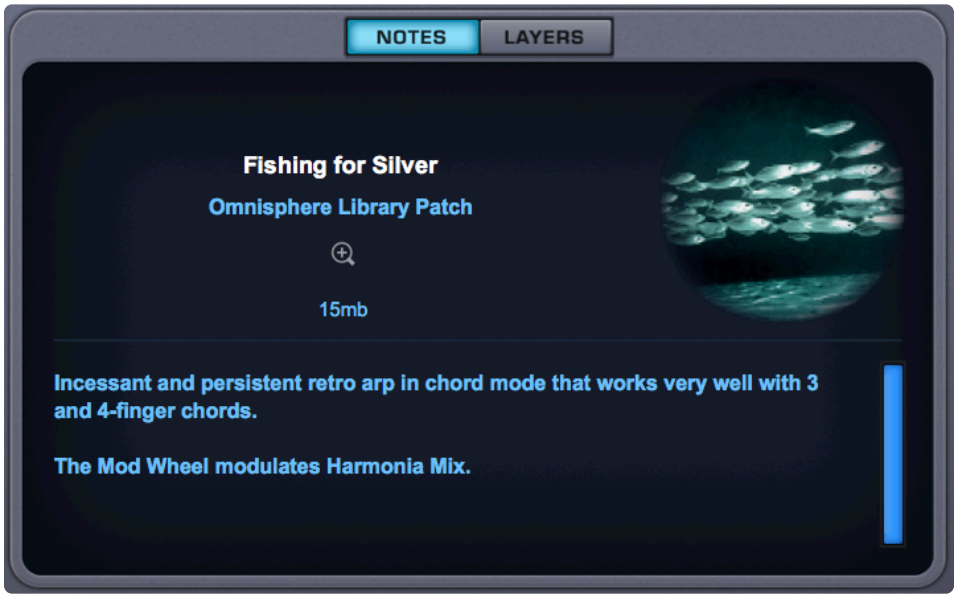
The large middle area shows the Notes View and the Layers View. The Notes tab provides access to the Patch Zoom, while the Layers tab allows you to see and select which Oscillator or Soundsource is used for each Layer and provides access to the Soundsource Zoom.

The controls on the left include the number of voices, Octave transpose, Scale, Clock Speed, Latch, Signal Path, Trigger Modes, Gain, MIDI Channel, Output routing, and Part Level, along with a Mute and Solo switch.

The Master Filter controls along the bottom allow you to select Highpass or Lowpass filters and adjust the Cutoff and Resonance.

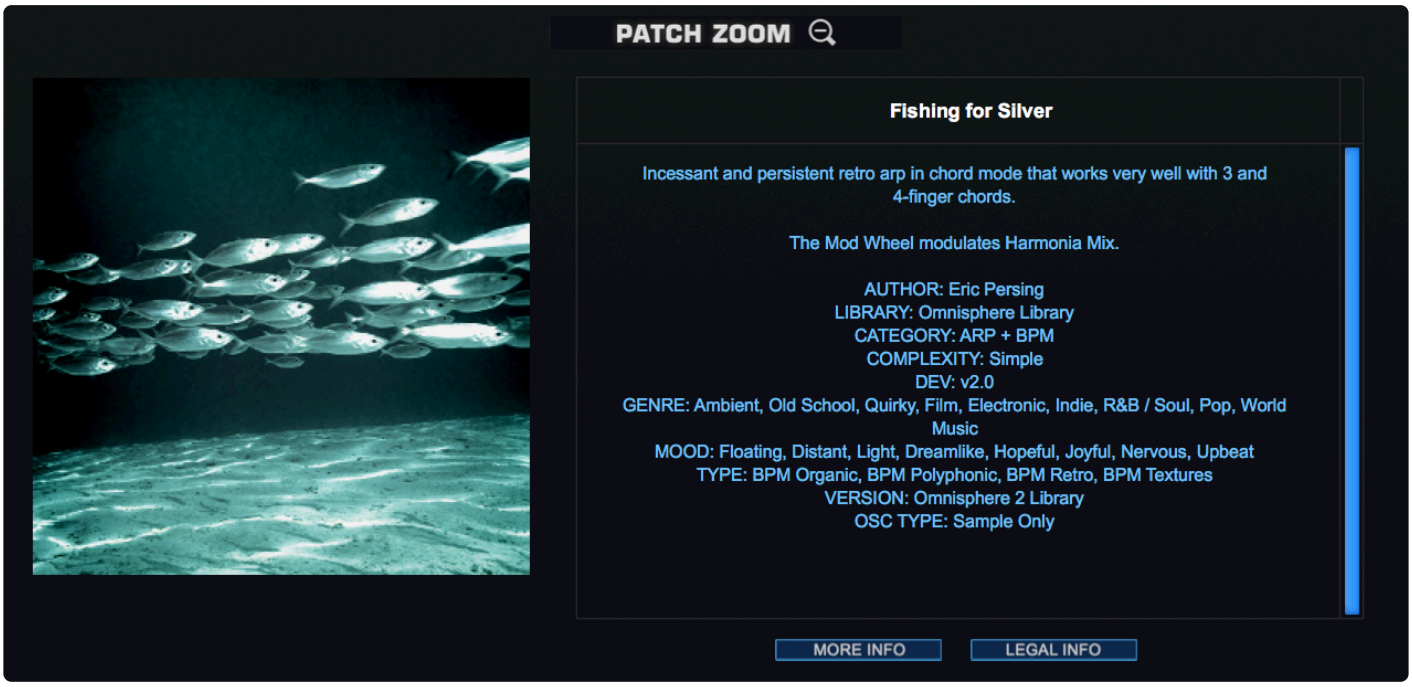
The controls on the right are for Velocity Curves, Solo/Glide modes, Pedal controls, and Pitch Bend controls. The V-Curve (Velocity Curve) section also has a Zoom option for customizing Velocity curves.

5.1. Notes View



The MAIN NOTES view provides a visual representation of the Patch, along with useful information and performance suggestions.

Click on the magnifying glass to access the Patch Zoom, for a more detailed description of the Patch, creative ideas for its application and performance, and other information such as the Patch author, as well as educational, historical, or background material that will be of interest.



Attributes are also listed here, providing information about timbre, mood, genre, and other descriptions of

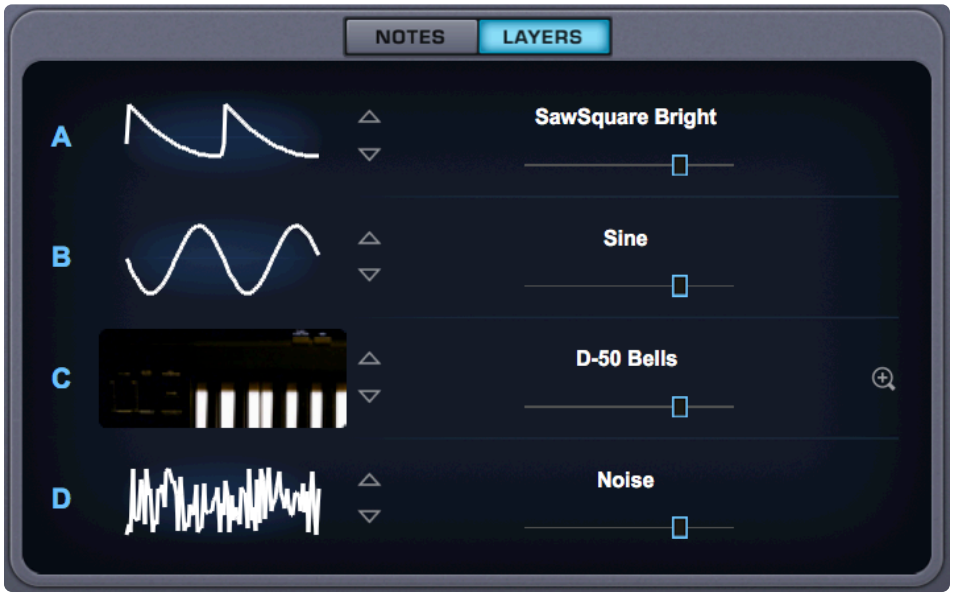
the Patch, thus enabling Patch selections to be filtered via Omnisphere's Browsers. You can edit these Tags using the powerful **Edit Tags** feature of each Browser.

The MORE INFO + WWW button can provide further information about the Patch and/or its author.

The LEGAL INFO button provides helpful information about the trademarks and copyrights for Omnisphere's Core Library.

5.2. Layers View

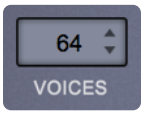
The LAYERS view provides the names and a visual representation of the Waveforms or Soundsources that make up the Patch, along with Volume faders for each Layer.
You can click on the Layer labels (A / B C / D) to turn that Layer ON / OFF.



Clicking on the waveform image opens the waveform menu. The stepper arrows allow you to step through Waveforms or Soundsources, and for Layers that use Soundsources. Clicking on the image takes you to the **Soundsource Browser** and the magnifying glass takes you to the **Soundsource Zoom** for that Layer.

5.3. Voices and Octave

Voices



The VOICES selector determines the available polyphony (number of simultaneous playable notes) in a single Part. Omnisphere is capable of up to 64 voices per Part.

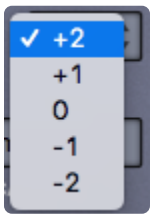
The higher the number of voices a Patch has available, the more CPU power it will use, so this is an important parameter in Omnisphere. The best approach is to set it only to the maximum number of notes that are needed for the given musical application.

The factory Patches have all been set conservatively, but if more polyphony is needed, you can always 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. If you let go of a note, but the tail is still sounding, it counts as a voice.

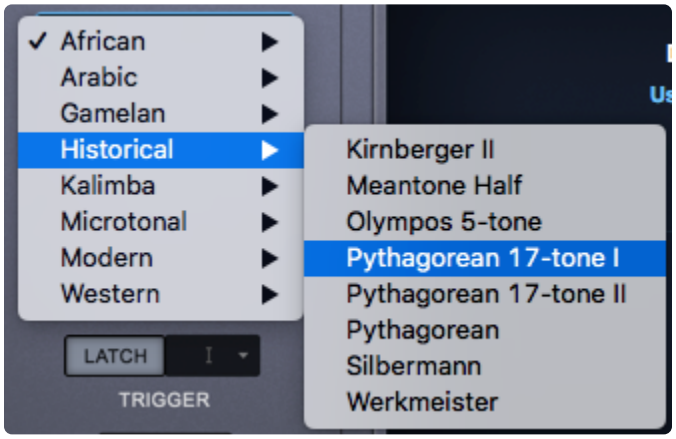
Octave



This function raises or lowers the overall pitch by transposing the Patch in 12 semitone (octave) increments. There is a total range of five Octaves.

Range -2 ~ +2 octaves

5.4. Scale



One of Omnisphere's versatile features is its ability to utilize different tunings including historical temperaments, microtonal scales, as well as user-created temperaments. Omnisphere can import any .TUN scale file.

Each Part can have a single Scale active at one time. Up to eight different Scales can be simultaneously loaded in a Multi (one per Part).

NOTE: Scales can be applied at the Global, Multi, or Patch level.

- **Global** allows you to set the scale or temperament for all Patches and Multis. You can select the scale from the menu and the name will be displayed in the Scale pane. The value is a universal user preference.
- **Multi** allows you to set a unique scale for each Multi. You can select the scale from the menu and the name will be displayed in the Scale pane.
  A unique value is used in each Multi. All Patches within a Multi share the same value.
- **Patch** allows you to set a unique scale for each of the eight Parts. Patch scales must be selected from the MAIN/Scale page. A unique value is used in each Patch (and is selected on the "Main" pane). When "Patch" is selected, the Scale pane will display a dash.

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: Middle C (C3 or C4 on the make of your controller) is the common reference for all alternate tunings and remains the same, no matter what Scale is loaded. Selecting "Multi" mode from the System Page / Master Tune menu allows you to save a unique Master Pitch in each Multi.

NOTE: The Menu button is highlighted in blue when the Scale is changed from Equal Temperament (default).

Temperaments

African

These ten scales are from African mallet idiophones and lamellaphones (commonly called kalimbas or moires), which feature metal tines that are plucked with the finger. The suffix **AD** indicates the notes are mapped in an **Ascending/Descending** arrangement where the scale is duplicated and mapped in opposite directions—starting from Middle C.

- Amandinda 240 cent – a whole-step scale in 240 cent steps instead of 200 cent steps.
- Amandinda AD
- Balafon 7-Tone
- Charimba 5-Tone scale AD
- Kunaka 7-Tone – named for mbira virtuoso John Kunaka
- Likembe 14-Tone
- Metepe Tuning AD
- Metepe Tuning
- Sanza 7-Tone
- Sanza 8-Tone

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 Oud (a lute-like instrument) and the fourth one 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, simple strings and horns, and vocals. These scales work 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 attempts were made to resolve the inherent “un-pure” nature of the 12-tone scale. As a result, some intervals and chords sound quite pure and others are more dissonant. The dissonant notes are sometimes called “Wolf intervals.”

- Kirnberger II – named for Johann Kirnberger, a student of Bach.
- Meantone Half – created in the 15th century, and utilized by J.S. Bach, among others. It arose from an attempt to create purer thirds by sacrificing the purity of the fifths.
- Olympos 5-tone – an ancient Greek pentatonic scale.
- Pythagorean – named for Pythagoras and based on perfect fifths. It has been used since 3500 BC. There are two 17-tone versions and a 12-tone version.
- Silbermann – named for Gottfried Silbermann, a 16th century keyboard builder.
- Werkmeister – named for Andreas Werkmeister, the composer who created it in the late 1600s.

Kalimba

Most of these scales were taken directly from the some of the Soundsources from Omnisphere’s Core Library. By loading one of the following tunings to the corresponding Soundsource, you’ll be able to play it with its original tuning. All of the Kalimba tunings use **Ascending/Descending** mapping.

- Blue Nile Alimba
- Bottlecap Zimbira
- Bright Marimbula
- Ceramic Kalimbadrum
- Coffee Can Kalimba
- Dark Zimbira
- Double Gourde Kalimba
- Electric MBira
- Guitaralimba
- Hohner Guitaret
- Kalimba-African AD
- Kalimba-Western AD
- Purple Rain Alimba
- Resonator Zim’bira
- Rhumba Box
- Ruby Moon Bass Alimba
- Sizzle Gourd Kalimba
- Small Gourd Kalimba

- Tanzanian Bird Kalimba
- Wood Key Marimbula

Microtonal

These scales add additional microtonal steps from just under an octave to as many as 48 tones PER OCTAVE.

- 11-Tone – One octave less one semitone
- 13-Tone – One octave plus a semitone
- 17-Tone – One octave and a fourth
- 19-Tone – One octave and a 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 150 years.

- Bohlen-Pierce – a 13-tone scale named for Heinz Bohlen and John Pierce
- Darreg Genus – a 9-tone scale named for Ivor Darreg, creator of the first re-tunable synthesizer in the 1950s.
- Ellis – a 24-tone scale named for Alexander Ellis and Hermann von Helmholtz, influential scientists of the late 1800s.
- Partch 29-tone – Henry Partch, an American composer of the 20th century. Partch created many alternate tunings, such as 43-tone, 37-tone and this 29-tone scale.* Carlos Scales – Synthesis pioneer Wendy Carlos created these five scales. The first three are microtonal and the last two are 12-tone scales.
- Carlos Alpha 18-tone
- Carlos Beta 22-tone
- Carlos Gamma 35-tone
- Carlos Harmonic C
- Carlos Super Just C

Western

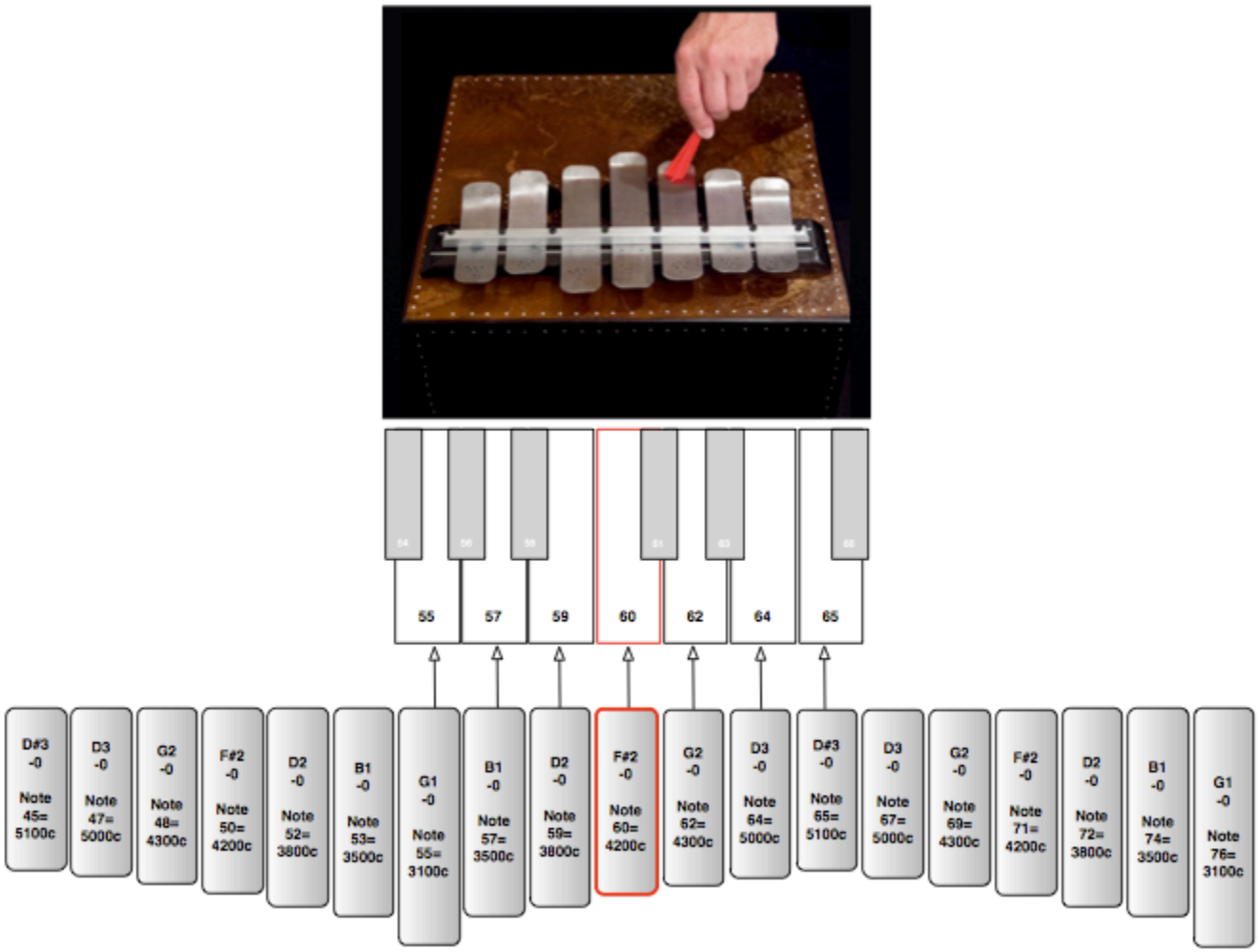
- Equal Temperament – the default tuning for most Western music (and for Omnisphere as well).

Ascending/Descending Mapping

Since the tines on mbiras and kalimbas are not typically arranged from low to high but rather are mixed in various ways, the best way to simulate the playing of these instruments on a standard keyboard is to

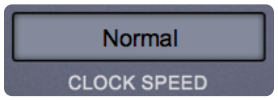
arrange the tuning in both directions from Middle C. These tunings are designed to be played only on the white keys. Some of the African scales and all of the Kalimba scales use this Ascending/Descending arrangement.

As you can see in the Rhumba Box example below, that instrument has seven tines, the lowest tine in the center. The Ascending/Descending tunings are mapped from low to high on the white keys (black keys are unmapped) and the middle note of the ascending scale is mapped to C60. The note order is then reversed in each direction.



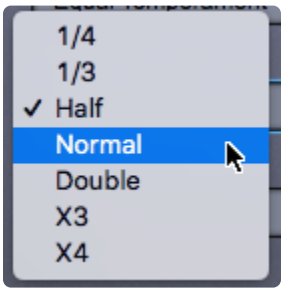
NOTE: In Ascending/Descending tunings the notes do not necessarily correspond to the key number to which they are mapped; they are simply grouped as they were tuned on the original instrument.

5.5. Clock Speed



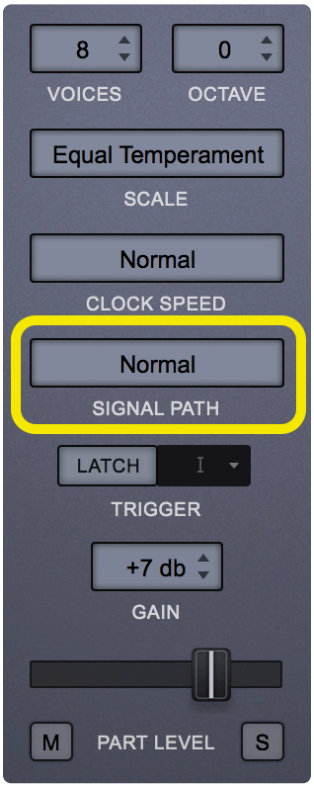
All of the time-based parameters in Omnisphere (Arpeggiator, Envelopes, LFOs, and FX) can be synchronized to the host's tempo, no matter the beat subdivisions.. For instance, a rhythmic Patch might have the Arpeggiator clock set to 16th-notes, the LFO set to the rate of a quarter note, and a delay effect unit with a delay time of a dotted 8th-note.

CLOCK SPEED provides an easy way to accomplish half-time or double-time for rhythmic Patches without the need to search out and individually modify all the rhythmic modulation sources, FX, and Arpeggiator settings.



CLOCK SPEED can be set to 1/4 or 1/3 of the host's tempo, as well as half-speed, normal, double-speed, X3, and X4.

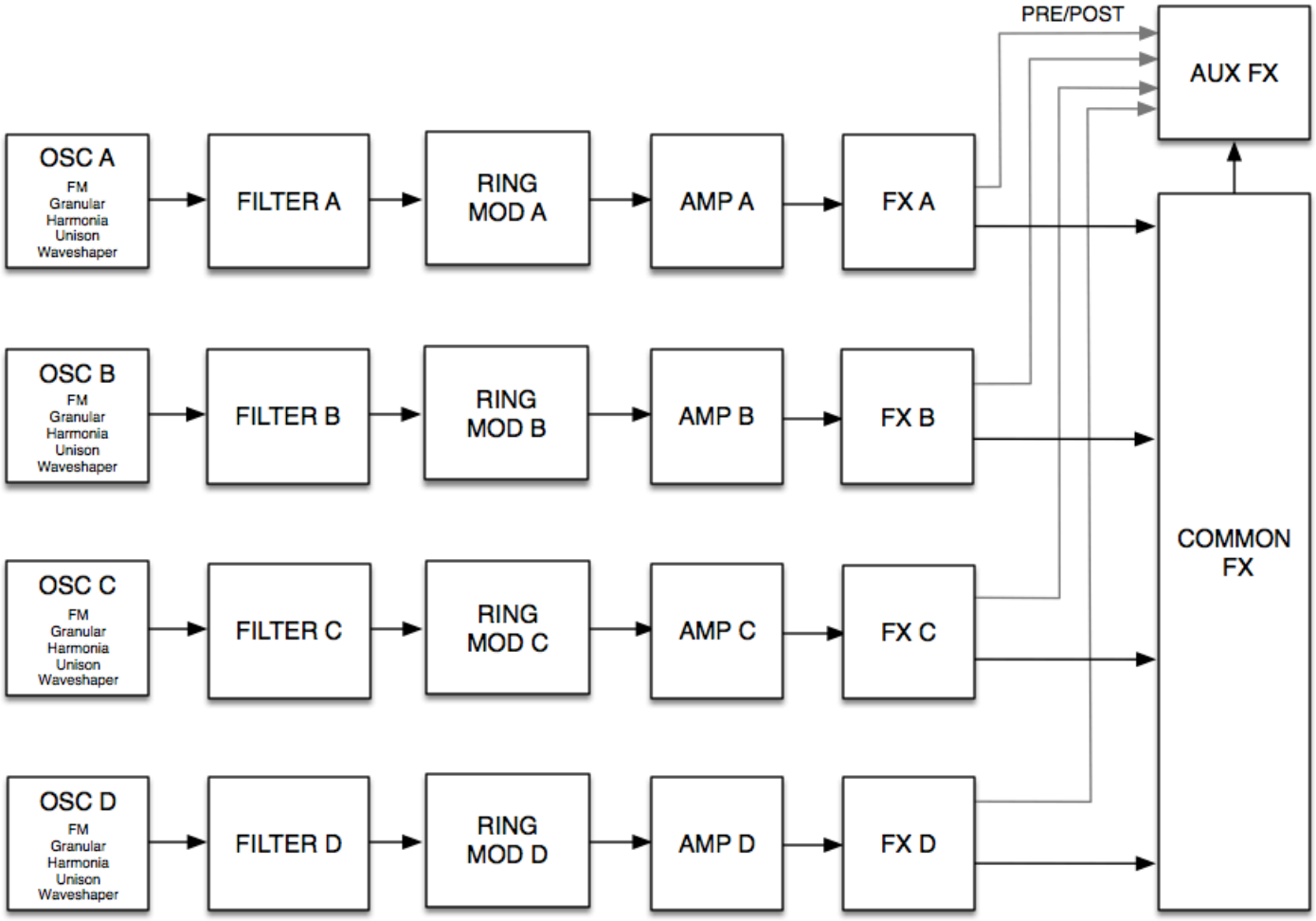
5.6. Signal Path



Whether you are using hardware or software, the path through which an audio signal travels defines its characteristics. The SIGNAL PATH menu presents two options: Normal and Shared.

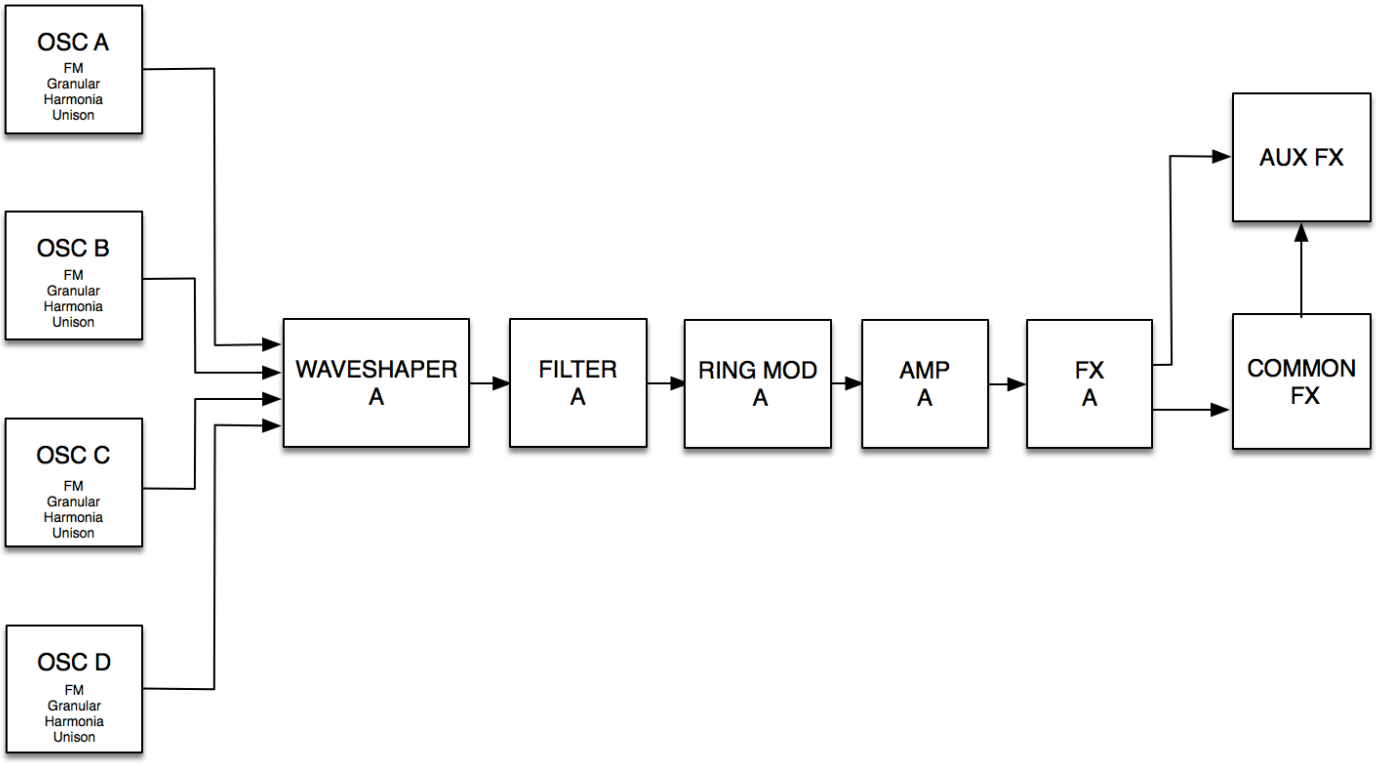
Normal

In Normal Mode, the signal paths of each of the four Layers are independent. Here, Omnisphere is at its most powerful.

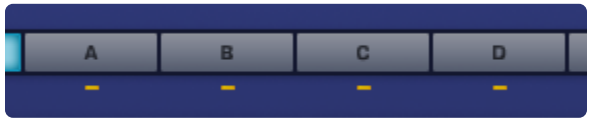


Shared

When Shared Mode is enabled, all four Layers share the signal path of Layer A, emulating the audio path of a hardware synth.



When using Shared Mode, the Layer LEDs will be yellow and shared sections are indicated by a yellow line under their name.



When Shared Signal Path is enabled, all audio processing is shared, with the exception of the following:

- FM
- Unison
- Granular
- Harmonia
- Timbre
- Shape
- Symmetry
- Hard Sync

- Coarse Pitch
- Fine Pitch
- Glide

The shared parameters can be accessed from any Layer and behave as though they are linked—the position of any shared parameter is reflected in all Layers. As an example, if you move the Filter Cutoff in Layer D, you will hear the result in all Layers.

There are certain advantages to using Shared Mode. Often, this simpler, more streamlined approach is all that is needed for Patch design and you gain the additional benefit of a substantial reduction in CPU usage.

NOTE: A Patch may sound different when changing the Signal Path. While not always, sometimes this can create interesting and unexpected results!

5.7. Latch and Trigger Modes

Latch and Trigger Modes

Latch and Trigger Modes extend the performance capabilities of Omnisphere, especially when used together with LIVE MODE and/or STACK MODE. Used together, they enable a wide range of creative performance, live remixing, and composition techniques.

%(ManualNote)NOTE: Be sure to check out the in-depth sections of the Reference Guide for using Latch & Trigger modes together with **LIVE MODE.** and **STACK MODE**

NOTE: Any latched notes will stop as soon as the host transport stops.

LATCH

The LATCH button allows you to toggle LATCH ON / OFF for the selected Part.

When LATCH 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. If you are already holding sustained notes when you enable LATCH, those notes will be latched. Any latched notes will stop as soon as the host transport starts or stops.

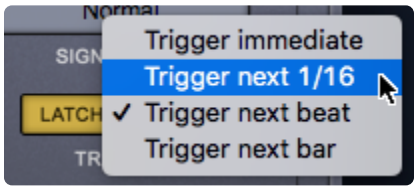
NOTE: Disabling LATCH for a Part while it's playing will immediately send an "All Notes Off" message to the Part. The tails from FX and release stages from envelopes will continue to decay. The "All Notes Off" message applies only to notes playing on that Part.

NOTE: A Part's LATCH status can also be viewed or changed from the LIVE MODE or STACK MODE pages.

Trigger Modes

Trigger Modes enable real-time quantization of incoming MIDI notes, so that Parts will always play in sync. This makes it 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 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 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.

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.

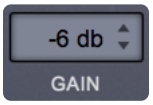
Next Beat: This option delays playback to the next beat. If incoming MIDI notes arrive ahead of the next beat, the delay is a maximum of one beat. Next Beat mode makes it easy to trigger rhythmic patches in perfect sync, and when used together with Latch Mode, for layering phrases that are quantized 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.

5.8. Gain



The output level of the part can be controlled in 1db increments. The default is -6db.

Range +10db ~ -24db.

NOTE: The GAIN Menu is MIDI-Learnable.

5.9. Part Level, Mute / Solo

Part Level

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 ~ +9.54dB

Mute and Solo

- **M** (Mute) – Silences the audio of the Part.
- **S** (Solo) – Isolates the audio of the Part, muting any other active Parts.

NOTE: The Part Level, MUTE, and SOLO parameters are saved with the MULTI, not the Patch.

5.10. Velocity Curve

The **Velocity Curve** allows you to refine and scale the MIDI velocity information coming from your controller as it enters Omnisphere to get the best response for your playing style.

Omnisphere has four velocity curve presets available on the Main Page. The first curve is linear, the second and third are exponential curves and the fourth is flat. These preset 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 a more intense touch and provides the widest musical dynamic range.

Flat

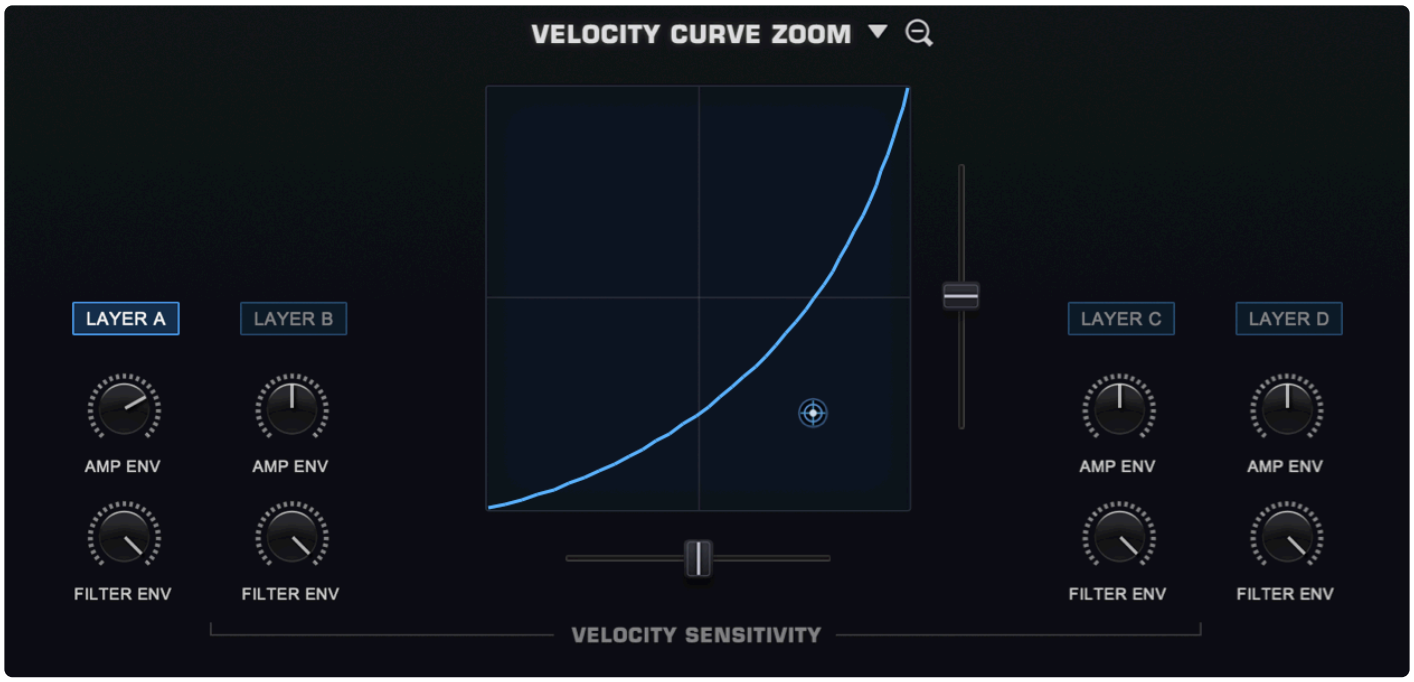
Omnisphere will receive the same velocity value with this flat curve. Useful if a totally consistent and predictable result is desired.

NOTE: These are just the four presets quickly available from the Main Page. Go to the Velocity Curve Zoom to access dozens more created for the most popular controller keyboards or to edit and/or save your own.

Velocity Curve Zoom

Click on the Velocity Curve Zoom button to access precise editing tools for the Velocity response of the Patch.

5.10.1. Velocity Curve Zoom

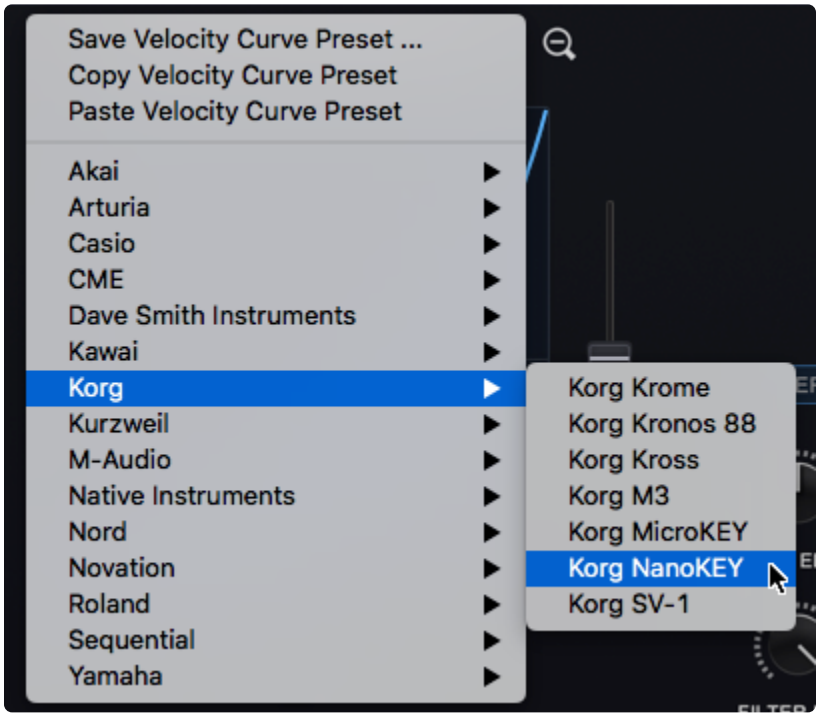


Clicking the Zoom icon next to the different Velocity Curve presets opens the **VELOCITY CURVE ZOOM**. This page provides detailed controls to modify the velocity curve of a Patch. The Velocity curve settings are global to the Part—meaning they will be applied to all layers, but the amount applied to each layer can be controlled independently by the VELO Depth knobs on the left of the overview section.

You can save, copy, and load preset Velocity curves from the drop-down menu next to the VELOCITY CURVE ZOOM header.

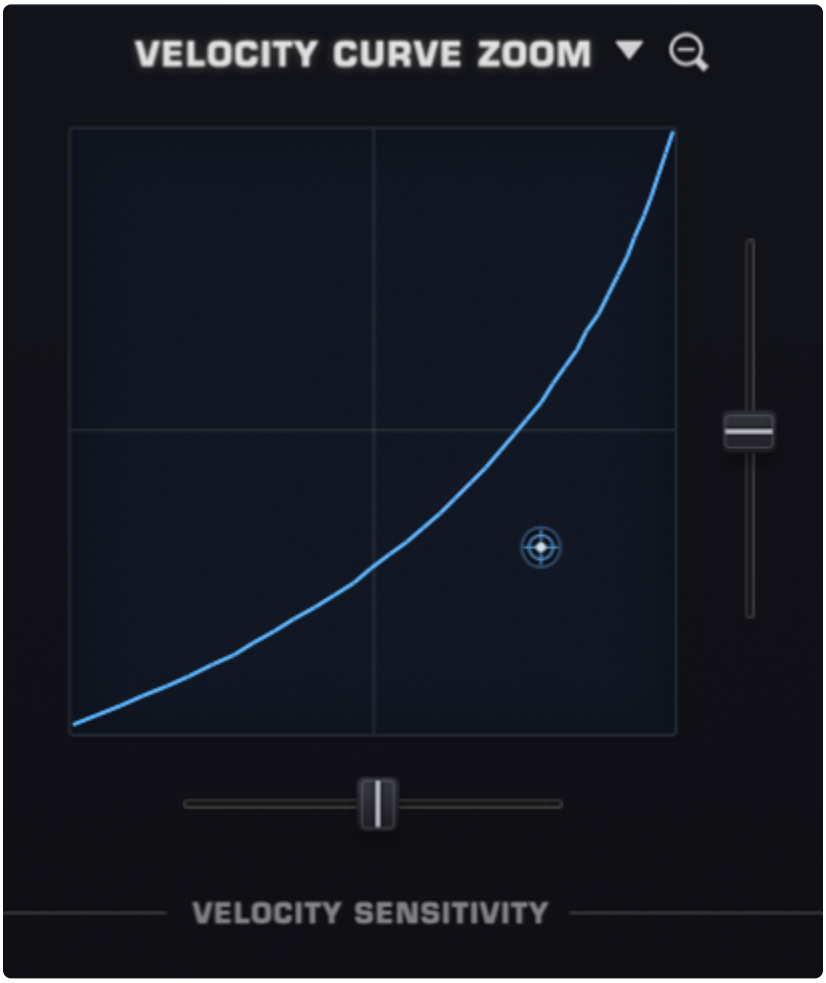
VELOCITY CURVE PRESETS

Omnisphere includes a variety of velocity curves specifically optimized specifically for the most popular keyboards and controllers. Select the curve that matches your keyboard from the VELOCITY CURVE ZOOM pull-down menu. **Here is the list of presets.**



NOTE: You can save your own custom velocity curves as presets from this menu.

CURVE DISPLAY



Based on a simple X-Y pattern, the Velocity Curve converts the incoming MIDI velocities into the MIDI velocities sent to the plug-in, effectively changing X to Y in a manner you can scale and control.

The horizontal axis and represents the MIDI velocity that Omnisphere receives from your controller. Moving the horizontal slider (SLOPE) to the right will scale lower incoming velocities and convert them to higher velocities as if you were playing harder.

The vertical axis represents the MIDI velocity value used to trigger Omnisphere. Moving the vertical slider (OFFSET) will control the offset and range of the converted velocity.

The CONTROL POINT allows you to modify the shape of the velocity curve from linear to convex or concave for even greater sensitivity. It can be dragged anywhere in the grid and sets the curve's exponential value. In other words, you can set how quickly and at what point in the velocity range there is an increase or decrease in intensity.

AMP ENV (All Layers)

The AMP ENV (Amplitude Envelope) knobs control how much the Amplitude Envelope is affected by the Velocity Curve in each Layer. The lower the setting, the less effect velocity will have on the output of the Amplitude Envelope.

FILTER ENV (All Layers)

The FILTER ENV (Filter Envelope) knobs controls how much the Filter Envelope is affected by the Velocity Curve in each Layer. The lower the setting, the less effect velocity will have on the output of the Filter Envelope.

5.10.2. Velocity Curve Operation

Once you understand the Omnisphere VELOCITY Curve settings, you'll find them easy to use. You can customize and adapt existing ones, as well as create and save your own.

ADJUSTING VELOCITY CURVES

When adjusting velocity curve settings it's important to keep in mind that all controllers are not created equal! The best ones have a high resolution in MIDI Velocity output and can respond in subtle ways, allowing for a wide range of velocities, an even response, and more nuanced playing.

Some controllers have a lower resolution and skip certain velocities, including leaving out the lowest and highest velocities and won't play soft enough or loud enough to access the full velocity range of the sound.

Velocity curves can also be a matter of personal taste, based on your playing style. You might even find you like different curves for different genres of music. There is no right or wrong and it's wide open for experimentation!

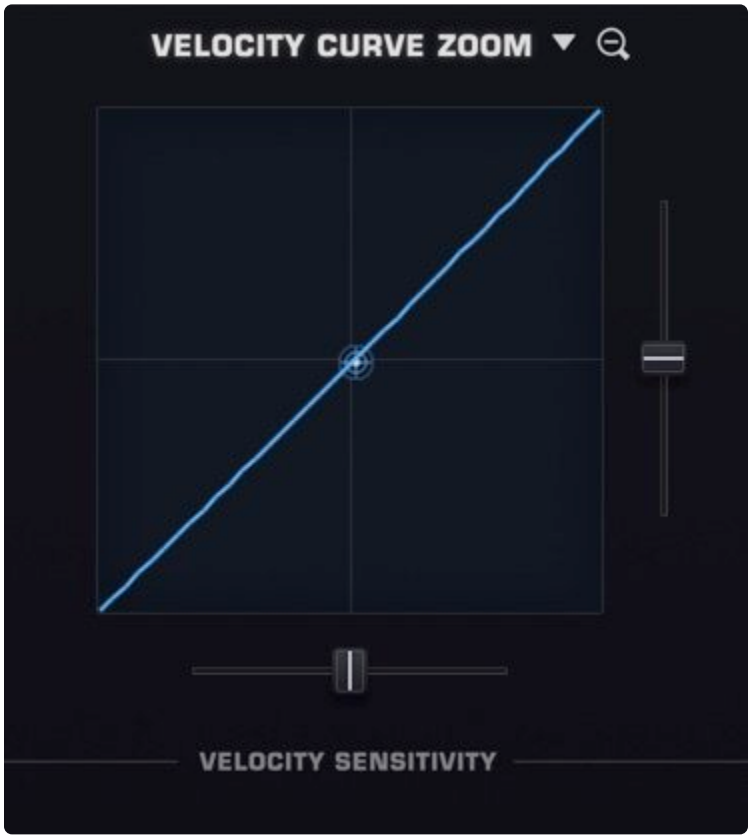
NOTE: This applies to all controller types, not just keyboard controllers.

We've carefully created custom Velocity Curve presets for the most popular MIDI keyboard controllers, but if you have a controller that isn't yet on the list, or you're just interested in customizing yours for a certain genre or playing style, please see the following examples.

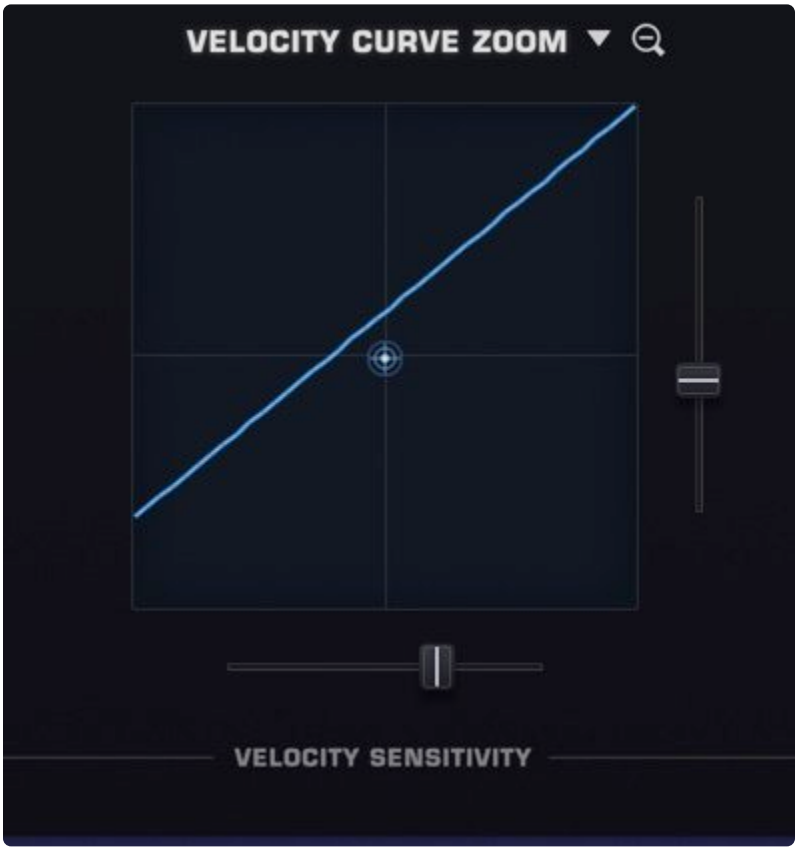
VELOCITY CURVE EXAMPLES

The two axes represent MIDI velocities 1~127. The farthest right / highest is 127, the mid-point lines are 64, and the farthest left / lowest is 1.

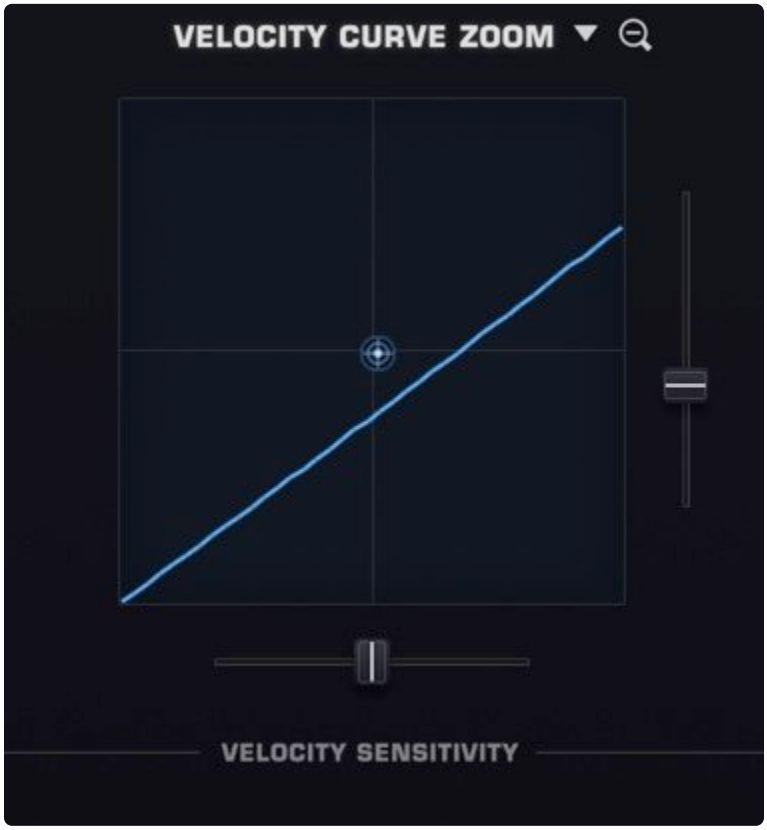
In the default linear example below, the incoming MIDI velocity matches the converted MIDI velocity (no offset or scaling). The mid-line along the horizontal axis represents a MIDI velocity of 64. It matches the mid-line of the vertical axis, which is also 64. Each point along the horizontal axis matches its counterpart on the ertical axis.



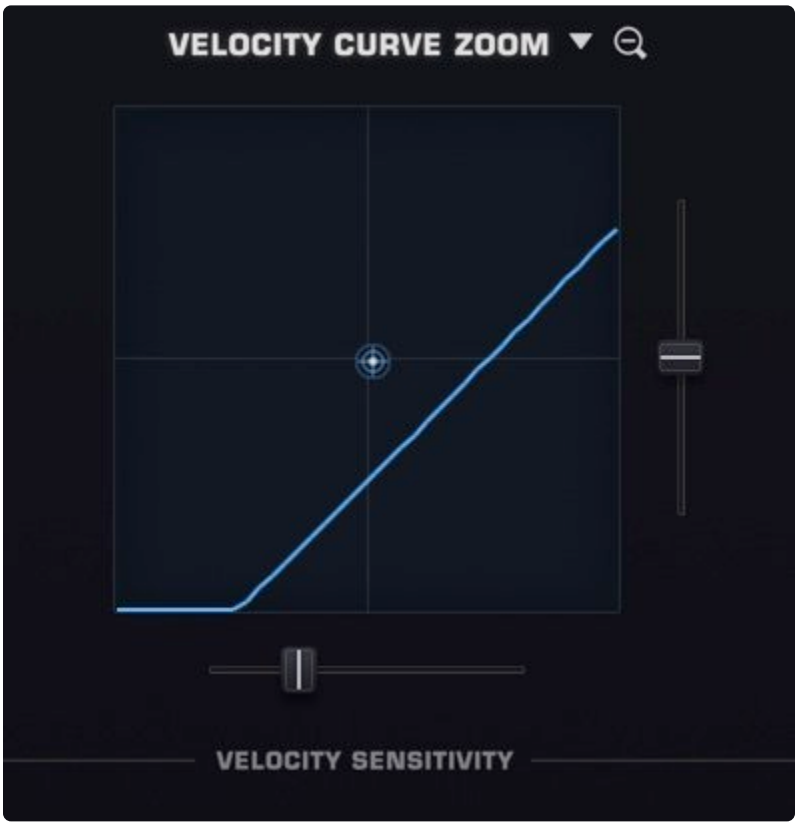
In this example, the velocity range is compressed. The lowest / quietest MIDI velocity inputs (from approximately 1~29) are raised to around 30 and above, and the range extends up to 127(loudest).



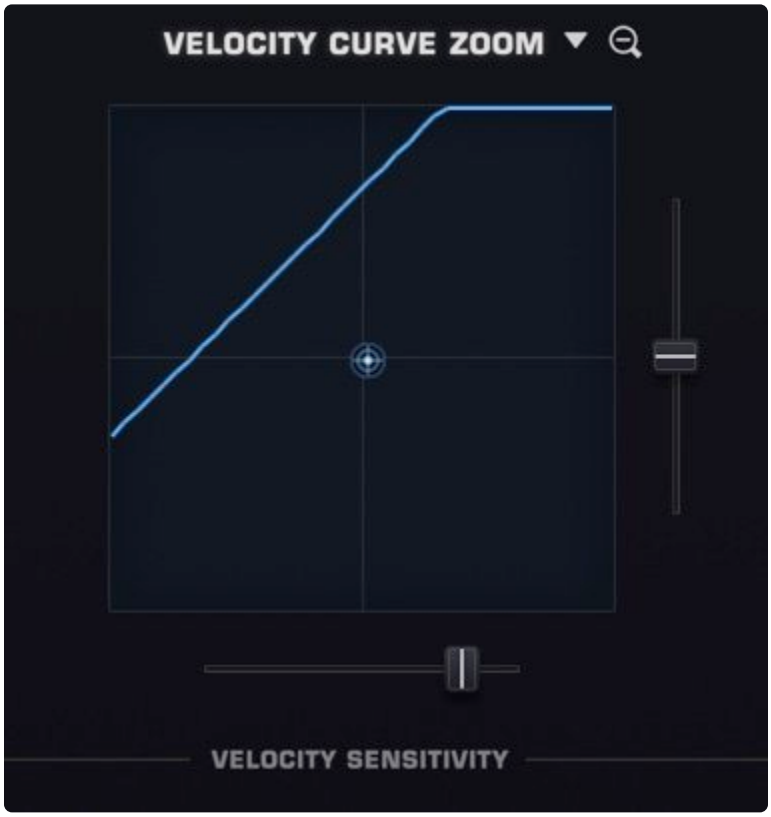
Here, the MIDI output is compressed downward—any incoming velocities above 90 are constrained to 90.



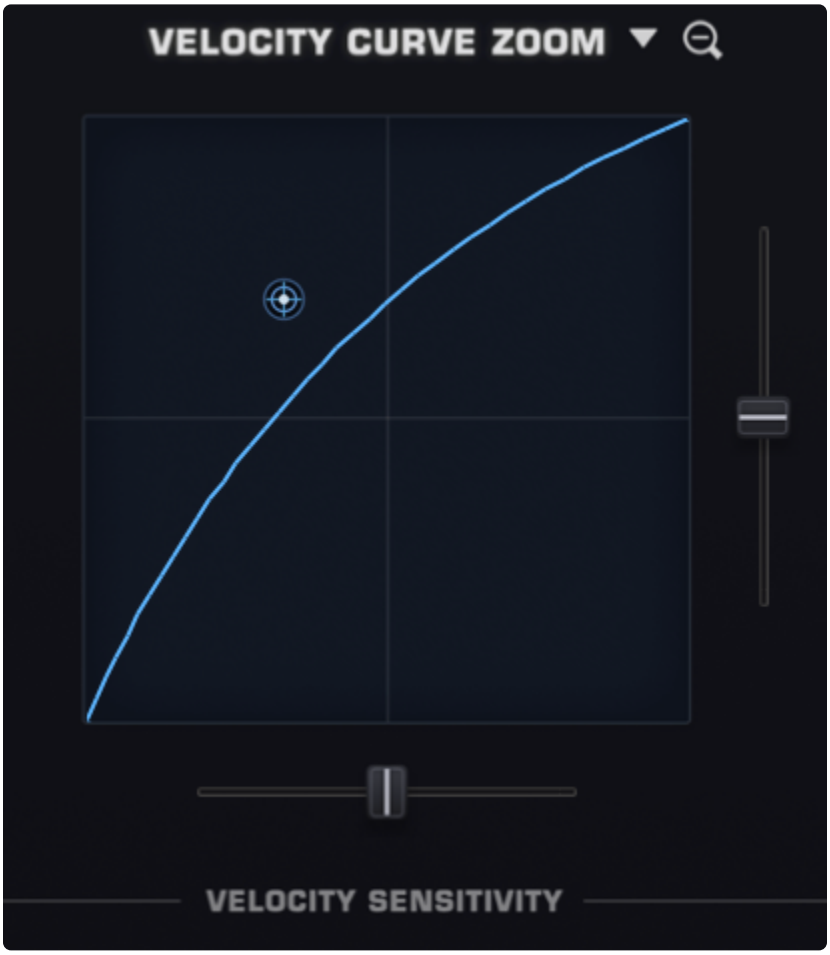
In the example below, any input velocities below around 30 are scaled down to 1 and incoming velocities above 30 are gradually increased and converted to a maximum of around 100.



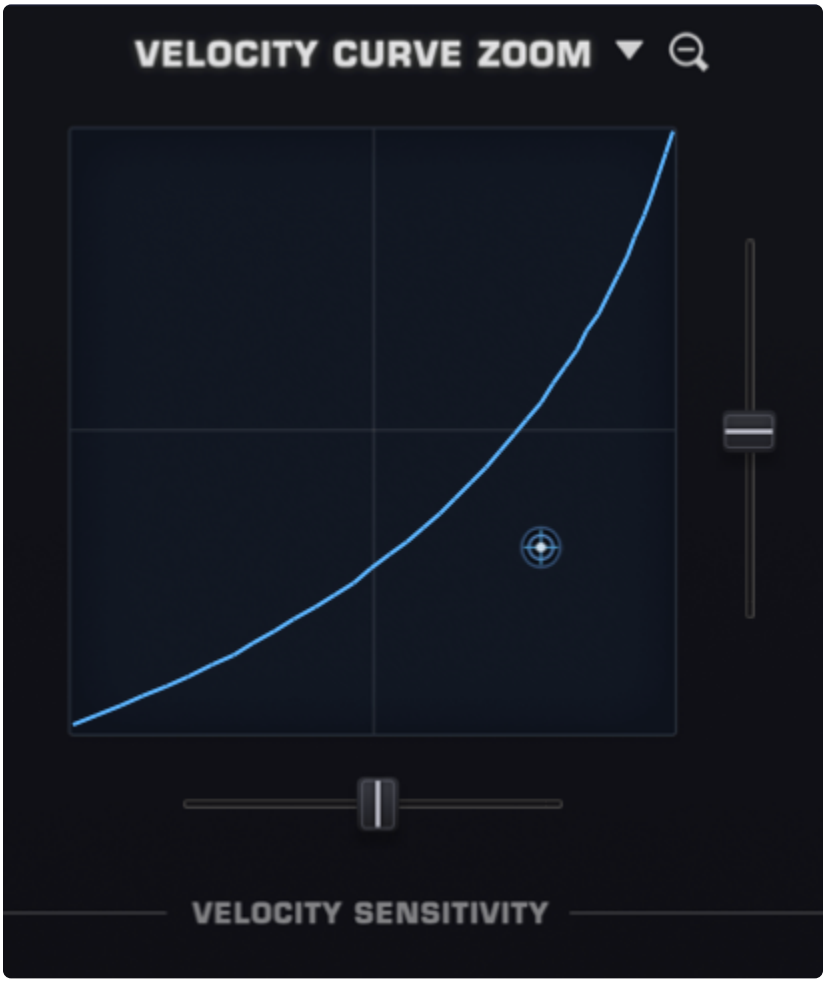
In this example, the quietest input velocities are scaled up to start at around 40 and anything over around 75 will be converted to 127.



Your controller might not be sending mid-range velocities in a linear way. You find that when you play, you hear mostly loud and soft velocities and you'd like to even out your controller's response. In the example below, by moving the Control Point up and to the left, you have scaled up the mid-range velocities to compensate for the velocities your controller is skipping.



Conversely, if you find that when you play, the medium velocities are too pronounced, drag the Control Point down and to the right until it feels more even.



Used together, the Control Point, the OFFSET, and the SLOPE sliders can create a wide variety of curves.

NOTE: Of course, your ear should always be the final judge!

5.10.3. Velocity Curve Presets

V-Curve Supported Controllers

Akai Advance 25
Akai Advance 49
Akai Advance 61

Akai MPK49
Akai MPK88
Akai MPKmini2

Arturia Keylab 49
Arturia Keylab 61
Arturia Keylab 88

Casio Privia PX-330BK
Casio Privia PX-350M
Casio Privia PX-760
Casio Privia PX-860

CME X-Key

DSI OB-6
DSI Prophet 12

Kawai M8000
Kawai MP9000

Korg Krome
Korg Kronos 88
Korg Kross
Korg M3
Korg MicroKEY
Korg NanoKEY
Korg SV-1

Kurzweil PC2X
Kurzweil PC88

M-Audio Axiom 49
M-Audio Keystation 88
M-Audio Keystudio

NI Kontrol S25
NI Kontrol S49
NI Kontrol S61
NI Kontrol S88

Nord Electro 5D
Nord Lead
Nord Piano 3
Nord Stage 2

Novation Impulse 49
Novation Impulse 61
Novation Launchkey
Novation SL MkII

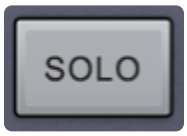
Roland A-50
Roland A-80
Roland A-88
Roland A-90
Roland FA-08
Roland JD-XA.
Roland Juno DS88
Roland Jupiter 80
Roland RD-800
Roland VR-09

Sequential Prophet 6

Yamaha CP33
Yamaha CP4
Yamaha MM8
Yamaha MO8
Yamaha Montage 6
Yamaha Montage 8
Yamaha Motif ES8
Yamaha Motif XS6
Yamaha MOXF8
Yamaha NP-32
Yamaha P-115
Yamaha P-255
Yamaha P-45
Yamaha S90XS
Yamaha YDP-181

5.11. Solo and Glide

SOLO



SOLO allows the Patch to play monophonically and is the most effective when playing lead or bass lines. It works in conjunction with the LEGATO button to the left of it, which determines how the sound is triggered.

LEGATO

Legato is a triggering mode that prevents the Envelope from being re-triggered with each new note. If LEGATO is not selected, then each new note will re-trigger the Envelopes on each Layer. When Legato is enabled the Envelopes are not re-triggered with each new note.

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 allows the Pitch to slide from one note to the next. Omnisphere's Glide function is polyphonic, affecting each note separately.. Selecting the SOLO button above it enables monophonic Glide.

The control slider next to the GLIDE button determines the rate at which the pitches slide from one note to the next. The higher the control fader is set, the slower the Glide between notes.

Range 0 ~ 8 seconds

GLIDE LEGATO

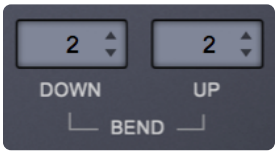
Glide Legato will change the criteria for when GLIDE is enabled. If legato notes are played, then GLIDE will be activated. If quick, staccato notes are played, the Glide effect will not be heard.

GLIDE A, B, C, and D (LAYER BUTTONS)

GLIDE can be used on just one Layer if desired. By default, when GLIDE is selected, all Layers will be active. If no layer is selected, no GLIDE effect will be heard, and the GLIDE button will turn itself off.

TIP: Gliding on one Layer only can be an interesting musical effect.

5.12. Bend



While many synthesizers' pitch benders allow only the same amount of pitch bend in both directions, Omnisphere has the ability to control the Pitch Bender's range independently for both up and down movements. This setting is for the Patch.

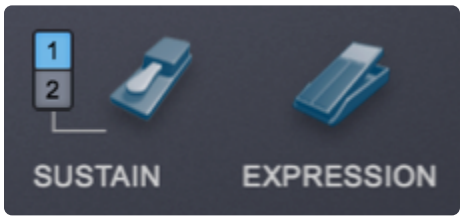
DOWN

Determines how much the pitch will bend down using the MIDI controller's Pitch Bender.
Range 0 ~ 24 semitones

UP

Determines how much the pitch will bend up using the MIDI controller's Pitch Bender.
Range 0 ~ 24 semitones

5.13. Sustain and 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, your Sustain pedal will behave normally. Notes played then released will be held, and additional notes played will overlap and sustain when the pedal is depressed. Sustains will be heard until the sound decays or the pedal is released.

Alternate Sustain (Mode 2)

- When the Alternate Sustain Mode is selected and your Sustain pedal is depressed, any note played and 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.

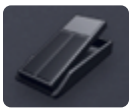
Sustain Pedal Icon

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



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 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.

5.14. Master Filter

Omnisphere's MASTER FILTER controls the entire Patch, meaning that it affects all Layers. The MASTER FILTER is separate from Omnisphere's dedicated Filter section on the LAYERS page and is designed as a simple tone control. The extensive Filter section in the LAYER pages should be used for more serious and surgical sound-shaping.

TYPE (LPF / HPF)

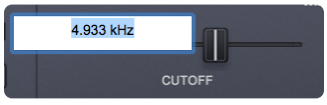
The MASTER FILTER has two available filter modes; LPF and HPF. The HPF (Highpass Filter) removes low frequencies from the sound, allowing high frequencies to "pass." The LPF (Lowpass Filter) removes high frequencies from the sound, allowing low frequencies to "pass."

NOTE: LPF or HPF are exclusive and cannot be enabled simultaneously.

CUTOFF

The primary function of the filter CUTOFF is to remove, hence "cut off," frequencies from the sound. Depending on which Filter Type is chosen, the Cutoff control will remove different frequencies in various ways. If a Lowpass Filter is used, moving the slider to the left will remove the higher frequencies. If a Highpass Filter is used, the opposite will occur.
As you move the slider, the frequency will be displayed.
Range: 0.050 kHz ~ 19.000 kHz

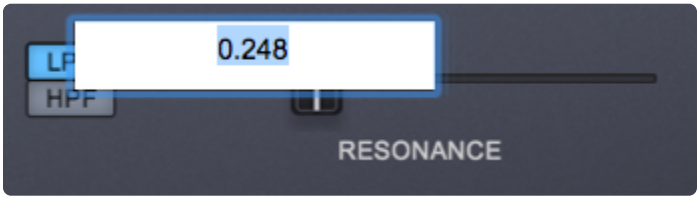
Right-click and select "Enter Parameter Value" to type in a numerical value.



RESONANCE

The RESONANCE slider controls the entire Patch, meaning it affects all Layers. RESONANCE (sometimes called “Q”) adds emphasis to the cutoff point of the MASTER FILTER. Because it works with the MASTER FILTER, it will have no effect on the sound if the MASTER FILTER is set to minimum value.
At minimum settings, little or no resonance will be heard. Moving the slider to the right will add more resonance to the sound.
As you move the slider, the numerical Q value will be displayed.
Range: 0.000 ~ 1.000

Right-click and select “Enter Parameter Value” to type in a numerical value.



NOTE: The Master Filter is not capable of self-oscillation, but the Dual-Filter on the LAYER 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.

5.15. Importing .tun Files

We've made it simple to import your own **.tun** scale files into Omnisphere.

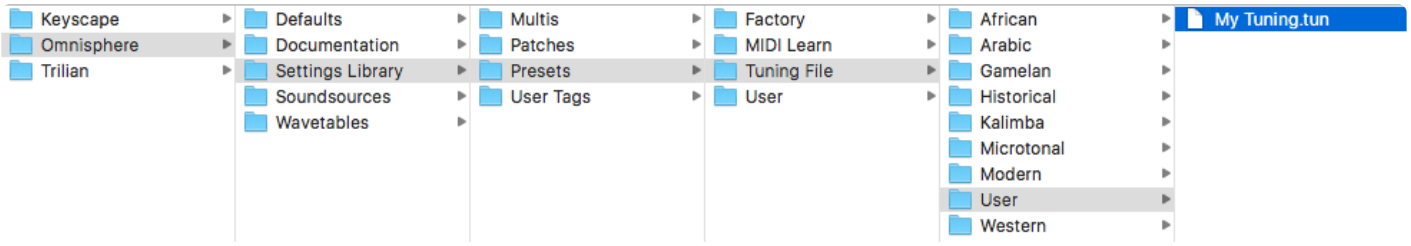
Here's how:

1. Create a User folder in the Tuning File folder located here:

- **MacOS**
  HD/Users/Username/Library/Application Support/Spectrasonics/STEAM/Omnisphere/Settings Library/Presets/Tuning File

- **Windows**
  C:\ProgramData\Spectrasonics\STEAM\Omnisphere\Settings Library\Presets\Tuning File

2. Drag and drop your .tun files into the Tuning File folder you've created.



3. Locate the Scale menu on the Main page of Omnisphere 2.

4. Select your new .tun file from the Scale menu.

NOTE: The SCALE directory is updated dynamically—there is no need to refresh.

6. The Orb

The innovative Orb feature is both a remarkable sound manipulation tool and an intuitive performance interface—it can be thought of as a “circular controller.” With a single click of the mouse, it is possible to instantly manipulate a sound in a wide variety of ways. Best of all, the Orb automatically works with every Patch a user has, there’s no setup necessary.

The Orb is a fun and intuitive way of introducing movement and animation into the sound by simply moving the Orb cursor with a mouse, a MIDI controller or in the case of an iPad or Windows Multitouch, with fingers directly on the Orb itself. As the Orb moves around the concentric circles, it morphs between automatically generated parameter scenes in Omnisphere’s STEAM engine in a highly intelligent and musical manner—all Patch-dependent—manipulating the sound in subtle or radical ways appropriate to that particular Patch.

The Orb’s unique dynamic results are based on Radius and Angle controls. The Angle defines which scenes or sets of parameters it manipulates, and the Radius defines the intensity of those manipulations. That means the closer to the edges of the circle the cursor is moved, the more dramatic the changes will be. Moving the cursor to the center of the Orb or pressing the **CLEAR** button returns to the sound of the original Patch. The overall intensity of the sound modifications can be determined with the **DEPTH** slider.

If you don’t like what the Orb has created, a complete new set of manipulations can be chosen by simply rolling (clicking) the **DICE** button, which instantly creates a brand new group of intelligent sonic modifications and effects to try. There’s no limit to how many serendipitous sonic variations the DICE can create—opening up the vast power of the STEAM engine to every user, regardless of synthesis knowledge. For advanced synthesists seeking maximum flexibility, the Orb can also be setup manually and used as a new modulation source in Omnisphere’s Mod Matrix.

The **INERTIA** controls of the Orb allows the creation of a ‘movement trail’ after letting go of the Orb, just like a ball might roll and bounce off the walls of a circular enclosure, adding a musical symmetry to the “performance” of an Orb interaction. The **ATTRACTOR** button causes the ORB cursor to behave like a non-linear pendulum.

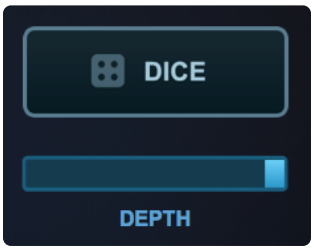
It is also possible to Record performance movements directly into the Orb and play the performance back in sync with the host. The Orb’s movements and sonic results can be saved within a UserPatch, User Multi or the host’s session for later recall. The movement of the Orb can also be **automated** in the host. Each part in Omnisphere has its own Orb, which means that multiple Orbs can manipulate different sounds simultaneously.

The ideal control surface for Omnisphere’s Orb are the multi-touch interface of the **Omni TR** iPad app, but the Orb can also be used with a standard mouse, trackpads, Windows Multitouch, and **MIDI controllers**.

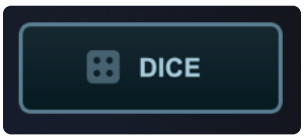
ORB POWER SWITCH

This switch will turn the Orb ON or OFF. Note that turning the Orb ON will activate some processing modules and enable FX units (in the Aux Rack) in your Patch in order to ensure moving the cursor creates some interesting sounds. Turning the Orb OFF deactivates any processing modules and removes any FX that were instantiated when it was ON.

6.1. Dice & Depth



DICE



Pressing the DICE button will instantly create a brand new group of intelligent sonic modifications and effects to try. There's no limit to how many serendipitous sonic variations the DICE can create—opening up the vast power of the STEAM engine to every user, regardless of synthesis knowledge. You will be presented with a different idea or point of departure each time you press it.

NOTE: The DICE button is MIDI-Learnable.

NOTE: It's important to save your Patches once you are satisfied with the Orb's changes. Once you press the DICE button or select a different Patch in that Part, Omnisphere will not be able to recall any previous Orb settings unless they have been saved with the Patch or with the host's session.

NOTE: It is recommended to save these changes to a User Patch for use in other sessions.

ORB DEPTH

The overall intensity of the Orb's sound-manipulation can be controlled with the DEPTH slider. The higher the DEPTH slider is set, the more pronounced the changes will be to the Patch.

6.2. Inertia and Attractor

Inertia and Attractor are key Orb parameters since they control the movement of the cursor, which directly affects the sonic results.

INERTIA

Inertia Switch

This turns the Inertia ON or OFF.

Inertia Amount

The Inertia Amount controls the speed and duration of the cursor's movement after it is set in motion. The higher the Inertia Amount slider is set, the faster and longer the cursor will bounce around. When turned all the way up, the cursor will continue to move indefinitely.

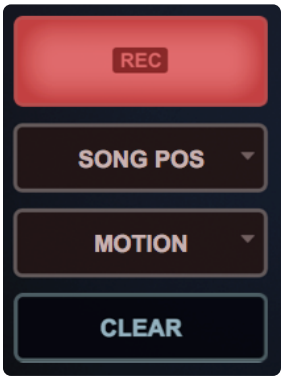
ATTRACTOR

The ATTRACTOR button causes the ORB cursor to behave like a non-linear pendulum. The trajectory will lead to points that are arbitrarily far apart.

Attractor Switch

This turns the Attractor ON or OFF.

6.3. Recording



The Orb's movements, whether manual or INERTIA-based, can be captured with the Orb's built-in recorder. These movements can be saved as part of the Patch. This simple feature adds a dynamic quality to a sound that is unique and quite difficult to achieve with conventional controllers.

By using the RECORD button and the menus below it, the built-in recorder can be programmed to capture a general idea of the movements (MOTION) or to record precise movements over 1, 2 or 4 bars, relative to your sequence. The recordings can be set to play back synced to **LEGATO** or **SONG POSITION**.

In all cases, the Orb creates a looping cycle by smoothly connecting the trajectory of the end with the beginning of the move, no matter how complex.

Recording Modes

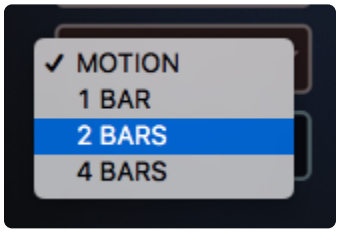
The four Recording Modes are: MOTION, 1, 2, or 4 BARS.

MOTION

- MOTION will capture the speed and trajectory of the Orb for a few seconds and then generate a full orbit cycle out of those movements. MOTION mode is not intended to record precise movements that need to be synced with the song and tempo of the host.
- To initiate recording, press the red RECORD button. The recording will begin as soon as the the cursor moves. The RECORD button will turn to solid red for a few seconds and a non-decaying Orbit will be created based on the recording.

NOTE: If the cursor is not moving when the RECORD button is pressed, the RECORD button will flash, waiting for the cursor to move. Recording will begin as soon as any movement is detected.

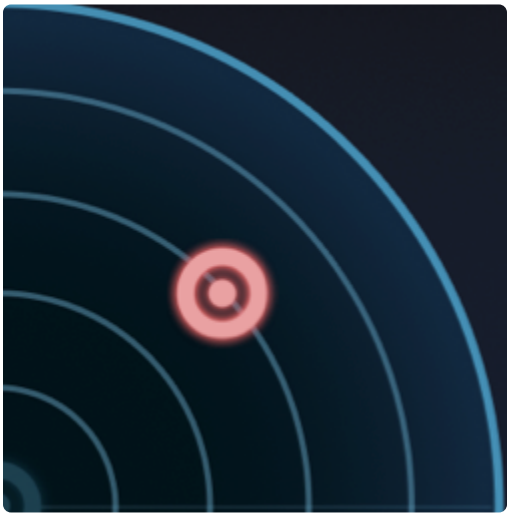
1, 2, or 4 BARS



- Choose 1, 2, or 4 BARS for recording precise movements in those lengths that you would like to be synced with the host.
- To initiate recording, press the red RECORD button. With the cursor in motion, the RECORD button will flash while waiting for the beginning of the next bar, whether or not the host sequencer is playing (Omnisphere's internal clock continues to run when the host is not playing). At the beginning of the next bar, the RECORD button will turn to solid red and begin recording. After the selected number of bars are complete, the recording stops and a loop of the movement is created. The cursor's location at the end of the recording will be smoothly linked to the beginning to ensure there are no abrupt changes as the movement loops.

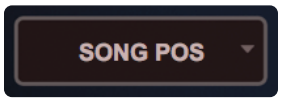
NOTE: If the cursor is not moving when the RECORD button is pressed, the RECORD button will flash and then start recording at the beginning of the next bar.

Whenever the the Orb's built-in recorder is in use (either when recording or playing back recorded movements), the Orb cursor will turn red.



If you're not satisfied with the movement that was recorded, press the **CLEAR** button to start over.

6.4. Trigger Modes



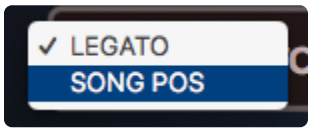
There are two available Trigger Modes that determine whether the recorded movements are synchronized with the host sequencer or with your playing.

NOTE: It is important to set the Trigger Mode before recording, as it cannot be modified afterwards.

LEGATO

When set to LEGATO, the recorded movements will start their cycle when the first note of a legato phrase is played. As long as the notes played are connected, the recorded loop will continue uninterrupted. Once all notes are released, the recorded loop restarts with the next note that is played. Playing in a detached manner will cause the loop to restart with each note.

SONG POSITION



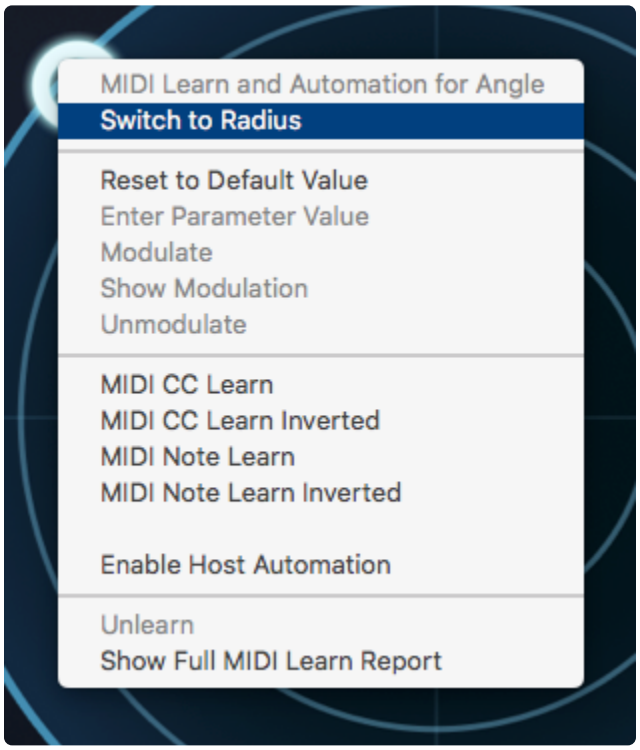
When set to SONG POSITION, the recording will track the bars and beats of the song and play back the movements accordingly. This setting is useful if you’re moving the cursor around in sync with the beat and you want in to play back in the same rhythmic way, regardless of when a note is triggered.

6.5. Clear

Pressing the CLEAR button will restore the Patch to its original state. The Orb's cursor will be returned to the center and any movements recorded in the built-in recorder will be cleared.

NOTE: The CLEAR button does not affect which parameters are modified by the Orb. The same parameters that were modified before pressing it will still be modified afterwards when the cursor is moved.

6.6. Automation



The Orb's movements can be automated in your host sequencer.

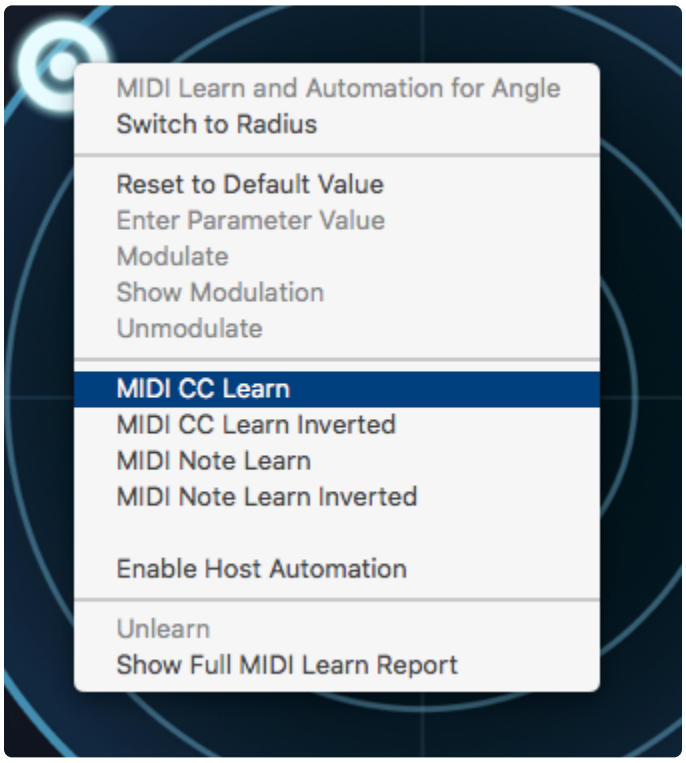
Since the Orb's movements are plotted on 2 different X/Y-type planes, "Angle" and "Radius," they must be enabled independently.

To enable the Orb's host automation, follow these steps:

1. Right-click on the Orb and choose "Enable Host Automation" to enable the Angle (the default setting) for automation.
2. Right-click again on the Orb in Omnisphere and choose "Switch to Radius."
3. Right-click once more on the Orb and choose "Enable Host Automation" to set the Radius for automation.
4. Enable automation record in your host and hit play.

Any movements that occur in the Orb, either manual dragging or INERTIA-based, will now be recorded into the host's session. Play it back to hear a faithful reproduction of your Orb performance and use your host's automation editing features if you'd like to edit it.

6.7. MIDI Learn



The Orb's movements can be controlled using a MIDI controller.

Since the Orb's movements are plotted on 2 different X/Y-type planes, "Angle" and "Radius," they must be assigned to different MIDI CCs to work effectively.

To control the Orb using MIDI CCs, follow these steps:

1. Right-click on the Orb and choose "MIDI CC Learn" to MIDI Learn the Orb's Angle (the default setting).
2. Move a physical control on the MIDI device that is connected to Omnisphere to control the Orb's Angle.
3. Right-click again on the Orb and choose "Switch to Radius" to MIDI Learn the Orb's Radius.
4. Move a different physical control on the MIDI device to control the Orb's Radius.

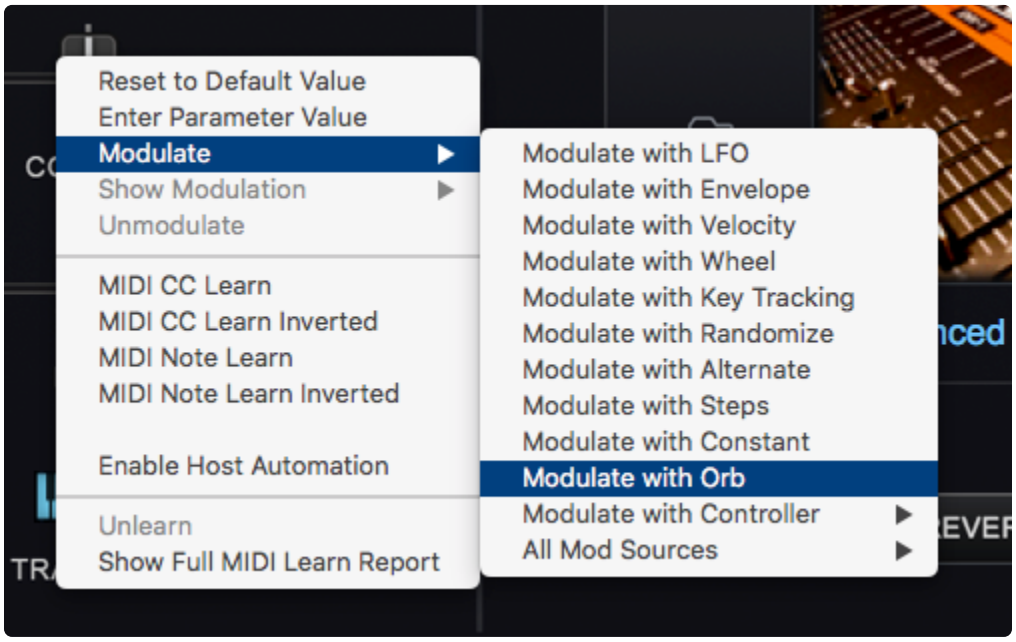
The Orb will be instantly paired, and can then be controlled from a MIDI Controller. All MIDI Learn assignments are stored with the MULTI, saved with the host project file, and can also be saved as a MIDI Learn Template.

NOTE: Inertia is a mouse/touch feature only and is incompatible with MIDI input. When the Orb is controlled using a MIDI Controller, the result will be the same as if Inertia was disabled.

6.8. Orb as Mod Source

The Orb can be used as a modulation source. Using the **DICE** provides interesting and surprising results instantly, however using the Orb as a modulation source gives the user flexibility and full control over the parameters it modulates.

The Orb is seamlessly integrated to Omnisphere's **Flex-Mod** system. In Omnisphere, by right-clicking on the parameter to be modulated, the available modulation sources will appear under the "Modulate" => "Modulate with Orb" submenu. You may also select "Orb" from the "All Mod Sources" submenu and the Orb will be automatically routed to the target parameter.



Please check the **Modulation** section for more information.

Orb as a modulation source vs the DICE button

The Orb can generate sound modifications automatically by using the **DICE** button, or manually by user-defined modulation routings. Each method has its pros and cons and they cannot be used simultaneously. When using the Orb as a modulation source, keep in mind the following rules:

- Creating a modulation routing where the Orb is the source overrides any sound modification that was Orb-generated.
- If you press the DICE button after using the Orb as a modulation source, the routings will be overridden. However, they will not be lost. In order to enable them again, simply reselect the Orb as a modulation source for any of them.

7. The Layer Pages

The Layer Pages comprise the basic building blocks of a Patch. This is where the majority of your sound design and editing decisions will be made.

7.1. Layer Page Basics

Each Part in Omnisphere has four Layers, A, B, C, and D. Omnisphere's Layer Pages have been designed to provide a useful set of controls over many aspects of the sound. From here you can control Oscillators, Filters, and LFOs, as well as sculpt Envelopes and route Modulation.

In cases when more precise and detailed controls are needed, the Zoom feature (click on the magnifying glass icons) reveals a set of deeper controls. You can also think of the Layer Pages as "Overviews" of the sound.

7.1.1. Selecting, Linking, and Soloing Layers

Selecting Layers

To select a Layer and bring its controls into focus, (even if more than one Layer is ON—indicated by LEDs under the Layer tabs or highlighted Layer Selection buttons in the Footer—click on the desired Layer tab or Layer Selection button.

NOTE: If the SWITCH TO LAYER UPON ACTIVATION preference on the System Page is OFF then Layer activation will not cause the Layer page to change to the activated Layer.

Linking Layers

The LINK Buttons (chain icons) lock the controls of any combination of Layers together. When enabled, parameter changes made in one Layer will be mirrored in the other Layers that are linked. The LINK Buttons are highlighted in blue when enabled.

Steps for linking Layers:

- Select a Layer from the desired Layer tab or Layer Selection button.
- Click on one or more other Link Buttons to link with the currently selected Layer.

For example, enabling the LINK Buttons for Layers A, B, and C and then moving the HARD SYNC slider on any of the linked Layers will cause the HARD SYNC sliders on the other Layers to reflect the change. This useful feature also gives you a quick way to simultaneously set parameters such as TRANSPOSE or ADSR envelopes for all Layers.

The Numerical Value popup will show the linked Layers you are changing.

You can also:

- Option/Alt+Click on any link icon links all Layers together.
- Option/Alt+Click on any link icon that's ON unlinks all Layers.

NOTE: When cross-layer linking is enabled, the SYNTH Layer parameters are linked, however none of the SAMPLE (Soundsource-specific) Layer parameters are linkable, including:
- START
- REVERSE
- TIMBRE
- CRUSH / SHIFT
- On the Soundsource Zoom page, however, "USE LEGATO SS," "INTERVAL," "PEDAL LEVEL," and upper DAMPER limit *are* linkable.

Soloing Layers

- Option-click on the Layer Selection Buttons in the Footer to solo each Layer's audio WITH FX.

- The Layer buttons will blink ON/OFF when in SOLO mode.

NOTE: When Layers are linked, most of the per-layer parameters are locked together.

The following parameters are not linked:

- Per-Layer Level
- Per-Layer Pan
- Per-Layer Soundsource or Wavetable
- Per-Layer ON/OFF
- Per-Layer FX rack

7.1.2. Level, Amp, and Pan

Each Layer has Level and Pan controls in addition to an AMP control—these are commonly used as modulation targets.

LAYER LEVELS

The level sliders are used to blend the Layers. Often, even a subtle change in level can affect the sound dramatically.

Range -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).

Range -inf dB (silence) ~ +9.54dB

LAYER ON/OFF

Below each of the Layer Level sliders are ON/OFF buttons that determine whether or not a Layer is active. They also can be used to mute any Layer in order to make comparisons without having to adjust the Layer Level faders. These buttons can also be used to bring a Layer's Edit Page into focus.

LAYER PAN

The Layer PAN knob provides independent PAN control for each Layer. The PAN controls can also be modulated independently.

To quickly return the PAN value to Center, Command/Control-click the PAN knob.

Range 0.000 ~ 1.000

AMP

This is a pre-Layer Level Amplitude control designed to be used as a modulation target. For example, if you bring AMP all the way down then right-click on the fader and navigate to Modulate with LFO, you will hear the Amplitude of that Layer being modulated. To change the overall level of the Layer, use the Layer Level slider.

7.1.3. Pitch Controls

TRANSPOSE

TRANSPOSE works like MIDI transposition and pitch changes are made in semitones. Changes in pitch don't affect the sound quality of the Oscillator. This control is most often used to set the Oscillators at different semitone values, such as octaves or different intervals.

Range -24 semitones ~ +24 semitones

NOTE: TRANSPOSE offers the best available sound quality but it is not modulatable.

COARSE

COARSE operates in a similar way to the FINE control, but with a much larger range. Unlike TRANSPOSE, using COARSE 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 ~ +4800 cents

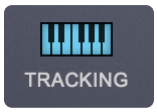
FINE

The FINE control is the most precise, changing the pitch in 1-cent increments. The FINE controls shift the pitch 100 cents (one semitone) up or down.

The most common use of the FINE control is to detune oscillators a small amount (less that 15 cents) from each other, causing them to sound richer.

Range -100 cents ~ +100 cents

TRACKING



If the TRACKING (also known as Keyboard Tracking) switch is enabled, the pitch of the Oscillator will track the keyboard, meaning the root pitch will be changed with each key. When TRACKING is disabled, the Oscillator will not track the keyboard.

If a Soundsource is loaded, depending on the map, 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 TRACKING is disabled.

Disabling TRACKING can be useful for drones, unusual sound effects, or strange tonal combinations.

7.2. Modulation

Modulation is the method used in synths for adding richness and variety to a sound in real-time by adding motion and complexity. Simply put, modulation is any source affects 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.

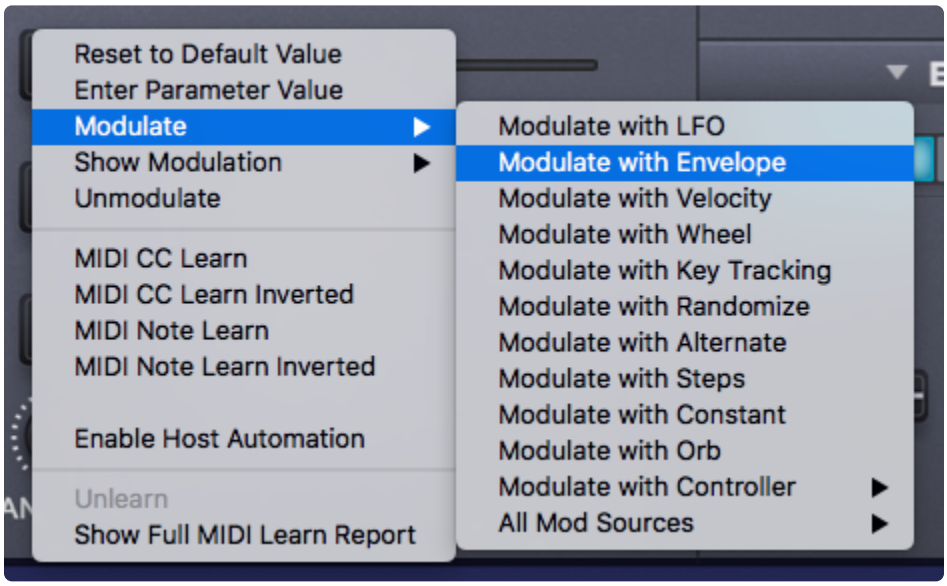
Omnisphere's modulation capabilities are extensive yet simple to use with our Flex-Mod™ system. Omnisphere also features a traditional MOD MATRIX ZOOM view that provides more precise control over modulation routings and an overview of all assigned routings.

There are four 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 Layer page.
3. Modulation routings can be configured on the MOD MATRIX ZOOM view.
4. Modulation adjustments can be made when the MODULATION column opens on the left, replacing the Mini-Browser.

With the wide variety of sources and destinations, there are literally thousands of potential modulation routings that can be configured.

7.2.1. Flex-Mod



Flex-Mod is the quickest way to set up a modulation routing. By right-clicking on the control to be modulated, you'll get a pop-out menu where you can select "Modulate" and 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 one source available of a given type, the next available source will be used automatically.

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. 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.

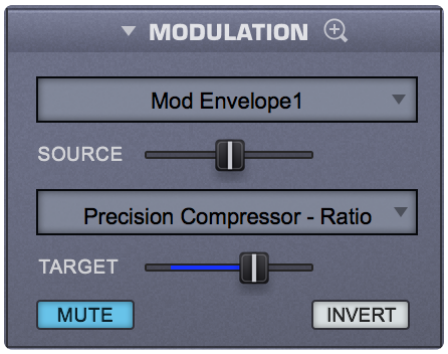
After the Target Parameter's modulation source has been selected, the routing is then displayed in the MODULATION section of the LAYER page.

*Not all controls are modulatable, but the majority are.

NOTE: If all eight 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—when all four are in use, any additional "Modulate with Envelope" routings will default to MOD Envelope 1.

7.2.2. Modulation Sections

When a parameter is modulated, the routing is automatically shown in two sections: in the left sidebar of the plug-in (replacing the Mini-Browser) and the Modulation section of the Layer pages. They both have similar controls, with the advantage that the sidebar on the left of the plug-in is visible from other pages (FX, ARP, Zooms, etc).



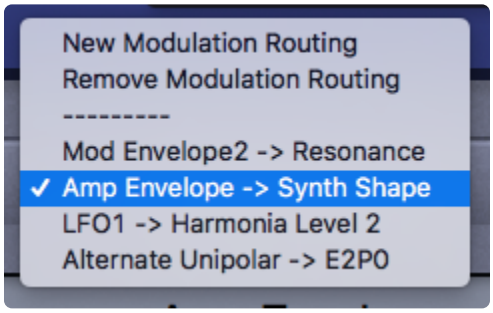
Both **Modulation** sections display the most recent modulation routing, which can also be edited there. The key concept of these Modulation sections is that only one Modulation Routing is displayed at a time (the MOD MATRIX ZOOM shows many routings simultaneously).

To display an existing Modulation Routing in the sidebar, right-click on the Target Parameter (e.g.

Arpeggiator Speed) and select the routing from the “Show Modulation Menu.” In this case, the routing will be displayed in the left column of the plug-in while the Arpeggiator page is still open. This allows you to make adjustments to the Arpeggiator and the routing, minimizing the amount of navigation. To close this view and return to the Mini-Browser, click the [X] to the left of the title.

Selecting the drop-down arrow on the MODULATION header in the Layer Page 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 Layer Pages.

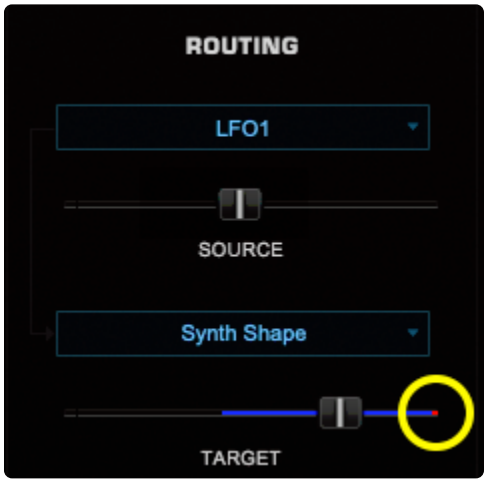
SOURCE



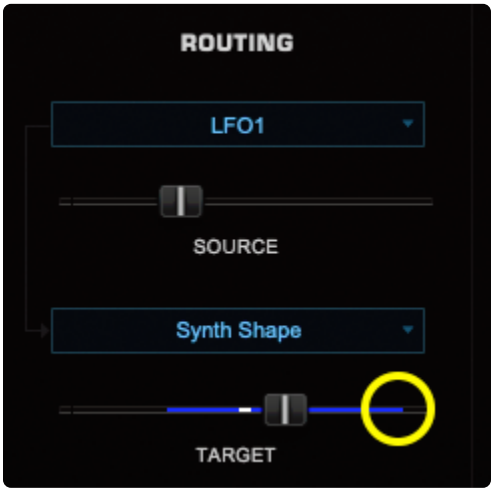
The SOURCE area displays and selects the Modulation Source to control a target. Selecting SOURCE will open up a menu of 43 Modulation Sources and “OFF” clears any Modulation Source with a checkmark [√].

This slider is a duplicate of the AMOUNT slider in the Mod Matrix and controls the amount of modulation that will be sent from the Modulation 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 affect the target.

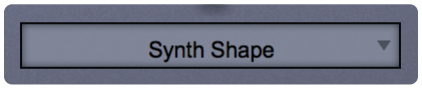
It’s possible to send too much signal from the Modulation Source, which can cause unusual behavior in the Modulation Target because the values are out of range. Out of range values are indicated with a red dot at the extreme right and/or left of the TARGET slider.



To bring the Modulation Amount to values within the Modulation Target's range, decrease the SOURCE / AMOUNT slider amount until the red indicator dot is no longer visible.

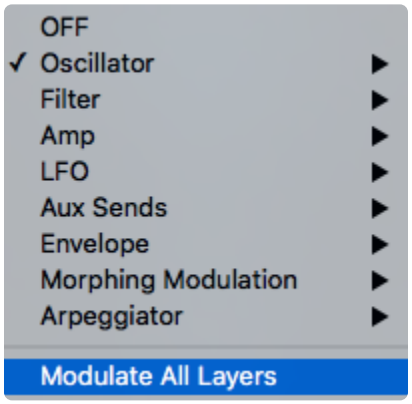


TARGET



The TARGET selects (and displays) the destination for the Source's output. Omnisphere has a large number of Modulation Targets, including synthesis parameters as well as effects parameters.

When "Modulate All Layers" is selected from the menu, that Modulation Source applies to the relevant Modulation Target in all 4 Layers.



The full list of Targets is listed in the MODULATION section **here.**

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. A red dot a the extreme right and/or left of the the blue line indicates the Modulation Source is sending values out of range of the Modulation Target.

NOTE: See the SOURCE section above regarding out of range Target values

MUTE

The currently displayed Modulation Routing can be muted with this switch. This is a quick way to A/B the Patch with and without the Modulation Routing.

INVERT

The Invert button inverts the Modulation Polarity.

For example, if the Modulation Source is an LFO with an ascending ramp wave as its waveform, it will invert the polarity, resulting in a descending ramp modulation.

SMOOTH (left column only)

The SMOOTHING control takes the incoming Modulation Source and softens the sharper points. 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 by reducing the rate at which the modulation evolves as it is applied to any source and target.

Modulation Source Controls (left column only)

For convenience, the Modulation Source controls are displayed at the bottom of the left column. For example, if an LFO is selected as a source, the corresponding LFO's controls will be available here. When sources don't have controls (Alternate, Random), a representative image will be displayed instead.


ROUTING
Alternate
SOURCE
Synth Shape
TARGET
MUTE
INVERT
SMOOTH
ALTERNATE

7.2.3. Modulation Sources

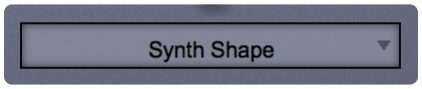
The **SOURCE** menu brings up a list of the 48 available Modulation Sources available in Omnisphere:

- **LFO1** – Low Frequency Oscillator 1
- **LFO2** – Low Frequency Oscillator 2
- **LFO3** – Low Frequency Oscillator 3
- **LFO4** – Low Frequency Oscillator 4
- **LFO5** – Low Frequency Oscillator 5
- **LFO6** – Low Frequency Oscillator 6
- **LFO7** – Low Frequency Oscillator 7
- **LFO8** – Low Frequency Oscillator 8 (monophonic or polyphonic)
- **Alternate** – Every keystroke alternates between positive and negative values (polyphonic)
- **Alternate Unipolar** – Every other keystroke generates a positive value (polyphonic)
- **3-Step** – Each keystroke will alternate between three positive values in series (polyphonic)
- **4-Step** – Each keystroke will alternate between four positive values in series (polyphonic)
- **Random 1** – Every keystroke will generate a random positive or negative value (polyphonic)
- **Random 2** – Every keystroke will generate a random positive or negative value (polyphonic)
- **Random 3** – Every keystroke will generate a random positive or negative value (polyphonic)
- **Random 4** – Every keystroke will generate a random positive or negative value (polyphonic)
- **Random Unipolar** – Every keystroke will generate a random positive value (polyphonic)
- **Bias 1-8** – A special-purpose Modulation Source described in the **Bias** page
- **Constant** – Outputs a constant value determined by the Depth amount
- **Constant Bipolar** – Outputs a constant value determined by the Depth amount, which covers a bipolar range
- **Velocity** – MIDI velocity values (polyphonic)
- **Key Tracking** – Values based on what note is played on the MIDI keyboard (polyphonic)
- **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 (monophonic or polyphonic)
- **Orb** – The output of the Orb
- **Wheel** – The value from Modulation Wheel MIDI Controller (MIDI CC#1)
- **Aftertouch** – The MIDI note pressure value (Channel or Polyphonic 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 Control Change (or MIDI CC value defined from the System page) **System** page
- **Morphing Source** – A special-purpose Modulation Source described in the **Morphing Modulation** chapter.

NOTE: See the System Page chapter for more information about the Mod Source slots and how they can be remapped to other MIDI CCs, etc.

7.2.4. Modulation Targets



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 nearly 100 different Modulation Targets. 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)
- **Unison Spread** – The amount of panning of Oscillator Unison Voices (monophonic)
- **FM Frequency** – The frequency of the dedicated Frequency Modulator (polyphonic)
- **FM Depth** – The depth of the Frequency Modulator (polyphonic)
- **FM Shape** – The waveshape of the Frequency Modulator (polyphonic)
- **FM Symmetry** – The span of the Frequency Modulator (polyphonic)
- **FM Hard Sync** – The Frequency Modulator's Hard Sync (polyphonic)
- **Ring Mod Frequency** – The frequency of the Ring Modulator (polyphonic)
- **Ring Mod Depth** – The amount of Ring Modulation (polyphonic)
- **Ring Mod Shape** – The waveshape of the Ring Modulator (polyphonic)
- **Ring Mod Symmmetry** – The span of the Ring Modulator (polyphonic)
- **Ring Mod Hard Sync** – The Ring Modulator's Hard Sync (polyphonic)
- **Waveshaper Depth** – The amount of Oscillator Waveshaping (polyphonic)
- **Waveshaper Mix** – The blend of the Waveshaping signal (polyphonic)
- **Waveshaper Bit Crush** – The amount of Bit-Crushing (polyphonic)
- **Waveshaper Bit Crush Force** – The amount of Bit Crush Force (polyphonic)
- **Waveshaper Sample Rate** – The amount of Sample Rate Reduction (polyphonic)
- **Waveshaper Sample Rate Animation** – The amount of Sample Rate Animation (polyphonic)
- **Harmonia Mix** – The blend of the Harmonia Voices with the Primary Oscillator (polyphonic)
- **Harmonia Level 1** – The level of the first Harmonia Oscillator (monophonic)
- **Harmonia Level 2** – The level of the second Harmonia Oscillator (monophonic)
- **Harmonia Level 3** – The level of the third Harmonia Oscillator (monophonic)
- **Harmonia Level 4** – The level of the fourth Harmonia Oscillator (monophonic)
- **Harmonia Detune 1** – The detune amount of the first Harmonia Oscillator (monophonic)
- **Harmonia Detune 2** – The detune amount of the second Harmonia Oscillator (monophonic)
- **Harmonia Detune 3** – The detune amount of the third Harmonia Oscillator (monophonic)
- **Harmonia Detune 4** – The detune amount of the fourth Harmonia Oscillator (monophonic)
- **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 Grains (monophonic)
- **Sample Granular Gliding** – The glide probability of the Grains (monophonic)
- **Sample Pitch Grains** – The probability of Granular Pitch Grains (monophonic)
- **Sample Granular Speed/Position** – The Speed/Position of the Grains (monophonic)
- **Sample Granular Trigger** * – Triggers a single Grain when receiving a value above zero (polyphonic)
- **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 Filter 1 and Filter 2 (monophonic)
- **Variant** – The position on the Filter Variant control (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 Variant** – The Filter 1 spread (monophonic)
- **Filter 2 Variant** – The Filter 2 spread (monophonic)

Amp

- **Amplitude** – The Amplitude level (polyphonic)
- **Pan** – The stereo Panning control (polyphonic)
- **Sublayer Mute 1** – Mutes Sublayer 1 (monophonic)
- **Sublayer Mute 2** – Mutes Sublayer 2 (monophonic)
- **Sublayer Mute 3** – Mutes Sublayer 3 (monophonic)
- **Sublayer Mute 4** – Mutes Sublayer 4 (monophonic)

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)
- **LFO6 Rate** – The speed of LFO6 (monophonic)
- **LFO6 Depth** – The depth of LFO6 (monophonic)
- **LFO7 Rate** – The speed of LFO7 (monophonic)
- **LFO7 Depth** – The depth of LFO7 (monophonic)
- **LFO8 Rate** – The speed of LFO8 (polyphonic)
- **LFO8 Depth** – The depth of LFO8 (polyphonic)

Aux Sends

- **Layer Aux Send** – The amount of Send from the Layer's FX Rack to the Part's Aux Rack (monophonic)
- **Common Aux Send** – The amount of Send from the Common FX Rack to the Part's Aux Rack (monophonic)
- **Common Aux Return** – The amount of Return from the Common FX Rack to the Part's Aux Rack (stereo)

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 (Explained in the **Morphing Modulation** section)

- **Morphing Input A**
- **Morphing Input B**

- **Morphing Input A/B Xfade**

Arpeggiator

- **Arp Length** – The Length of Arpeggio Steps
- **Arp Swing** – The Swing amount of the Arpeggio
- **Arp Speed** – The Speed of the Arpeggio

(*) These parameters appear exclusively within the Modulation Matrix and are not seen on the GUI.

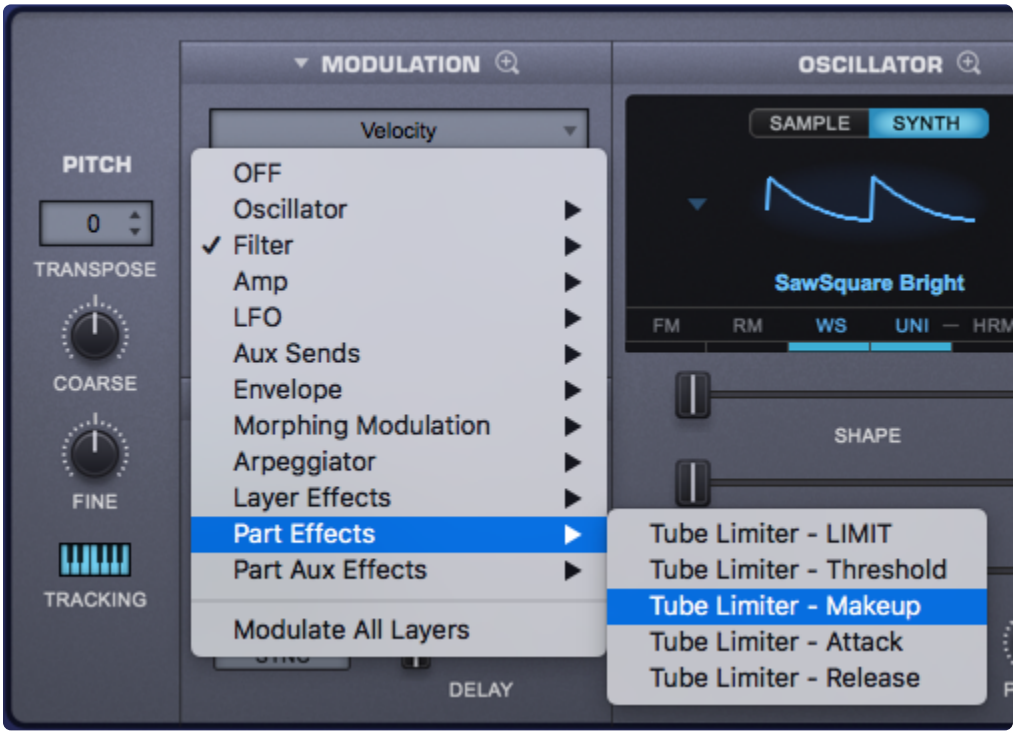
NOTE: When "Modulate All Layers" is selected, that Modulation Source applies to the relevant Modulation Target in all 4 Layers

7.2.5. FX Modulation

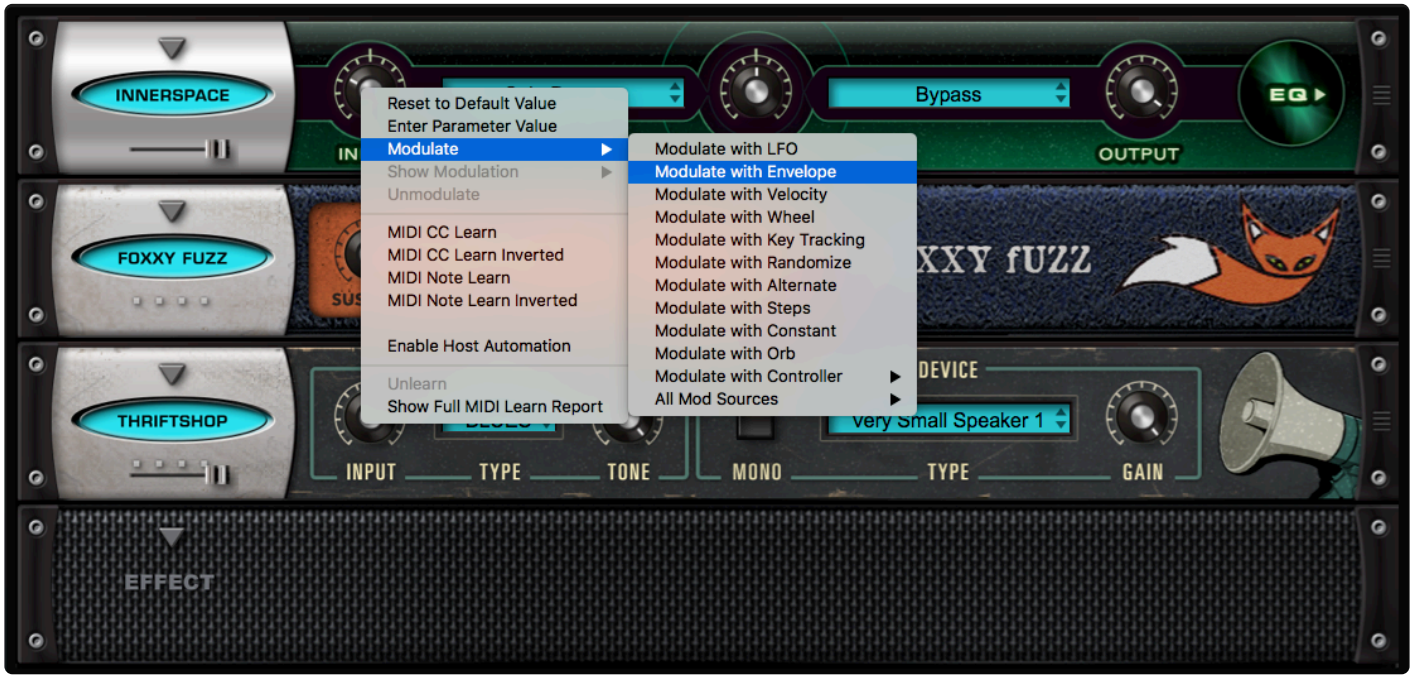
The fact that Omnisphere can modulate hundreds synthesis parameters is only part of the story. Any of Omnisphere's modulation sources can be applied to the myriad of FX parameters as well. Just about every single parameter in all of Omnisphere's 58 effects modules can be modulated, which means there are scores of effects parameters available in addition to all the synthesis parameters!

Modulation FX Menu

Any effect that's added to an effect rack (Aux, A, B, C, D, or Common) is available as a Modulation Target. After an effect has been added to a rack, a new category named for the rack (Layer FX, Part Aux FX, etc.) will appear at the bottom of the list of target categories.



When you right-click on any modulatable parameter, the same list of Modulation Sources appears as when you right-click on a synthesis parameter. All of the modulation options are the same.

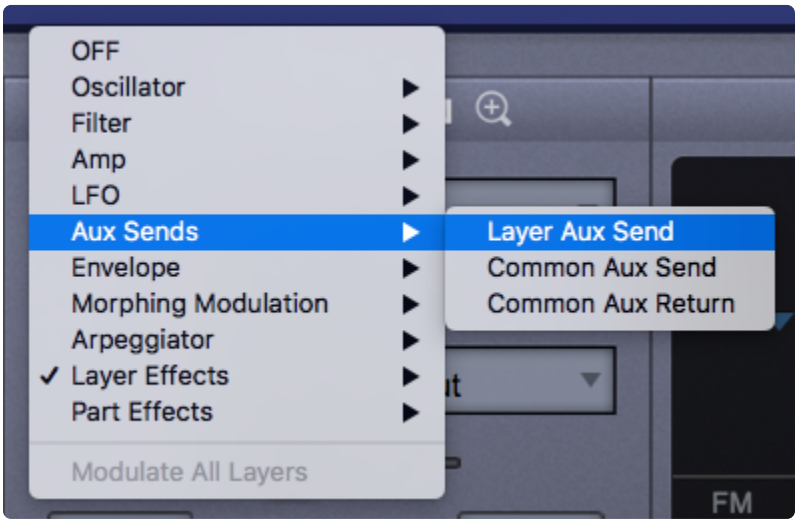


After a parameter has been assigned as a Modulation Target, the control will become shaded with a bluish tint (in the example below, the Input control is now blue).

These parameters will be available as long as the effect module is assigned to the Patch—meaning they will no longer appear if the effect is removed from that Layer's rack.

Aux Sends

It is possible to modulate the Aux Sends from each Layer and the Common Rack. These Modulation Targets are always available in the list of targets in the Aux Sends category.



7.2.6. Mod Matrix Zoom

Selecting the Zoom icon on the Modulation header will open the **MOD MATRIX ZOOM** view. This 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.

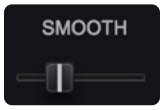
There are the same Source/Target sections, Depth and Target Parameter controls that are on the EDIT overview page, as well as some controls unique to the MOD MATRIX ZOOM, like SMOOTH. There are four sub-pages in MOD MATRIX ZOOM, each with twelve modulation routings making for a total of 48 possible user-defined 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

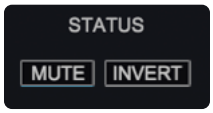
Toggles between the four Mod Matrix sub-pages. It's generally a good rule of thumb to fill up the first modulation page before any mod routings are added on the additional modulation pages. Each page displays twelve routings at a time. The MOD MATRIX ZOOM shows modulation routings for all Layers simultaneously.

SMOOTH



The **SMOOTH** 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, but applied to any source and target.

STATUS



This is a shared area with two switches, **MUTE** and **INVERT**.

The **MUTE** control disconnects the modulation routing. This is a quick way to hear what kind of effect it's having on the part.

The INVERT button inverts the modulation polarity.

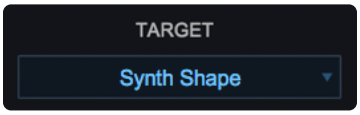
SOURCE

The **SOURCE** area displays and selects the modulation source to control a target. Selecting SOURCE will open up a menu of 48 modulation sources and "OFF" removes any Modulation Source.

AMOUNT

This control determines to what degree the Source affects the Modulation Target. The higher the setting, the more it will affect the Target. Depending on the kind of Modulation Source used, it is possible to send too much signal from the Source, causing 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 FX parameters.

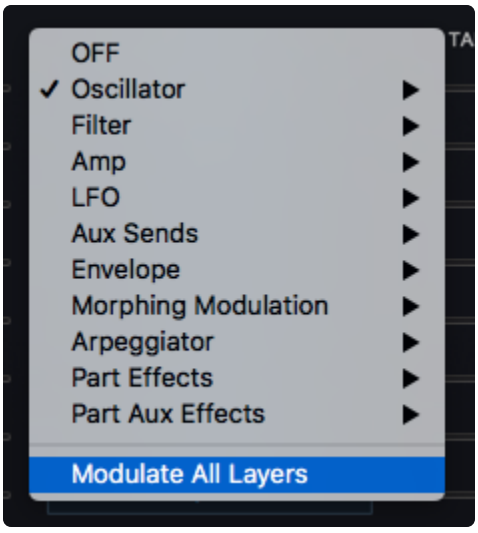
The full list of Targets is listed in the **Modulation Targets** section.

TARGET PARAMETER

This control is another representation of the TARGET PARAMETER setting.

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.

Modulate All Layers



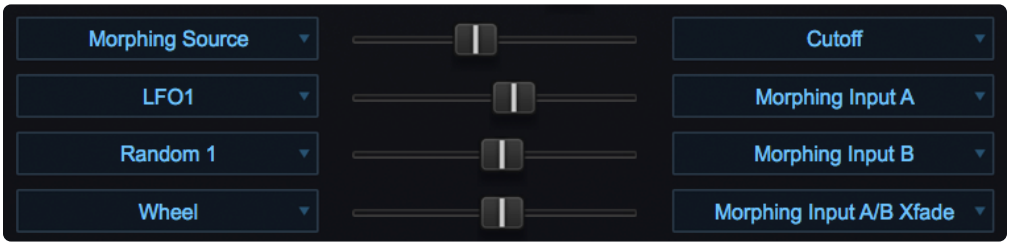
When "Modulate All Layers" is selected, that Modulation Source applies to the relevant Modulation Target in all 4 Layers.

Other Layer / Greyed-Out Text

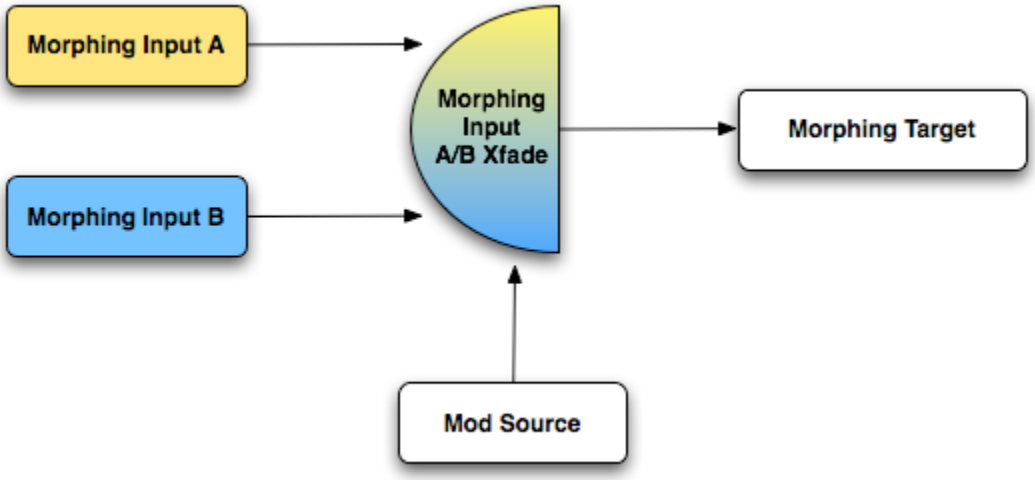
When you see **Other Layer** in the Source or Target Menus, or the text in those menus is greyed-out, this indicates that the Mod Source or Target is exclusive to a Layer you are NOT viewing—e.g. Random 1 from Layer B modulating Sample Start when you are looking at Layer A.

NOTE: When"Modulate All Layers" is selected in the Target Menu, the text still will be greyed-out if the modulation was created in another Layer.

7.2.7. 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 crossfade interactively 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 it's 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.

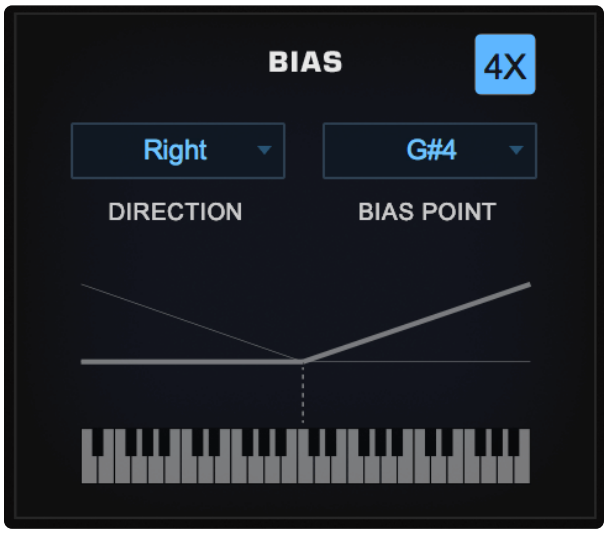
Morphing Input A/B Xfade

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

7.2.8. Bias



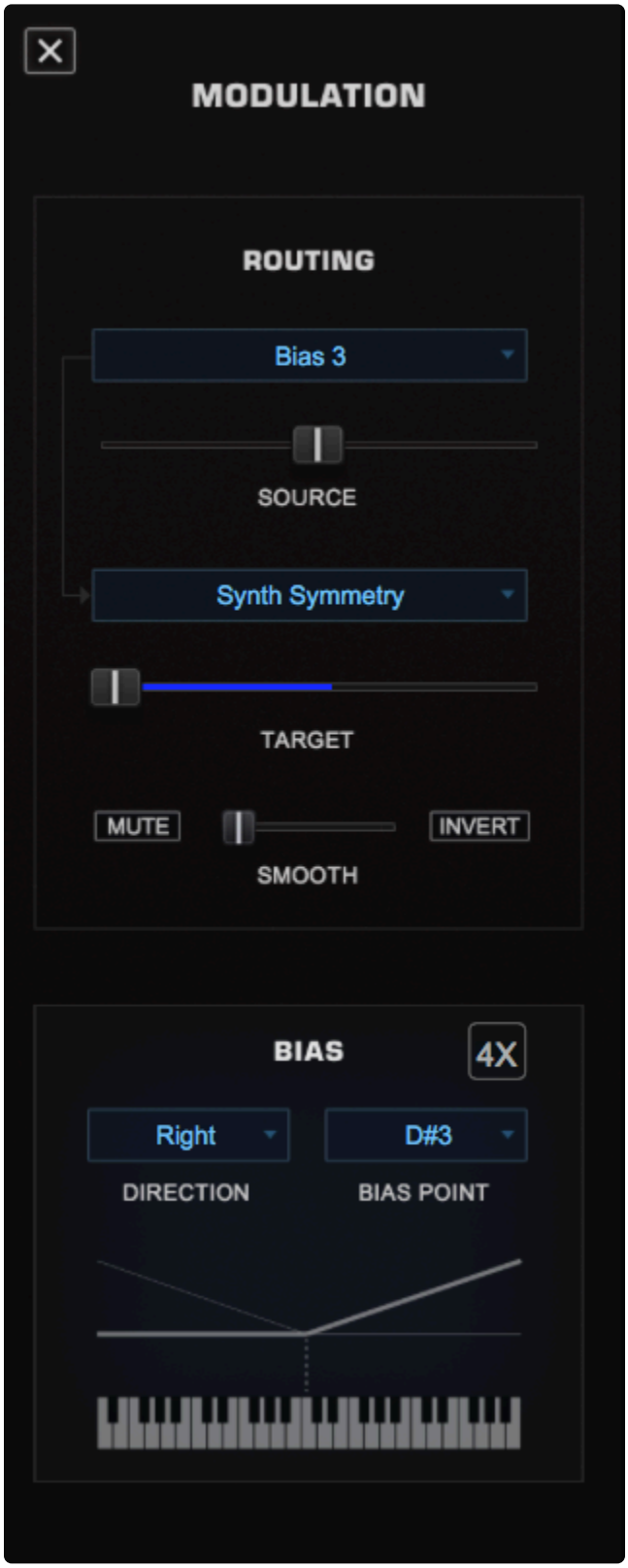
Bias is a useful Modulation Source which can be applied to any of Omnisphere's modulatable targets. Bias has a user-defined "Bias Point" (any key on the keyboard), which can be thought of as a fulcrum from which a linear boost or decrease can be applied above or below. As you play higher and/or lower than the Bias Point, the effect becomes more (or less) pronounced.

Bias is related to Keyboard Tracking, but whereas Key Tracking uses a fixed, invertible linear control over certain parameters across the entire keyboard (such as opening or closing Filter Cutoff), Bias gives you much more flexibility.

Each part in Omnisphere has eight Bias sources.

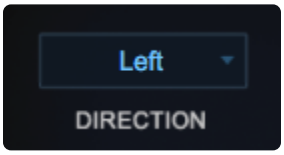
BIAS PARAMETERS

When using **Flex Mod**, Bias parameters are displayed in Modulation Zoom on the left.



NOTE: You can display these parameters at any time by right-clicking on a target that is modulated by Bias and selecting it from within the "Show Modulation" menu.

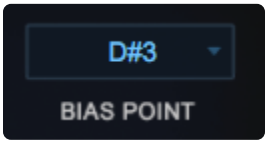
DIRECTION



Sets the direction in which the modulation is applied. It can be set above or below (Left or Right) from the Bias Point.

NOTE: If you want to to use Bias in both directions (both above and below the Bias Point) at once, you can apply two Bias sources and select a different direction in each. You may also assign more than one Bias modulation to the same area of the keyboard.

BIAS POINT

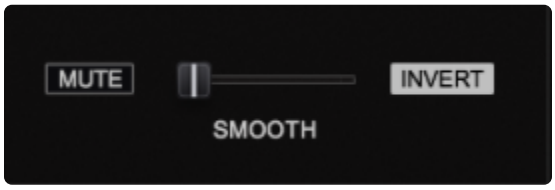


Select the Bias Point from the pull-down menu. This note becomes the “zero point” from which the modulation rises or falls.

RANGE

Click on the 4X button to multiply the effect of the modulation by 4. This can be used in conjunction with the SOURCE and TARGET amount sliders to fine-tune the effect.

INVERT



You can use the INVERT button in the mod slot to reduce the Bias effect (e.g. instead of increasing amplitude, you can decrease it) as you play further away from the Bias Point.

AMOUNT

Controls the amount of the Bias source applied to the target.

USING BIAS

There are many creative ways to use Bias. Here are some examples:

• Perhaps you have dragged one of your custom Soundsources into Omnisphere and although you find that it sounds great at Middle C, you can hear aliasing (or it is too piercing) in the range above C6. To compensate for this, you can use Bias to modulate Amplitude. Set the Bias Point to C6, then set the Direction to “Right” and INVERT the range, The higher you play above C6, the lower the level will be. You can use the 4X RANGE for a steep falloff.

• You can use Bias to modulate an Aux Send and set the Bias Point to a high note on your keyboard so that the effect is only heard when you play above the Bias Point. Additionally, you might want the FX to become more or less pronounced as you play higher or lower. This technique can be used in conjunction with the Arpeggiator to add interest to the pattern.

• You can also use Bias to crossfade between Layers, creating up to a four-way keyboard split within a Part, similar to what you can do with multiple Parts in STACK Mode.

Give it a try! You will certainly be able to find many creative ways to customize your Patches and your performance setup.

7.3. Oscillators

The Oscillator is the heart of Omnisphere's vast synthesis capabilities. It has a "split-personality" since each of the 4 Layers' Oscillators can have either high-definition, streaming sample-playback or dynamic, real-time, DSP-generated wavetables. The Oscillators' extensive synthesis capabilities vary depending on whether SAMPLE mode or SYNTH mode is selected.

SAMPLE MODE

- Omnisphere's massive Core Library comprises approximately 60 GB of sample-based sounds, called Soundsources, to use as sources for synthesis. These Soundsources cover a wide spectrum of sounds, from simple raw waveforms and psychoacoustic samples, to morphing textures, warm voices and choirs, vintage keyboards, analog synths, and a best-of selection from our award-winning sample libraries. **User Audio** can be imported and used as Soundsources as well.

SYNTH MODE

- When the Oscillator is in SYNTH Mode, Omnisphere uses DSP wavetables generated in real-time by the STEAM engine. There are over 400 Wavetables available, ranging from classic vintage synthesizer waveforms to aggressive, digital waveshapes. Using these in combination with the three main synth Oscillator Parameters (SHAPE, SYMMETRY and HARD SYNC) offers vast sonic possibilities.

The combination of both types of sound generation makes Omnisphere a true hybrid instrument, which is able to transform both sample and synth-based sounds using a wide range of synthesis methods.

The STEAM engine goes far beyond traditional synthesizers by including a set of dedicated oscillators for Hard-Sync, Frequency Modulation, Ring Modulation, Unison, Harmonia, and Granular Synthesis controls. A single part can actually use up to 24 Oscillators per voice!

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 Wavetable (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.

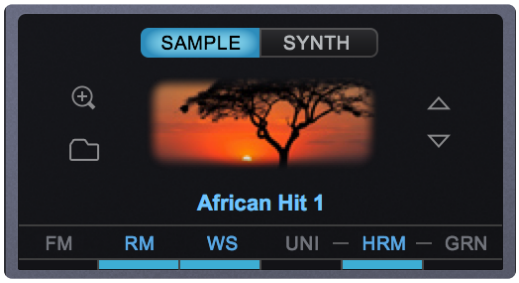
OSCILLATOR SUB-PAGES

Each of the Oscillator Zoom Sub-pages contain a wide set of synthesis functions that can applied to the Oscillator. They can be accessed by clicking on the magnifying glass icon in the Oscillator Header or by clicking in the LEDs below the Wavetable/Soundsource name. The LEDs double as activity indicators for those pages.

FM	Frequency Modulation synthesis
RM	Ring Modulation synthesis
WS	The Wave Shaper
UNI	Unison
HRM	Harmonia
GRN	Granular synthesis

NOTE: The Main Oscillator Zoom Sub-page doesn’t have an indicator—it is accessed directly by clicking on the magnifying glass icon in the Oscillator header.

7.3.1. 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 a single sample mapped across a keyboard.

SAMPLE MAIN

Soundsource Display

The Soundsource Display area contains an image of the loaded Soundsource, provides controls to step through Soundsources, and access to the Soundsource Browser and Soundsource Zoom.

Image

Whenever you load a Soundsource into the Layer, it will include an image representing the Soundsource.

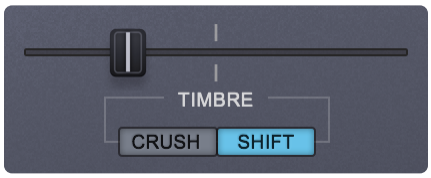
Browser Access

Selecting the Folder icon, the Soundsource Name Display, or the Soundsource Image will open the Soundsource Browser.

Soundsource Zoom

Selecting the magnifying glass icon will open the **Soundsource Zoom.**

7.3.1.1. Timbre



The TIMBRE slider alters the tonal characteristics of the Soundsource in different ways. There are two TIMBRE modes: CRUSH and SHIFT. The center-point of this bidirectional slider is null—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. When SHIFT is used as a Modulation Target, the character of the Soundsource can change dynamically. The more samples that are mapped across the keyboard, the more pronounced the TIMBRE SHIFT effect will be. Conversely, with a texture or other Soundsource that only contains a single sample, SHIFT will have no effect.

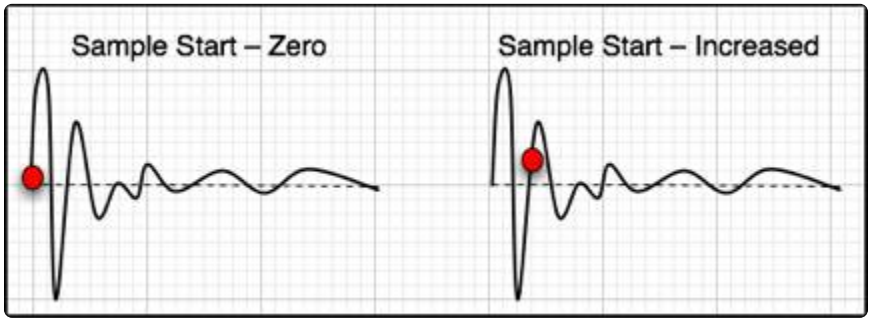
TIP: To see how many samples the Soundsource uses, select the Soundsource Zoom icon at the top of the OSCILLATOR Header and refer to the SPECS.

NOTE: Because of the way TIMBRE SHIFT works, changes to the modulation of the TIMBRE slider must be re-triggered to hear the effect. TIMBRE changes cannot be heard on a sustained note.

7.3.1.2. 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 (such as a Texture) mapped across the entire keyboard. 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 (including Round Robins), 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. Modulating the START time in the .5–.6 range can be especially useful (for adding a random feel) when working with long, evolving Texture Soundsources and using the **Arpeggiator**

NOTE: At certain START offsets you may hear attack clicks. These can be eliminated using the Start Fade parameter in Oscillator Zoom section.

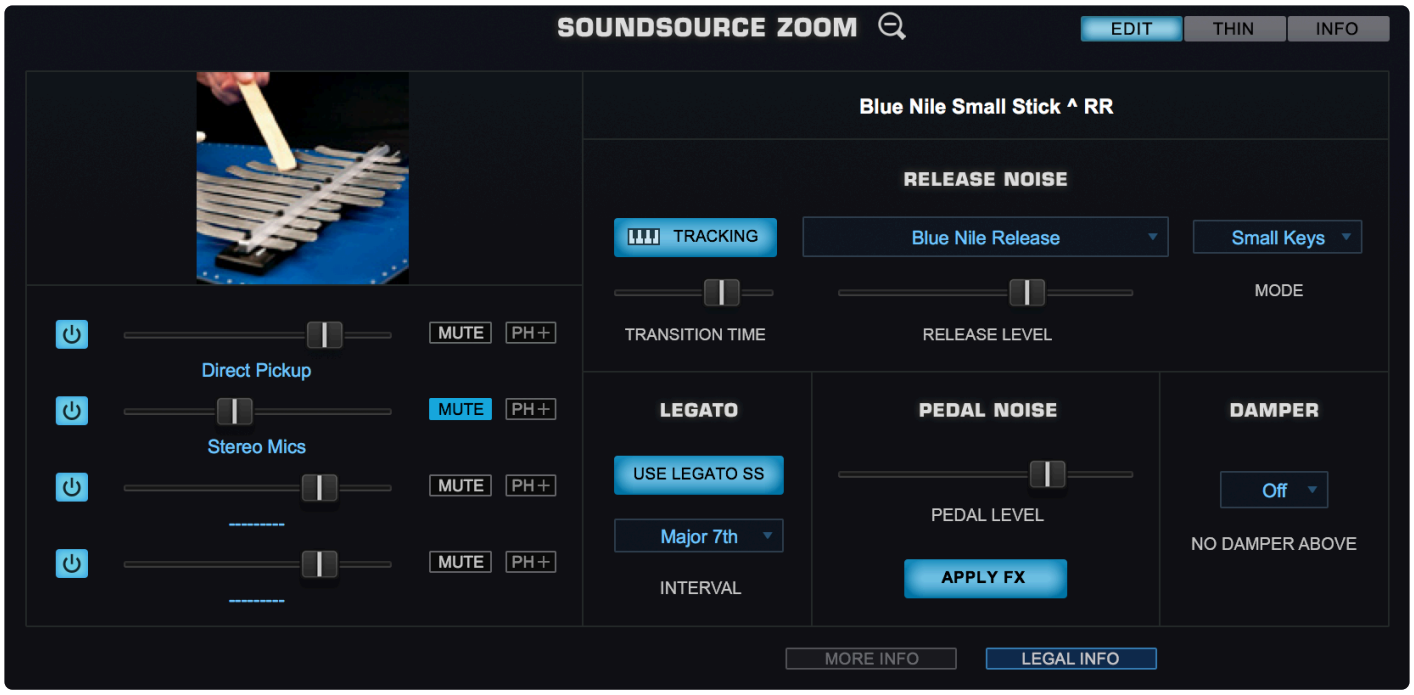
7.3.1.3. Reverse

The REVERSE button is located at the bottom center of the of the Layer Pages and the Oscillator Zoom when the SAMPLE tab is selected. When engaged, the button turns blue and the playback of the selected Soundsource is reversed for that Layer.

When REVERSE is enabled the loop points become inactive for the following reasons:

- You normally want to hear the attack when playing a sample in reverse, and it will not play if loops are active.
- Usually the looped section occurs at the tail of the sound, so that is all you would hear if loops were active.
- Without either an attack or decay, looped samples generally don’t sound much different when played forward or backward.

7.3.2. Soundsource Zoom



The **SOUNDSOURCE ZOOM** provides controls for managing the complex Soundsources in Omnisphere. This single interface provides important sound-shaping and memory management capabilities.

Select from the three sub-panes by selecting the **EDIT**, **THIN**, and **INFO** buttons in the upper right.

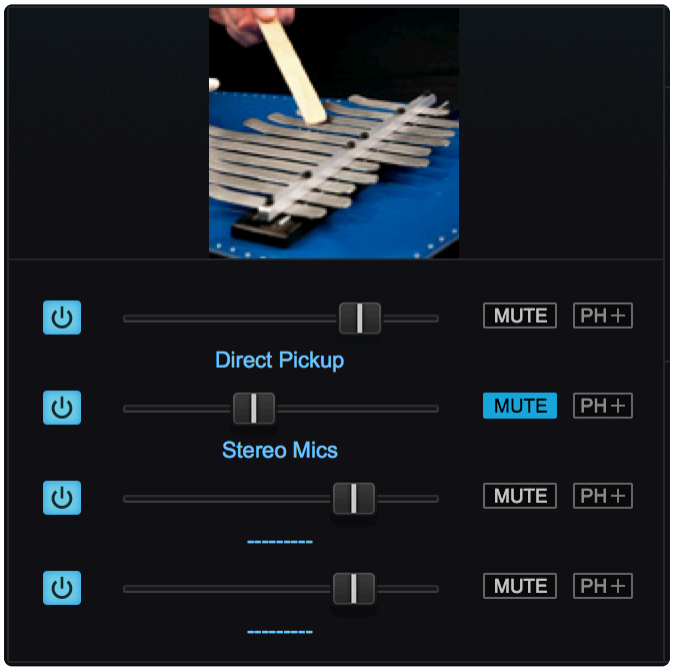
The EDIT View allows you to mix the levels of multiple channels (such as Microphone and Direct Pickup output) and select and adjust the desired Release Noise and Legato articulation triggering.

NOTE: Some of the controls are intended for use with Keyscape or Trilian sounds loaded into Omnisphere. For example, Omnisphere sounds don't currently include Legato Soundsources, so these controls will have no effect on Omnisphere Soundsources.

The THIN view lets you manage resources by limiting the number of Round Robin samples and Velocity-switched samples, or by turning off Legato Soundsources.

The 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 Browser section of the guide.

7.3.2.1. Mix



Omnisphere supports Soundsources of up to four channels, called Sublayers. Each Sublayer one can be mono or stereo. The controls in this section allow you to mix the output channels.

Sublayer Power Button

Turning this button OFF mutes the audio and disables that Sublayer from using memory resources or CPU usage. Turning it ON will reload the Sublayer.

Sublayer Level

Each Sublayer has a Level fader. Moving the fader to the left decreases volume, moving the fader to the right increases volume.

Range -inf to + 9.54dB

NOTE: Use Command/CTRL-click to reset the fader to 0dB.

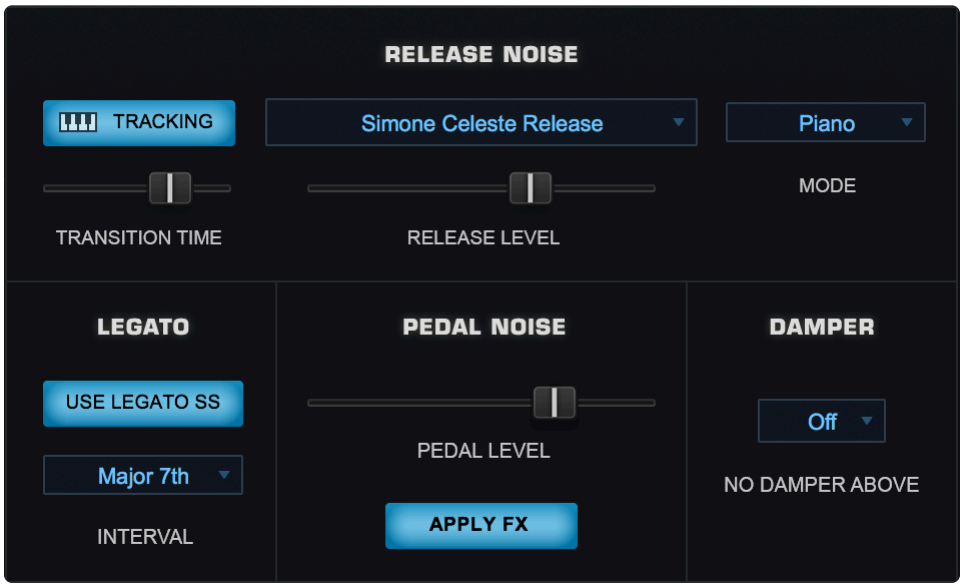
MUTE

Selecting this button mutes the audio output for that Sublayer. However, the Sublayer is still playing in the background when muted, and will continue to use CPU resources. This button is modulateable.

PH+/- (Phase Invert)

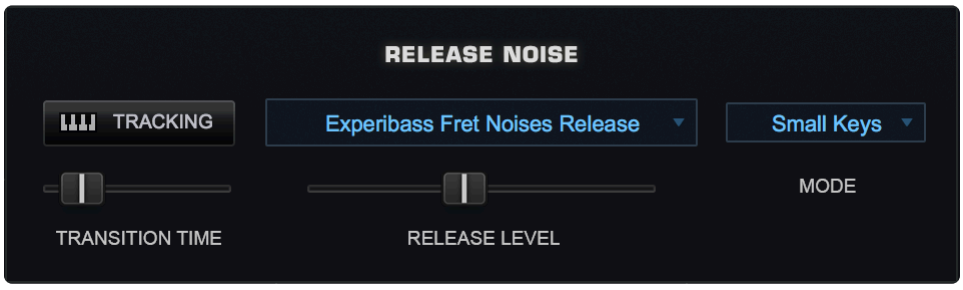
Selecting this button reverses the phase of the Sublayer.

7.3.2.2. Special Articulations



There are two types of additional Soundsources loaded in the background that are automatically triggered depending on how a passage is performed. These consist of Release Noise articulations and Legato Soundsources (samples of actual Legato performances). Omnisphere Soundsources don't currently use Legato Soundsources, but most Trilian Soundsources do. When using **Omnisphere Library Integration**, the Special Articulations section lets you control how these articulations are applied to the primary Soundsource.

RELEASE



Release Key Tracking

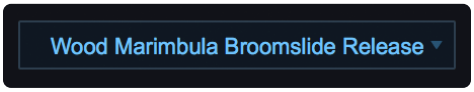
When the Release Key Tracking Button is enabled, the pitch of the Release Noises will track the keyboard. If it is disabled, the Release Noise will only play at the pitch of the root note.

TRANSITION TIME

This fader affects the transition time between Sustain Soundsource and the Release Noise Soundsource. It controls how long the note-on samples decay after the note is released, so that the transition between the sustained samples and the release noise samples is musical.

At higher settings you will hear an overlap of the sustained sample release time, and the trigger of the release noise. If the fader is all the way to the left, there will be no overlap.

Release Soundsource Menu

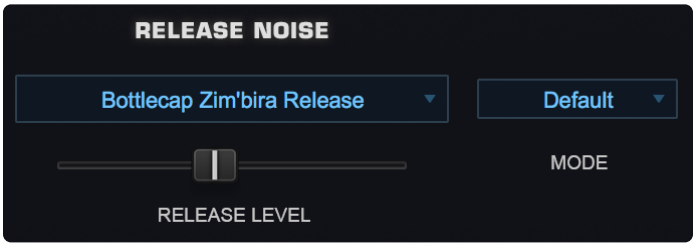


Release Soundsources are triggered only after a note has been released.

This menu lets you select the Soundsource used for Release Noises. You can also select “No Release Soundsource” if none is desired. Some Soundsources have multiple sets of Release Noises (e.g. a softer set), and you can even use Release Noises from other Soundsources.

NOTE: When Release Soundsources are used, the Amp Envelope Release Time affects the Release Soundsource.

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. Experiment by mixing Release Noises louder for up-tempo tunes, and softer 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. RELEASE LEVEL works in conjunction with Mode.

NOTE: The Amp Envelope Release Time must be set long enough to hear the decay of the Release

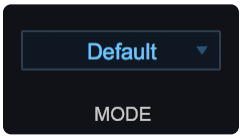
Noise Soundsource.

Amp Release and Release Soundsources

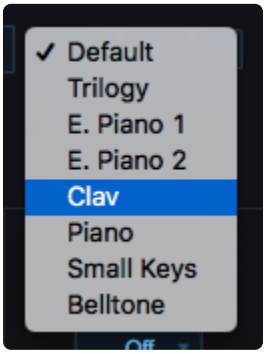
When no Release Soundsource is selected and you let go of the key, the Amp Envelope Release time has the same musical result that you would expect on any synth. For example, all the synth bass Patches in Omnisphere and Trilian are programmed with no Release Soundsource, so they behave in this way.

If a Release Soundsource is selected, you will hear it replace the Sustain when the key is released, cross-fading at a rate that is dependent on the Transition Time setting. All the Electric and Acoustic Basses in Trilian and keyboards in Keyscape have their Release Times set quite high so that the full decay of the noise samples can be heard.

RELEASE MODE

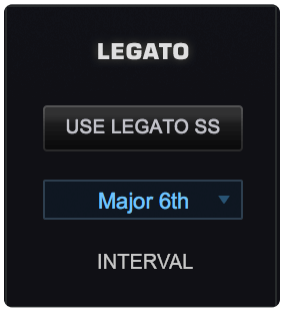


There are several Release Noise Level modes from which to choose. They consist of settings that are set up for basses and various keyboard instrument types.



The MODE menu controls how much velocity and volume attenuation is applied to the Release Soundsource—depending on how long a note is sustained. Setting “Trilogy” has no velocity or volume attenuation (this is how release noises were handled in Trilogy). In the following Keyscape-related settings, the volume drops gradually the longer a note is held. Settings “E. Piano 1” thru “Belltone” provide various combinations of volume and velocity attenuation at different time intervals which are appropriate for different instrument types.

LEGATO

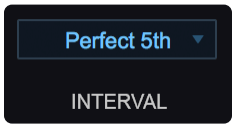


Use Legato SS

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 within the specified Legato Interval, 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.

LEGATO INTERVAL



From this menu you can select the interval within which the Legato Soundsources will be triggered.
Range: 1~ 24 semitones

Legato Rules

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 within the specified Legato Interval 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 polyphonic.

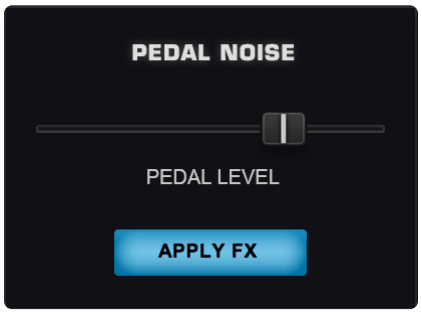
Notes which are played legato, but are outside the specified Legato Interval, will not trigger the Use Legato

SS behavior.

NOTE: 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 live, dynamic quality to the sound during performance.

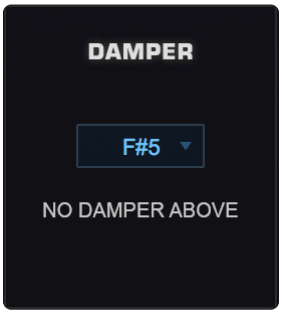
NOTE: "Use Legato SS" is a Patch Common parameter. Changing its setting will affect all Layers in the Patch.

PEDAL NOISE



When Keyscape Soundsources that contain Pedal Noises are loaded, you can set the volume of the Pedal Noise with this slider. Selecting the APPLY FX button routes the Pedal Noise through the effects, along with the Sustains and Release Noises.

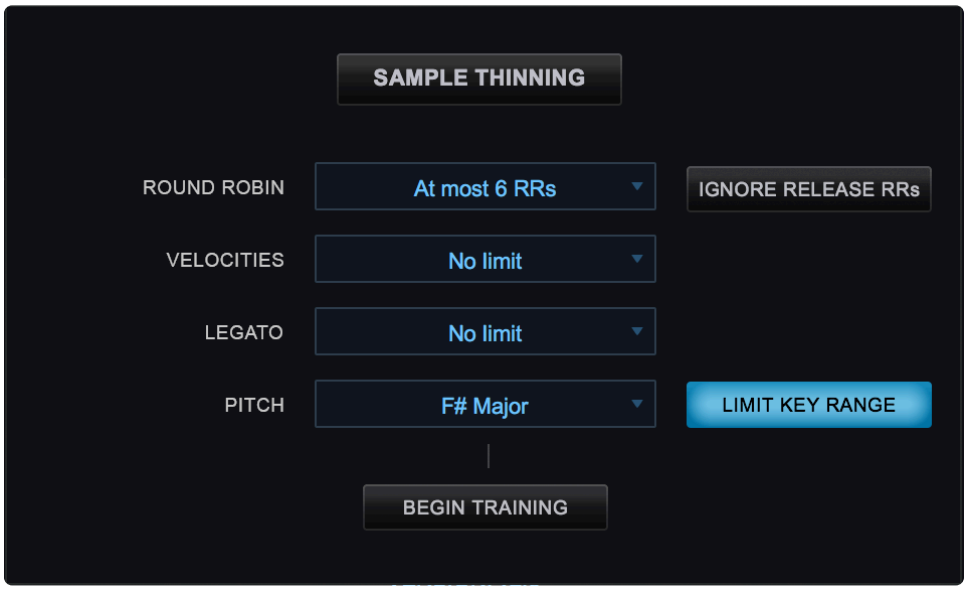
DAMPER



In the highest registers of certain Keyscape instruments, such as acoustic pianos, electric pianos, and celestes, there is less sustain, therefore no need for dampers. Here, you can set the highest note that uses the dampers. Notes above the selected pitch ring out, just like the real instrument.


DAMPER
Off
F#9
F9
E9
D#9

7.3.2.3. Thinning



In addition to Special Articulations, Soundsources may also include multiple Round Robin samples and velocity-switched samples.

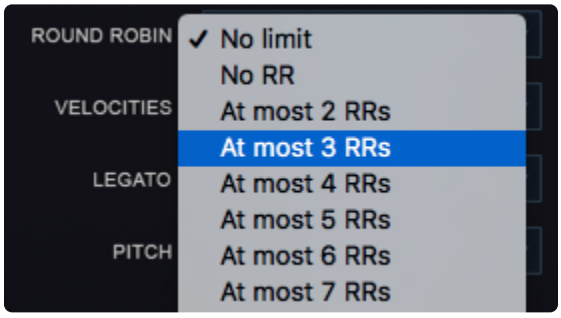
For this reason, a fully loaded Soundsource can use quite a bit of memory. The SAMPLE THINNING interface helps to manage the use of those resources.

By limiting the number of Round Robin samples, or velocity-switched samples, or by turning off Legato Soundsources, you can dramatically reduce the amount of memory used.

SAMPLE THINNING

This enables and disables Sample Thinning. Changing the status of this button will cause the Soundsource to be reloaded.

ROUND ROBIN



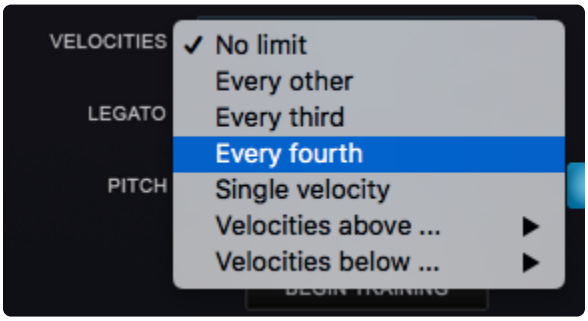
To limit the number of Round Robin samples that are loaded, select an option from the Round Robin menu.

You can choose a setting that ranges from “No RR” to “At Most 16 RR”. Select “No Limit” to allow all Round Robin samples to be loaded.

IGNORE RELEASE RRs

When turning this button on Release Soundsources will ignore the limit set on the Round Robin menu. Many times it is useful to limit the number of Sustain Round Robins to save resources. Release samples don’t take as much memory, so allowing all Release Round Robin samples to be loaded can help providing a lot of character and realistic results.

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

- Loads all velocity-switched samples.

Every other

- Loads every other velocity-switched sample.

Every third

- Loads only every third velocity-switched sample.

Every fourth

- Loads only every fourth velocity-switched sample.

Velocities above

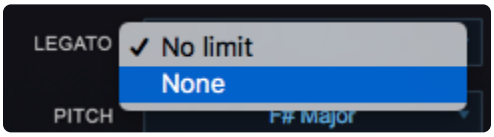
- Selecting a value from this menu, for example, 64, will only load velocity-switched samples mapped to a Velocity of 64 and above.

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 are 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.

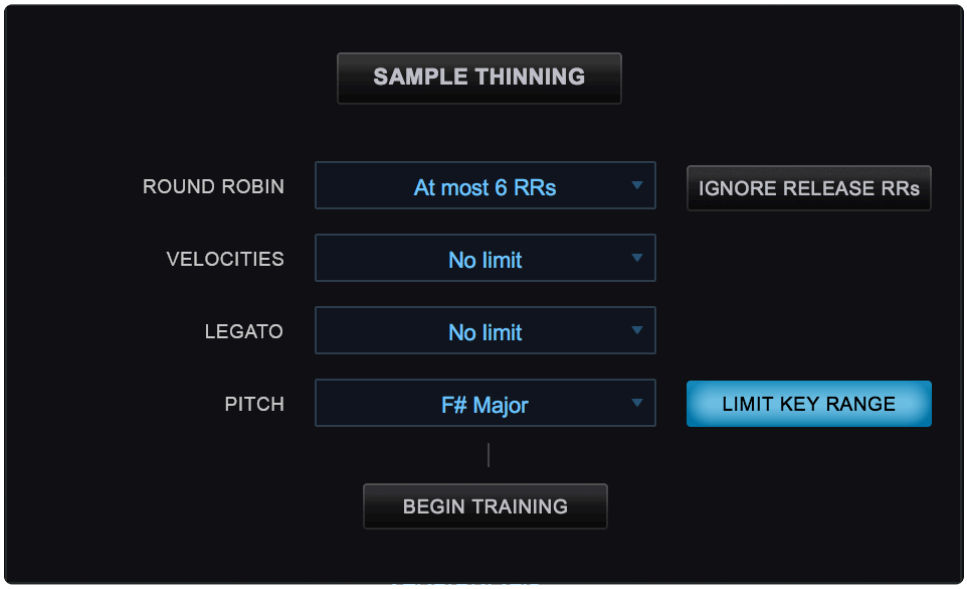
TIP: If you choose to load the Legato Soundsources, you must also enable the Use Legato SS button to trigger them when playing.

NOTE: If you are not using Legato Soundsources ("Use Legato SS" button is disabled), it's a good idea to unload them by selecting "None" from the menu in order 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 or not the Legato Soundsources will be

loaded, 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).

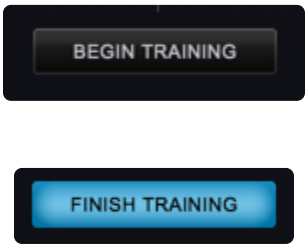
SAMPLE THINNING



A Soundsource can contain thousands of samples mapped across the full keyboard range. Sample 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.

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 because the remaining zones will be stretched across the sample map.

Trained Pitch Thinning



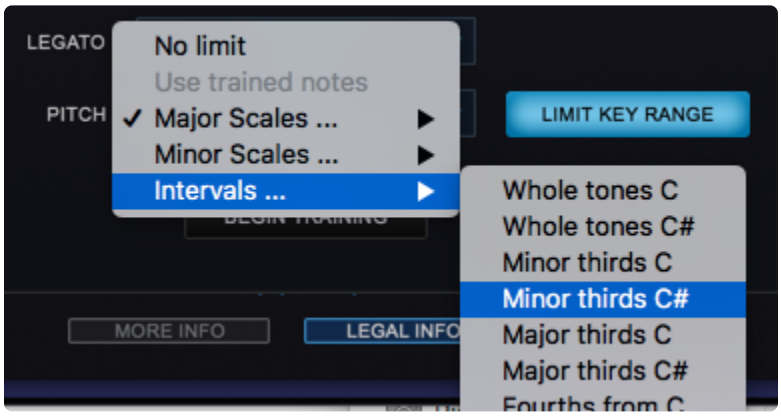
With Trained Pitch Thinning, you can load only the samples used during a performance.

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 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.

LIMIT KEY RANGE

Turning this button ON will limit the key range of certain Soundsources. This feature currently works on some kalimba Soundsources from the Core Library. Enabling this option will limit the playing range of these Soundsources to the actual ranges of the instruments from which they were sampled. When this option is disabled, the key range is extended across the entire keyboard.

NOTE: All Thinning options applied here are saved with the Patch or Multi, and are recalled the next time you load them.

7.3.3. Synth Mode

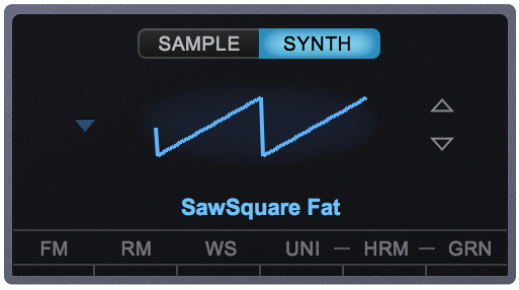
When the OSCILLATOR is in Synth Mode, Omnisphere uses DSP wavetables generated in real-time by the STEAM engine. A wavetable is a collection of single-cycle waveforms that can be swept through smoothly (using the SHAPE slider), creating dynamic timbral changes. These changes can be subtle or dramatic, depending on the timbral variety of the waveforms in a wavetable.

Omnisphere has over 500 available wavetables, ranging from classic vintage synthesizer waveforms to aggressive, digital waveshapes. SYNTH mode's Waveform Display features a graphic representation of the waveshape. Changes that are made to the three unidirectional sliders in the MAIN section below will dynamically and visually alter the contour of the waveform.

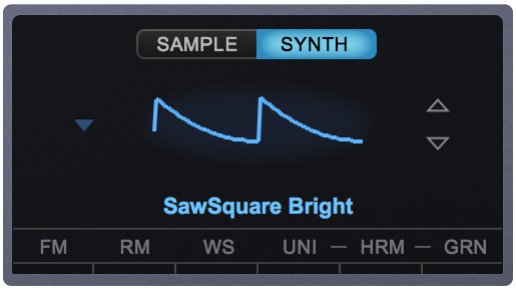
7.3.3.1. Wavetables

Click the down-arrow to the left of the Waveform display to reveal a drop-down menu listing Omnisphere's DSP wavetables. There are over 500 wavetables in Omnisphere and they are listed in the directories below. Use the SHAPE slider to get an idea of the sonic results each wavetable can produce.

SawSquare Fat



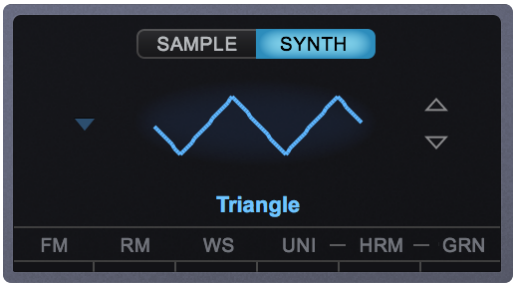
SawSquare Bright



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.

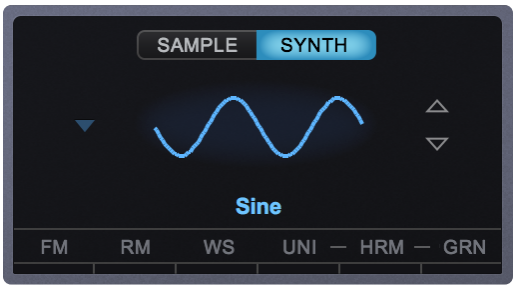
The Bright and Fat versions of the SawSquare waveform are similar, but with a different character. The SawSquare Bright has a bit leaner and buzzier timbre and is excellent for polyphonic applications. The SawSquare Fat has a thicker sound, especially in the low end and is ideal for monophonic lead sounds.

Triangle Waveform



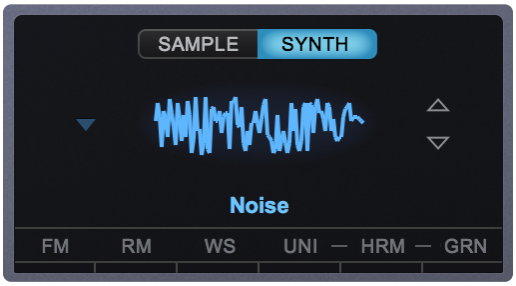
A Triangle wave is more symmetrical than the SawSquare waveforms and has a mellower character, as it contains fewer overtones. By moving the SHAPE slider towards maximum it will sound richer and more like a Square wave.

Sine Waveform



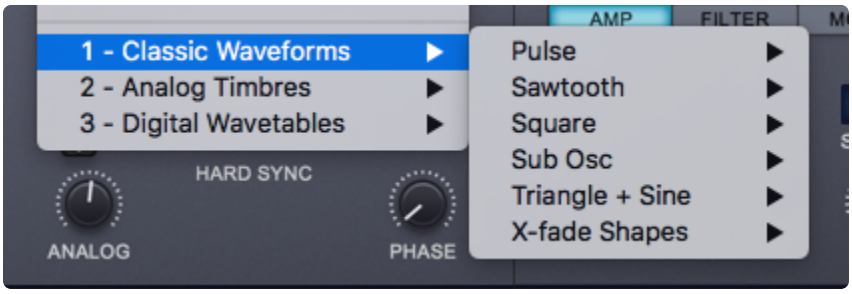
The sine wave is the most symmetrical and since it has no overtones, it sounds very pure. But with the SHAPE, SYMMETRY, and HARD SYNC controls, overtones can be added to alter its character.

Noise Waveform



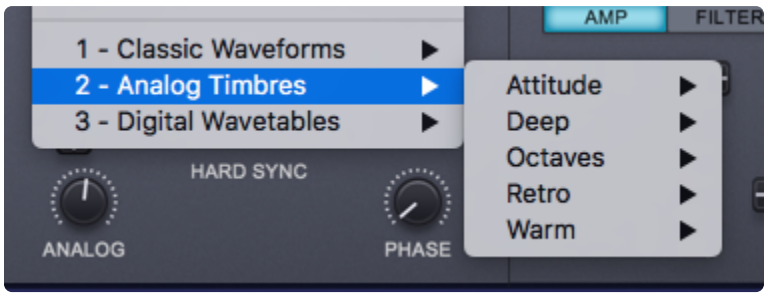
Just like the color white contains all colors, White Noise contains all frequencies at equal amplitude, therefore it is pure noise. Since changing the wave's contour with the SHAPE control would not normally make any difference to noise, the three sliders in the MAIN section have different functions when the Noise waveform is selected.

Classic Waveforms



This directory contains traditional waveforms (Pulse, Sawtooth, Square, Triangle, Sine, and a variety of sub-oscillators) modeled after vintage and modern synths. It is interesting to hear how the character of these simple waveforms changes depending on the synth they were modeled after. Most of these wavetables contain two waveforms from the same synth in order to maintain the modeled synth's character when SHAPE is used.

Analog Timbres



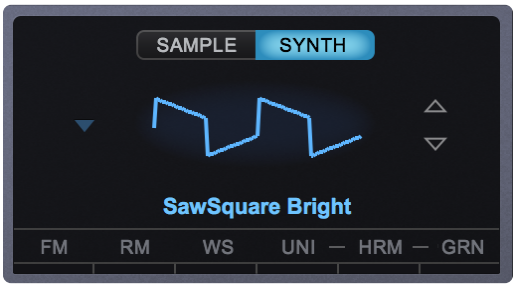
The wavetables in "Analog Timbres" are modeled after sounds created with analog synthesizers that are more complex than those found in "Classic Waveforms." They range from aggressive to warm and the amount of waveforms per wavetable varies, and SHAPE produces many interesting timbres.

Digital Wavetables

The “Digital Wavetables” directory contains sounds modeled after a wide variety of digital synthesizers—both hardware and software-based. Because of the nature of these sources, this directory contains the most sonic variety, ranging from edgy, to warm, to bell-like. You will find classic digital PPG-like sounds and modern, aggressive sources for new Patches. The amount of waveforms per wavetable varies and the more dramatic-sounding ones (using SHAPE) are in the “Sweepers” subdirectory.

7.3.3.2. Shape

The SHAPE control is unique to the SYNTH Oscillator in Omnisphere. Moving this slider sweeps through the waveforms on the selected wavetable, and depending on the wavetable, can create subtle or dramatic changes. The waveform display will dynamically change as the slider is moved. SHAPE is modulatable.



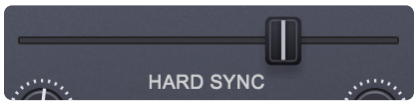
NOISE waveform only—SHAPE becomes a complex filter control, which varies from White Noise (all frequencies) at the minimum setting, to Pink Noise (exponentially-reduced high frequencies) at the maximum setting.

7.3.3.3. Symmetry

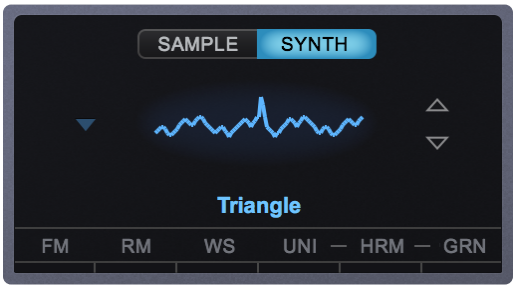
SYMMETRY varies the span of the waveform and is most commonly used for Pulse-Width Modulation (PWM). This is especially useful when SYMMETRY is used as a Modulation Target, as it adds shifting tone color and movement to the sound. The waveform display will dynamically change the waveshape as the slider is moved.

NOISE waveform only – The SYMMETRY slider acts as a morphing filter that sweeps through four different types of filters. Starting at the minimum setting with lowpass to a notch filter, then to a highpass and finally to bandpass at maximum setting.

7.3.3.4. Hard Sync



HARD SYNC is a feature on some analog synthesizers which gave the timbre a “throaty” diphthong type of sonic characteristic when swept. Hard Sync was popularized on synthesizers like the Prophet 5 and the early Oberheim synthesizers for a more metallic and aggressive timbre, and is 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. Any changes in the slave oscillator’s pitch will not change the pitch of the master—instead the overtones and harmonic structure are changed.



In the past, an oscillator would need to be sacrificed to get this 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. The waveform display will dynamically change as the HARD SYNC slider is moved. HARD SYNC is modulatable.

NOISE waveform only – HARD SYNC control acts as a stereo width control that is mono at the minimum setting and gradually spreads the noise into both right and left channels towards the maximum setting.

7.3.3.5. 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 ANALOG is set to 50% and lower, it destabilizes the phase of the oscillator. After 50% it will also destabilize the pitch. As the control is increased past 75% the pitch will become heavily detuned.

ANALOG is found in the Layer Pages, the Main Oscillator Zoom, and in the Unison Oscillator Zoom.

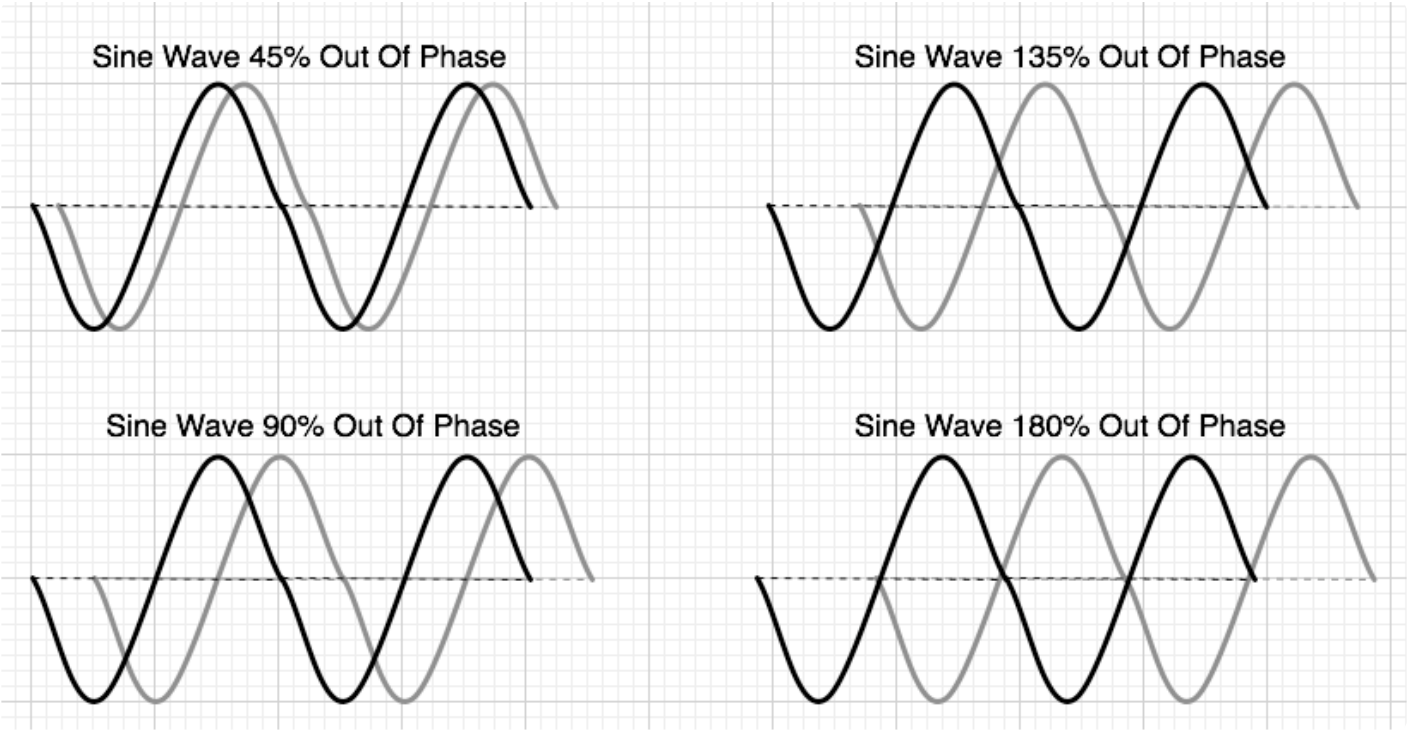
NOTE: The ANALOG control has an effect on Unison voices too, so if Unison detuning is too drastic, it may be desirable to reduce the ANALOG control.

7.3.3.6. Phase

The PHASE control will have an audible effect ONLY when it is combined with another Layer, as phase changes can only be perceived as a reaction between two audio signals.

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, then select the Paste Layer option from the UTILITY menu. This way two identical Oscillator Layers will be audible and changes in the phase can easily be heard.

If the PHASE control is at minimum, the Oscillator will be triggered at the start of the waveform. As the value is increased, the point at which the Oscillator will be triggered will be moved and it will then 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.



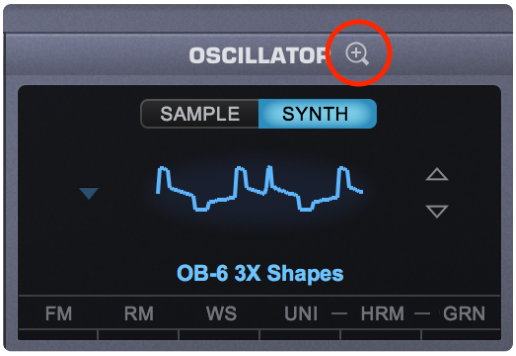
Many interesting composite waveforms can be created with the PHASE control this way, and this technique is particularly useful for synth bass sounds.

NOTE: PHASE best utilized when the ANALOG control, also in the MAIN section, is set to a minimum value.

7.3.4. Oscillator Zoom

The **OSCILLATOR ZOOM** provides access to many of Omnisphere's controls in one convenient place.

To access the OSCILLATOR ZOOM, click on the magnifying glass next to the word OSCILLATOR.



From here, you can adjust and control TRANSPOSE, COARSE and FINE TUNING, TRACKING, REVERSE, TIMBRE, START, REVERSE, and clicking on the IMAGE takes you to the Soundsource Browser.

The OSCILLATOR ZOOM contains the controls for Omnisphere's multiple types of synthesis and has six sub-pages: **MAIN**, **FM**, **RING**, **WS**. **UNISON**, **HARM**, and **GRAN**.

To close the OSCILLATOR ZOOM, click on the magnifying glass icon in the header.

7.3.4.1. Main

The Main OSCILLATOR ZOOM Sub-Page contains many of the controls already present in the Layer Page, with some additions and a different layout. Some of the controls will change depending on the selected Oscillator mode.

TRANSPOSE

TRANSPOSE works like MIDI transposition and pitch changes are made in semitones. Changes in pitch don't affect the sound quality of the Oscillator. This control is most often used to set the oscillators at different semitone values, such as octaves or other intervals. TRANSPOSE offers the best available sound quality, but it is not modulatable.

Range -24 semitones to +24 semitones

COARSE

The COARSE control operates in a similar way to FINE, but with a much larger range. Unlike TRANSPOSE, using COARSE does affect the sound quality of the Oscillator, but it is a modulatable control. COARSE is useful for wide-range pitch modulation FX.

Clicking on the COARSE button toggles between COARSE pitch and HARD SYNC mode and is only available on SYNTH mode.
When HARD SYNC is selected, any COARSE pitch modulations will be changed in the Mod Matrix to Hard Sync for that Layer only. Re-selecting COARSE changes the modulations back.

Range -4800 cents to +4800 cents

• The HARD SYNC control is a duplicate of the HARD SYNC control on the Layer pages.

Range 0.0 to 1.0

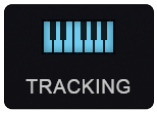
FINE

The FINE control is the most precise, changing the pitch in 1cent increments. The most common use of a fine pitch control is to detune the oscillators a small amount (less that 15 cents) from each other, causing them to sound richer.

The FINE range is selectable between +/- 1 semitone (half-step), +/- 7 semitones (perfect fifth), or +/- 12 semitones (one octave)_

- *Range [1] -100 cents ~ +100 cents*
- *Range [7] -700 cents ~ +700 cents*
- *Range [12] -1200 cents ~ +1200 cents*

TRACKING



If the TRACKING (also known as Keyboard Tracking) switch is enabled, the pitch of the Oscillator will track the keyboard, meaning the root pitch will be changed with each key. When TRACKING is disabled, the Oscillator will not track the keyboard.

If a Soundsource is loaded, depending on the map, 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.

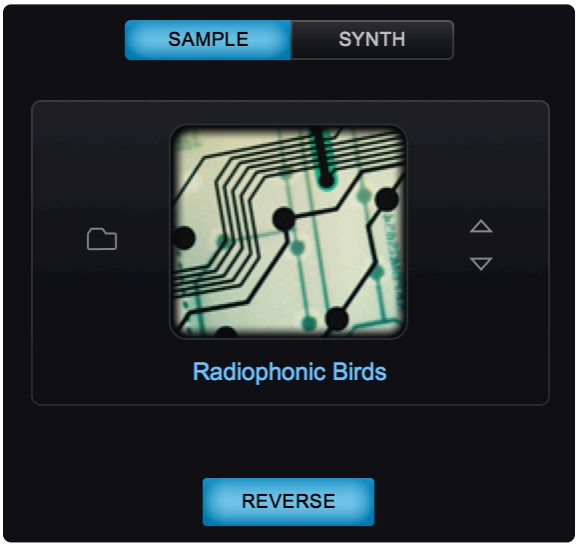
SAMPLE/SYNTH MODE SELECTOR

Selecting either mode switch will determine whether the Layer will be able to load a Soundsource (SAMPLE) or will utilize a DSP Wavetable (SYNTH).

SAMPLE MODE does not load a Soundsource by default. A Soundsource must be selected from the Soundsource Browser.

SYNTH MODE defaults to the “SawSquare Fat” waveform.

SOUNDSOURCE/WAVEFORM DISPLAY



Depending on which tab is selected, the Soundsource/Waveform Display area displays an image of the loaded Soundsource (SAMPLE) or waveform (SYNTH). The steppers on the right allow you to step through Soundsources (SAMPLE) or wavetables (SYNTH). Clicking on the displays brings up the Soundsource Browser (SAMPLE) or the wavetable menu (SYNTH).

REVERSE (SAMPLE ONLY)

The REVERSE button appears at the bottom center of the of the Layer Pages and the Oscillator Zoom when the SAMPLE tab is selected. When engaged, it reverses the playback of the selected Soundsource for that Layer. The button is highlighted in blue when it is ON.

When REVERSE is enabled the loop points become inactive for the following reasons:

- You normally want to hear the attack when playing a sample in reverse, and it will not play if loops are active.
- Many times the looped section occurs at the tail of the sound, so that is all you would hear if loops were active.
- Samples which play something worthwhile when looped in reverse generally don't sound much different when played forward or backward.

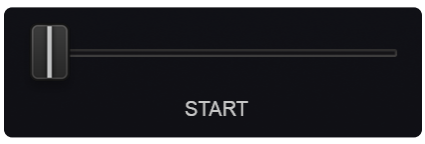
TIMBRE (SAMPLE ONLY)

The TIMBRE slider alters the tonal characteristics of the Soundsource in different ways. There are two TIMBRE modes, CRUSH, and SHIFT. The center-point of this bidirectional slider is null—meaning no TIMBRE change will occur.

- **CRUSH** – 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.
- **SHIFT** – 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. When SHIFT is used as a modulation target, the character of the Soundsource can change dynamically. The more samples that are mapped across the keyboard, the more pronounced the TIMBRE SHIFT effect will be. Conversely, with a texture or other Soundsource that only contains a single sample, SHIFT will have no effect.

NOTE: Because of the way TIMBRE SHIFT works, changes to the modulation of the TIMBRE slider must be re-triggered to hear the effect. TIMBRE changes cannot be heard on a sustained note.

START (SAMPLE ONLY)



The START control determines where in the sample its playback will start when the Oscillator is triggered.

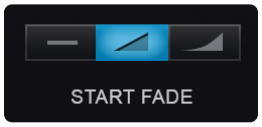
Among other things, it can be useful to remove sharp attacks or clicks at the start of a sample. The range of this setting will vary depending on the number of samples in the Soundsource.

Soundsources such as Textures might have a single sample mapped across the entire keyboard whereas other types of Soundsources might have a great many mapped sample ranges. These ranges are called “Zones.”

The number of Zones determines the range of the Start control. Depending on the number of Zones contained in a Soundsource, its range can vary from 1 second (when there are many Zones) to as much as 90 seconds (in the case of one Zone).

TIP: To add interesting motion to Patches such as Textures, try moving the Start Slider to the mid-range and modulate it with the Mod Source, “Random,” then turn the Arpeggiator ON.

START FADE



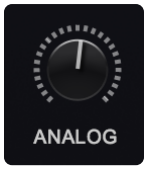
These are mode switches that control the shape of the start point. This can be useful for eliminating clicks that might happen at certain START offsets. These three mode switches set the duration of the fade-in:

No Fade-in

Medium Fade-In

Maximum Fade-In

ANALOG (SYNTH ONLY)

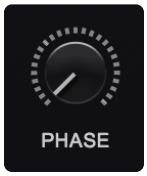


The ANALOG control allows inconsistency to be introduced into the pitch and phase of the oscillator, which makes Omnisphere sound and behave more like a vintage analog instrument. When the ANALOG control is set to 50% and lower, it destabilizes the phase of the oscillator. After 50% it will also destabilize the pitch. As the control is increased past 75% the pitch will become heavily-detuned.

The ANALOG control is found in the Layer Pages, the Main Oscillator Zoom and in the Unison Oscillator Zoom.

NOTE: The ANALOG control also affects Unison voices, so if Unison detuning is too drastic, you may want to lower the ANALOG control.

*PHASE (SYNTH ONLY) *

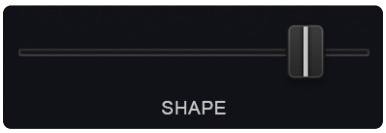


The PHASE control will only have an audible effect when it is heard combined with another layer, as phase changes can only be perceived in relation to another audio signal. The best way to understand the PHASE control is to set up a SYNTH sound on Layer A (with the ANALOG control to zero). Then, from the UTILITY menu select the Copy Layer option and select Layer B and select the Paste Layer option from the UTILITY menu. With two identical Oscillator Layers, 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 where 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° out-of-phase with the other Layer's Oscillator.

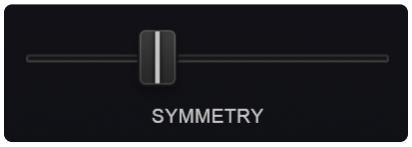
Many interesting composite waveforms can be created with the PHASE control this way, and this technique is particularly useful for Synth Bass sounds.

*SHAPE (SYNTH ONLY) *



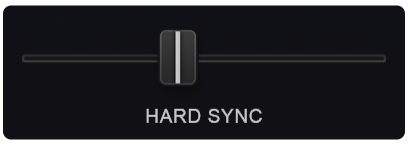
Moving this slider sweeps through the waveforms on the selected wavetable, and depending on the wavetable, can create subtle or dramatic changes. The waveform display will dynamically change the waveshape as the SHAPE slider is moved. The SHAPE slider is modulatable. When the oscillator is set to Noise, SHAPE becomes a complex filter control, which varies from white noise (all frequencies) at the minimum setting, to pink noise (exponentially reduced high frequencies) at the maximum setting.

SYMMETRY (SYNTH ONLY)



Symmetry varies the span of the waveform and is most commonly used for Pulse-Width Modulation (PWM). This is especially useful when SYMMETRY is used as a modulation destination, as it adds shifting tone color and movement to the sound. The waveform display will dynamically change the waveshape as the SYMMETRY slider is moved. When the oscillator is set to Noise, SYMMETRY becomes a morphing filter that sweeps through four different types of filters, starting at the minimum setting with lowpass to a notch filter, then to a highpass and finally to bandpass at the maximum setting.

HARD SYNC (SYNTH ONLY)



Hard Sync was a feature on some analog synthesizers which gave the timbre a “throaty” diphthong type of sonic characteristic when swept. Hard Sync was popularized on synthesizers like the Prophet 5 and the early Oberheim synthesizers for a more metallic and aggressive timbre, and is 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. Any changes in the slave oscillator’s pitch will not 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. The waveform display will dynamically change the waveshape as the HARD SYNC slider is moved. HARD SYNC is modulatable. When the oscillator is set to Noise, HARD SYNC acts as a stereo width control that is mono at the minimum setting and gradually spreads the noise into both right and left channels towards the maximum setting.

7.3.4.2. Frequency Modulation

FM stands for Frequency Modulation. FM has been a feature on synthesizers since the 1960s, but it became mainstream in the 1980s with Yamaha's DX/TX series of digital synthesizers. It was well-known for producing glassy, metallic, and other harmonically complex sounds.

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.

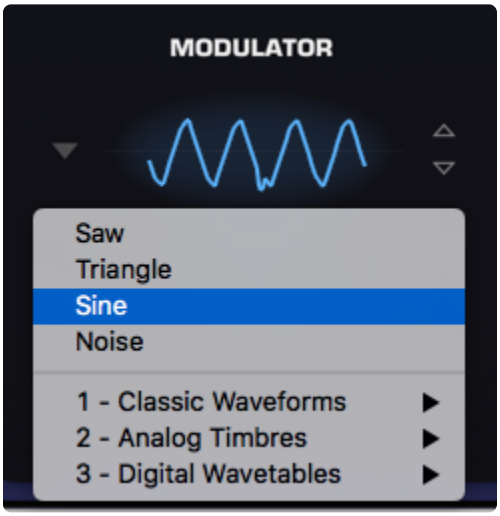
FM can take simple waveforms, like sine waves, and make them sound quite complex. In Omnisphere, any Soundsource or DSP wavetable can be modulated with FM.

Each Layer in Omnisphere has a dedicated FM Oscillator, which acts as the modulator. This dedicated oscillator can utilize different waveforms and its Frequency, Depth, Shape, Symmetry, and FM Sync can be modulated.

FM POWER SWITCH

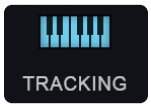
Turns the FM modulating oscillator ON or OFF.

FM MODULATOR



While many FM synthesizers use only sine waves as modulators, Omnisphere can use any of its more than 500 wavetables. You can select them from the menu by clicking on the waveform display or by using the stepper arrows to the right of the image.

TRACKING



The small music-keyboard switch enables or disables Keyboard Tracking. The TRACKING button determines if the modulator oscillator tracks the keyboard.

If TRACKING is ON, the modulator oscillator will track the keyboard, meaning it will change pitch with each key. If TRACKING is OFF, the modulator will not change pitch with the keyboard, it will stay on the same pitch, no matter which key is played. This can be useful for more clangorous or noise-like sounds.

FREQUENCY

Controls the frequency of the modulator oscillator. Because the modulator is unheard, it does not change the pitch of the original Oscillator, but instead 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 values at the notches are decimal versions of the following ratios:

.5, 1:1, 1:1.5, 1:2, represented as .250, .500. .750 and 1.00.

Range 0.000 to 1.000

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

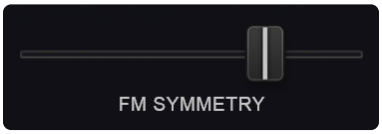
DEPTH SWITCH

When the NORMAL tab is selected, the DEPTH range is narrow but with more resolution, and is useful for adding a subtle FM-color to sounds. When BOOST is selected, the range is much higher, allowing you to produce more dramatic FM sounds.

FM SHAPE

Moving this slider sweeps through the wavetable selected as the Modulator, and depending on the wavetable, can create subtle or dramatic changes. The waveform display will dynamically change the waveshape as the FM SHAPE slider is moved.

FM SYMMETRY



FM SYMMETRY varies the span of the wavetable selected as the Modulator and is most commonly used for Pulse-Width Modulation (PWM). This is especially useful when FM SYMMETRY is used as a modulation destination, as it adds shifting tone color and movement to the sound. The waveform display will dynamically change the waveshape as the FM SYMMETRY slider is moved.

FM SYNC

Hard Sync was a feature on some analog synthesizers which gave the timbre a “throaty” diphthong type of sonic characteristic when swept. Hard Sync was popularized on synthesizers like the Prophet 5 and the early Oberheim synthesizers for a more metallic and aggressive timbre, and is especially useful for lead sounds.
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 FM Hard Sync. The FM Hard Sync Oscillator becomes the slave and the FM Oscillator is the master. The slave is forced to restart its waveform when hard-synced with the master oscillator and the master controls the pitch. Any changes to the slave oscillator’s pitch will not change the pitch of the master—but change the overtones and harmonic structure instead. The waveform display will change dynamically as the FM SYNC slider is moved.

NOTE: All the sliders on this page are modulatable.

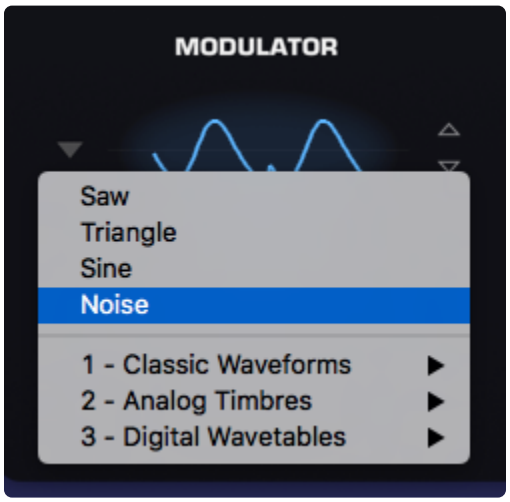
7.3.4.3. Ring Modulation

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.

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.

Each Layer in Omnisphere has a dedicated Ring Modulation Oscillator. This dedicated oscillator can utilize different waveforms and its Frequency, Depth, Shape, Symmetry, and Ring Sync can be modulated.

RING MODULATOR

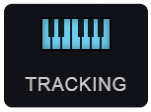


You can select any of the over 500 waveforms or wavetables to act as the modulator. You can select them from the menu by clicking on the waveform display or by using the stepper arrows to the right of the image.

RING MOD POWER SWITCH

Turns the modulator oscillator ON or OFF.

TRACKING



The small music-keyboard switch enables or disables Keyboard Tracking. The TRACKING button determines whether the modulator oscillator tracks the keyboard. 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 Keyboard Tracking is ON, then the Ring Modulator Oscillator will change pitch with the keyboard. If Keyboard Tracking is OFF, the modulation oscillator will remain the same pitch, no matter what key is played.

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 is in the audio range.

The notches along the FREQUENCY slider are markers for the frequency ratios that will produce the most useful results.

The values at the notches are decimal versions of the following ratios:

1:.5, 1:1, 1:1.5, 1:2, represented as .250, .500. .750 and 1.00.

Range 0.000 to 1.000

DEPTH

This horizontal slider controls the depth of the Ring Modulation, meaning how much interaction occurs between the carrier and the modulator.

Range 0.000 to 1.000

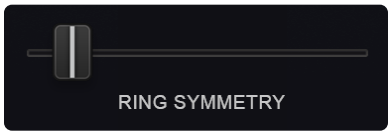
DEPTH SWITCH

These tabs control the level of the modulator. Use NORMAL for adding a subtle Ring Mod-color to sounds. When BOOST is selected, the level of the modulator is increased, producing more dramatic results.

RING SHAPE

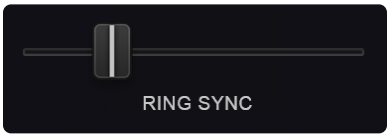
Moving this slider sweeps through the wavetable selected as the Modulator, and depending on the wavetable, can create subtle or dramatic changes. The waveform display will dynamically change as the RING SHAPE slider is moved.

RING SYMMETRY



RING SYMMETRY varies the span of the wavetable selected as the Modulator and is most commonly used for Pulse-Width Modulation (PWM). This is especially useful when RING SYMMETRY is used as a modulation destination, as it adds shifting tone color and movement to the sound. The waveform display will dynamically change as the RING SYMMETRY slider is moved.

RING SYNC



Hard Sync was a feature on some analog synthesizers which gave the timbre a “throaty” diphthong type of sonic characteristic when swept. Hard Sync was popularized on synthesizers like the Prophet 5 and the early Oberheim synthesizers for a more metallic and aggressive timbre, and is especially useful for lead sounds.

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 Ring Mod Hard Sync. The Ring Mod Hard Sync Oscillator becomes the slave and the Ring Mod Oscillator is the master. The slave is forced to restart its waveform when hard-synced with the master oscillator and the master controls the pitch. Any changes to the slave oscillator’s pitch will not change the pitch of the master—but change the overtones and harmonic structure instead. The waveform display will change dynamically as the Ring Mod SYNC slider is moved.

NOTE: All the sliders on this page are modulatable.

7.3.4.4. Waveshaper

Omnisphere's Waveshaper takes the Oscillator's waveform and passes it through mathematically generated curves that add various types of distortion, changing the waveform's harmonic content.

Instead of being a standalone effect, Omnisphere's Waveshaper 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 and musical.

The Waveshaper page is divided into three sections: **CRUSHER**, **SHAPER**, and **REDUCER**.

In the **CRUSHER** section, you can reduce the bit-depth using the BIT CRUSH slider to create digital distortion and you can make it more or less aggressive by using the CRUSH FORCE slider.

In the **SHAPER** section, you can control the amount of Waveshaping that is applied to your sound by using the DEPTH slider. You can also change the type of Waveshaping by selecting one of the four algorithms, which range from softer to more aggressive.

In the **REDUCER** section, you can reduce the sample rate by moving the SAMPLE RATE slider to create interesting alterations to the quality of the sound. By using the ANIMATION slider you can add a dynamic character that changes over time.

The **MIX / PATH / GAIN** controls apply to all three sections.

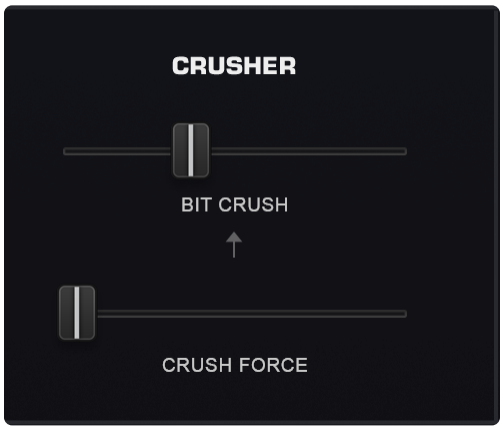
POWER SWITCH

This turns the Waveshaping effect ON or OFF.

PRESETS

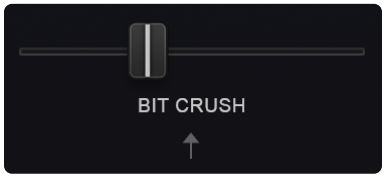
Waveshaper Presets can be copied, pasted, or saved from this menu.

7.3.4.4.1. Crusher



The CRUSHER section offers parameters for controlling the bit depth of the oscillator.

BIT CRUSH

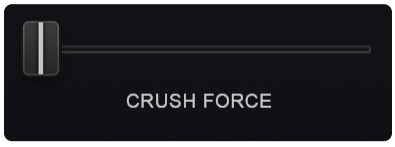


Bit-crushing introduces distortion by reducing the resolution of digital audio. This lowers the dynamic range and increases the noise floor. Use this for achieving grainy or lo-fi sounds—it really adds character to your sound. The effect can range from slightly distorted to very harsh, depending on the slider setting.

BIT CRUSH is modulatable.

Range 0.000 to 1.000

CRUSH FORCE

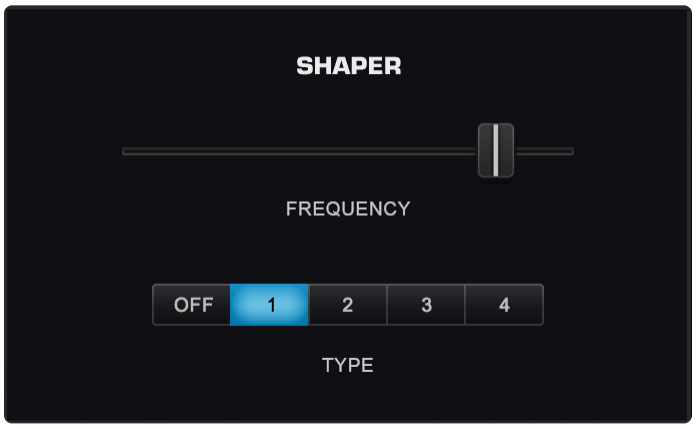


The CRUSH FORCE slider lets you add a unique distortion for a more aggressive sound. This parameter will have no effect if the BIT CRUSH slider is set to zero.

CRUSH FORCE is modulatable.

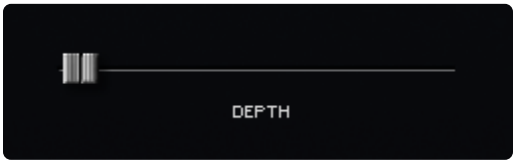
Range 0.000 to 1.000

7.3.4.4.2. Shaper



The SHAPER section offers controls for introducing Waveshaping to the Oscillator.

DEPTH



In the SHAPER section, you can control the amount of Waveshaping that is applied to your sound by using the FREQUENCY slider. The farther to the right this is set, the more pronounced the effect of the Waveshaper will be.

DEPTH is Modulatable.

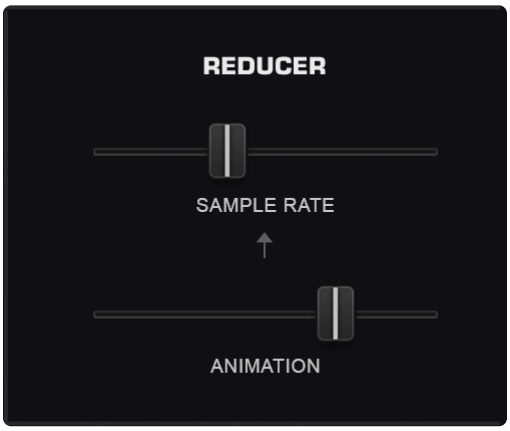
Range 0.000 to 1.000

TYPE

You can change the type of Waveshaping by selecting one of the four preset Waveshaping algorithms. These range from softer to more aggressive—1 being the most subtle and 4 the most extreme.

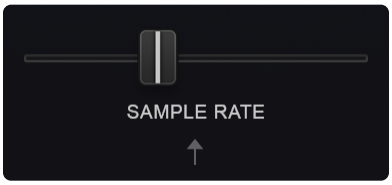
NOTE: Even with the DEPTH slider set to zero, there will be a certain amount of color added to the sound, so be sure to click the OFF button when Waveshaping is not in use.

7.3.4.4.3. Reducer



The REDUCER section offers parameters for controlling the Sample Rate of the Oscillator.

SAMPLE RATE

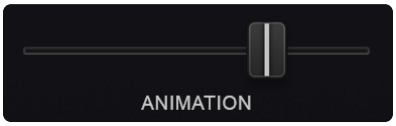


This controls the amount of Sample-Rate Reduction that is introduced to the Oscillator. By reducing the sample rate, distortion and artifacts called “aliasing” are introduced to the sound. Generally, aliasing is avoided in digital audio, but here it can be used in a controlled manner to add wildly different tonal qualities. The higher this slider is set, the lower the sample rate, and the more pronounced the effect will be.

SAMPLE RATE is modulatable.

Range 0.000 to 1.000

ANIMATION



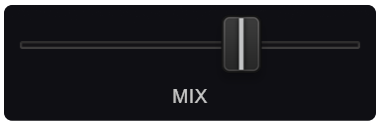
The ANIMATION slider adds a dynamic, time-variant character to the sound. This parameter will not have any effect if the SAMPLE RATE slider is set to zero.

ANIMATION is modulatable

Range 0.000 to 1.000

7.3.4.4.4. Mix / Path / Gain

MIX

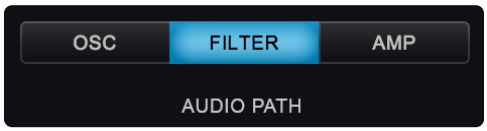


The MIX slider controls the balance between the original Oscillator's signal and the Waveshaped sound. If the mix is at the minimum setting, then the effect of the Waveshaper is not heard. When set to the maximum, only the Waveshaped signal is heard.

MIX is modulatable.

Range 0.000 to 1.000

*AUDIO PATH *



These three mode switches determine at what point in Omnisphere's audio path the Waveshaper 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.
- **FILTER** (Filter) – The Waveshaper is placed after the Filter's output, before the Amplifier.
- **AMP** (Amplifier) – The Waveshaper is placed after Omnisphere's Amplifier.

GAIN

The GAIN slider controls the amount of gain that is applied to the output.

Range 0.000 to 1.000

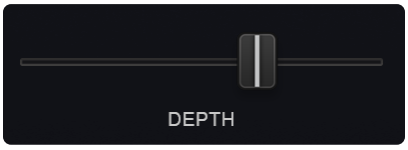
7.3.4.5. Unison

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 trigger several voices—each with different detuning, spread, and octave.

POWER SWITCH

This turns the UNISON effect on and off to quickly A/B your changes.

DEPTH

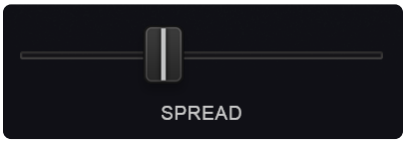


The DEPTH slider controls the amount of UNISON voices added. Increasing the setting of this slider increases the number of UNISON voices. The more UNISON voices used, the richer the sound, but the higher the demand on the CPU.

The maximum number of UNISON voices is 8.

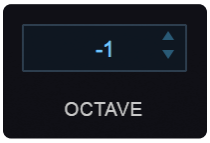
DEPTH is modulatable.

SPREAD



UNISON voices can be panned across the stereo image. SPREAD controls the extent of the stereo imaging. When the slider is at minimum setting, all UNISON voices are in the center of the stereo image. When set to maximum value, the UNISON voices are panned across the stereo field.

OCTAVE



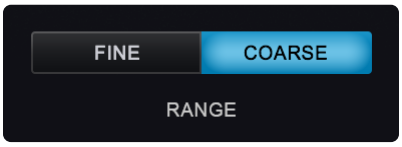
The OCTAVE menu specifies at which octave the UNISON notes will sound—up to two octaves above or below the main Oscillator. This is not a traditional transpose control, as it only moves the UNISON voices up or down—the pitch of the Oscillator will remain the same.

DETUNE

This determines to what degree the UNISON notes will be detuned from the original Oscillator. This setting does not affect the pitch of the original Oscillator, just the UNISON voices.

DETUNE is modulatable.

FINE/COARSE RANGE

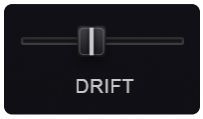


These mode switches determine the RANGE of the DETUNE slider. If FINE is selected, the DETUNE slider will only detune the UNISON voices as much as a half-step (99 cents) up or down. This works for classic UNISON and “SuperSaw” types of sounds.

When COARSE is selected, the range of the DETUNE slider is increased to a fifth or an octave above the

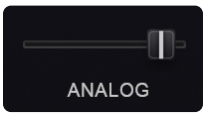
note, depending how many are added. When the DETUNE slider is used in COARSE mode, the UNISON voices will gradually glide to the final chord, producing the classic “THX” logo effect.

DRIFT (SYNTH mode only)



DRIFT is unique to the SYNTH mode. It simulates the pitch movement that occurs naturally in analog synthesizers. The DRIFT slider controls how much the pitch of the UNISON voices will drift from the main Oscillator.

ANALOG (SYNTH mode only)

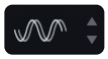


The ANALOG control option is unique to the SYNTH mode. It allows inconsistency to be introduced into the pitch and phase of the Oscillator, which makes Omnisphere sound and behave more like a vintage analog instrument. When the ANALOG control is set to 50% and lower, it destabilizes the phase of the oscillator. After 50% it will also destabilize the pitch. As the ANALOG control is increased past 75% the pitch will become heavily detuned.

This parameter is also present in the Layer pages and in the OSCILLATOR ZOOM MAIN page.

PHASE (SYNTH mode only)

The PHASE Control option is unique to the SYNTH mode. The Phase Control allows the initial phases of the Unison voices to 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 180° out-of-[hase. Perfectly in-phase produces results like digital synthesizers. Out-of-phase settings produce classic analog-like results.



7.3.4.6. Harmonia

HARMONIA is one of Omnisphere's most exciting and unique features. While it may seem like it shares the same functionality of a traditional Harmonizer effect, it's actually far more powerful because it's built into Omnisphere's Oscillator as a polyphonic synthesis component — not just as an effect.

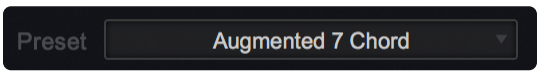
HARMONIA adds four additional oscillators to the Layer. Since each Layer has it's own HARMONIA section, it can add up to sixteen additional oscillators per patch, for a total of eighteen!

7.3.4.6.1. Controls

POWER SWITCH

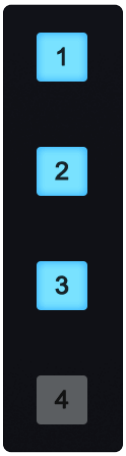
This turns HARMONIA ON and OFF and is useful for comparison to the original sound.

HARMONIA PRESETS



A complete set of HARMONIA presets can be accessed by selecting the menu arrow. Any factory presets or custom settings can be copied, pasted, or modified and saved.

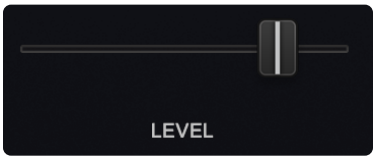
VOICES 1-4



Up to four HARMONIA voices can be stacked on top of the original voice by selecting the numbered switches in HARMONIA.

Keep in mind, adding more voices creates a higher demand on the CPU.

LEVEL



Controls the output level of the HARMONIA voices, so the effect of each voice can be subtle or pronounced.

The LEVEL controls are modulatable.

Range 0.000 to 1.000

PAN

Each of the HARMONIA voices can be positioned in the stereo field with the PAN controls.

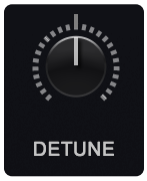
Range 0.000 to 1.000

TRANSPOSE

Each of the HARMONIA voices can be transposed over a four-octave range. Clicking the INTERVAL switch will reveal a drop-down menu of half-step transpositions, either up or down by as much as two octaves.

Range -24 to +24

DETUNE



Each of the HARMONIA voices can be detuned by +/- 100 cents. When the knobs are centered, there is no detuning.

The DETUNE controls are modulatable.

Range 0.000 to 1.000

MIX

This parameter controls the blend of the HARMONIA voices with the primary voice.

The MIX parameter is modulatable.

Range 0.000 to 1.000

7.3.4.6.2. Synth Controls

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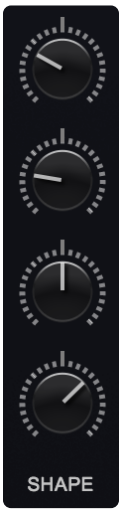
When the OSCILLATOR is set to SYNTH mode, all of the HARMONIA features in SAMPLE mode are available, as well as a second set of options that are unique to SYNTH mode. This special set of controls allows independent waveform control over each HARMONIA voice.

PHASE

Like the Phase Control option in UNISON, this is unique to the SYNTH Oscillators. The PHASE Control allows the phase of the HARMONIA voices to be spread across a 180° range. The width of the range is controlled by stepping through the five PHASE Control options, which range from in-phase to spread over 180°.

SHAPE

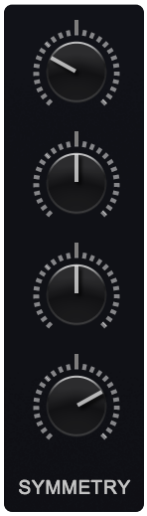


This control is unique to SYNTH Oscillators. This is an offset of the SHAPE control on the MAIN OSCILLATOR page. Each of HARMONIA's four voices can have its own SHAPE offset. The center position indicates that the HARMONIA voice's SHAPE is identical to the main Synth Oscillator's SHAPE.

NOTE: To learn more about the SHAPE functionality, check out the description in the OSC MAIN chapter.

Range 0.000 to 1.000

SYMMETRY



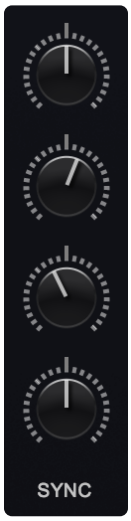
This control is unique to SYNTH Oscillators. This is an offset of the SYMMETRY control on the MAIN

OSCILLATOR page. Each of HARMONIA's four voices can have its own SYMMETRY offset. The center position indicates that the HARMONIA voice's SYMMETRY is identical to the main Synth Oscillator's SYMMETRY.

NOTE: To learn more about the SYMMETRY functionality, check out the description in the OSC SYMMETRY chapter.

Range 0.000 to 1.000

SYNC



The SYNC control is unique to SYNTH Oscillators. This is an offset of the HARD SYNC control on the MAIN OSCILLATOR page. Each of HARMONIA's four voices can have its own SYNC offset.The center position indicates that the HARMONIA voice's SYNC is identical to the main Synth Oscillator's HARD SYNC.

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

WAVETABLE

This control is unique to SYNTH Oscillators. The WAVETABLE of each of the four HARMONIA voices can be set by clicking on this display, which will bring up the WAVETABLE menu, or stepped through by using the steppers. All the wavetables available for the main Oscillator can be used in each of the HARMONIA voices (Noise is not available). When the display is set to OSC, this means the WAVETABLE will follow the primary Oscillator's current wavetable selection.

NOTE: To learn more about the WAVETABLE functionality, refer to the Wavetables page.

7.3.4.7. Granular

Granular synthesis is a powerful type of synthesis that fragments pieces of audio into very small bits 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.

Omnisphere contains a fully implemented set of granular controls. Soundsources and DSP-Wavetables 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.

Granular Synthesis is a useful technique for creating a wide variety of evolving sounds (using **Grain** and **Pitch** Controls), time-stretching effects (using **Speed** mode), “freezing” effects (using **Position** mode), or edgy, gritty, glitchy effects (using **Intensity**).

TIP: Try dragging-and-dropping an audio file onto the Granular display, making it immediately available for Granular processing.

The Granular controls are located in the Oscillator Zoom Granular page. The controls in this page are enhanced with a dynamic Granular Display, a waveform model that represents how the grains are manipulated in the STEAM engine.

GRANULAR POWER SWITCH

This turns Granular ON and OFF and it is useful for comparing the granulated sound with the original.

GRANULAR DISPLAY

The Granular Display is a dynamic waveform model that represents how the grains are manipulated in the STEAM engine. It provides visual feedback of the Granular parameters and can be very useful during the sound design process.

NOTE: Granular Synthesis can require a great deal of processing power.

LEGACY

Omnisphere 2.0 uses a new granular algorithm which allows for wider sonic results. The LEGACY button activates the granular algorithm used in Omnisphere 1.x, in which the grains were larger and the results were often slower-moving and dreamier-sounding. Patches created in version 1.x will automatically load with the LEGACY button engaged to ensure backwards compatibility. Turn the LEGACY button to ON if you wish to program Patches with this algorithm.

NOTE: The WILD mode will not work in LEGACY mode.

7.3.4.7.1. Modes

There are two exclusive Granular modes: SPEED and POSITION. While other granular parameters work in the same manner regardless of the mode, the slider above the SPEED and POSITION mode selectors controls only the selected mode.

SPEED

SPEED automatically moves the position of the sample that is being granulated forwards or backwards at a fixed rate. All the way to the left is forward at full speed, all the way to the right is backwards full speed. In-between values will move it more slowly forwards (below .5) or backwards (above .5). Omnisphere takes over control of the position in this mode. This mode can be useful for adding movement to otherwise static sounds, or to do lo-fi time stretching or reversing.

The SPEED slider is modulatable.

POSITION

The POSITION slider allows you to select which portion of the sample is being granulated. As an example, you can choose to granulate only the “pluck,” or only the decay of a guitar note. This mode is useful for granulating a specific portion of the sample and for creating “freezing” effects. The blue display above the slider represents the current position of the slider, hence the portion of the sample being granulated.

The POSITION slider is modulatable.

NOTE: The number of Zones in a Soundsource determines the maximum range of the POSITION slider. If the Soundsource has more than 12 Zones mapped, the range of the POSITION slider slider is 1 second. If it has less than 12 Zones, then the POSITION slider’s range can be up to 90 seconds.

In both modes, the results will vary depending on the settings of other Granular parameters, particularly **INTENSITY**, **DEPTH**, and **SMOOTHING**.

Range 0.000 to 1.000

7.3.4.7.2. Grain Controls

GRAIN DEPTH

Moving this slider to the right increases the number of grains which are created from the Soundsource. The higher the number of grains, the higher the demand on the CPU. Excellent results can usually be obtained without using a lot of GRAIN DEPTH, so use it carefully. GRAIN DEPTH adds more loops, which means more grains overlapping with each other.

Range 0.000 to 1.000

INTENSITY

When the sound is sliced into grains, the grain size can be altered, changing the speed and intensity of the effect. When the INTENSITY slider is lower, the grains are longer and there is a slower transition to the next grain. When the INTENSITY slider is higher, the grains are shorter and make the transition more quickly.

GRAIN INTENSITY is a Modulatable parameter.

Range 0.000 to 1.000

SMOOTHING

Since the grains can vary in pitch and amplitude, the change from grain to grain can be abrupt and jarring. Increasing the value of this slider softens the sharp transitions. Think of SMOOTHING as cross-fading between the grains. SMOOTHING changes the brightness of the blue lines in the Granular Display.

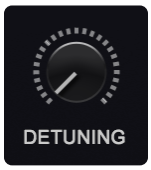
Range 0.000 to 1.000

SPREAD

This slider controls the placement of the grains within the stereo image — the higher the SPREAD, the wider the grains will be panned across the stereo field.

Range 0.000 to 1.000

DETUNING



The grains can be detuned by increasing this control's value. The higher DETUNING is set, the more variation in pitch will be heard in the grains.

Range 0.000 to 1.000

Sample Granular Trigger (MOD MATRIX TARGET Only)

Sample Granular Trigger is an advanced feature that can be accessed only from the Modulation Matrix. It allows for single grains to be triggered at specific time intervals without affecting their size.

For example, turn GRANULAR ON and create a modulation routing with LFO 1 set to a Square waveform as the source and Granular Trigger as the target. When you play a note on your keyboard, a single grain will be triggered every time the LFO transmits a value above zero. Increase the LFO Rate and the grains will be triggered more often. Increase the Intensity value in the Oscillator Zoom Granular page, and the grains will be smaller but still triggered at the same rate. To make it more interesting, try modulating Intensity with a different source (e.g. a different LFO or an Envelope) at a different speed. Constantly fluctuating sounds can be created using this technique. When the modulations are synced to the host's tempo, it is possible to get interesting stuttering FX that are synced to your music.

7.3.4.7.3. Pitch Controls

PITCH GRAINS

This slider sets how often the grains will be transposed in pitch. The PITCH GRAINS parameter and the ones below it, INTERVAL, GLIDING, and DIRECTION menu, are interdependent. When the PITCH GRAINS parameter is set to 0, the INTERVAL, GLIDING, and DIRECTION parameters will have no effect. In the Granular display, PITCH GRAINS determines the percentage of different color lines, based on the INTERVAL setting.

The PITCH GRAINS parameter is modulatable.

INTERVAL

The INTERVAL can be set from one to twelve semitones. This parameter will have no effect if the PITCH GRAINS slider is set to zero, or if the INTENSITY slider is set to zero. In the Granular Display, INTERVAL selects an alternate color for a percentage of lines determined by PITCH GRAINS.

Range 1 to 12 semitones

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 have no effect if the PITCH GRAINS slider is set to zero. In the Granular Display, an increase in GLIDING is represented by an increase in the number of different colored lines.

Range 0.000 to 1.000

DIRECTION

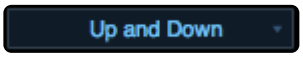
The items in the DIRECTION menu determine which direction the PITCH GRAINS are transposed.

There are four PITCH GRAIN DIRECTIONS available:

The PITCH GRAINS will be transposed up only.

The PITCH GRAINS will be transposed down only.

The PITCH GRAINS will be transposed up or down only – they will never be transposed up and down on the same note.



The PITCH GRAINS will be transposed randomly up and down on the same note.

MODE

The MODE menu lets you choose between NORMAL and WILD modes. WILD mode creates more dramatic results when the DETUNING or PITCH GRAINS sliders are above zero.

NOTE: WILD mode does not function in LEGACY Mode.

7.4. Filters

The **Filter** is a key component of subtractive synthesis. It's designed to remove frequencies from a sound, thus changing and enhancing sonic character. Filters typically consist of a cutoff control, which sets which frequencies are reduced or removed, 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 are allowed to pass. Most vintage synthesizers employed Lowpass filtering, but some also included Highpass 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 thirty-four different filter types available, which include Low Pass, High Pass, Band Pass and other specialized varieties. Because Omnisphere's filters are stereo, they are ideal for dynamic filter-panning effects.

The FILTERS section of the LAYER 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 **FILTER ZOOM** view.

7.4.1. Power Switch

Enables or disables the FILTERS.

NOTE: Turning the Filter OFF saves CPU power, since every voice played has its own dual-filter per Layer.

7.4.2. 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.

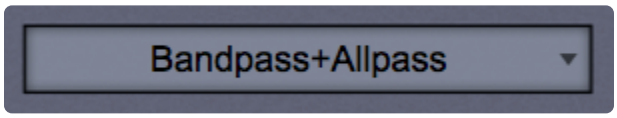
The Presets are categorized into several sub-categories; Bandpass Filters, Highpass Filters, Lowpass Filters, and Specialty Filters.
For the sake of space, the preset names are abbreviated:

BPF	Band Pass Filter
HPF	High Pass Filter
LPF	Low Pass Filter
UVI	UVI Filter from Atmosphere®
db	Short for Decibel. Names like 12db, 24db, refer to the roll off slope of the filters.

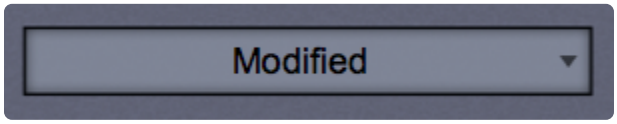
NOTE: Filter presets are not the same as Filter types. Filter Presets include the Filter types, Gain, routing, and offsets. Filter types are covered in the FILTER ZOOM section.

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 FILTER ZOOM view, the display will be changed to “Modified” until the Filter settings are saved as a Preset or another Preset is selected.



NOTE: Filter Presets do not recall CUTOFF, RES, KEY, and ENV settings. This is the most accurate way to audition the different Filter Presets within the context of your current Patch.

7.4.3. Cutoff

The primary function of the filter is to remove, hence “cut off,” frequencies from the sound. Omnisphere’s filters can remove frequencies in a variety of ways, from Lowpass, High Pass, Band Pass, and Notch filters, to more specialized types. 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 higher frequencies. If a High Pass Filter is used, the opposite will happen. It’s best to experiment with the 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

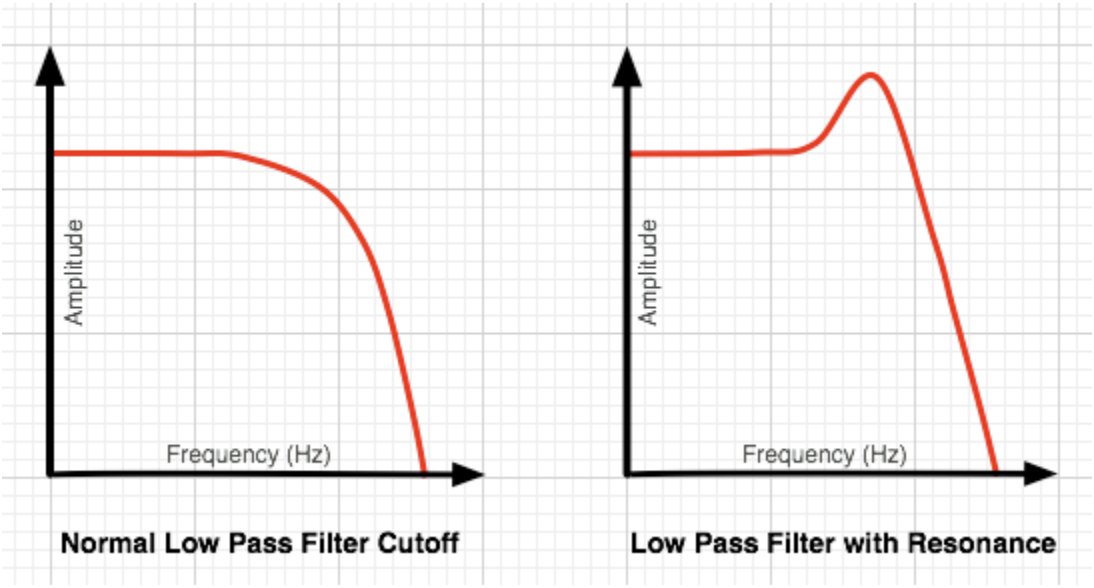
24dB = 4 Pole

Range 00.05 kHz to 19.00 kHz

Omnisphere has many specialized filters, some of which are based on tuned delay lines (e.g. Metal Pipe +/- and Resonator +/-). In those cases, the Cutoff is used to tune the filter’s pitch.

7.4.4. 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. To achieve this effect, set the Resonance to maximum, and the filter can then be ‘tuned’ by the Cutoff control.

NOTE: Omnisphere’s resonant filters are unusual. Turn up the Resonance and Variant while holding a note and turn the Filter Cutoff higher. The pitch goes down with the filter when the Cutoff goes up. That means the Key Tracking must be inverted to get the pitch to go up as you go up the keyboard.

7.4.5. Key Tracking

The Filter **Key Tracking** knob 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 0.262 kHz, 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 0.000 to 1.000

FILTER KEY TRACKING INVERT SWITCH

Key Tracking can be inverted simply by selecting the word “KEY” below the control. The button’s label text will become inverted and the sonic result will be the opposite of standard Filter Key Tracking.

TIP: The Resonator +/- filters are tuned to respond to key tracking.

- ***1) Put the Filter Cutoff at the default (50***) value.%
- ***2) Turn the Key Tracking knob all the way up.***
- ***3) Invert the key tracking with the switch.***

At these settings, the Resonator +/- filters will track the pitch when played above middle C (although we intentionally detuned it a few cents). And with some timbres there can be surprising pitches on certain notes.

7.4.6. 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 effect on the Cutoff. The higher the setting, the greater effect the Filter Envelope's contour has on 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 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.

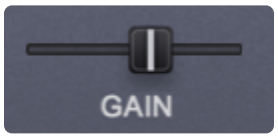
Range 0.000 to 1.000

ENV INVERT SWITCH

This control inverts the Filter Envelopes contour and so it will have the effect of closing the filter (lowering the cutoff frequency). ENV will change to inverted text when tracking is inverted.

TIP: Inverting the Filter's Envelope can be useful for creating unusual contours, such as double-triggering and release effects

7.4.7. Gain



By default the Filter **GAIN** is set at 0.0db. Changing this control alters the output level of the Filters. E.G. if the Filter is closed down and the tone is dark and low in output, the level can be compensated by using the FILTER GAIN control. More commonly, Filter combinations with Resonances can get too loud, causing distortion and clipping. Use the GAIN slider to reduce the overall level in these cases.

Range between – inf (0) and +9.54.dB

NOTE: From the Filter Zoom, GAIN can be applied before or after the Filters.

7.4.8. Variant

The **VARIANT** control in Omnisphere's Filter section is not typically found on most synthesizers. Since Omnisphere's Filter is stereo, VARIANT responds in most filter types by moving 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 could be opening on the left channel while closing on the right channel. This creates unique panning effects that are more dramatic than standard audio panning—particularly when VARIANT is modulated.

In the following Filters, VARIANT behaves differently:

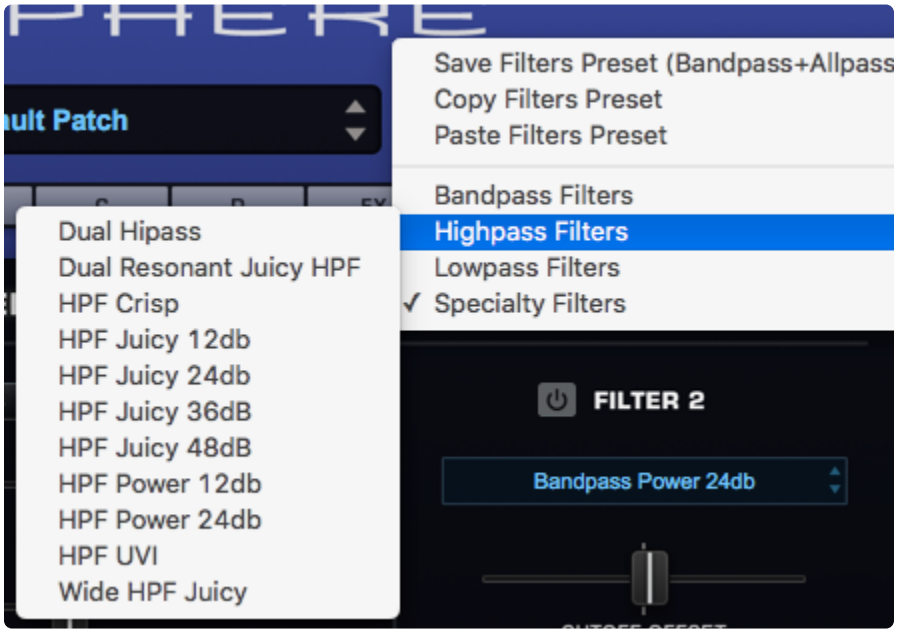
- In the Power Filter types, VARIANT controls the width of the CUTOFF.
- In the Resonator +/- Filter types, VARIANT controls the tone of the Filters.

7.4.9. Filter Zoom

The **FILTER ZOOM** in Omnisphere provides precise control over each Layer's Dual-Filter. The two stereo filters are represented on the left and right. The central area controls the routing and contains the shared controls. Each of the two stereo filters can have any of 34 filter types assigned. They can be combined in series or parallel, allowing for hundreds of possible filter configurations.

There are primary Cutoff, Resonance, and Variant controls for the entire Filter, but FILTER 1 and FILTER 2 both have their own independent CUTOFF, RES, and VARIANT Offsets which are applied to those primary values.

PRESETS



Omnisphere has a wide variety of customized filter configurations, called Presets. Filter Presets can be selected, copied, pasted, and saved from this menu.

NOTE: Filter presets are not the same as Filter types. Filter Presets include the Filter types, Gain, routing, and offsets.

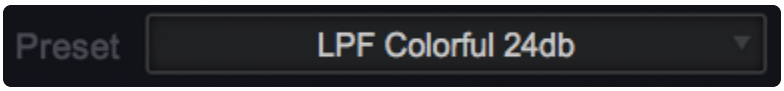
TIP: If you find a Patch that has an interesting custom filter configuration, you can save it into your Preset library to use with your own Patches.

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:

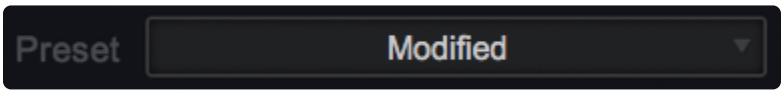
BPF	Band Pass Filter
HPF	High Pass Filter
LPF	Low Pass Filter
UVI	UVI Filter from Atmosphere®
db	Short for Decibel. Names like 12db, 24db, refer to the roll off slope of the filters.

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 are not designed to 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.

7.4.9.1. Power Switches

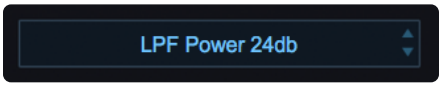
The Dual-Filter **Power Switch** enables or disables the entire Filter. It is a duplicate of the Power Switch on the EDIT page. The entire Dual-Filter can be turned ON and OFF with this switch, providing a quick way to compare the sound with and without filtering.

FILTER 1 and FILTER 2 POWER SWITCHES

Enables or disables FILTER 1 and/or FILTER 2.

NOTE: If both FILTER 1 and FILTER 2 are OFF, the GAIN slider is the only control on the FILTER ZOOM page that will still change the sound.

7.4.9.2. Type



The Filter Type menu allows you to select the 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 thirty-four types available.

Because of the flexible Dual-Filter system in Omnisphere, different filter types can be combined, routed in series or parallel, allowing for hundreds of possible 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.

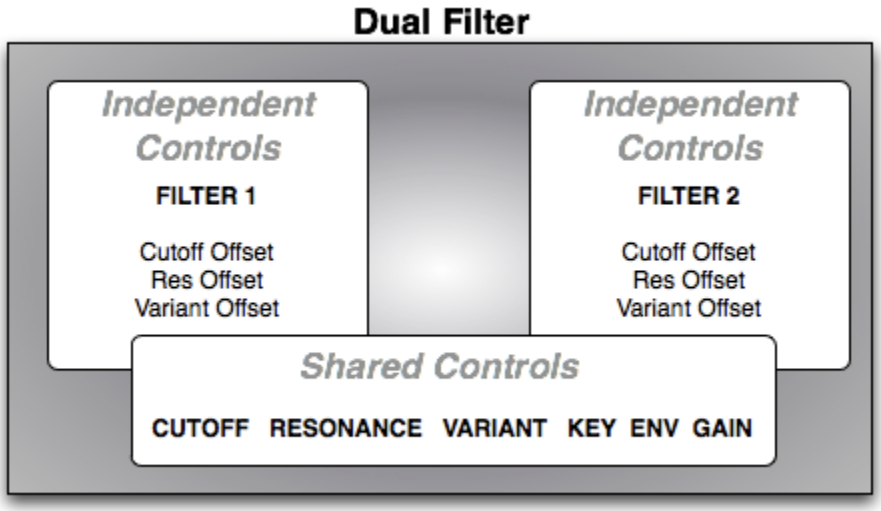
Once a customized filter configuration has been created, the settings can be saved as a Filter Preset and loaded from the FILTERS section on the LAYER overview pages.

OFF		The Filter is OFF.
LOW PASS	Gentle 6db	A subtle, 1-pole LPF.
	Crisp 12db	A brighter, 2-pole LPF.
	Warm 12db	A fuller, 2-pole LPF.
	Juicy 12db	This 2-pole LPF has a very smooth response at high resonances.
	Power 12db	This is the 12db LPF from the Power Filter FX module.
	Warm 24db	A fuller-frequency 4-pole LPF.
	Smooth 24db	This 4-pole LPF has a smooth response at higher resonances.
	Colorful 24db	This 4-pole LPF adds character.
	Edge 24db	Brighter 4-pole LPF.
	Juicy 24db	This 4-pole LPF has a very smooth response at high resonances.
	Power 24db	This is the 24db LPF from the Power Filter FX module.
	UVI 1	The 4-pole 24db LPF used in Atmosphere (it can self-oscillate).
	UVI 2	The 3-pole 18db LPF used in Atmosphere.
	UVI 3	The 2-pole 12db LPF used in Atmosphere.
HIGH PASS	UVI	The 2-pole 12db HPF used in Atmosphere.

	Crisp	A brighter, 2-pole 12db HPF.
	Juicy 12db	This 2-pole 12db HPF has a smooth response at high resonances.
	Power 12db	This is the 12db LPF from the Power Filter FX module. This 2-pole 12db HPF has a very smooth response at high resonances.
	Juicy 24db	This 4-pole 12db HPF has a very smooth response at high resonances.
	Power 24db	This is the 24db HPF from the Power Filter FX module.
OTHER	Bandpass	All frequencies above and below a certain range are removed.
	Bandpass Juicy 12db	This 2-pole BPF has a smooth response at high resonances.
	Bandpass Power 12db	2-pole—all frequencies above and below a certain range are removed.
	Bandpass Juicy 24db	This 4-pole BPF has a smooth response at high resonances.
	Bandpass Power 24db	4-pole—all frequencies above and below a certain range are removed.
	Notch	Frequencies pass through 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.
	Formant	This filter simulates the formants of the human voice by chaining a narrow set of bandpass filters, set at specific frequencies.
	Resonator -	A complex stereo comb-filter, inverted.
	Resonator +	A complex stereo comb-filter.
	State Variable Filter 12db	On this 2-pole “State Variable” filter, the Variant knob sweeps between LPF, Notch, and HPF response—similar in function to the gain taper of the OB-6 LP-NOTCH-HP knob.
	State Variable Filter 24db	On this 4-pole “State Variable” filter, the Variant knob sweeps between LPF, Notch, and HPF response—similar in function to the gain taper of the OB-6 LP-NOTCH-HP knob.

7.4.9.3. Structure

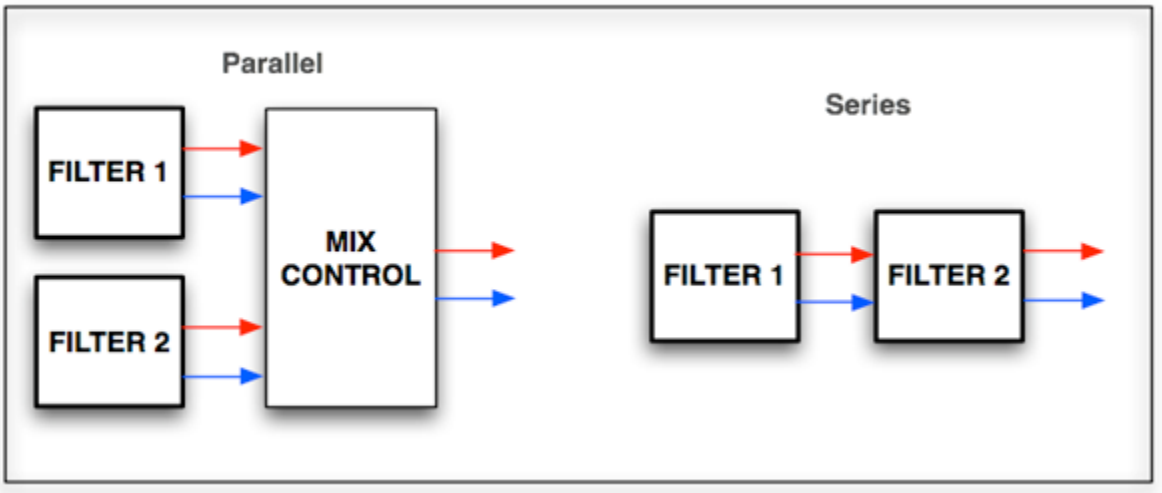
The central part of the FILTER ZOOM section is dedicated for controls that are common to both of the Filters, including the ability to route to two Filters in parallel or series and to place them before or after the Amplifier.



The CUTOFF, RES, VARIANT, KEY, ENV, and GAIN controls mirror those in the Filter section on the LAYER pages. Any changes made to these controls are reflected on both pages.

SERIES / PARALLEL

When Omnisphere's two Filters are in "Series," the output of FILTER 1 is feeding into FILTER 2 and affects the character of FILTER 2. When the two Filters are in Series, the Mix control is not in use. "Parallel" indicates 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 controls the balance between the two filters.

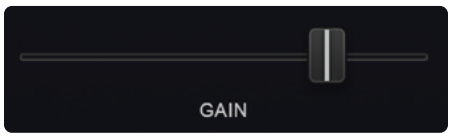


MIX

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)

MIX is modulatable.

GAIN



GAIN adjusts the level of the input or output of the Filter Module depending on the Pre & Post setting.
Range between – inf (0) and +9.54.dB

GAIN is modulatable.

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.

PRE

The GAIN Control is applied before the Filters.

POST

POST means that the GAIN Control will be applied after the Filters.

7.4.9.4. Offsets

CUTOFF OFFSET

Filter Cutoff settings affect both FILTER 1 and FILTER 2. The CUTOFF OFFSET counterbalances the Cutoff for FILTER 1 and FILTER 2 independently. These are not separate filters controls—they simply increase or decrease the Cutoff frequency for each Filter, relative to the primary Cutoff control.

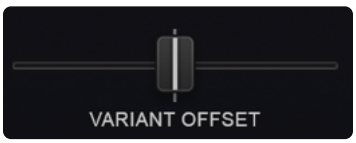
When the slider is centered, there is no offset to the Filter Cutoff. Moving the slider to the right increases the offset and moving it to the left decreases it.

RESONANCE OFFSET

Filter Resonance settings affect both FILTER 1 and FILTER 2. The RES OFFSET allows the FILTER 1 and FILTER 2 resonance depth to be set independently, by decreasing or increasing the resonance setting for each Filter, relative to the primary Resonance control.

When the slider is centered, there is no offset to the Filter Resonance. Moving the slider to the right increases the offset and moving it to the left decreases it.

VARIANT OFFSET



VARIANT settings affect both FILTER 1 and FILTER 2. The VARIANT OFFSET allows the FILTER 1 and FILTER 2 Variants to be set independently, by decreasing or increasing the VARIANT setting for each Filter relative to the primary VARIANT control.

When the slider is centered, there is no offset to the VARIANT. Moving the slider to the right increases the offset and moving it to the left decreases it.

7.4.9.5. Cutoff

The **CUTOFF** control in the Filter Zoom is identical to the CUTOFF control on the Layer pages. The primary function of the filter is to remove, hence “cut off” frequencies from the sound. Omnisphere’s filters can remove frequencies in a variety of ways, from Lowpass, Highpass, Bandpass, and Notch, to more specialized filter types. Depending what Filter preset is chosen, the CUTOFF control will remove different frequencies in various ways.

For example, if a Lowpass filter is used, turning the control counter-clockwise will remove the higher frequencies. If a Highpass Filter is used, the opposite will happen. It’s best to experiment with the CUTOFF control with the wide variety of Filter Types.

The Filter’s rolloff 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.

6 dB =	1 Pole
12 dB =	2 Pole
18 dB =	3 Pole
24 dB =	4 Pole

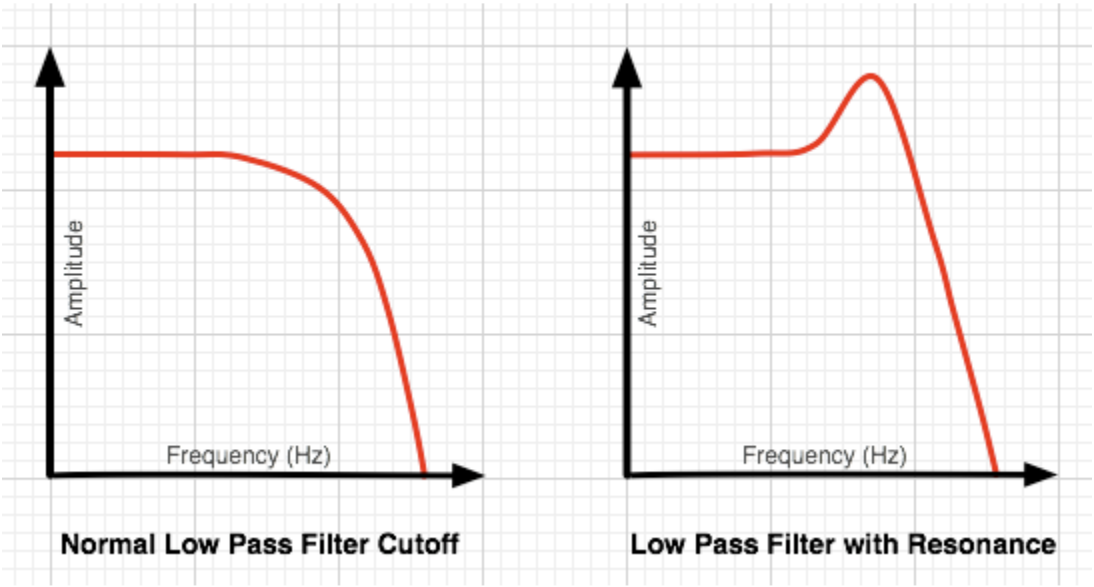
Range 00.05Hz to 19.00kHz

Omnisphere has many specialized filters, some of which are based on tuned delay lines (e.g. Metal Pipe +/- and Resonator +/-). In those cases, CUTOFF is used to tune the filter’s pitch.

7.4.9.6. Resonance

The **RES** control on the FILTER ZOOM page is identical to the RES knob on the LAYER pages. Resonance is also called “Q” or “Emphasis” in synthesizers, because it emphasizes the cutoff point of the filter. Resonance can increase the loudness of the Filter, so its a good idea to use this control along with the Filter Gain, to avoid audio clipping.

TIP: Omnisphere’s UVI1 filter can self-oscillate. If RES is set to maximum, the filter can be “tuned”’ by the CUTOFF control.



Range 0 to 127

7.4.9.7. Variant

The **VARIANT** control in Omnisphere's filter is not typically found on most synthesizers. Since Omnisphere's filter is stereo, VARIANT responds in most filter types by moving 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 could be opening on the left channel while closing on the right channel. This creates unique panning effects that are more dramatic than standard audio panning—particularly when VARIANT is modulated. In the following Filters, VARIANT behaves differently:

- In the Power filter types, VARIANT controls the width of the CUTOFF.
- In the Resonator +/- filter types, VARIANT controls the tone of the filters.

7.4.9.8. Key Tracking

The **KEY** control on the FILTER ZOOM page is identical to the KEY slider on the LAYER pages. The Filter Key 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 in the upper range of the keyboard and close in the lower ranges of the keyboard.

For example, if a Lowpass filter (LPF) 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 LAYER pages. 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.

NOTE: Because of how the scaling works in the Metal Pipe -/+ or Resonator -/+ filters, in order to get these filters to respond with playable pitches the Key Tracking knob should be fully open and the Invert switch enabled.

KEY TRACKING OCTAVE SWITCHES

The small LED switches above the KEY knob are the Key Tracking Octave Switches. These switches transpose Filter Key Tracking up or down 2 octaves, the middle switch being the standard tracking. You will find these offsets most useful when using the Resonator and Metal Pipe filters.

7.4.9.9. Envelope

The Filter **ENV** control is identical to the ENV control found on the LAYER pages. 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 effect 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 or no sound will be heard. If the Filter Cutoff is at the maximum value, then the ENV 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

The Filter ENV INVERT switch is identical to the Filter ENV INVERT switch on the LAYER pages. This control inverts the Filter Envelopes contour and so it will close 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

7.5. 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've combined both ideas into one, offering the best of both worlds. Omnisphere's envelopes are extremely powerful and at the same time easy-to-use, regardless of the envelope style.

Envelopes are the contours that shape the sound coming from the Oscillators and the Filters—over time.

A basic ADSR-style envelope determines how quickly a sound will begin, its initial decay, at what level it sustains, 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.

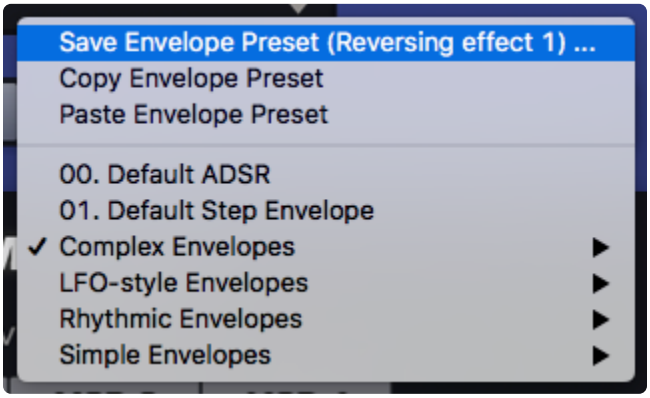
Complex envelopes contain contours with more than foour stages. Complex envelopes allow a much greater degree of control in shaping the sound, and offer tremendous flexibility when shaping sounds and can be used to create rhythmic shapes.

Each Part in Omnisphere has 12 envelopes. Each can be used either as a basic 4-stage ADSR envelope, or as a Complex envelope. Each of the four Layers has a dedicated AMP (Amplitude) envelope and a dedicated FILTER envelope, and there are four MOD ENVELOPES that are common to all Layers.

ENVELOPE PRESETS

All envelopes can load Envelope Presets from the pull-down menu in the Header.

A wide variety of envelope types ranging from simple ADSRs to extremely complex ones can be loaded from this menu. You can save your own Envelope Presets, as well as copy and paste them from one envelope to the other.



AMP ENVELOPE

Each Part has four dedicated AMP (Amplitude) Envelopes, one for each Layer. 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 four dedicated FILTER Envelopes, one for each Layer. These shape the Filter Cutoff for each Layer. A dedicated Velocity knob controls the dynamic output of the FILTER Envelopes based on MIDI Velocity.

MOD ENVELOPES

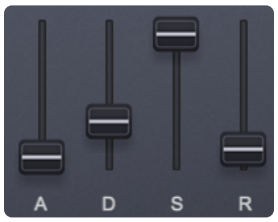
Modulation Envelopes are global, meaning there are a total of four Mod Envelopes available per Part. The Modulation Envelopes are monophonic, in contrast to the FILTER and AMP envelopes, which are polyphonic. The best way to think of Modulation Envelopes is as uni-polar LFOs that can have custom-defined shapes.

1, 2, 3, 4 (Modulation Envelope buttons)

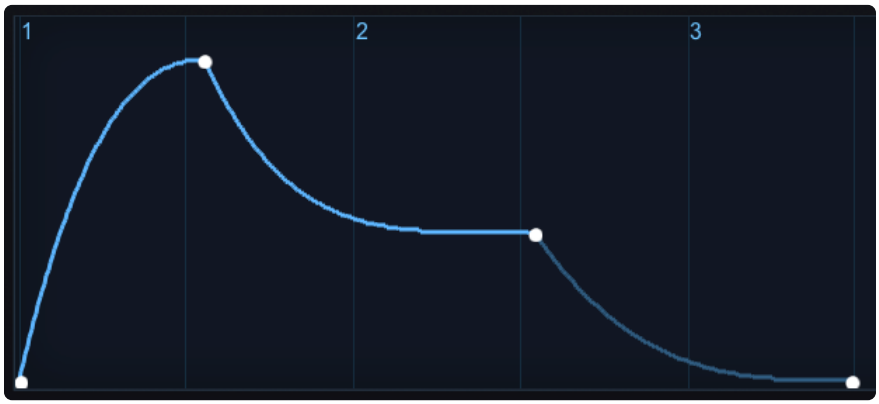
Under the MODS sub-page, there are 4 small switches with which you can select any of the four Modulation Envelopes.

Instead of a dedicated VELO (Velocity) control, each of the four Modulation Envelopes has its own DEPTH control knob.

7.5.1. 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 to third point is the decay time, the third to fourth point reflects the Sustain level. After the note is released, the Sustain level drops away at a rate based on the Release time.

When viewed on the MAIN page, the ADSR looks like this:

A – ATTACK

The ‘A’ stands for ATTACK, which controls 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 sound 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 its 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 is released, 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.

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.

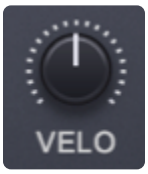
When an envelope has more than 4 stages, its icon will change to display the Complex icon, which looks like a Complex envelope, and includes an "X" button.

X BUTTON

When the X BUTTON is clicked, it will change the complex envelope contours to a SIMPLE one (after asking you to confirm), and the icon will revert to the SIMPLE icon. This can't be undone, so use it with caution!

NOTE: Changing an Envelope's shape to complex can be done by loading a Complex Envelope Preset or by accessing the Envelope Zoom page and adding stages.

VELO (Envelope Velocity)



VELO is short for Velocity Sensitivity and is available for the AMP and FILTER envelopes. The Velocity knob controls how much MIDI velocity will affect the output signal of the Envelope. Moving the knob clockwise increases the dynamic sensitivity of the envelope, and moving it counter-clockwise decreases the sensitivity. This control is duplicated as a fader AMP and FILTER tabs in the **FILTER ZOOM**.

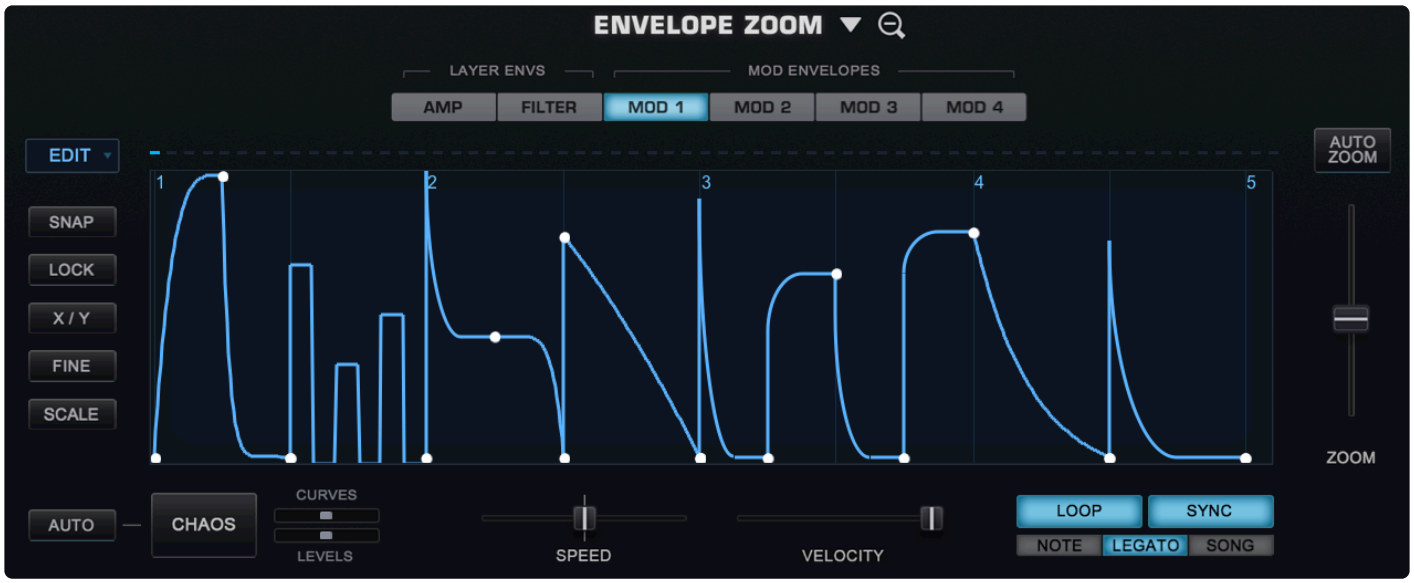
NOTE: Each of the VELO controls for the four AMP and four FILTER envelopes are independent. The VELO control will affect only the selected envelope.

DEPTH

The DEPTH controls are dedicated to the four MOD Envelopes. Turning this knob clockwise increases the envelope's dynamic output that is sent to the modulation matrix. The default setting is at maximum.

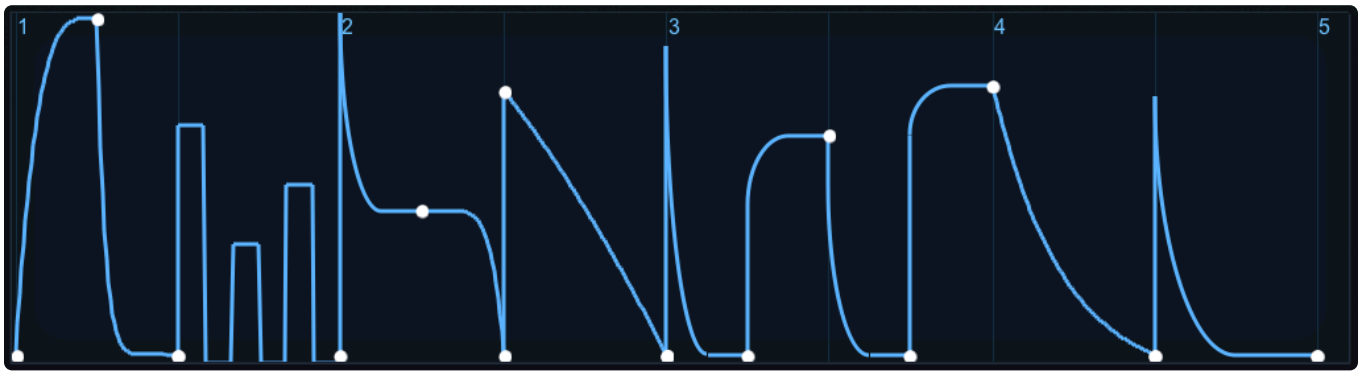
NOTE: The DEPTH controls for the Modulation Envelopes are independent. The DEPTH control will affect only the selected envelope.

7.5.2. Envelope Zoom



The **ENVELOPE ZOOM** page provides precise editing of the 12 available envelopes in a Part (4 AMP envelopes per Layer, 4 Filter envelopes per Layer, and 4 Global Mod Envelopes). 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 easily be repeated or “unrepeated” to add or remove stages.

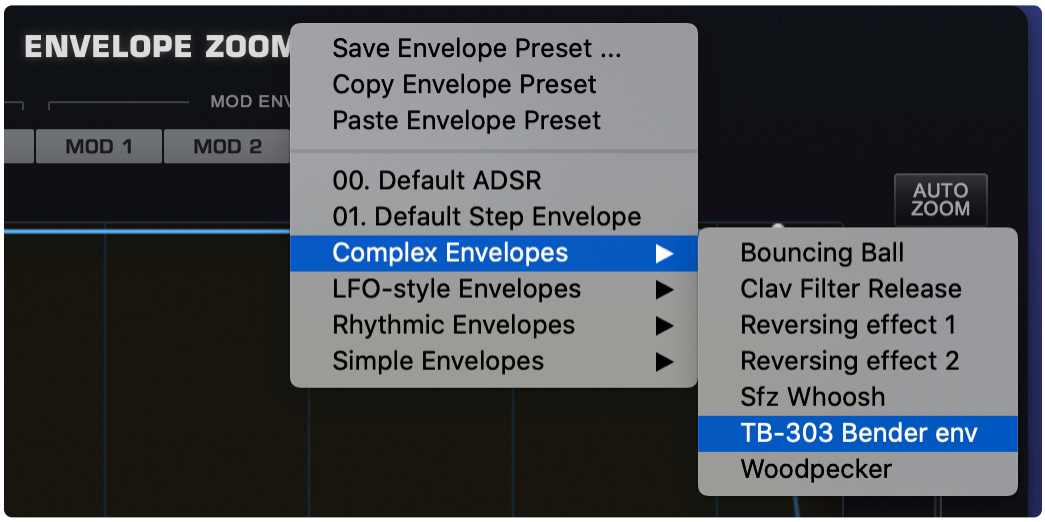


The Envelope Zoom has a special **CHAOS** feature, which can randomize the envelope’s shape. CHAOS can also be set to automatically change on every cycle, creating constantly changing envelopes. The degree that CHAOS will affect the Envelope is determined with dedicated probability mini-sliders.

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.

7.5.2.1. Presets



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.

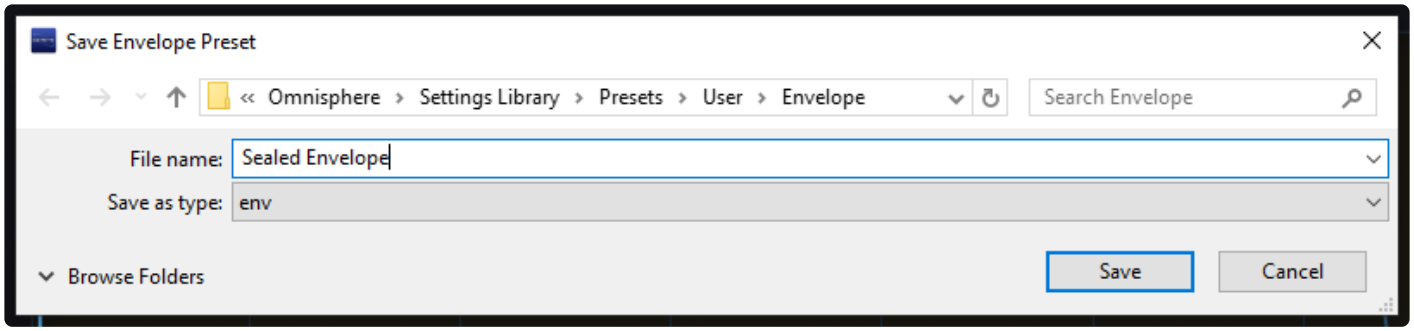
Envelope Presets contain all the contours of a single envelope. The Save Envelope Preset function allows you to save envelopes for later recall. Envelopes can be copied to other Layers or Parts using the Copy/Paste Envelope Preset functions. This provides a quick and convenient way to work with envelopes and Omnisphere ships with a large number of interesting and useful Envelope Presets for you to explore.

Saving and Loading Envelope Presets

To save a customized Envelope setting select Save Envelope Preset. A standard “Save” dialogue will appear. Omnisphere will automatically add the ‘.env’ extension to your custom name.

By default the Envelope preset will be saved in the following directory in your STEAM folder:

- STEAM/Omnisphere/Settings Library/Presets/User/Envelope



After a new Preset has been saved it can be loaded from either of the Envelope Presets drop-down menus.

NOTE: You can also create custom sub-folders within the Envelope folder to organize custom your Presets.

Copying and Pasting Envelope Presets

Select “Copy Envelope Preset” from the Presets menu to copy the current Envelope contours, then select the Envelope where you want to paste it. 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.

7.5.2.2. Page Buttons

Above the Envelope Display area are six **Page Buttons** that select the controls for the current Layer's AMP and FILTER Envelopes and the four global MOD Envelopes which are shared by all Layers for the Part.

NOTE: The AMP and FILTER Envelopes displayed are only for the current Layer—the other Layers must be selected to see the other AMP / FILTER envelopes.

7.5.2.3. Timeline

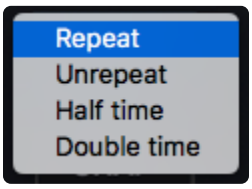
Each of the MOD ENVELOPES has a **Timeline** — an LED indicator that tracks the time it takes to play through the Envelope contour. The rate of the Envelope's contour will make these LEDs trace along as a visual guide. The LED timeline display is also helpful in monitoring the different types of Envelope 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.

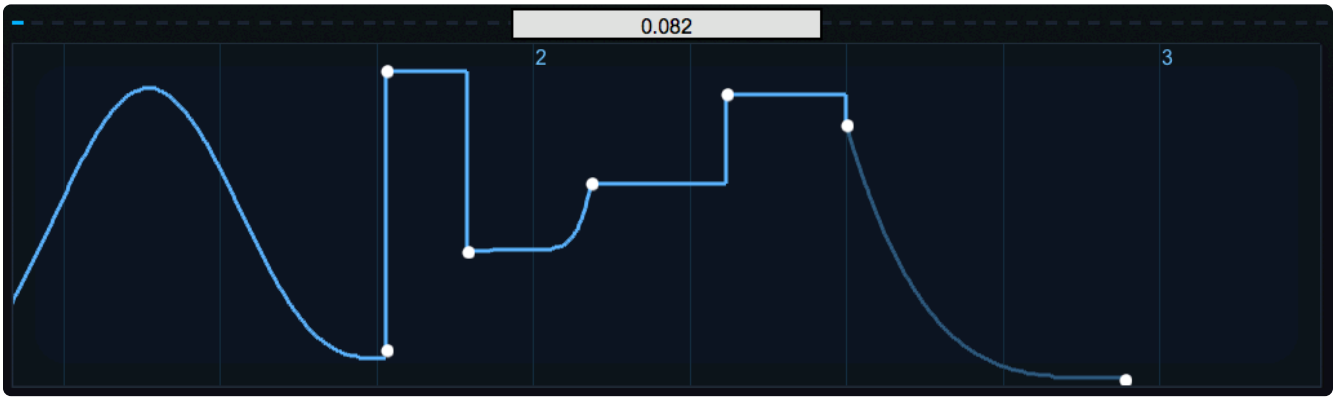
7.5.2.4. Edit

There are four different automated Envelope adjustments, which provide a simple way to double or halve the total number of Envelope points as well as quickly change their playback rate.



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.

7.5.2.5. Display



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, bring up the **Envelope Curves** menu by Right-Clicking (or Control-Clicking) directly on the point (dot) where you want it and select “Add” from the pop-up menu. An additional point will be added and all points to the right will be 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.

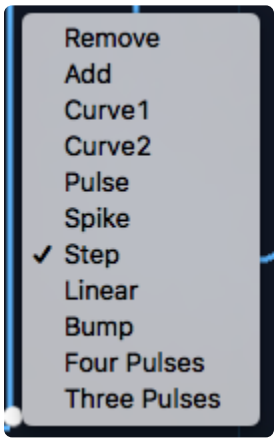
You can also double-click on the line at the place where you want to add a stage and it will appear without shifting the points to the right.

NOTE: If your cursor is between points and you right-click or double-click to add a point, the stage you add will be the same type you are near—e.g. Curve, Linear, etc.

- 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.
- Scrolling anywhere in the Display zooms in or out horizontally.

When any point has been selected a small numerical window will appear above the display that indicates the level settings for that point.
Range: 0.000 ~ 1.000

7.5.2.6. Curves Menu



All of Omnisphere's twelve dedicated Envelopes are capable of generating contours with hundreds of points. Right/Control-clicking anywhere in the Envelope display will bring up the **Envelope Curves Menu** with 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 crosshair will appear that will move the curve in any direction within the limits of the curve and a small numerical window will appear above the display, indicating the magnitude of the curve.
Range: 0.000 ~ 1.000

Some curves default to maximum level settings, such as Spike, Pulse, and Bump. To reduce the levels, click and drag and the crosshair will appear, allowing the amplitude of the curve to be changed.

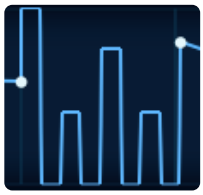
Remove		Deletes the currently selected point
Add		Puts a new point at the place in the Envelope display.
Curve1		A gradual slope between the points
Curve2		A steeper, more exponential slope between the points.

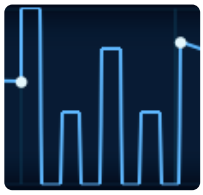
Pulse  Places a three-angle pulse shape between two points.

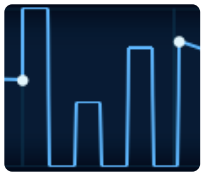
Spike  A sharp point with a gradual slope on one side.

Step  Adds a right angle between the points.

Linear  Places a straight line between the points.

Bump  A rounded bump that rises and falls between the points.

Four Pulses  Introduces four pulses between the points

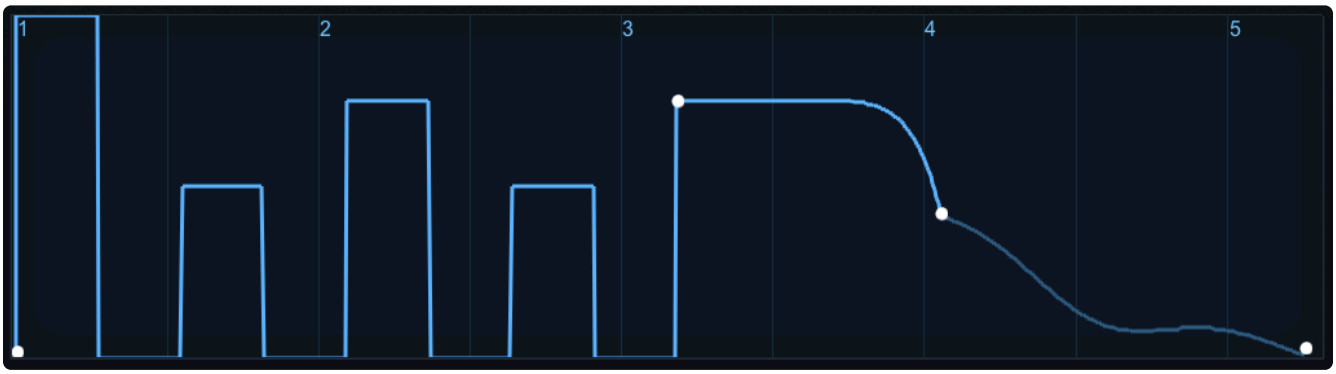
Three Pulses  Introduces three pulses between the points

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.

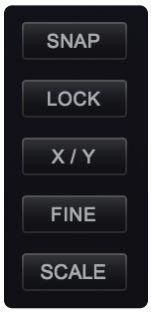
TIP: You can add a point to the envelope by double-clicking at the desired place in the display. Double-clicking on any existing point in the Envelope will remove it.

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.

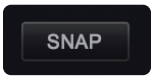


7.5.2.7. Editing Controls



These mode switches offer several methods for precise editing of the Envelopes.

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: While holding down OPTION / ALT, position your mouse cursor over the Display and SNAP will be activated.

Quantizing the Pitch to Semitones

- First Right-click on the COARSE (Pitch) knob on the Layer Page and select a Mod Envelope as the SOURCE, making sure the SOURCE slider is centered (If not, Right-click and select “Reset to Default Value”).
- Next, make sure the DEPTH slider in the Mod Envelope Zoom is all the way up—fully to the right.
- Click on SNAP to activate it.
- Hold down SHIFT while moving the points and the display will show the Pitch is restrained to semitones—it will only move in 100 cent increments.

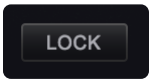
The result will depend on the types of lines and/or curves, as well as the SPEED. Use vertical/horizontal steps for sharp switching between Pitches.

NOTE: If the Pitch Coarse Target slider is offset from Zero, the SNAP points will be offset by that amount.

TIP: Experiment by inverting the Modulation by activating INVERT in the Mod Section.

NOTE: SCALE will have no effect on the Pitches controlled by the Mod Envelope, but you can effectively create your own scales outside Equal Temperament by experimenting with the MOD Source slider. Additionally, if the MOD Envelope Zoom DEPTH slider is less than FULL, the Pitch quantization will be less than a semitone (100 cents).

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.

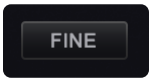
KEYBOARD SHORTCUT: While holding down COMMAND / CONTROL, position your mouse cursor over the Display and LOCK will be activated.

X/Y

This control will constrain the movements vertically or horizontally.

KEYBOARD SHORTCUT: While holding down SHIFT, position your mouse cursor over the Display and X/Y will be activated.

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.

SCALE

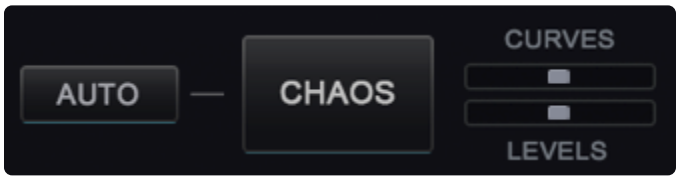
The duration of the Envelope will be scaled by dragging any of the points within it (except the first one). Dragging to the right will increase the duration and dragging to the left decrease it. Scaling the Envelope

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.

TIP: When modulating Pitch using MOD ENVELOPES, use Alt/Opt-Shift to SNAP points to semitones.

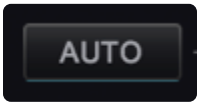
7.5.2.8. Chaos



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 two Modulation Envelopes have an AUTO feature that automatically randomizes the CHAOS on every cycle of the Envelope.

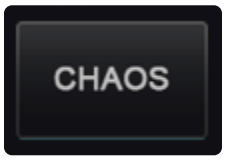
CHAOS AUTO



When enabled, the LEVELS and CURVES 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 LEVELS and CURVES probability sliders.

NOTE: The AUTO switch is only available on the two Modulation Envelopes.

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 when CHAOS is selected.

NOTE: CHAOS only affects the existing points in an Envelope—it will not add or remove any stages.

CHAOS CURVES

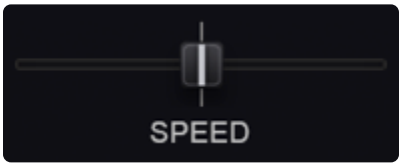
The higher the CURVES probability slider is set, the greater the likelihood of variance in the curves between the stages. Higher settings will also smooth out the sharper Envelope transition types, such as bump, pulse, spike, linear, as well as the three and four pulses curves.

CHAOS LEVELS

The amplitude of the Envelope points will be changed more or less frequently, depending on the setting of the LEVEL control. At minimum setting, the levels of the points will only change slightly. Maximum settings will produce more dramatic shifts in the evel values of the stages.

NOTE: LEVELS changes are strictly vertical—no point is moved horizontally with CHAOS.

7.5.2.9. Speed

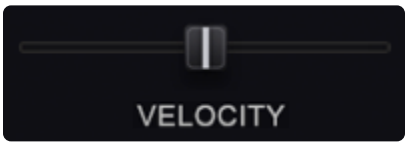


The **SPEED** slider controls how quickly the envelope will cycle. This is a rate-based control, based on the duration of the Envelope.

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 5 times every second. This control can be modulated.

Range 0.10×-10.0× (1.00X is the default)

7.5.2.10. Velocity

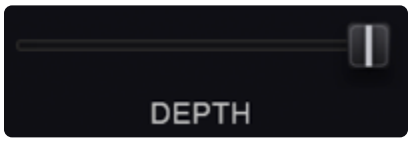


The **VELOCITY** slider controls how much MIDI Velocity affects the output of the AMP and FILTER envelopes and is a duplicate of the control found in the AMP and FILTER Envelope section. Moving the slider to the right increases the dynamic sensitivity of the Envelope and moving it to the left decreases it.

Range 0 to 1.00

NOTE: Each of the VELOCITY controls for the four AMP and four FILTER envelopes are independent and affect only the selected envelope.

7.5.2.11. Depth



The **DEPTH** slider controls the amount of Envelope Modulation that is sent to the **Mod Matrix** and is a duplicate of the DEPTH control found in the MOD Envelope sections. At minimum settings, little to no modulation will be sent to the Modulation Target. At the maximum setting the full output of the MOD Envelope is sent.

Range 0 to 1.00

7.5.2.12. Trigger

The LFO **Trigger Mode** determines how the Envelope is triggered and cycled. The **NOTE**, **LEGATO**, and **SONG** modes are only available on MOD Envelopes.

LOOP

This switch toggles Envelope looping. When selected, the Envelope will continually repeat as long as the note is held.

SYNC

The Envelope will sync to the song's tempo. Both LOOP and SYNC can be selected at the same time.

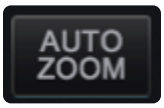
NOTE / LEGATO / SONG

These three mode switches are only available on the MOD Envelopes as they are related to the MOD Envelope Timeline display.

- **NOTE** – The Envelope is re-triggered with every key that is pressed.
- **LEGATO** – The Envelope is triggered only from the first note of a legato passage.
- **SONG** – The Envelope will follow the song position in the host.

7.5.2.13. Zooming

AUTO ZOOM



Selecting this button will automatically scale and fit all of the points into the Envelope Display.

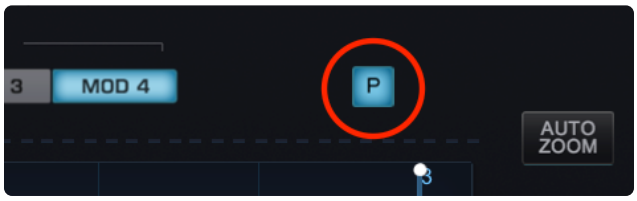
ZOOM

This slider controls the how much of the Envelope Display is visible in the pane. 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 hold your mouse over the Envelope display and scroll to zoom (or use 2-finger scrolling).

NOTE: If the Envelope's 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.

7.5.2.14. Polyphonic



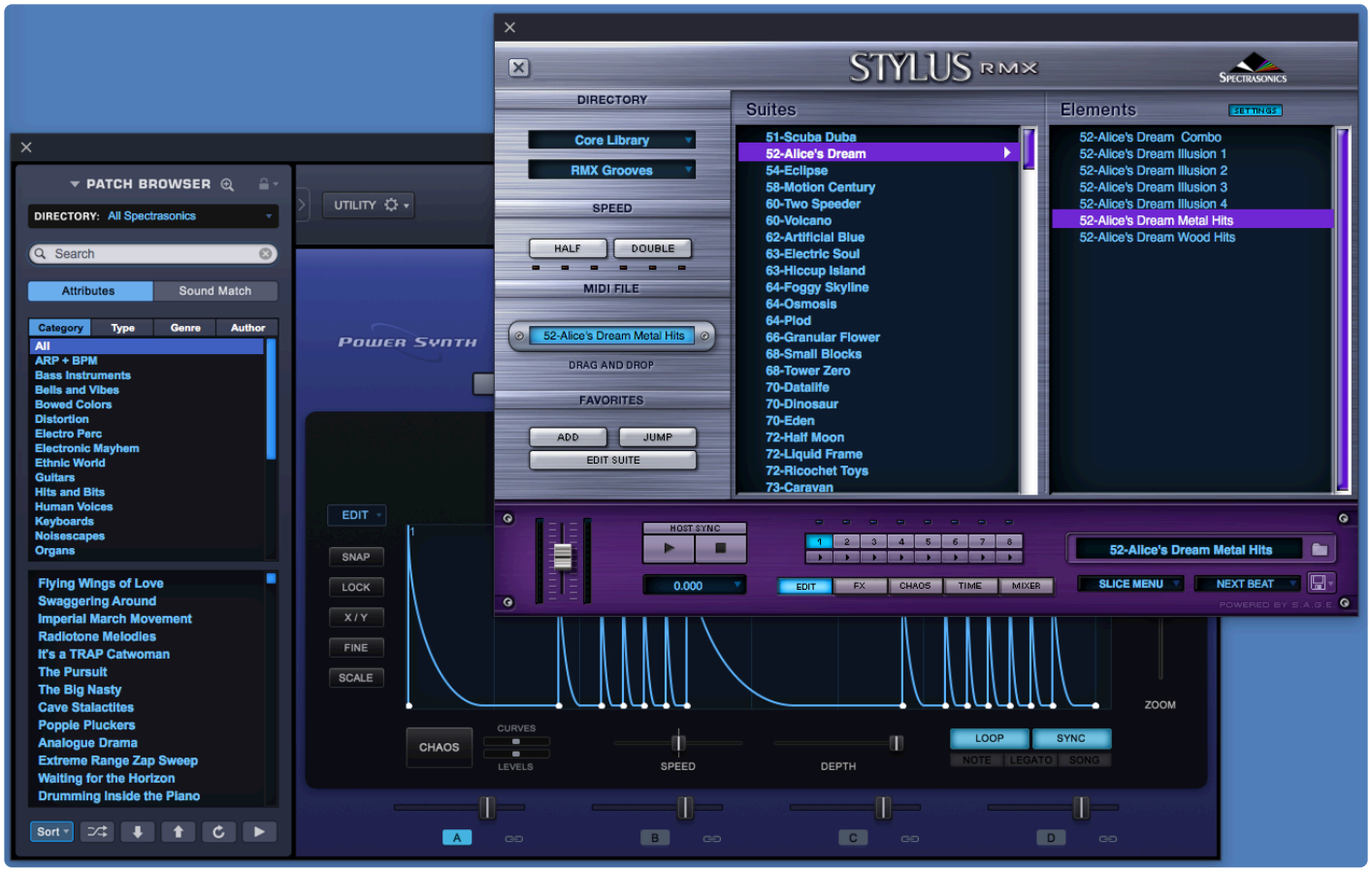
Mod Envelope 4 can be monophonic or polyphonic. When you select the MOD 4 tab in the Envelope Zoom, you will see a small button, labeled “P” to the right of the tab.

Engaging it makes Mod Envelope 4 polyphonic, meaning each note will trigger it’s own envelope, instead of all notes sharing the same one.

To demonstrate this, right click on the FINE PITCH knob and select “Modulate with Envelope.” Next, select Mod Envelope 4 as a source in the Modulation sidebar, then load the preset “00. Default ADSR” from the Envelope Presets menu. In monophonic mode (“P” OFF), play and hold Middle C and then play C one octave below. You’ll notice when you play the second note, Middle C is also modulated. Release both notes, engage the polyphonic envelope (“P” ON) and try it again. When you play both notes in a similar way, each one will be modulated independently.

NOTE: The MOD 4 Polyphonic button is MIDI-Learnable.

7.5.3. Groove Lock Envelopes

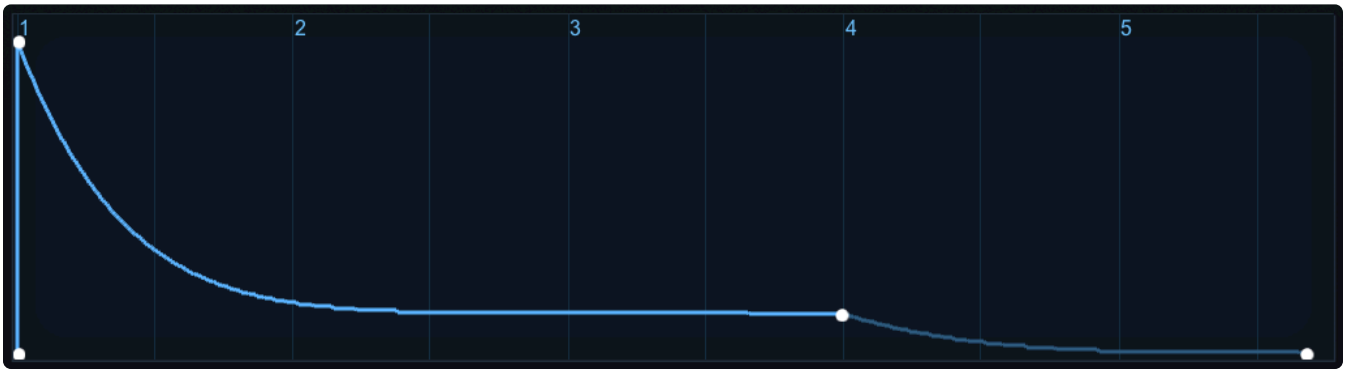


Groove Lock is one of Omnisphere's most innovate features. With Groove Lock you can lock the groove of the Envelopes to the feel of any Stylus RMX or Standard MIDI file. This dramatically expands the rhythmic potential of the Omnisphere Envelopes. You can instantly create a Groove Lock Envelope by simply dragging and dropping any standard MIDI file (e.g. from Stylus RMX) onto the Envelope Display. This can be applied to any of the available Envelope types: AMP, Filter, and Mod.

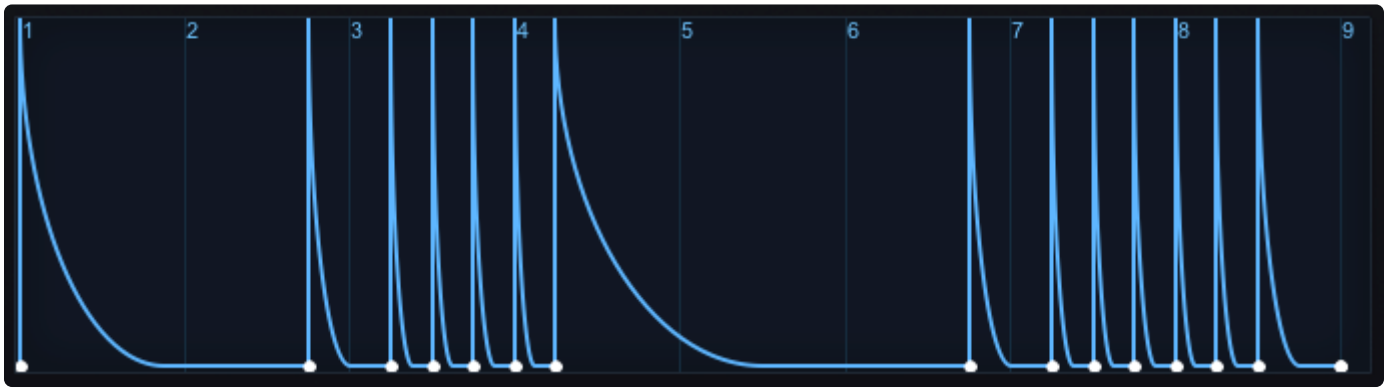
When you drop a MIDI file onto the Envelope Display, it imports the rhythmic information contained in that MIDI file, resulting in a complex rhythmic Envelope.

This is a fast and convenient way to create complex Envelopes, and can dramatically reduce the time required to create them 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 them to be Groove-Locked to other Spectrasonics plug-ins, or to any MIDI-based musical phrase in your project.

NOTE: When you drop a MIDI file onto the Envelope Display, it will replace the existing Envelope. If you want, you can save your current Envelope as an Envelope Preset before creating the new Groove Lock Envelope.

7.6. LFOs

LFOs (Low Frequency Oscillators) are used for cyclical modulation effects like vibrato, tremolo, filter sweeps, and auto-pan effects.

Omnisphere has eight independent LFOs available for each Part. All eight LFOs have an identical set of parameters and can be used as sources within Omnisphere's **Modulation Matrix**.

LFO PRESETS

Selecting the menu arrow in the section header will display a drop down menu that allows copying, pasting, and saving of the LFO settings as presets. Below 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.

LFO NUMBER

Underneath the section header are page buttons numbered 1 ~ 8, each of which represents an LFO. Selecting a button displays the current values of that LFO’s parameters.

7.6.1. Waveforms

Each of Omnisphere's LFOs can have its own waveshape. There are nine available LFO waveforms.

Sine – A smooth c-shape that begins positive and then curves negative and back again. Useful for sweeps and vibrato.

Triangle – 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.

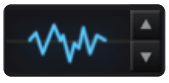
Rounded Square – A smoothed Square wave. Ideal for smooth pulsing.

Ramp – A linear slope from highest to lowest to highest 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 analog synth effects.

Heartbeat – Modeled after a human heartbeat



Noise/Random – Similar to Sample and Hold, with random values, but doesn't stop—the values change immediately. Useful for adding chaos.

The waveforms can be changed by clicking the UP/DOWN stepper buttons or by clicking on the waveform itself, which will display the waveform selection menu.

7.6.2. Rate

The **RATE** knob controls the speed of the LFO's cycle and has two modes. These modes depend on the state of the LFO **SYNC** 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 is 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:
8x – Stretches a cycle across eight bars.
1/8 – Cycles the LFO every eighth-note.
1/8 dot – Cycles the LFO every dotted eighth-note.
1/8 triplet – Cycles the LFO every eighth-note triplet

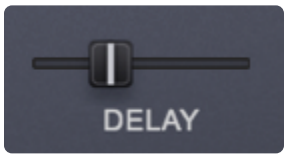
Range (Sync Mode ON)
32X, 16X, 8X, 7X, 6X, 5X, 4X, 3X, 2X,
1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96,
1/1 dot, 1/2 dot, 1/4 dot, 1/8 dot, 1/16 dot,
1/1 triplet, 1/2 triplet, 1/4 triplet, 1/8 triplet, 1/16 triplet

Range (Sync Mode OFF)
0 to 60 Hz

7.6.3. Depth

The LFO **DEPTH** knob controls the intensity of the LFO's effect on the Mod Target. The higher the setting, the greater the amount of the LFO signal is sent to the **Mod Matrix**.

7.6.4. 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, e.g. to achieve delayed vibrato.

When the DELAY slider is set to maximum, it will take approximately 5 seconds for the LFO DEPTH to reach its maximum value.

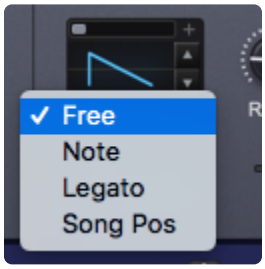
The LFO DELAY always works in a LEGATO trigger mode, wherein subsequent legato notes do not re-trigger the start of the LFO delay. The **LFO Trigger Mode** has no effect on the DELAY slider.

7.6.5. Sync

The **SYNC** switch determines how the LFO rate behaves. When SYNC is enabled, the LFO rate is locked to the host's tempo and 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.

7.6.6. Trigger Mode



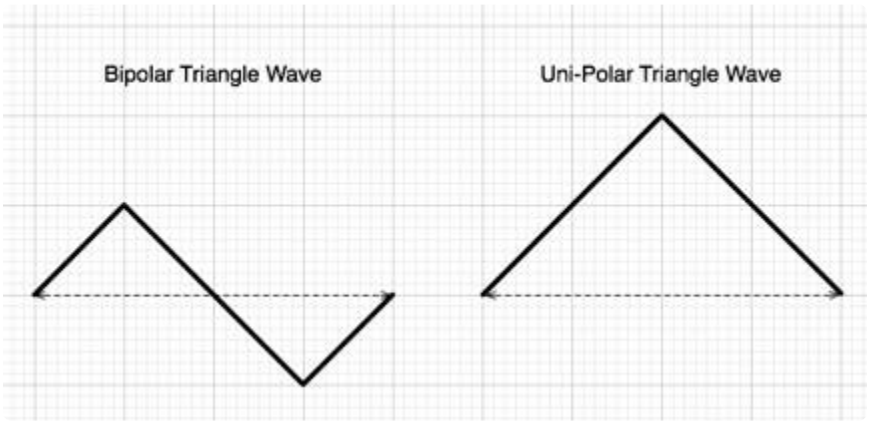
The LFO Trigger mode determines how the LFO will begin its cycle. There are four available LFO Trigger Modes:

- **Free** – The LFO will cycle independently, 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 legato (connected). 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. “Song Position” mode is the best choice if repeatable results are required for playback.

7.6.7. Unipolar Switch

The **Unipolar switch** is represented by a small (+) button in the LFO section in the layer pages or with a “UNIPOLAR” switch in the SHOW MODULATION sidebar on the left. When it is not selected, the LFO will be in Bipolar mode. In Bi-polar 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 the example below, the Oscillator’s pitch is being modulated with a Triangle 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 pitch change would be greater.



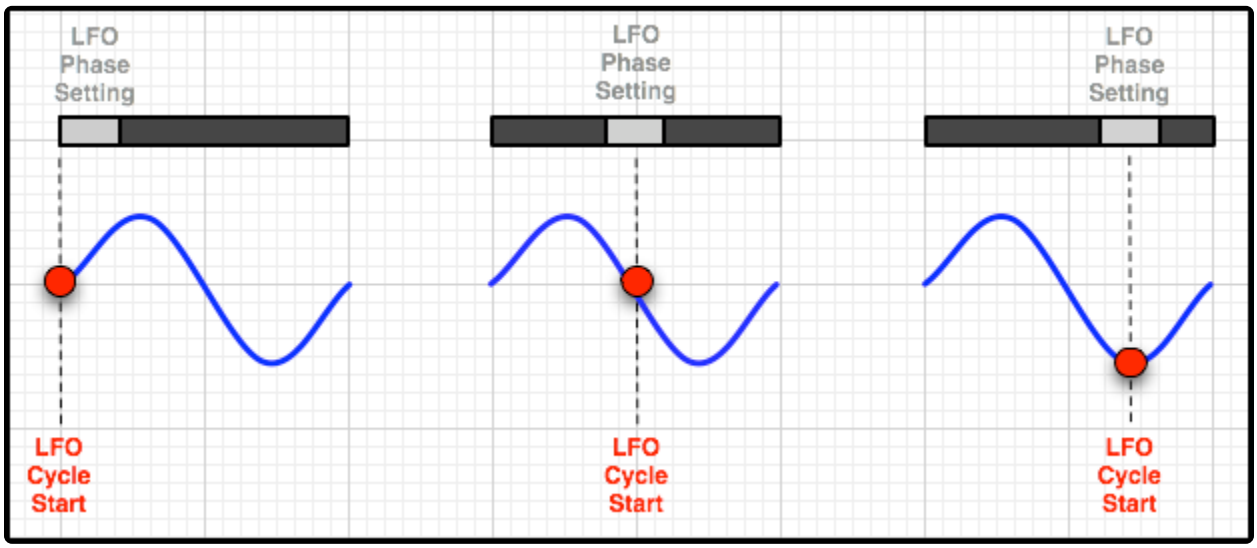
For example, a Unipolar LFO applied to Oscillator pitch is great for simulating guitar-string finger vibrato, as guitarists can only bend strings UP with their fingers. Another use is for a Unipolar LFO to modulate the

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 you want the value to go negative instead of positive, simply select the INVERT button in the Modulation section.

7.6.8. 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 sine 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 eight 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.

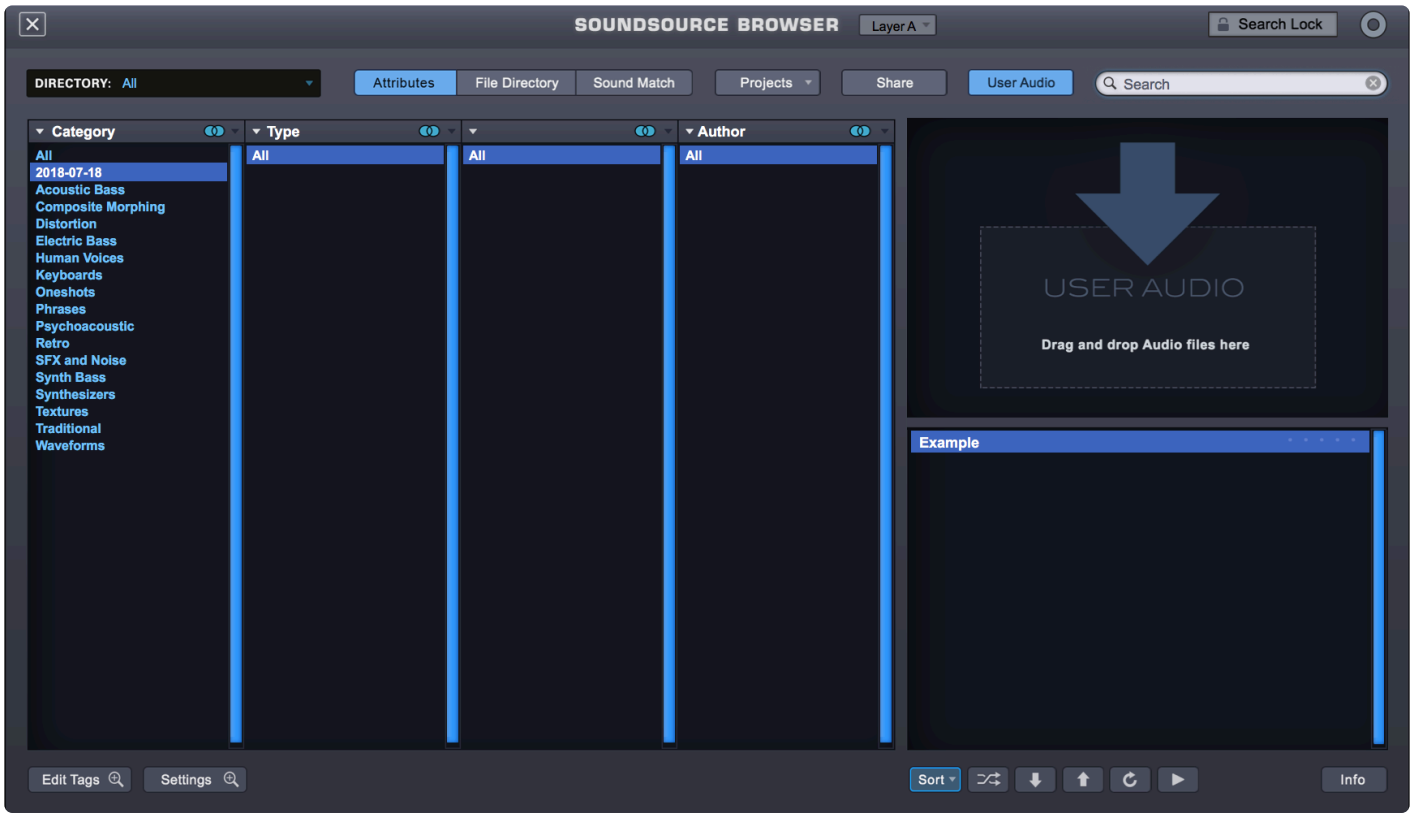
7.6.9. Polyphonic

LFO 8 can be monophonic or polyphonic. When you select LFO 8, you will see a small button, labeled “P” in between the RATE and DEPTH knobs.

Engaging it makes LFO 8 polyphonic, meaning each note will trigger it’s own LFO, instead of all notes sharing the same one.

To demonstrate this, Right/Control-click on the FINE PITCH knob and select “Modulate with LFO.” Next, select LFO 8 as a source in the Modulation sidebar, then load the preset “Delayed Vibrato” from the LFO Presets menu. In monophonic mode (“P” OFF), quickly arpeggiate a chord and hold it. You’ll notice the Pitch of all notes being modulated simultaneously. Release the chord and engage the polyphonic LFO (“P” ON). When you play the chord again in a similar way, each note’s Pitch will be modulated independently.

8. User Audio



Omnisphere is an extremely powerful synthesizer that allows you to import your own audio to use as Soundsources for the creation of your own Patches and Multis. This lets you creatively morph, meld, and mangle your own audio the same way you can with the included Factory Soundsources. Each imported audio file will become a User Soundsource in Omnisphere.

NOTE: The User Audio import function does not include full "sampler" types of features like complex zone-mapping, round-robins, multiple velocities, etc. Keep in mind that Omnisphere is a synth, not a sampler. The User Audio feature is designed to provide a very fast way to transform your own audio in creative ways with all the processing power Omnisphere has to offer.

IMPORTANT: Please respect all copyrights and import only material that you are licensed to use.

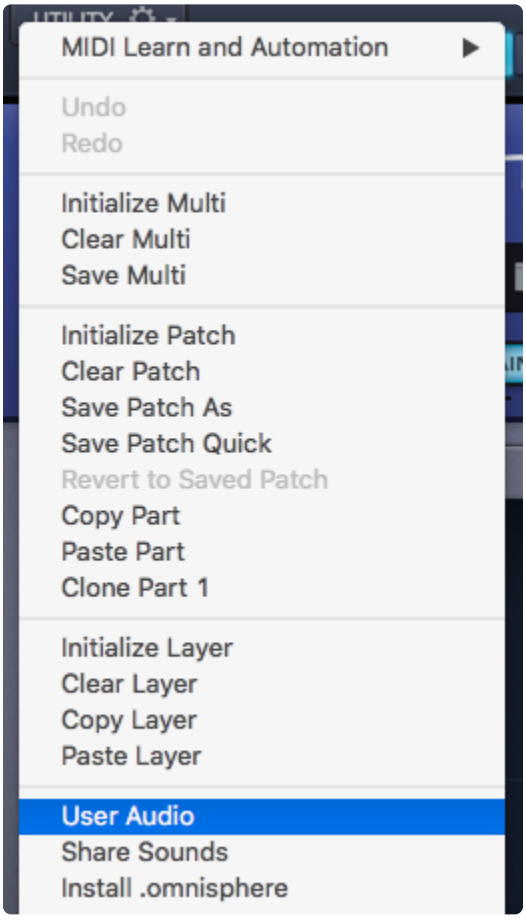
8.1. Importing User Audio

Omnisphere allows you to import your own audio to use as Soundsources and to create your own Patches and Multis. You can process and manipulate your own audio in creative ways using Omnisphere's powerful synthesis capabilities.

You might want to import a guitar track, a vocal, or even an entire mix and transform the audio into something completely different: a cinematic texture, a percussive sound, or even a synth lead. You can then save them as Patches and easily **Share** them with other users.

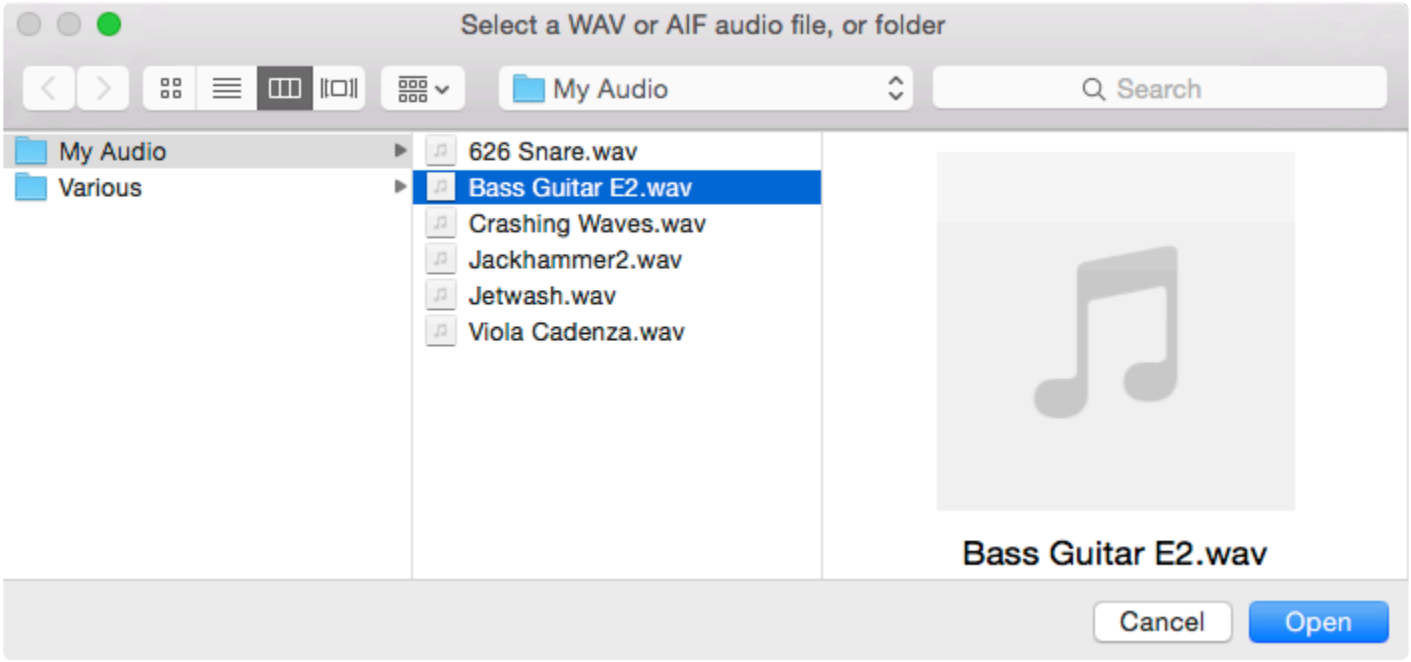
There are three ways to import User Audio feature to Omnisphere: using the Utility Menu, the Soundsource Browser, or the Granular page.

Utility Menu

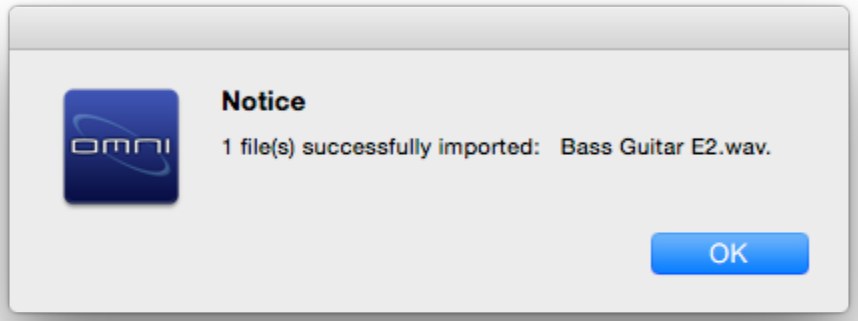


Selecting “User Audio” from the Utility Menu will display a File Dialog prompting you to navigate to the audio file or directory.

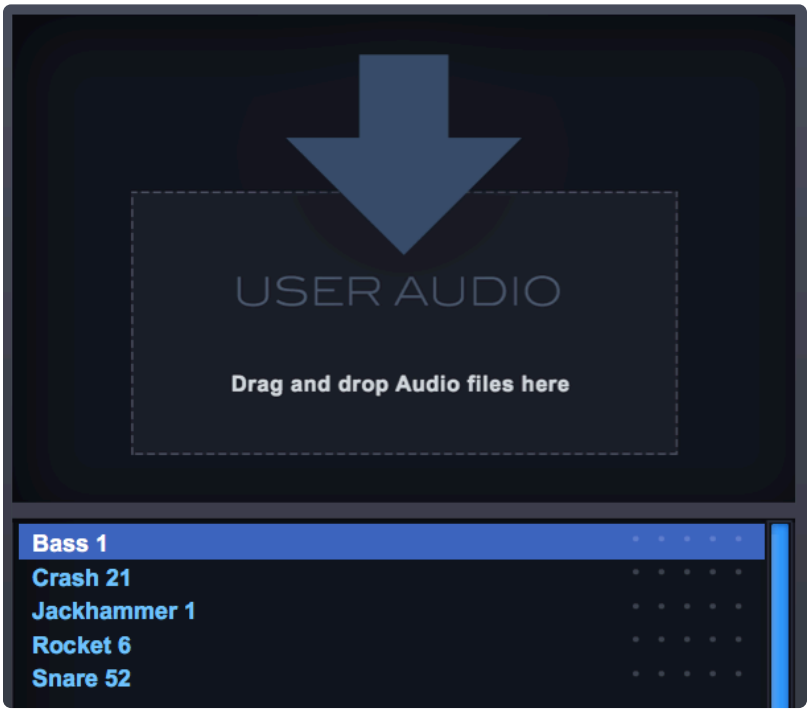
Navigate to the folder or file you wish to import and click “Open.” The import process will begin and your selection will be added to the User Soundsources directory in Omnisphere.



Once the audio has been successfully imported, you will get a confirmation notice.



After the import process is complete, the Soundsource Browser will be displayed and your audio (now an Omnisphere User Soundsource), will be automatically selected and played back at the note and duration set by the **Audition Note** settings.



To delete the audio you imported, you can do so by locating it on your hard drive in the following directory:

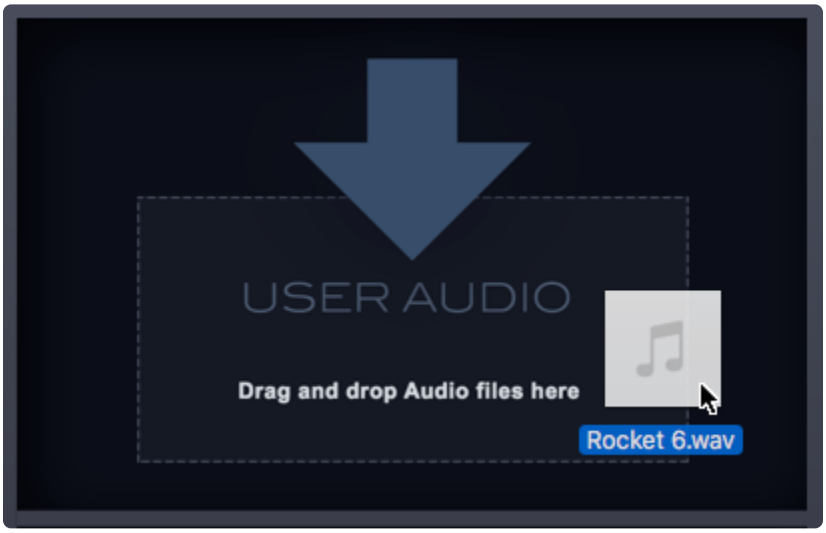
STEAM/Omnipshere/Soundsources/User/

After deleting it, you must click the “Refresh” button in your Soundsource Browser to reflect the changes.

NOTE: Each imported audio file will become a User Soundsource in Omnisphere. The User Audio import function does not support zone-maps, round-robins, multiple velocities, etc. Remember, Omnisphere is not a sampler, is a synthesizer. The objective is not to play multi-sampled instruments like a sampler, but to be creative in transforming your own audio.

NOTE: If you batch convert a group of audio files, only the first imported file will be selected and played back.

Soundsource Browser



Audio can be imported via the Soundsource Browser. You can drag and drop audio files or folders into this area to automatically start the import process. You can also click on the pane to open a File Dialog prompting you to navigate to the audio file or directory. Clicking “Open” will start the import process.

Granular Page

Another useful way to import User Audio is by dragging-and-dropping the audio file onto the Granular page, making it immediately available for Granular processing.


PATCH BROWSER
DIRECTORY: All Spectrasonics
Search
Attributes
Sound Match
Category
Type
Genre
Author
All
ARP + BPM
Bass Instruments
Bells and Vibes
Bowed Colors
Distortion
Electro Perc
Electronic Mayhem
Ethnic World
Guitars
Hits and Bits
Human Voices
Keyboards
Noisescapes
Organs
Phoenix Rising
Sweet Beef
Organic Blacksmith
Backwards Neosoul
Drop Springs
Zplane Alarmist
Muted Expectations
Brainball
Replicants
Age of Clarity
So Legit
Intimate Bouncing Mallets
Sacred Shrine
Sort
UTILITY
HW
default multi
1 2 3 4 5 6 7 8 MULTI SYSTEM
OMNISPHERE
POWER SYNTH
Default Patch
SPECTRASONICS
ORB MAIN A B C D FX ARP
OSCILLATOR ZOOM
LEGACY
MAIN FM RING WS UNISON HARM GRAN
SPEED POSITION
GRANULAR
Preset
Granular Presets
Low Bell.wav
GRAIN DEPTH
INTENSITY
SMOOTHING
SPREAD
DETUNING
PITCH GRAINS
INTERVAL
GLIDING
Up
Normal
DIRECTION
MODE
Low Bell.wav

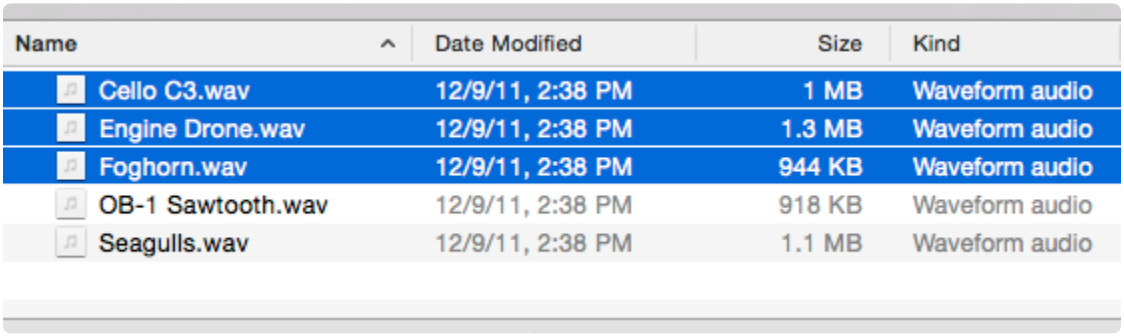

OSCILLATOR ZOOM
LEGACY
MAIN FM RING WS UNISON HARM GRAN
SPEED POSITION
GRANULAR
Preset
Granular Presets
Notice
1 file(s) successfully imported: Low Bell.
OK
GRAIN DEPTH
INTENSITY
SMOOTHING
SPREAD
DETUNING
PITCH GRAINS
INTERVAL
GLIDING
Up
Normal
DIRECTION
MODE

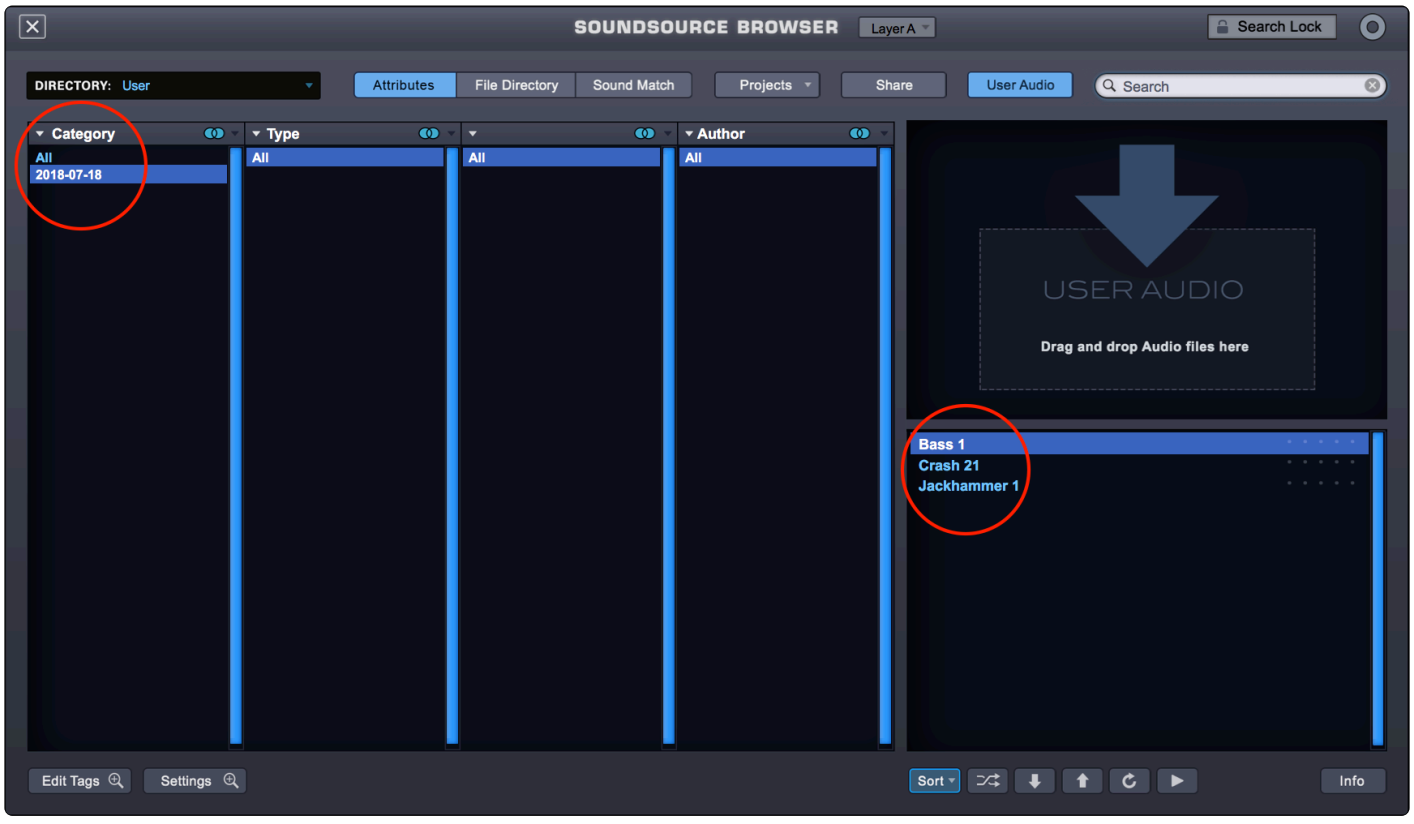
8.1.1. Files and Directories

Omnisphere can import single or multiple (hundreds) of audio files at once. The way in which the files are organized prior to importing determines how they are organized in Omnisphere's Soundsource Browser and in your STEAM folder.

Importing Single or Multiple Files (not in a folder)

When importing single or multiple audio files, the files are saved to your User directory, in a folder labeled with the current date. This folder will show up in the Category column in Omnisphere's Soundsource Browser.



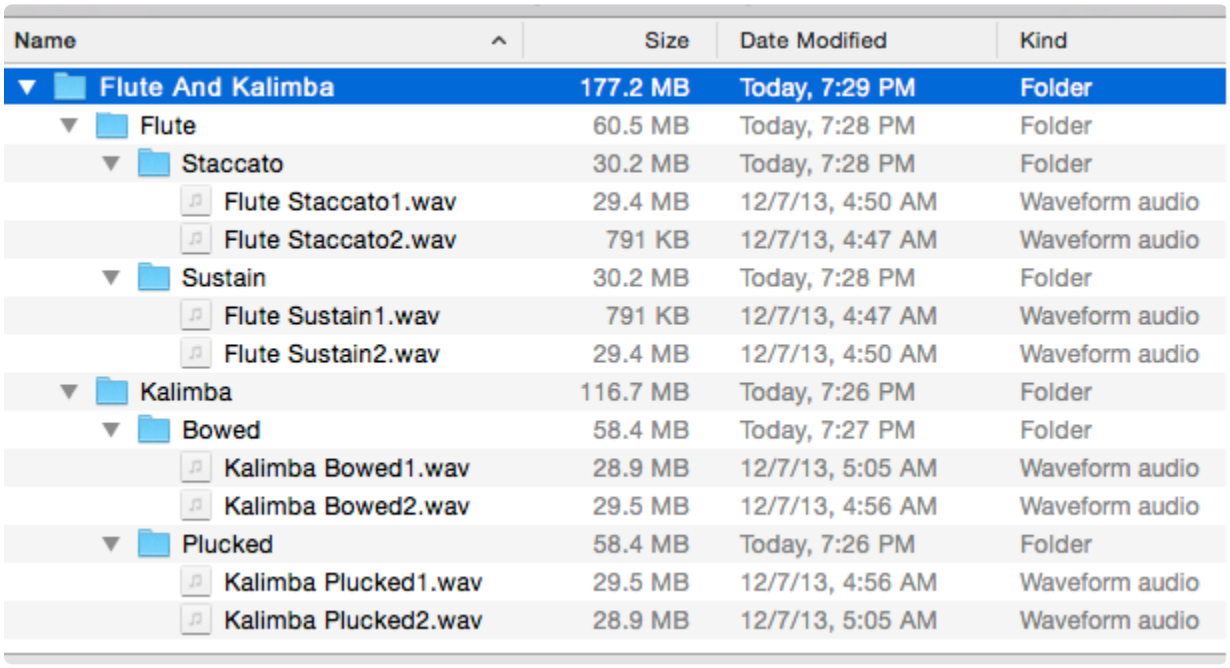


That folder resides here on your drive:

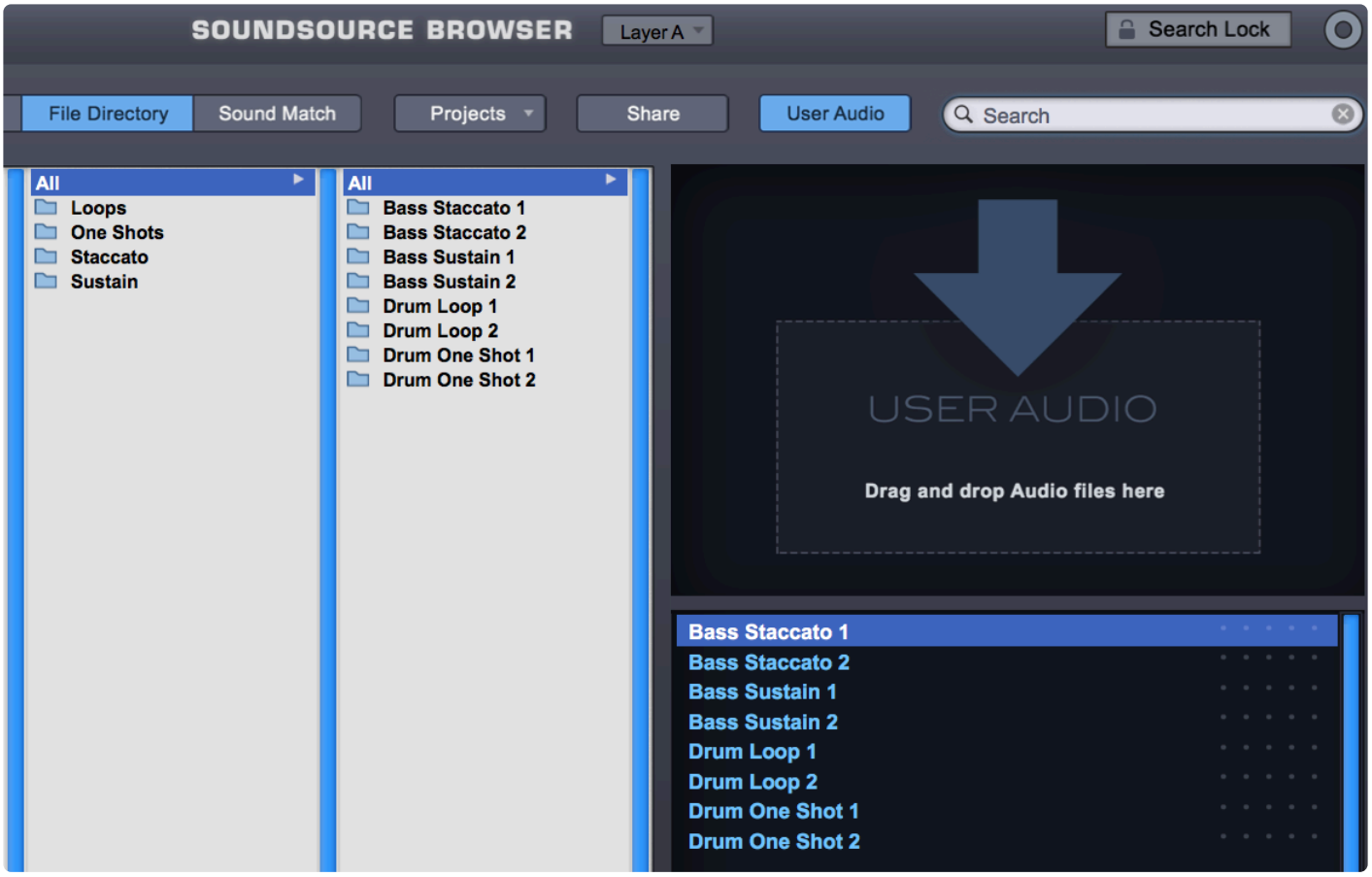
- STEAM/Omnisphere/Soundsources/User

Importing Directories (files organized in folders)

Omnisphere can import hundreds of audio files at once into multiple, custom-named directories. Importing using this method is a simple matter of selecting the top folder(s) containing the audio files and either dragging them into the User Audio pane or locating them via the File Dialog. They will be saved in your User directory and the top folder will show up in the Category column in Omnisphere's Soundsource Browser.

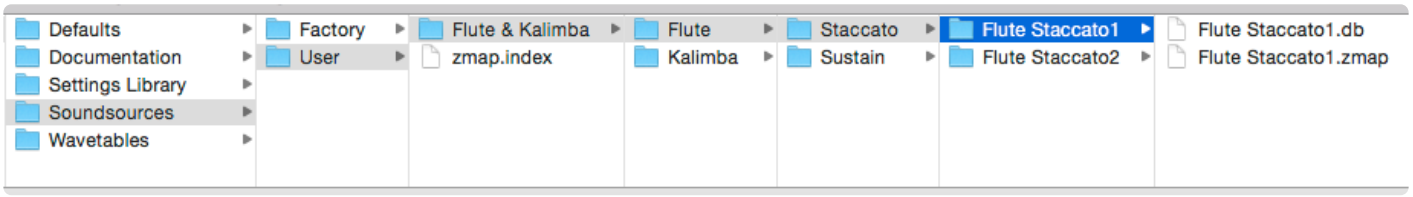


The first three sub-directories below your top folder can be displayed by setting the Soundsource Browser to File Directory mode.



On your drive, the directories will be in the following location:

- STEAM/Omnisphere/Soundsources/User



NOTE: Omnisphere will assign unique names to files that share the same name. If "Audio File Name" already exists in your User folder and you import the same sound (or a sound with the same name), it will be renamed "Audio File Name_2" when it is imported.

File Naming

Both macOS and Windows have *prohibited* characters for file names. Make sure that your imported audio files (as well as your custom Patch names) do not have any of the following characters:

- < (less than)
- > (greater than)

- : (colon)
- “ (double quote)
- / (forward slash)
- \ (backslash)
- | (vertical bar or pipe)
- ? (question mark)
- * (asterisk)

That will ensure that your user audio files and patches will load on any across both platforms.

8.2. Loops, Sample Rates, etc.

Format, Sample Rate, and Bit Depth

Omnisphere can import standard, uncompressed (PCM) stereo or mono .wav, and aif files of any sample rate with bit depths of 8, 16, 24, and 32.

Certain files, such as those with advanced compression, cannot be imported. If you receive an error message, simply convert the file to a standard, uncompressed (PCM) .wav, or aif file format and re-import.

Base Note

Omnisphere will read the base note (the key on which the sample will play in its original tuning) when importing an audio file.

You may specify the base note number by either including it within the audio file as a base note attribute; or name the file with the base note at the end of the file name, preceded by an underscore or space:

Audio File Name_D#3.wav or Audio File Name D#3.wav.

If both the filename specification and the embedded base note attribute are present, the base note from the filename takes precedence.

NOTE: A base note is not required in the file name. If omitted, the software will use any existing base note attribute embedded in the audio file. If a base note has not been specified, the default is Middle C.

Loops

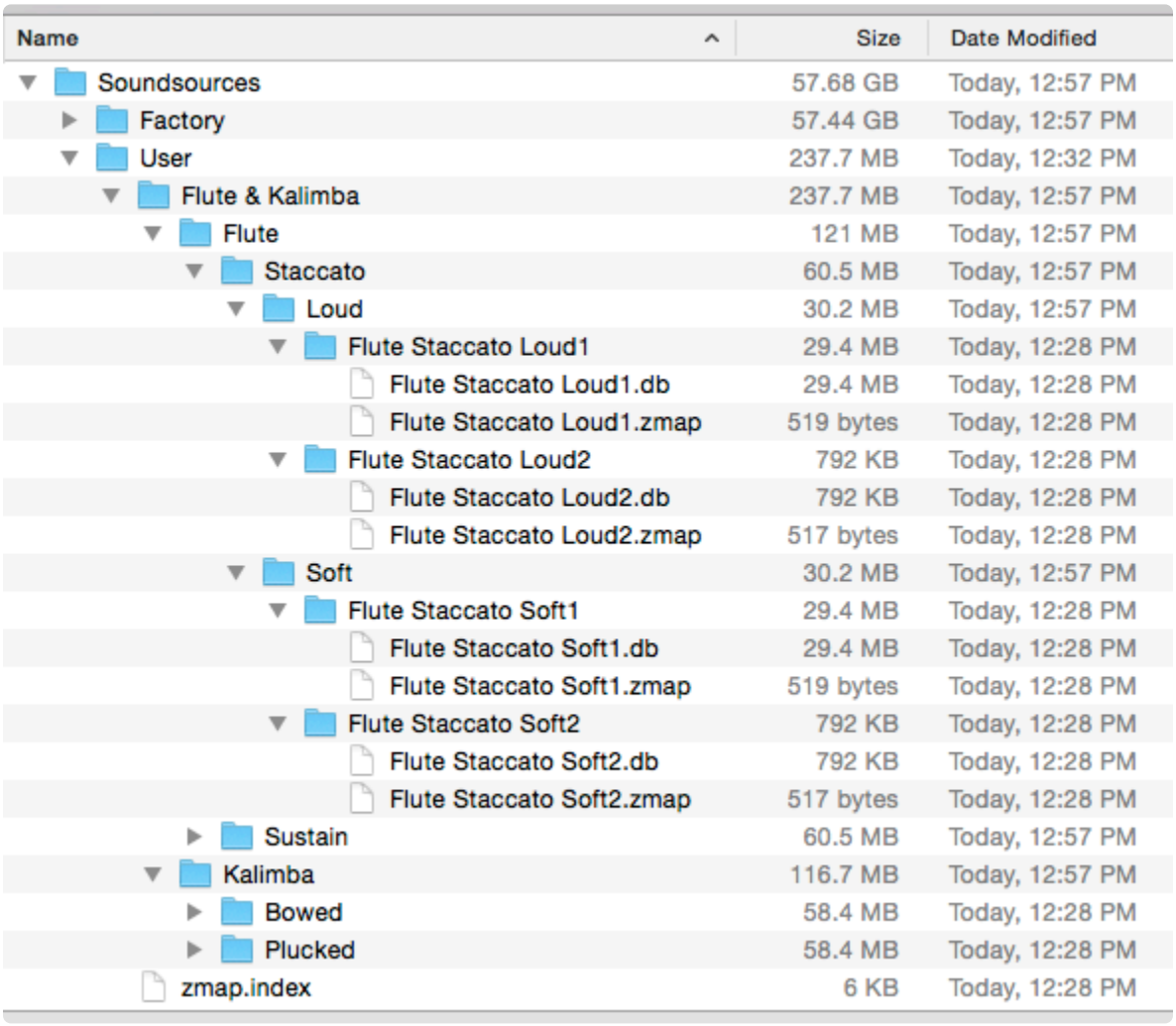
Omnisphere will play looped audio files, but the loop points must be embedded in the audio file before importing. Many audio editors have this ability, such as **Magix's Sound Forge**, **Steinberg's WaveLab**, or **DSP-Quattro** (Mac only).

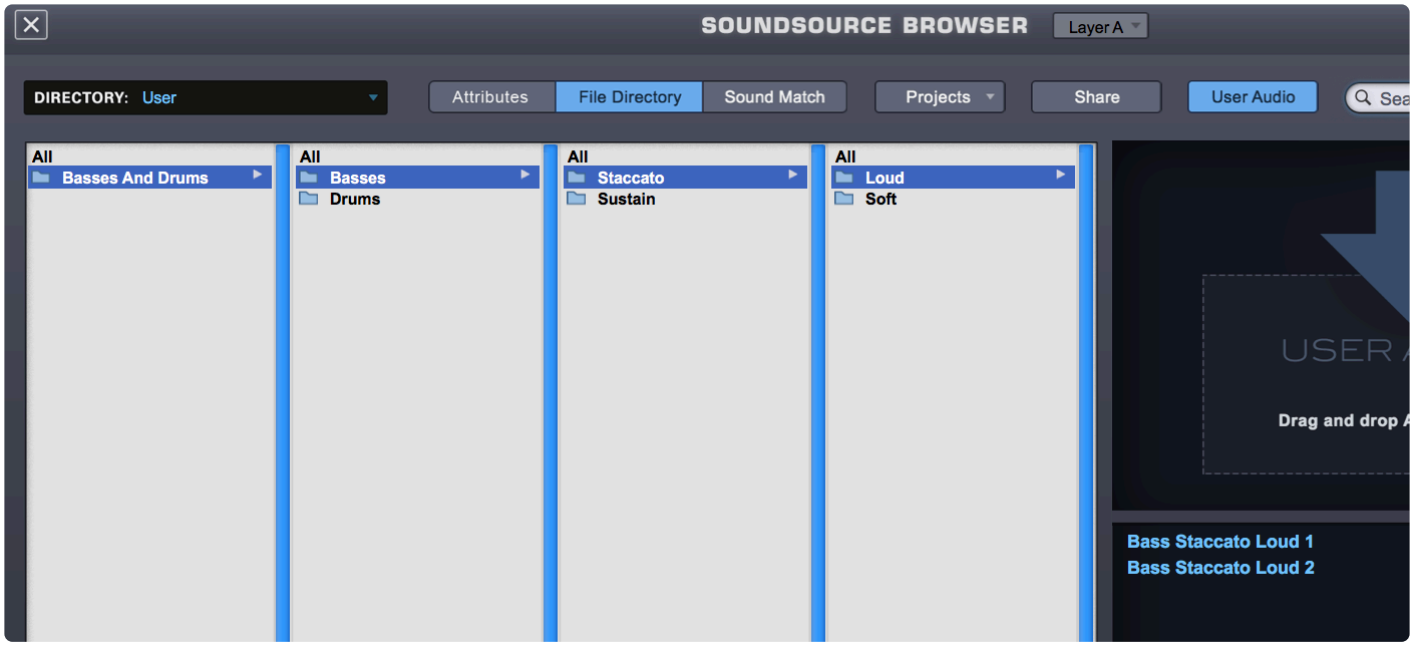
8.3. Organizing User Audio Libraries

Once User Audio has been imported, it resides in the following directory on your drive:

STEAM/Omnisphere/Soundsources/User

The first four sub-directories under “User” are reflected in the first four columns of the Soundsource Browser when in File Directory mode. With that in mind, you can reorganize your directories inside “User” any way you like.





There are two things you must avoid or you will break the path to your imported user audio:

- Do not rename files which have the extension .db or .zmap.
- Do not move files or folders outside “User.”

Other than that, you can create, rename, move, or delete folders.

NOTE: You must click on the Refresh button in your Soundsource Browser to see any changes.

Sometimes it can be simpler to organize your directories before importing. If you wish to re-organize folders that you have already imported, delete the previously imported files from your STEAM folder, reorganize your .wav and .aif directories and then re-import.

8.4. FAQ

Can I import my mp3 files?

No. Omnisphere supports only standard stereo or mono PCM, .wav, and aif files.

See **USER AUDIO – Audio File Properties** for more info.

Can I rename the files, once they are imported?

You can create, rename, move, or delete FOLDERS, as well as reorganize your directories inside “User” in any way you like. However you cannot not rename files which have the extension .db or .zmap or move files or folders outside “User.” If you want to rename your .wav or .aif files, do so on your drive and then re-import them.

How many audio files can I import at once?

Omnisphere can import hundreds of audio files at once into multiple, custom-named directories.

I looped an audio file in my sampler and when I import it into Omnisphere it doesn’t loop. Why not?

Omnisphere will play looped audio files, but the loop points must be embedded in the audio file first. You will need to loop the audio file in an audio editor (not a sampler) prior to importing it.

Which audio editors can I use to loop my audio before I import?

Many audio editors have this ability, such as **Magix’s Sound Forge**, **Steinberg’s WaveLab**, or **DSP-Quattro** (Mac only).

Why isn’t Omnisphere playing my loop crossfades? They play fine in my sampler.

Omnisphere does not read sampler settings. Loop crossfades must be rendered to audio before importing.

Is there a way I can apply a crossfade to a looped audio I’ve imported into Omnisphere?

Omnisphere is a synthesizer, not a sampler. If you want to apply a crossfade to a loop, you’ll need to do so in an audio editor before importing.

How can I make the sample shorter, once it is imported? I want to create a short one shot out of a long sample.

You can use the Amplitude Envelope to control the length of the Soundsource or Patch. Reduce Sustain to zero and adjust Decay and Release to whatever time you like. You can also select where you would like the audio to start playing from via the Start slider on the Layer pages.

I played D4 on my guitar and when I brought it into Omnisphere, it sounds a whole step higher than I

expect (if I play D4 in my controller the pitch is E4). How can I fix it?

That is because the correct base note has not been specified in the audio file. When that happens, Omnisphere will map your audio file Middle C. You can set the base note by renaming the audio file like this: Martin Acoustic_D4.wav or Martin Acoustic D4.wav. After renaming the file, re-import it and the audio will be mapped correctly.

See **USER AUDIO – Base Note** for more details.

Can file names also include flats? Like Tingly_Ab.wav or does it have to be Tingly_G#.wav?

Yes, you can have “b” or “#” after any of the 7 note letters: Eb2, Bb5, G#4, etc. The “b” is not confused with the note letter because it follows the letter. The file name must have a space or underscore before the note letter:

- * Tingly_Eb3
- * Tingly F#3
- * Tingly_G#3
- * Tingly Bb3
- * Tingly B4
- * Tingly E3

Can I turn my imported audio file into a sustained, playable sound?

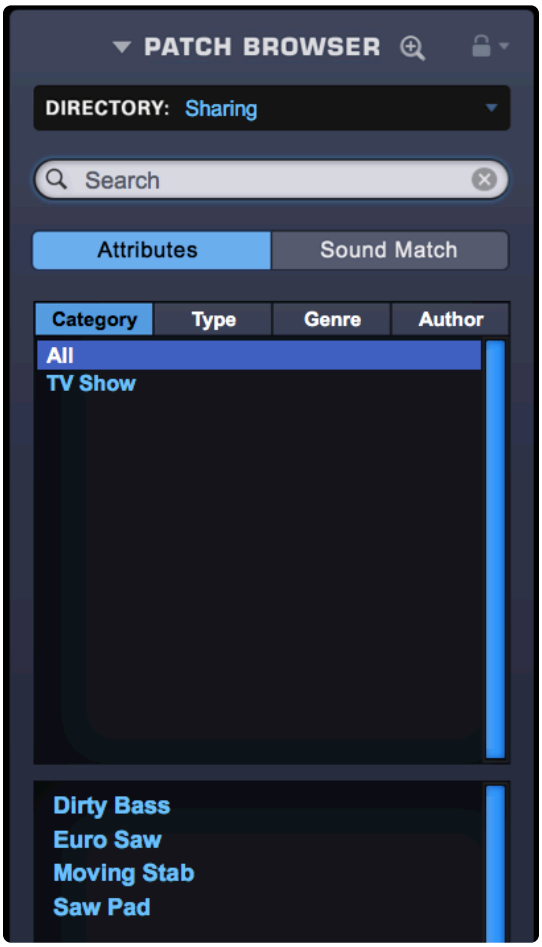
Yes. Using Granular, you can transform your audio beyond recognition. Granular can “freeze” a small portion of your audio into a single-cycle waveform which can then be played as a sustained sound. You can even use Granular to create a slowly-evolving texture out of something like a piano chord.

Please see **Granular** for more info.

Can I make it so that regardless of whatever key I play, the sample plays back at its original duration and pitch (for things like drums, or pluck transients) across the entire keyboard range?

Yes. Click on the magnifying glass next to “Oscillator” on the Layer page and in the Main tab set the Keyboard TRACKING button to OFF.

9. Sharing



Using the Sharing feature, it's easy for you to share your custom Omnisphere sounds, no matter if they were created using Factory Soundsources, Wavetables, or your own audio. You can share any combination of Patches, Multis, and User Soundsources with a few simple steps. All the necessary components will be collected for you into a single .omnisphere file which others can open in Omnisphere on their computer.

There are three ways to share Omnisphere sounds:

Share Sounds

This method is intended for casually sharing sounds. You can choose which sounds to share by selecting them in the browser with Shift-click. Next, select **Share Sounds** from the Utility menu or press the **Share** button in the Full Browsers to create an .omnisphere package containing the sounds you selected. This method allows you to share only one type of sound of a time (Multis, Patches, or User Soundsources).

NOTE: If a Patch or Multi you are sharing includes User Soundsources, those will be included as part of the .omnisphere package.

Share Projects

Sharing Projects allows you to share all Multis, Patches, and User Soundsources that were added to a Project in a single .omnisphere package.

Publish Library

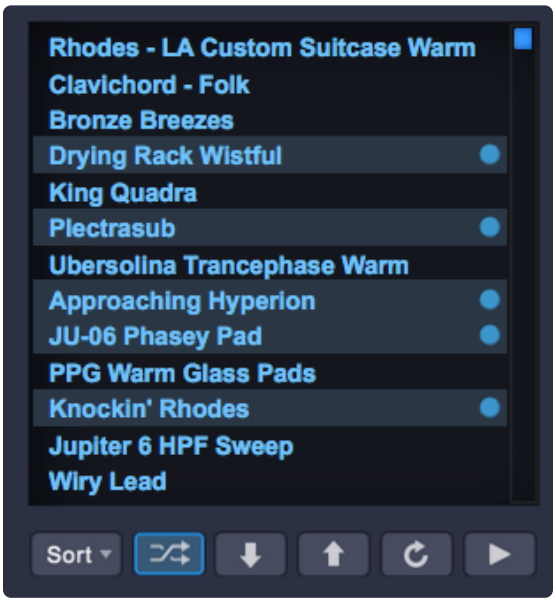
The **Publish Library** feature was created for third-party developers of Omnisphere libraries. It allows developers to easily export or “publish” a library of Multis and Patches, along with any associated Soundsources and images in a single .omnisphere package. End-users can then install this package into their systems with a single step.

9.1. Sharing Sounds

When you want to share only one type of sound at a time, (Multis, Patches, or User Soundsources), this is the quickest and simplest method.

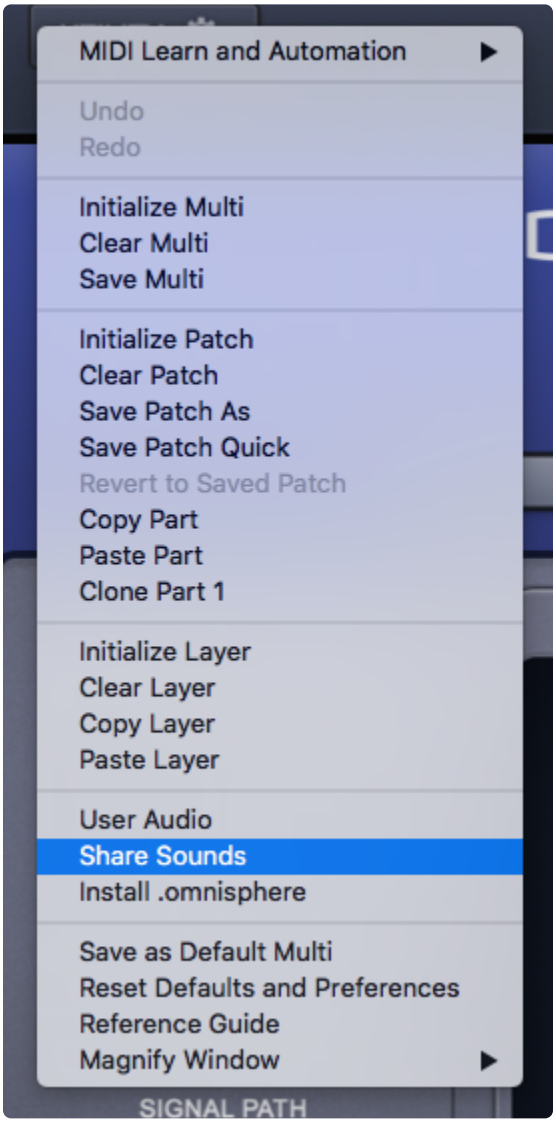
NOTE: You can share User Soundsources by themselves, without Patches or Multis, but if a Patch or Multi you are sharing employs User Soundsources, those will automatically be included as part of the .omnisphere package.

From any of the three **Browsers**, choose the sounds you want to share by using Shift-click.

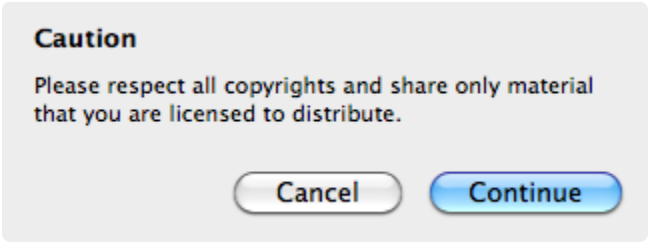


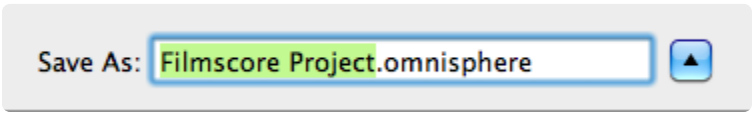
NOTE: Use Option-click if you wish to de-select them all in one step.

Next, select “Share Sounds” from the Utility Menu or press the **Share** button in the Full Browser to create an .omnisphere file containing the selected sounds.

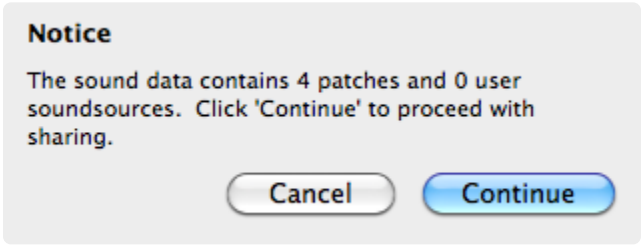


After viewing the copyright message, you will be prompted to enter a name and select a location where you wish to store the .omnisphere package.

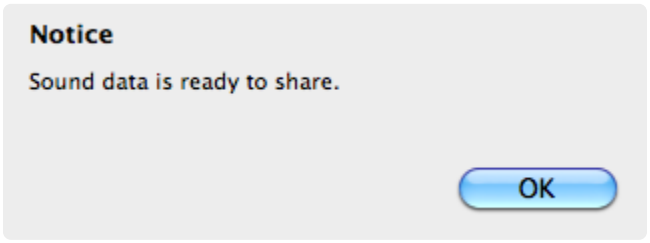




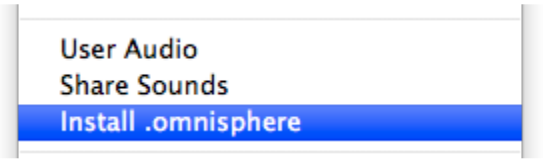
Next you will get a report of the data contained in the package.



Select ”Continue” and you’ll get a confirmation that your sounds are ready to share.



You can send the .omnisphere file to other Omnisphere users and they can select **Install .omnisphere** from the Utility Menu to import the shared package or simply drop the file anywhere on the Omnisphere interface.



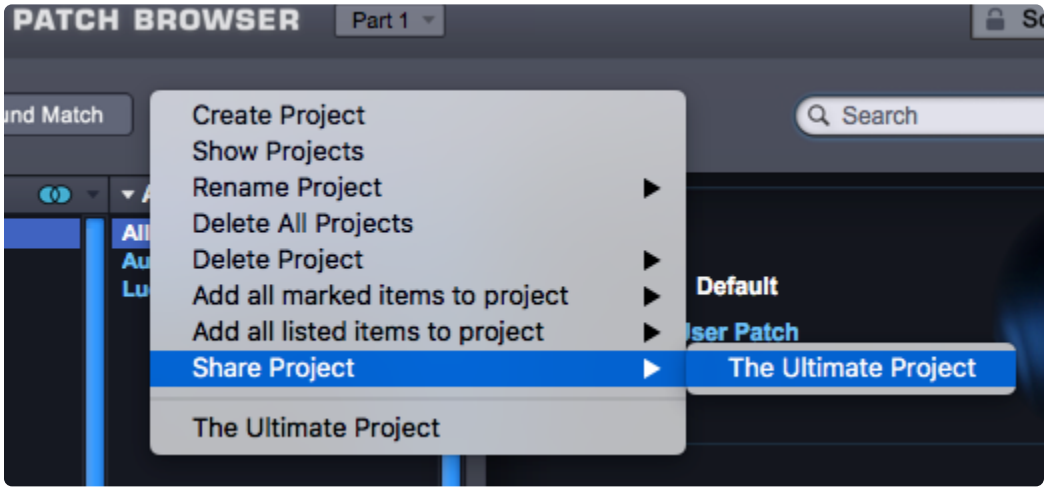
NOTE: If you wish to share multiple types of sounds at once, see the Share Projects or Publishing a Library sections of the guide.

9.2. Sharing Projects

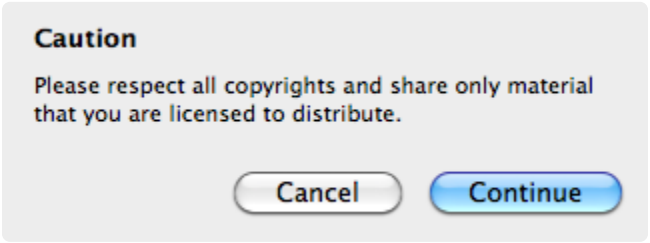
Sharing Projects lets you assign sounds to a specific Project and share them with other users. This method uses the Project features located in the Full Browsers. You can share any combination of Patches, Multis, and User Soundsources with a few simple steps. All the necessary components will be collected for you into a single .omnisphere file which others can open in Omnisphere on their computer.

First, create a **Project** for the sounds you want to share. Then add the Multis, Patches, and Soundsources.

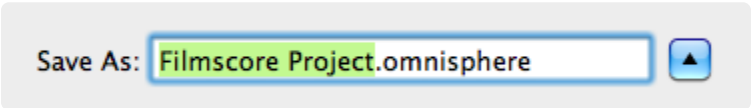
TIP: If the Patches or Multis you want to share have been created with User Soundsources, those Soundsources will be automatically included in the .omnisphere file. If you want to share a User Soundsource that is not used in a Patch or Multi, just add it to a Project by itself.



You will get this message reminding you to respect all applicable copyrights.

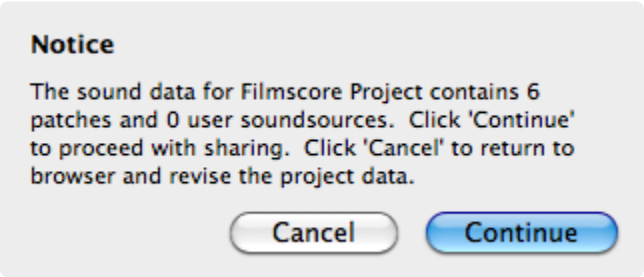


Then you will prompted to name the archive and select a location to store it.

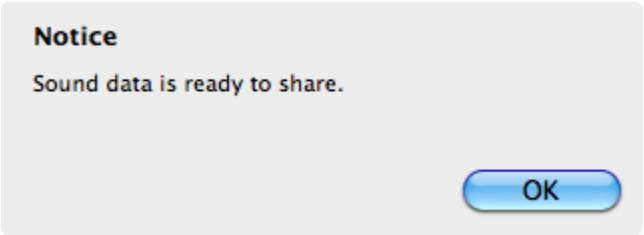


When you select “Save,” Omnisphere will analyze your Project and give you a report of the data you are about to share. If you find discrepancies, select “Cancel” and make sure your Project contains everything

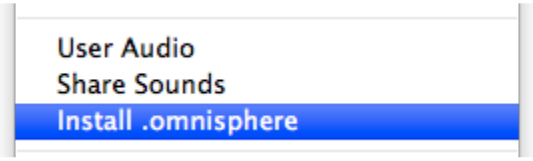
you want to share.



After selecting “Continue,” you’ll get a confirmation that your sounds are ready to share.



You can send the .omnisphere file to other Omnisphere users and they can use Install .omnisphere to import the shared archive or simply drop the file anywhere on the Omnisphere interface.

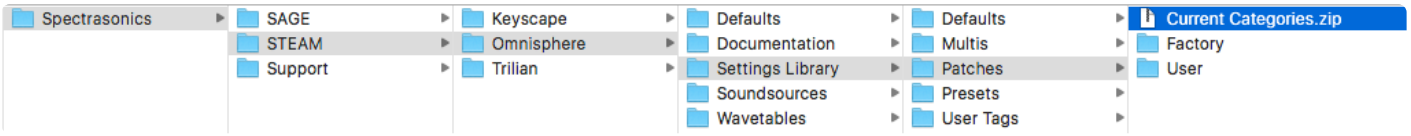


9.3. Creating a Library

Patch Library

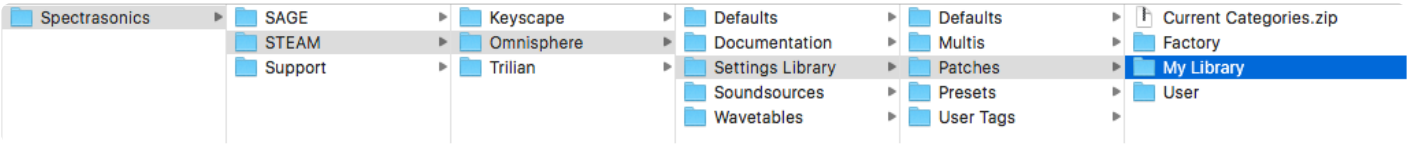
To create a Patch Library, first make sure your host is not running, then locate the “Current Categories.zip” file here:

- **Spectrasonics/STEAM/Omnisphere/Settings Library/Patches/Current Categories.zip**

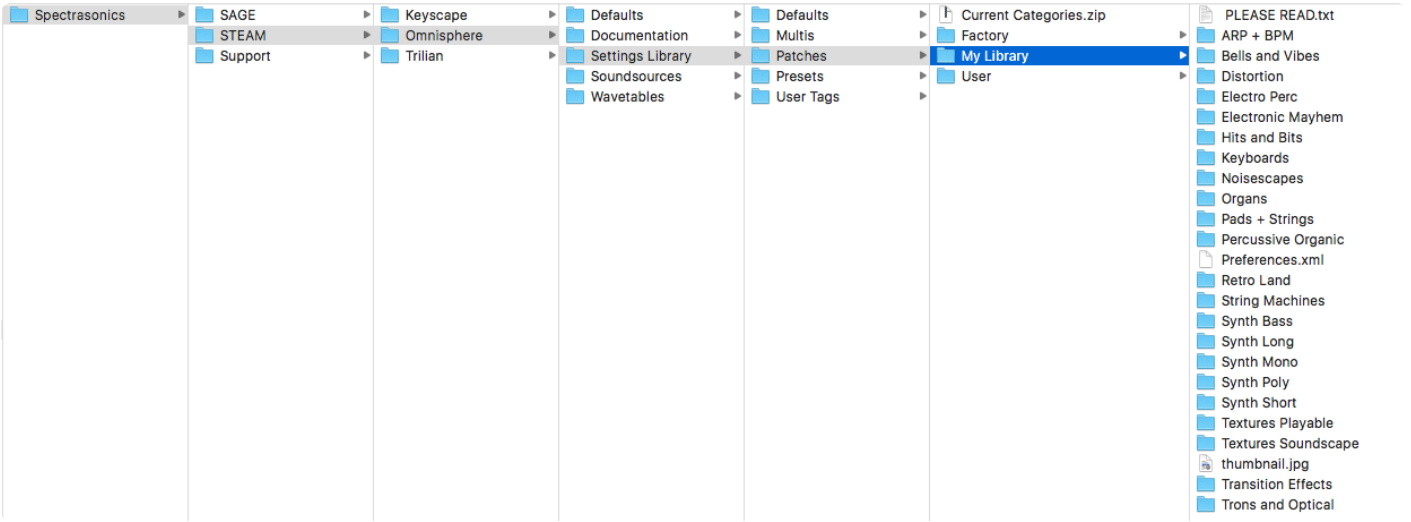


Before uncompressing the Current Categories.zip archive, make sure you are up-to-date with the latest version of the Omnisphere Factory Patch Library.

Un-zip the file and rename the new “Current Categories” folder to anything you like (pictured here as “My Library”).
This new folder must remain next to the ”User” folder, Inside “Patches.”

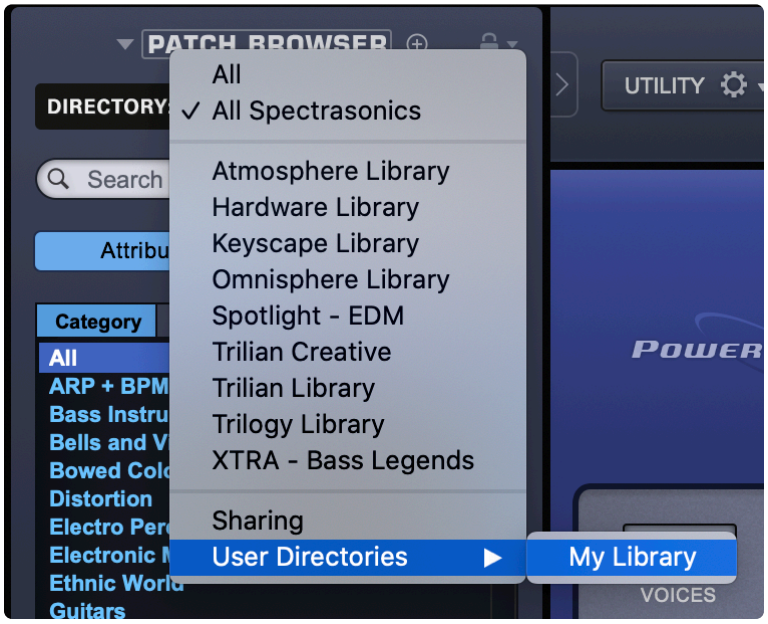


For tagging and browsing purposes, it’s best to save your Patches to the existing sub-folders inside the new Library folder in order to match the categories and tag selection in **Edit Tags** currently used by Spectrasonics.



NOTE: You can also create an empty Library folder (in the same location) with empty "Category" sub-folders and save your Patches there. Your custom-named Library and Categories will show up in the Omnisphere Directory in the same way. Keep in mind your Library might not conform exactly with Spectrasonics browsing behavior, but feel free to experiment!

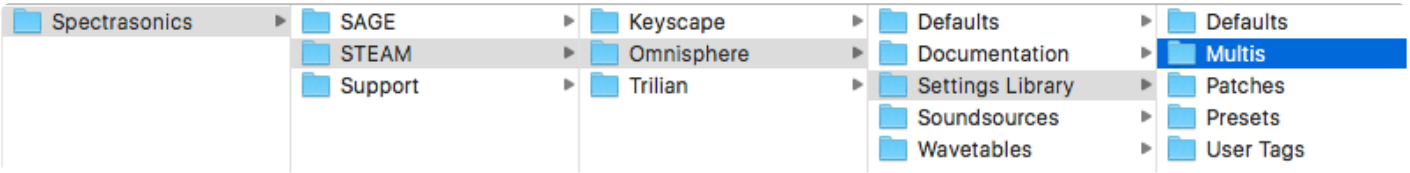
Once you have re-started Omnisphere and saved a Patch in one of the Category sub-folders, the Library will be displayed in the Directory menu.



Multi Library

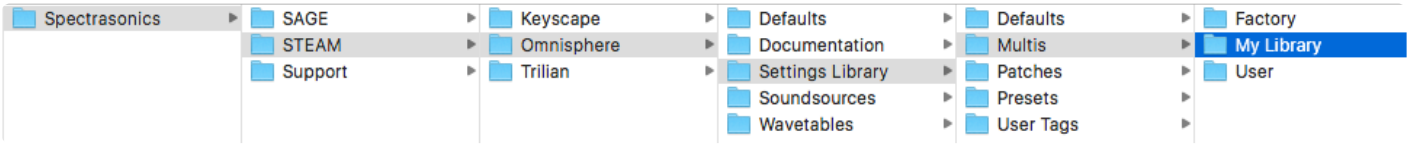
In order to create a Multi Library, make sure your host is closed and create a new folder here:

- **Spectrasonics/STEAM/Omnisphere/Settings Library/Multis/**

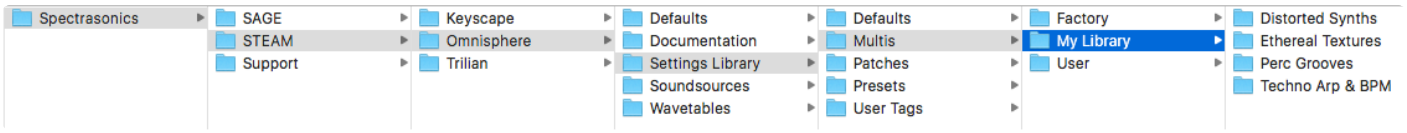


NOTE: There is no "Current Categories.zip" file for Multis.

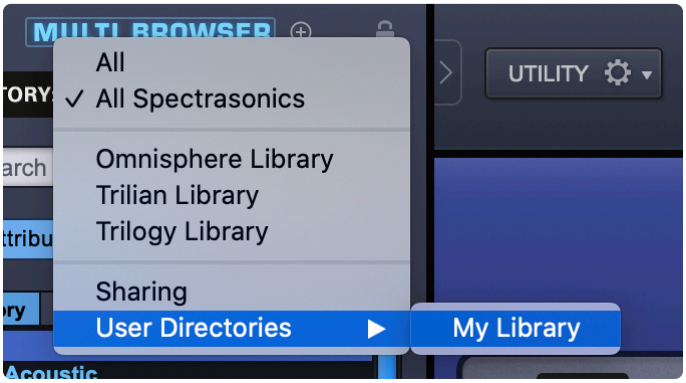
Give the folder a custom name (pictured here as "My Library").
This new folder must remain next to the "User" folder, Inside "Multis."



Next create empty sub-folders inside the new Library folder—one for each category you plan to have.



Once you have re-started Omnisphere and saved a Multi in one of the Category sub-folders, the Library will be displayed in the Directory menu.

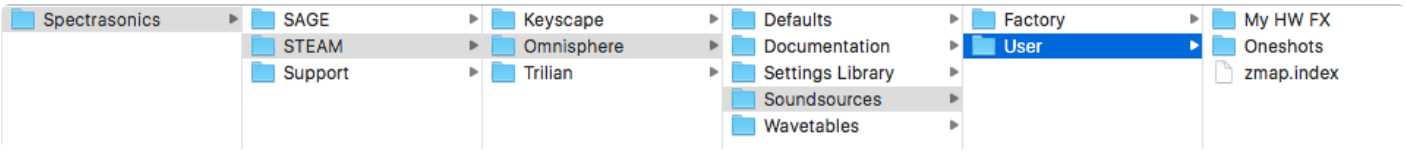


NOTE: To publish a library that includes both Patches and Multis, the Patch and Multi library names must match.

User Soundsources

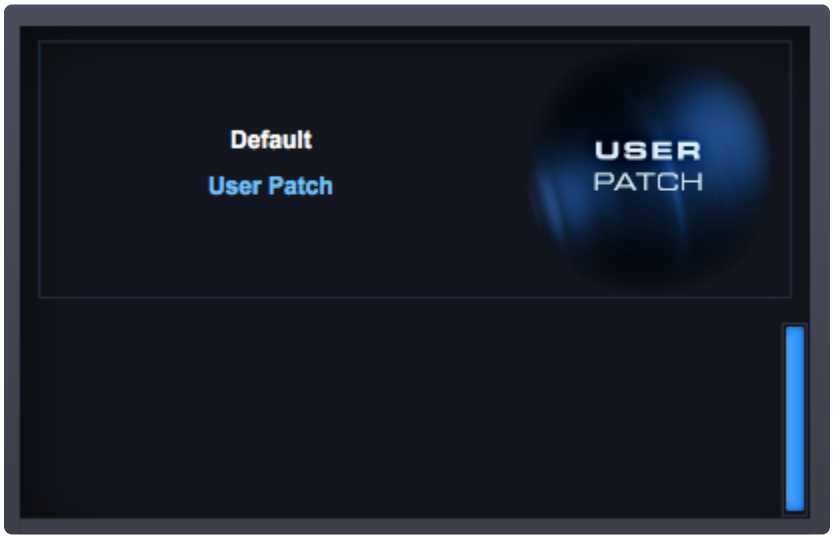
If **User Soundsources** are used in any of the Patches or Multis in your Library, they will automatically be included as part of the exported .omnisphere package. Omnisphere will only share or publish User Soundsources located here:

- **Spectrasonics/STEAM/Omnisphere/Soundsources/User**



9.4. Adding Images to a Library

Omnisphere's interface has several pages where images are shown as a visual representation of a sound. Patches, Multis, and Soundsources can have unique images displayed in different pages of the instrument.



You can include images that are shared by an entire Library or Category, a unique image for each Multi, Patch, or Soundsource, or any combination thereof.

9.4.1. Soundsources

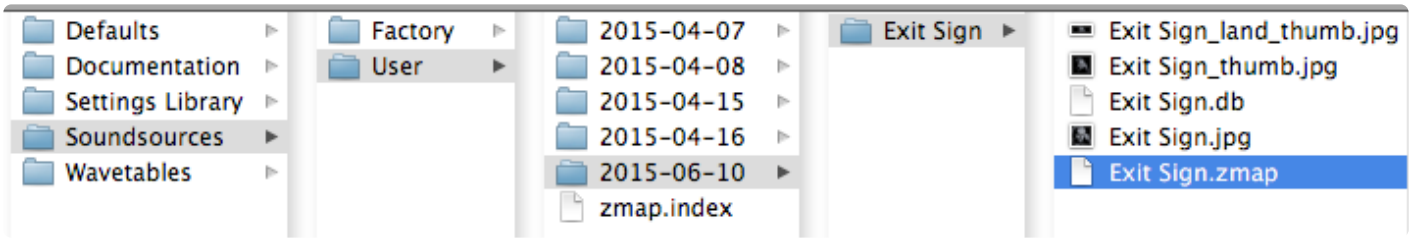
To add images to a single Soundsource, you will need three .jpg files with the following naming convention and dimensions:
(replace “Soundsource Name” with the name of the Soundsource to which you want to add images):

- Soundsource Name.jpg [300w x 300h] or [600w x 600h]
- Soundsource Name.jpg [125w x 125h] or [250w x 250h]
- Soundsource Name.jpg [125w x 50h] or [250w x 100h]

Place the .jpg images next to the Soundsource .zmap here:

- **Spectrasonics/STEAM/Omnisphere/Soundsources/User/Category/Soundsource Name/**

As shown in the screenshot below, images are used by the Soundsource “Exit Sign.”


Defaults
Documentation
Settings Library
Soundsources
Wavetables
Factory
User
2015-04-07
2015-04-08
2015-04-15
2015-04-16
2015-06-10
zmap.index
Exit Sign
Exit Sign_land_thumb.jpg
Exit Sign_thumb.jpg
Exit Sign.db
Exit Sign.jpg
Exit Sign.zmap

9.4.2. Patches

Images can be shared by an entire library of Patches, by a Category, or used by a single Patch.

Adding Images to a Patch Library

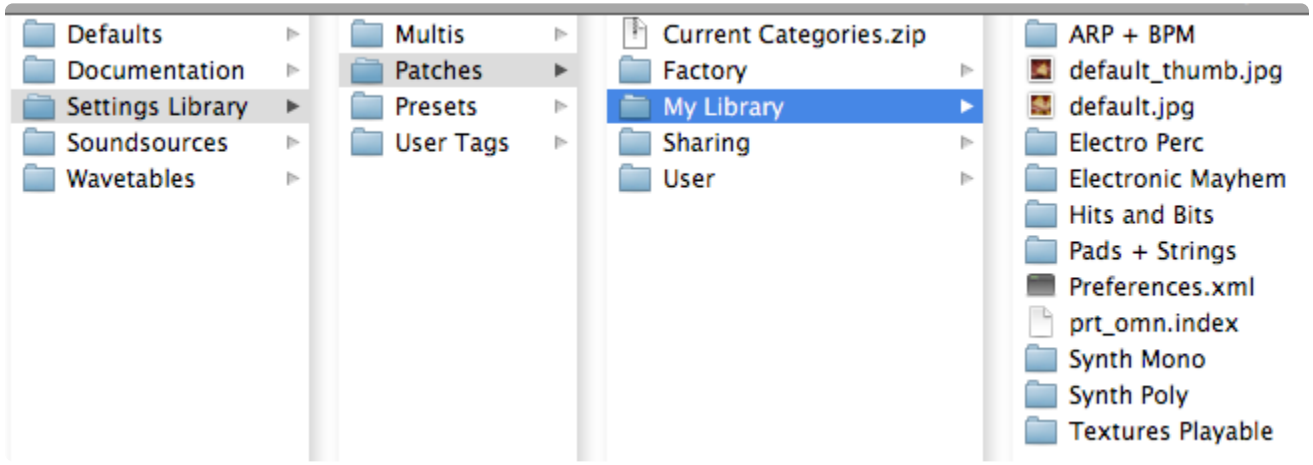
An image can be shared by all the Patches in a Library. You will need two .jpg files with the following naming convention and dimensions:

- Patch Name.jpg [300w x 300h] or [600w x 600h]
- Patch Name_thumb.jpg [125w x 125h] or [250w x 250h]

Place the .jpg files inside the Patch Library to which you want to add images, using this path:

- **Spectrasonics/STEAM/Omnisphere/Settings Library/Patches/Library Name**

As shown in the screenshot below, images are used by all the Patches in “My Library.”



NOTE: Categories or Patches that have unique images assigned to them will take precedence over the Library image.

Adding Images to a Patch Category

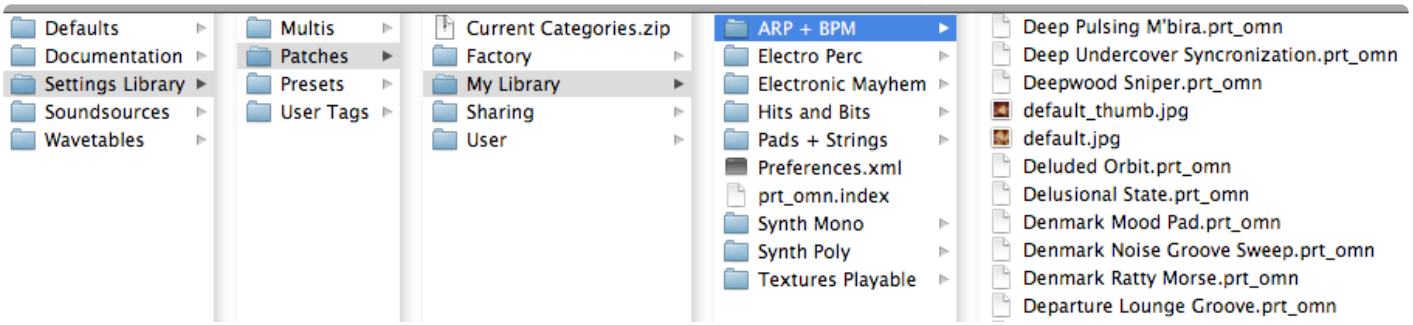
A set of images can be shared by all Patches in a Category. You will need two .jpg files with the following naming convention and dimensions:

- Patch Name.jpg [300w x 300h] or [600w x 600h]
- Patch Name_thumb.jpg [125w x 125h] or [250w x 250h]

Place the .jpg files inside the Patch Category to which you want to add images, using this path:

- **Spectrasonics/STEAM/Omnisphere/Settings Library/Patches/Library Name/Category**

As shown in the screenshot below, images are used by all the Patches in the “ARP + BPM” Category in “My Library.”



NOTE: Patches that have unique images assigned to them will take precedence over Category or Library image.

Adding Images to a Patch

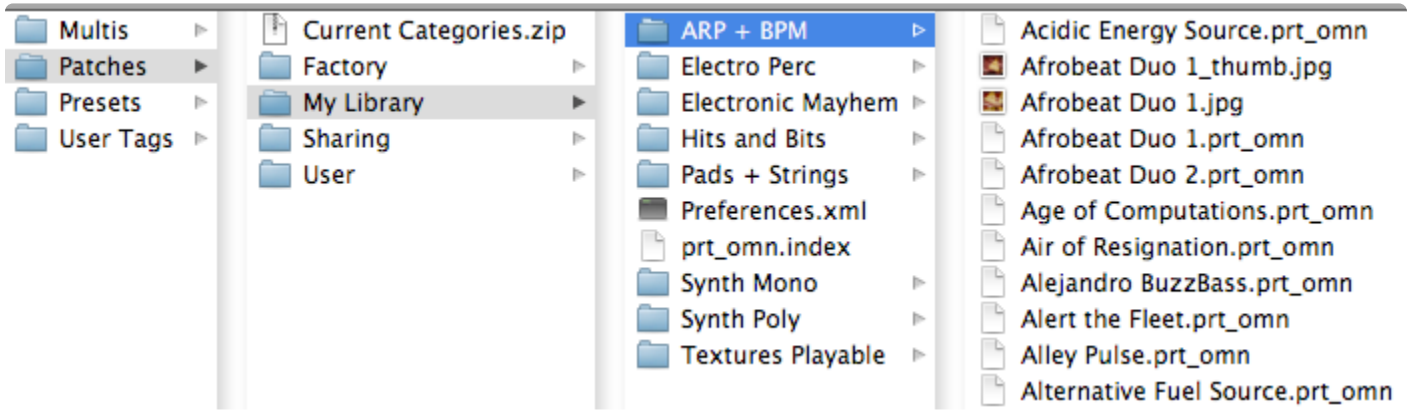
To add images to a Patch, you will need two .jpg files with the following naming convention and dimensions (replace “Patch Name” with the name of the Patch):

- Patch Name.jpg [300w x 300h] or [600w x 600h]
- Patch Name_thumb.jpg [125w x 125h] or [250w x 250h]

Place the .jpg files next to the Patch to which you want to add images (Patch files have .prt_omn extensions) following this path:

- **Spectrasonics/STEAM/Omnisphere/Settings Library/Patches/Library Name/Category**

As shown in the screenshot below, images are used by the Patch “Afrobeat Duo 1.”



NOTE: Patches that have unique images assigned to them will take precedence over Category or

Library image.

9.4.3. Multis

A set of images can be shared by an entire library of Multis, by a Category, or used by a single Multi.

Adding Images to a Multi Library

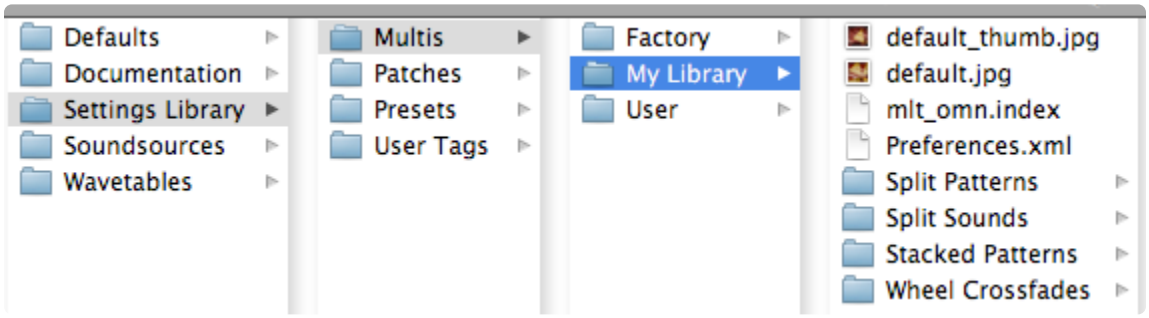
A set of images can be shared by all the Multis in a library. You will need two .jpg files with the following naming convention and dimensions:

- Multi Name.jpg [300w x 300h] or [600w x 600h]
- Multi Name_thumb.jpg [125w x 125h] or [250w x 250h]

Place the .jpg files inside the Multi library folder here:

- **Spectrasonics/STEAM/Omnisphere/Settings Library/Multis/Library Name**

As shown in the screenshot below, images are used by all the Multis in “My Library.”



NOTE: Categories or Multis that have unique images assigned to them will take precedence over the Library image.

Adding Images to a Multi Category

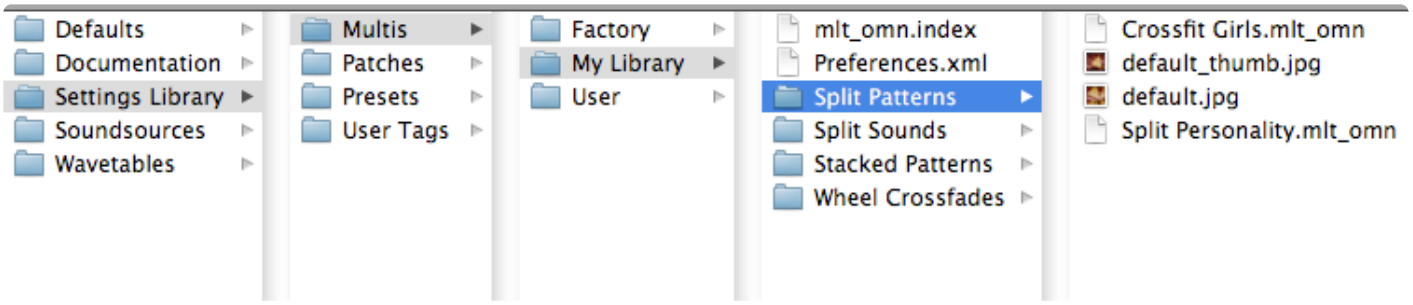
A set of images can be shared by all the Multis in a Category. You will need two .jpg files with the following naming convention and dimensions:

- Multi Name.jpg [300w x 300h] or [600w x 600h]
- Multi Name_thumb.jpg [125w x 125h] or [250w x 250h]

Place the .jpg files inside the Multi Category to which you want to add images, using this path:

- **Spectrasonics/STEAM/Omnisphere/Settings Library/Multis/Library Name/Category**

As shown in the screenshot below, images are used by all the Multis in the “Split Patterns” category.



NOTE: Multis that have unique images assigned to them will take precedence over the Category or Library images.

Adding Images to a Multi

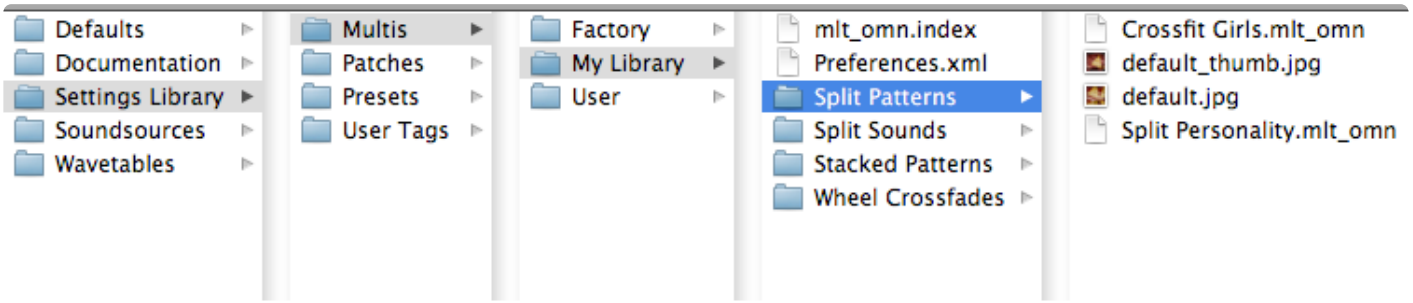
To add images to a Multi, you will need two .jpg files with the following naming convention and dimensions (replace “Multi Name” with the name of the Multi):

- Multi Name.jpg [300w x 300h] or [600w x 600h]
- Multi Name_thumb.jpg [125w x 125h] or [250w x 250h]

Place the .jpg files next to the Multi to which you want to add images (Multi files have .mlt_omn extensions) following this path:

- **Spectrasonics/STEAM/Omnisphere/Settings Library/Multis/Library Name/Category**

As shown in the screenshot below, images are used by the Multi “Crossfit Girls.”



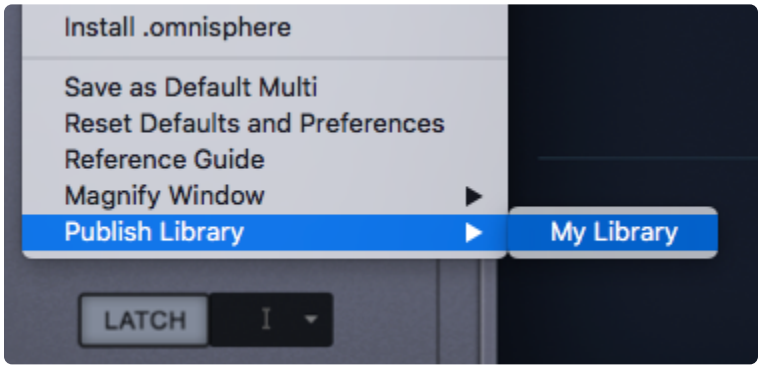
9.5. Publishing a Library

The **Publish Library** feature was created for third-party developers of **Omnisphere Libraries**. It allows developers to easily export or “publish” a library of tagged and categorized Multis, Patches, any associated Soundsources, and custom **images** in a single .omnisphere package. End-users can then install this package into their systems with **one simple step**.

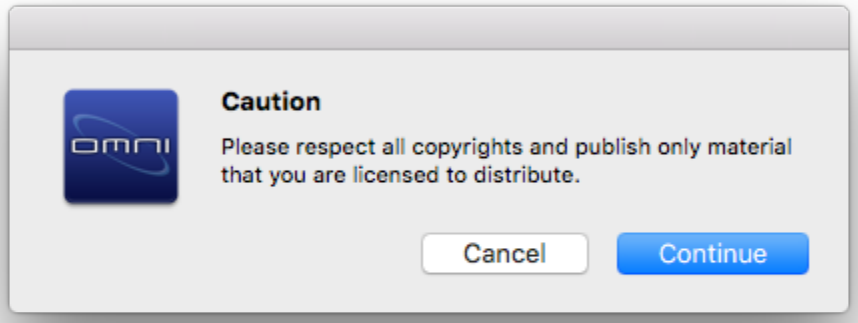
NOTE: Patches, Multis, and Soundsources are located in separate directories in your STEAM folder, but if you wish to publish a library that includes both Patches and Multis, the libraries in which those Patches and Multis are located must have the same name. That name will appear in the Publish Library sub-menu only once.

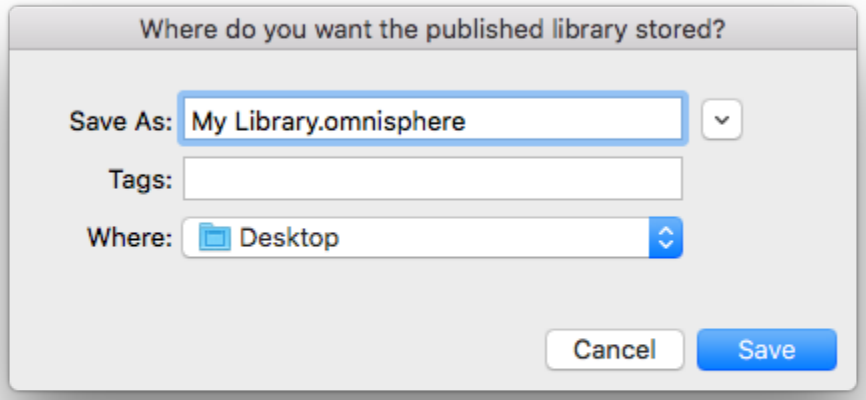
User Soundsources used by any Patch or Multi in the library you wish to publish will be automatically added to the .omnisphere package, so there is no need to create a Soundsource library with a matching name. Factory Soundsources (on all Omnisphere users’ systems) are referenced by the Patches / Multis.

Once a Library has been created and is ready to be published, Option/Alt-click on the Utility Menu and a “Publish Library” menu item will appear at the bottom of the list. This item contains a sub-menu displaying the Libraries available for publishing.

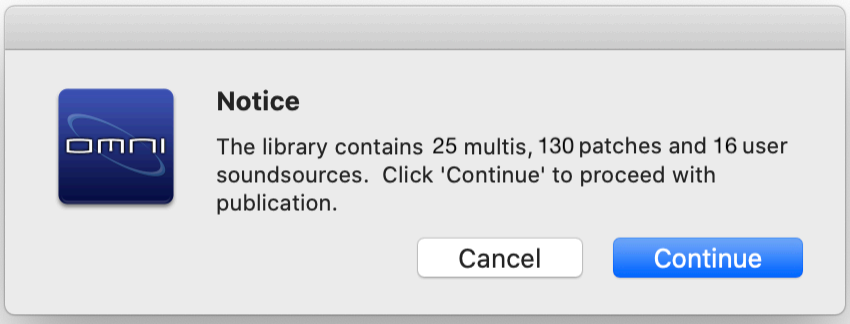


Select the Library you wish to publish and, after viewing the copyright message, you will be prompted to select a location to store the .omnisphere package.

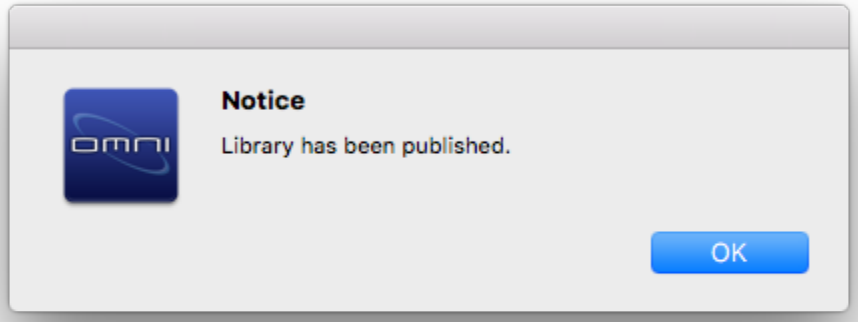




After completing these steps. you will see a report of the data to be included in the .omnisphere package.



Click “Continue,” and your .omnisphere file will be finalized and made ready for sharing.



9.6. Adding Sounds

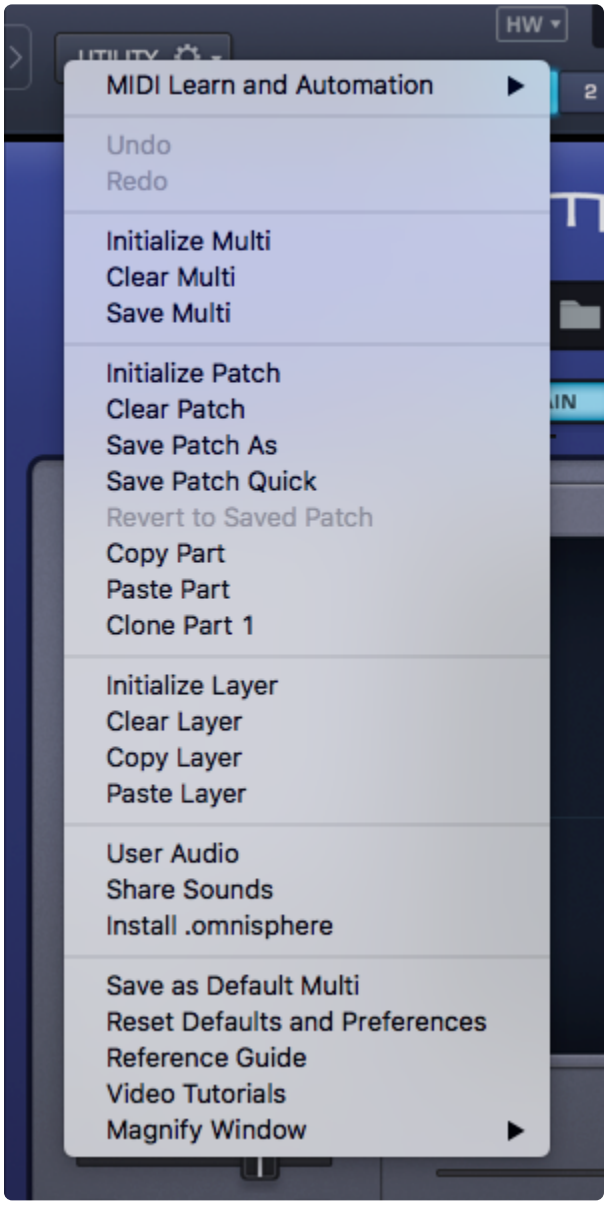
Adding sounds to your library that have been **Shared** by other Omnisphere users is simple!

Omnisphere sounds that have been shared using the **Sharing** feature are conveniently collected into a single .omnisphere file. Files with the extension .omnipshere can be added to your library in a single operation.

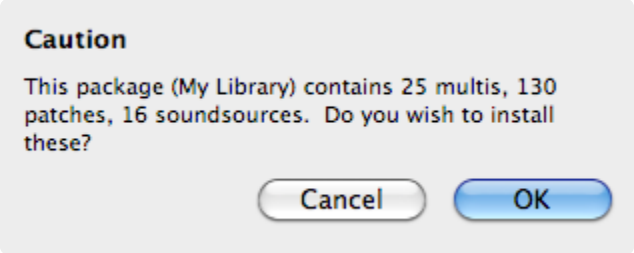
This feature handles the file management for you—without you ever having to leave Omnisphere.

Once you've received the shared .omnisphere file, there are 2 ways to install it.

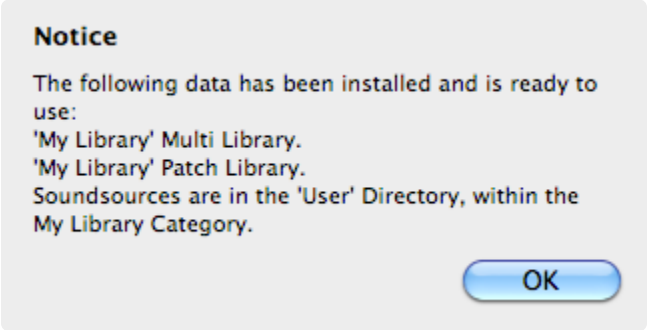
1. Install .omnisphere files by dragging-and-dropping them anywhere on the GUI.
2. Select "Install .omnisphere" in the Utility Menu.



After selecting the .omnisphere file, you'll get a report detailing the data contained in the package.



After clicking OK, Omnisphere will display a confirmation letting you know where the new sounds have been installed.



Multis that were shared using “Share Sounds” or “Share Project” will be stored here:

- **STEAM/Omnisphere/Settings Library/Multis/Sharing**

Multis that were shared using “Publish Library” will be stored in their own directory here:

- **STEAM/Omnisphere/Settings Library/Multis**

Patches that were shared using “Share Sounds” or “Share Project” will be stored here:

- **STEAM/Omnisphere/Settings Library/Patches/Sharing**

Patches that were shared using “Publish Library” will be stored in their own directory here:

- **STEAM/Omnisphere/Settings Library/Patches**

Soundsources will be stored here:

- **Spectrasonics/STEAM/Omnisphere/Soundsources/User**

10. The FX Page

Effects 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, movement, alter the timbre, and shape the sound in many interesting ways.

The high-quality, built-in FX in Omnisphere are integrated with the interface as well as with the sounds. Any FX units you use are saved along with Patches and Multis.

In one instance of Omnisphere there are 58 different FX Units which can be mixed and matched in 53 FX Racks, a comprehensive FX Preset library, and a powerful feature set for integrating the FX with the synthesis engine.

Each of the 8 Parts in Omnisphere has six insert racks (one for each of the four Layers, an AUX rack and a COMMON rack for the entire Patch). Additionally, at the Multi level there are 5 racks that are shared by all Parts (four AUX racks and a MASTER rack).

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

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

in an AUX Send for all Layers is far less CPU-intensive than using one reverb for every Layer.

The position of an FX unit in the audio chain will affect how it sounds and reacts. FX units can be easily repositioned in any of the FX racks by clicking on the rack ear's handles and dragging the unit to the desired position. To move an FX unit to another rack, you can copy and paste the effect preset from the pull-down Presets menu to the left of the unit.

One of the key features of Omnisphere's FX is that almost all the FX parameters 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 much more than simple FX plug-ins.

All FX parameters can be **MIDI-Learned** for hands-on control and enabled for Host Automation.

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

All Part FX can be **globally bypassed** by clicking on the blue LED under the FX tab. The LED is blue when FX units are in use and turns red when in Bypass mode. The FX page will become greyed-out when in Bypass Mode.

10.1. Architecture and Signal Flow

The FX in Omnisphere are organized into Racks, with each one containing up to four FX Units.

PATCH FX

A Patch in Omnisphere can contain up to six Racks of four FX Units each, for a total of twenty-four 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 has a dedicated FX Rack. The FX in these Racks affect only the specific Layer into which they’re inserted. These are Pre-fader Insert FX.

The A/B/C/D racks feed into a COMMON rack, which affects all four Layers.

The COMMON and A/B/C/D racks can use their “AUX SEND” control in the top right to send audio to the AUX rack. Racks A/B/C/D can send audio PRE or POST Layer Level via the “PRE–POST” switch. The level of the AUX Rack output can be controlled from the “AUX RETURN” slider in the top right.

MULTI FX

A MULTI in Omnisphere can contain up to four AUX Racks plus a MASTER Rack, for a total of twenty FX Units (in addition to the FX racks in each Part).

To access the FX Racks for the four Aux Sends and the MASTER Rack, select the MULTI tab in the header

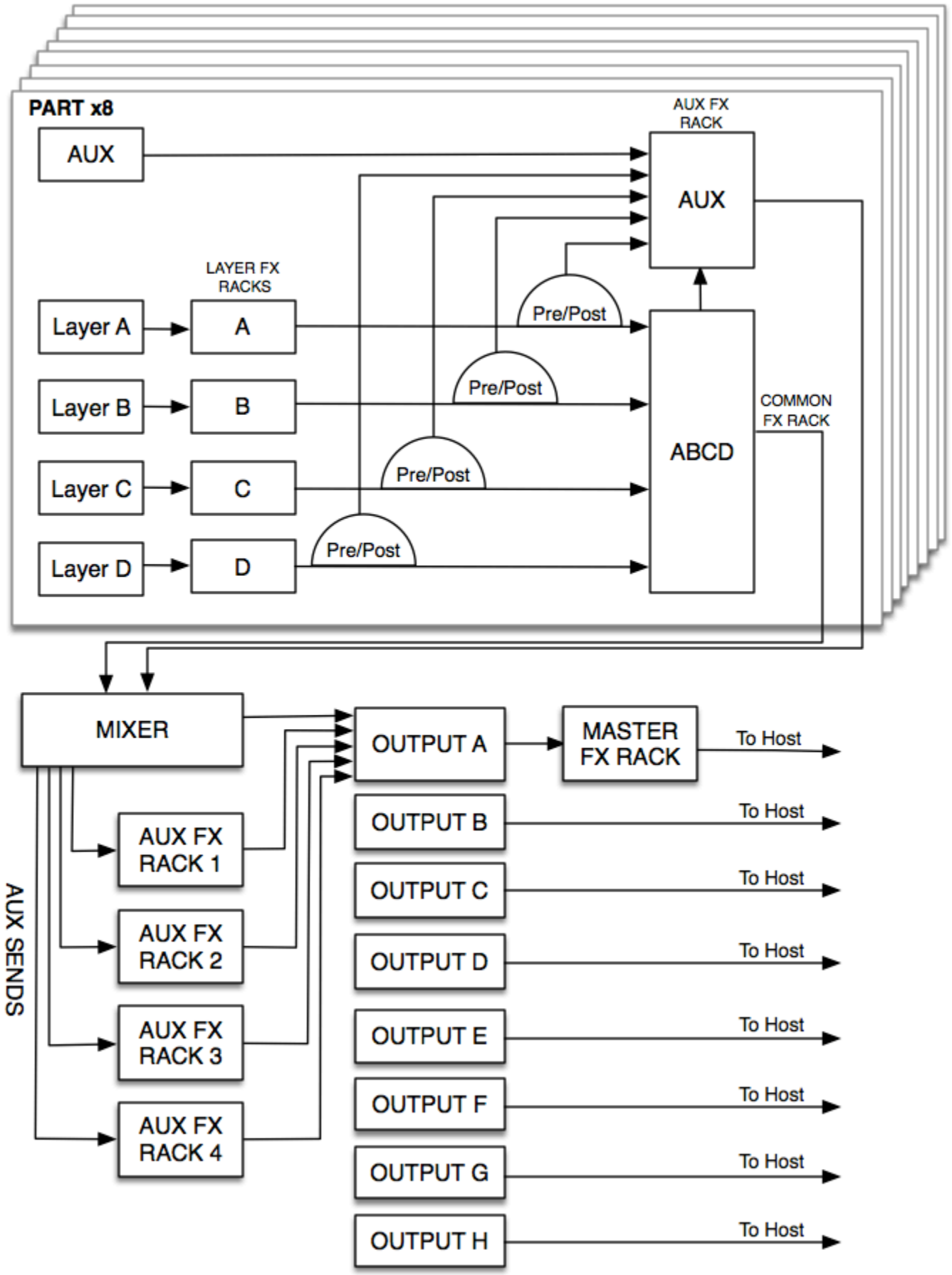
and then select the FX button.

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 in the MULTI FX racks, plus 8 Parts containing up to 24 FX Units each. This means a fully-loaded MULTI can have as many as 212 active FX Units in 53 Racks loaded at once. Of course, actually running that many simultaneous FX would require a very powerful computer!

Below is the FX Signal Path to give you an idea how Omnisphere’s FX are chained.


PART x8
AUX
AUX FX RACK
AUX
LAYER FX RACKS
Layer A
A
Pre/Post
Layer B
B
Pre/Post
COMMON FX RACK
Layer C
C
Pre/Post
ABCD
Layer D
D
Pre/Post
MIXER
OUTPUT A
MASTER FX RACK
To Host
AUX FX RACK 1
OUTPUT B
To Host
AUX FX RACK 2
OUTPUT C
To Host
AUX SENDS
AUX FX RACK 3
OUTPUT D
To Host
AUX FX RACK 4
OUTPUT E
To Host
OUTPUT F
To Host
OUTPUT G
To Host
OUTPUT H
To Host

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 down.

An example of this is illustrated below:

- In this example, the audio first goes through Stompbox Modeler FX Unit in the top slot.
- The distorted audio is then sent into the Analog Phaser unit in the second slot.
- The distorted and phased audio is then routed into Innerspace for some creative ambient processing.
- The output of Innerspace is sent to the Pro-Verb unit in the bottom slot.

NOTE: The Master FX rack uses OUT A only.

10.2. FX Descriptions

There are 58 different professional-quality internal FX Units to choose from in Omnisphere. For more detailed descriptions of the controls and operation, please click on the FX Unit names.

DYNAMICS

- **Tube Limiter**
  Both a limiter and compressor—modeled on the fat, warm sound of the famous Fairchild™ 670 tube limiters from the 1960s.

- **Tape Slammer**
  This fully controllable compressor simulates different types of analog tape compression, tape saturation, and even tape age.

- **Modern Compressor**
  Modeled after the legendary SSL™ buss compressor, this compressor adds a bright, “solid-state” character to the sound.

- **Vintage Compressor**
  Modeled on the “go-to” vintage Universal Audio LA-2A™ and 1176™ compressors, this unit has a warm and musical sound.

- **Precision Compressor**
  The Precision Compressor is super-clean, versatile, and modern-sounding. It’s an ideal hi-fi studio compressor and works well for mastering.

- **Stomp Comp**
  Modeled after the vintage Ross Compressor™ guitar pedal, it has a tough, gritty character and it is useful for lots more than just guitars.

- **Gate Expander**
  A traditional, controllable noise gate that also works well as an expander.

EQUALIZERS

- **Studio EQ**
  This clean and versatile 2-band EQ provides multiple modes for each band and is suitable for mastering.

- **Vintage 2-band EQ**
  Modeled after the Pultec™ EQP2-A model tube equalizer, with a warm and musical tone.

- **Vintage 3-Band EQ**
  Modeled after the Pultec™ EQP series tube equalizers, renowned for their 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

- **Enevelope Filter**
  This FX Unit uses Omnisphere's filters with an envelope follower to provide a cool, animated-envelope effect.

- **Formant Filter**
  A filter based on the characteristics of the human vocal tract, with adjustable headsize and vowel controls.

- **Power Filter**
  Developed in cooperation with GForce Software and based on their famous and super-musical

impOSCar™ filter design.

- **Valve Radio**
  A unique device that functions both as a dual filter and a distortion device—includes drive control and a gate.

- **Wah-Wah**
  Modeled after classic wah-wah pedals of the 1970s, with LFO modulation that can be synced to the host tempo.

- **Crying Wah**
  This FX unit is modeled after the classic Vox Cry Baby wah-wah pedal, used by Clapton and Hendrix and pretty much everyone else!

- **DISTORTION AMP FX**
  Stompbox Modeler
  This FX unit recreates ELEVEN incredible models of classic fuzz, overdrive, and distortion pedals.

- **Flame Distortion**
  Scorch your audio with this extremely versatile distortion and bit-crushing unit.

- **Metalzone Distortion**
  Modeled after the Boss MT-2 Metal Zone™ distortion pedal—rock tones, galore!

- **Toxic Smasher**
  This FX unit combines Omnisphere's Waveshaper with different controllable filter types.

- **Foxy Fuzz**
  This FX unit is modeled after the Foxx Tone Machine fuzz pedal, known for its sustain—includes octave harmonics.

AMPLIFIERS

- **Bassman**
  This FX unit is modeled after the mighty, mighty '59 Fender Bassman™ amplifier—many guitarists' favorite amp. Comes with selectable, high-end mic and preamp combinations. Controls for the head and the cabinet.

- **Boutique**
  This FX unit is modeled after the 100-watt Dumble Overdrive Special™ amplifier, with selectable, high-end mic and preamp combinations.

- **Brit-Vox**

This FX unit is modeled after the Vox AC30™ amplifier. This amp led the British Invasion of the 1960s! Comes with selectable, high-end mic and preamp combinations. Controls for the head and the cabinet.

- **Classic Twin**
  This FX unit is modeled after the classic (and we mean CLASSIC!) ’65 Blackface Fender Twin™ amplifier—with selectable, high-end mic and preamp combinations. Controls for the head and the cabinet.

- **Hiwattage**
  This FX unit is modeled after a custom 100-watt 1974 Hiwatt™ amplifier—Classic Rock tones with selectable, high-end mic and preamp combinations. Controls for the head and the cabinet.

- **Rock Stack**
  This FX unit is modeled after the seminal and iconic ’64 Marshall JTM45™ amplifier—with selectable, high-end mic and preamp combinations. Controls for the head and the cabinet.

- **San-Z-Amp**
  This FX unit is modeled after the trend-setting SansAmp GT-2™ tube amplifier emulation pedal.

- **Smoke Amp**
  A guitar amplifier-modeling effect, with a nice variety of amps and cabinets modeled after hand-made amps from smaller, boutique amp manufacturers.

- **Thriftshop Speaker**
  This unit is designed to trash your audio by running it through the old and funky speakers/telephones/megaphones that you might find in a thrift shop.

MODULATION

- **Analog Chorus**
  This FX unit is modeled after famous Boss™ and TC Electronics™ chorus pedals that have graced thousands of classic keyboard and guitar tracks. Stereo and mono.

- **Ultra-Chorus**
  A rich and thick chorus unit that features some unique LFO modulation options.

- **Solina Ensemble**
  This FX unit is modeled after the classic “Ensemble” effect in the ARP Solina String Ensemble™.

- **Analog Phaser**
  This FX features models of the Oberheim Phasor™, MXR Phase 90™, and a custom chorus/phase-shifter with the ability to sync to your track.

- **Retro-Phaser**
  Classic phaser unit with a vintage, low-fi vibe, a darker tone, and a “DIRT” switch. Can be synced to the host tempo.

- **PRO Phaser**
  A versatile and rich phaser design—capable of going way beyond traditional phaser effects.

- **EZ Phaser**
  Best suited for classic phaser effects—very easy-to-use and understand.

- **Analog Flanger**
  This FX unit is modeled after the popular classic, the A/DA Flanger™ pedal. You’ve heard this!

- **Retro-Flanger**
  Classic flanger unit with a warm, vintage character. Complete with a “DIRT” switch.

- **Flanger**
  Provides many traditional flanging and tuned-resonance effects. Can be synced to the host tempo.

- **Analog Vibrato**
  This FX unit is modeled after the vibrato of the once-ubiquitous Roland JC-120™ and of the Shin-ei Uni-Vibe™ pedal, which imitated a Leslie (think Pink Floyd).

- **Vintage Tremolo**
  This unit recreates the classic vintage tube amp tremolo effect, in mono or stereo. Think ’60s Surf music and ’70s Soul and R&B.

CREATIVE

- **Quad Resonators**
  This unit is based on comb filters and adds tuned, robotic resonances to any input signal.

- **Innerspace**
  Designed to create acoustic resonances, organic textures, and add unconventional ambiences to any input signal by super-imposing the characteristics of one sound onto another.

DELAYS

- **Chorus Echo**
  Inspired by the classic Roland Chorus-Echo™ units from the 1970s. Features a modulated delay line that can be synced to the host tempo and includes a vintage chorus mode, as well as a “Dirt” switch.

- **BPM Delay**
  A single, true-stereo delay unit that is always synchronized with the host tempo.

- **BPM Delay X2**
  Dual-mono delays that are always synchronized to the host tempo.

- **BPM Delay X3**
  Triple L-C-R (left-center-right) mono delays that are always synchronized to the host tempo.

- **Radio Delay**
  A dual-mono, BPM-style delay, with the delayed signals passed through Omnisphere's Valve Radio distortion filter. Can be synced to the host tempo.

- **Retroplex**
  Modeled after the tape echo units of the '60s and '70s such as the Echoplex™. Delays and Echos are selectable from any year: 1960 through 2000!

REVERBS

- **Pro-Verb**
  Ambience controlled with surgical precision, Pro-Verb is the premier, studio-quality reverb unit in the Omnisphere FX arsenal. Extremely versatile, hi-res, and rich-sounding.

- **EZ-Verb**
  A simple-to-use, basic reverb unit that uses less CPU power, and sounds great!

- **Spring Verb**
  Faithfully recreates the classic vibe of the spring reverbs of early guitar amplifiers.

UTILITY

- **Imager**
  A handy device that can be used as a stereo image widener, phase corrector, and more.

How many FX units can be used at one time?
It's 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 4 slots in an Omnisphere FX Rack, plus the 5 Multi racks. Up to 53 FX Racks can be open at once.

Here's the structure:

- 4 Effects per Rack x 6 racks per part = 24 Effects per Part
- 24 Effects per Part x 8 Parts = 192 FX

PLUS:

- 4 Effects per Rack x 4 Multi AUX racks + MASTER rack = 20 FX Units per MULTI

This equals 212 possible simultaneous FX Units (depending on your computer's capability).

NOTES ON USING THE FX

Each FX Unit consumes different amounts of additional CPU power, so the number of simultaneous FX Units depends on the available CPU power of your computer. Some FX, like the PRO-Verb, can use more CPU power, depending on which settings are used.

To maximize CPU performance in multi-timbral, LIVE, or STACK applications, it's recommended to Bypass any Part FX Units which can be shared by other Parts (especially reverbs and 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. In other words, the signal from multiple Parts can be sent to one FX unit. Think of a hardware recording console, where the signal from multiple channels is sent through one hardware reverb.

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 indicates the parameters found on the second page.

You can also use external third-party FX plug-ins with Omnisphere by utilizing the multiple outputs feature of Omnisphere with your host.

10.3. FX Basics

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 category and then the FX name from the menu.

10.3.1. Changing an FX Unit

To select a different FX Unit in the same FX Slot, click the downward-facing triangle and choose from the drop-down menu list.

10.3.2. Bypassing an FX Unit

It can be useful to audition sounds and Patches by bypassing one or more of the FX units. When an FX unit is bypassed it is removed from the audio chain, allowing you to hear how any particular effect (or group of effects) is changing the sound.

Bypassing an FX Unit

An FX Unit is active when the oval FX Name Window is highlighted in blue.

To Bypass an FX Unit, click the oval FX Name Window. The Name Window darkens when bypassed.

Clicking the Name Window again reactivates the FX Unit.

NOTE: Bypassing an Effect DOES save CPU power.

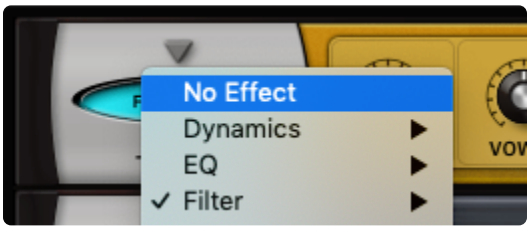
Bypassing All FX Units

Omnisphere's FX can be globally bypassed by clicking on the blue LED under the FX tab.

The LED will turn red and the FX page will become greyed-out.

Tip: You can globally bypass FX units and use Sound Lock to browse Patches without any FX enabled.

10.3.3. Removing an FX Unit



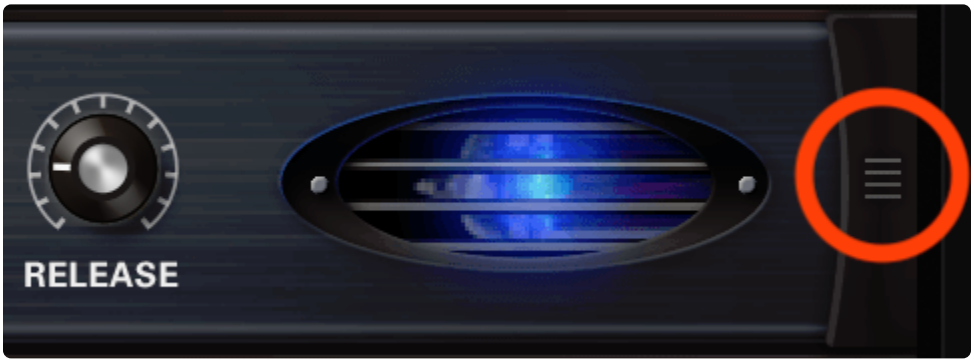
To remove an FX unit from the rack, click the downward-facing triangle on the active slot and choose “**No Effect**” from the top of the list.

NOTE: Removing any unneeded or unused FX units saves memory when the Patch is loaded and is recommended before saving Patches or Multis.

10.3.4. Re-ordering FX Units

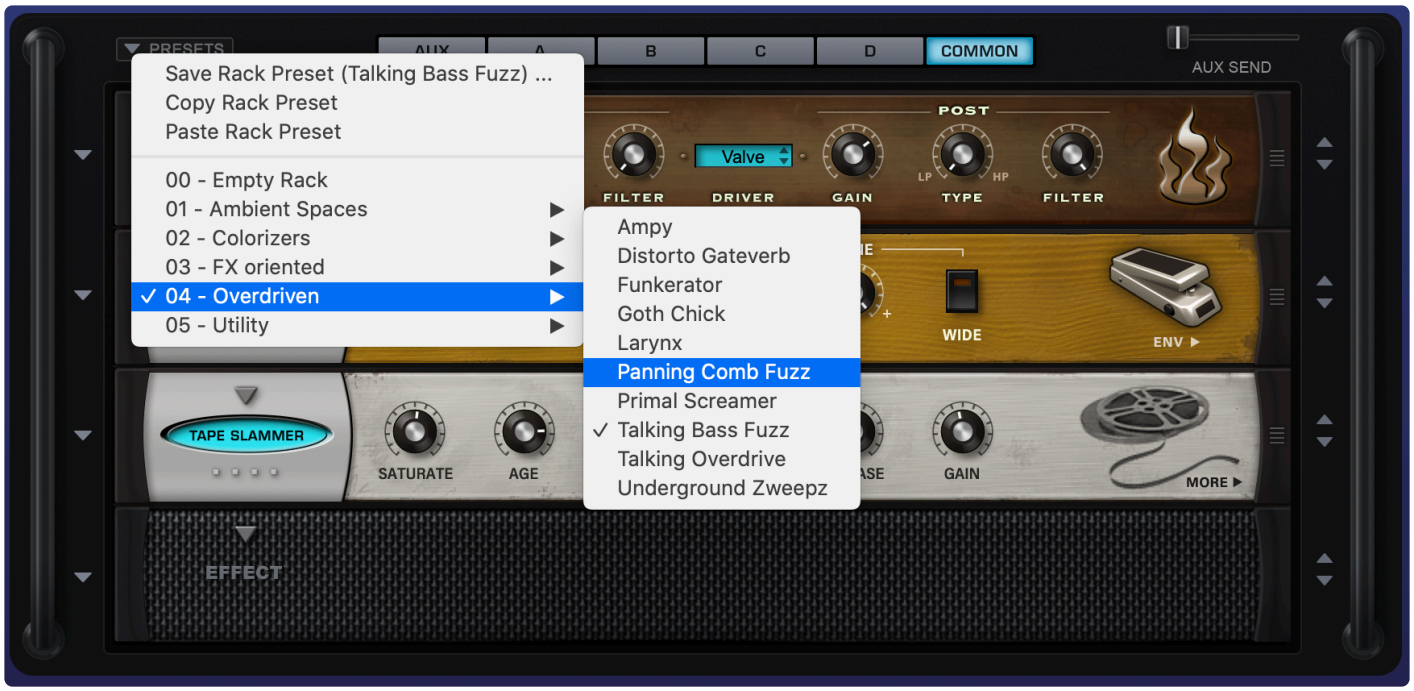
The position of an FX unit in the audio chain will affect how it sounds and reacts. For instance, placing a reverb in the chain BEFORE a compressor will cause the reverb to sound dramatically different than if you place it AFTER.

FX units can be easily repositioned in any of the FX pages by clicking on the rack ear's handles and dragging the unit to the desired position.



To move an FX unit to another rack, you can copy and paste effect presets between racks using the Presets menu.

10.4. FX Presets



The flexible FX Preset system offers rapid access to the full power of Omnisphere's FX. It's easy to 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.

HINT: Spectrasonics has included an extensive factory library of useful Presets to give you a glimpse into the world of Omnisphere FX. They are a great starting point for exploring the diverse sonic possibilities with the FX system.

10.4.1. FX Presets – Intro

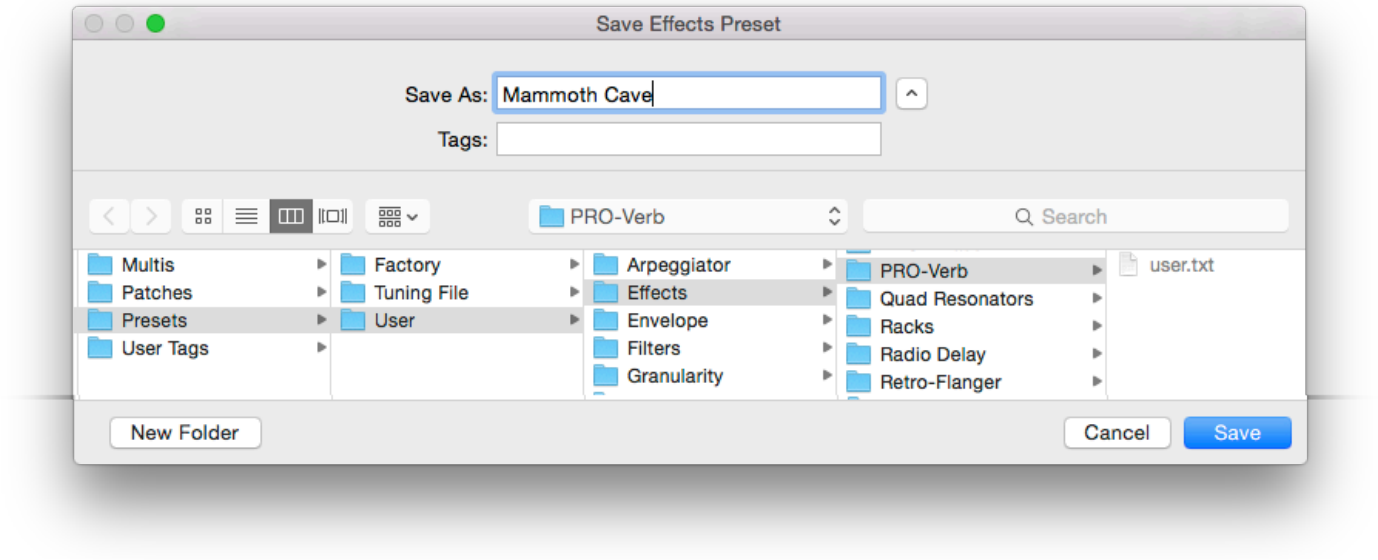
An **FX Preset** consists of the complete customized parameter settings of a specific FX Unit, which allowing the “total recall” of that one effect. It’s useful to build a library of FX Presets that you like. You can also experiment by using Presets created for one purpose for a completely different application. Happy accidents can occur when you experiment by trying Presets created for one sound on a different sound.

FX Presets are accessed by clicking on the down-arrow next to the left on an FX unit. A menu will pop up displaying Presets relevant to that particular unit. For example, in the picture below, the Retroplex Delay has it’s own Preset list.

You can also step through the FX Presets using the Stepper Arrows on the right of the unit. The name of the selected Preset will be displayed each time you click on the arrows.

To save your own FX Presets, click on the down-arrow to the left of the unit. When saving a Preset, a file dialog will appear, prompting you to save to the correct location:

Omnisphere/Settings LibraryPresets/User/Effects/FX Unit Name/



User Presets will appear in the Preset menu below the Factory Presets, divided by a solid line.

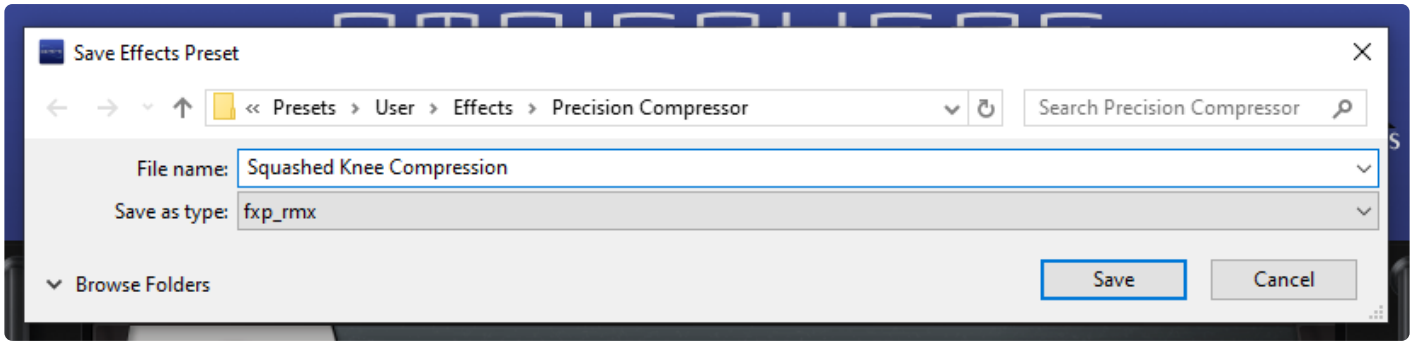
You can create as many sub-directories for presets as you like, as long as the folders are nested on your drive in the specific directory for that unit. FX Presets have the extension **.fxp_rmx**

10.4.2. Saving FX Presets

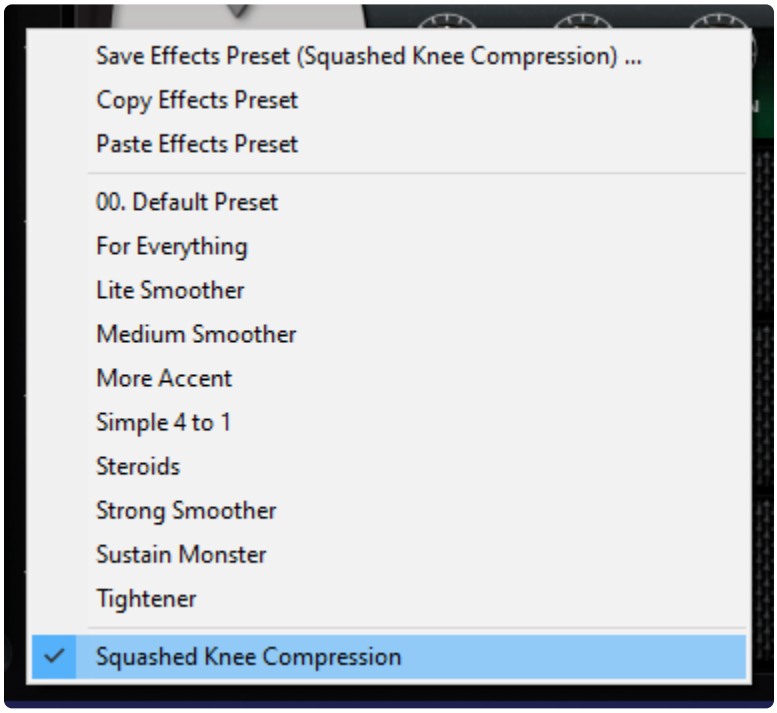
Saving an FX Preset allows you to name and recall it for future use. This is a convenient way to build a custom FX library.

To Save a Preset

1. Select the drop-down arrow to the left of the unit.
2. A drop-down menu will appear.
3. Select “Save Effects Preset.”



A Save dialog box will appear allowing you to name the 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.

10.4.3. Copying and Pasting FX

In addition to reorganizing FX units by **dragging**, you have the option to copy and paste them to alternate locations.

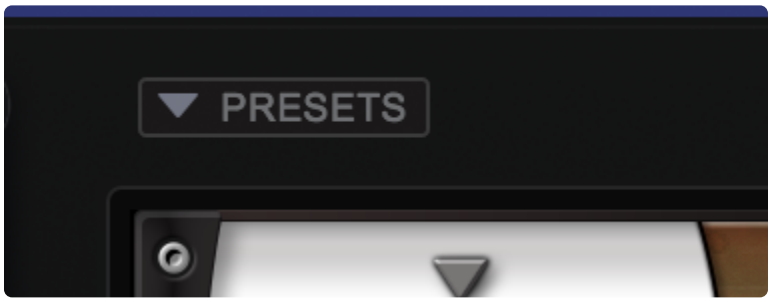
Copying an FX Unit, along with all of its current parameter settings and pasting it into a different slot or rack is another way of changing the order and placement of FX Units. It's not required to Save a Preset in order to use it in another other FX Slot. You can simply Copy the FX Unit with its current settings and paste it into any other FX Slot. If the targeted slot is occupied, the existing FX unit will be replaced by the new one.

To Copy and Paste an Effect

1. Select the drop-down arrow to the left of the FX unit you'd like to copy.
2. A drop-down menu will appear.
3. Select "COPY EFFECT PRESET."
4. Choose any other FX Slot—it doesn't matter whether or not the targeted FX Slot currently contains an Effect.
5. Select the drop-down arrow to the left of the unit.
6. From the drop-down menu will Select "PASTE EFFECT PRESET."

This FX Slot now has the same FX Unit and settings as the original slot.

10.4.4. Rack Presets



Select the **PRESETS** menu in the upper left of the FX Rack to access Rack Presets.

You can save any combination of up to four FX Units and their respective settings into a single **Rack Preset**.

This feature gives you instant “total recall” of an entire FX Rack to use on any sound in Omnisphere. The possible combinations of FX and settings can be an endless source of inspiration.

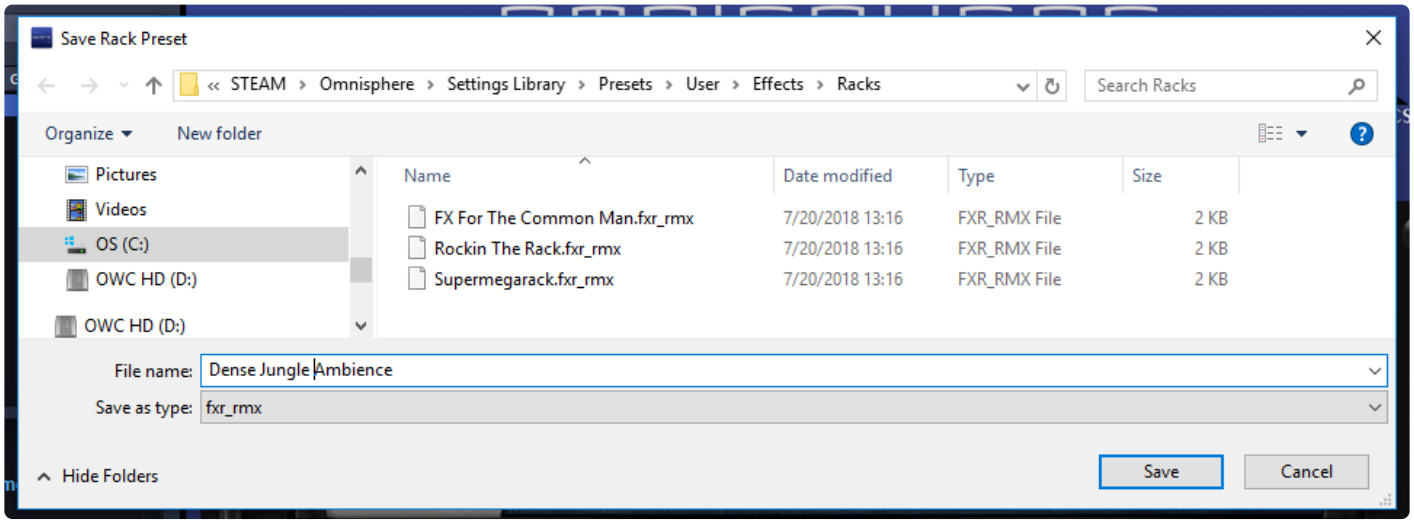
10.4.5. Saving Racks

Saving a full Rack Preset allows you to name and recall it for future use. This is a convenient way to build a custom library of preset FX chains.

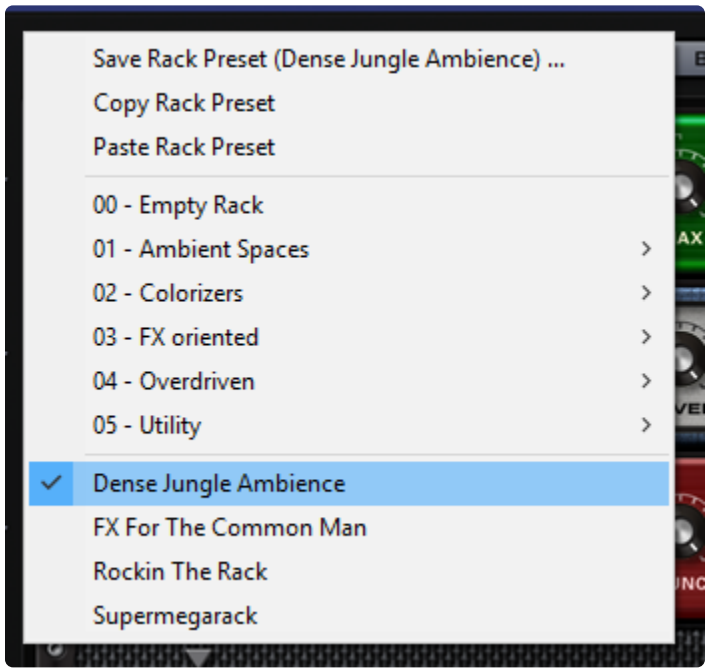
To Save an FX Rack

1. Select the PRESETS menu arrow above the FX rack.
2. A drop-down menu will appear like the one below.
3. Select “Save Rack Preset”

- A Save dialog box will appear allowing you to name the FX Rack Preset. The Save dialog box defaults to the **STEAM / Omnisphere / Settings Library / Presets / Effects / Racks** directory on your drive.



All FX Racks Presets appear in the Omnisphere interface in the drop-down menu. You may create 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.

10.4.6. Loading Racks

Loading FX Rack Presets from the menu is an easy way to use your favorite FX chains at any time and allows you to quickly experiment with combinations of settings in different musical contexts.

To load an FX Rack Preset

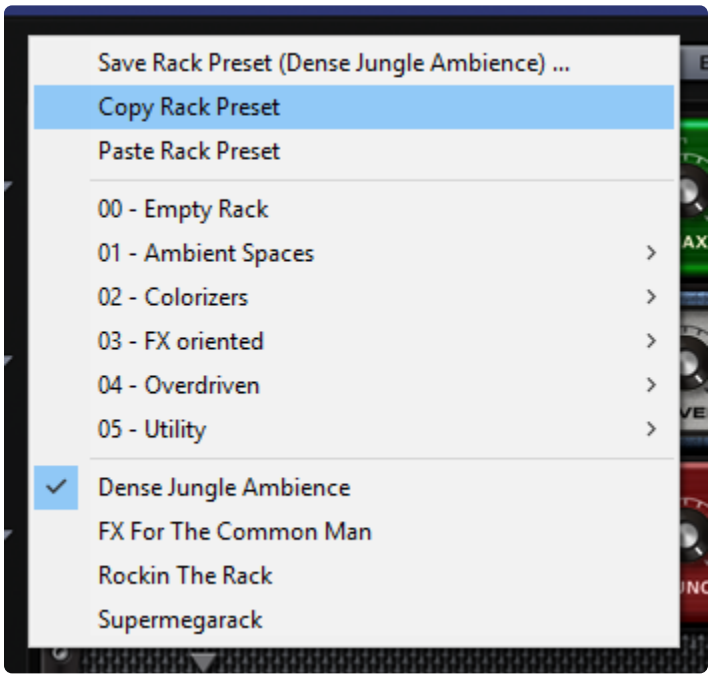
- Select the PRESETS menu arrow above the FX Rack.
- A drop-down menu will appear.
- Select a Rack Preset from the menu to load the new Rack.

10.4.7. Copying and Pasting Racks

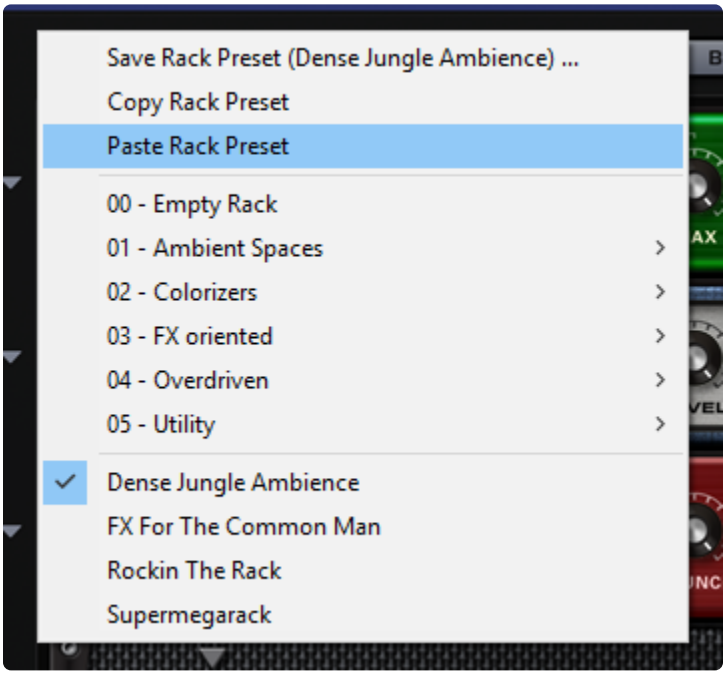
Copying an FX Rack along with all of its current parameter settings and pasting to a different Rack is a quick and useful way of working with FX Racks. It's not required to save a preset in order to copy it to another Rack. You can simply copy the Rack with its current settings and Paste it into any other Rack. You can also paste over an existing Rack.

To Copy and Paste an FX Rack

1. Select the **PRESETS** menu arrow above the FX rack.
2. Select "Copy Rack Preset."



3. Choose another FX Rack (it doesn't matter whether or not the targeted Rack currently contains any FX units).
4. Select the PRESETS menu arrow above the FX rack.
5. Select "Paste Rack Preset."



This FX Rack now has the same units and settings as the original Rack.

10.5. Dynamics

Omnisphere includes seven dynamics processors, modeled on the finest studio hardware from the past 6 decades.
These units provide precise dynamic control, as well as a variety of sonic colors.

- Tube Limiter
- Tape Slammer
- Modern Compressor
- Vintage Compressor
- Precision Compressor
- Stomp Comp

- **Gate Expander**

10.5.1. Tube Limiter

The **Tube Limiter** in Trilian is both a limiter and compressor and is an ideal tool for pumping things up in a musical way. It was modeled on the warm sound of the famous Fairchild™ 670 tube limiters of the 1960s with a fixed internal compression ratio and a slower, smoother response than other compressors. It works great as a stereo buss compressor/limiter as well as well for individual instruments.

- **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 ~ 60 dB

- **GAIN**
  A make-up gain stage that adjusts the overall output to compensate for compression level reduction.
  Range: 0 ~ 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 at 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 entire 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 until compression starts once the audio has gone above the Threshold level.
  Range: 0.1ms ~ 400 ms

- **RELEASE**
  Adjusts the amount of time until compression stops once the audio has gone under the Threshold level.
  Range: 10ms ~ 5000ms

10.5.2. Tape Slammer

The **TAPE SLAMMER** is designed to simulate the effects of various types of analog tape compression, saturation, and age. This versatile unit is the perfect tool when you need a little more edge, grit, or warmth. It's ideal for adding a retro flavor and even works well as a normal compressor/limiter.

PAGE ONE CONTROLS

- **SATURATE**
  Controls the amount of the tape saturation/distortion effect.
  Range: 0 ~ 100%

- **AGE**
  Allows you to control the age of the "tape stock."
  Range: Bright ~ Dark

- **THRESHOLD**
  Sets the audio level at which the unit starts to simulate 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 ~ -60 dB

- **ATTACK**
  Adjusts the amount of time until compression starts once the audio has gone above the Threshold level.
  Range: 0.1ms ~ 400 ms

- **RELEASE**
  Adjusts the amount of time until compression stops once the audio has gone under the Threshold level.
  Range: 10ms ~ 5000ms

- **GAIN**
  A gain make-up stage that adjusts the overall output to compensate for compression level reduction.
  Range: 0 ~ 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 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 entire audio signal louder. With RMS, there is no specific ceiling for the audio as there is with Peak Limiting.

10.5.3. Modern Compressor

The **MODERN COMPRESSOR** has a bright, “solid-state” sound character with a fast, snappy response curve. The Modern Compressor was modeled after the legendary SSL™ compressors found in their renowned consoles that have been used on many hit records. This compressor is great for the stereo master buss if you want a clear, bright sound and works equally well to emphasize individual elements 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, the compression begins to affect the signal.
  Range: 0 ~ -60 dB

- **RATIO**
  The range of dynamic compression once the compressor engages.
  Range: 1:1 ~ 8:1

- **GAIN**
  A gain make-up stage that adjusts the overall output to compensate for compression level reduction.
  Range: 0 ~ 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 until compression starts once the audio has gone above the Threshold level.
  Range: 0.1ms ~ 400 ms

- **RELEASE**
  Adjusts the amount of time until compression stops once the audio has gone under the Threshold level.

Range: 10ms ~ 5000ms

- **LIMIT**
  Engages and disengages an additional “brick wall” limiter at the output. The compression controls continue to work regardless of whether the limiter is engaged or not.

10.5.4. Vintage Compressor

Although the MODERN and VINTAGE Compressors have nearly identical controls, the sound and response characteristics couldn't be more different. The **VINTAGE COMPRESSOR** was modeled on the vintage UA LA-2A™ and 1176™ style response curves, but have more flexibility to tailor the sound. This warm and musical-sounding unit 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, the compression begins to affect the signal.
  Range: 0 ~ -60 dB

- **RATIO**
  The range of dynamic compression once the compressor engages.
  Range: 1:1 ~ 10:1

- **GAIN**
  A gain make-up stage that adjusts the overall output to compensate for compression level reduction.
  Range: 0 ~ 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 entire 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 until compression starts once the audio has gone above the Threshold level.
  Range: 0.1ms ~ 400 ms

- **RELEASE**
  Adjusts the amount of time until compression stops once the audio has gone under the Threshold level.
  Range: 10ms ~ 5000ms

- **LIMIT**
  Engages and disengages an additional “brick wall” limiter at the output. The compression controls continue to work regardless of whether the limiter is engaged or not.

10.5.5. Precision Compressor

The **PRECISION COMPRESSOR** is super-clean, versatile, and modern-sounding. It's an ideal hi-fi studio compressor and works well for mastering.

- **INPUT**
  Sets the input level to the compressor.
  Range: -12.0 ~ +12.0

- **RATIO**
  The range of dynamic compression once the compressor engages.
  Range: 1:1 ~ 10:1

- **SUSTAIN**
  Controls both the threshold and output gain of the compression effect. Higher settings lower the threshold and make up more gain, while slowing the attack.
  Range: 0 ~ 36 dB

- **RELEASE**
  Adjusts the amount of time until compression stops once the audio has gone under the Threshold level.
  Range: .4 ~ 2.5

- **LEVEL**
  A gain make-up stage that adjusts the overall output to compensate for compression level reduction.
  Range: -24 dB ~ 0 dB

10.5.6. Stomp Comp

The **STOMP COMP** is modeled after the vintage Ross Compressor guitar pedal. This pedal is extremely hard to find and quite expensive, hence it's one of the most-cloned compressor pedals on the market. It is known for its warm, full tone, but also sought-after for its tough, gritty character. It's not just for guitars!

- **INPUT**
  Sets how hard you are hitting the compressor.
  Range: -12.0 ~ +12.0

- **SUSTAIN**
  Controls both the threshold and output gain of the compression effect. Higher settings lower the threshold and make up more gain, while lowering the attack.
  Range: 0 ~ 36 dB

- **RELEASE**
  Adjusts the amount of time until compression stops once the audio has gone under the Threshold level.
  Range: 0.1 ~ 2.5

- **GAIN**
  A gain make-up stage that adjusts the overall output to compensate for compression level reduction.
  Range: -inf dB ~ 9.54 dB

10.5.7. Gate Expander

The **GATE EXPANDER** is a traditional noise gate-type effect. It also works well as a dynamic expander—the inverse of a compressor.

- **THRESHOLD**
  Controls the audio level at which the Gate starts to open.
  Range: 0 ~ 35 dB

- **ATTACK**
  Adjusts the speed at which the gate opens.
  Range: 0.1 ~ 400 ms

- **HOLD**
  Adjusts how long the gate remains open.
  Range: 0 ~ 2000 ms

- **RELEASE**
  Adjusts the speed at which the gate closes.
  __Range: 0.1 ~ 4000 ms_

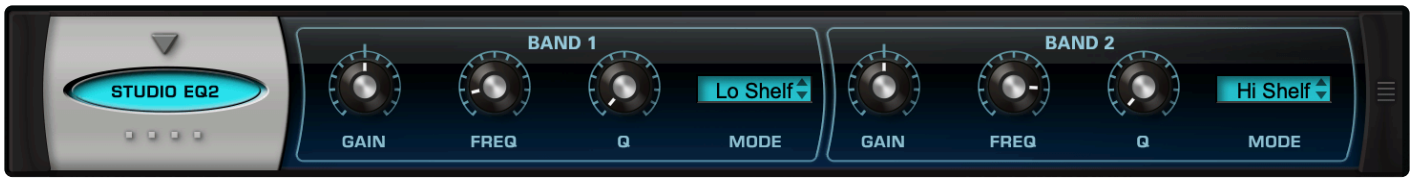
- **RANGE**
  Controls the dynamic range of the gate attenuation.
  Range: -90 ~ 0 dB

10.6. Equalizers

Omnisphere includes six equalizers that range from super-musical Pultec-style units, to graphic sculpting and parametric EQs with surgical precision.

- Studio EQ
- Vintage EQ2
- Vintage EQ3
- Graphic EQ7
- Graphic EQ12
- Parametric EQ2
- Parametric EQ3

10.6.1. Studio EQ



The **STUDIO EQ** is a clean, versatile, 2-band parametric EQ that provides multiple modes for each band. In addition to Peaking mode, where you choose which frequencies to scoop or boost, the controls include High and Low shelving and highpass / lowpass filtering.

- **[BAND 1] [BAND 2] GAIN**
  Adjusts the gain of BAND 1 and BAND 2.

- **[BAND 2] FREQ**
  Selects the frequency of BAND 1 and BAND 2.

- **[BAND 2] Q**
  Controls the resonance or EQ Bandwidth of BAND 1 and BAND 2.

- **[BAND 1] MODE**
  Selects a filter type for BAND 1 from the following options:

1. Lo Shelf
2. Peaking
3. HPF

- **[BAND 2] MODE**
  Selects a filter type for BAND 2 from the following options:

1. Hi Shelf
2. Peaking
3. LPF

10.6.2. Vintage EQ2

The **Vintage 2-Band EQ** us 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 warm and musical tones that can have a lot of gain without getting harsh.

- **[LOW] BAND BOOST**
  Increases the gain of the selected frequency.
  Range: 0 ~ +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 ~ -20 dB

- **[HIGH] BAND BOOST**
  Increases the gain of the selected frequency.
  Range: 0 ~ +20 dB

- **[HIGH] BAND Q**
  Controls the Bandwidth of the selected frequency.
  Range: 0 ~ 1

- **[HIGH] BAND FREQ**
  Drop-down menu that provides EQ frequency choices of 2000, 3000, 4000, 5000, 8000, 10000, 12000, 140000, 16000, and 18000 Hertz

- **[HIGH] BAND CUT**
  Reduces the gain of the selected frequency.
  Range: 0 ~ -20 dB

- **[HIGH] BAND FILTER**
  Adjusts the cutoff Frequency of the Low Pass Filter.
  Range: 5000 ~ 18000 Hz

10.6.3. Vintage EQ3

The **Vintage 3-Band EQ** is 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, and 200 Hertz

- **[LOW] GAIN**
  Adjusts the gain of the Low Band.
  Range: -20 ~ +20 dB

- **[MID] FREQ**
  Drop-down menu that provides Frequency choices. Choices: 300, 500, 800, 1200, and 1600 Hz

- **[MID] GAIN**
  Adjusts the gain of the Mid Band.
  Range: -20 ~ +20 dB

- **[HIGH] FREQ**
  Drop-down menu that provides EQ frequency choices of 2000, 3000, 4000, 5000, 8000, 10000, 12000, 140000, 16000, and 18000 Hertz

- **[HIGH] GAIN**
  Adjusts the gain of the High Band.
  Range: -20 ~ +20 dB

- **LEVEL**
  Adjusts the overall output.
  Range: 0 ~ 13 dB

10.6.4. Graphic EQ7

The **Graphic 7-Band EQ** is useful for tailoring a full spectrum audio source with broad control of multiple bands. With the Q control, it's more versatile than an average graphic EQ—it's 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 ~ +18 dB

PAGE TWO CONTROLS

- **Q**
  Controls the Resonance or EQ Bandwidth of all seven frequency bands.
  Range: 0.1 ~ 2

- **LEVEL**
  Adjusts the overall output.
  Range: 0 ~ 13 dB

10.6.5. Graphic EQ12

The **Graphic 12-Band EQ** is useful for tailoring a full spectrum audio source with fine controls of multiple bands for precision control. With the Q control, it's more versatile than an average graphic EQ — it's capable of comb filter FX and even basic speaker simulation effects.

PAGE ONE CONTROLS

- **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 ~ +16 dB

PAGE ONE CONTROLS

- **Q**
  Controls the Bandwidth of all twelve frequency bands.
  Range: 0.1 ~ 2

- **LEVEL**
  Adjusts the overall output.
  Range: 0 ~ 13 dB

10.6.6. Parametric EQ2

The **Parametric 2-Band EQ** 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 sweepable frequency.
  Range: 30 ~ 7000 Hz

- **[LOW] Q**
  Controls the EQ Bandwidth.
  Range: 1.9 ~ 0.1

- **[LOW] GAIN**
  Adjusts the gain of the Low Band.
  Range: -20 ~ +20 dB

- **[HIGH] FREQ**
  Selects a sweepable frequency.
  Range: 1000 ~ 16000 Hz

- **[HIGH] Q**
  Controls the EQ Bandwidth.
  Range: 1.9 ~ 0.1

- **[HIGH] GAIN**
  Adjusts the gain of the High Band.
  Range: -20 ~ +20 dB

- **LEVEL**
  Adjusts the overall output.
  Range: 0 ~ 13 dB

10.6.7. Parametric EQ3

The **Parametric 3-Band EQ** 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 sweepable frequency.
  Range: 30 ~ 600 Hz

- **[LOW] Q**
  Controls the EQ bandwidth.
  Range: 1.9 ~ 0.1

- **[LOW] GAIN**
  Adjusts the gain of the Low Band.
  Range: -20 ~ +20 dB

- **[MID] FREQ**
  Selects a sweepable frequency.
  Range: 100 ~ 6000 Hz

- **[MID] GAIN**
  Adjusts the gain of the Mid Band.
  Range: -20 ~ +20 dB

- **[HIGH] FREQ**
  Selects a sweepable frequency.
  Range: 1000 ~ 16000 Hz

- **[HIGH] Q**
  Controls the Resonance or EQ Bandwidth.
  Range: 1.9 ~ 0.1

- **[HIGH] GAIN**
  Adjusts the gain of the High Band.
  Range: -20 ~ +20 dB

10.7. Filters

Omnisphere includes six ultra-musical, powerful, and dynamic filters for sonic coloring and customization—even in real-time. Sculpt individual layers or overall sounds, create dynamic envelopes with vocal formants and tube radios, or use continuous controllers such as the Mod Wheel or an expression pedal to rock out with a wah-wah.

- Envelope Filter
- Formant Filter
- Power Filter
- Valve Radio
- Wah-Wah
- Crying Wah

10.7.1. Envelope Filter

The **ENVELOPE FILTER** uses Omnisphere's filters with an envelope follower, adding sonic animation to the envelope of a sound. Includes a cool compressor on Page 2 to squash those filtered sounds! Great for use with Clavinets and electric guitars, and anything else you want to liven up.

- **MINI-SLIDER**
  Controls the balance of the dry signal and the processed (wet) signal. The percentage indicates the amount of the signal that is wet.
  Range: 0 ~ 100%

PAGE ONE CONTROLS

- **SENS**
  Controls the depth of the envelope applied to the filter.
  Range: 0.00 ~ 0.50

- **SHAPE**
  Controls the response of the envelope follower. The envelope reacts faster at lower settings and slower at higher settings.
  Range: 0.00 ~ 1.00

- **INVERT**
  Inverts the contour of the envelope follower.

- **TYPE**
  Drop-down menu determines the filter type.

- **RESO**
  Controls the amount of filter resonance.
  Range: 0.00 ~ 1.00

- **GAIN**
  Master volume.
  Range: -inf ~ 9.54 dB

PAGE TWO CONTROLS

- **[FILTER] CUTOFF**
  Adjusts the cutoff frequency for the chosen filter on Page 1. The higher the SENS value, the more effect it has on the CUTOFF.
  Range: 0.50 Khz ~ 19.00 KHz

- **[FILTER] SPREAD**
  The SPREAD control moves the cutoff frequency in one direction in the stereo field while moving it in the opposite direction on the other side of the stereo field.
  Range: 0.00 ~ 1.00

- **[COMPRESSOR] ON/OFF**
  Engages and disengages the compressor through which the filter is fed before the output.

- **[COMPRESSOR] INPUT**
  Sets the input level to the compressor.
  Range: -12.0 ~ 12.0

- **[COMPRESSOR] SUSTAIN**
  Controls both the threshold and output gain of the compression effect. Higher settings lower the threshold and cause more gain to be made up, while lowering the attack.
  Range: 0 dB ~ 36.0 dB

- **[COMPRESSOR] RELEASE**
  Adjusts the amount of time that the compressor takes to stop compressing once the audio has dipped under the threshold level.
  Range: 0.1 sec ~ 2.5 sec

- **[COMPRESSOR] GAIN**
  A gain make-up stage that adjusts the overall output volume to compensate for compression level reduction.
  Range: 0.00 ~ 1.00

10.7.2. Formant Filter

The **FORMANT 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 of a human head. Higher values will have a deeper resonance.
  Range: 0.000 Cm ~ 1.000 Cm

- **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: 0.000 Hz ~ 1.000 Hz

- **RES (Resonance)**
  Emphasizes the formant's frequency.
  Range: 0.000 ~ 1.000

NOTE: 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: 0.000 Amp ~ 1.000 Amp

- **LEVEL**
  Determines the overall Formant Filter level.
  Range: -inf dB ~ 0.000 dB

PAGE TWO CONTROLS

NOTE: This page contains 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: 0.000Hz ~ 15.000 Hz

- **[HEADSIZE] DEPTH**
  Controls the amount of the modulation.
  Range: 0.000 ~ 1.000

- **[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: 0.000 Hz ~ 15.000 Hz

- **[VOWEL] DEPTH**
  Controls the intensity of the Vowel modulation.
  Range: 0.000 ~ 1.000

- **[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.

10.7.3. 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 ~ 18318.000 Hz

- **RES**
  Controls the Resonance or "Q" of the Filter, which emphasizes the cutoff frequency to the point of oscillation at the highest settings.
  Range: 0.000 ~ 1.000

- **WIDTH**
  Controls the amount of Frequency separation between the filters.
  Range: 0.000 ~ 1.000

- **TYPE**
  Drop-down menu determines the sonic character of the different filter options.
  Low Pass 24 dB, Band Pass 24 dB, High Pass 24 dB, LP/LP, BP/BP, HP/HP, LP/BP, LP/HP, BP/HP

- **DRIVE**
  Controls the amount of overdrive/saturation.
  Range: 0 ~ 1

- **LEVEL**
  Adjusts the overall output volume.
  Range: 0.000 ~ 1.000

PAGE TWO CONTROLS

- **[CUTOFF] RATE**
  Controls the speed of the Filter's 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: 0.000 Hz ~ 15.000 Hz

- **[CUTOFF] DEPTH**
  Controls the sweep range of the cutoff modulation.
  Range: 0.000 ~ 1.000

- **[CUTOFF] SYNC**
  Engages and disengages synchronization of the LFO rate with the host's tempo.

- **[WIDTH] RATE**
  Controls the speed of the Filter's 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: 0.000 Hz ~ 15.000 Hz

- **[WIDTH] DEPTH**
  Controls the modulation range of the width sweeping LFO.
  Range: 0.000 to 1.000

- **[WIDTH] SYNC**
  Engages and Disengages synchronization of the LFO rate with the host's tempo.

10.7.4. Valve Radio

The **VALVE RADIO** FX unit is a unique device, which functions equally well as both a dual filter and 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 ~ 100%

PAGE ONE CONTROLS

- **LOPASS**
  Controls the frequency cutoff of the Low Pass filter.
  Range: 100 ~ 22000 Hz

- **HIPASS**
  Controls the frequency cutoff of the High Pass filter.
  Range: 20 ~ 10000 Hz

- **Q**
  Controls the Resonance or “Q” of the two filters, which emphasizes the cutoff frequencies.
  Range: .5 ~ 3.0

- **DRIVE**
  Increases the amount of overdrive distortion gain.
  Range: 0 ~ 100%

PAGE TWO CONTROLS

- **GATE**

Sets the audio level at which the threshold for the Gate starts to open.
Range: 0 ~ 35 dB

- **ATTACK**
  Adjusts the speed at which the gate opens.
  Range: 1 ms ~ 400 ms

- **RELEASE**
  Adjusts the speed at which the gate closes.
  50 ~ 4000ms

- **GAIN**
  Adjusts the overall output.
  Range: 0.00 ~ 3.50 dB

10.7.5. Wah-Wah

The **WAH-WAH** FX unit was modeled after classic wah-wah pedals of the 1970s. It's a fun and versatile effect that doesn't sound like any of the other Trilian 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 the speed of the LFO's 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 ~ 8.8 Hz

- **[SWEEP LFO] DEPTH**
  Controls the sweep range of the LFO.
  Range: OFF ~ 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 ~ +10%

- **[TONE] Q**
  Controls the Resonance or emphasis of the wah frequency.
  Range: -10 ~ +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 ~ -90 dB

- **[AUTO ENV] ATTACK**
  The time of the Envelope Follower modulation beginning slope.
  Range 200 ~ 8000 ms

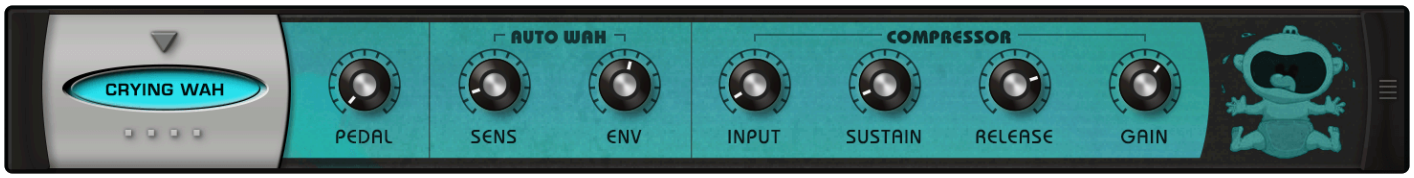
- **[AUTO ENV] RELEASE**
  The time of the Envelope Follower modulation ending slope.
  Range 25 ~ 1500 ms

- **[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 the source of the wah-wah modulation.

- **LEVEL**
  Adjusts the overall output.
  Range: 0 ~ 13 dB

10.7.6. Crying Wah



The **CRYING WAH** is modeled after the classic Vox™ Cry Baby wah-wah pedal, used by Clapton and Hendrix, and pretty much everyone else! It includes a nice compressor at the end of the path to compress the filtered signal.

- **PEDAL**
  Controls the frequency (wah) of the filter.
  Range: 0 ~ 10.0

- **[AUTO WAH] SENS**
  Controls the depth of the envelope applied to the filter.
  Range: 0% ~ 100%

- **[AUTO WAH] ENV**
  Controls the response of the envelope follower. The envelope reacts faster at lower settings and slower at higher settings.
  Range: 0.1 Sec ~ 1.5 Sec

- **[COMPRESSOR] INPUT**
  Sets the input level to the compressor.
  Range: -12.0 ~ 12.0

- [COMPRESSOR] SUSTAIN*
  Controls both the threshold and output gain of the compression effect. Higher settings lower the threshold and cause more gain to be made up, while lowering the attack.
  Range: 0 dB ~ 36 dB

- **[COMPRESSOR] RELEASE**
  Adjusts the amount of time that the compressor takes to stop compressing once the audio has dipped under the threshold level.
  Range: 0.1 Sec ~ 2.5 Sec

- [**COMPRESSOR] GAIN**
  A gain make-up stage that adjusts the overall output to compensate for compression level reduction.
  Range: -inf dB ~ 9.54 dB

10.8. Distortion

Omnisphere includes five distortion processors—from a variety of stomp boxes to rack modules—giving you tones that barely break up to the most clipped and gnarly noises imaginable.

- Stompbox Modeler
- Flame
- Metalzone
- Toxic Smasher
- Foxxy Fuzz

10.8.1. Stompbox Modeler

STOMPBOX recreates 11 of THE BEST classic fuzz, overdrive, and distortion pedals, including Boss, Ibanez, DOD, Arbiter, Sola Tone, MXR, Pro Co, and Big Muff.

- **DRIVE**
  Sometimes referred to as overdrive, DRIVE sets how much the amplifier is overloaded, causing distortion. The higher this control is set, the more distorted the signal.
  Range: 0.00 ~ 10.00

- **TONE**
  Controls the tone of the distortion, creating darker results at low settings and brighter results at higher settings. TONE responds differently depending on the selected model.
  Range: 0.00 ~ 10.00

- **LEVEL**
  Master volume.
  Range: 0.00 ~ 10.00

- **MODEL**
  Selects one of the Stompbox models:

1. Boss BD-2 Blues Driver™
   Classic, creamy, blues tones from one of the best overdrive pedals of its type.
2. Ibanez Tube Screamer™
   Boosted midrange overdrive, loved by blues players. Think Stevie Ray Vaughn.
3. Boss SD-1 Overdrive™
   Provides a warm, tube-like distortion, while retaining clarity.
4. DOD 250 Overdrive™
   Smooth, Classic Rock tone.
5. Arbiter Fuzz Face™
   Classic from the 1960s, used by the Beatles, The Who, Jimi Hendrix, Pink Floyd, to name only a few.
6. Sola Tone Bender™
   A descendant of the Arbiter Fuzz-Face, this cool distortion pedal form the mid-sixties was a Classic Rock staple and made a comeback in 2012.
7. MXR Distortion +™
   Tons of sustain in this mustard-colored classic, often used in Classic Rock and Heavy Metal.

8. Pro Co RAT™
   Another descendant of the Arbiter Fuzz-Face, used extensively by David Gilmour, Jeff Beck, and Joe Walsh
9. Big Muff Pi™
   Electro-Harmonix developed this from earlier models called Axis Fuzz and Foxey Lady, obvious nods to Hendrix.
10. Boss DS-1 Distortion™
    Similar to the Pro Co RAT, this simple overdrive pedal was popular with Prince, Nirvana, Steve Vai, and the Red Hot Chili Peppers.
11. DOD FX69 Grunge™
    Super-heavy distortion, named for the Pacific Northwest Grunge scene of the ’90s!

10.8.2. Flame

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 ~ 100% Wet

- **PRE GAIN**
  Adjusts the amount of gain BEFORE being processed by the Flame Driver.
  Range: -200 ~ +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 ~ 100% High Pass

- **PRE FILTER**
  Controls the Cutoff Frequency of the Filter.
  Range: 100 ~ 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 ~ +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 ~ 100% High Pass

- **POST FILTER**
  Controls the Frequency of the Filter.
  Range: 100 ~ 21924.17 Hz

10.8.3. Metalzone

METALZONE is modeled after the Boss MT-2 Metal Zone™ distortion pedal. Huge low-end and mid-range, with a super-smooth high-end, this distortion unit's overdrive ranges from warm to insane. Excellent, musical tone controls for shaping the perfect sound.

- **DRIVE**
  Sometimes referred to as overdrive, DRIVE sets the amount the amplifier is overloaded, causing distortion. The higher this control is set, the more distorted the signal. This powerful control really adds energy.
  Range: 0.00 ~ 10.00

- **LOW**
  Bipolar control which cuts or boosts low frequencies.
  Range: 0.00 ~ 10.00

- **MID**
  Bipolar control which cuts or boosts mid frequencies.
  Range: 0.00 ~ 10.00

- **HI**
  Bipolar control which cuts or boosts high frequencies.
  Range: 0.00 ~ 10.00

- **LEVEL**
  Master volume.
  Range: 0.00 ~ 10.00

10.8.4. Toxic Smasher

*Toxic Smasher *combines Omnisphere's Waveshaper with different filter types. It provides the same effect as the existing Waveshaper in Omnisphere, but with the flexibility of using it anywhere in an FX chain.

- **MINI-SLIDER**
  Controls the mix of the dry signal and the processed (wet) signal. The percentage indicates the amount of the signal that is wet.
  Range: 0 to 100%

PAGE ONE CONTROLS

- **CRUSH**
  Introduces distortion by reducing the resolution of digital audio. This lowers the dynamic range and increases the noise floor. Use this for achieving grainy or lo-fi sounds. The effect can range from slightly distorted to very harsh, depending on the setting.
  Range: 0.00 ~ 1.00

- **REDUCE**
  Controls the amount of sample rate reduction that is introduced to the Oscillator. By reducing the sample rate, distortion and artifacts called "aliasing" are introduced to the sound. Generally, aliasing is avoided in digital audio, but here it can be used in a controlled manner to add wildly different tonal qualities. The higher this slider is set, the lower the sample rate, and the more pronounced the effect will be.
  Range: 0.00 ~ 1.00

- **WAVESHAPER**
  Drop-down menu for selecting one of the four preset waveshaping algorithms.
  These range from 1 (softer) to 4 (more aggressive).

- **DEPTH**
  Controls the amount of waveshaping applied to a sound. The higher the setting, the more pronounced

the effect. If Waveshaper is OFF, it will have no effect.
Range: 0.00 ~ 1.00

- **GAIN**
  Adjusts the overall output.
  Range: -inf ~ -0.00 dB

PAGE TWO CONTROLS

- **CRUSH FORCE**
  This control adds a unique distortion to the bit depth for a more aggressive sound. This parameter will have no effect if the CRUSH knob is set to zero.
  Range: 0.00 ~ 1.00

- **REDUCE ANIM**
  The Animation slider adds a dynamic, time-variant character to the sample-rate reduction. This parameter will have no effect if the REDUCE knob is set to zero.
  Range: 0.00 ~ 1.00

- **FILTER**
  Drop-down menu for selecting the filter type: LPF, BPF, HPF, or OFF.

- **[FILTER] CUTOFF**
  Controls the filter cutoff frequency.
  Range: 0.050 kHz ~ 19.00 kHz

- **[FILTER] RESO**
  Controls the filter resonance.
  Range: 0.00 ~ 1.00

- **[FILTER] PRE/POST**
  Controls where the filter sits in the audio path.

PRE places it before the crushed / reduced / wave-shaped signal, **POST** places it after.

10.8.5. Foxxy Fuzz

FOXXY FUZZ is modeled after the Foxx Tone Machine™ fuzz pedal, available from 1965-1975. It is known for its long sustain.

- **SUSTAIN**
  This knob controls the distortion and the famous sustain level.
  Range: 0.00 ~ 10.00

- **MELLO-BRITE**
  This knob controls the tone and ranges from (you guessed it!) mellow to bright!
  Range: 0.00 ~ 10.00

- **VOLUME**
  Adjusts the overall output.
  Range: 0.00 ~ 10.00

- **OCTAVE**
  This switch acts like an octave divider pedal—it adds harmonic distortion an octave above.

10.9. Amplifiers

Omnisphere includes nine amplifier models for unique sonic coloration. From clean, bell-like tones and fat, classic tube distortion, to sounds you can only get from the cheesiest transistor radio speaker!

- **Bassman**
- **Boutique**
- **Brit-Vox**
- **Classic Twin**
- **Hiwattage**
- **Rock Stack**
- **San-Z-Amp**
- **Smoke Amp**
- **Thriftshop Speaker**

10.9.1. Bassman

BASSMAN is modeled after the mighty, mighty ’59 Fender Bassman™ amplifier—many guitarists’ favorite amp. It has a full set of amplifier controls, along with a selection of impulse responses from the speaker cabinet using different high-end mic and preamp combinations. Includes controls for the head and the cabinet, which can be used separately or in combination with other amps.

PAGE ONE CONTROLS

- **BASS**
  Bipolar control which cuts or boosts low frequencies.
  Range: 0.00 ~ 1.00

- **MID**
  Bipolar control which cuts or boosts mid-range frequencies.
  Range: 0.00 ~ 1.00

- **TREBLE**
  Bipolar control which cuts or boosts high frequencies.
  Range: 0.00 ~ 1.00

- **PRESENCE**
  Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies and slightly rolls off the low end.
  Range: 0.00 ~ 1.00

- **VOLUME**
  This knob controls how much signal is sent though the “tubes” in the first gain stage. Higher settings can introduce a pleasing distortion.
  Range: -inf dB ~ 9.54 dB

- **MASTER**

Master volume.
Range: -inf dB ~ 9.54 dB

PAGE TWO CONTROLS

- **GAIN**
  This switch introduces a volume boost into the amp, like a “High Gain” switch.

- **BOOST**
  This is a tone control that can boost the high frequencies at the same time it attenuates the low end.
  Range: 0.00 ~ 1.00

- **AMPLIFIER**
  Enables or disables the amplifier model. If the switch is OFF, none of the amplifier controls will be active. The only active control will be the Cabinet Mic menu and you can use the cabinet with other amp heads.

- **CABINET MIC**
  Drop-down menu for selecting an impulse response for the speaker cabinet using a variety of high-end preamps and mics.

10.9.2. Boutique

BOUTIQUE is modeled after the 100-watt Dumble Overdrive Special™ amplifier. It has a full set of amplifier controls and a selection of impulse responses from the speaker cabinet using different high-end mic and preamp combinations.

PAGE ONE CONTROLS

- **GAIN**
  The GAIN switch introduces a volume boost into the guitar amp, like a “High Gain” switch.

- **AMPLIFIER**
  Enables or disables the amplifier model. If the switch is OFF, none of the amplifier controls will be active. The only active control will be the Cabinet Mic menu and you can use the cabinet with other amp heads.

- **LEVEL**
  Range: -inf dB ~ 9.54 dB

- **PREAMP**
  Controls how much signal is sent though the “tubes” in the first gain stage. Higher settings can introduce a pleasing distortion.
  Range: 0.00 ~ 1.00

- **MODE**
  This drop-down menu allows you to select different models:
  Selections: Jazz, Brite, and Mid

- **MASTER**
  Master volume.
  Range: -inf dB ~ 9.54 dB

PAGE TWO CONTROLS

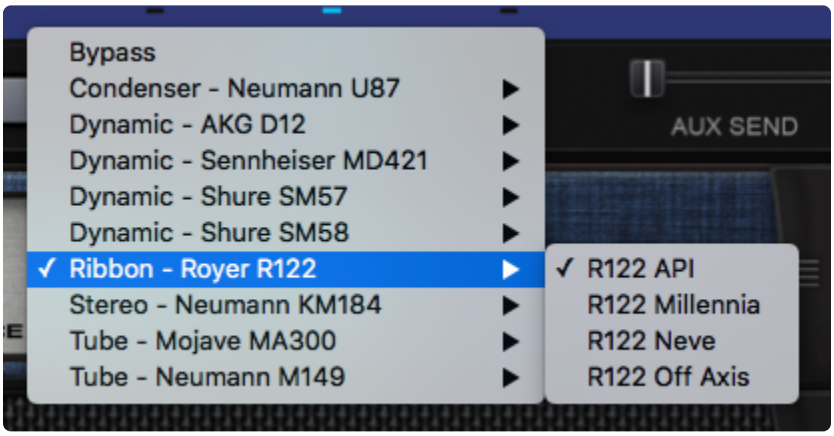
- **BASS**
  Bipolar control which cuts or boosts low frequencies.
  Range: 0.00 ~ 1.00

- **MID**
  Bipolar control which cuts or boosts mid-range frequencies.
  Range: 0.00 ~ 1.00

- **TREBLE**
  Bipolar control which cuts or boosts high frequencies.
  Range: 0.00 ~ 1.00

- **PRESENCE**
  Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies and slightly rolls off the low end.
  Range: 0.00 ~ 1.00

- **CABINET MIC**
  Drop-down menu for selecting an impulse response of the speaker cabinet using a variety of preamps and mics.



10.9.3. Brit-Vox

The *Brit-Vox *is modeled after the Vox AC30™ amplifier. This amp led the British Invasion of the 1960s! Comes with selectable, high-end mic and preamp combinations. Controls for the head and the cabinet which can be used separately or in combination with other amps. Mix and match heads and cabinets!

PAGE ONE CONTROLS

- **BASS**
  Bipolar control which cuts or boosts low frequencies.
  Range: 0.00 ~ 1.00

- **MID**
  Bipolar control which cuts or boosts mid-range frequencies.
  Range: 0.00 ~ 1.00

- **TREBLE**
  Bipolar control which cuts or boosts high frequencies.
  Range: 0.00 ~ 1.00

- **PRESENCE**
  Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies and slightly rolls off the low end.
  Range: 0.00 ~ 1.00

- **LEVEL**
  The Level knob controls how much signal is sent though the “tubes” in the first gain stage. Higher settings can introduce a pleasing distortion.
  Range: -inf dB ~ 9.54 dB

- **MASTER**
  Master volume.

Range: -inf dB ~ 9.54 dB

PAGE TWO CONTROLS

- **GAIN**
  The Gain switch introduces a gain boost into the guitar amp, like a “High Gain” switch.

- **BOOST**
  This is a tone control that when increased simultaneously boosts the high frequencies and attenuates the low end.
  Range: 0.00 ~ 1.00

- **AMPLIFIER**
  Enables or disables the amplifier model. If the switch is OFF, then none of the amplifier controls will be active. The only active control will be the Cabinet Mic menu.

- **EQ**
  Enables or disables the tone controls on Page One.

- **CABINET MIC**
  Drop-down menu for selecting an impulse response of the speaker cabinet using a variety of preamps and mics.

10.9.4. Classic Twin

CLASSIC TWIN is modeled after the classic (and we mean CLASSIC!) 1965 Blackface Fender Twin™ amplifier. The unmistakable sound of this 85 watt / 2-12 combo has been heard on virtually every record in the past 50 years.

Comes with selectable, high-end mic and preamp combinations, as well as controls for the head and the cabinet which can be used separately or in combination with other amps.

PAGE ONE CONTROLS

- **BASS**
  Bipolar control which cuts or boosts low frequencies.
  Range: 0.00 ~ 1.00

- **MID**
  Bipolar control which cuts or boosts mid-range frequencies.
  Range: 0.00 ~ 1.00

- **TREBLE**
  Bipolar control which cuts or boosts high frequencies.
  Range: 0.00 ~ 1.00

- **PRESENCE**
  Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies and slightly rolls off the low end.
  Range: 0.00 ~ 1.00

- **VOLUME**
  The Volume knob controls how much signal is sent though the “tubes” in the first gain stage. Higher settings can introduce a pleasing distortion.
  Range: -inf dB ~ 9.54 dB

- **MASTER**
  Master volume.
  Range: -inf dB ~ 9.54 dB

PAGE TWO CONTROLS

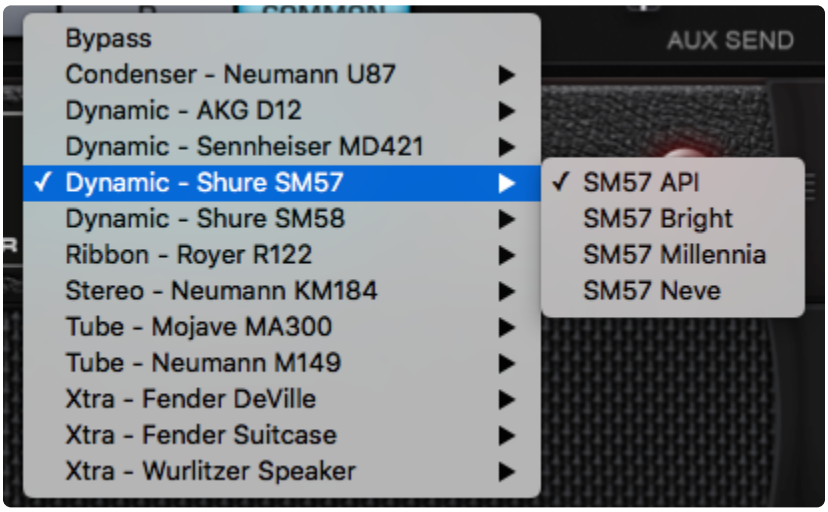
- **GAIN**
  The Gain switch introduces a gain boost into the guitar amp, like a “High Gain” switch.

- **BOOST**
  This is a tone control that when increased simultaneously boosts the high frequencies and attenuates the low end.
  Range: 0.00 ~ 1.00

- **BRIGHT**
  When enabled, this switch boosts high frequencies.

- **AMPLIFIER**
  Enables or disables the amplifier model. If the switch is OFF, then none of the amplifier controls will be active. The only active control will be the Cabinet Mic menu and you can use the cabinet with other amp heads.

- **CABINET MIC**
  Drop-down menu for selecting an impulse response of the speaker cabinet using a variety of preamps and mics.



10.9.5. Hiwattage

HIWATTAGE is modeled after a custom 100-watt 1974 Hiwatt™ amplifier is an all-time classic British tone-monster! Comes with selectable, high-end mic and preamp combinations. The controls for the head and the cabinet can be used separately or in combination with other amps. Mix and match heads and cabinets! Excellent for creating heavy rock tones.

PAGE ONE CONTROLS

- **BASS**
  Bipolar control which cuts or boosts low frequencies.
  Range: 0.00 ~ 1.00

- **MID**
  Bipolar control which cuts or boosts mid-range frequencies.
  Range: 0.00 ~ 1.00

- **TREBLE**
  Bipolar control which cuts or boosts high frequencies.
  Range: 0.00 ~ 1.00

- **PRESENCE**
  Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies and slightly rolls off the low end.
  Range: 0.00 ~ 1.00

- **DRIVE**
  Sometimes referred to as overdrive, DRIVE sets the amount the amplifier is overloaded, causing distortion. The higher this control is set, the more distorted the signal.
  Range: 0.00 ~ 1.00

- **VOLUME**

The VOLUME knob controls how much signal is sent though the “tubes” in the first gain stage. Higher settings can introduce a pleasing distortion.
Range: -inf dB ~ 9.54 dB

- **MASTER**
  Master volume.
  Range: -inf dB ~ 9.54 dB

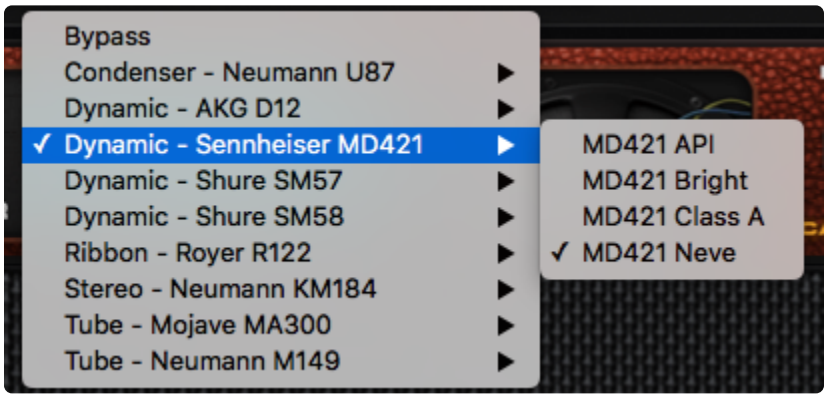
PAGE TWO CONTROLS

- **GAIN**
  The GAIN switch introduces a gain boost into the guitar amp, like a “High Gain” switch.

- **BRIGHT**
  When enabled, this switch boosts high frequencies and attenuates low ones.

- **AMPLIFIER**
  Enables or disables the amplifier model. If the switch is OFF, then none of the amplifier controls will be active. The only active control will be the Speaker Mic and you can use the cabinet with other amp heads.

- **CABINET MIC**
  Drop-down menu for selecting an impulse response of the speaker cabinet using a variety of preamps and mics.



10.9.6. Rock Stack

ROCK STACK is modeled after the seminal and iconic ’64 Marshall JTM45™ amplifier. Originally based on the Fender Bassman™, it used 12AX7 tubes for more distortion and had an aluminum chassis, to reduce hum. It would be easier to list who has NOT used this amp than who has!

Complete with a full set of amplifier controls, it comes with selectable, high-end mic and preamp combinations. Controls for the head and the cabinet which can be used separately or in combination with other amps. Mix and match heads and cabinets!

PAGE ONE CONTROLS

- **BASS**
  Bipolar control which cuts or boosts low frequencies.
  Range: 0.00 ~ 1.00

- **MID**
  Bipolar control which cuts or boosts mid-range frequencies.
  Range: 0.00 ~ 1.00

- **TREBLE**
  Bipolar control which cuts or boosts high frequencies.
  Range: 0.00 ~ 1.00

- **PRESENCE**
  Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies and slightly rolls off the low end.
  Range: 0.00 ~ 1.00

- **LEVEL**
  The Level knob controls how much signal is sent though the “tubes” in the first gain stage. Higher settings can introduce a pleasing distortion.

Range: -inf dB ~ 9.54 dB

- **MASTER**
  Master volume.
  Range: -inf dB ~ 9.54 dB

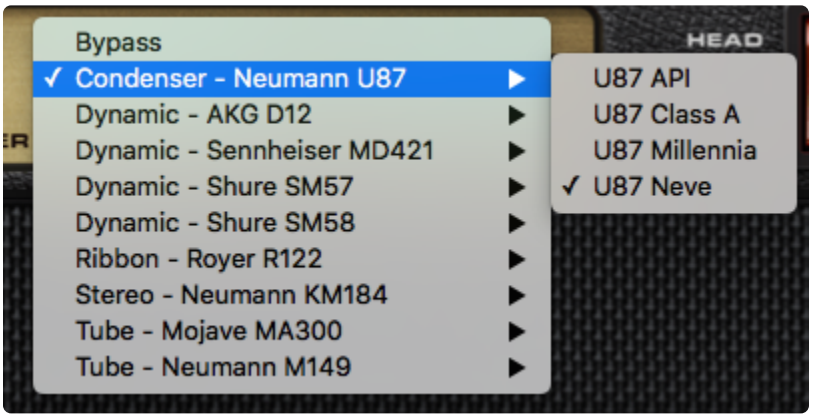
PAGE TWO CONTROLS

- **GAIN**
  The GAIN switch introduces a gain boost into the guitar amp, like a “High Gain” switch.

- **BOOST**
  This is a tone control that when increased simultaneously boosts the high frequencies and attenuates the low end.
  Range: 0.00 ~ 1.00

- **AMPLIFIER**
  Enables or disables the amplifier model. If the switch is OFF, then none of the amplifier controls will be active. The only active control will be the Speaker Mic and you can use the cabinet with other amp heads.

- **CABINET MIC**
  Drop-down menu for selecting an impulse response of the speaker cabinet using a variety of preamps and mics.



10.9.7. San-Z Amp

SAN-Z-AMP is modeled after the trend-setting SansAmp GT-2™ tube amplifier emulation pedal. It has a full set of amplifier controls and a selection of impulse responses simulating selectable, high-end mic and preamp combinations

- **DRIVE**
  Sometimes referred to as overdrive, DRIVE sets the amount the amplifier is overloaded, causing distortion. The higher this control is set, the more distorted the signal.
  Range: 0.00 ~ 10.00

- **LOW**
  Bipolar control which cuts or boosts low frequencies.
  Range: 0.00 ~ 10.00

- **HIGH**
  Bipolar control which cuts or boosts mid-range frequencies.
  Range: 0.00 ~ 10.00

- **MIC**
  This drop-down menu is used to control the mic placement.
  The options are: Off-Axis, Center, and Classic

- **MOD**
  This drop-down menu is used to select either the default amp setting (Clean), a gain boost setting (Hot-Wired), or a high-gain tone with scooped mid-range (Hi Gain).

- **AMP**
  This drop-down menu allows you to select the different amplifiers after which this unit has been modeled:

1. American Tweed (Fender)
2. Classic British (Vox)
3. Modern California (boutique)

- **LEVEL**
  Master volume.

Range: 0.00 ~ 10.00

10.9.8. Smoke

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**
  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**
  Select from six models of well-known guitar amplifiers:

1. USA – Fender™ Deluxe
2. Plexi – Marshall™ Plexi
3. British – VOX™ AC-30
4. Chief – Matchless™ Chieftain
5. Rectify – Mesa Boogie™ Rectifier
6. Twin – American Fender Twin™

- **MIC**
  This is a switch to control on-axis versus off-axis mic'ing 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.

1. 1×12 – one active 12-inch speaker
2. 2×12 – two active 12-inch speakers
3. 4×12 – four active 12-inch speakers

- **GAIN**
  The Gain switch introduces a 3 dB boost into the guitar amp, like a high gain switch.

- **DRIVE**
  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.
  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**
  This switch enables the four tone controls. When 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

10.9.9. Thriftshop Speaker

*Thriftshop Speaker *is designed to trash your audio by running it through old funky speakers/telephones/megaphones that you might find in a thrift shop.This unit uses different kinds of distortion models and then super-imposes the ambiences of a wide variety of devices (ranging from tube radios, computer speakers, and headphones, to children toys, intercoms and much more) onto the sound. In addition to being good at producing lo-fi sounds, it is useful for creating sounds with a very narrow frequency range that sit well in a mix.

- **MINI-SLIDER**
  Controls the mix of the dry signal and the processed (wet) signal. The percentage indicates the amount of the signal that is wet.
  Range: 0 to 100%

- **[DISTORTION] INPUT**
  This knob controls the input level.
  Range: -inf dB ~ 9.54 dB

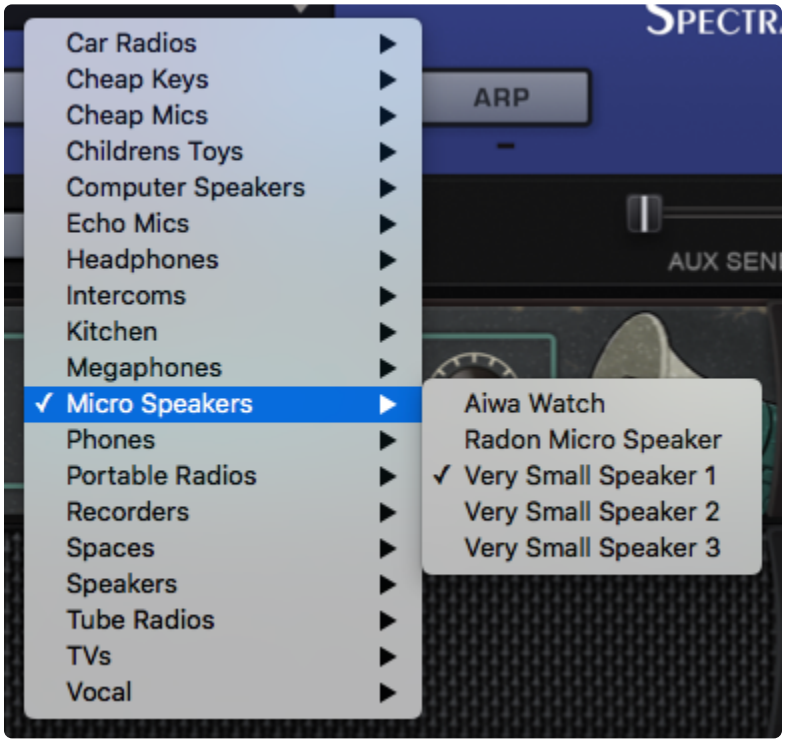
- **[DISTORTION] TYPE**
  Drop-down menu for selecting one of the distortion models from the Stompbox Modeler:

1. Boss BD-2 Blues Driver™
2. Ibanez Tube Screamer™
3. Boss SD-1 Overdrive™
4. DOD 250 Overdrive™
5. Arbiter Fuzz Face™
6. Sola Tone Bender™
7. MXR Distortion +™
8. Pro Co RAT™
9. Big Muff Pi™
10. Boss DS-1 Distortion™
11. DOD FX69 Grunge™

- **[DISTORTION] TONE**
  Controls the tone of the distortion, creating darker results at low settings and brighter results at higher settings. The Tone control responds differently depending on the selected model in the Type menu.
  Range: 0.00 ~ 1.00

- **[DEVICE] MONO**
  Engaging this switch makes the effected signal mono.

- **[DEVICE] TYPE**
  Drop-down menu for selecting the ambience of the different kinds of devices, including radios, toys, cheap mics, computer speakers, megaphones, telephones, and more. The input signal will take on the timbral characteristics of the selection.



- **[DEVICE] GAIN**
  Master output.
  Range: -inf dB ~ 9.54 dB

10.10. Modulation

Omnisphere includes twelve modulation processors that span the history of recording, from vintage and modern phasers, flangers, and choruses to vibey vibrato and tasty tremolo.

- Analog Chorus
- Ultra Chorus
- Solina Ensemble
- Analog Phaser
- Retro-Phaser
- PRO-Phaser
- EZ-Phaser
- Analog Flanger
- Retro Flanger
- Flanger
- Analog Vibrato
- Vintage Tremolo

10.10.1. Analog Chorus

ANALOG CHORUS is modeled after the Boss CE-2™, the Boss CE-5 Chorus Ensemble™ and the TC Electronic Chorus™. All three of these chorus pedals are still sought-after for the unique tones they bring to a track.

- **MINI-SLIDER**
  Controls the mix of the dry signal and the processed (wet) signal. The percentage indicates 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 produce a sweeping effect, higher settings will create a more warbling effect.

- **DEPTH**
  The Depth control adjusts the amount of pitch modulation from the LFO.

- **WARMTH**
  When enabled, this switch makes the tone warmer by rolling off the high frequencies and slightly boosting the low end.

- **MODEL**
  This drop-down menu allows you to select from the different choruses after which this effect has been modeled:

1. **Boss CE-2**
   Rare and highly-collectible, this famous, robin's egg blue pedal has a smooth, warm sound.
2. **Boss CE-5 Chorus Ensemble**
   Newer version of the CE-2, with added filter controls. Different and cool-sounding.
3. **TC Electronic Chorus**
   For good reason, this vintage analog chorus pedal is highly-sought-after by guitarists and keyboard players. Warm chorus and versatile modulation.

- **MONO**
  Engaging this switch makes the effected signal mono.

10.10.2. 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 which acts as a 'LUSH' control, giving this unit a very dense, rich character compared with other choruses.

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% ~ 100%

PAGE ONE CONTROLS

- **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 ~ 15.00 Hz

- **DEPTH**
  The Depth control adjusts the amount of pitch modulation from the LFO.
  Range: 0.01 ~ 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.

1. Sine – A symmetrical, smoothly cycling wave.
2. Random – Asymmetrical changes in the wave make randomized pitch changes.
3. Linear – A symmetrical, linear cycle.

- **LUSH**
  Sums the left and right signal, adding 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 ~ 0.98

- **INVERT**
  Reverses the phase of the chorus.

- **WIDTH**
  Pans the chorused signal to left and right, widening 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 and when changed counter-clockwise, a low-pass filter is applied.
  Range: 0.00 ~ 1.00

- **LEVEL**
  Adjusts the overall output.
  Range: -inf ~ 0.00

10.10.3. Solina Ensemble

SOLINA ENSEMBLE is modeled after the Ensemble effect in the ARP Solina String Ensemble™. This keyboard was used on records in practically every genre in the 1970s and its signature sound came from the internal chorus effect. That iconic, swirling chorus is faithfully reproduced here.

- **MINI-SLIDER**
  Controls the mix of the dry signal and the processed (wet) signal. The percentage indicates the amount of the signal that is wet.
  Range: 0 ~ 100%

- **RATE**
  This control sets the cycle speed of the LFO. Minimum settings will produce a sweeping effect, higher settings will create a more warbling effect.

- **DEPTH**
  The DEPTH control adjusts the amount of pitch modulation from the LFO.

- **MONO**
  Engaging this switch makes the effected signal mono.

10.10.4. Analog Phaser

ANALOG PHASER features models of the incredible Oberheim Phasor™, the classic MXR Phase 90™, and a boutique, custom-designed chorus/phase shifter.

- MINI-SLIDER*
  Controls the mix of the dry signal and the processed (wet) signal. The percentage indicates the amount of the signal that is wet.
  Range: 0 ~ 100%

- **RATE**
  This control sets the cycle speed of the LFO. Minimum settings will produce a sweeping effect, higher settings will create a more warbling effect.

- **COLOR**
  The DEPTH control adjusts the amount of modulation from the LFO.

- **SYNC**
  Engages and disengages synchronization of the LFO rate with the host's tempo.

- **MODEL**
  This drop-down menu allows you to select the phaser model. In addition to the custom-designed Chorus/Phase Shifter, we have:

1. **Oberheim Phasor**
   Before creating classics like the OB-8™, Tom Oberheim came up with the Phasor. Can a sound be lush and subtle and never-boring, all at the same time? Turn this unit on and see for yourself.
2. **MXR Phase 90**
   This box has been described as Van Halen tone in a box. Classic 1970s phaser, for guitar and everything else!

- **MONO**
  Engaging this switch makes the effected signal mono.

10.10.5. Retro Phaser

Retro Phaser has a vintage, lo-fi vibe. On the surface it looks similar to the EZ Phaser, but has more features, and a dedicated page for tone-shaping.

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 ~ 100%

PAGE ONE CONTROLS

- **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 ~ 15.00 Hz

- **DEPTH**
  Controls the sweep range of the modulation.
  Range: 0 ~ 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, changing the tone character of the phasing.

PAGE TWO CONTROLS

- **DIRT**
  Adds subtle overdrive to the Phaser's signal.

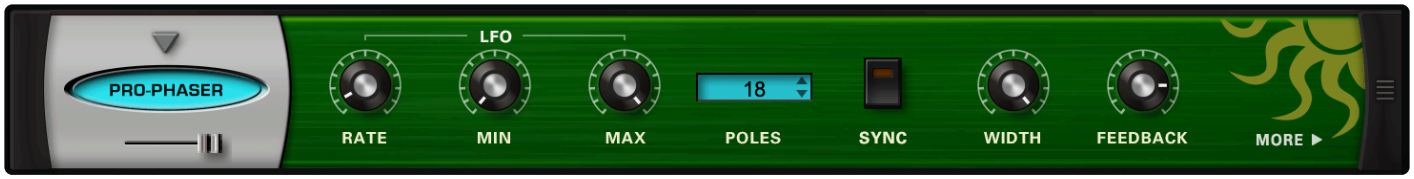
- **TONE**
  This control is a simple tone filter control.
  Range: Dark ~ Bright

- **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.
  Range: 0 ~ 13.0 dB

10.10.6. PRO-Phaser



The **PRO Phaser** FX unit is one of the most versatile and rich phaser designs. 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 just 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 ~ 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 ~ 15.00 Hz

- **[LFO] MIN**
  Controls the minimum point of modulation depth of the LFO.
  Range: 0 ~ 100%

- **[LFO] MAX**
  Controls the maximum point of modulation depth of the LFO.
  Range: 0 ~ 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 ~ 360 degrees

- **FEEDBACK**
  Controls the amount of resonance/feedback of the phaser. High settings will oscillate.
  Range: 0 ~ 100%

PAGE TWO CONTROLS

- **SOURCE**
  Continuous mix control to blend between LFO and Envelope Follower modulation sources.
  Range: 0 ~ 100%

- **[ENVELOPE] ATTACK**
  The time of the Envelope Follower modulation beginning slope.
  Range: 0 ~ 400 ms

- **[ENVELOPE] RELEASE**
  The time of the Envelope Follower modulation ending slope.
  Range: 0 ~ 1000 ms

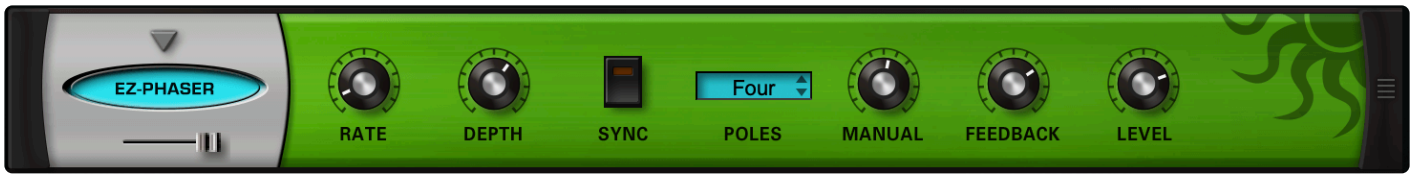
- **[ENVELOPE] MIN**
  Controls the minimum point of modulation depth of the Envelope.
  Range: 0 ~ 100%

- **[ENVELOPE] MAX**
  Controls the maximum point of modulation depth of the Envelope.
  Range: 0 ~ 100%

- **DRIVE**
  Controls the amount of overdrive at the final output.
  Range: 0 ~ 100

- **LEVEL**
  Adjusts the overall output.
  Range: -200 ! +10 dB

10.10.7. 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 simple to use and understand and best-suited to recreating classic phaser effects.

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 ! 1

- **RATE**
  Controls the speed the Phaser's 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 ~ 15.00 Hz

- **DEPTH**
  Controls the width of the LFO's sweep range.
  Range: 0 ~ 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 ~ 0.1

- **FEEDBACK**
  Controls the amount of resonance/feedback of the phaser.
  Range: 0 ~ 1

- **LEVEL**
  Adjusts the overall output.
  Range: -inf to 0 Unity gain

10.10.8. Analog Flanger

ANALOG FLANGER is modeled after the “built-like-a-tank” A/DA Flanger™ pedal. Famous for its road-worthy construction and super-versatile tone, this flanger gives you fantastic musical effects (not to mention cool jet engine sounds!).

- **MINI-SLIDER**
  Controls the mix of the dry signal and the processed (wet) signal. The percentage indicates the amount of the signal that is wet.
  Range: 0% ~ 100%

- **RATE**
  This control sets the speed of the LFO. Minimum settings will produce a sweeping effect, higher settings will create a more warbling effect.
  Range: 0.1 Hz ~ 10.0 Hz

- **DEPTH**
  The DEPTH control adjusts the amount of modulation from the LFO.
  Range: 0% ~ 100%

- **SYNC**
  Engages and disengages synchronization of the LFO rate with the host’s tempo.

- **COLOR**
  Controls the tone of the affected signal, creating darker results at low settings and brighter results at higher settings.
  Range: 1000 Hz ~ 20,000 Hz

- **ENHANCE**
  Controls the amount of delay feedback, which produces a stronger flanging resonance.
  Range: 0 ~ 100

- **MONO**
  Engaging this switch makes the effected signal mono.

10.10.9. 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 ~ 1

PAGE ONE CONTROLS

- **RATE**
  Controls the speed of the Flanger's 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 ~ 15.000Hz

- **DEPTH**
  Controls the width of the LFO's sweep range.
  Range: 0.01 ~ 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 ~ 0.1 ms

- **FEEDBACK**
  Controls the amount of delay feedback, which produces a stronger flanging resonance.

Range: 0.01 ~ 0.99

- **INVERT**
  Reverses the phase of the delay feedback signal, producing a throatier flanging tone.

- LEVEL
  Adjusts the overall output volume.
  Range: -inf ~ 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: Dark ~ 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%

10.10.10. 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 ~ 1

- **RATE**
  Controls the speed of the Flanger's 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 ~ 15.000Hz

- **DEPTH**
  Controls the width of the LFO's sweep range.
  Range: 0.01 ~ 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 ~ 0.1ms

- **FEEDBACK**
  Controls the amount of delay feedback, which produces a stronger flanging resonance.
  Range: 0.01 ~ 0.99

- **INVERT**
  Reverses the phase of the delay feedback signal, producing a throatier flanging tone.

- **LEVEL**
  Adjusts the overall output.

Range: -inf ~ 0 Unity gain

10.10.11. Analog Vibrato

ANALOG VIBRATO is modeled after the vibrato of the once-ubiquitous Roland JC-120™ keyboard amp and of the Shin-ei Uni-Vibe™ pedal, which imitated a Leslie (think David Gilmour).

- **RATE**
  This control sets the cycle speed of the LFO. Minimum settings will produce a sweeping effect, higher settings will create a more warbling effect.
  Range 0.9 Hz ~ 20 Hz

- **DEPTH**
  The DEPTH control adjusts the amount of pitch modulation from the LFO.
  Range 0 % ~ 100 %

- **SYNC**
  Engages and disengages synchronization of the LFO rate with the host's tempo.

- **MODEL**
  This drop-down menu allows you to select from the vibratos after which this effect has been modeled:

1. The *Roland JC-120*™ amplifier was an '80s classic. Popular for its clean, built-in analog chorus and vibrato FX, it was used in the New Wave scene by bands like The Police and The Cure, and even Supertramp and jazz guitarist Pat Metheny. The vibrato is faithfully reproduced, here.
2. The spinning speaker of the Shin-ei *Uni-Vibe*™ pedal was originally meant to imitate a Leslie™ rotating speaker, and although it was not too successful at that (!), it had a cool sound that everyone loved. This was achieved via a series of phasing filters.

- **MONO**
  Engaging this switch makes the effected signal mono.

- **LEVEL**
  Adjusts the overall output.
  Range 0 % ~ 100 %

10.10.12. Vintage Tremolo

VINTAGE TREMOLO recreates the classic vintage tube amp tremolo effect. Tremolo was popularized in the 1960s, first with Surf Guitar, and later with keyboards, such as the Wurlitzer and Rhodes electric pianos. The blackface Fender amps from that time were considered the best for achieving this kind of “creamy” tremolo.

It was originally (and ingeniously) achieved by using an opto-isolator (opto for short) circuit. The opto sensor detects a light source (often a simple incandescent bulb) which is modulated electrically to flash on and off. It then converts the pulsing light to an electrical impulse which modulates the volume of the audio.

Originally a mono effect, a stereo version was introduced by Fender for their Rhodes electric pianos. The audio alternated from left to right—a really cool effect, especially on stage!

- **SPEED**
  This control sets the speed of the tremolo.
  Range 0.3 Hz ~ 13.0 Hz

- **DEPTH**
  The DEPTH control adjusts the depth of the amplitude modulation. From all ON and all OFF to just a subtle rise and fall in volume.
  Range 0 ~ 1.0

- **AGE**
  As opto circuits got older, they lose their ability to modulate completely ON or OFF (and that’s actually a good thing!). This makes for a smoother ON/OFF or L/R that is not as jarring. Use this knob to control the modulated amount of ON/OFF or L/R. Higher settings yield a smoother, “older-sounding” tremolo.
  Range 0.006 ~ 0.645

- **WAVE**
  This drop-down menu allows you to select from the different tremolo waveforms:
  Opto (Square), Sine, and Triangle.

- **LEVEL**
  Master volume.
  Range -inf dB ~ 9.54 dB

- **PANNING**
  Engaging this switch enables alternating left-right panning.

10.11. Creative

These two powerful and unique processors provide a ton of new possibilities for sound design—and they're super fun to use!

- Quad Resonator
- Innerspace

10.11.1. Quad Resonator

QUAD RESONATOR is based on four parallel comb filters that can add tuned resonances to any input signal. Comb filters create a “metallic” ringing effect and are created by feeding a sound back into itself and mixing the two signals. The positional relationship of the mixed signals effects the resultant pitch, resonance, and “springiness.”

PAGE ONE CONTROLS

- **WET MIX SLIDER**
  Controls the mix of the dry signal and the processed (wet) signal. The percentage indicates the amount of the signal that is wet.
  Range: 0 ~ 100%

- **PITCH 1, 2, 3, 4**
  Controls the pitch offset of the Resonators in relation to the note value.

- **NOTE**
  Reference pitch from which PITCH 1–4 knobs will be offset.

- **FEEDBACK**
  This knob controls how much of each Resonator’s output is fed back into itself. The higher the setting, the more resonant the results will be.

- **+/-**
  This switch controls the direction in which signals are delayed before they are added to the input.

PAGE TWO CONTROLS

- **LEVEL 1, 2, 3, 4**
  Controls the level of Resonators on Page 1.

- **MASTER**
  Controls the overall level of Resonators 1-4.

- **SPREAD**
  This knob affects the pan positions of each of the four Resonators. At the minimum value, all four Resonators are panned to the center. At the maximum value, Resonators 1 and 3 are panned full left and Resonators 2 and 4 are panned full right.

- **TONE**
  This knob controls the cutoff of a 6db LPF applied into the internal feedback loop of the Resonators, providing a damping result. At the minimum setting, the sound will be darker and at higher settings, brighter.

10.11.2. Innerspace

Designed to apply acoustic resonances and and the sonic character of unique spaces to any sound in Omnisphere, **INNERSPACE** super-imposes the characteristics of one sound onto another. Sounds range from pills being dropped in a glass, scraped piano strings, crushed sugar grains, and cymbal sweeps—to liquid streams, vinyl noises, and tons more. You can load one (or two parallel) ambiences and their timbral characteristics will be applied to the Omnisphere sound, yielding surprising and unconventional results. The second page of INNERSPACE has a 7-band graphic EQ, to sculpt the sound even further and control any peaks that can occur naturally from the combination of sounds with resonant ambiences.

PAGE ONE CONTROLS

- **INPUT**
  This knob controls the input level to the effect unit.

- **A / B**
  Select the ambience in slot A and/or slot B from these drop-down menus.

- **BALANCE**
  Controls the balance between the ambiences loaded in slots A and B.

- **OUTPUT**
  Master volume.

PAGE TWO CONTROLS (EQ)

- **50Hz, 100Hz, 500Hz, 1k, 5k, 10k**
  Each knob controls the gain of the corresponding frequency.

- **Q**
  Controls the resonance of all six frequency bands.

10.12. Delays

Omnisphere includes six delay units that range from the powerful Chorus Echo and tempo-driven multi-tap delays, to the modeled, tape-based Retroplex, and the awesome retro-sounding Radio Delay. Synchable, time-based delays are not only useful for creating ambience but also for creating and complementing rhythms in a Patch.

- Chorus Echo
- BPM Delay
- BPM Delay X2
- BPM Delay X3
- Retroplex*
- Radio Delay

10.12.1. Chorus Echo

The **Chorus Echo** is 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.

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 ~ 100%

PAGE ONE CONTROLS

- **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 ~ 100 ms

- **CHORUS 2**
  Range: 5ms ~ 500 ms

- **ECHO**
  Range: 50ms – 2000 ms
  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.
  Range 0Hz ~ 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.

  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: Dark ~ 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.
  Range: 0 ~ 13.0 dB

10.12.2. 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 ~ 100%

PAGE ONE CONTROLS

- **LEVEL**
  Adjusts the overall output.
  Range: 0 ~ 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 ~ 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 ~ 1

- **EMPH**
  Controls the resonance of the Tone control cutoff frequency in the delayed signal.
  Range: 0 ~ 1

- **FEEDBACK**
  Feeds the delay signal back to the input for echo repeats.
  Range: 0 ~ 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 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 ~ 1

- **[OVERDRIVE] PRE / POST**
  Selects between the overdrive circuit being placed before the Tone Control filter (PRE), or after the Tone control filter (POST).

10.12.3. BPM Delay X2

The **BPM Delay X2** 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 ~ 100%

PAGE ONE CONTROLS

- **[DELAY1] LEVEL**
  Controls the volume of the delayed audio.
  Range: -inf ~ 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 ~ 0 dB

- **[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 ~ 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 ~ 1

- **[COLOR] EMPH**
  Controls the resonance of the Tone control cutoff frequency in the delayed signal.
  Range: 0 ~ 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 ~ 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.
  Range: 0 ~ 1

10.12.4. BPM Delay X3

The **BPM Delay X3** 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 ~ 100%

PAGE ONE CONTROLS

- **[LEFT] LEVEL**
  Controls the volume of the delayed audio.
  Range: -inf ~ 0 dB

- **[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 ~ 0 dB

- **[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 ~ 0 dB

- **[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 ~ 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 ~ 1

- **[COLOR] EMPH**
  Controls the resonance of the Tone control cutoff frequency in the delayed signal.
  Range: 0 ~ 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 ~ 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.
  Range: 0 ~ 1

10.12.5. 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 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 ~ 100%

PAGE ONE CONTROLS

- **[FILTERS] HPF**
  Controls the cutoff frequency for the high-pass filter.
  Range: 20 ~ 10000 Hz

- **[FILTERS] LPF**
  Controls the cutoff frequency for the low-pass filter.
  Range: 100 ~ 22000 Hz

- **[FILTERS] Q**
  Controls the resonance of the cutoff frequency of the filters in the delayed signal.
  Range: 0 ~ 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 ~ 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 ~ 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 ~ 1

- **WIDTH**
  Controls the stereo width of the delay and dry signal.
  Range: 0 ~ 100%

- **GAIN**
  Adjusts the overall output.
  Range: 0db ~ 12db

10.12.6. Retroplex

The **Retroplex** delay unit is modeled after the old tape echo units of the ’60s and ’70s 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% ~ 100%

- **FEEDBACK**
  Feeds the delayed signal back to the input for echo repeats.
  Range: 0 ~ 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 of vintage tape echo machines that make the echoes vary in pitch from one repeat to the next.
  Range: 0 ~ 100%

- **[FLUTTER] SPEED**
  Controls how fast the motor instability affects the tape flutter pitch modulation of the echoes.
  Range: 0 ~ 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.

- **WIDTH**
  Controls the width of the echo stereo imaging.
  Range: 0% (mono) ~ 100% (full stereo)

PAGE TWO CONTROLS

- **DRIVE**
  Controls the amount of overdrive distortion in the delayed signal.
  Range: 0 ~ 1

- **SMASH**
  Adjusts the bit resolution of the delayed audio for additional distortion.
  Range: 32 bit to 4 bit

- **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.
  Range: 0 ~ 100

10.13. Reverbs

Omnisphere includes three studio-quality reverb units—the highly detailed PRO Verb, the quick and easy-to-use EZ Verb, and the ultra-reaslitic, classic Spring Verb.

- Pro Verb
- EZ Verb
- Spring Verb

10.13.1. 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.

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 ~ 100%

PAGE ONE CONTROLS

- **SIZE**
  Controls the Room/Hall size of the reverberation.
  Range: 0 ~ 100

- **TIME**
  Controls the overall length of the reverb.
  Range: 100 ~ 20000 ms

- **PREDELAY**
  Controls the time it takes for the first reflection to appear.
  Range: 0 ~ 500 ms

- **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 resolution of the reverb effect. Also very useful for making different density variations.
  Range: 0 ~ 100%

- **DENSITY**

Controls the smoothness or coarseness of the reflections.
Range: 0 ~ 1000

- **[TONE] LOWS**
  Controls the level of the reverb's high frequencies.
  Range: -18 ~ +6 dB

- **[TONE] HIGHS**
  Controls the level of the reverb's high frequencies.
  Range: -18 ~ +6 dB

PAGE TWO CONTROLS

- **[REVERB SHAPING] LO FREQ**
  Chooses the low crossover frequency of the reverb signal.
  Range: 25 ~ 1000 Hz

- **[REVERB SHAPING] LO TIME**
  Controls the specific length of the reverb's low frequencies.
  Range: 10 ~ 400

- **[REVERB SHAPING] HI FREQ**
  Chooses the high crossover frequency of the reverb signal.
  Range: 500 ~ 22000 Hz

- **[REVERB SHAPING] HI TIME**
  Controls the specific length of the reverb's high frequencies.
  Range: 10 ~ 400

- **WIDTH**
  Adjusts the stereo width of the Wet signal.
  Range: 0 ~ 100%

- **DIFFUSION**
  Controls the amount of chaotic variation in the reverb reflections.
  Range: 0 ~ 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.

10.13.2. 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 ~ 100%

- **TIME**
  Controls the length of the Reverb.
  Range: 0 ~ 0.98

- **PREDELAY**
  Controls the time it takes for the first reflection to appear.
  Range: 0 ~ 100 ms

- **HF DAMP**
  Controls the amount of High Frequency Dampening of the Wet signal.
  Range: 1 ~ 0.014

- **LF DAMP**
  Controls the amount of Low Frequency Dampening of the Wet signal.
  Range: 0 ~ 0.329

- **LEVEL**
  Adjusts the overall output volume.
  Range: 0 ~ 1

10.13.3. Spring Verb

The **Spring Verb** faithfully recreates the “less-than-pristine” vibe of the ancient spring reverbs of 1960s era guitar amplifiers.

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 ~ 100%

PAGE ONE CONTROLS

- **[REVERBERATION] TIME**
  Controls the length of the reverb.
  Range: 0 ~ 100%

- **[REVERBERATION] TONE**
  Controls the tone color of the reverb.
  Range: -10 ~ +10

- **[REVERBERATION] WIDTH**
  Controls the stereo width of the audio. Left is Mono, Center is normal stereo, and Right is ultra-wide “simulated” Stereo.

PAGE TWO CONTROLS

- **[TONE] EQ**
  Engages and disengages the EQ Tone controls.

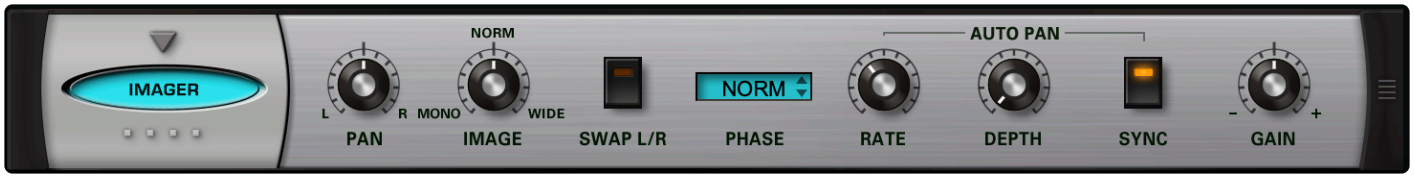
- **[TONE] BASS**
  Controls the amount of the reverb’s high frequencies..
  Range: -15 ~ +15 dB

- **[TONE] TREBLE**
  Controls the amount of the reverb's high frequencies.
  Range: -15 ~ +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 ~ +24 dB

10.14. Utility



The unit in this section provides useful tools for control over the stereo image and phase.

- Imager

10.14.1. Imager

The **Imager** is a “Swiss Army Knife” utility device that can be used as a panner, stereo/mono image control, L/R channel inverter, phase corrector, auto-panner, and gain control.

- **PAN**
  Controls the placement and 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 (-100%) 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 8.8 Hz

- **[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

10.15. Technology Partners

Spectrasonics FX Technology Partners

We are proud to have collaborated with the following partners in developing the custom FX used in Omnisphere:

Overloud Audio Tools

Technology from Overloud was used in the following FX units:

- Precision Compressor
- Stomp Comp
- Studio EQ
- Envelope Filter
- Crying-Wah
- Stompbox Modeler
- Metalzone Distortion
- Foxxy Fuzz
- Bassman
- Boutique
- Brit-Vox
- Classic Twin
- Hiwattage
- Rock Stack
- San-Z-Amp
- Thriftshop Speaker
- Analog Chorus
- Solina Ensemble
- Analog Phaser
- Analog Flanger
- Analog Vibrato
- Innerspace

Nomad Factory

Technology from Nomad Factory was used in the following FX units:

- Tube Limiter
- Tape Slammer
- Modern Compressor
- Vintage Compressor
- Gate Expander

- Vintage 2-band EQ
- Vintage 3-Band EQ
- Graphic 7-Band EQ
- Graphic 12-Band EQ
- Parametric 2-Band EQ
- Parametric 3-band EQ
- Power Filter
- Wah-Wah
- Smoke Amp
- Retro-Phaser
- Retro-Flanger
- Chorus Echo
- Radio Delay
- Retroplex

GForce Software

Technology from GForce Software was used in the following FX units:

- Valve Radio
- Power Filter

Bram at Smartelectronix

Technology from Bram at Smartelectronix was used in the following FX units:

- Flame Distortion
- PRO-Phaser

Magnus at Smartelectronix

Technology from Magnus at Smartelectronix was used in the following FX unit:

- PRO-Verb

Audionerdz

Technology from Audionerdz was used in the following FX unit:

- Formant Filter

Sinevibes

Technology from Sinevibes was used in the following FX unit:

- Toxic Smasher

LEGAL NOTICES – Trademarks

All other manufacturers' product names used in this instrument are trademarks of their respective owners, which are in no way associated or affiliated with Spectrasonics. These trademarks of other manufacturers are used solely to identify the products of those manufacturers whose tones and sounds were studied during Spectrasonics sound development.

11. 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 a pattern, but it also interacts directly with the chords and intervals that you play from the keyboard. Omnisphere features a highly advanced, next-generation Arpeggiator.

Omnisphere's **ARPEGGIATOR** has multiple **Note Patterns**, **Play Modes**, **Functions**, **Latch**, **Step Modifiers**, **Trigger Types**, **Clock Rates**, a variable-length 32-step **Pattern Programmer**, and a super-useful MIDI **Capture** feature.

Omnisphere's ARPEGGIATOR also features the innovative **Groove Lock** which synchronizes the ARPEGGIATOR with **Stylus RMX** grooves (or any standard MIDI file).

Each Part in Omnisphere can have its own ARPEGGIATOR, each with its own unique pattern settings. This means that up to eight arpeggiators can be running simultaneously, which is especially powerful when using **STACK** and **LIVE** Modes.

There are lots of Factory and User ARPEGGIATOR **Presets** available to help get you started. Patterns that you create or modify can be saved as User Presets.

POWER BUTTON

Engages the ARPEGGIATOR.

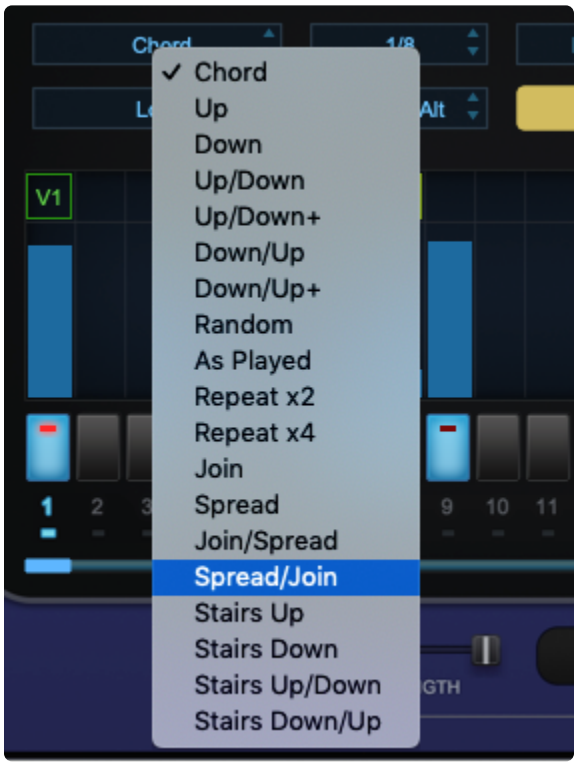
11.1. Presets Menu

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 categorized preset patterns.

Custom arpeggios can be saved as presets. Use the Copy/Paste functions to copy and paste Arpeggiator patterns between Omnisphere's Parts.

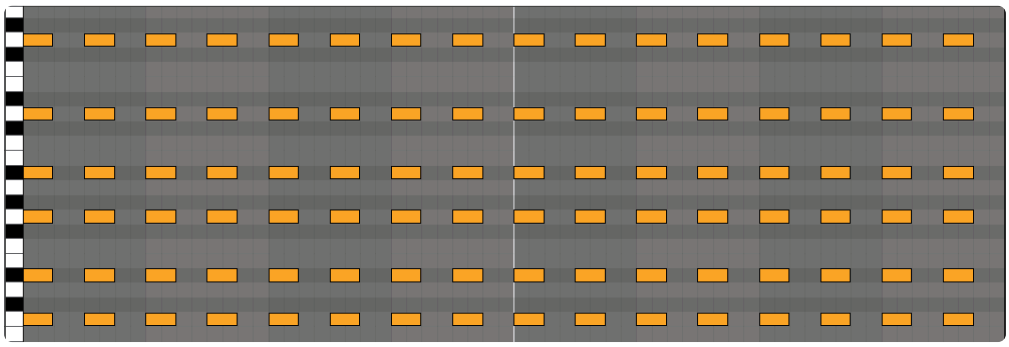
NOTE: You can organize your custom patterns into folders using the Mac Finder or Windows Desktop here: STEAM / Omnisphere / Settings Library / Presets / User / Arpeggiator.

11.2. Note Patterns

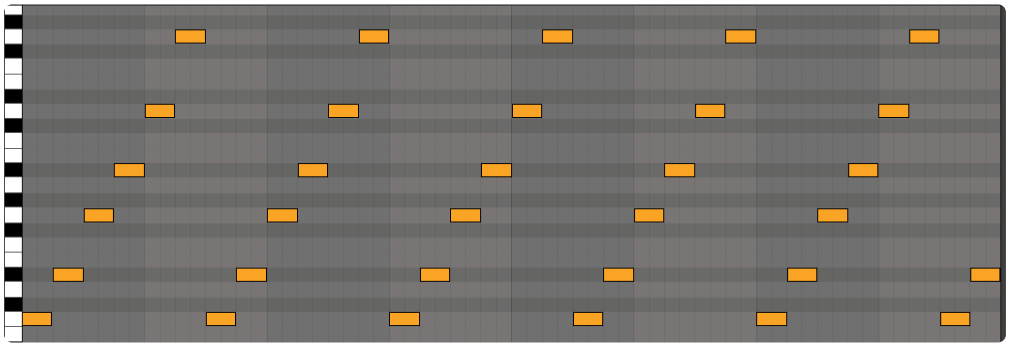


Note Patterns determine how the notes are ordered in the Arpeggiator pattern. Clicking on this field reveals the nineteen different patterns/modes.

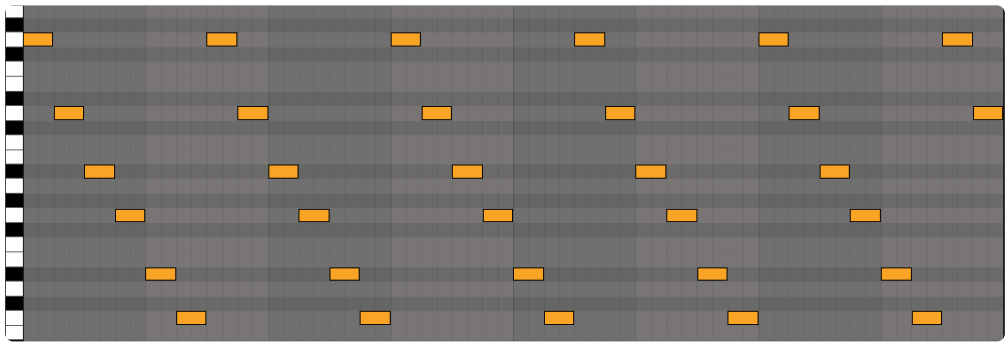
- **Chord** – all the notes held in a chord will be triggered at the same time, based on the velocity value of each step.



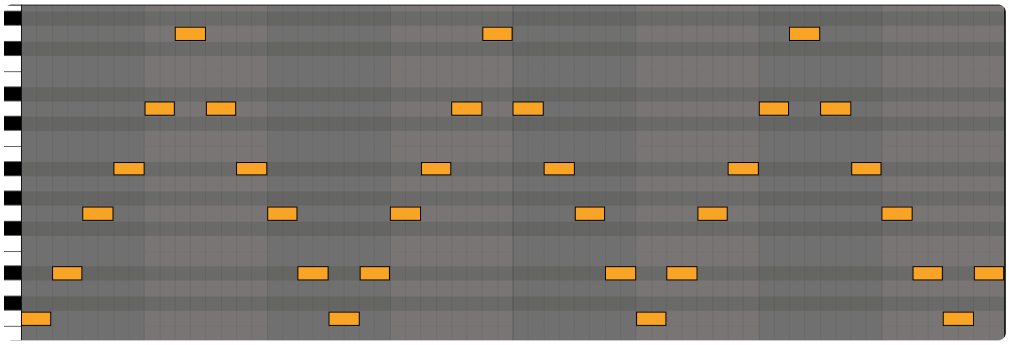
- **Up** – all the notes held will be played in an ascending arpeggio.



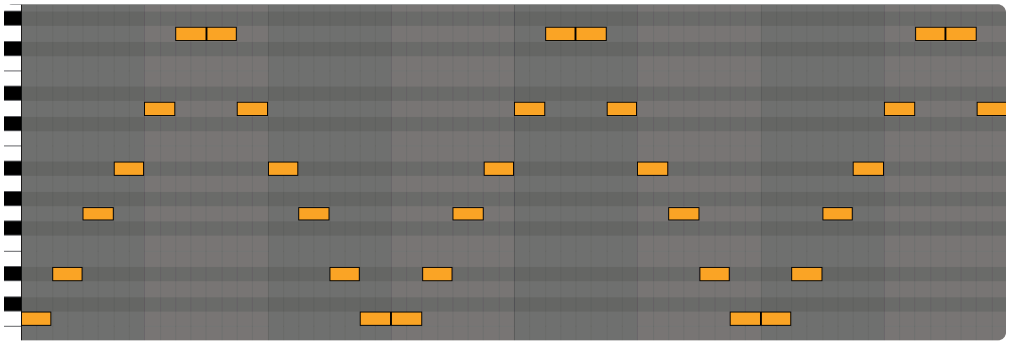
- **Down** – all the notes held will be played in a descending arpeggio.



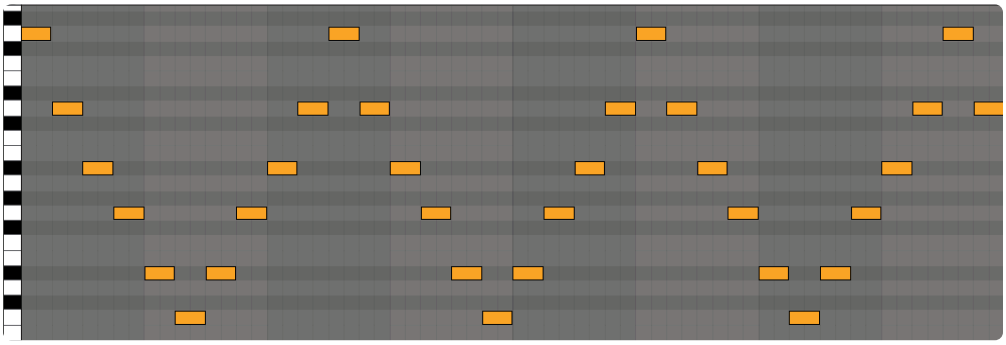
- **Up/Down** – all the notes held will first be played ascending, then descending.



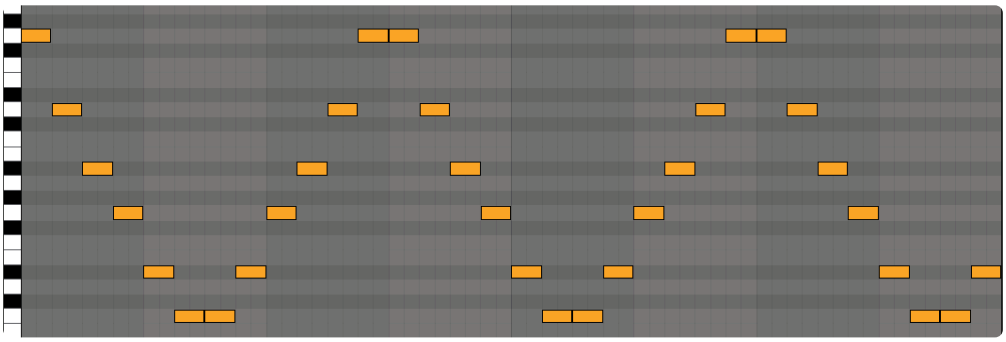
- **Up/Down+** – similar to Up/Down, but repeats the highest note and the lowest note.



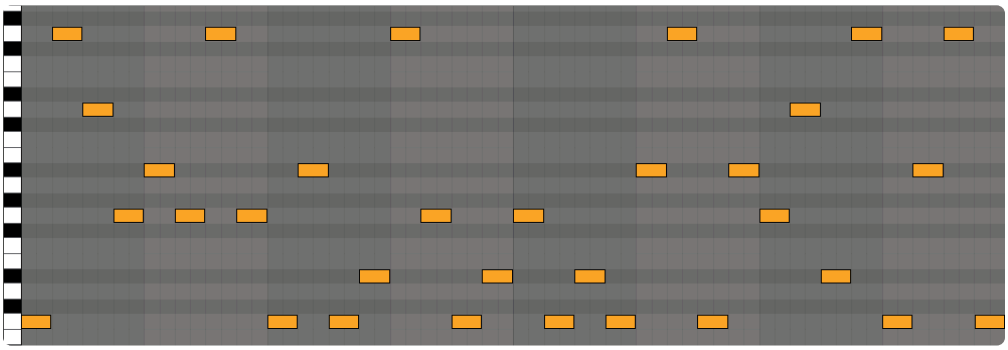
- **Down/Up** – all the notes held will first be played in a descending arpeggio, then an ascending arpeggio.



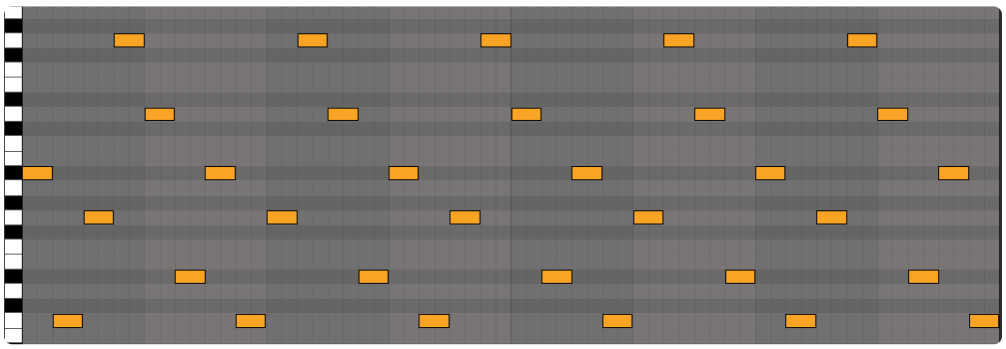
- **Down/Up+** – similar to Down/Up, but repeats the lowest and highest notes when it reverses direction.



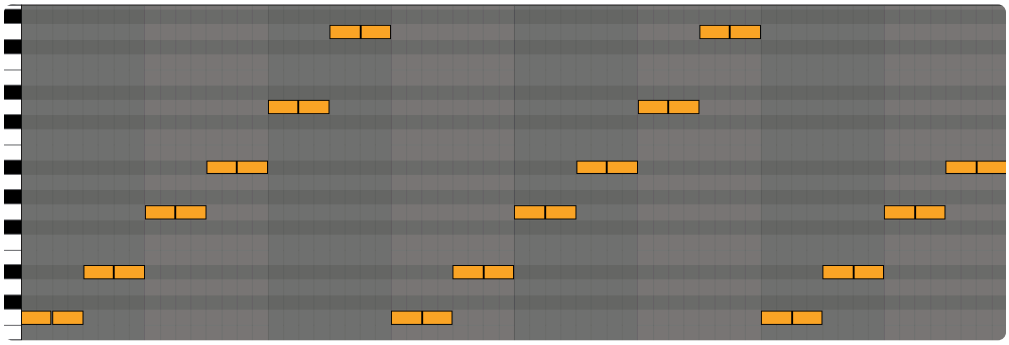
- **Random** – All the notes held will be played in random order.



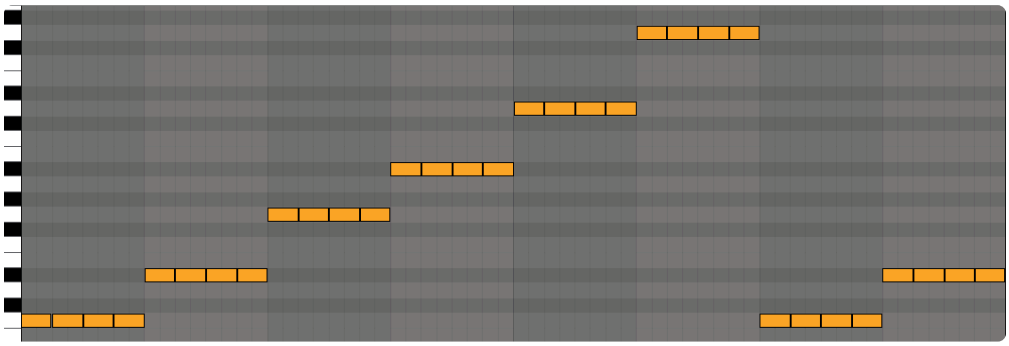
- **As Played** – The notes are played in the order they are triggered.



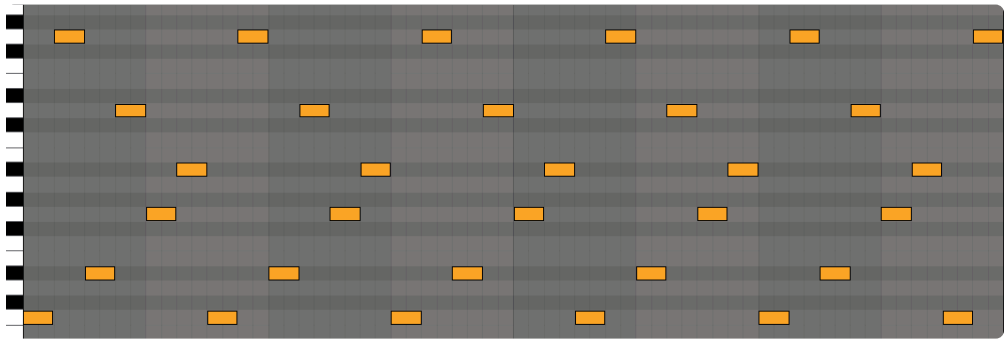
- **Repeat X2** – Every note in the pattern will be repeated twice, in ascending order.



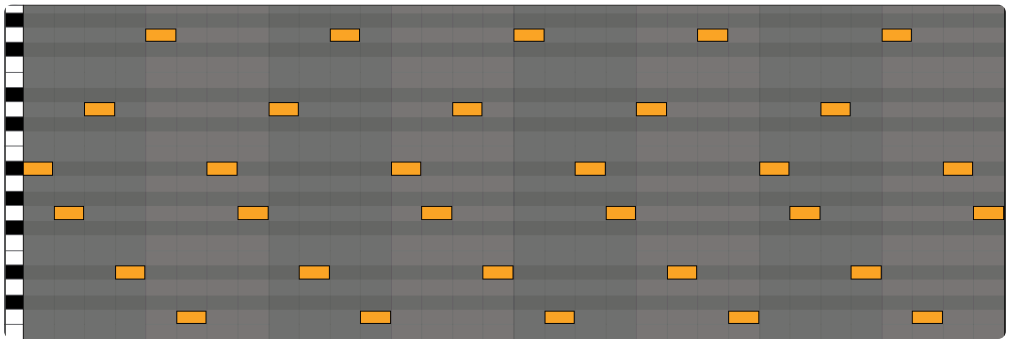
- **Repeat X4** – Every note in the pattern will be repeated four times, in ascending order.



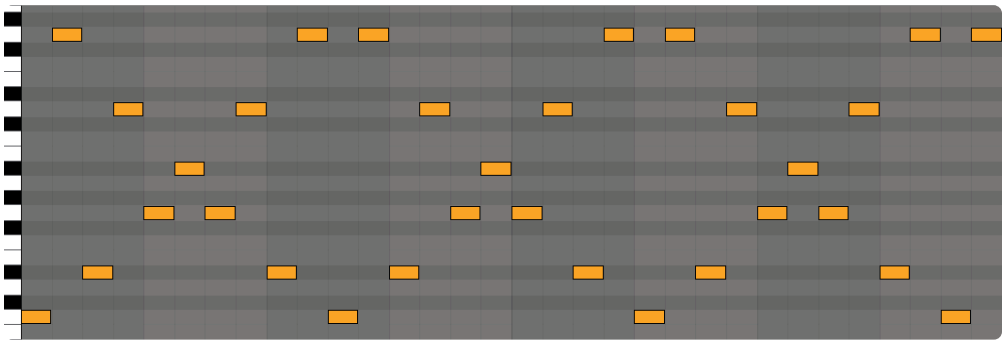
- **Join** – Join creates a pattern which starts with lowest note, then the highest note, alternating progressively inward until they meet in the middle, creating a pattern in a 6-note chord like this: 1-6-2-5-3-4



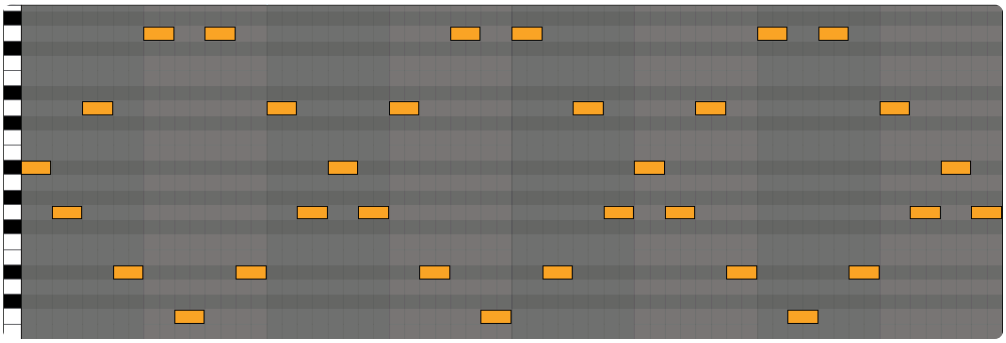
- **Spread** – Spread creates a pattern that is the reverse of Join, creating a pattern which starts in the middle, alternating progressively outward until they reach the outermost notes, creating a pattern in a 6-note chord like this: 3-4-2-5-1-6



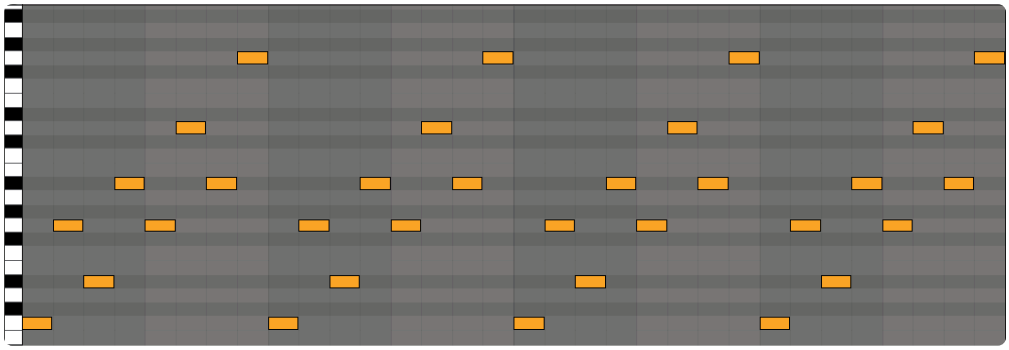
- **Join/Spread** – Join/Spread begins with Join and at the end of the pattern, continues with the same notes in the Spread pattern.



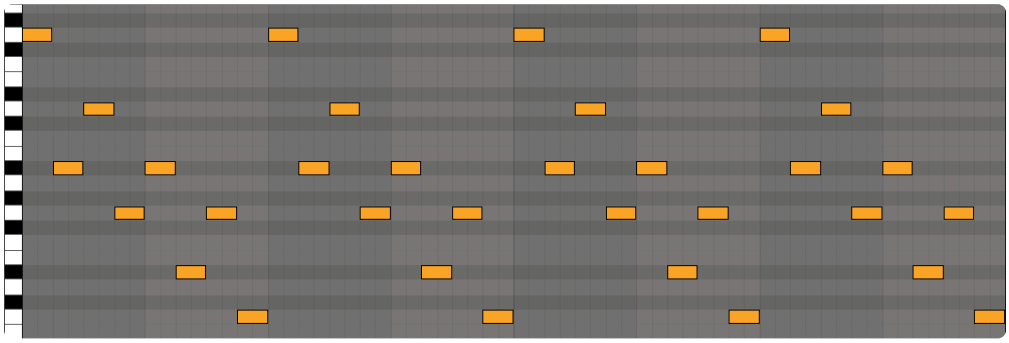
- **Spread/Join** – Spread/Join begins with Spread and at the end of the pattern, continues with the same notes in the Join pattern.



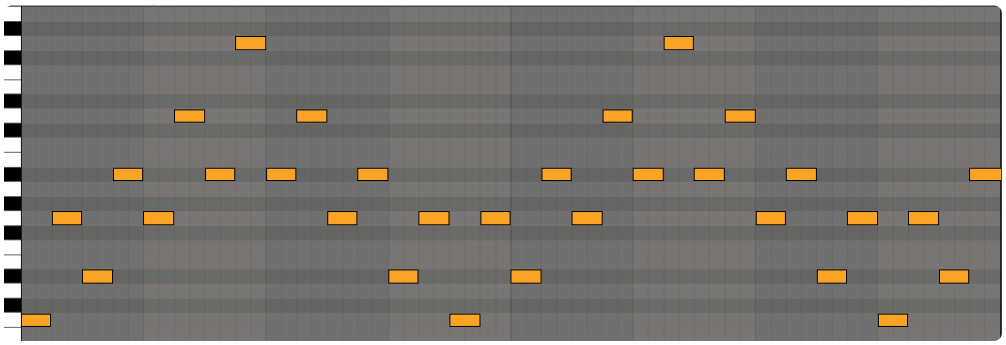
- **Stairs Up** – Stairs Up creates a pattern which, starting with the lowest note, goes two notes up and one note down, continuing the pattern upwards.



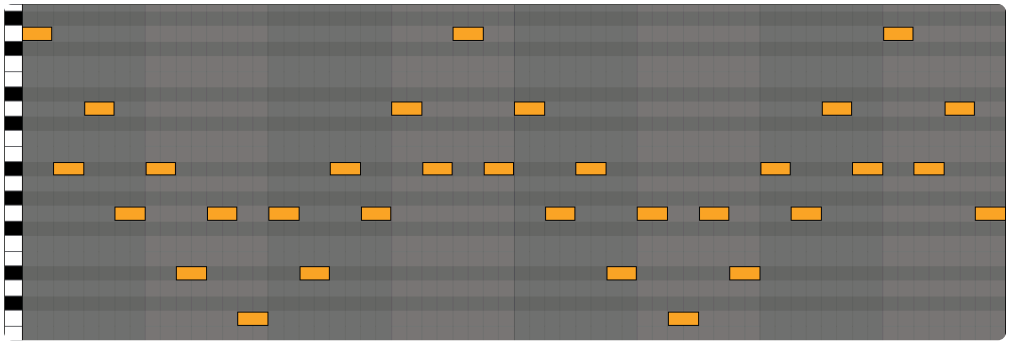
- **Stairs Down** – Stairs Down is the reverse of Stairs Up, starting with the highest note.



- **Stairs Up/Down** – Stairs Up/Down begins with Stairs Up and at the end of the pattern, reverses direction, using the same notes to play the Stairs Down pattern.



- **Stairs Down/Up** – Stairs Down/Up begins with Stairs Down and at the end of the pattern, reverses direction, using the same notes to play the Stairs Up pattern.



NOTE: Combinations of Note Patterns, Play Modes, and Octaves can create a large number of variations—experimentation is encouraged!

11.3. Play Modes

The Play Mode menu has 3 options. Only the steps and their modifiers are affected—not the selected note patterns.

- **Loop**
  This mode plays from the beginning of the pattern and repeats until the held notes are released.

- **Chaos**
  This mode randomly re-orders the steps within the active range (including any blank steps) while maintaining the note pattern, step velocity, and step modifiers.

- **Once**
  This mode plays the active range once and stops. This can be useful for a variety of FX, including one-shots, up or down glissandos (using note transpositions), and even velocity-based crescendos or decrescendos.

11.4. Step Modifiers

Step Modifiers are powerful, flexible tools that add specific behaviors to any step, allowing you to create complex and creative patterns.

Click on the square pane above each step to reveal the Step Modifier menu, then make a selection from the 5 fly-out menus.

None

“None” is the default state and no Step Modifiers are applied. If a Step Modifier is selected, you can select “None” to clear it.

Transpose

You can select the Transpose value by choosing the number of half steps the played note will be transposed up or down.
Range: +/- 24 half steps

When a Transpose modifier is selected, the transposition value will be displayed in blue.

Slide

You can select the Slide value by choosing the number of half steps the played note will bend up or down in a step, allowing you to create TB-303-style pitch slides as part of the arpeggiation. The speed at which the

bends occur is set by moving the Rate Slider above the Slide value—all the way left is the fastest and all the way right is the slowest. Slide is the only Step Modifier that can be used multiple times over the length of a multi-step note, allowing for legato slides.
Range: +/- 24 half steps

Slide uses Pitch Bend messages to create the pitch slides. Once you engage Slide, Omnisphere's Pitch Bend range is automatically changed to +/- 24 half steps. The Pitch Bend messages can be recorded using the Capture feature. When using captured MIDI Arpeggiator data with another instrument, make sure the Pitch Bend range on that device or VI is set to +/- 24 half steps.

NOTE: Slides are always relative to the played note.

Chord

When a Chord Modifier is applied to a step, that step will play a chord (some or all of the notes held in the pattern, depending on the selected modifier).

Chord Modifier Types

There are 9 Chord Modifier Types:

- **Chord**
  Plays all held notes.

- **Chord Voicing 1**
  Plays only the odd-numbered notes in the held chord.
  E.G. If you play a 6 note chord, it will play a chord comprised of the 1st, 3rd, and 5th notes.

- **Chord Voicing 2**
  Plays only the even-numbered notes in the held chord.
  E.G. If you play a 6 note chord, it will play a chord comprised of the 2nd, 4th, and 6th notes.

- **Chord Inversion +1**
  Plays the first inversion of the chord.

E.G. if you play C3-E3-G3, it will play E3-G3-C4. If you play C3-E3-A3-D4, it will play E3-A3-C4-D4.

- **Chord Inversion +2**
  Plays the second inversion of the chord.
  E.G. if you play C3-E3-G3-B3, it will play G3-B3-C4-E4.

- **Chord Inversion +3**
  Plays the third inversion of the chord.
  E.G. if you play C3-E3-G3-A3, it will play A3-C4-E4-G4.

- **Chord Inversion -1**
  This is similar to Chord Inversion +1, but inverts downward one chord step instead.
  E.G. if you play C3-E3-G3, it will play G2-C3-E3.

- **Chord Inversion -2**
  Inverts downward two chord steps.
  E.G. if you play C3-E3-G3, it will play E2-G2-C3.

- **Chord Inversion -3**
  Inverts downward three chord steps.
  E.G. if you play C3-E3-G3, it will play C2-E2-G2.

Hi-Low

- **Lowest**
  The modifier will ignore the Arpeggiator mode and always play the lowest held note.

- **Highest**
  The modified step will ignore the Arpeggiator mode and always play the highest held note.

Step Dividers

- **Step Divider 2**
  This modifier divides the step into 2 equal parts and triggers the same note twice.
  E.G. If the step was supposed to play one 8th-note on C4, it will play two 16th-notes on C4 in the same time.

- **Step Divider 3**
  Divides the step into 3 equal parts.

- **Step Divider 4**
  Divides the step into 4 equal parts.

- **Step Divider 2 Rise**
  Divides the step into 2 equal parts that play with an increasing velocity.

- **Step Divider 3 Rise**
  Divides the step into 3 equal parts that play with an increasing velocity.

- **Step Divider 4 Rise**
  Divides the step into 4 equal parts that play with an increasing velocity.

- **Step Divider 2 Fall**
  Divides the step into 2 equal parts that play with a decreasing velocity.

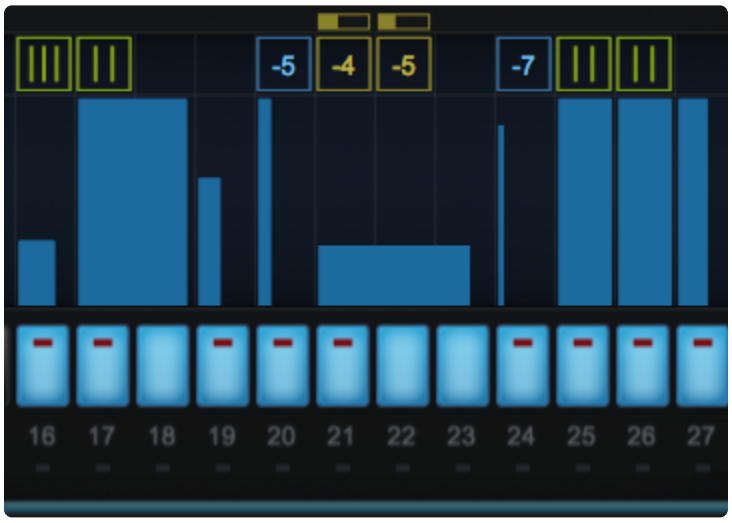
- **Step Divider 3 Fall**
  Divides the step into 3 equal parts that play with a decreasing velocity.

- **Step Divider 4 Fall**
  Divides the step into 4 equal parts that play with a decreasing velocity.

NOTE: Step dividers can be applied to tied notes. For example, if four 16th-note steps are tied and a Step Divider 3 is used, it's possible to add irregular rhythms to the pattern.

11.5. Pattern Programming

Omnisphere's ARPEGGIATOR can have up to 32 steps in a pattern. Each step can have its own velocity, length, and Step Modifier.



To change the velocity of a step, you can hover and scroll or click and hold the top of the step to drag it up or down.

NOTE: When a step bar is scrolled all the way down, click in the empty space above to bring it back up.

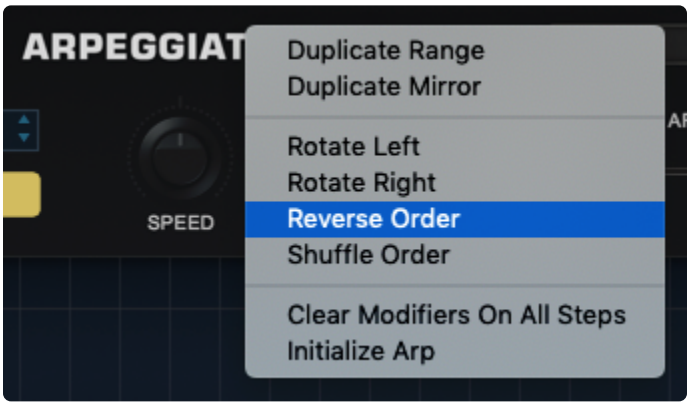
Two or more steps can be combined to create a tie. The fastest way to tie steps together is to double-click the next step to the right. Finer adjustments to the duration of an individual step can be achieved by holding down SHIFT while dragging the right edge of the bar horizontally until the desired length is achieved. If the subsequent step of the pattern is empty, the duration of a step can be dragged into the empty step to increase its note value.

Step Modifiers are located above each step. Click on the square pane to reveal the menu and select a modifier.


ARPEGGIATOR
1/16
Legato
1 OCT
None
Transpose
Slide
Chords
Hi-Low
Step Dividers
Step Divider 2
Step Divider 3
Step Divider 4
Step Divider 2 Rise
Step Divider 3 Rise
Step Divider 4 Rise
Step Divider 2 Fall
Step Divider 3 Fall
Step Divider 4 Fall
SPEED
LENGTH
Lo
+12
+++
Hi
8
9
10
11
12
13
14
20
21
22

11.6. Functions

Click on the down arrow to the right of the page header to reveal the pop-up menu.



- **Duplicate Range**
  Duplicates the active step range and places the copy directly after the last step in the active range. For example if the active range is 8 steps long, it copies steps 1-8 to steps 9-16, respectively, and the range becomes 16 steps long.

- **Duplicate Mirror**
  Duplicates the active step range and places a mirrored copy directly after the last step in the active range. For example if the active range is 8 steps long, it copies steps 1-8 to steps 9-16 and inverts their order.

- **Rotate Left**
  Shifts all the steps in the active range to the left, bringing the leftmost (first) step around to fill in the space voided by the rightmost (last) step.

- **Rotate Right**
  Shifts all the steps in the active range to the right, bringing the rightmost (last) step around to fill in the space voided by the leftmost (first) step.

- **Reverse Order**
  Reverses the steps within the active range, creating a mirror image in place, without adding any steps.

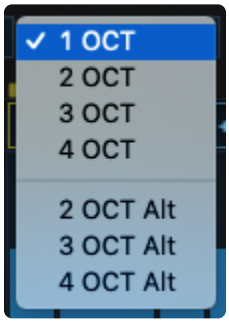
- **Shuffle Order**
  Shuffles the steps randomly within the active range.

NOTE: All Step ON/OFF, Step Length, Step Velocity, and Step Modifier data move with the Steps.

- **Clear Modifiers on All Steps**
  Removes all existing modifiers.

- **Initialize Arp**
  Removes all Steps and Modifiers and returns the settings to the default state.

11.7. Octave



1 OCT
Plays a pattern based only on notes that are being held on the MIDI controller.

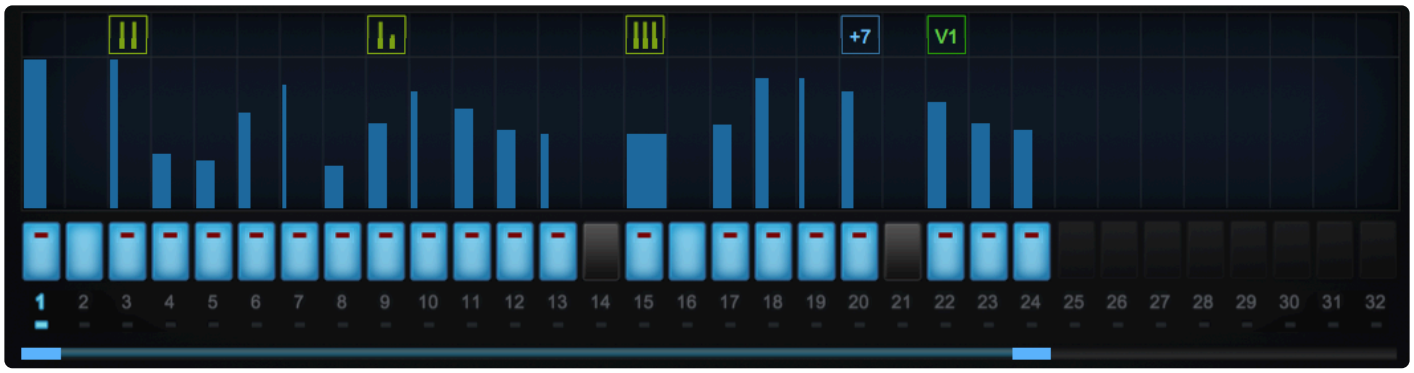
2 OCT
Plays a pattern based on notes being held on the MIDI controller, followed by the same pattern one octave higher.

3 OCT
Plays a pattern based on notes being held on the MIDI controller, followed by the same pattern one octave, then two octaves higher—a three-octave range.

4 OCT
Plays 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—a four-octave range.

2 OCT Alt / 3 OCT Alt / 4 OCT Alt
When using any of the ALT modes, each note in the pattern is played through the selected octave range before moving on to the next note.

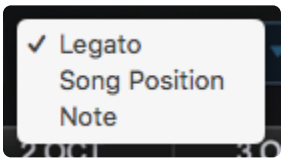
11.8. Range



The **Range Slider** (the thin blue bar under the steps) determines how many steps the pattern will have. To change the number of steps, click and drag the right end until the desired number of steps is set.
Range: 1 ~ 32

NOTE – Dragging the Range Slider to the left in order to shorten the pattern does not delete steps—it merely hides them. You can access them again by moving the slider to the right.

11.9. Trigger

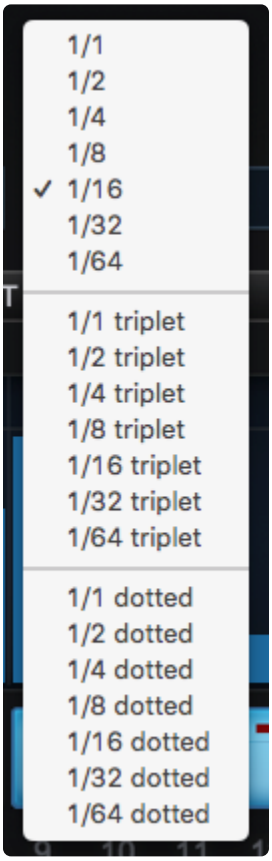


Legato
The pattern will continue through all of the steps as long as notes are played legato. If staccato notes are played, or if you lift your hand from the keys before the pattern has finished, it will restart from the first step.

Song Position
The pattern will follow the song position (bar & beats) of the host.

Note
Every time a new note is triggered, the pattern will restart from the first step.

11.10. Clock



The **CLOCK** setting lets you change the resolution of the pattern, and determines the note value of each step. For example, if you select 1/8, each step will be equal to an eighth note. In addition to straight steps, triplets, and dotted note values are available.

Available ranges are:

- **Straight Steps**
  1/1 ~ 1/32

- **Triplets**
  1/1 triplet ~ 1/64 triplet

- **Dotted Notes**
  1/1 dotted ~ 1/64 dotted

11.11. Length

The **LENGTH** control lets you adjust the overall length (the time between MIDI note-ON and note-OFF) of all steps in the arpeggio.

In the example below, the length of each step is at the maximum.

Turning the Length knob counterclockwise shortens the steps.

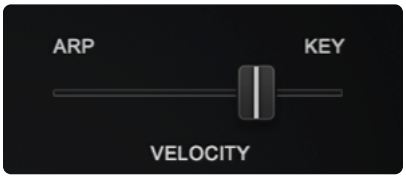
NOTE: Changing the length of individual events is discussed in the [Pattern Programming] section.

11.12. Swing

- At the **SWING** control's minimum setting, all events are aligned to the tempo grid.
- As the setting is increased, the events will have a greater swing groove.
- At high settings the swing will be exaggerated.

NOTE: When you adjust / enable the SWING control to any value above 0.000, the Groove-Lock Strength slider will be set to maximum.

11.13. Velocity



The **VELOCITY** control determines how much the velocity of incoming notes affects the dynamics of the Arpeggiator pattern. At the 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 have more control over the dynamics of the Arpeggiator pattern.

The default is a setting of 50% and can a good balance, since it allows the incoming MIDI velocity to interact with the dynamics of the pattern, but we encourage you to experiment for different applications.

11.14. Speed

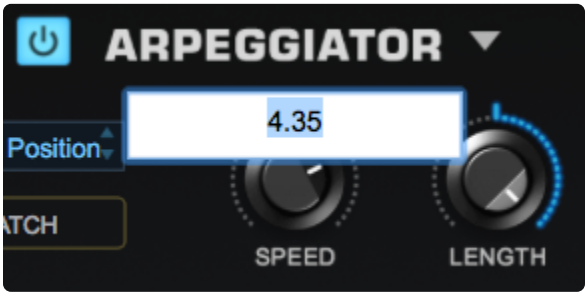
The **SPEED** knob controls the offset to the host tempo. It can be either perfectly locked at a variety of speeds or unsynched and completely free-wheeling.

When set to 1.00 (the center position), the speed is locked to the host tempo at the quarter note.

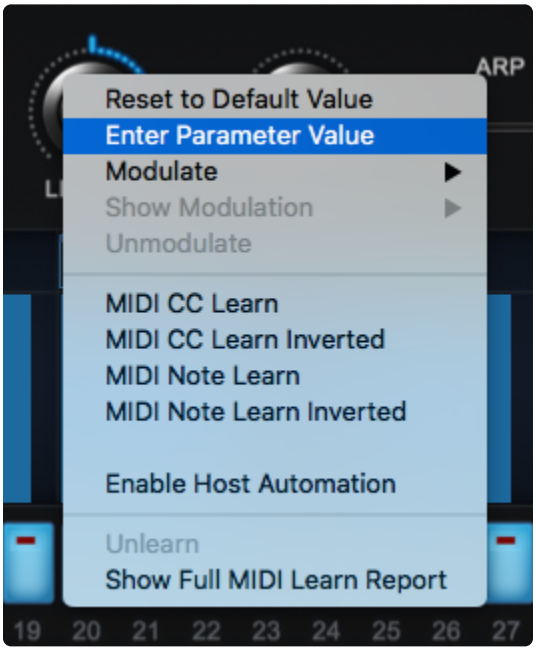
When turned all the way right, the value is 8X the host tempo and when turned all the way left, the value is 1/8 of the host tempo.

There are also convenient detent points at .500, 1.0, 2.0 and 4.0.

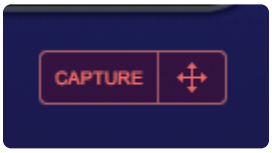
In addition to the wide range of settings between the two extremes, the SPEED values can be set even more precisely by holding down SHIFT while turning the knob.



Right-click to Reset, Modulate, enter a precise Parameter Value, or MIDI-Learn.

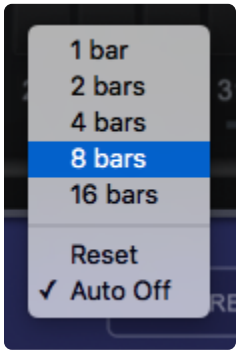

ARP
Reset to Default Value
Enter Parameter Value
Modulate
Show Modulation
Unmodulate
MIDI CC Learn
MIDI CC Learn Inverted
MIDI Note Learn
MIDI Note Learn Inverted
Enable Host Automation
Unlearn
Show Full MIDI Learn Report
19 20 21 22 23 24 25 26 27

11.15. Capture

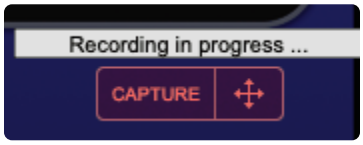


Located in the lower right corner of the Arpeggiator page, the **CAPTURE** button allows you to dynamically record and capture the output of the Arpeggiator, creating a MIDI clip.

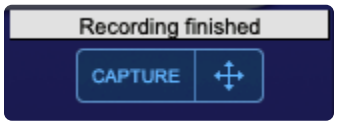
The record length can be set to either 1, 2, 4, 8, or 16 bars—the choices appear when you click on the button.



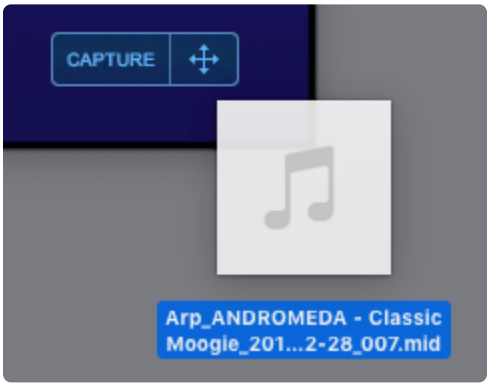
Clicking on the CAPTURE button and choosing the length sets it to “record-ready” mode and the button will flash red.

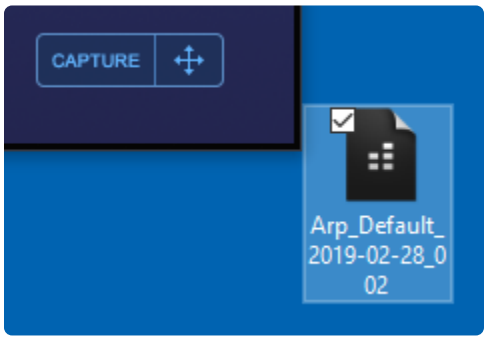


The recording starts once you play the first note and continues for the specified length (the button will be solid red while recording).



When the recording is complete, the button will revert to blue and you can drag the MIDI clip from the “Drag & Drop” icon to the right of the button to the Mac Finder, Windows Desktop, or directly into your DAW to edit any way you want.





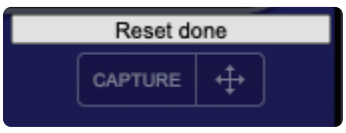
NOTE: The MIDI files generated by CAPTURE cannot be dragged back into Omnisphere.

If you wish to change anything about the capture, you can repeat the process until you are satisfied, or, if you want to keep all your captures in order to compare them, drag them the Mac Finder or Windows Desktop before re-recording and they will be numbered chronologically.

Auto Off

When Auto Off is selected, it will display a checkmark (this is the default setting).
Once you drag the MIDI file to its destination, the ARPEGGIATOR will be turned OFF.
If you want it to remain ON for further captures, simply uncheck this menu item (the checkmark will disappear).

Once you are finished with your Capture(s), you can use the **RESET** function at the bottom of the pop-up menu and the CAPTURE button will return to grey.



NOTE: Slides will be represented in the MIDI clips as Pitch Bend data with a range of +/- 2 octaves.

11.16. Latch

The **LATCH** button allows you to toggle LATCH ON / OFF for the selected Arpeggiator pattern.

When LATCH is enabled, the Arpeggiator pattern will continue to play, even if the notes are released. If you are already holding notes when you enable LATCH, the pattern will be latched. Any latched pattern will stop when either the switch is toggled OFF, you replay the notes, or as soon as the host transport stops.

NOTE: This duplicates the LATCH Switch on the Main Page, as well as the LIVE and STACK Modes pages.

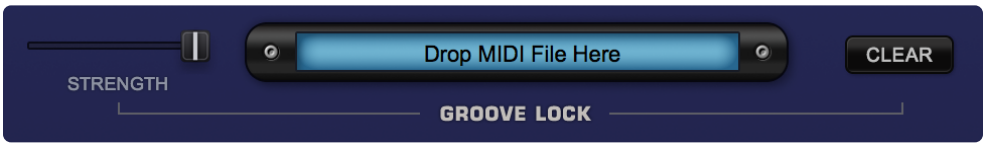
11.17. Reset

When **RESET** is selected, the pattern will immediately restart from the first step.

NOTE: Using Reset returns to the first step regardless of Trigger mode.

NOTE: The Reset button is modulatable.

11.18. Groove Lock



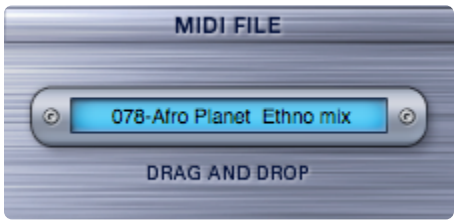
GROOVE LOCK is one of Omnisphere's most innovative features. In the past, arpeggiators have always had a fixed timing, so they've had limited usefulness in genres outside of electronic music. With GROOVE LOCK you can lock the groove of the ARPEGGIATOR to the feel of any **Stylus RMX** or **Standard MIDI file**. This dramatically expands the rhythmic potential of Omnisphere's ARPEGGIATOR.

Any MIDI data from Stylus RMX—including grooves that have had CHAOS applied—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.

The feel of any standard MIDI file can be used as a reference for GROOVE LOCK, as well. 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 or on the CHAOS page.

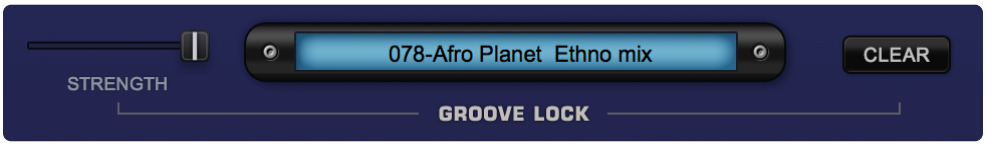
Stylus RMX DIRECTORY Page



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.


Inst 3
Manual
Compare
Copy
Paste
Undo
Redo
View: Editor
STYLUS RMX
DIRECTORY
EXP Libraries
Liquid Grooves
SPEED
HALF
DOUBLE
MIDI FILE
078-Afro Planet Tribal mix
DRAG AND DROP
FAVORITES
ADD
JUMP
EDIT SUITE
Suites
053-Euphrates 4_4
055-Sand Castles
063-Lay It Down
068-Liquid Brushes
069-Ultra Cruise
070-Bubbly
072-Tyrant
073-Bolerino
073-Mysterious
074-Smooth Stix
078-Afro Planet
078-Ice Brushes
080-Euphrates 6_8
081-Resosoul
084-Saunter
084-Swingin Cyms
089-Loose
089-Swampy
089-Swing Toms
092-Cavern Swing
094-Soul Bob
095-Aboriginal
Elements
078-Afro Planet Ethno mix
078-Afro Planet Tribal mix
HOST SYNC
0.000
EDIT
FX
Inst 2
Manual
Compare
Copy
Paste
Undo
Redo
View: Editor
PATCH BROWSER
DIRECTORY: All Spectrasonics
Search
Attributes
Sound Match
Category
Type
Genre
Author
All
ARP + BPM
Bass Instruments
Bells and Vibes
Bowed Colors
Distortion
Electro Perc
Electronic Mayhem
Ethnic World
Guitars
Hits and Bits
Human Voices
Keyboards
Noisescapes
Organs
Phoenix Rising
Sweet Beef
Wakandan War Rhino
Backwards Neosoul
Drop Springs
Weathered Strummin
Circus Nightmare
Muted Expectations
Brainball
Replicants
Innerversions
Intimate Bouncing Mallets
Analog Vibralead
Sort
UTILITY
HW
Default Multi
1 2 3 4 5 6 7 8 MULTI SYSTEM
OMNISPHERE
POWER SYNTH
Default*
SPECTRASONICS
ORB MAIN A B C D FX ARP
RESET
ARPEGGIATOR
COMBO - Chordflow
Up
1/16
Legato
Loop
1 OCT
LATCH
SPEED
LENGTH
SWING
ARP
KEY
VELOCITY
Chd V1 +12 Chd V2 +12 Lo Chd V2 +12 Chd V1 +12 Lo
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
STRENGTH
078-Afro Planet Tribal mix
CLEAR
CAPTURE
GROOVE LOCK
Omnisphere


STRENGTH
078-Afro Planet Ethno mix
CLEAR
GROOVE LOCK

11.18.1. Strength and Clear

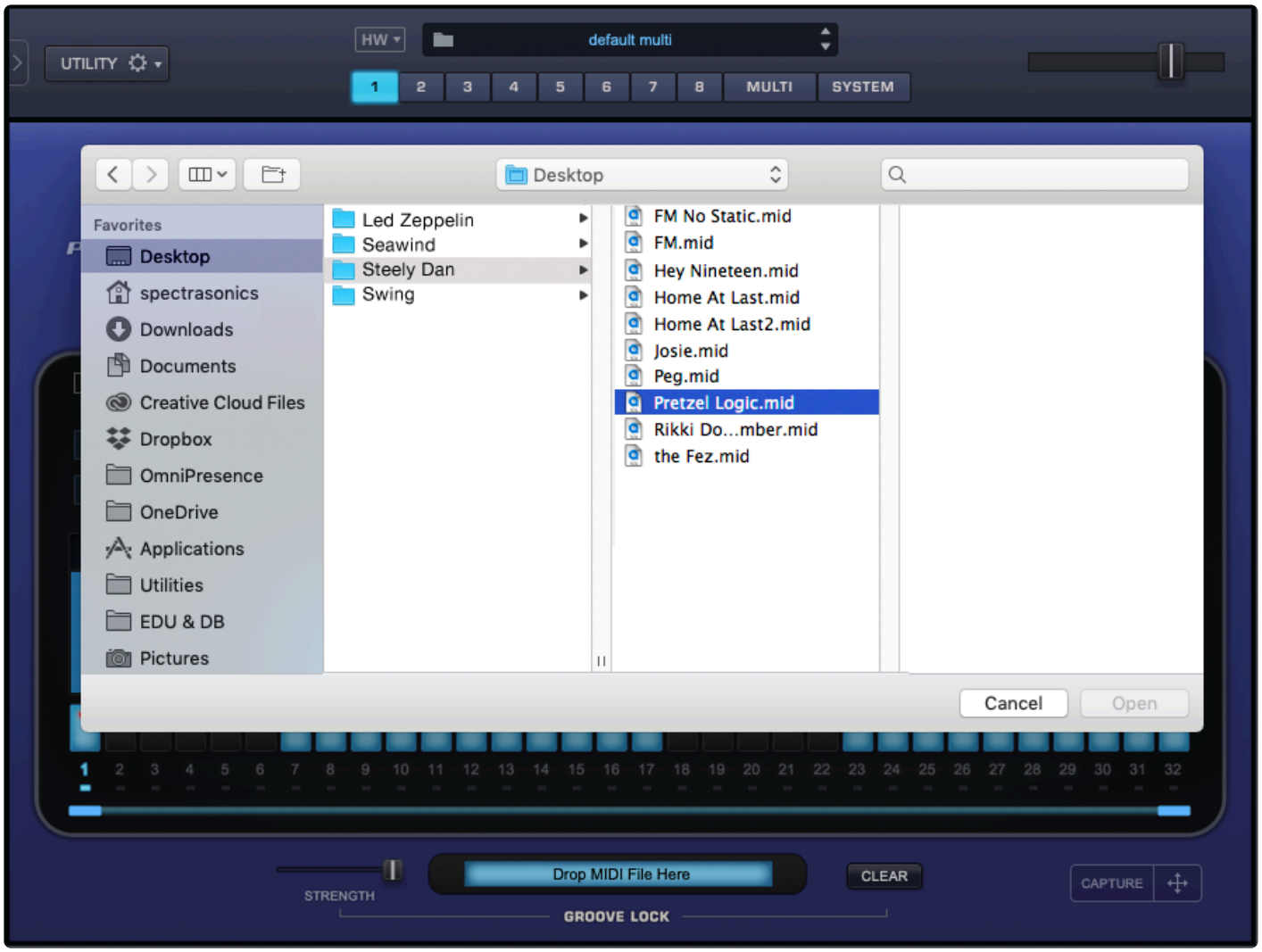
Once you drop a MIDI groove into the Arpeggiator, you can set the amount of the lock with the GROOVE LOCK's **STRENGTH** slider.

STRENGTH is a blend control that determines how much the imported MIDI groove will affect the feel of the arpeggiated pattern. At the minimum setting, Omnisphere will ignore the imported MIDI groove in favor of a standard, straight "grid" feel. As you move STRENGTH towards maximum settings, the imported MIDI groove will begin to override the grid and the feel will be based on the imported groove.

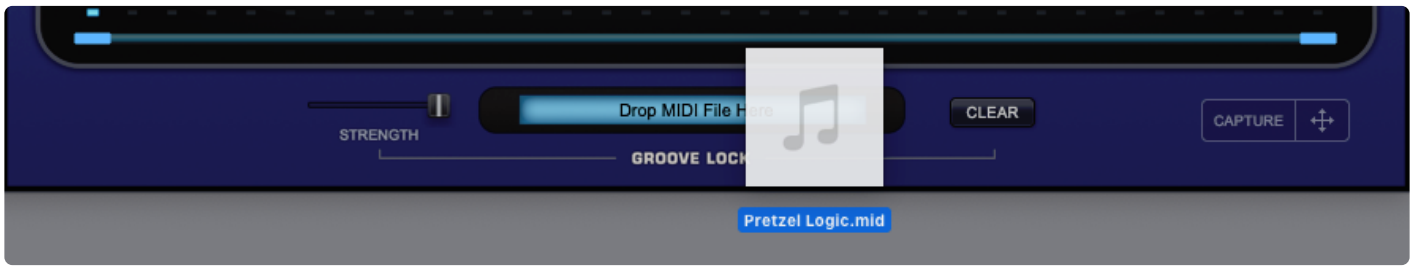
NOTE: When you adjust / enable the SWING control to any value above 0.000, the Groove-Lock Strength slider will be set to maximum.

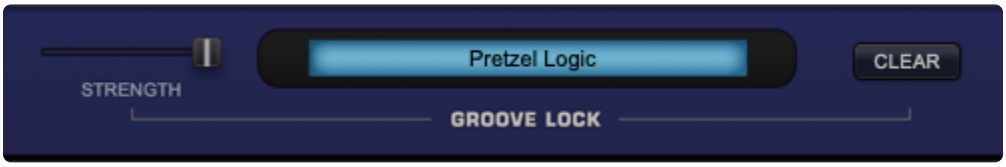
CLEAR removes the MIDI file from the from the GROOVE LOCK field.

11.18.2. MIDI File Browsing



In addition to drag and drop, you can also click inside the GROOVE LOCK field to open a file dialog, which allows browsing to any .mid file on your computer you wish to import into the ARPEGGIATOR.



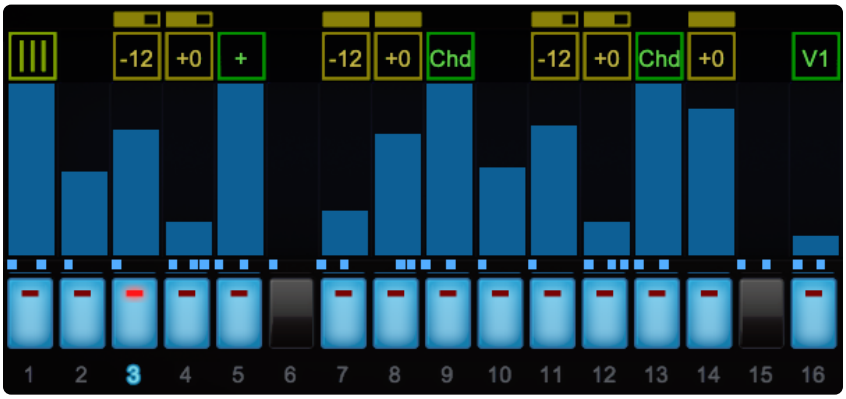


NOTE: Omnisphere will only recognize the first 128 MIDI note events in a .mid file—any subsequent notes are ignored.

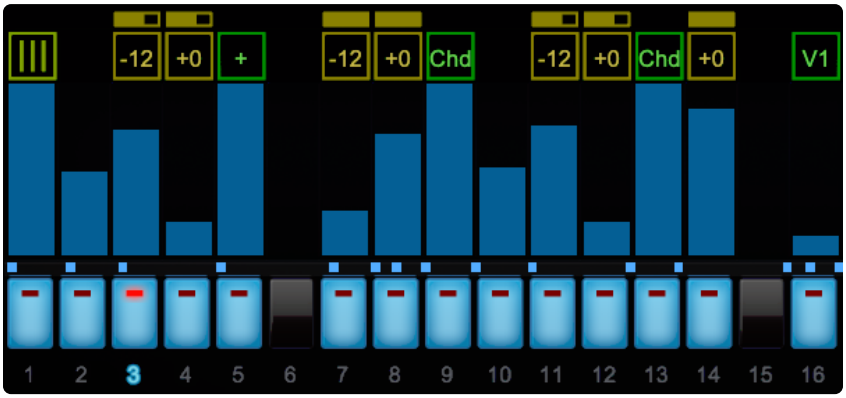
11.18.3. Indicator Dots

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 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 **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.

12. The Mixer

The **MIXER** page provides a complete overview of all the Parts in a **MULTI**. 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 and Pan
- AUX Sends 1 ~ 4

12.1. Part Number and 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 1–16

NOTE: While either LIVE MODE or STACK MODE is enabled, these settings are ignored.

12.2. Mute and 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.

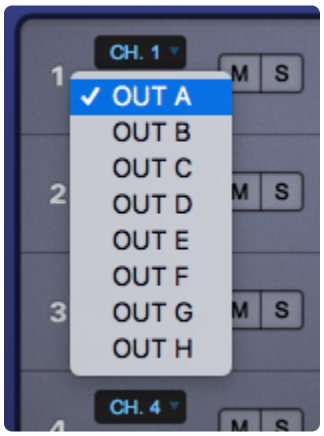
Solo

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. You can solo multiple Parts by selecting additional Solo buttons.

NOTE: The Solo and Mute Buttons can be MIDI-Learned. Using this feature can make it easy to Mute or Solo multiple Parts simultaneously. Check out the MIDI Learn chapter for more information.

12.3. Output Assignment

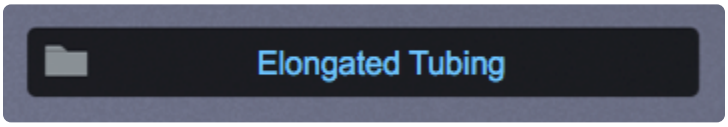
By default, Parts 1 – 8 are assigned to OUT A. However, each Part in a MULTI can be routed to any one of the 8 output channels. Select the desired channel from the Output Channel drop-down menu.



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.

12.4. Patch Name



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.

12.5. Level and Pan

LEVEL

Each Part has a **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

PAN

Each Part has a PAN control. Moving the knob counter-clockwise pans to the left. Moving the knob clockwise pans to the right.
Range 0.000 to 1.000

12.6. 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 FX chapter for a signal flow diagram.

CPU CONSERVATION AND MUTING

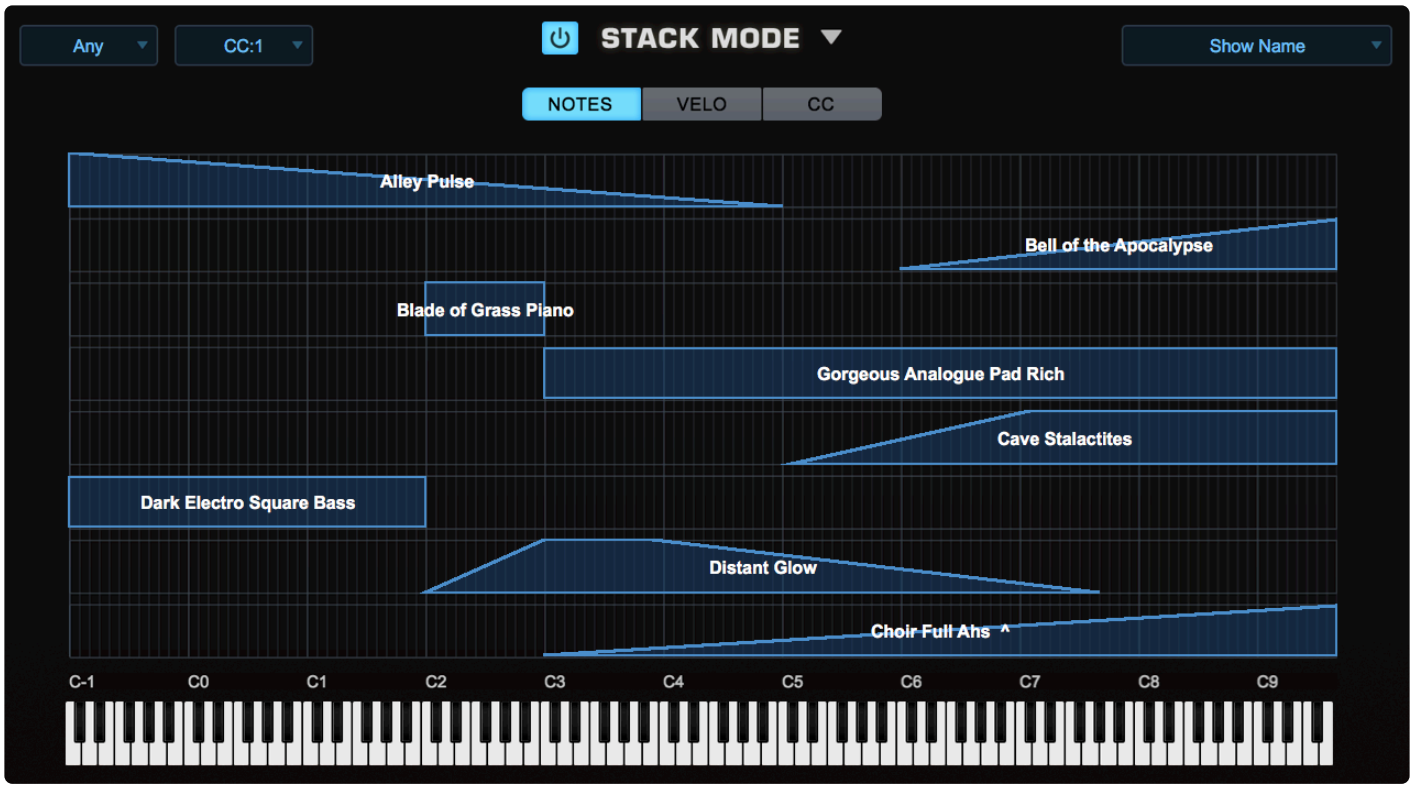
When all 32 AUX knobs are in the zero position (fully counter-clockwise), all aux send FX will be internally bypassed to conserve CPU power.

Conversely, if any one of the AUX 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 knobs 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.

13. 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**, **VELO**, 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 VELO, 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 Continuous Controller messages.

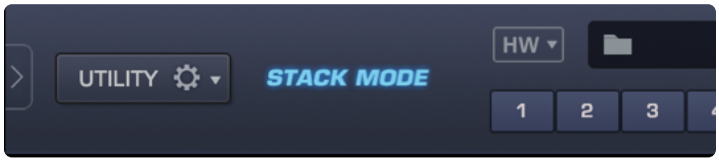
NOTE: STACK MODE works with multiple Patches simultaneously, so it requires a powerful

computer to make the best use of it. To optimize performance, mute Patch FX like Reverbs and Delays and use the shared [Aux Sends FX] instead.

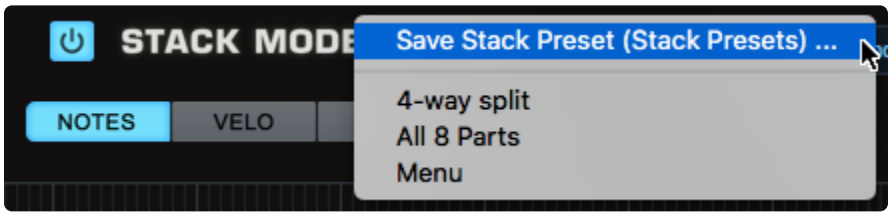
Enabling STACK MODE

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.



13.1. 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 set up a STACK MODE-enabled MULTI.

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.

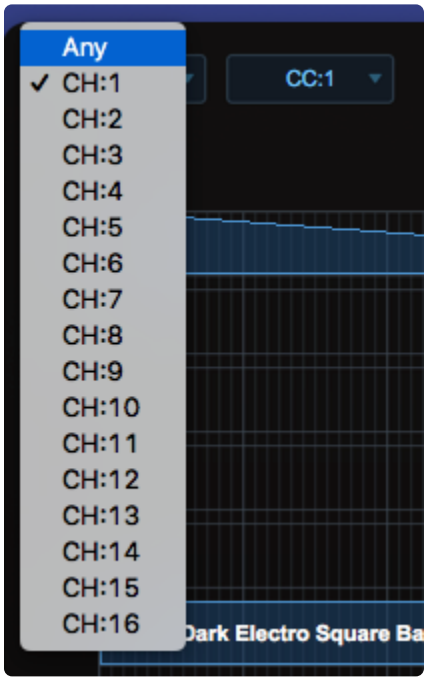
When a Stack Preset is loaded, it will replace the layout of the STACK MODE Grid. Part Regions will be automatically matched to the same Part numbers they were assigned when the Preset was saved.

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 with those Regions. In other words, Stack Presets do not store Patches, Part Names, CC assignments, or the NOTES / VELOCITY / CC settings.

13.2. 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.

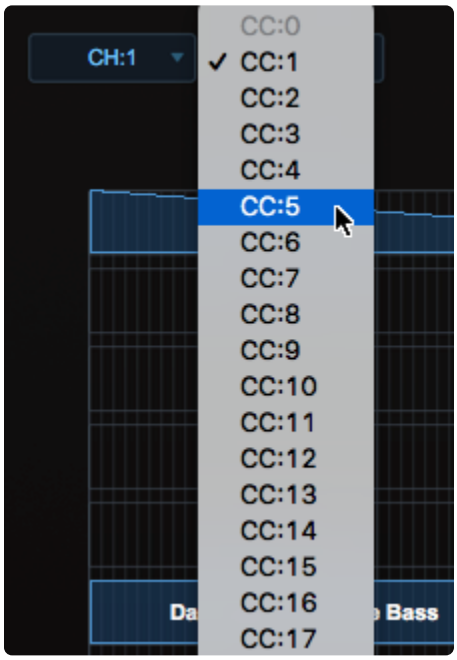
Use the **MIDI Channel Menu** to select STACK MODE's MIDI Channel.



Range Any, CH: 1 – CH: 16.

13.3. MIDI CC Menu

Use the **MIDI CC Menu** to select STACK MODE's MIDI Control Change number when using **CC Mode**.

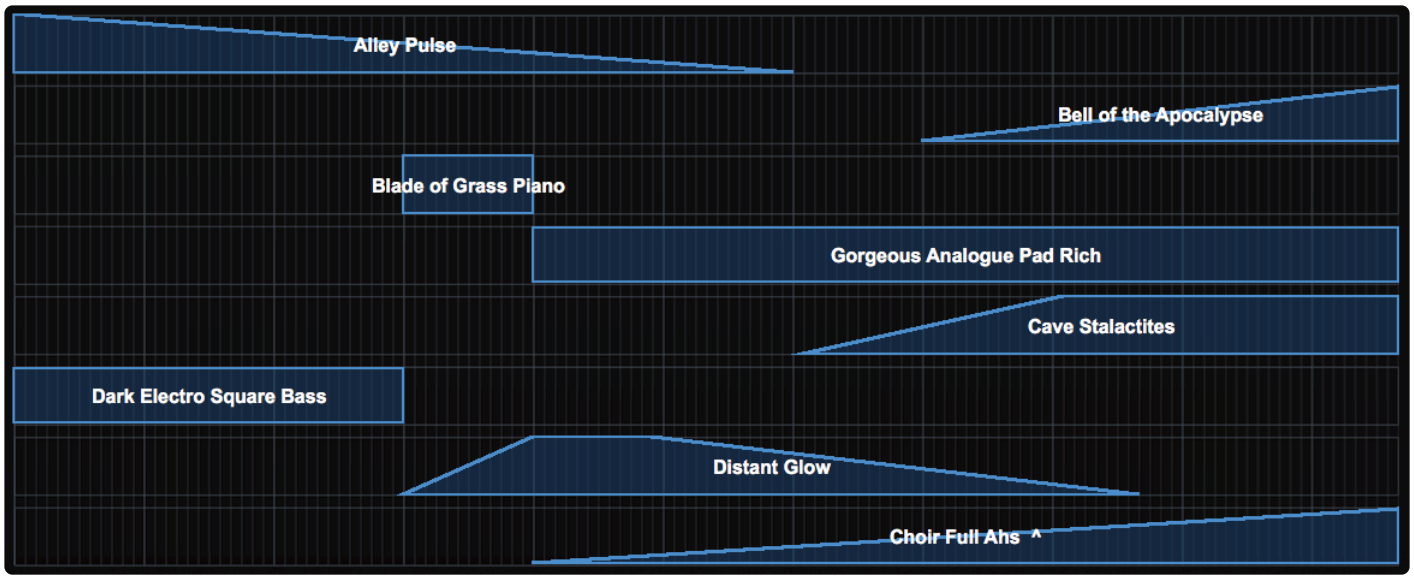


When using CC, all Parts added to the **Stack Mode Grid** will be triggered simultaneously when notes are played, even if their Regions are outside the CC value range, and not outputting audio. Therefore, this feature can put a high demand on the **CPU** on your system.

Range: CC:00 – CC:127

NOTE: CC values 0 and 32 are greyed-out as they are dedicated bank-select messages.

13.4. Grid



The **Stack Mode Grid** is made up of 8 horizontal rows, each divided by 128 lines that correspond 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.
See **Adding and Removing Parts**.

13.5. Operation Modes

There are three ways that Part Regions can be used in STACK MODE:

NOTES

- Part Regions are mapped to a MIDI Note range.

VELO

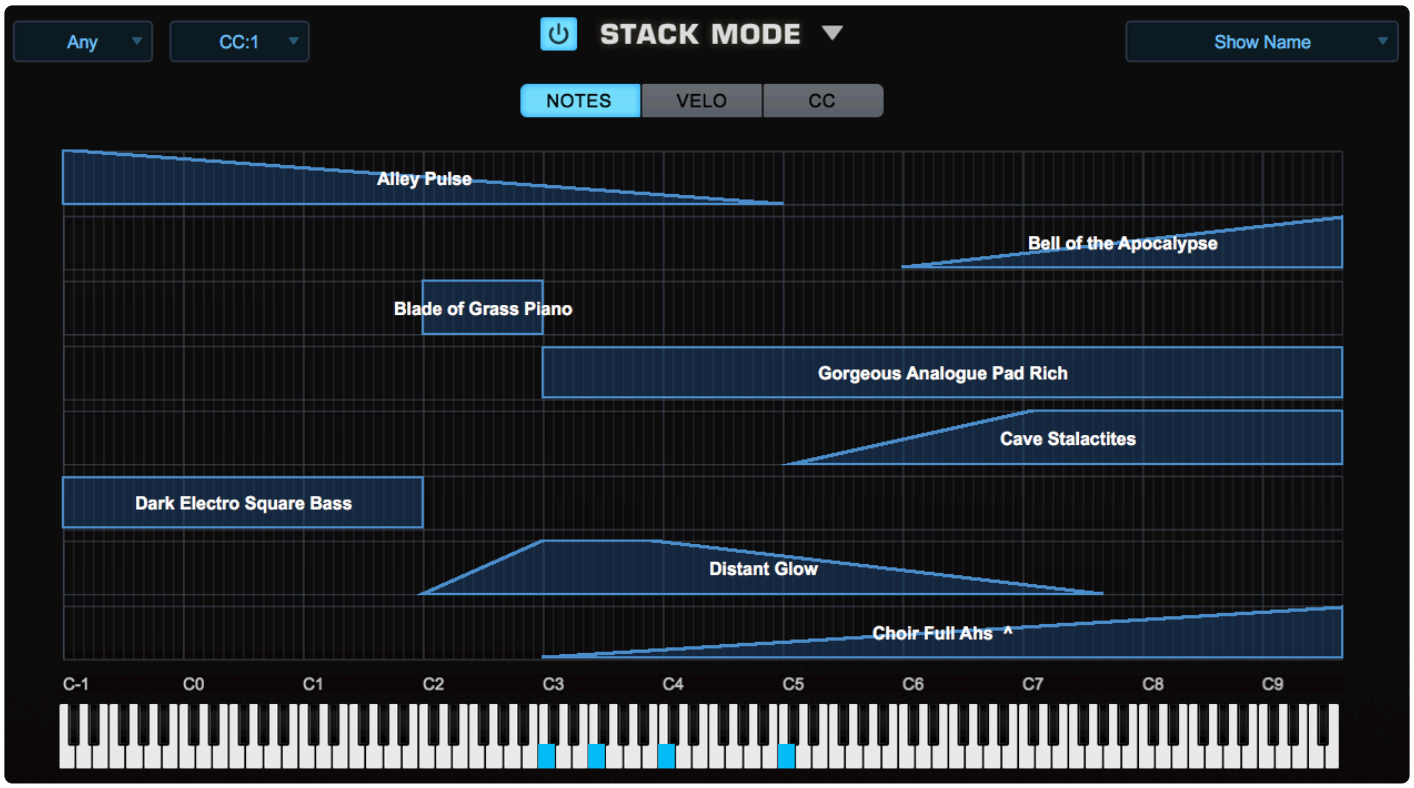
- Part Regions are mapped to a specific Velocity range.

CC

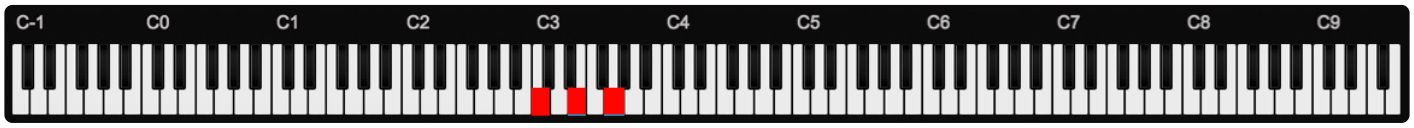
- Part Regions can be switched or cross-faded using MIDI CC messages.

Only one of these methods can be active at a time.

13.5.1. Notes Mode



When **NOTES Mode** 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.



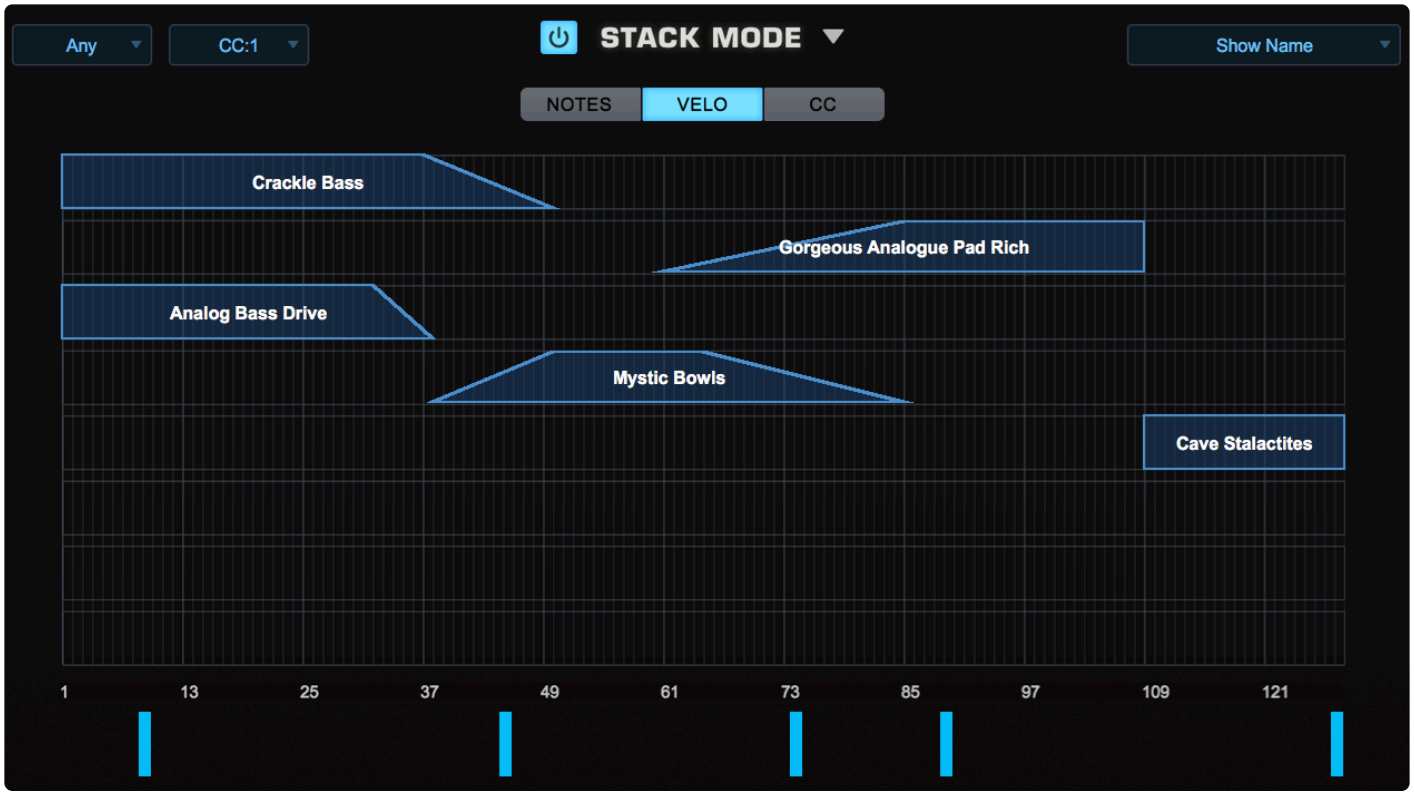
NOTE: The mini-keyboard will highlight notes in blue as they are played. Notes highlighted in red are notes that have been MIDI Note-learned in LIVE MODE, and are shown for reference only.

13.5.2. Velo Mode

VELO Mode lets you control Part-switching and cross-fading with your playing Velocity. The Parts are triggered based on their placement along the horizontal axis and the velocity of the incoming MIDI messages.

Part Regions can still be configured in the same manner (with fades, cross-fades, splits, etc.), but each is mapped to a specific Velocity range.

The mini-keyboard is replaced in the footer by white numbers representing 127 Velocity values (1~127). The incoming MIDI Note messages (and their velocity values) are displayed as vertical yellow bars. As you play notes on your controller, their velocity values will be displayed.



- In the example above, velocities below 32 will trigger both “Crackle Bass” and “Analog Bass Drive” as a layered sound.
- From 32 to 38, “Analog Bass Drive” will start to fade and as you play harder, “Crackle Bass” and “Mystic Bowls” will crossfade with each other from 37 to 49.
- At Velocity 60, “Gorgeous Analog Pad Rich” will start to fade in and as you play harder (between 65 and 86), “Mystic Bowls” will fade away.
- From 86 to 109, you’ll trigger only “Gorgeous Analog Pad Rich.”
- Velocities above 109 will trigger only “Cave Stalactites.”

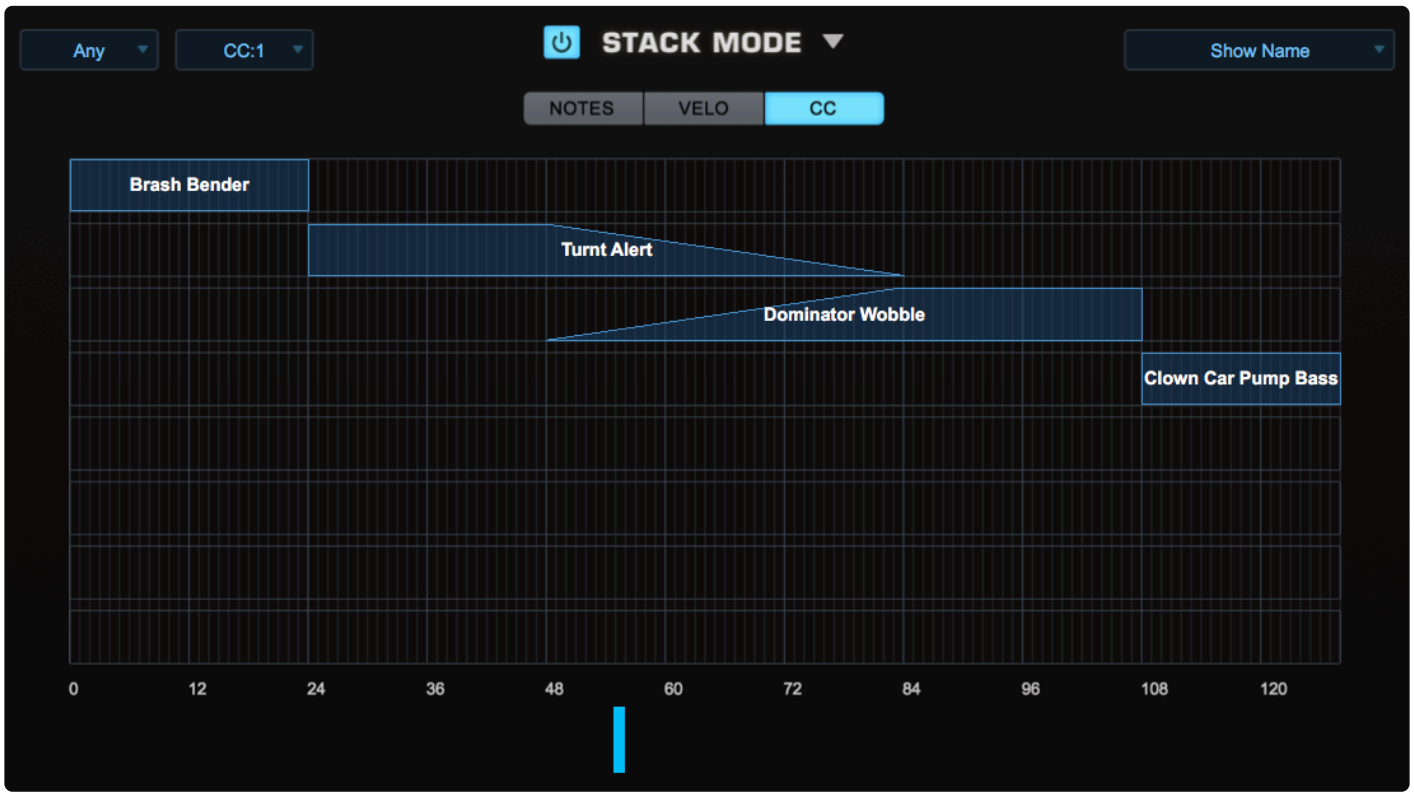
NOTE: When using VELO MODE, all Parts in the Grid will be triggered simultaneously, even if their

Regions are outside the mapped range and are not outputting audio. Therefore, this feature can put a high demand on the CPU on your system.

13.5.3. CC Mode

When **CC Mode** is selected, Part Regions can be switched or cross-faded using MIDI Control Change messages from a MIDI hardware slider, knob, or wheel. Each Region can be mapped to specific values across the MIDI CC's range. The MIDI CC number that STACK MODE uses is chosen from the MIDI CC menu in the top left of the STACK MODE page.

All of the Regions will respond to selected CC number. The current MIDI CC value is displayed as a single vertical blue bar in the footer of the Grid and will update as you move the control.

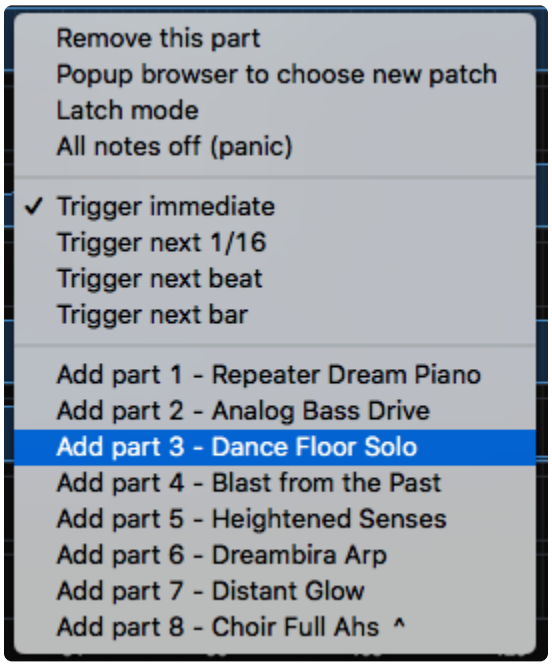


- In the example above, CC1 (Mod Wheel) is chosen.
- In the bottom range of the wheel, you will only hear "Brash Bender."
- As you push the Mod Wheel up past 24, the sound changes to "Turnt Alert."
- In the middle range, as you move the wheel between 48 and 84, "Turnt Alert" will cross-fade with "Dominator Wobble."
- You will only hear "Dominator Wobble" when the wheel is between 84 and 108.
- When the wheel is near the top (above 108), you will only hear "Clown Car Pump Bass."

NOTE: When using CC MODE, all Parts in the Grid will be triggered simultaneously, even if their

Regions are outside the mapped range and are not outputting audio. Therefore, this feature can put a high demand on the CPU on your system.

13.6. Adding and 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 “Empty.“

NOTE: You can add Parts to the STACK MODE Grid that have no Patches loaded.

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. 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.

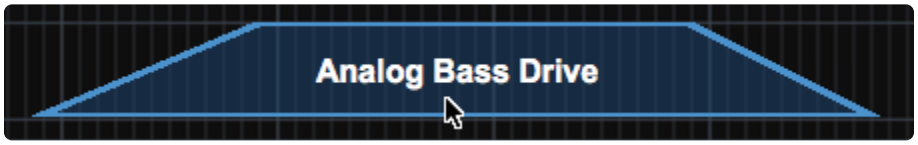
To remove a Part from any Row, Right/Control-click on the Region and select “Remove this Part.”

NOTE: Removing a Part from the STACK MODE grid doesn’t remove that Part from the Multi, so it can be added back if desired. When re-adding a Part, all previous changes made to its Region (position, width, and fades) are retained.

13.7. Moving, Crossfading, and Resizing

Moving

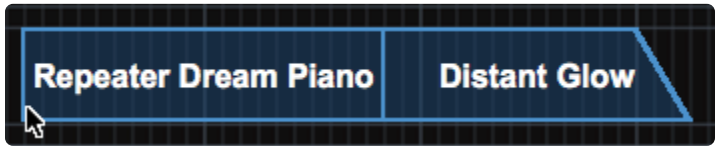
To move a Region, click inside the Region and drag horizontally.



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 by right-clicking and using the Add Part contextual menu. The Part will relocate with its Region settings (position, width, and fades) intact.

Resizing

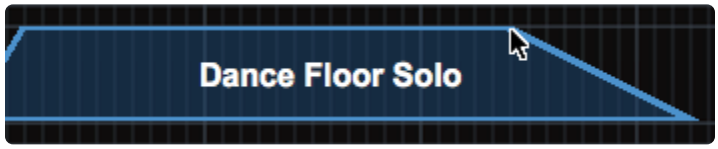
Click and drag the lower right or lower left corner of a Region to increase or decrease its width. If two Regions are on the same Row and crossfaded together, resizing will only change the width of the selected Region.



Fading

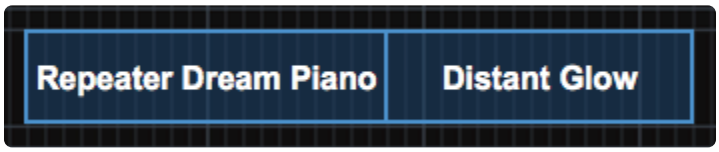
To add a fade to a Region, select the upper-right or upper-left corner of the Region and drag the corner inward. The further the corner is dragged, the more gradual the ramp and the longer the fade will be.

You can shorten or remove a fade by dragging the upper corner of the fade outward.



Contiguous and Crossfade

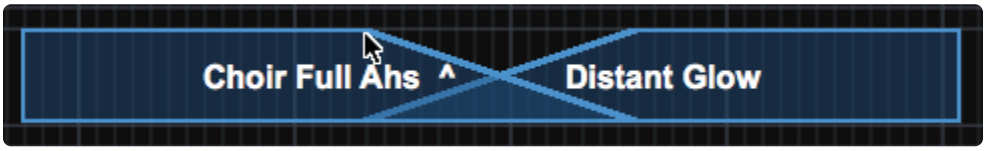
To have contiguous or crossfaded Regions, both Regions must be on the same Row. Once on the same Row, Regions can be placed side-by-side for contiguous layout.



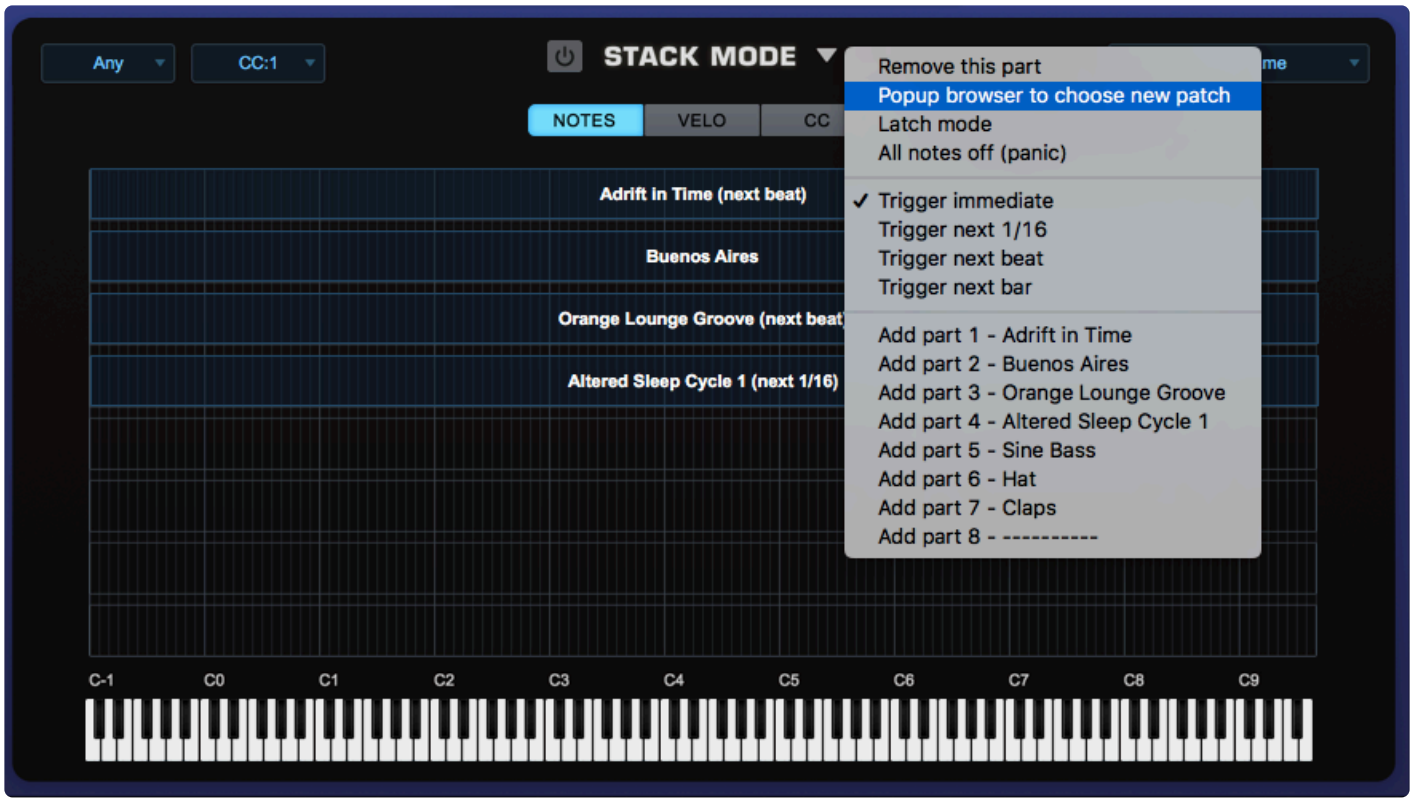
To crossfade two Regions, place two Regions on the same Row. Create a fade on one Region (on the side facing the other Region), then drag the faded Region toward the other. When the Regions touch, Omnisphere will automatically create a crossfade.

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.



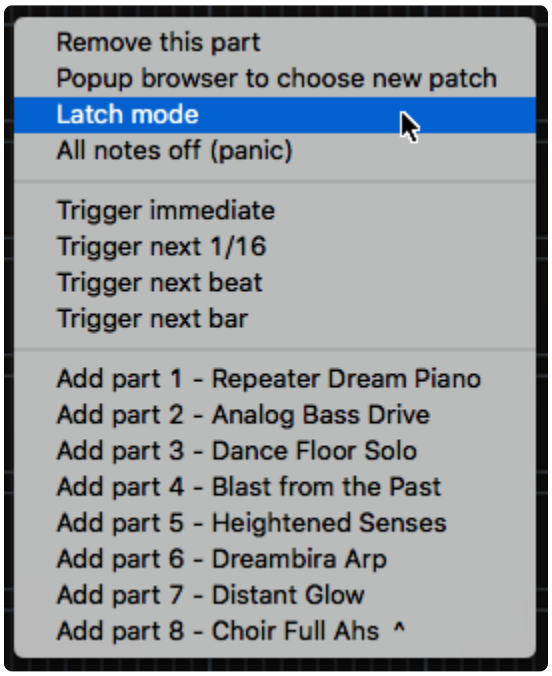
13.8. Patch Browser Access



To access the **Patch Browser** for a specific Part, Control/Right-click its Part Region and select “Popup browser to choose new patch” from the menu.

Once you’ve selected the Patch, close the Patch Browser and you’ll be returned to the STACK MODE page.

13.9. Latch and 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.

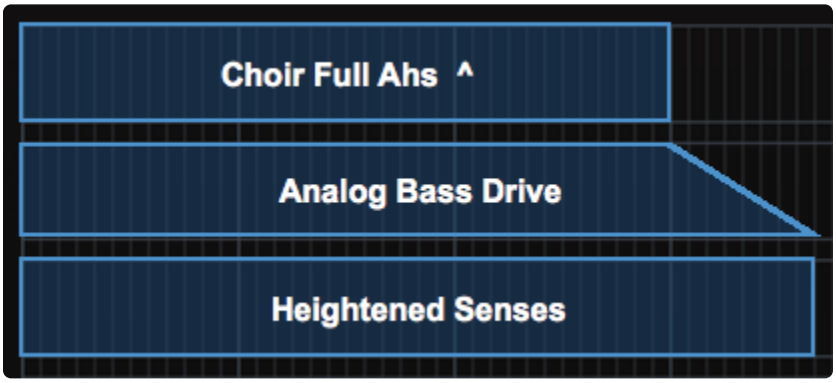
They enable real-time creation of complex, multi-Part performances with full synchronization between Parts—even across multiple instances of Omnisphere, Trilian, and Stylus RMX—without the need for traditional sequencing techniques.

Latch Mode causes notes to be held when played (or toggled OFF when played again), allowing quick triggering of repeating arpeggiated patterns 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 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 ideas quickly!

Used together, they enable a wide range of creative performance, live remixing, and composition techniques to discover and explore.

13.9.1. Latch Mode



When **Latch Mode** is enabled for a Part, repeatedly playing a note will toggle the note ON / 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.

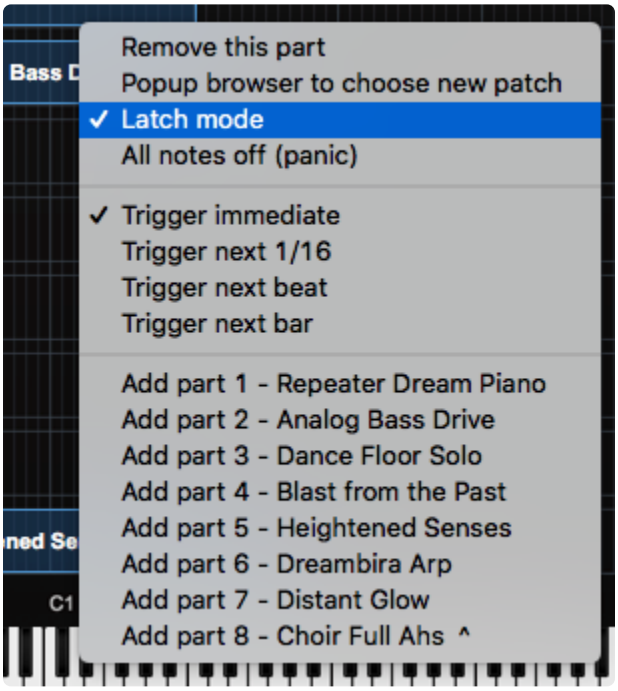
When the STACK MODE page is open, you can access the Latch Mode setting for a Part by Right/Control-clicking on the Part Region. Select “Latch Mode” from the context menu to toggle it ON or OFF for the Part.

NOTE: A Part’s Latch Mode status can also be viewed and changed from the MAIN Page using the controls on the left or from the LIVE MODE page using the LATCH View button. The LATCH Icons are MIDI-learnable, so you can assign a hardware control to remotely enable or disable LATCH 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 especially useful when working with rhythmic sounds, and when 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 and Enabling Latch Mode

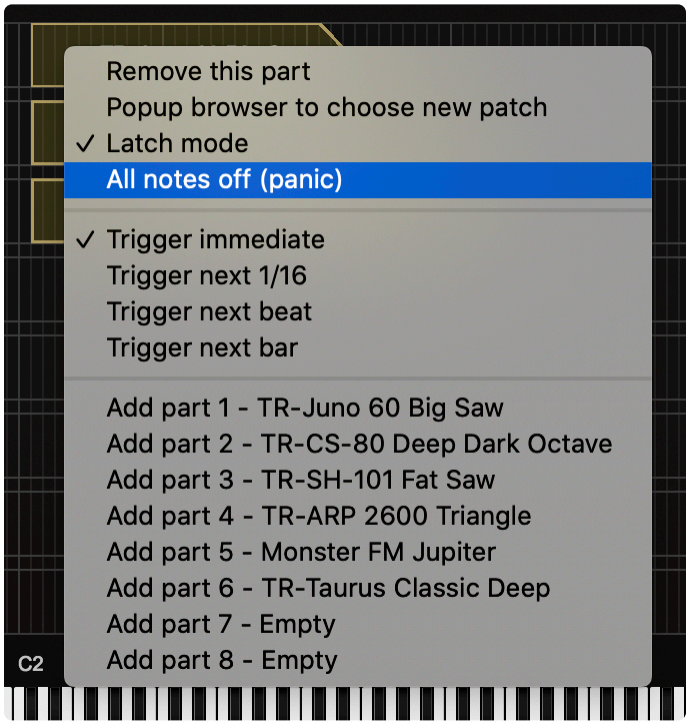


To enable Latch Mode for a Part, Control/Right-click its Part Region, and select the “Latch Mode” option from the context menu.
When Latch Mode is enabled for a Part, a checkmark will appear next to the Latch Mode menu option, and the word “Latch” will be appended to the Part Name on the Stack Mode grid.

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 (Panic) / STOP ALL



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 cutoff is not unnaturally abrupt.

To access the All Notes Off command, control/right-click on a Part Region, and select "All Notes Off (Panic)" from the context menu.

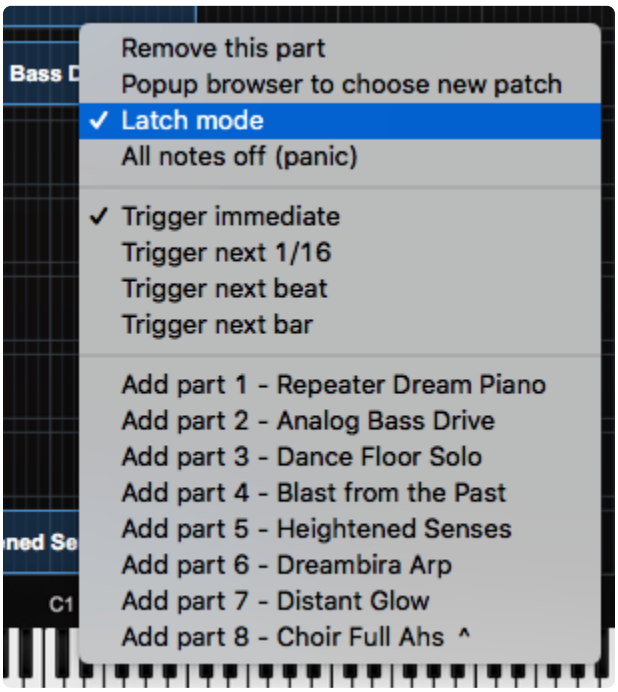
NOTE: You can also stop notes by using the STOP ALL button on the LIVE MODE page. The *STOP ALL*button is MIDI-learnable, which allows you to trigger it using a hardware controller. This is especially useful when using Latch Mode together with STACK MODE.

NOTE: If you have multiple Parts playing using Latch Mode and only want to stop one Part, disable Latch Mode only for that Part.

13.9.2. Trigger Mode

Trigger Modes control 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.



NOTE: Trigger Modes can also be accessed from the LIVE MODE page using the LATCH View button, or from the MAIN Page using the controls on the left.

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 Modes control 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. These modes are set independently for each of the eight Parts and 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 complex and interesting performance possibilities.

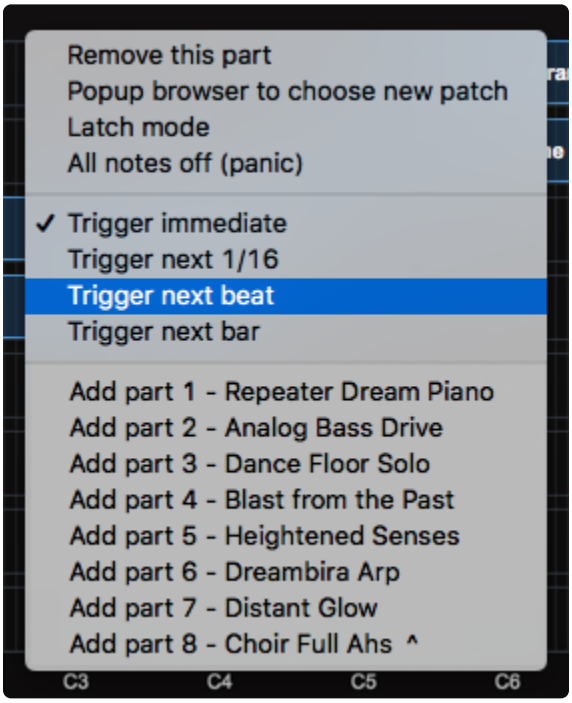
One simple example is to set up a split with an arpeggiated synth bass on the lower keys, and another arpeggiated sound on the upper keys. Playing them together in sync can be difficult. Setting the Trigger Mode to “Next 16th” for both Parts will quantize them in real-time as you play, so your arpeggiated 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 quantized in real-time and play in sync with the host or other clocked source as you audition them.

Viewing and 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 mode.



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.

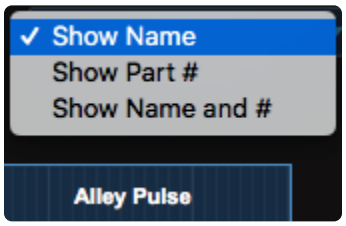
- **Next 16th:**
  This option delays the playback of incoming MIDI notes to the next 16th note. In other words, notes are quantized in real time to the next 16th note. If you play ahead of the next 16th, there may be a slight delay before the note sounds. This delay will be a maximum of a 16th note 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 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.

13.10. Display Menu



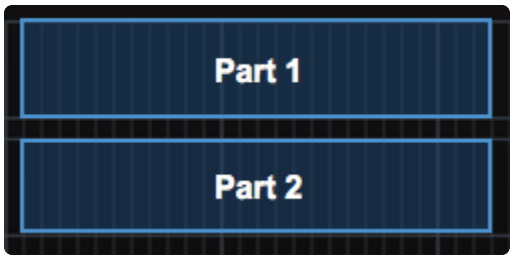
The Display Menu allows you to choose which information is displayed with each Region in the STACK MODE Grid.

Show Name

Displays only the Part Name.

Show Part

Displays only the Part Number. This corresponds to the Part Number on the **MIXER** Page.

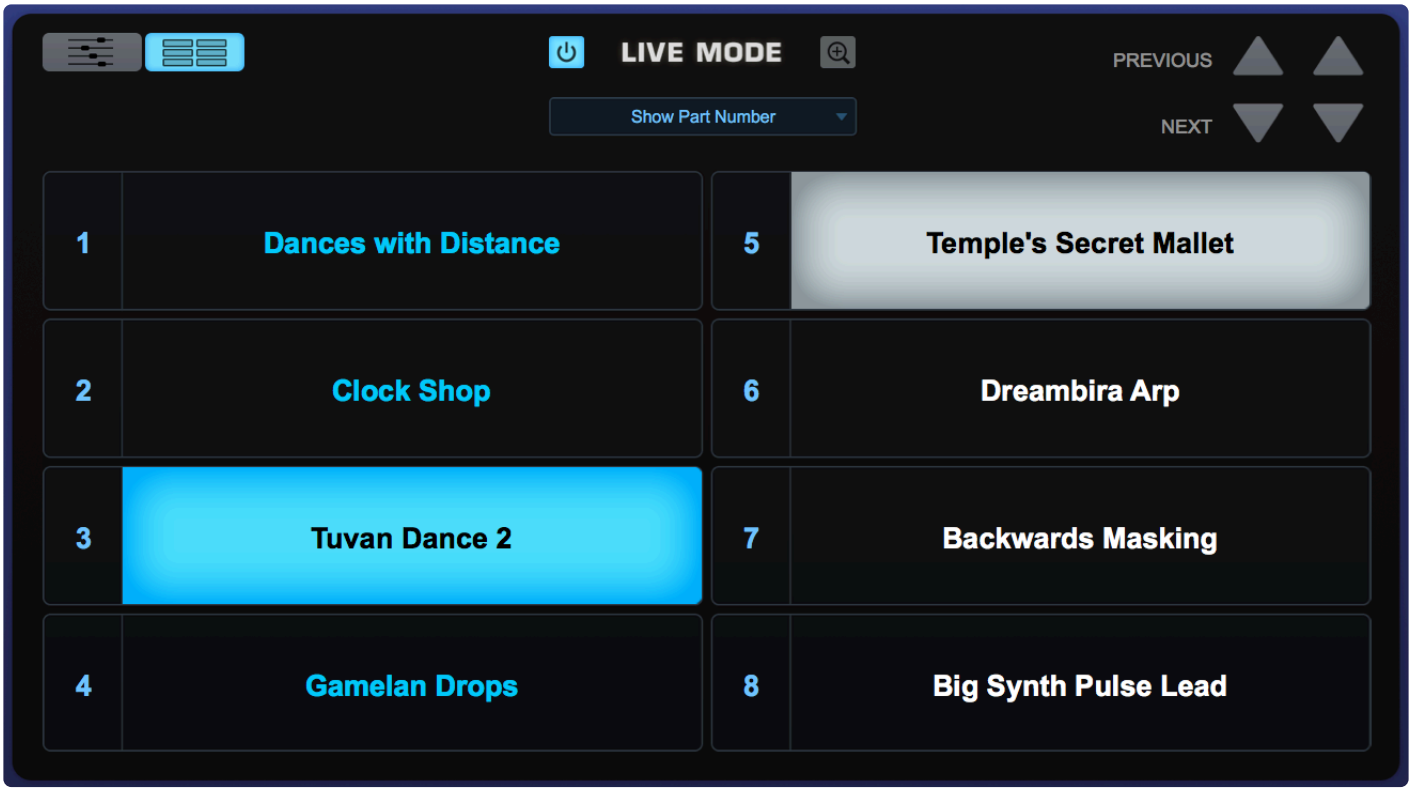


SHOW Name and

Displays both the Part Name and the Part Number.


Alley Pulse - Part 1
Distant Glow - Part 2

14. Live Mode



LIVE MODE is a powerful feature that allows you to switch and layer Patches seamlessly. LIVE MODE was designed for use in a live performance environment, but is also an inspiring 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 when you want to switch and layer Parts on-the-fly, or need enhanced interface 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.

In LIVE MODE you can 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 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 are clearly visible 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. Multiple 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**

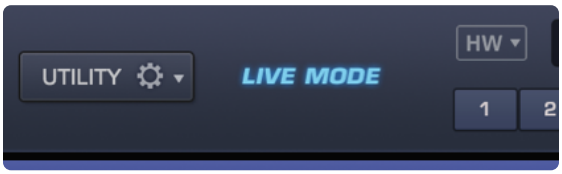
Any Part can be muted and soloed, and controls are available for each Part to adjust mix levels and access the Patch Browser.

You can also use your **STACK MODE** regions in LIVE MODE, by turning ON **Stack Mode Note Regions** in the LIVE MODE zoom. This gives you the flexibility to combine the instant Part selection from LIVE MODE with STACK MODE's splits and layering capabilities.

Power Button

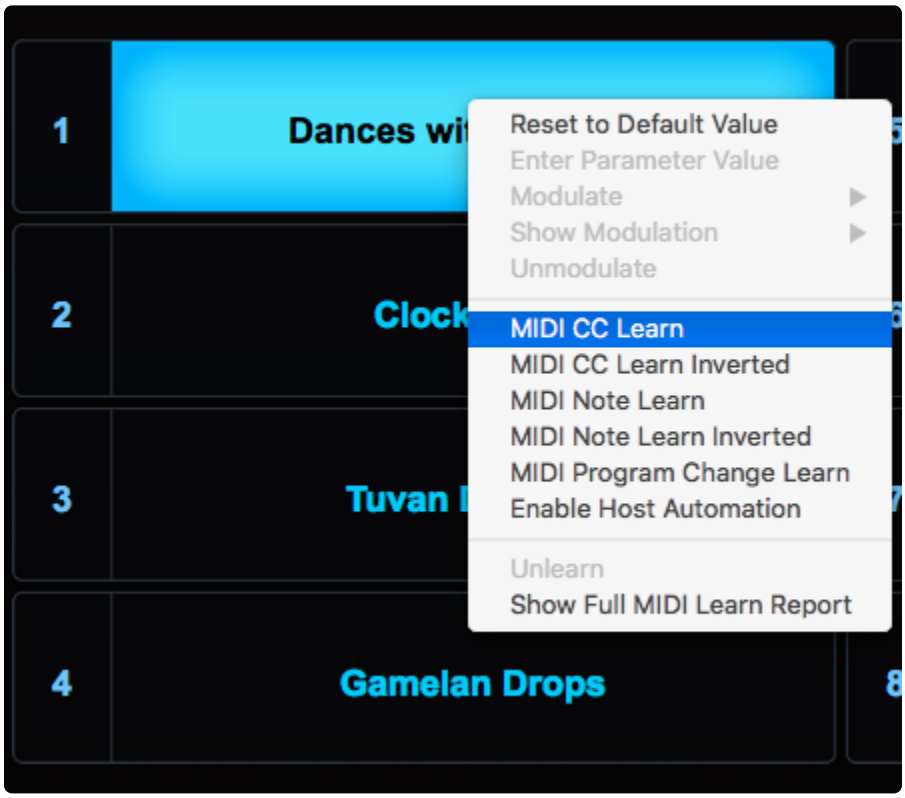
To enable LIVE MODE, select the Power Button to the left of the LIVE MODE label.

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.



NOTE: Live Mode can be controlled from Windows Multitouch or remotely from an iPad using the Omni TR app.

14.1. Selecting Parts



To get the most out of LIVE MODE, it can often be more convenient to switch Parts by other means than the mouse — via Windows Multitouch, by MIDI-Learning the Part switches, or by using **Omni TR** our remote control app for the iPad .

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.

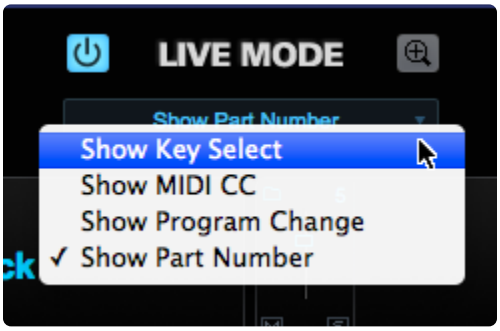
NOTE: Learned MIDI Notes will display as red highlighted keys on the STACK MODE mini-keyboard. Select the Notes setting on the STACK MODE page to display the mini-keyboard.

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 Zoom** section for details.

NOTE: Multiple assignments can be made for a Part. For example, you can assign both MIDI Key Select and MIDI CC to a single Part Slot.

14.2. Show Menu



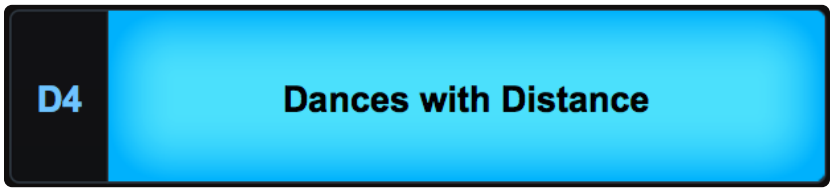
LIVE MODE offers five ways to switch or layer the eight Parts:

- MIDI Notes
- MIDI CC (Control Change) messages
- MIDI Program Change
- Mouse (or Windows Multitouch)
- **Omni TR**

The first three methods use MIDI Learn to set up how the Parts will respond. Although all 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, Key Assignments, or MIDI Learn assignments are displayed in the boxes to the left of the Part names in both Mixer and Jumbo Views.

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.

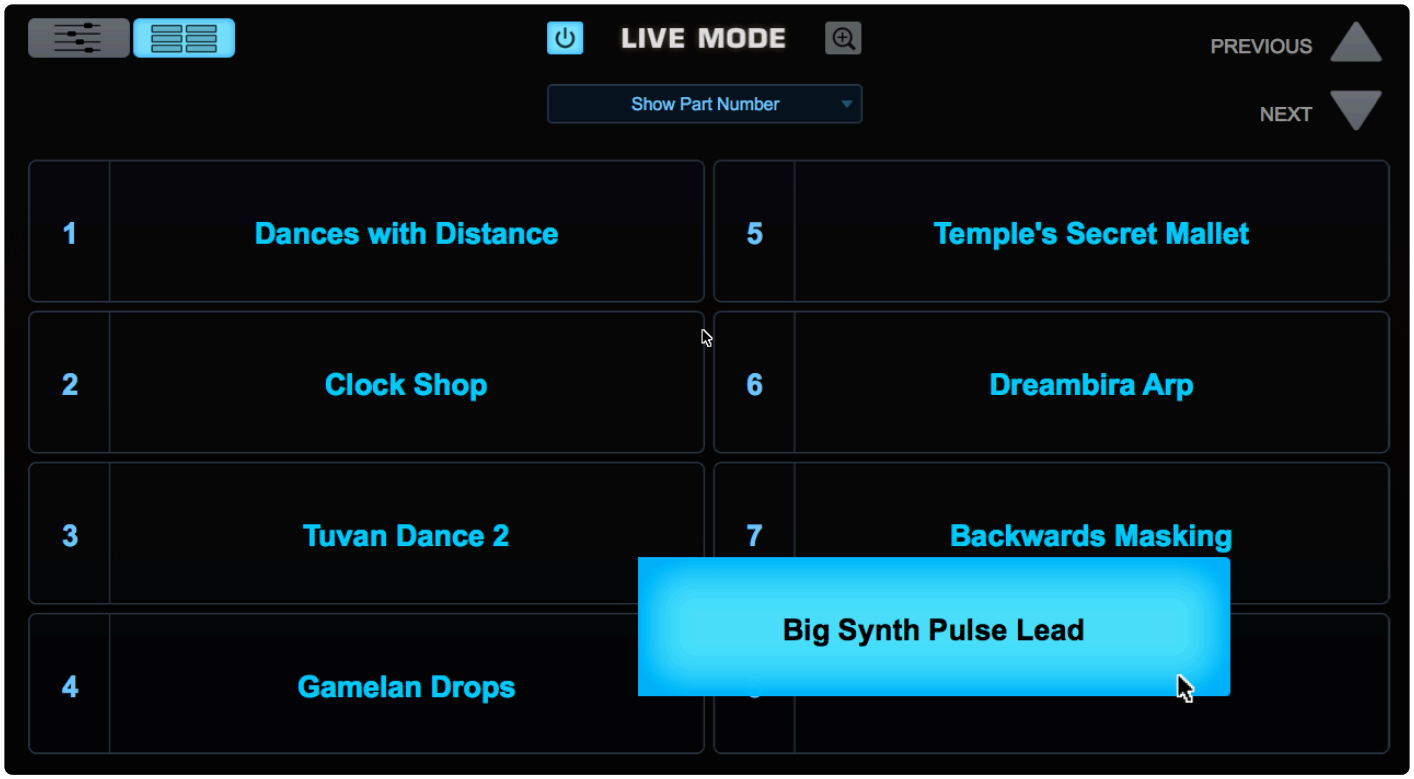
SHOW: Program Change

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.

14.3. Re-ordering Parts

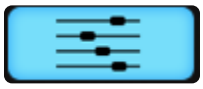


Parts can be re-ordered by dragging and dropping them between the eight Slots. Dropping a Part into an occupied Slot doesn't delete the existing Part. Instead, all the remaining Parts will move to make room for the dropped Part.

NOTE: Re-ordering Parts in the LIVE MODE display will not change their positions in the MIXER. For example, a Patch loaded into Part 3 of the MIXER will remain as Part 3, regardless of which Part Slot it occupies on the LIVE MODE page.

NOTE: Part selection MIDI Learn 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.

14.4. Mixer Controls



Displays the basic **Mixer 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 – 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.

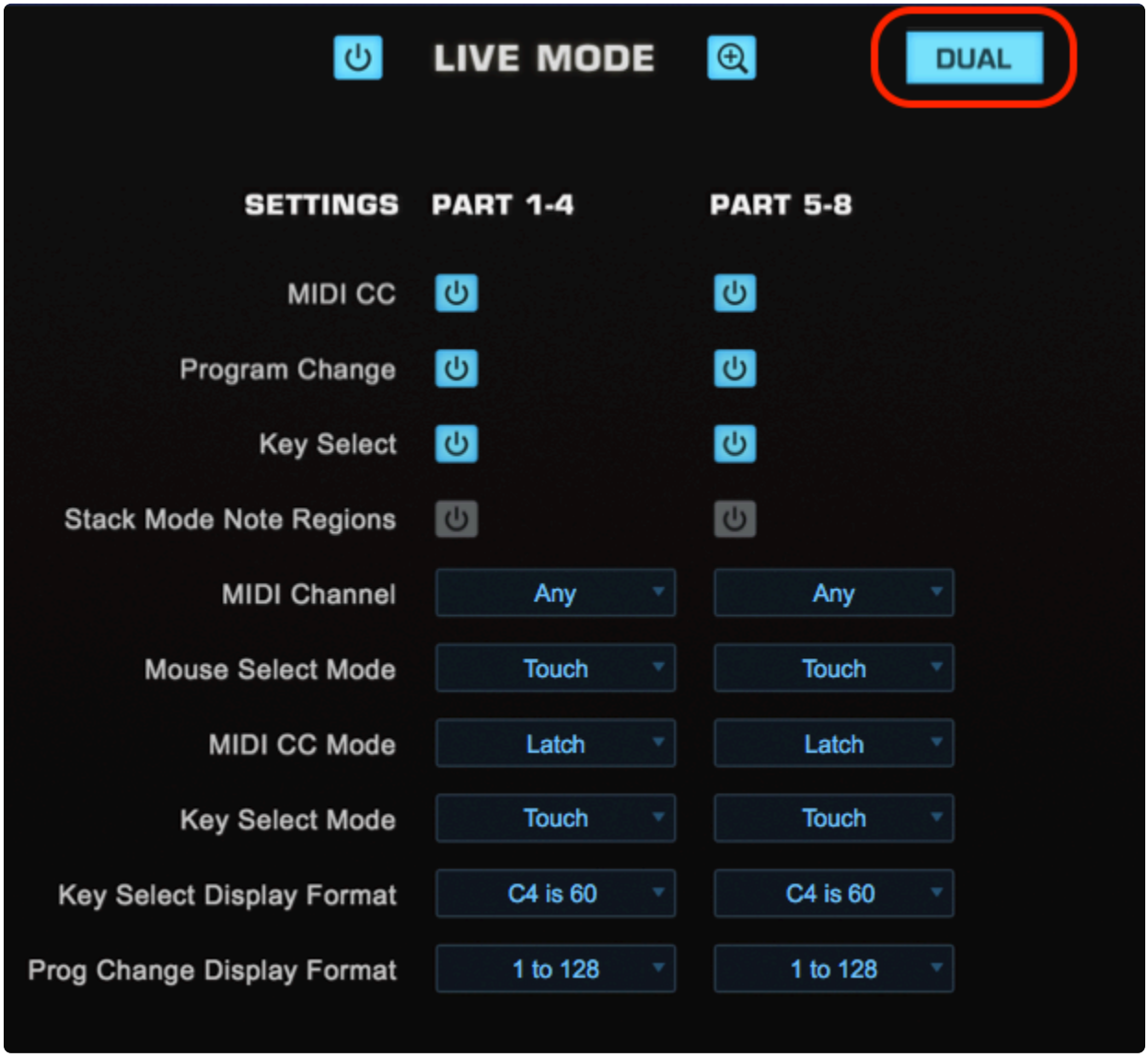
Level – Controls the output level of the Part. This is a duplicate of the LEVEL slider from the MIXER page, and can be MIDI-Learned.

14.5. Dual Live Mode

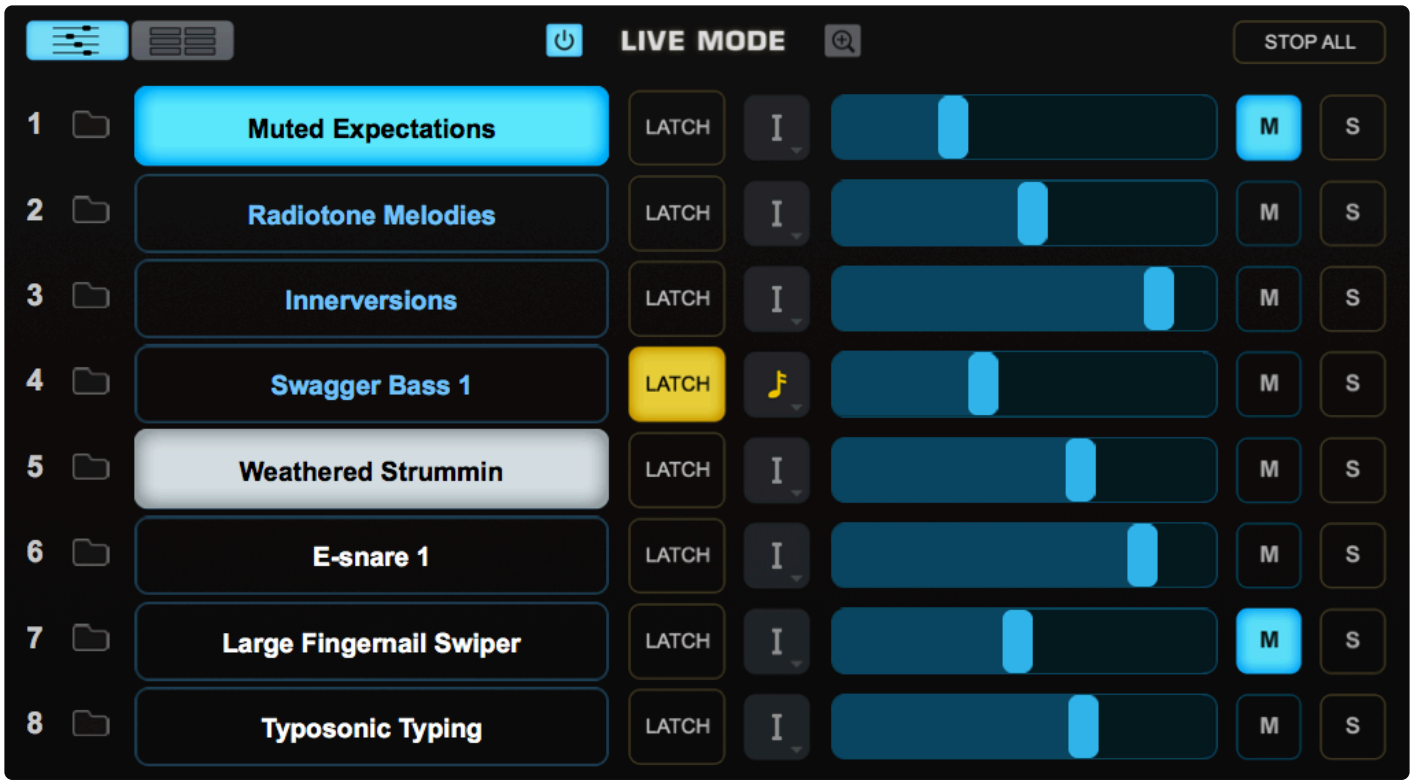
Dual Live Mode is designed to be used with two independent MIDI controllers. It divides the eight Parts into two sets of four (Parts 1~4 and Parts 5~8) and each set can receive MIDI messages on its own MIDI channel.

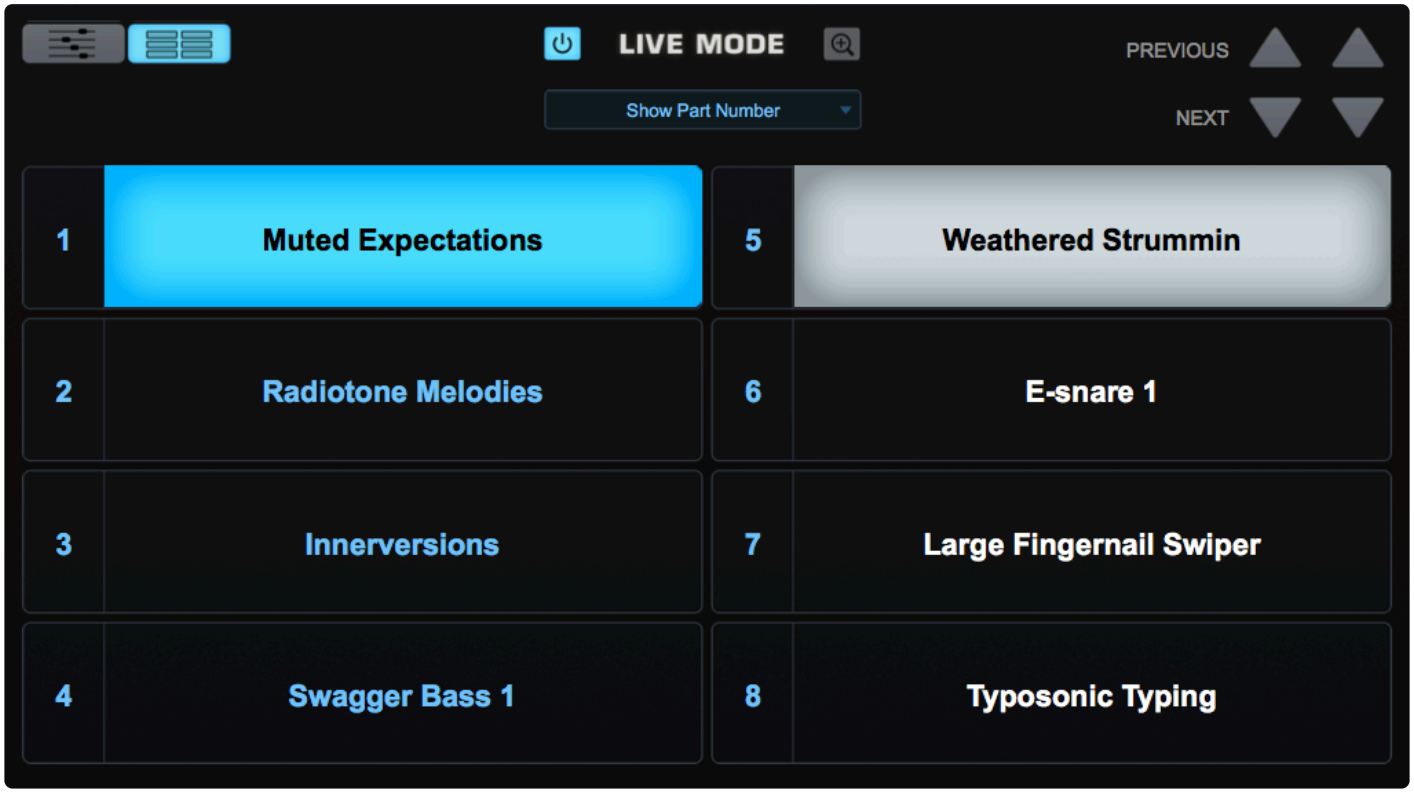
Activating Dual Live Mode

To activate Dual Live Mode, click on the **Settings Zoom** magnifying glass and select **DUAL** in the upper right. All the SETTINGS will be duplicated so each set of parts can have independent control over modes, MIDI Input Channel, display formats, etc.



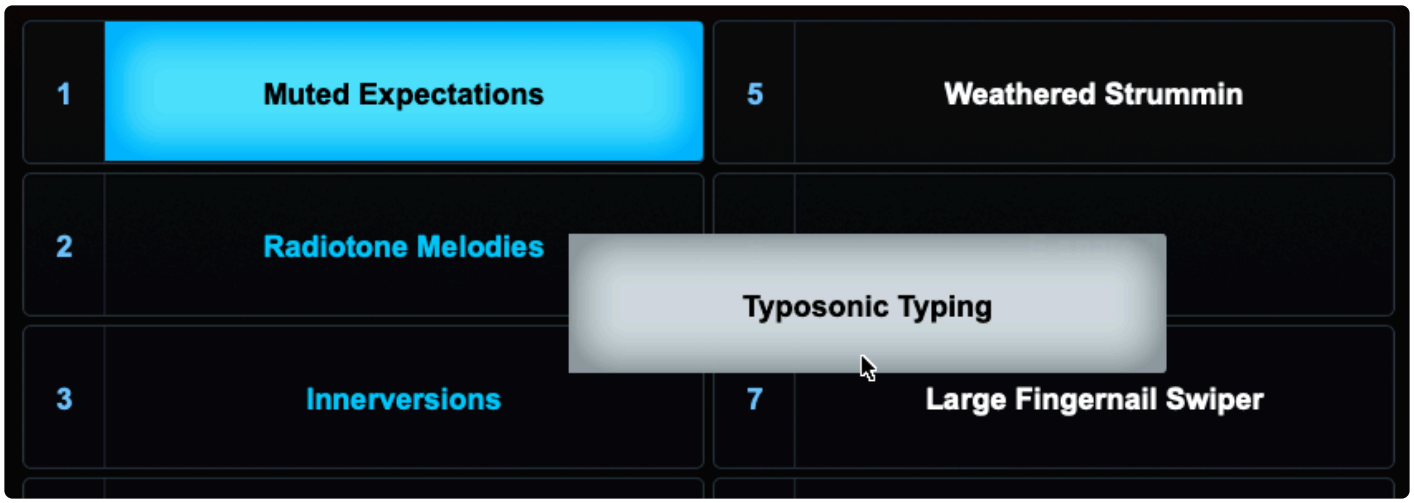
The color scheme is changed so that Parts 5–8 are highlighted in white instead of yellow in both Mixer and Jumbo views.

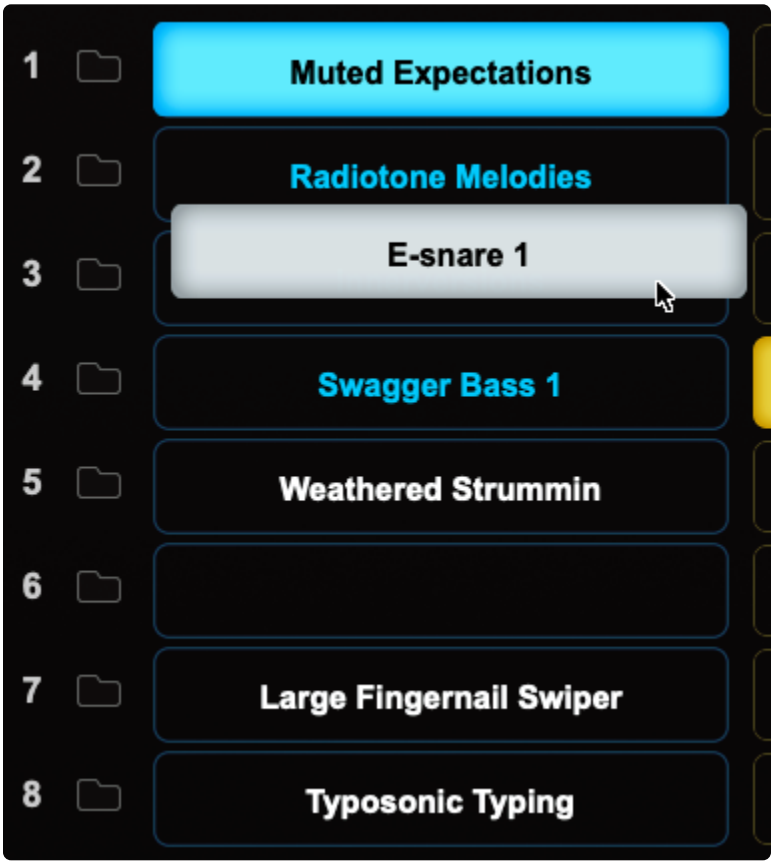




NOTE: Parts can still be re-ordered in Dual Live Mode. Parts can be moved vertically in Mixer view or

between the two columns in Jumbo view (and therefore switched between MIDI channels), simply by dragging them from one column to the other.

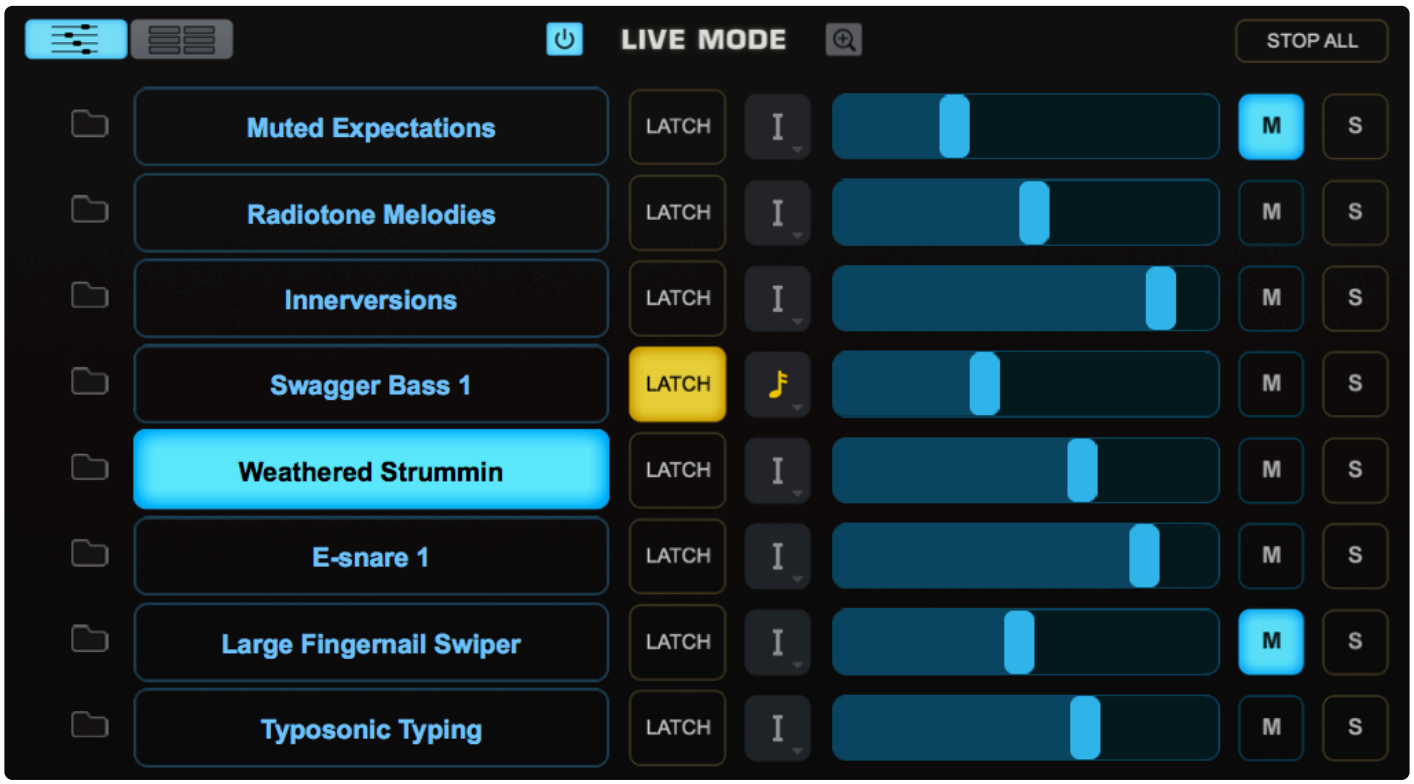




TIP: Using Dual Live Mode with two MIDI controllers, you can to set up one MIDI Controller to be used exclusively for playing the eight Parts, while the other MIDI Controller is dedicated to Part selection.

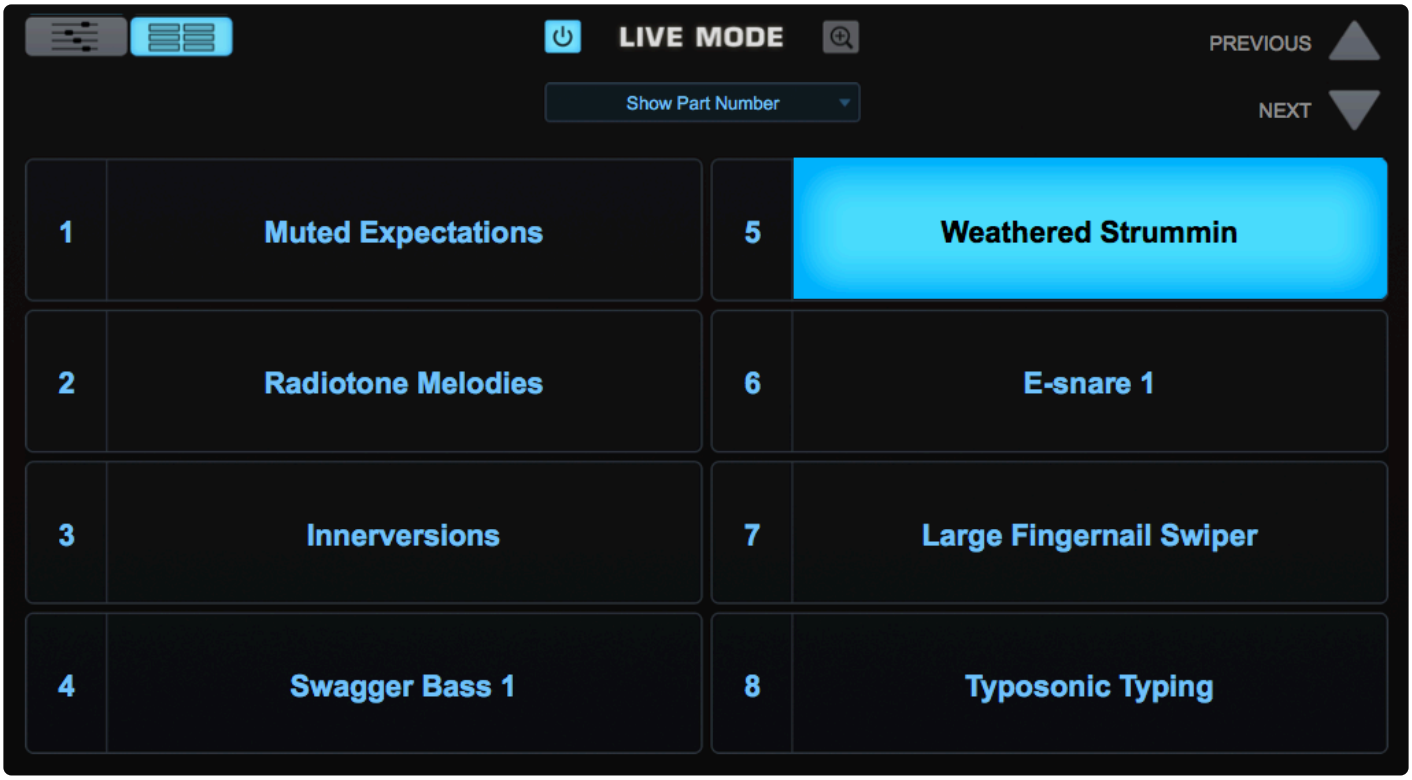
14.6. Mixer and Jumbo Views

When **Mixer View** is selected, this area displays the basic mixer controls for each of the eight Parts. In addition to **Level, Mute, and Solo**, there is a Folder icon to access the Patch Browser, **Latch and Trigger** selectors, the **Settings Zoom** icon, and the **Stop All** button.



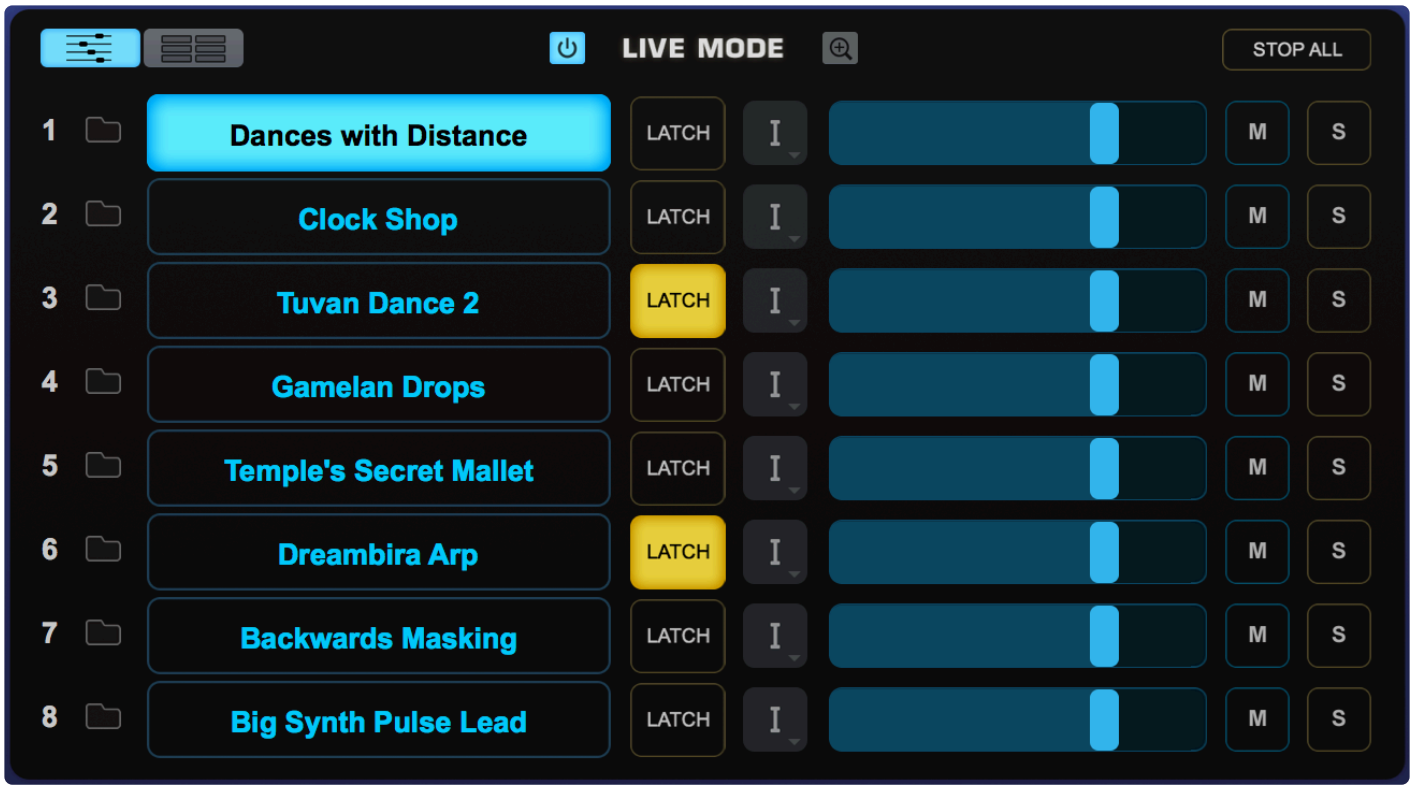
NOTE: You can MIDI-Learn the controls on these pages.

Live Mode's **Jumbo View** is intended for stage work, facilitating the selection of parts in large easy-to-read type.



In addition to **Part Selection,** the **Settings Zoom** icon, and the **Previous / Next Arrows** there is the display menu, where you can select the Part Number or the type of MIDI message was used to select the Part: **Key Select (Note), MIDI CC, Program Change.**

14.7. Latch and Trigger Modes



Latch Mode and **Trigger Mode** extend the multi-timbral performance capabilities of Omnisphere, especially when used together with Live Mode or Stack Mode.

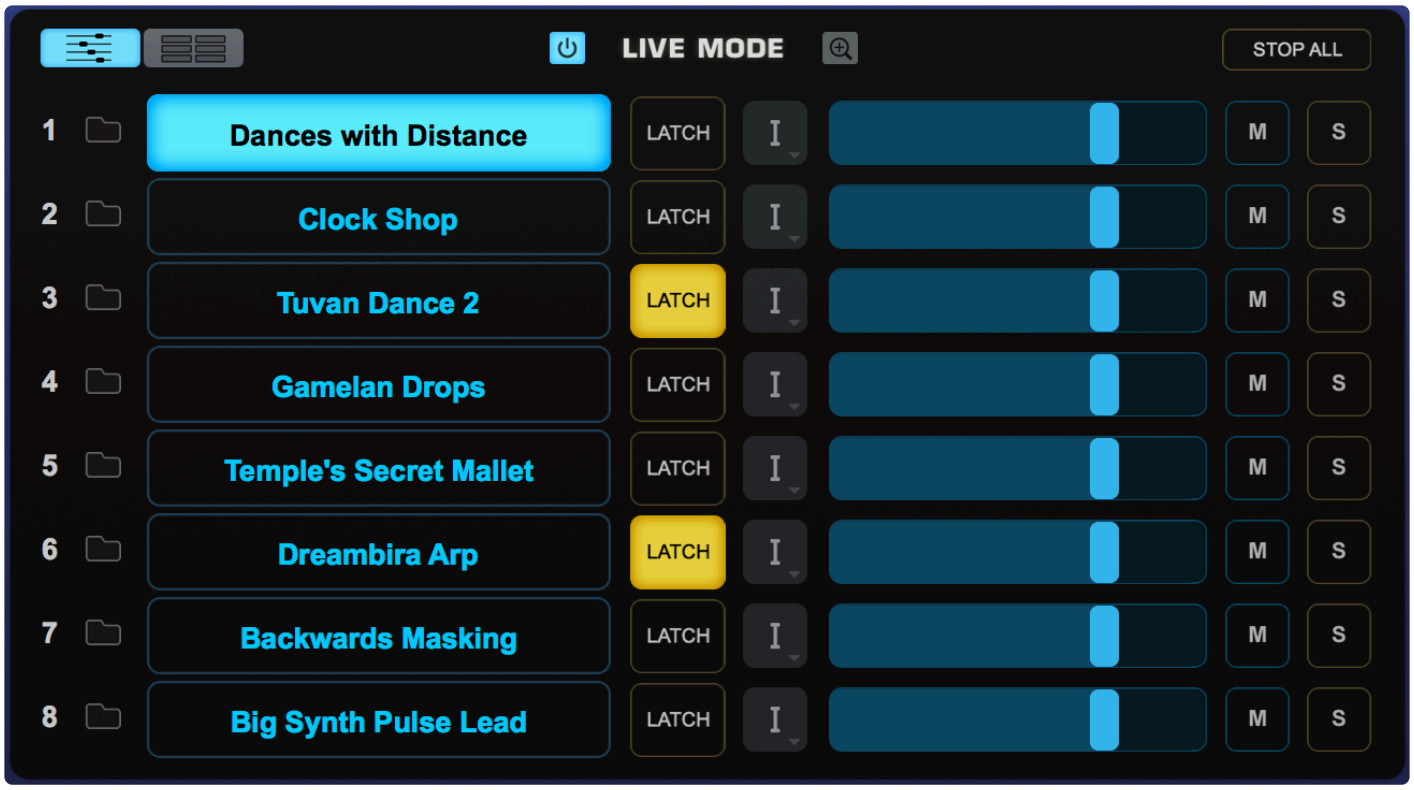
They enable real-time creation of complex, multi-Part performances with full synchronization between Parts, and across multiple Omnisphere, Trilian, and Stylus RMX instances, without the need for traditional sequencing techniques.

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 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.

14.7.1. Latch Mode



When **Latch Mode** is enabled for a Part, repeatedly playing a note will toggle the note ON/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.

NOTE: Any latched notes will stop as soon as the host transport starts or stops.

Latch Mode is accessed from the LIVE MODE page, using the LATCH View button.

NOTE: A Part's Latch Mode status can also be viewed and changed from the STACK MODE page using Part Regions and their context menus, 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 and Enabling Latch Mode

To view or adjust the Latch Mode status for a Part, open the LIVE MODE page, and select the LATCH View button to open the Latch Mode View.

NOTE: The LATCH View button toggles between Latch View and LIVE MODE views. Closing the LATCH View does not change or disable the Latch Mode or Trigger Mode settings.

When the LATCH View is open, you will see the Latch and Trigger Mode Part controls.

Selecting the LATCH 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 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 Icons are MIDI-learnable, so you can assign a hardware control to remotely enable or disable Latch Mode for a Part.

STOP ALL

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 **STOP ALL** 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 cutoff is not unnaturally abrupt. Notes being played on all Parts will be stopped, regardless of their Latch status.

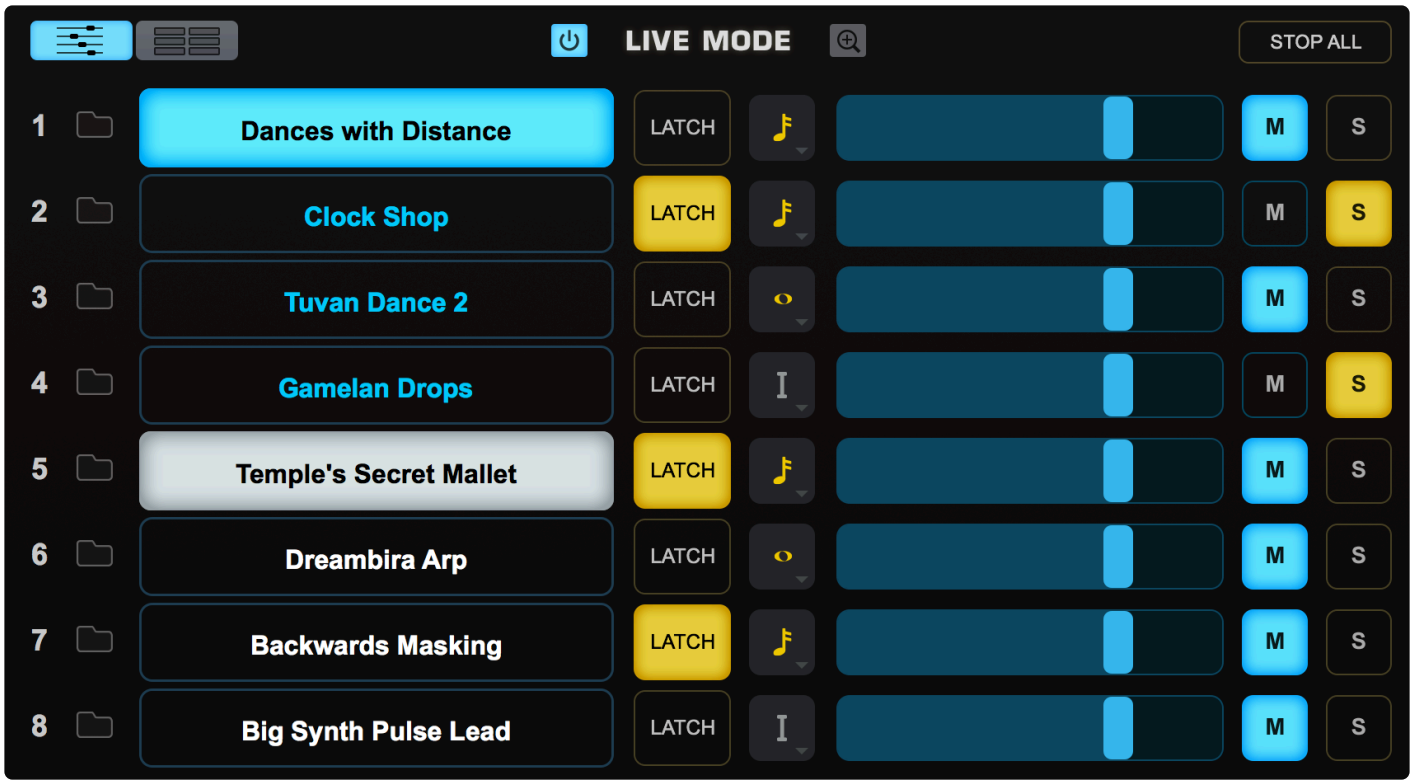
The STOP ALL button is MIDI-Learnable, which allows you to trigger it using a hardware controller.

You can also stop all latched notes by starting or stopping your host's transport.

NOTE: If you have multiple Parts playing using Latch Mode and only want to stop one Part, disable that Part's LATCH Icon to send an All Notes Off message only to that Part.

14.7.2. Trigger Mode

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 View button.

NOTE: Trigger Modes can also be viewed and accessed from the STACK MODE page using Part Regions and their context menus or from the MAIN Page using the controls on the left.

When playing complex phrases or rhythmic sounds along with other sequences, it can be difficult to sync those performances. Trigger Mode solves this by quantizing live MIDI input. With Trigger Modes other than Immediate selected, the playback from each incoming MIDI note is delayed until the sequencer reaches the next point on the bar/beat grid. 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 are independent from LIVE MODE, so LIVE MODE does not need to be enabled for Trigger Modes to be active.

Using Trigger Modes 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.

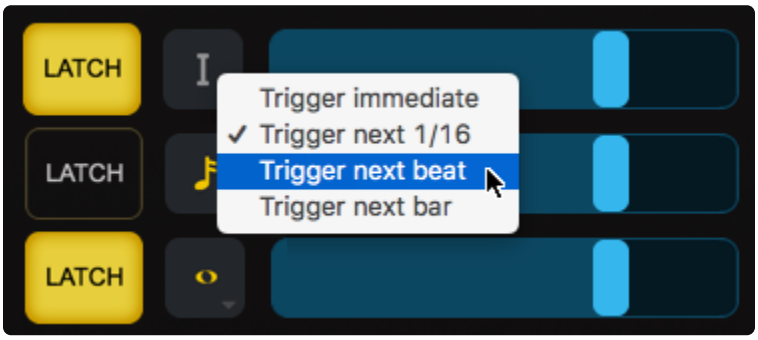
Trigger Modes can also be used while browsing and auditioning sounds. If you have selected a Trigger Mode other than Immediate for the Part, the sounds will be quantized in real-time and play in sync with the host as you audition them.

Viewing and Selecting Trigger Modes

To view and select the Trigger Mode for a Part, open the LIVE MODE page and select the LATCH View button.

NOTE: The LATCH View button toggles between the Latch Mode and LIVE MODE views. Closing the LATCH View does not change or disable Latch Mode or Trigger Mode settings.

When LATCH View is enabled, you will see the Latch and 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.

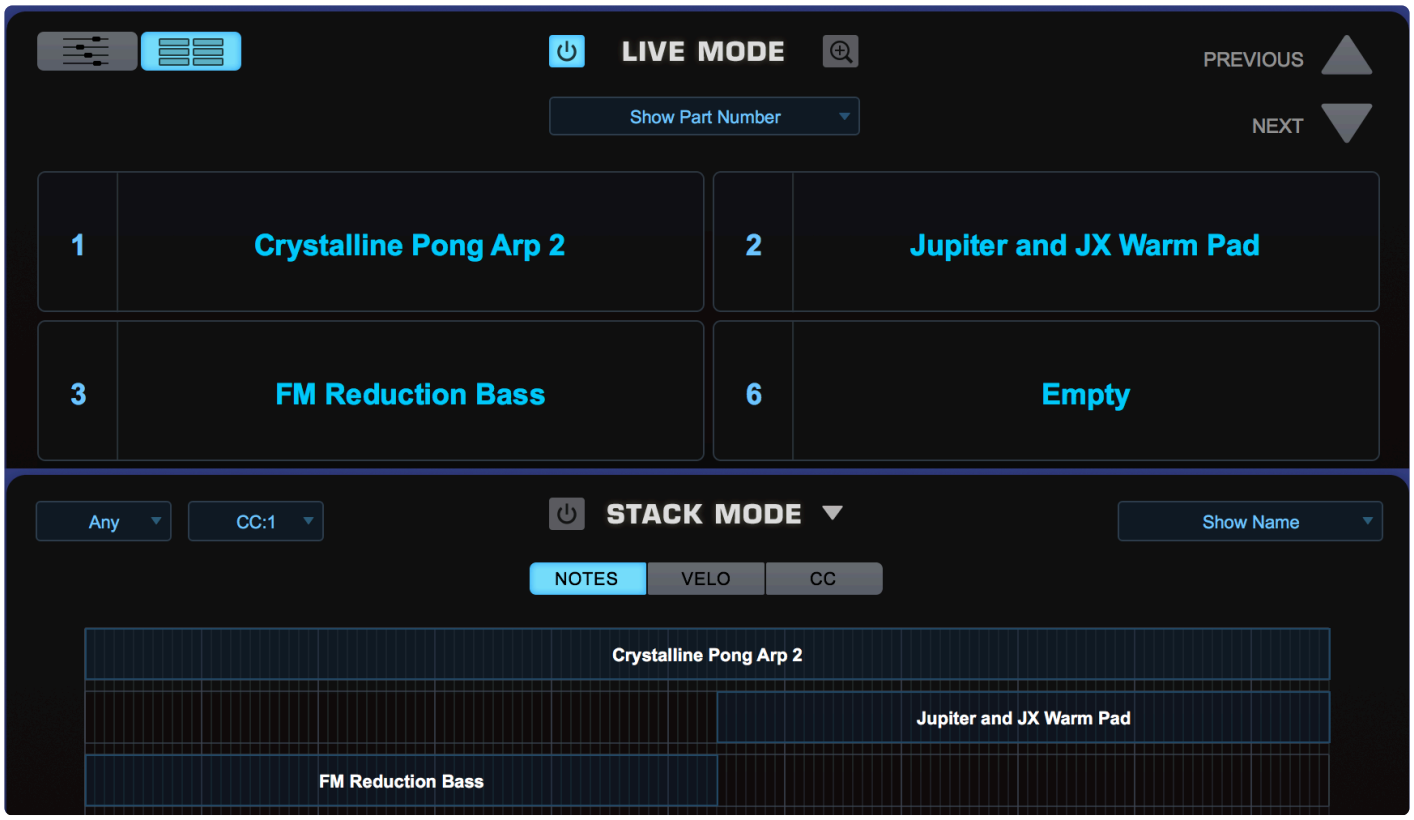
NOTE: The selected Trigger Mode also affects a Part's Arpeggiator, LFOs, and Envelopes. These will also be delayed until the note itself is triggered.

14.8. Previous/Next Arrows

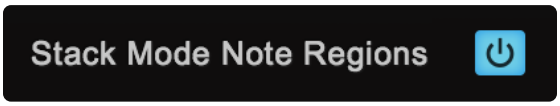
The Previous/Next arrows step through the eight Slots one at a time, changing the selected Part without stopping any notes currently being played. The Previous/Next arrows can be MIDI-Learned, so they can be triggered via MIDI messages.

When **DUAL LIVE MODE** 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.

14.9. Stack Mode Note Regions



Omnisphere allows the Part-splitting, layering, and fading features of **STACK MODE** to be used in combination with LIVE MODE. There are times in live performance when splits are desired and you need to switch instantly between Parts. This can be achieved by clicking on the “Stack Mode Note Regions” Power Button in the LIVE MODE Settings page.



When “Stack Mode Note Regions” is turned ON, the range and fade settings currently set for each of the regions in the STACK MODE page are also made active in LIVE MODE. When LIVE MODE is ON and “Stack Mode Note Regions” is turned ON, the STACK MODE regions will be white instead of blue.

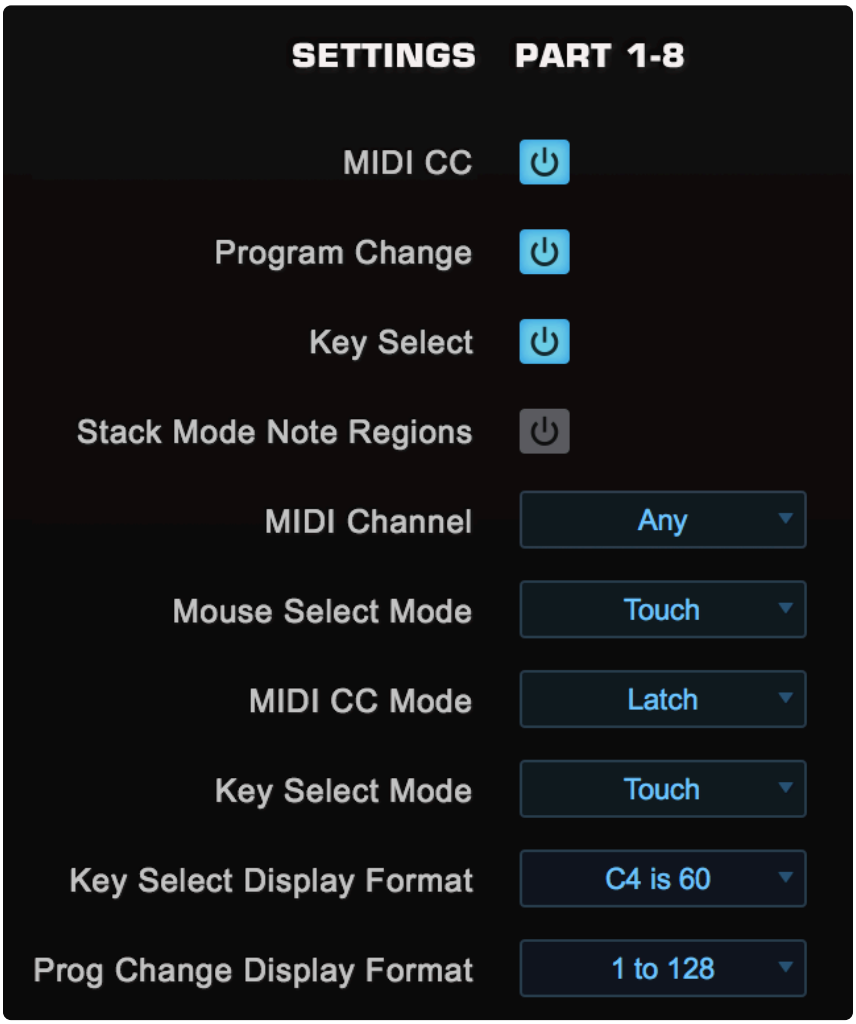
Here is a practical example of how it works:

Part 1 has an arpeggiated synth sound that you’d like to use in the intro of a song. Part 2 has a synth bass, and Part 3 has a pad, both for the verse.

In STACK MODE, the region for Part 1 covers the entire keyboard range, Part 2 is set to play on the left side of the keyboard, and Part 3 to play on the right.

In LIVE MODE, enable “Stack Mode Note Regions.” Now, using either your computer or Omni TR, you can select Part 1 for the intro and right before the verse, select Parts 2 and 3 simultaneously. Your keyboard will be now divided into two parts, with the bass on the left and the pad on the right.

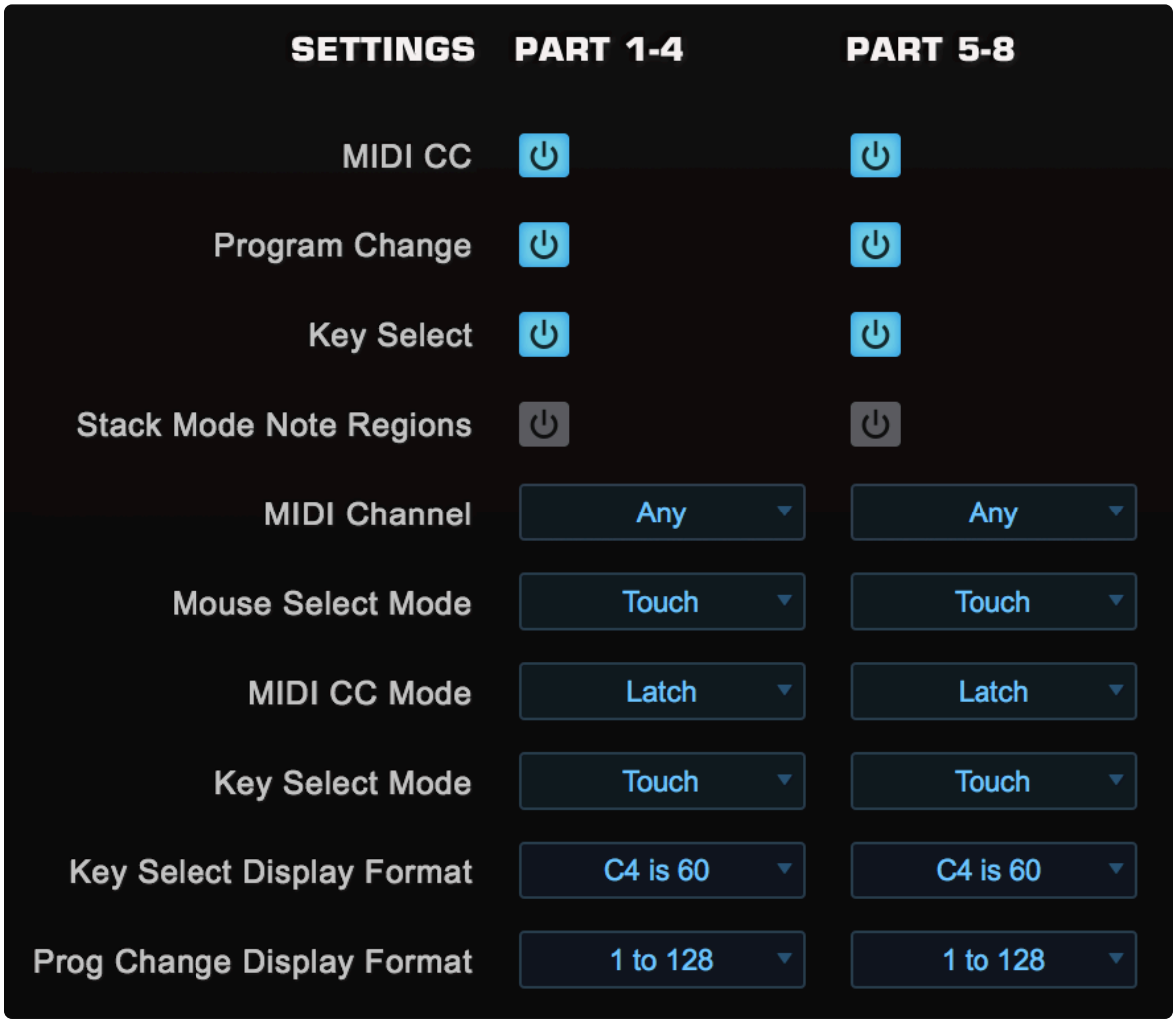
14.10. Settings Zoom



The **SETTINGS** page allows the configuration of LIVE MODE parameters. These include the Part selection methods LIVE MODE responds to, as well as settings for MIDI Channel, Modes, and Display Formats.

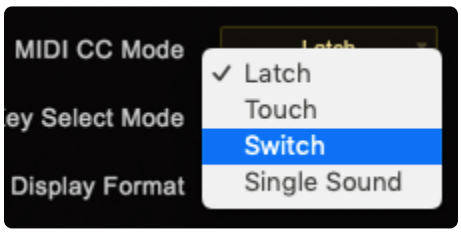
Settings in DUAL LIVE MODE

When Dual Live Mode is enabled, the Settings options are duplicated each set of Parts (1~4 and 5~8). This allows settings to be customized individually for each MIDI device.



NOTE: LIVE MODE Settings are saved with the MULTI.

MIDI CC



When enabled, Parts can be selected using learned MIDI Control Change messages. When disabled, Parts will not respond to Control Change messages.

Program Change

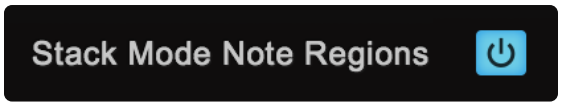
When enabled, Parts can be selected using learned MIDI Program Change messages. When disabled, Parts will not respond to Program Change messages.

Key Select

When enabled, Parts can be selected using learned MIDI Note messages. When disabled, Parts will not respond to MIDI Note messages.

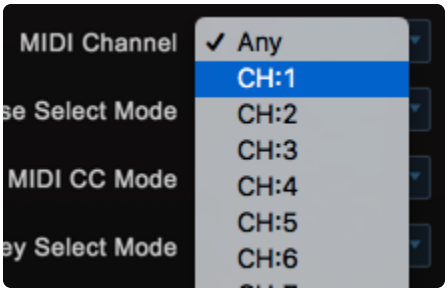
NOTE: Even when the MIDI CC, PROGRAM CHANGE, or KEY SELECT buttons are disabled, you can still add new MIDI Learn assignments. LIVE MODE will make the new assignments, but will not respond to those MIDI messages until the respective Power Button is enabled.

Stack Mode Note Regions



When enabled, you can use the splitting, layering, and fading features of **STACK MODE** in combination with LIVE MODE.

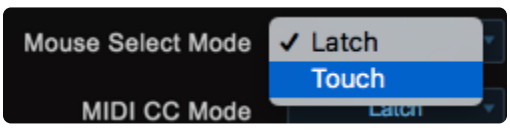
MIDI Channel



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 respond to MIDI messages sent from the specified MIDI channel.

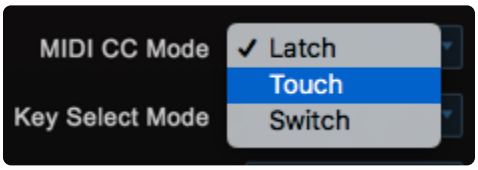
Mouse Select Mode



Parts can be selected (or deselected) using a mouse.

- **Latch** – Latch Mode is 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 Continuous Controller messages.

- **Latch** – This button 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.

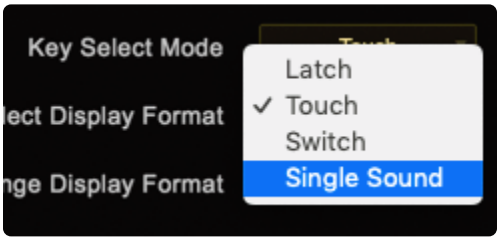
- **Touch** – Sending a learned MIDI CC message to a Part will select it, and all other Parts will be deselected. Only one Part can be selected at a time using Touch Mode with MIDI CC.

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** – This is 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.

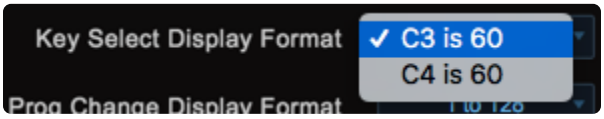
Key Select Mode



Parts can be selected or deselected using MIDI Note messages, such as notes on your MIDI keyboard. Once notes have been MIDI-Learned they will no longer trigger sounds when played, but will instead select and deselect Parts according to the chosen mode.

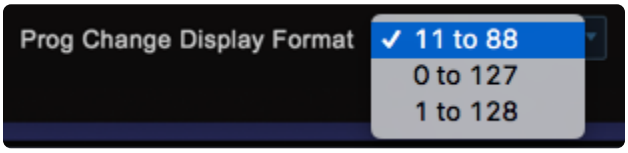
- **Latch** – Latch mode acts as an ON / OFF toggle. Sending a learned MIDI Note message to a Part will select it. Sending the note again will deselect the Part.
- **Touch** – Sending a learned MIDI Note to a Part will select it, and all other Parts will be deselected. If multiple MIDI Note messages 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.
- **Single Sound** – 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, the selection is constrained to a single Part—the last one touched.

Key Select Display Format



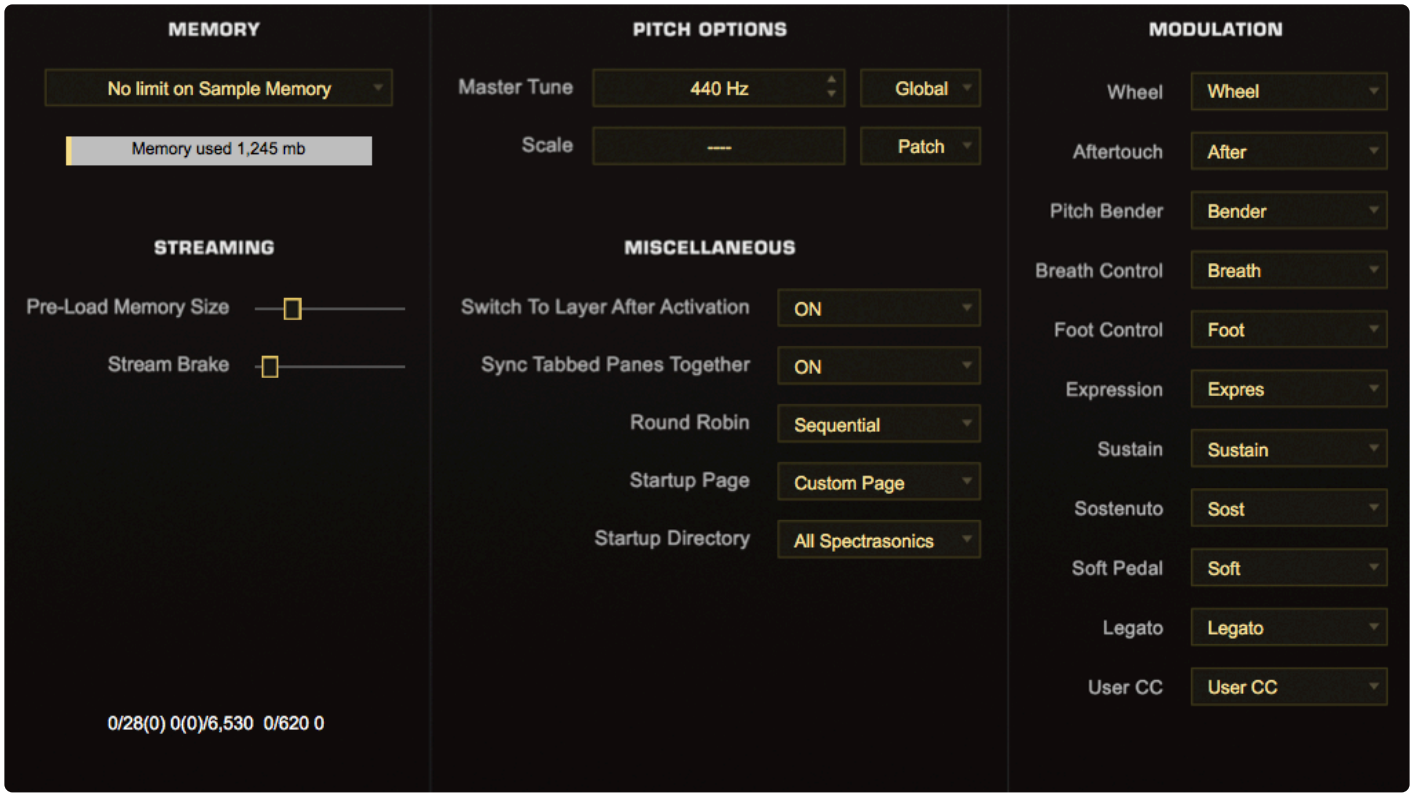
Middle-C (note number 60) is referred to in two different ways—as either C3 or C4—depending on the MIDI device manufacturer. You can choose either numbering convention, based on your keyboard or your host software. Please refer to your device or host's owner's manual to determine which is the correct 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.

15. System



The **System Page** in Trilian is a universal control area that governs how Trilian's sounds are streamed, sets certain user defaults, master tuning, and configurations for the modulation controls.

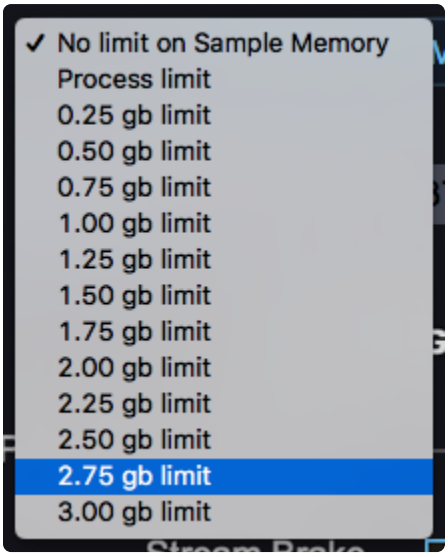
The System page is divided into five sections:

- Memory Management
- Streaming
- Pitch Options
- Miscellaneous
- Modulation

15.1. 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.



Selecting a value from the drop-down menu sets the maximum amount of virtual memory available for Omnisphere to use.

Using the up-down arrows will step through the available values.

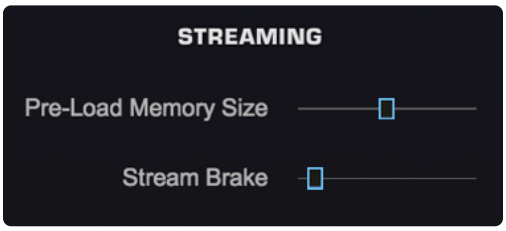
NOTE: Omnisphere Soundsources can require a great deal of memory. When limiting the amount of memory available to Omnisphere, it is a good idea to also apply Sample Thinning using the Patch Browser Lite Version feature, or the thinning options on the Soundsource Zoom Edit View.

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.

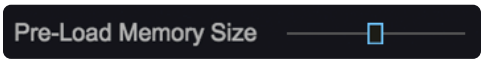

Memory used 537 mb

15.2. Streaming



The first column contains controls for the streaming function in Omnisphere. Streaming permits samples to reside largely on disk. In this way you can use large samples with a relatively small amount of memory.

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 of 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.

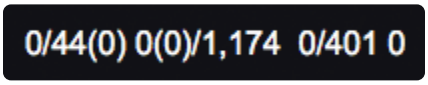
Range – 1000 samples to 100,000 samples.

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



Diagnostic numbers that are used for Customer Support purposes.

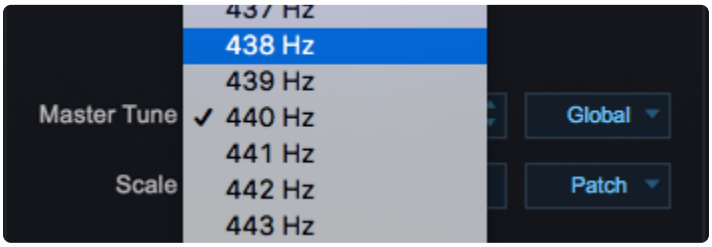
15.3. Pitch Options

Master Tune

This is Omnisphere's selectable Master Tune parameter. Any tuning change you make in Master Tune will affect all other **tuning settings** in the instrument.

- **Global** sets the master frequency for all Patches and/or Multis.
- **Multi** allows you to save a unique master frequency for each Multi.

The default is 440 Hz—the standard for most Western music. For other tuning standards, Omnisphere's pitch can be changed to accommodate any of them.



Range – 420 Hz ~ 460 Hz.

Scale Modes

- **Global** allows you to set the scale or temperament for all Patches and Multis and is a universal User Preference.
  You can select the scale from the menu and the name will be displayed in the Scale pane.

- **Multi** allows you to set a unique scale for each Multi. You can select the scale from the menu and the name will be displayed in the Scale pane. All Patches within a Multi share the same value.

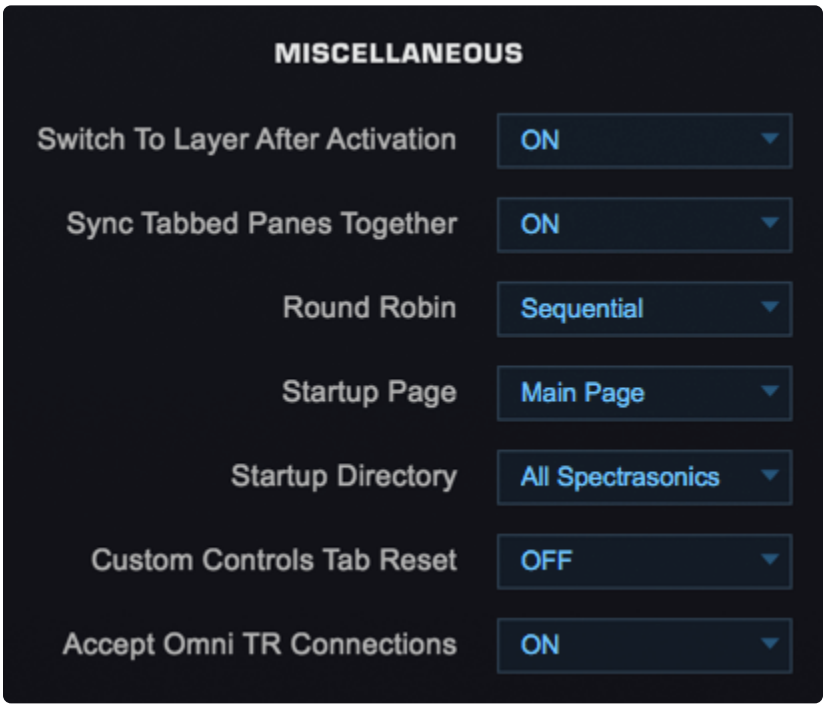
- **Patch** allows you to set a unique scale for each of the eight Parts.

NOTE: Patch scales must be selected from the MAIN / Scale page. A unique value is used in each Patch (and is selected on the "Main" pane). When "Patch" is selected on the System page, the Scale pane will display a dash.

NOTE: When the mode is changed to "Patch" it will take effect when the next Patch is loaded.

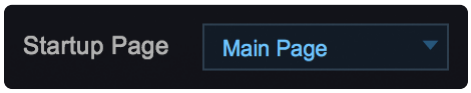
NOTE: Middle C (C3 or C4, depending on your controller) is the common reference for all alternate tunings and remains the same, no matter what scale is loaded.

15.4. Miscellaneous

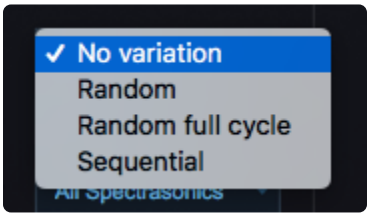


This area provides global options for the instrument's Startup Page, Round Robin settings, and preferences for how the Layers behave in the interface.

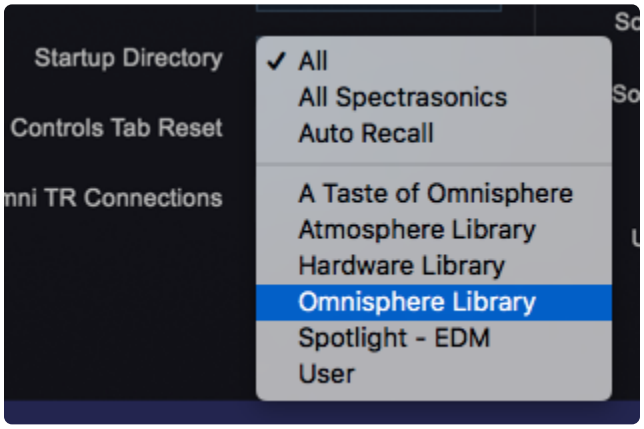
Startup Page Preference



Omnisphere's default startup page is the Main Page. This menu allows you to select from either the Orb, Main, or Layer page as the default.



Startup Directory Preference

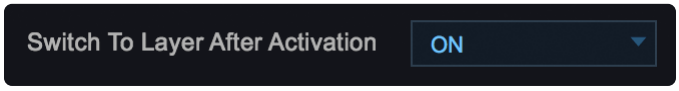


From this menu you can select the Patch directory that is loaded at startup. Choose from “All,” “All Spectrasonics,” “Projects,” “User,” any of the Satellite Instruments and Legacy Libraries, as well as any of your third-party libraries.

For example, the “All Spectrasonics” option brings up only Spectrasonics Patches, including those from Satellite Instruments like Keyscape or Trilian, and omits any User and third-party sounds.

You can also select “Auto Recall” which remembers and returns you to the last Library/ Directory from which you loaded a Patch.

Switch to Layer Upon Activation Preference

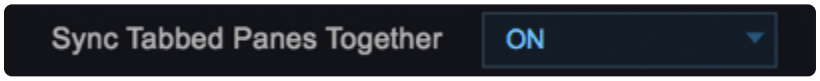


The four Layer MIX sliders on the footer of the **LAYER PAGES** have activation buttons. If “Switch to Layer Upon Activation” is set to “ON,” whenever you turn ON a Layer, it will automatically switch the LAYER page’s view to that Layer.

For example, if Layer A is activated, but Layer C is not, when you select the Layer D activation button, the view will switch to Layer D.

If Switch to Layer Upon Activation is OFF then Layer activation will not cause the Layer page to change to the activated Layer.

Sync Tabbed Panes Together

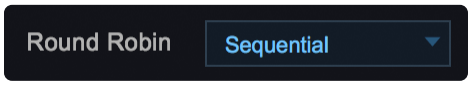


This is the default setting, but you may set your preference here.

When enabled, this function will ensure that when you change from one Part to another, the view will remain the same.

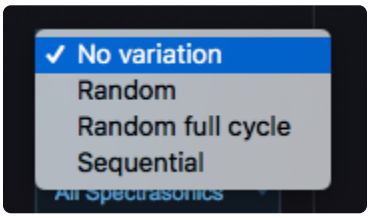
For example, if Part 1 has the FX page selected, and then Part 2 is selected, it will also display the FX page. If “Sync Tabbed Panes Together” is disabled, then the views will not synchronize – they’ll change only for the Part you are editing.

Round Robin



With only one sample per note, repeated notes on a sample-based instrument can typically cause a “machine gun” effect, with the same sample 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 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 Keyscape’s keyboards and for Trilian basses. If you are loading Keyscape and/or 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.

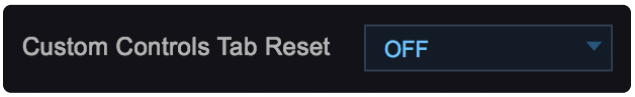
NOTE: The Sample Thinning settings located in the Patch Browser’s Soundsource Zoom determine how many Round Robin samples are loaded with the Patch or Soundsource.

Accept Omni TR Connections

Enabling this option allows Omnisphere to communicate with the Omni TR iPad app. When “Accept Omni TR Connections” is enabled, Omni TR will automatically connect to Omnisphere when launched.

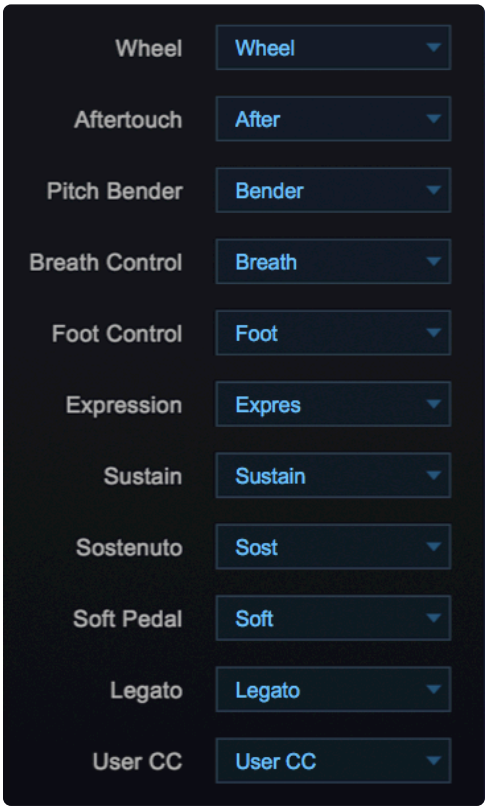
For complete instructions on setting up Omni TR, please visit our website at:
http://www.spectrasonics.net/omni_tr_app/

Custom Controls Tab Reset



When enabled, this function will ensure that when you change from one Keyscape Custom Controls Tab to a different one, the view will be the same. For example, if a Patch has the FX Tab selected, Keyscape will continue to display the FX Tab when another Patch is selected. If “Custom Controls Tab Reset” is disabled, the views will not synchronize – they’ll change depending on the Patch.

15.5. Modulation



The MODULATION assignments section allows you to override and remap the standard MIDI messages used by the **Modulation Matrix** sources in Omnisphere. Simply select the drop-down menu next to one of the 14 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 for 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.

NOTE – When you designate a MIDI controller to act for pitch bend, sustain, or any other standard MIDI message, the controller will only operate in the context of the Mod Matrix. It will not fully replace the Message. For example, if you designate CC 34 for Pitch Bend, CC 34 will work as the Pitch Bend Mod Source (in the Mod Matrix), but CC 34 will not act as the Pitch Bend itself and will not bend notes. Likewise, a CC used for Sustain will act as a Sustain Mod Source, but will not cause notes to sustain.

15.5.1. MIDI Controller

The choices for MIDI Modulation Sources in Omnisphere include a variety of standard MIDI controllers such as Wheel, Legato, Expression, etc. You can use these options on the **SYSTEM Page** to map those sources to other MIDI controls.
For example, if you don't have a particular physical controller such as an Expression Pedal, you can map Expression to Breath Control and use a Breath Controller in any Patches that use Expression 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.

16. Support

Many common technical support questions can be answered by checking the related section of this Reference Guide or by **logging in** and navigating to our **Knowledgebase.**

NOTE: It's important to stay up-to-date with the latest version of Omnisphere, as we continue to add new features and improve the performance and capabilities of our instruments. Please refer to the Smart Update section of this guide.

If you are still in need of technical assistance after checking this Reference Guide and our Knowledgebase, please feel free to contact our 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'll get back to you as soon as possible.

- (818) 955-8444 phone
- (888) 870-4223 toll free in North America

Monday-Friday 10AM-5PM Pacific Standard Time

Email: **info@spectrasonics.net**

SALES SUPPORT
For product orders or sales please contact your local Spectrasonics distributor. All Spectrasonics instruments and Xpanders are sold through our **international distributor and authorized dealer network.**

17. Glossary

Audio Unit Apple introduced the Audio Unit (AU) plug-in specification in MacOS. Since this plug-in standard is native to MacOS—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, Ableton 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 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.

Bipolar 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.

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…

Center detent
This is the neutral position of a parameter's knob or slider, especially in reference to Bipolar 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
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 58 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
Saving all the current parameter settings of an entire FX Rack creates an FX Rack Preset. An FX Rack Preset can be any combination of up to three FX Units with any settings. Users can save custom FX Rack Preset with custom names. These FX Rack Preset will be available later in any session.

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, Tracktion, Fruity Loops, Metro, and Acid Pro are all examples of software 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 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.”

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

Omni
Through the MIDI Learn function, Omnisphere is capable of being set up 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 (PM). 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 runs from within a host application to provide additional functionality.

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

Pop-up Menu
One of the menu lists appears when you click on an Keyscape 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 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.

Re-trigger
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 RMS

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
The attribute of 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 changing the overall gain of the system.

Unlearn
Parameters that have been mated with a physical controller can be un-attached 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.

18. Credits

Produced by Eric Persing

SOFTWARE DEVELOPMENT

- **Principal software development:** Glenn Olander, Neal Olander
- **Standalone development:** Matt Stabile
- **Additional coding:** Thomas Serafini, Bernie Torelli, Artemiy Pavlov, Bram de Jong, Jon Hodgson, Magnus Jonsson, David Strozyk, Jay Olson, Shirley Sloper, Jankoen de Haan, Chad Martin

SOUND DEVELOPMENT

- **Principal Soundsource development:** Eric Persing, Diego Stocco, Ignacio Longo, Tobias Marberger, Scott Frankfurt
- **Additional sound development:** Bob Daspit, Tobias Marberger, Jonathan Merrill, Roby Duke, Peter Maunu, Adam Hawk, Bob Wilson, Hans-Jörg Scheffler, Stéphane Pigeon, Dan Holter, Steve Conner, Stéphane Bonvallet, Schtung Music, Ryeland Allison, Dan Portis-Cathers, Nick Manson, Les Correa, Michael Flint, Hans Zimmer, Lennie Moore, Bobby Summerfield, Joe Arthur, John Lehmkuhl, Andrew Schlesinger, Gabe Shadid, Jack Mazzotti, Steve Tavaglione, Peter James, Matt Bowdler, Pendle Poucher, Mike Babbitt, Carl Lofgren, Seth Norman, Michael Lord, Ace Yukawa, Luigi Bruti, Scott Tibbs, Taro Kakehashi Jr, Luke Pickerill, Richard Souther, Akira Endoh, Tetsuya Fukumaro
- **Performers:** Gulli Briem, Jonathan Merrill, Alvin Chea, Cantate Boys Choir, William Cantos, Randy Crenshaw, Jeff Gunn, Dave Simpson, Ellis Hall, Huun Huur Tu, Imani Fellowship Choir, Jennifer Ivester, Kirsten Wenlock, Libby Torrance, Melinda Perrin, Pablo Sepulveda, Roby Duke, Steve Amerson, The Hertfordshire Chorus, The Washington Chorale, The Compline Singers, Bob Daspit, Peter Maunu, Aimee Buchholtz, Bashiri Johnson, Makinto, Gina Salá, Kaigal-ool Khovalyg, Anatoli Kuular, Sayan Bapa, Amalita, José Guzman, Marcelo Sulantay, Elmer Brown, Kirsten Owen, Julie Wolf, Roger Treece, Antowaine Richardson, Main Attraction, Ronnie Rowland, Tony Graves, Lee Conerly, Sean King, Nikol Kollars, Jo Miller, Doug Barnett, Kuk Harrell, Justo Almario, Katharine Grant, Lisa Curtis, Sam Townsend Jr., Linda McCrary, Charity McCrary, Don McCrary, Howard McCrary II, Charles McCrary, Kristle Murden and all the great big musical McCrary family, Elliot Redman, Drew Dumas, Timur Beriker, The Escola de Samba percussionists of Rio de Janeiro, Elijah Newsome, Eddie Cusic, Eugene Powell, Dee Dee Brazitis, Rob Stewart, Melvin Saunders, Timothy Danpier, Joe Arthur’s South African Choir, Antwoine Parmer, S.H.A.D.E.S. Urban Youth Choir, Corla Wygal, Richard Hill, David Palmer, Carol Ensley, Valerie Pinkston, Karl Nagele, Fritz Tatzer, Juan M. Ponce, Martin Mayorga, Alphonso Castaneda, and Rosa Castañeda.
- **Recorded in:** London, England; Burbank, California;, Brooklyn, New York; Rio de Janeiro, Brazil; Mumbai, India; Singapore; Hammamatsu, Japan; Jackson, Mississippi; Cape Town, South Africa; Pedaso, Italy; Kingston, Jamaica; Seattle, Washington; Paris, France, Bothel, Washington; Los Angeles, California; Dusseldorf, Germany; Santa Monica, California; Boise, Idaho; Kenya; Tibet; Tuva; Istanbul, Turkey; Belgium, Czech Republic

DESIGN

- **Principle Interface design:** Tolga Gurpinar, Eric Persing
- **Additional design:** Ignacio Longo, Scott Frankfurt, Glenn Olander
- **Cover Art, Art Direction, Graphic Design, & Sonic Imagery:** Tolga Gurpinar

DOCUMENTATION

- **Managing Editor:** Ignacio Longo
- **Graphic Layout:** Michael Flint
- **Contributors:** Ignacio Longo, Jonathan Merrill, Eric Persing, Robinson Collins, Michael Flint, Glenn Olander, Neal Olander

PRODUCTION

- **Production Manager:** Michael Flint
- **Production Coordinator:** Lorey Persing
- **Warehouse Manager:** Gabriel Muñoz
- **Discmaster:** Ignacio Longo
- **Betamaster:** Bob Wilson
- **Printing:** Graphic Visions

WEBSITE

- **Webmaster:** Chad Martin
- **Site development:** Tolga Gurpinar, Chad Martin, Ekim Yardimli, Adam Hawk
- **Techshop:** Chad Martin, Lorey Persing, Cesar Moreno, John Martin

ADDITIONAL TECHNOLOGY

- Power Filters by GForce Software
- UVI Filters by Univers Sons
- Custom FX development partners: Overloud, Nomad Factory, Audionerdz, Smartelectronix, Sinevibes
- FLAC Lossless Audio compression courtesy of xiph.org Foundation
- Additional Thriftshop Impulses by Fokke van Saane Geluid

18.1. Special Thanks

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The Producer wishes to extend personal thanks 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

THIS INSTRUMENT IS GUARANTEED TO BE 100% COPYRIGHT CLEAN

19. Legal

When you break the licensing seal on the packet of discs, you have agreed to the terms of our license agreement.

Please read these Frequently Asked Questions and the **Software License Agreement** carefully before agreeing to install the software.

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.

What is meant by "Single-User"?
A single-user is defined as one person. The license cannot be owned by a company, corporation, organization, band, partnership, studio, etc.

Are there any legal limitations to how I can use Spectrasonics Virtual Instruments?
The main limitation is that you are not allowed to use them 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 Spectrasonics Virtual Instruments. However, you are able to use them in all your musical recording applications without paying for any additional licenses.

Is there a educational license price for Spectrasonics Virtual Instruments?
Spectrasonics doesn't offer student discounts, however qualifying schools and institutions can participate in our EDU program.

On how many computers may I install it?
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 on a project?
No, it isn't mandatory for our instruments, but we would certainly 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 in music for 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 "multi-track" format?
One of the only things that is NOT allowed is distributing your music in a multi-track 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 attaining 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.

Can I use the sounds from my Spectrasonics Virtual Instruments outside of music production?
If you are considering any non-musical use of the sounds from your Spectrasonics Virtual Instruments, it's very important that you contact us directly in advance to clear any special, non-musical usage: **info@spectrasonics.net**

Can I use the demo songs?
No. They are presented to give you an idea of what Spectrasonics Virtual Instruments can do. Demo songs cannot be sampled, remixed, or used in any other application without special permission from Spectrasonics. If you are interested in using any of the demo songs in some other application, please contact us and we'll connect you with the composer/publisher.

Can my writing partner use my Spectrasonics Virtual Instruments on their computer?
No. The license to use Spectrasonics Virtual Instruments is on a per-person (single-user) basis. They would need their own licenses for the Spectrasonics Virtual Instruments to use them legally on their computer.

I work at a production music studio with several other composers/producers. Can we all use Spectrasonics Virtual Instruments from our main server?
No. It's very important to know that each composer must have his own copy and license for Spectrasonics Virtual Instruments. 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, am I allowed to include Spectrasonics Virtual Instruments on a rental or studio computer for studio clients to use on their projects?
No. The standard license to use Spectrasonics Virtual Instruments is only granted to the buyer. We have a "single-user/multiple-computer" lifetime license policy. If it is a recording project that you are musically involved in producing, engineering or arranging of course that isn't a problem. However, your studio clients aren't licensed to use them for their own projects and the use of Spectrasonics Virtual Instruments cannot be "rented." In the case where a client has his own license for a Spectrasonics Virtual Instrument, that client

is welcome to use the studio's installed copy of the instrument. The main point of our license agreement is the concept of a single, licensed user. A licensed Spectrasonics user must be musically involved in a project that is utilizing Spectrasonics Virtual Instruments – hence the restriction against simply renting the instruments or renting "time" to use the instruments as part of a studio's services.
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 in which they are involved. 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 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.

NOTE: Please note that purchasing an instrument new from an authorized Spectrasonics dealer is the only way to retain the complete rights for our special “Upgrade” offers. Although the used buyer does retain full access to all future free maintenance updates and tech support, license transferees do not retain the same rights for special upgrade offers.

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.

Who can I talk to if I have more questions?
We’re happy to talk to you! You can send us an email at **info@spectrasonics.net** or call us at 818-955-8481 (US).

19.1. Software License Agreement

NOTICE TO USER: THIS IS A CONTRACT. BY INSTALLING THIS SOFTWARE AND SOUNDS, YOU ACCEPT ALL THE TERMS AND CONDITIONS OF THIS AGREEMENT.

This copy of the Software is licensed to you as the end user. Please read this Agreement carefully.

This **Spectrasonics End User License Agreement** accompanies a Spectrasonics computer software program and sounds and its documentation and other related explanatory materials (collectively, the "Software"). In addition to the program and the documentation, the term "Software" shall also include any upgrades, modified versions or updates of the Software licensed to you by Spectrasonics.

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19.2. Sounds License Agreement

COPYRIGHT LAWS HAVE RECENTLY BEEN STRENGTHENED. IT IS IN YOUR BEST INTEREST TO READ AND FOLLOW THIS AGREEMENT.

You cannot re-sell or copy this instrument to another user.

You cannot transfer ownership of this instrument or the sounds or programs it contains without obtaining a license transfer from Spectrasonics. License Transfers are only granted on a case-by-case basis.

DO NOT USE THIS PRODUCT UNTIL YOU HAVE READ THIS LICENSE AGREEMENT.

BY OPENING AND INSTALLING THIS PRODUCT, YOU ACCEPT THIS LICENSE AGREEMENT.

The license to use Spectrasonics Virtual Instruments and the sounds they contain is granted to a single-user only. You cannot transfer ownership of Spectrasonics Virtual Instruments, nor the sounds or programs they contain, without first obtaining a one-time-only license transfer from Spectrasonics. License transfers are only granted on a case-by-case basis for Spectrasonics Virtual Instruments.

Reproduction or duplication of these collections, or any of the sound recordings contained therein, either as they exist in their original format, or by any means of reformatting, mixing, filtering, re-synthesizing, processing, or otherwise editing for use in another product or for resale, is strictly prohibited without the express written consent of Spectrasonics.

All unauthorized copying, giving, trading, lending, renting, reissuing, redistributing, or reselling of Spectrasonics Virtual Instruments, or any of the sounds they contain, is expressly prohibited.

You cannot electronically transfer or post samples from Spectrasonics Virtual Instruments to another person or group of persons over the Internet, or place them in a computer/sampler network to be accessed by multiple users.

NOTE: License Transfers are NOT available for Spectrasonics sound library products (Xpanders, sample libraries, benefit libraries, sample DVDs/CDs/CD-ROMS, etc).

Use of these sounds in Multimedia/Game Music projects is limited to use within original musical compositions.

Spectrasonics constantly monitors other soundware and software releases to check for copyright infringements, and will prosecute all piracy and copyright violations to the fullest extent of the law.

In Plain English: **DON’T COPY THEM.**
Please be creative in your application of these sounds and instruments and respect the artists’ hard work by keeping them for your use only.

THE SOUNDS IN SPECTRASONICS VIRTUAL INSTRUMENTS ARE GUARANTEED TO BE 100% COPYRIGHT CLEAN

19.3. Sampling FAQs

The purpose of this information is to clear up any confusion regarding the sampling of Omnisphere®. We get a lot of questions about this topic from other sound designers, so we'd like to make sure our policies are clear and upfront.

The factory Sound Libraries within Omnisphere are based on sound recordings which are copyrighted by Spectrasonics ©2018. The included Omnisphere **Sounds License Agreement** grants the purchaser a license to utilize the copyrighted material in the sound libraries within a musical context.

However, please note that this included standard license does NOT grant the user any rights to copy any portion of the factory Sound Libraries for distribution or to use Omnisphere's Soundsources to create new samples for distribution.

Please contact us at **info@spectrasonics.net** or call us at 888-870-4223 (US) if you have any further questions regarding the sampling or distribution of sounds from Spectrasonics Virtual Instruments. We are happy to talk to you, as other licensing options may be available. We handle requests outside of the standard licensing terms on a case-by-case basis.

Am I allowed to distribute samples I've made of any of Omnisphere's Factory sound libraries?
No. The factory 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.

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*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.

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*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).

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*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

19.4. Copy Protection FAQs

Do Spectrasonics Virtual Instruments use copy protection?

Yes, we have our own system. Once you've installed and opened the plugin, you'll need to authorize the plugin on our website, via your User Account. 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.

Do Spectrasonics Virtual Instruments use an iLok or any kind of dongle for Copy Protection?

No. 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. Additionally, with our system, you aren't limited to using them on only one computer. Since all Spectrasonics instruments have a "single-user/multiple- computer" license, you can install and use them on as many computers that you own and will be using yourself.

Does this mean I can use my Spectrasonics Virtual Instruments on more than one computer at a time?

Yes. This is no problem as long as you are the only user.

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 website 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 you need from Spectrasonics.

I'm concerned about what would happen to my Spectrasonics Virtual 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 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've been in business for a long time and we plan to be around for many years!

19.5. Trademarks

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