

A glowing blue sphere with a network of nodes and various waveforms. The sphere is the central focus, with a bright blue ring at its top and bottom edges. Inside the sphere, a network of nodes is connected by thin lines. Various waveforms, including sine waves, square waves, and complex oscillations, are scattered across the sphere's surface. The overall aesthetic is futuristic and technological.

OMNISPHERE

2.5



# Omnisphere2

2.5 — Last update: 2018/10/24

Spectrasonics

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# 1. Getting Started

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## **Welcome to Omnisphere 2.5!**

Reference Guide 2.5.1 – Software Version 2.5.1d – Soundsources v2.5.0c – Patches Version v2.5.1c

# 1.1. Quickstart

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This Quickstart provides an overview of the essential things you'll 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 take about 64 GB of free hard drive space, but can require up to 3 times that for the installation process.

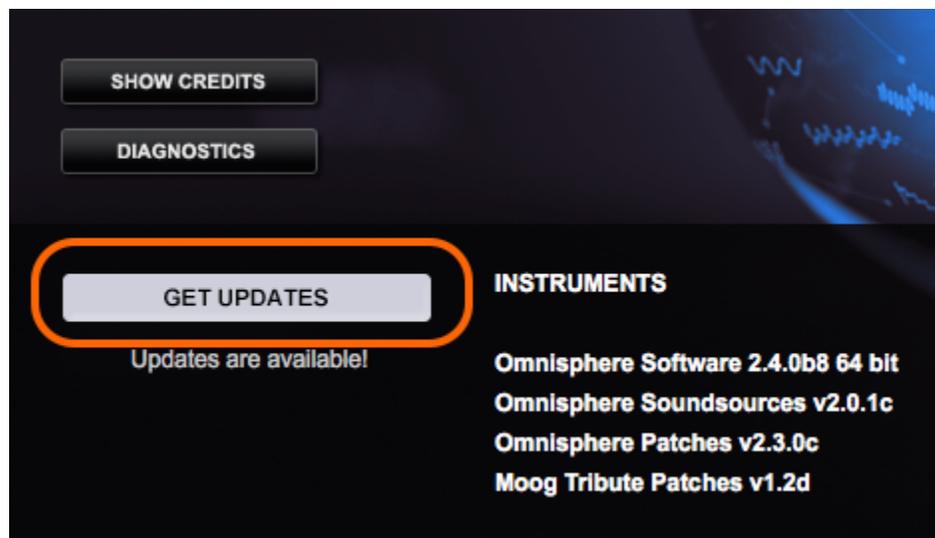
## 2. Authorize the Plug-In

[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 Recommendations

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## SYSTEM REQUIREMENTS FOR ALL USERS:

- Native 64-bit on OS X and Windows—requires 64-bit hosts.
- 2.4 GHz or higher processor.
- 8GB RAM minimum, 16GB or more recommended.
- USB2 Port, Broadband internet connection.
- 64GB of free hard drive space (twice that for the download installation process).
- Solid-state (SSD) or USB3 drives recommended when installing Omnisphere's Core Library on an external drive.

### Mac Recommendations:

- OSX 10.9 Mavericks or higher.
- AU, VST 2.4, or AAX-capable host software.

### Windows Recommendations:

- VST 2.4 or AAX capable host software.
- Microsoft Windows 7 or higher.

### 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).

**NOTE:** Support for 32-bit hosts is no longer supported in Omnisphere 2.5. Support for Pro Tools 10, RTAS, and 32-bit hosts is supported **ONLY** through Omnisphere 2.4.

## 1.3. Installation

---

Here you will find instructions for performing default and custom installations for both Mac and Windows. After installing Omnisphere, you'll need to authorize the plug-in.

Please refer to the [Authorization](#) section of this guide for further information

## 1.3.1. Download (Mac)

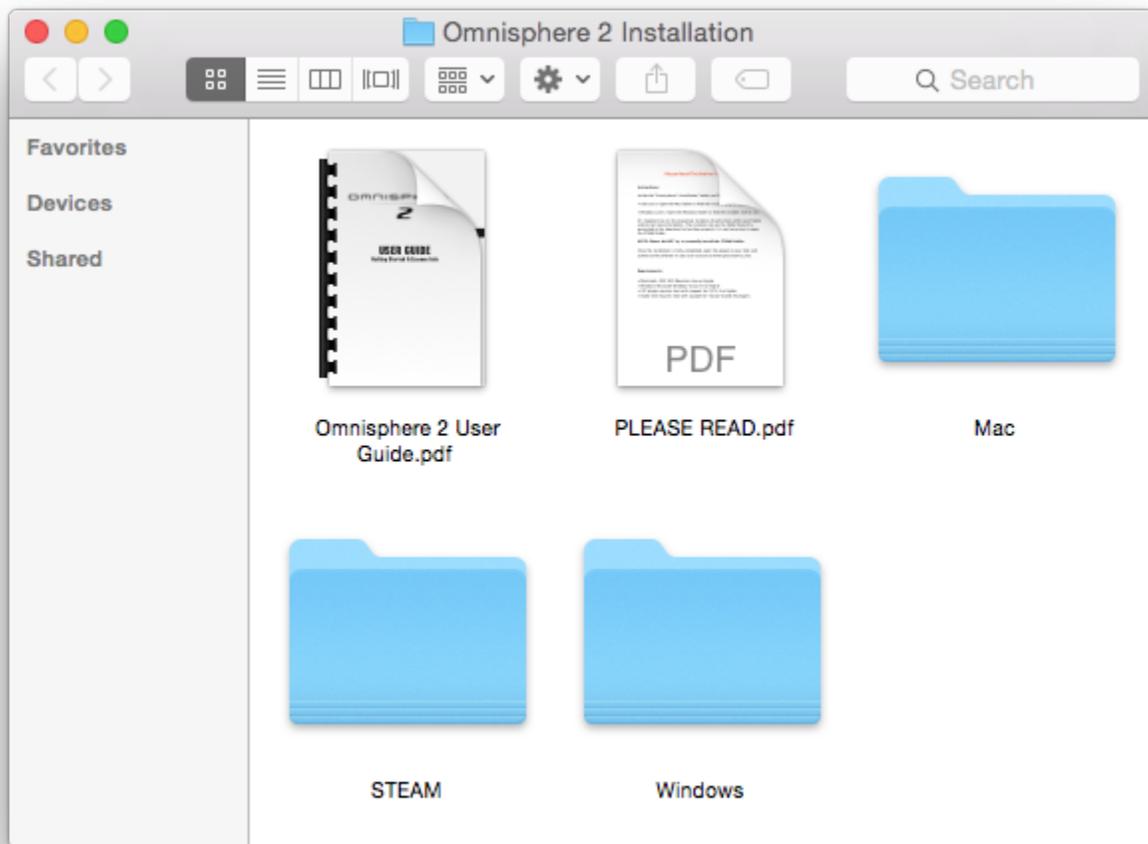
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Omnisphere 2 is available as a download for registered users through our [Webstore/Techshop](#). Once you download Omnisphere 2 via the Download Manager, follow this set of instructions to install it on your Mac system. You'll need roughly 128GB of 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).

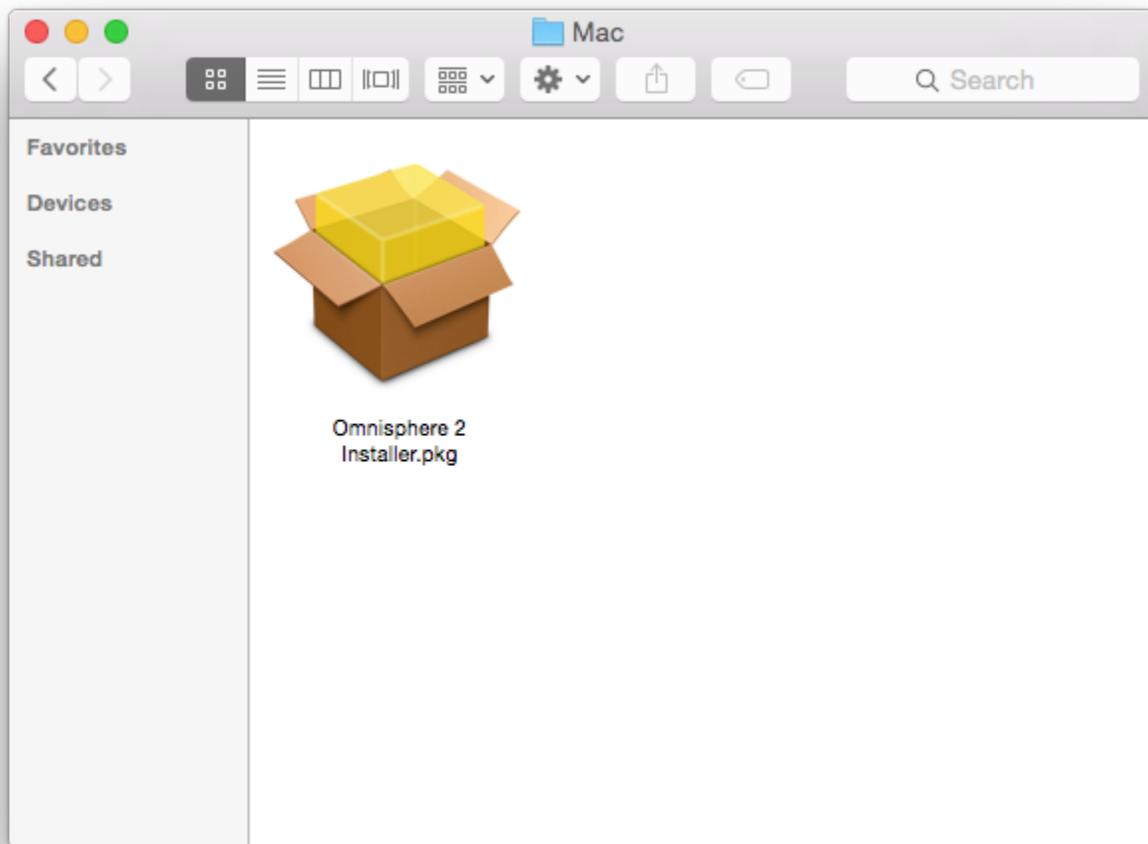
*NOTE: These screen shots are taken in macOS 10.10 (Yosemite). Installation on other versions of macOS may look somewhat different.*

### Omnisphere 2 Installation

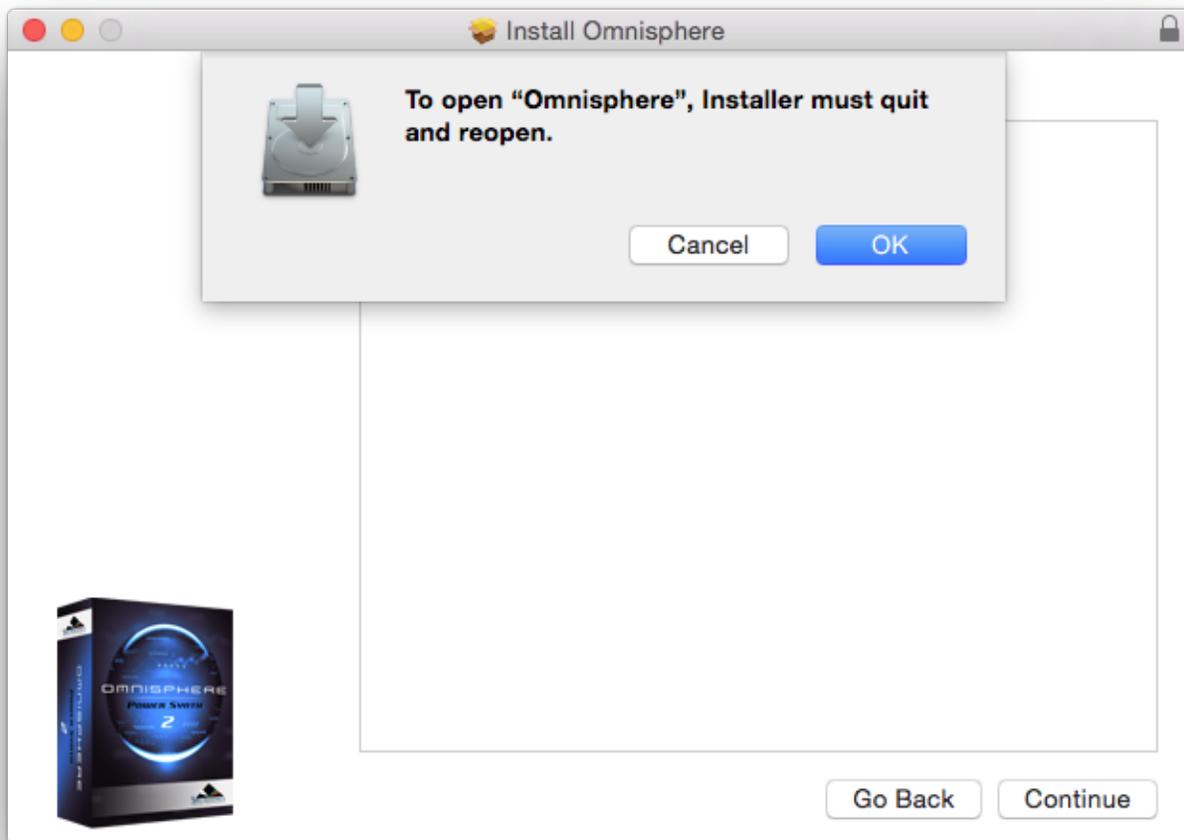
1. Open the folder "Omnisphere 2 Installation."



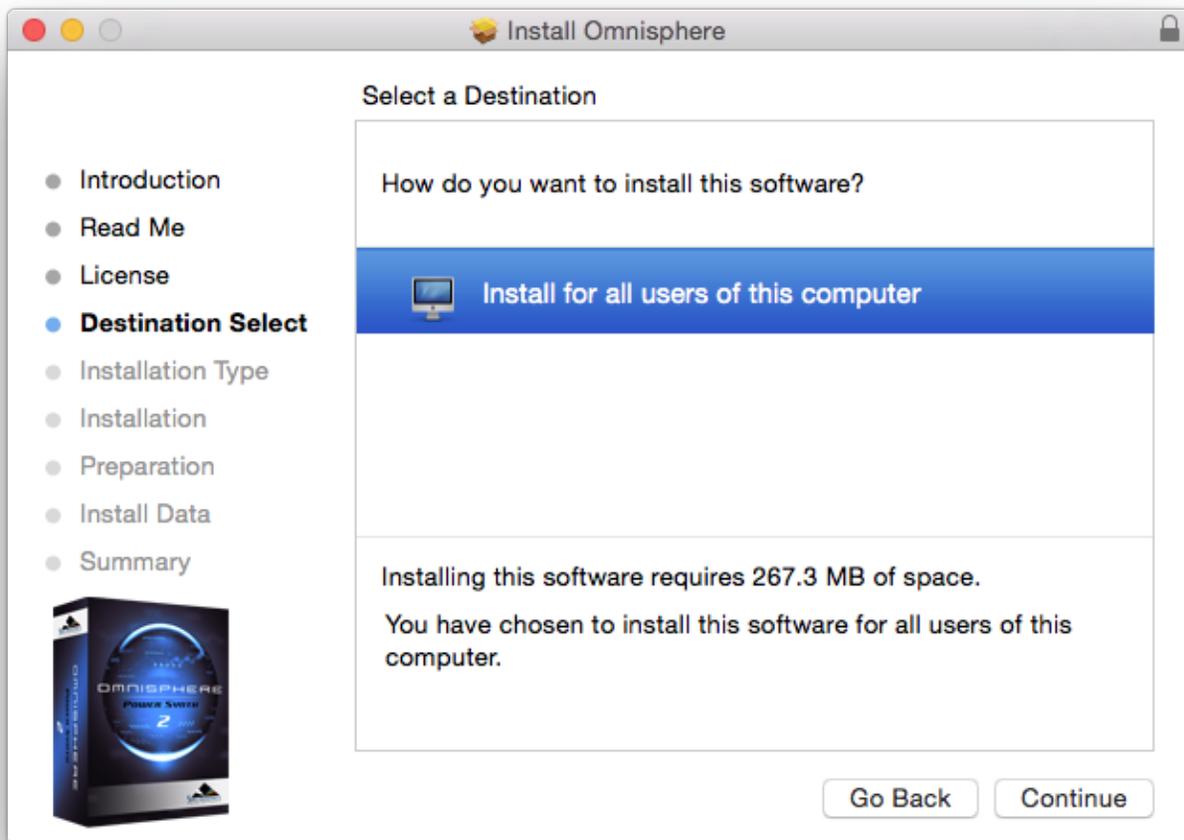
2. Open the Mac folder, then double-click “Omnisphere 2 Installer.pkg” to begin the installation.



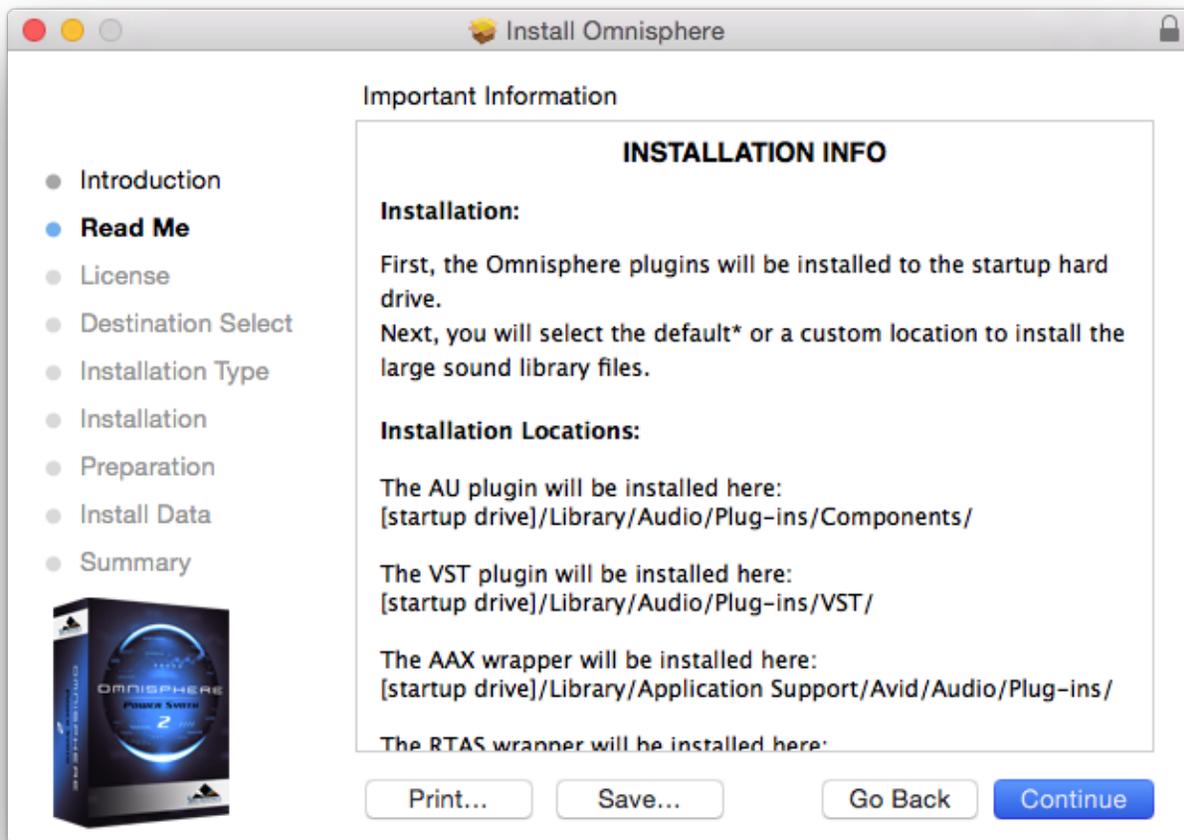
3. Double-click the file "Omnisphere 2 Installer.pkg." The installer might need to quit and reopen to ensure support for older versions of OS X, so just click "OK."



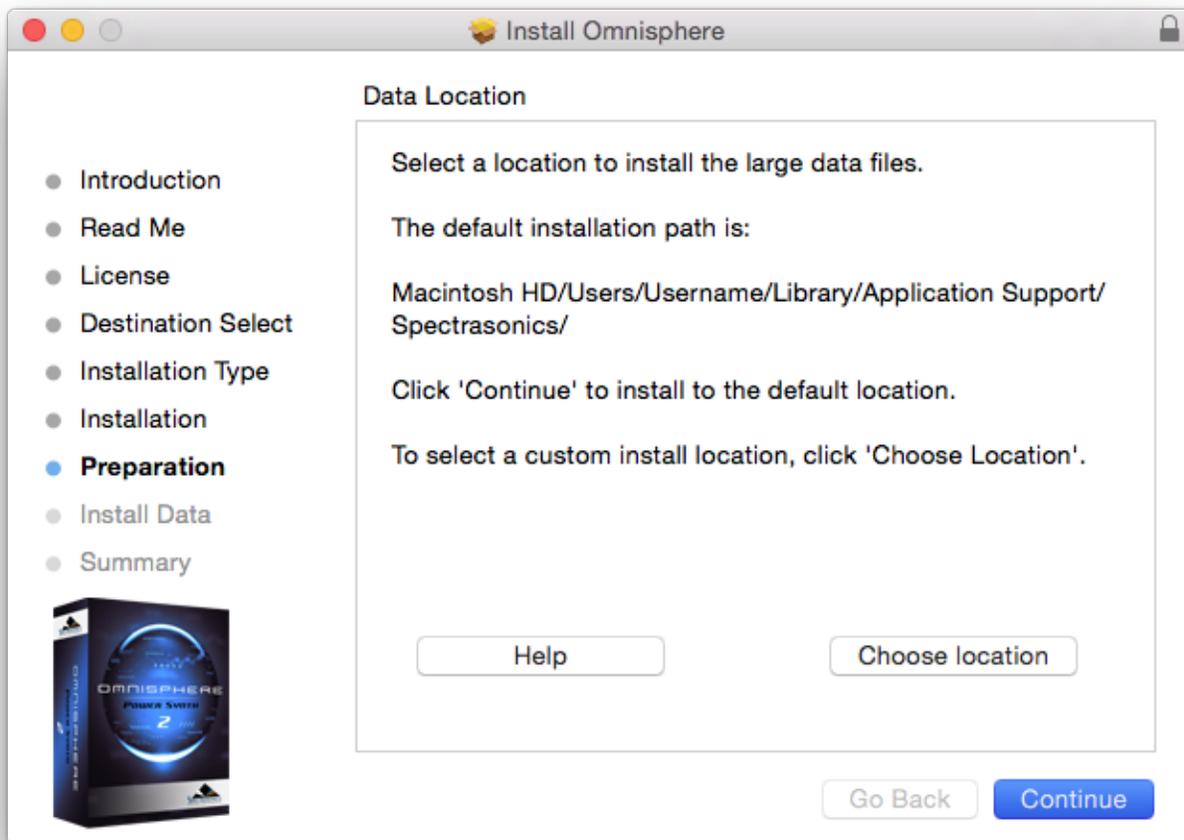
4. Follow the steps as you're guided through the installation process. Make sure to review the Installation Info and Licensing FAQ. Then at the "Destination Select" step, choose the option "Install for all Users of this computer." After the Installation Type information you'll enter your system password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



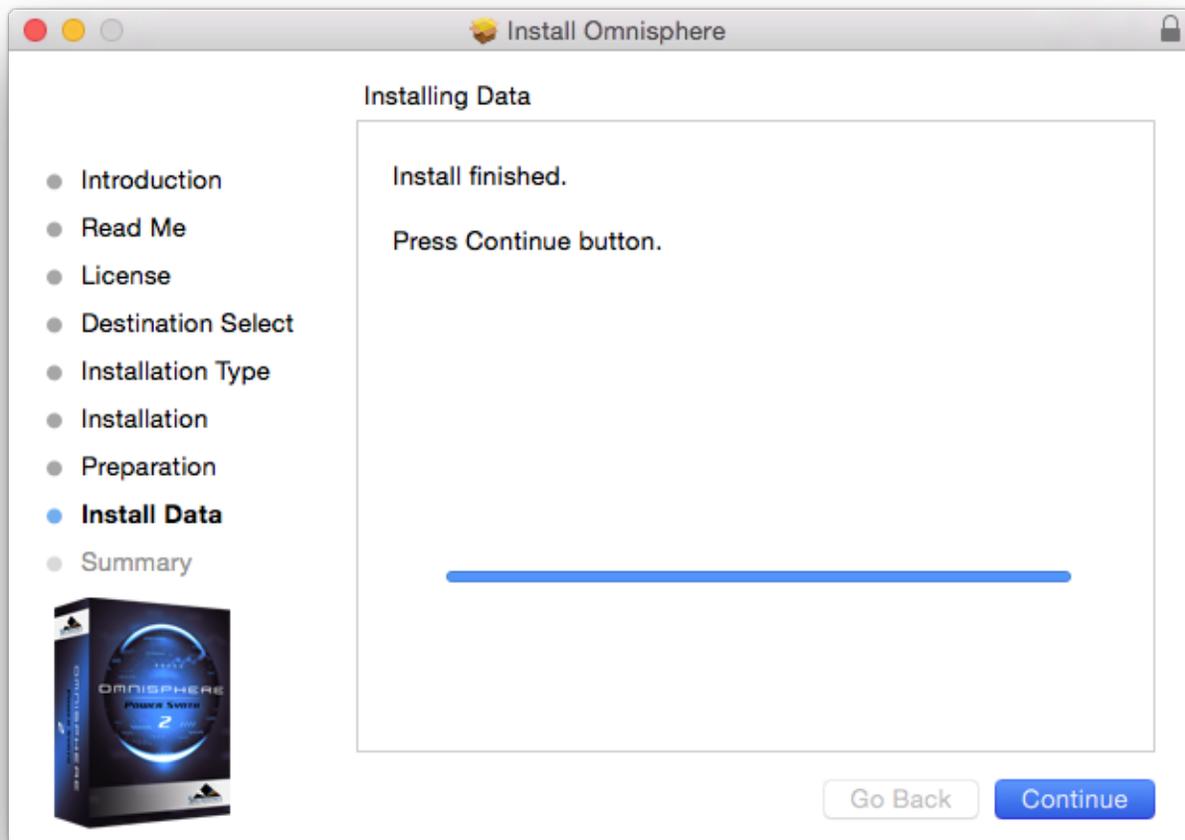
5. The plug-in files will then be installed on your Mac's system drive.



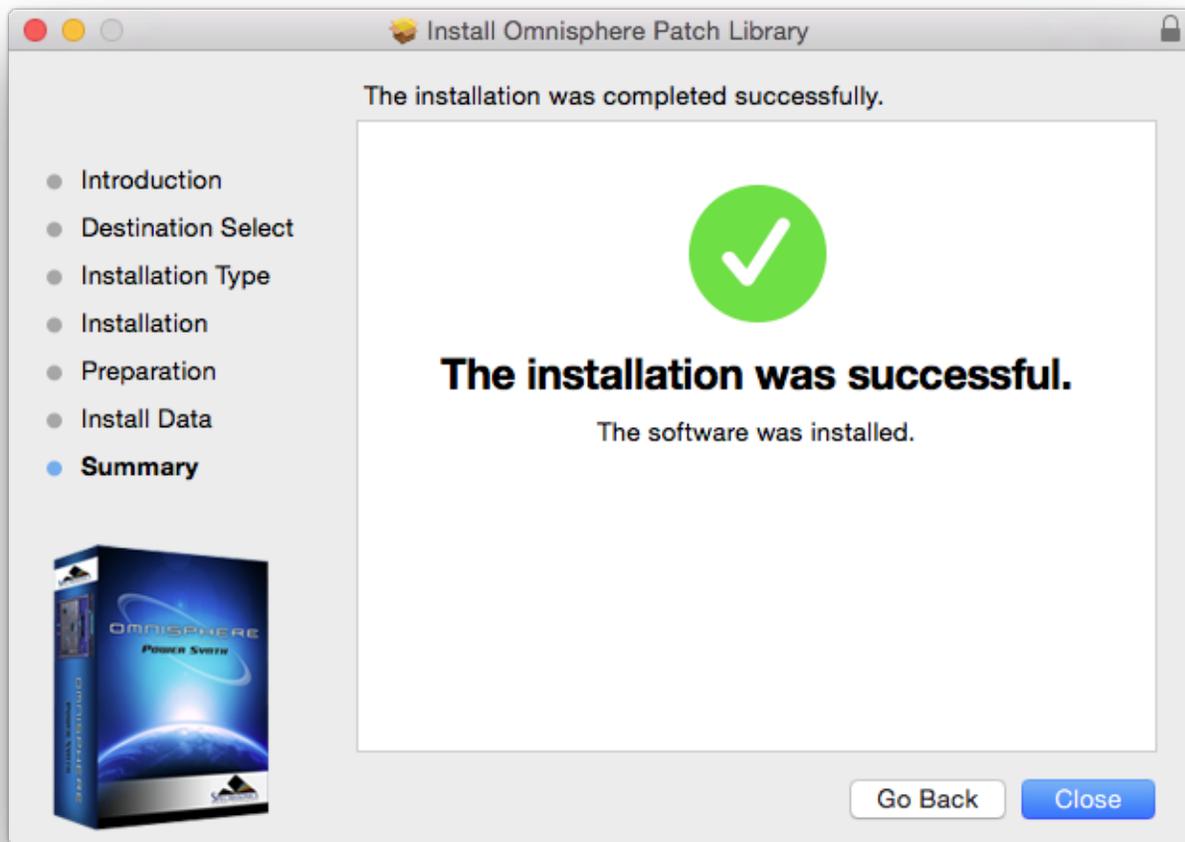
6. Next, at the Preparation step, you'll select where to install the large Core Library files. By default they will be installed to your system drive or you can choose a secondary drive by selecting the button "Choose Location."



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.



Please consult the [Authorization](#) section for assistance with authorizing Omnisphere.

## 1.3.2. USB Drive (Mac)

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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.

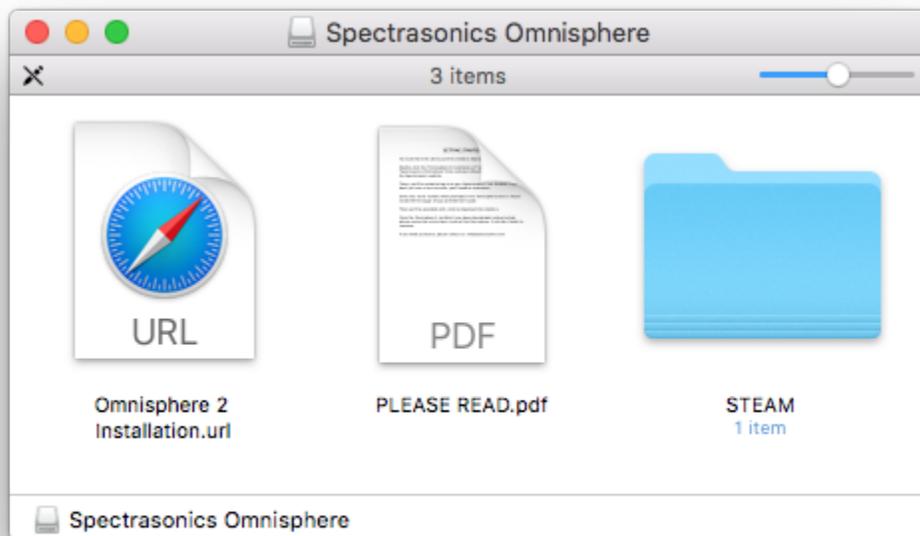
*NOTE: These screen shots are taken in macOS 10.10 (Yosemite). Installation on other versions of macOS may look somewhat different.*

### **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.



## Download the Installers

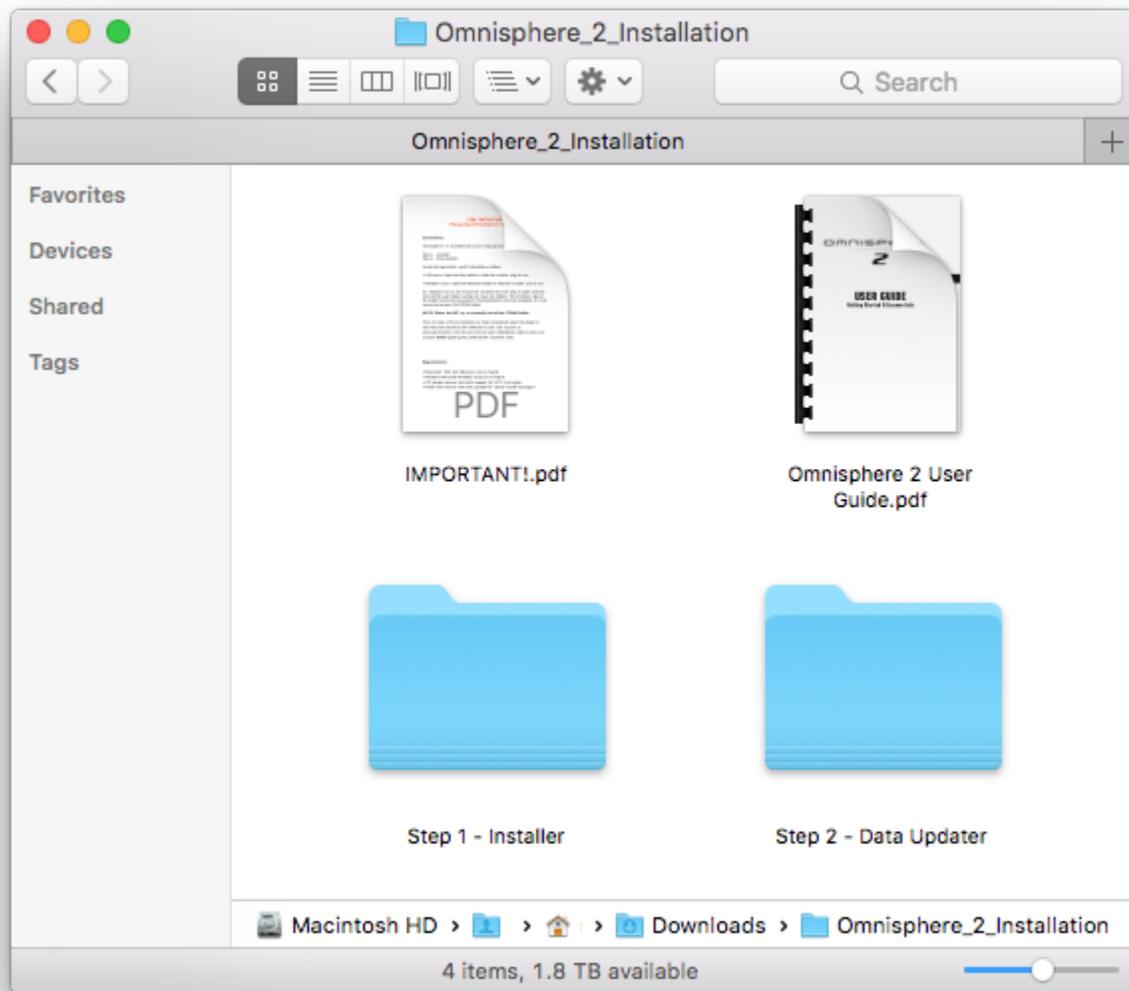
Omnisphere 2 Installers (123.1 MB)

[Download](#)

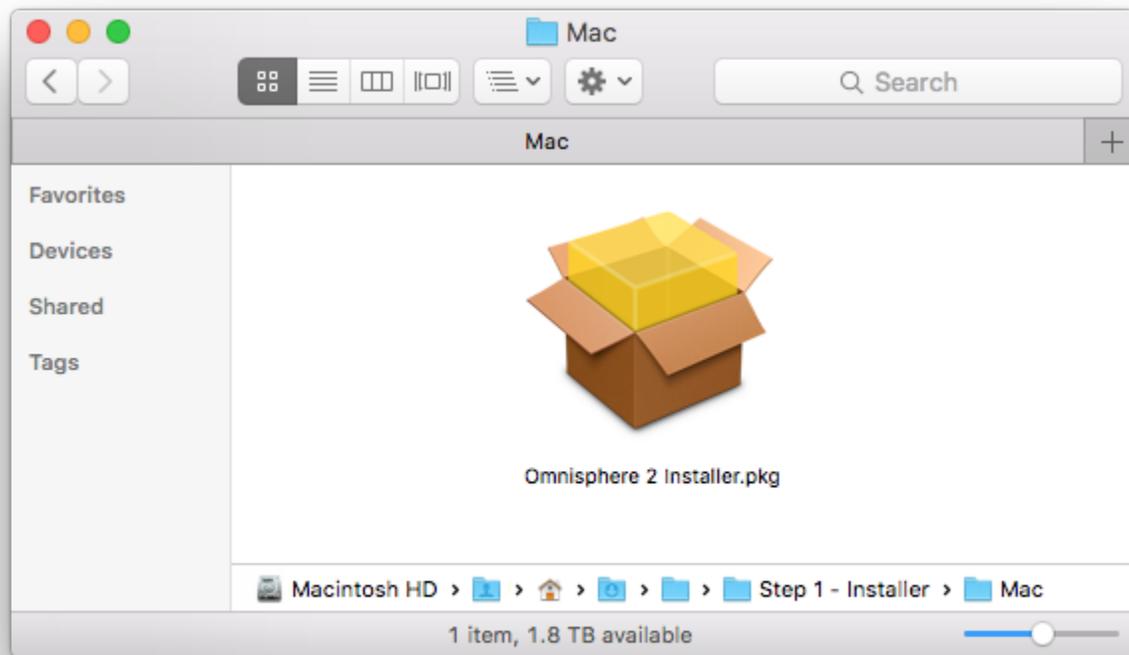
 [Installation Instructions for Mac](#)

 [Installation Instructions for Windows](#)

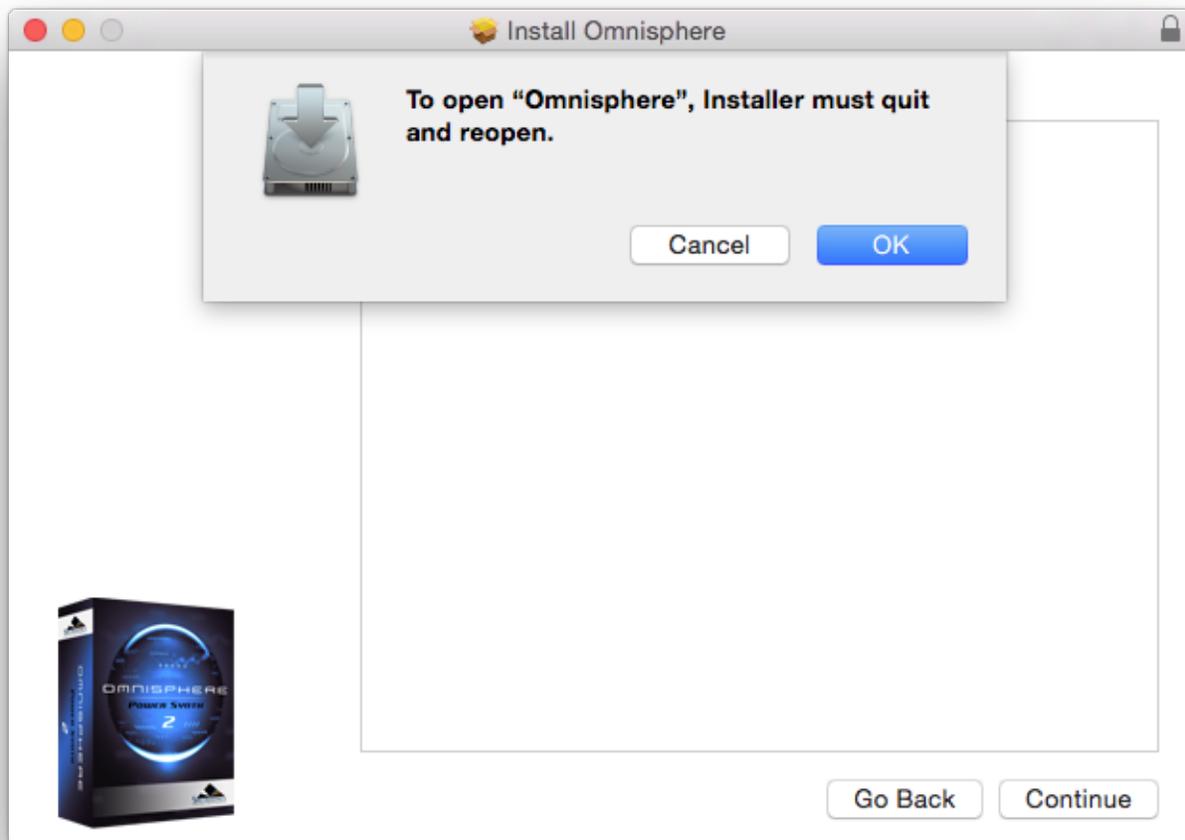
4. From your Mac's Downloads folder open the "Omnisphere\_2\_Installation" folder, then open the "Step 1 – Installer" folder.



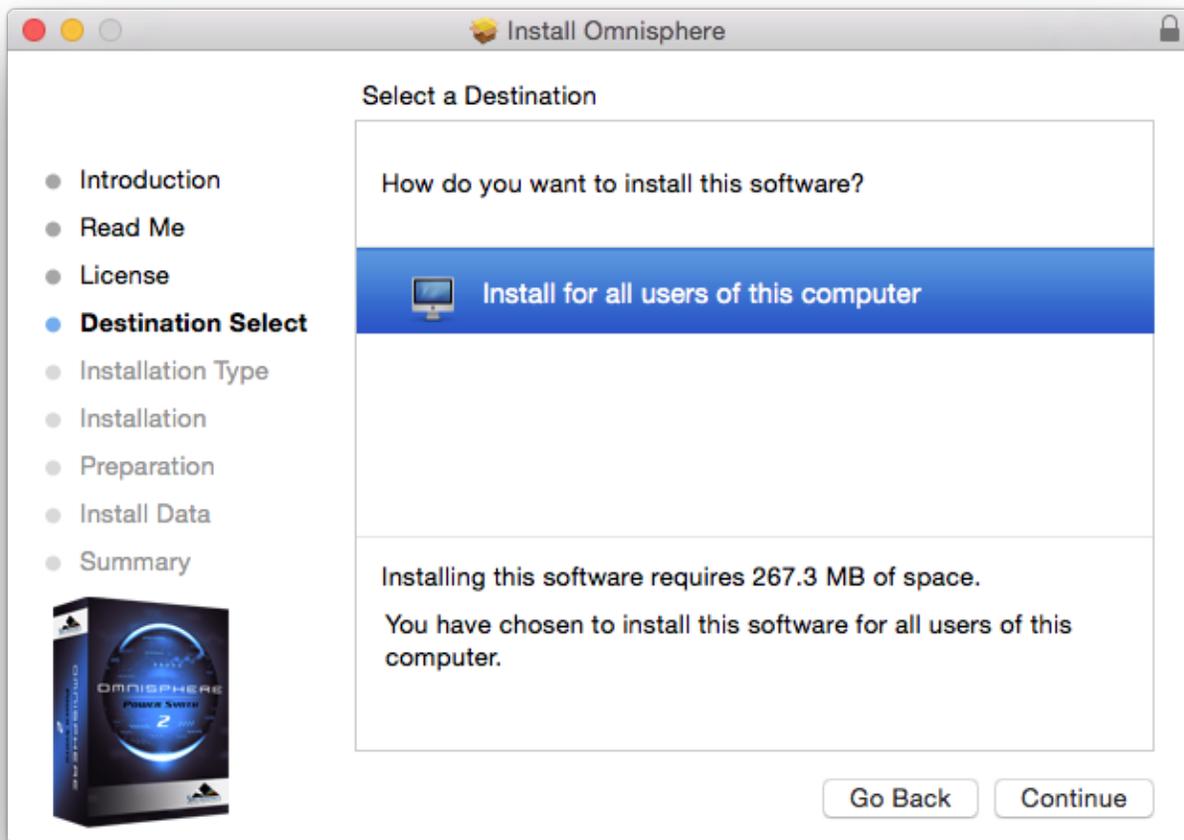
5. Open the “Mac” folder inside of “Step 1 – Installer.” Double-click “Omnisphere 2 Installer.pkg” to begin the installation.



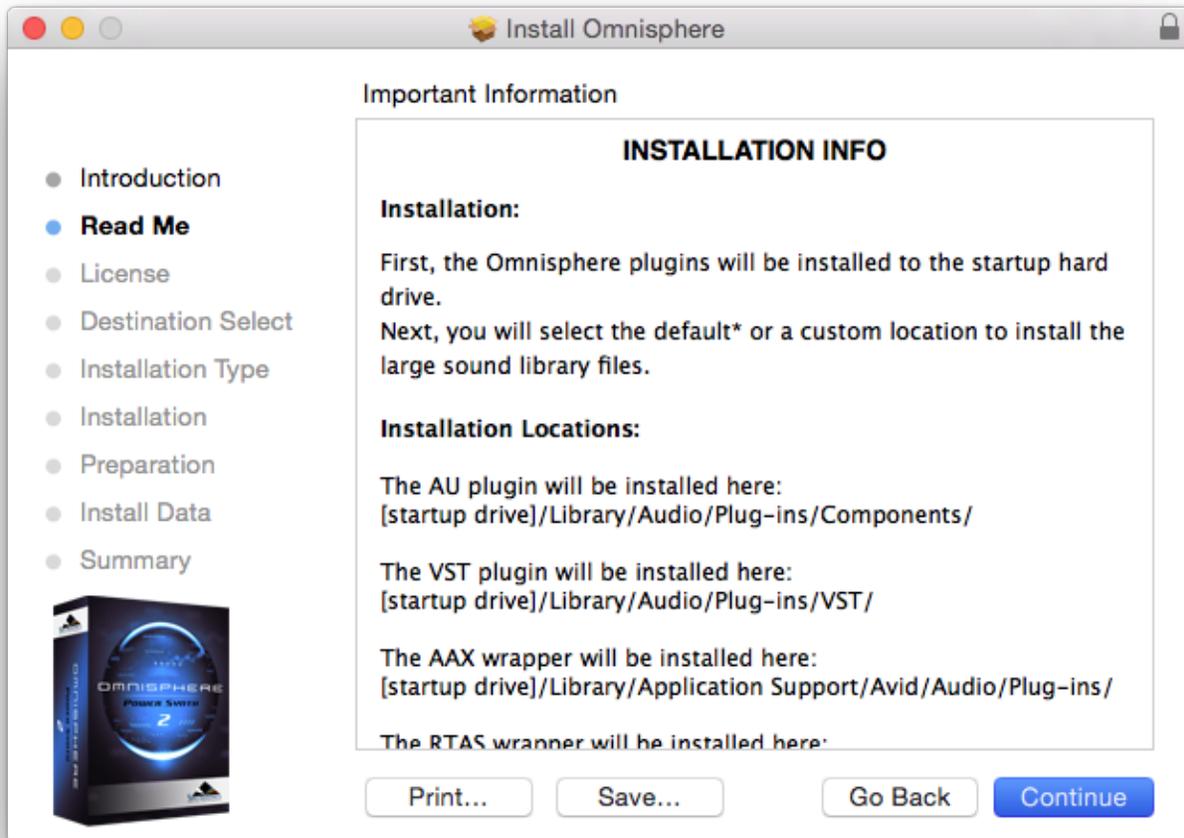
6. The installer might need to quit and reopen to ensure support for older versions of OS X, so just click “OK.”



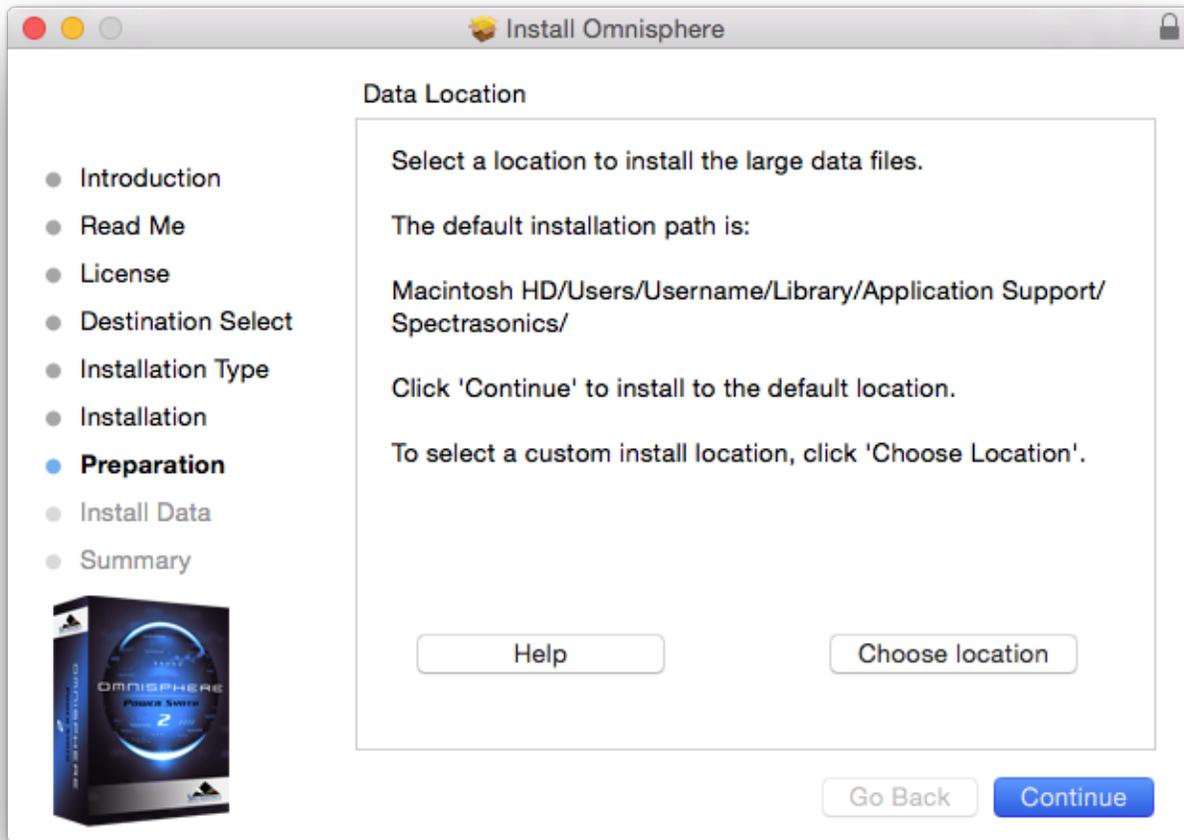
7. Follow the steps as you're guided through the installation process. Make sure to review the Installation Info and Licensing FAQ. Then at the "Destination Select" step, choose the option "Install for all Users of this computer." After the Installation Type information you'll enter your system password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



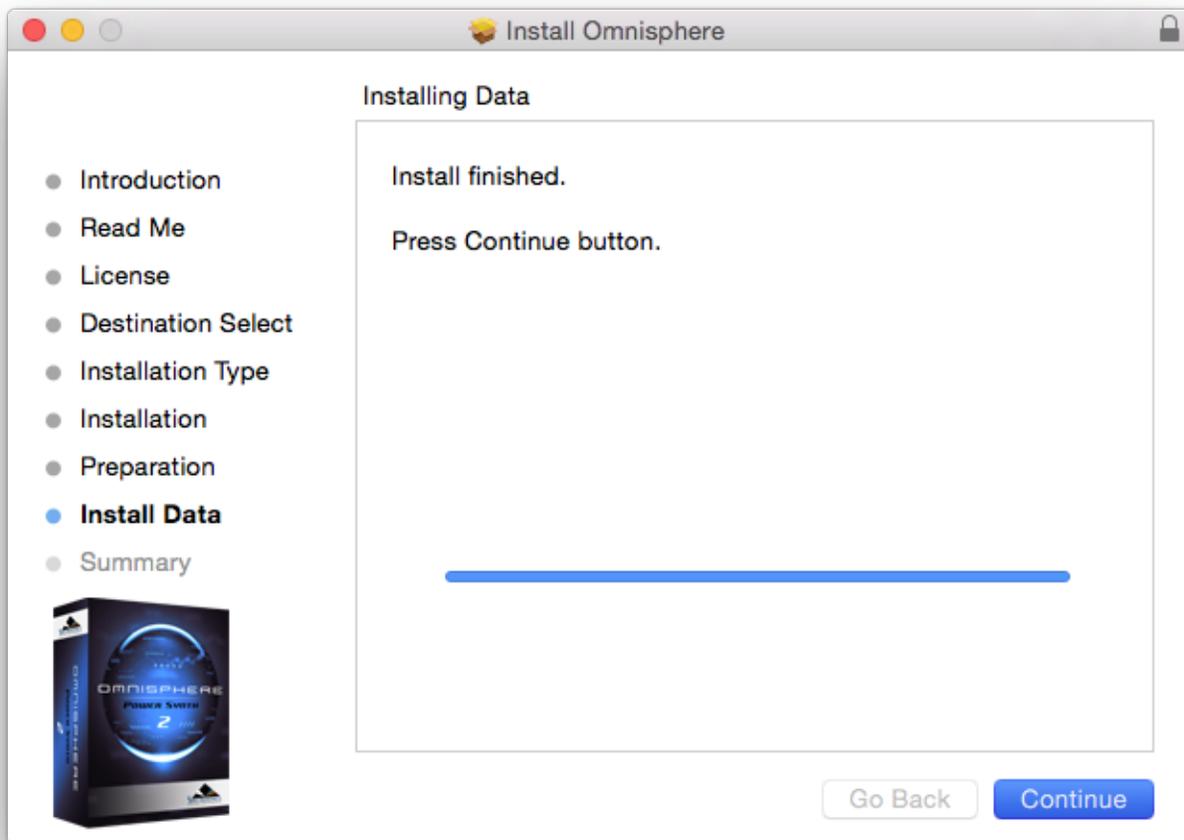
8. The plug-in files will then be installed on your Mac's system drive.



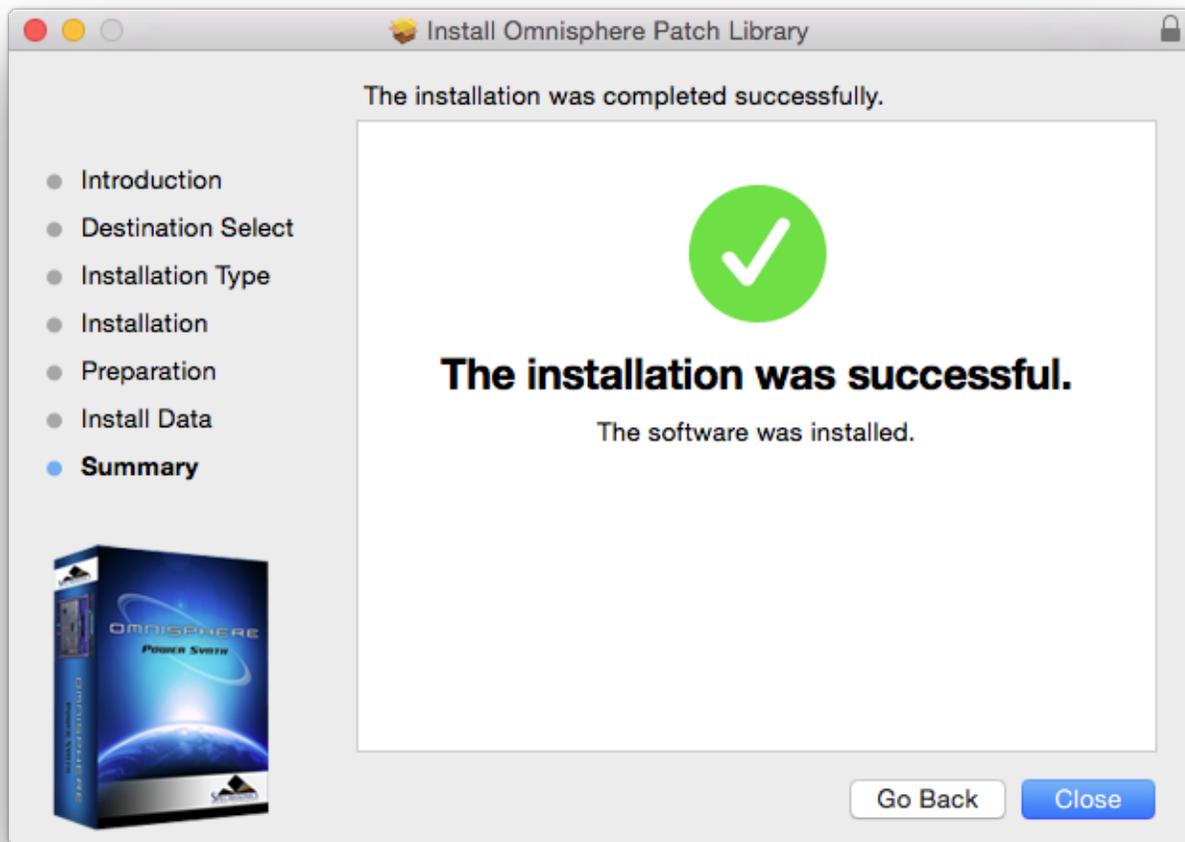
9. Next, at the Preparation step, you'll select where to install the large Core Library files. By default they will be installed to your system drive or you may choose a secondary drive by selecting the button "Choose Location."



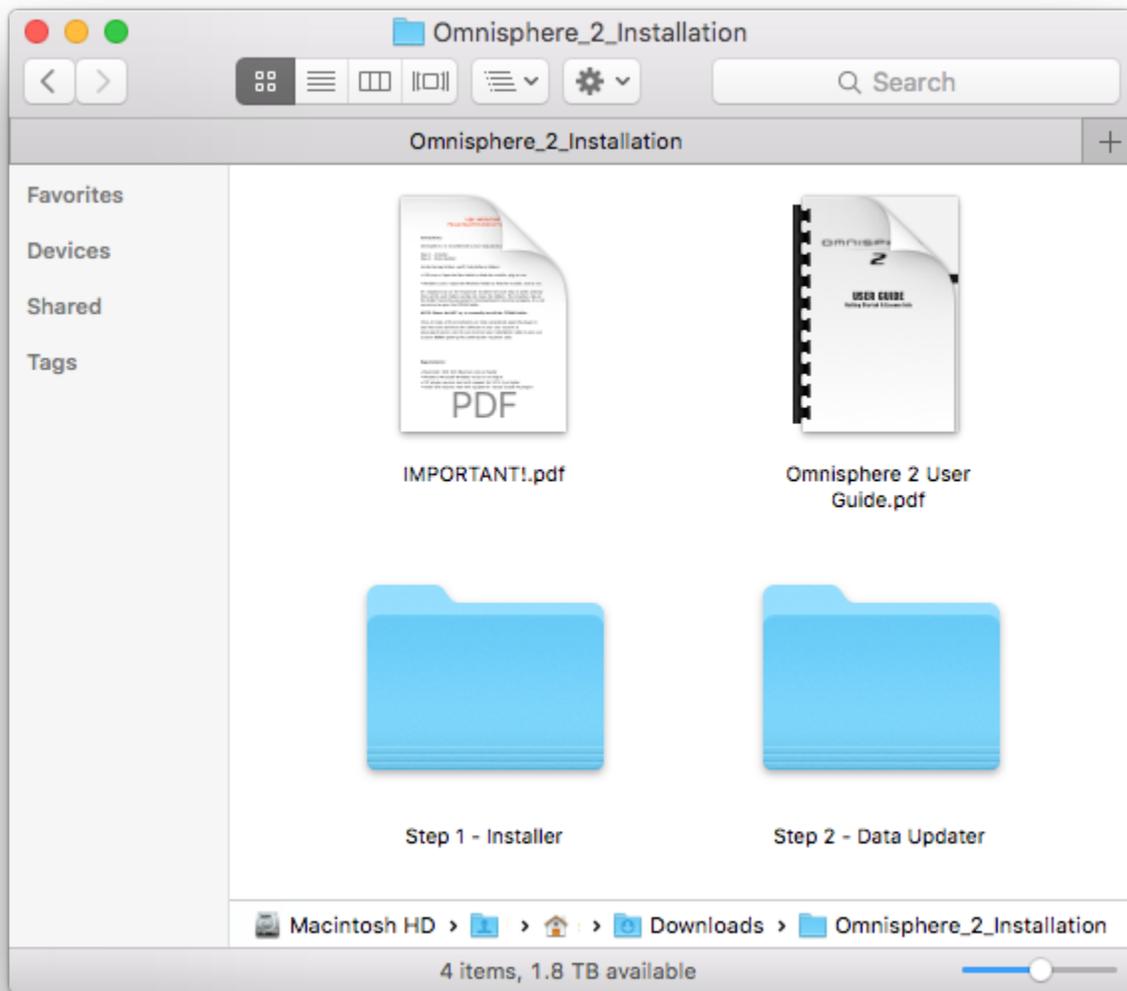
10. The large data files will now be copied to your selected drive. Allow for 30-60 minutes to install all of the data.



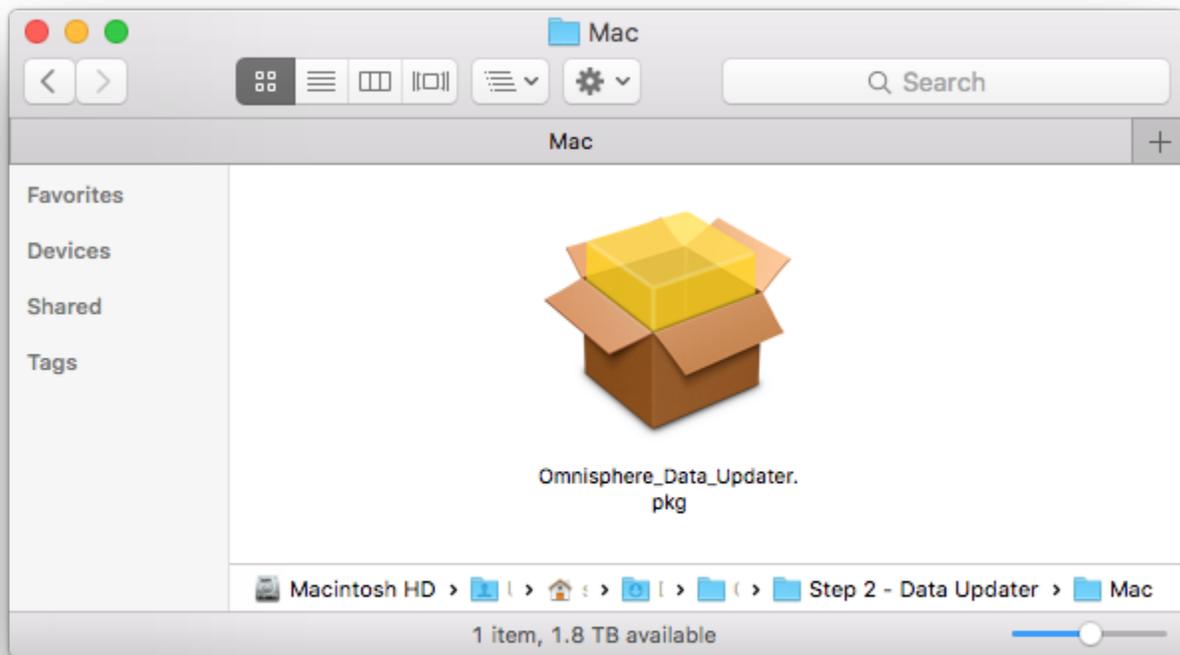
11. After the installation of Step 1 is complete, select "Close."



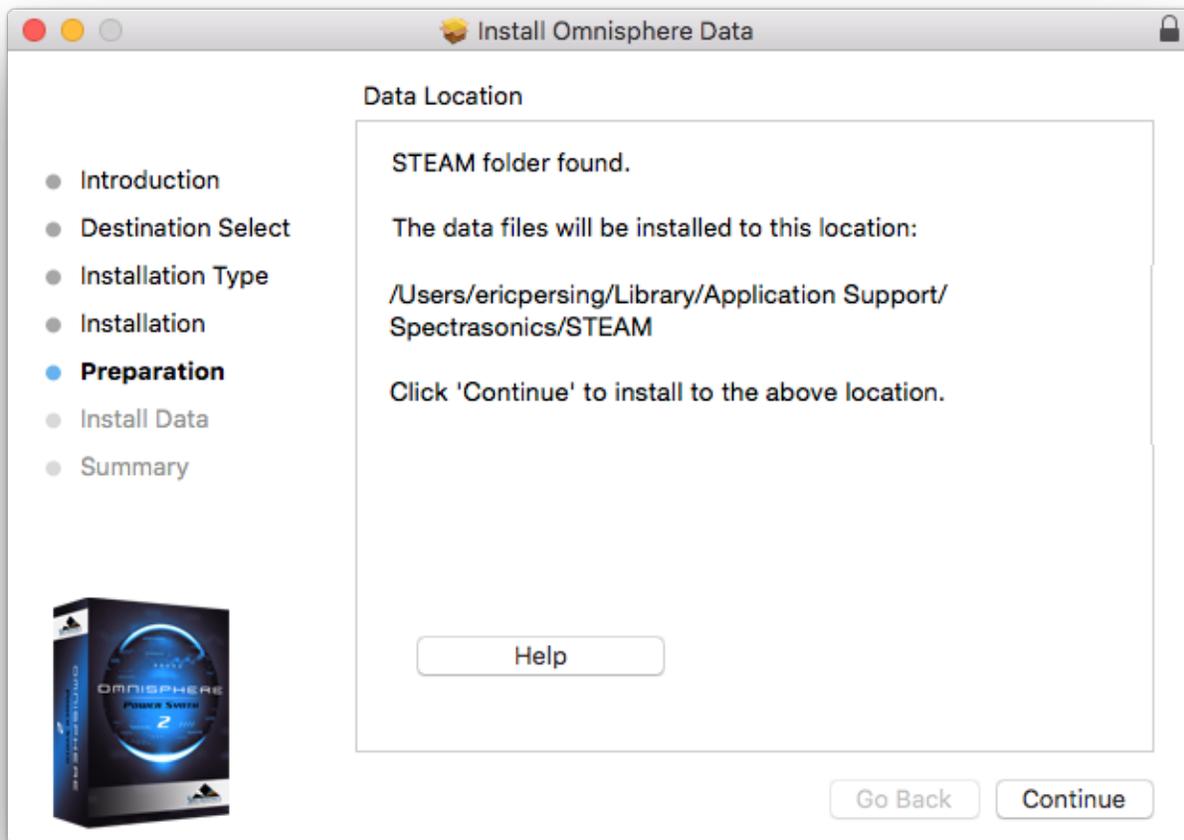
12. From the Omnisphere\_2\_Installation folder open the "Step 2 – Data Updater" folder and then open the "Mac" folder.



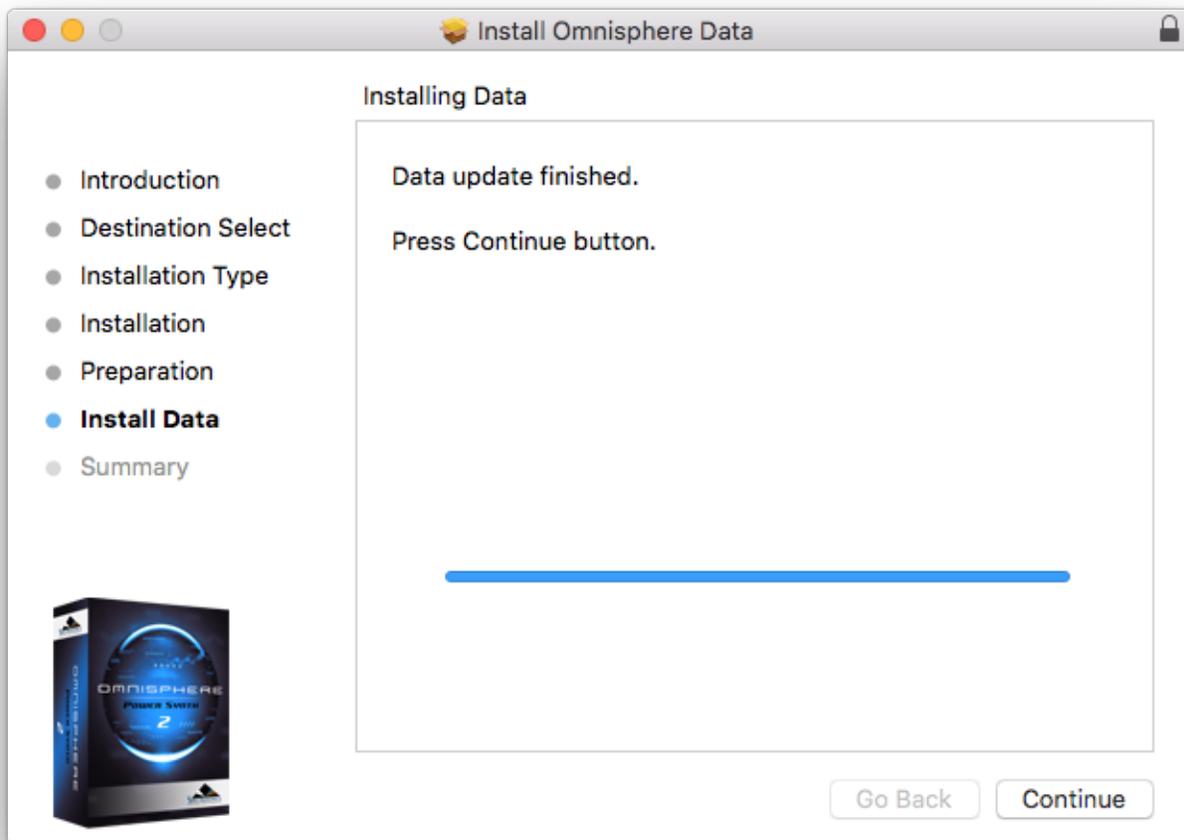
13. Run the "Omnisphere\_Data\_Updater.pkg" from inside the "Mac" folder.



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.

## 1.3.3. DVDs (Mac)

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Follow this set of instructions to install the Omnisphere large sound library files onto your startup hard drive. You need over 64GB of free space available on your startup hard drive in order to continue.

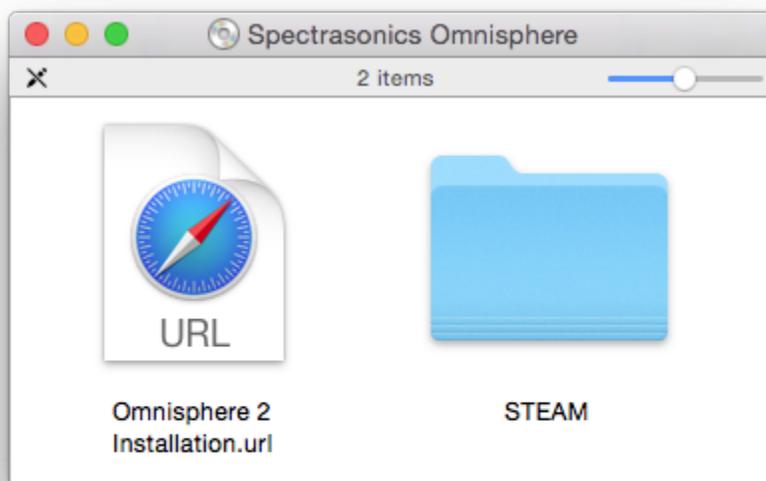
*NOTE: These screen shots are taken in macOS 10.10 (Yosemite). Installation on other versions of macOS may look somewhat different.*

### INSTALLING DISC A

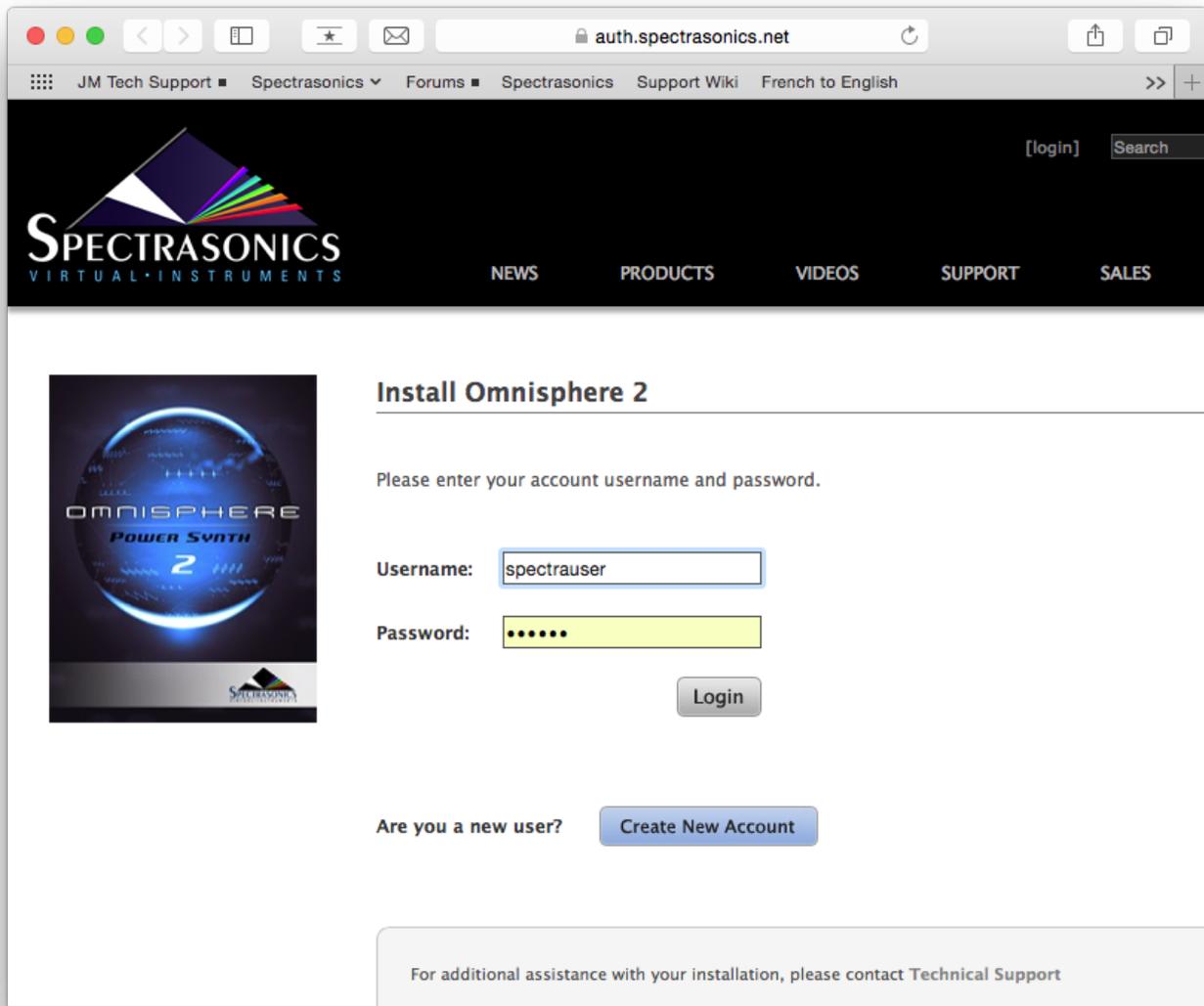
1. After inserting Omnisphere Disc A into the computer, open the disc “Spectrasonics Omnisphere” to reveal its contents on the Desktop.



2. Open the Mac folder, then double-click “Omnisphere 2 Installation.url” to begin the installation.



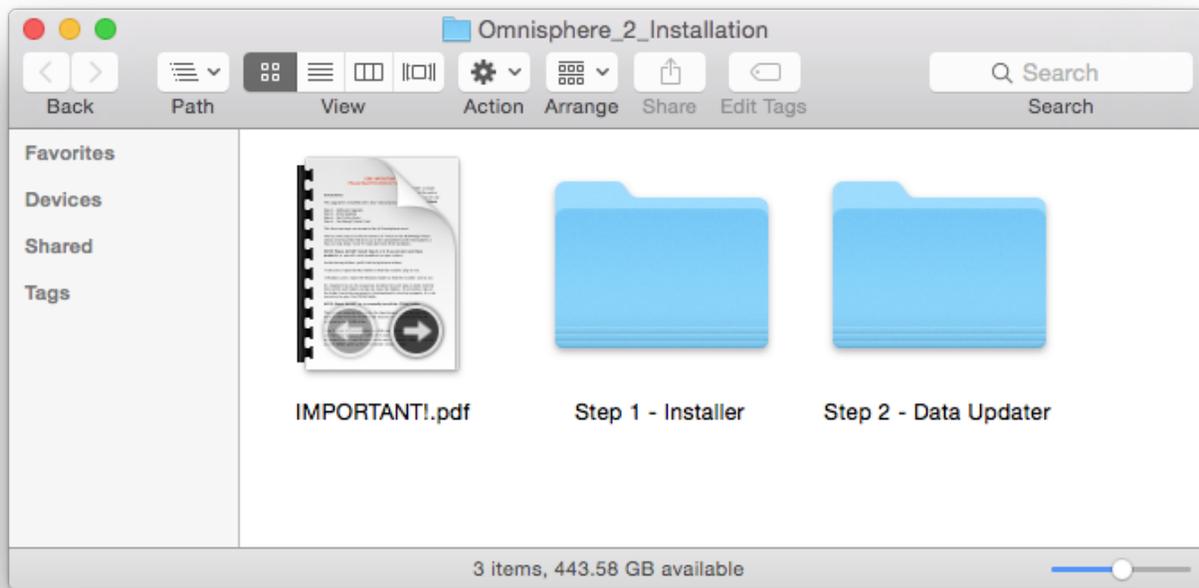
3. You'll be directed to the Spectrasonics website where you'll log in to your User Account. If you don't yet have one, you can create a User Account by selecting the "Create New Account" button. When prompted, enter your Omnisphere serial number (found on the inside of your printed User Guide.)



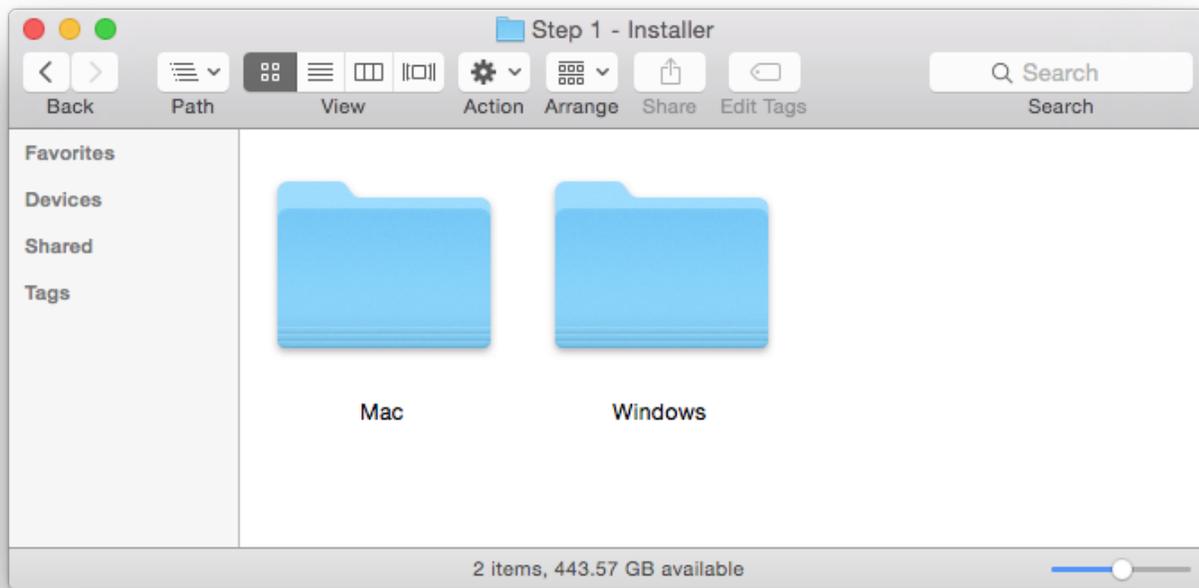
The screenshot shows a web browser window at the URL `auth.spectrasonics.net`. The page features the Spectrasonics logo and navigation links for NEWS, PRODUCTS, VIDEOS, SUPPORT, and SALES. The main content area is titled "Install Omnisphere 2" and contains a login form. The form includes a "Username:" field with the text "spectrauser" and a "Password:" field with six dots. A "Login" button is positioned below the password field. Below the login form, there is a link "Are you a new user?" followed by a "Create New Account" button. At the bottom of the page, a grey box contains the text: "For additional assistance with your installation, please contact Technical Support".

4. You'll select the link to download the Omnisphere 2 Disc Installer.

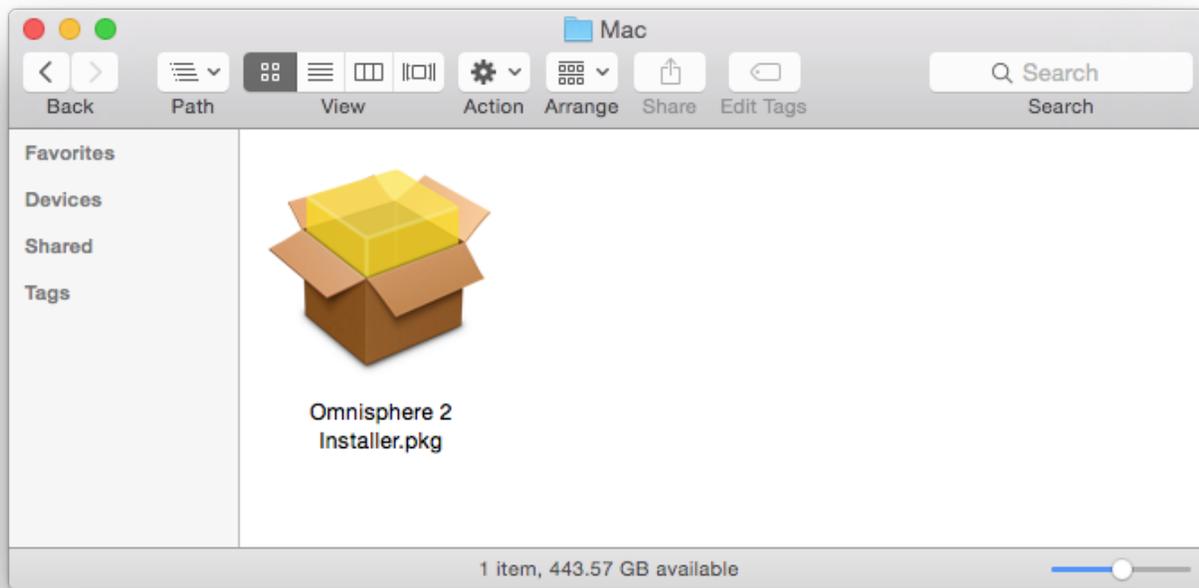
5. Once the .zip file downloads and extracts itself you should have a folder called "Omnisphere\_2\_Installation". Open the folder and first read the file called "Important!" as it contains vital information about the installation process and requirements. Next, open the folder called "Step 1 – Installer."



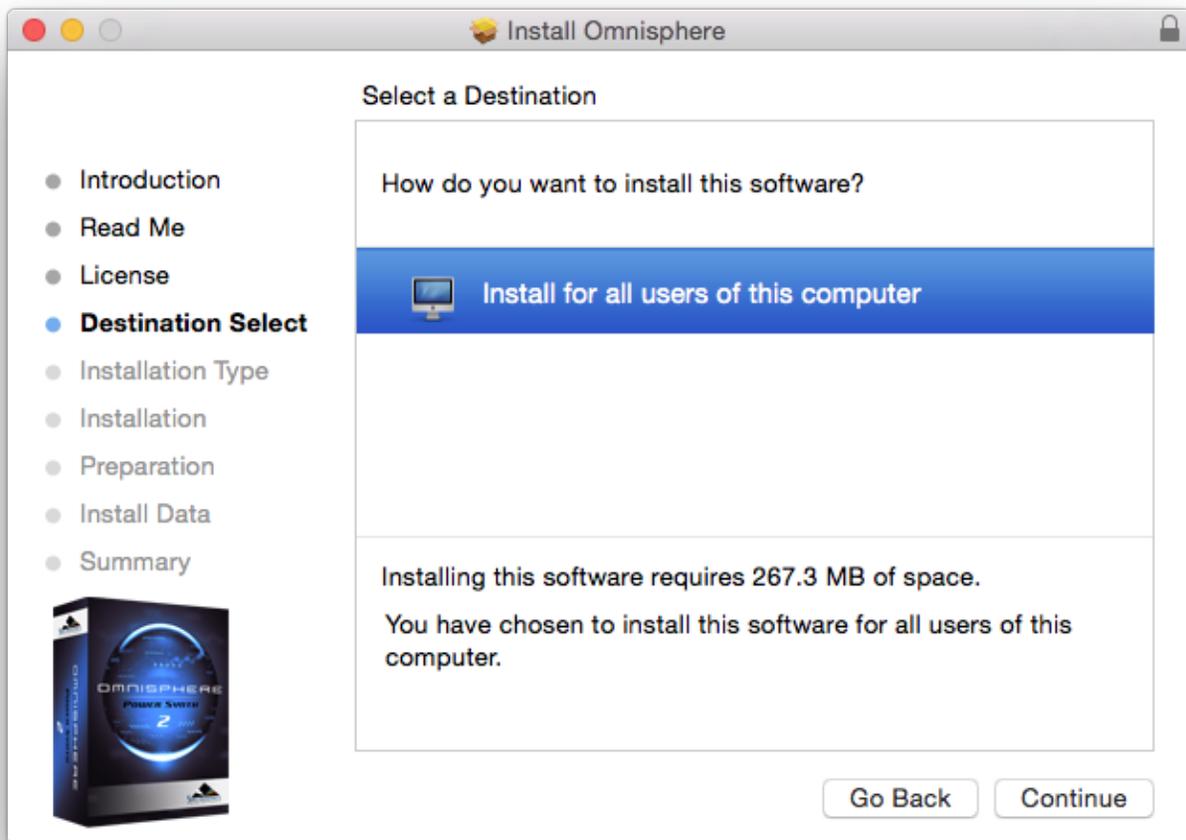
6. Next, open the folder called "Mac."



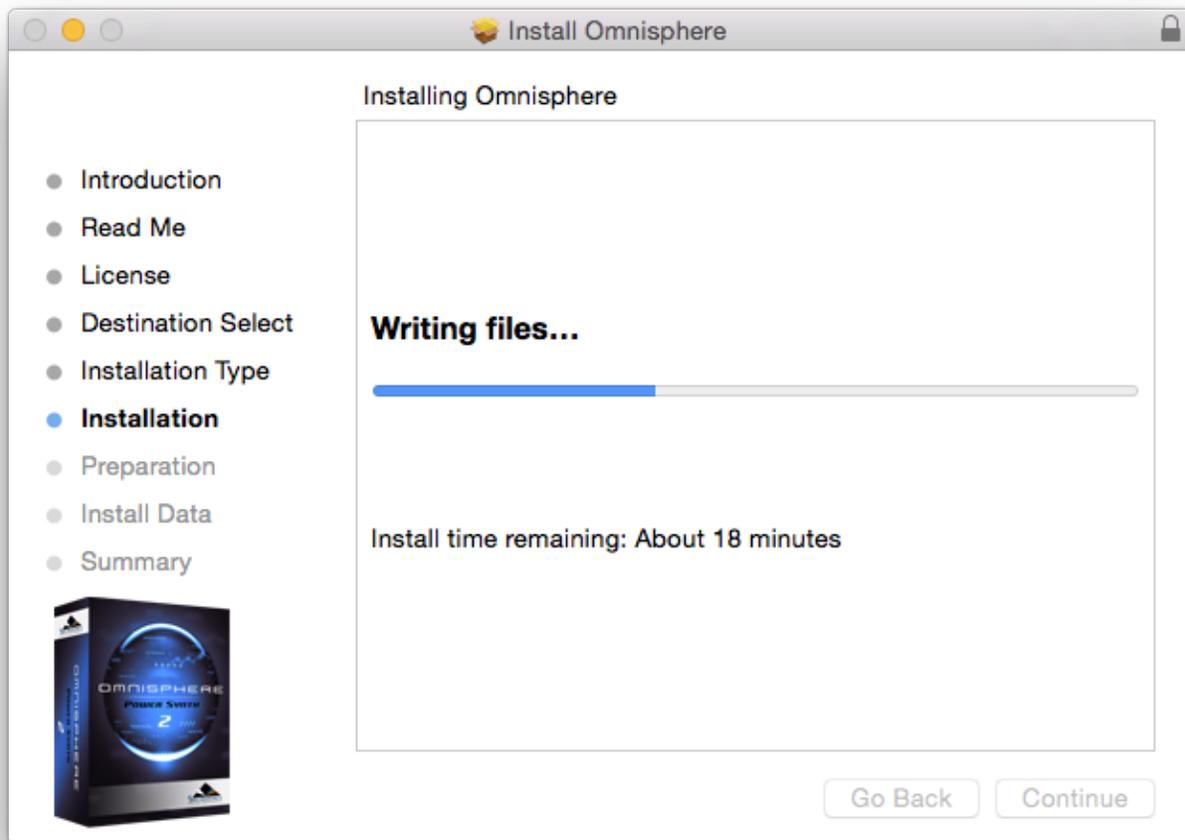
7. Double-click the file "Omnisphere 2 Installer.pkg". The installer might need to quit and reopen to ensure support for older versions of OS-X, so just click "OK."



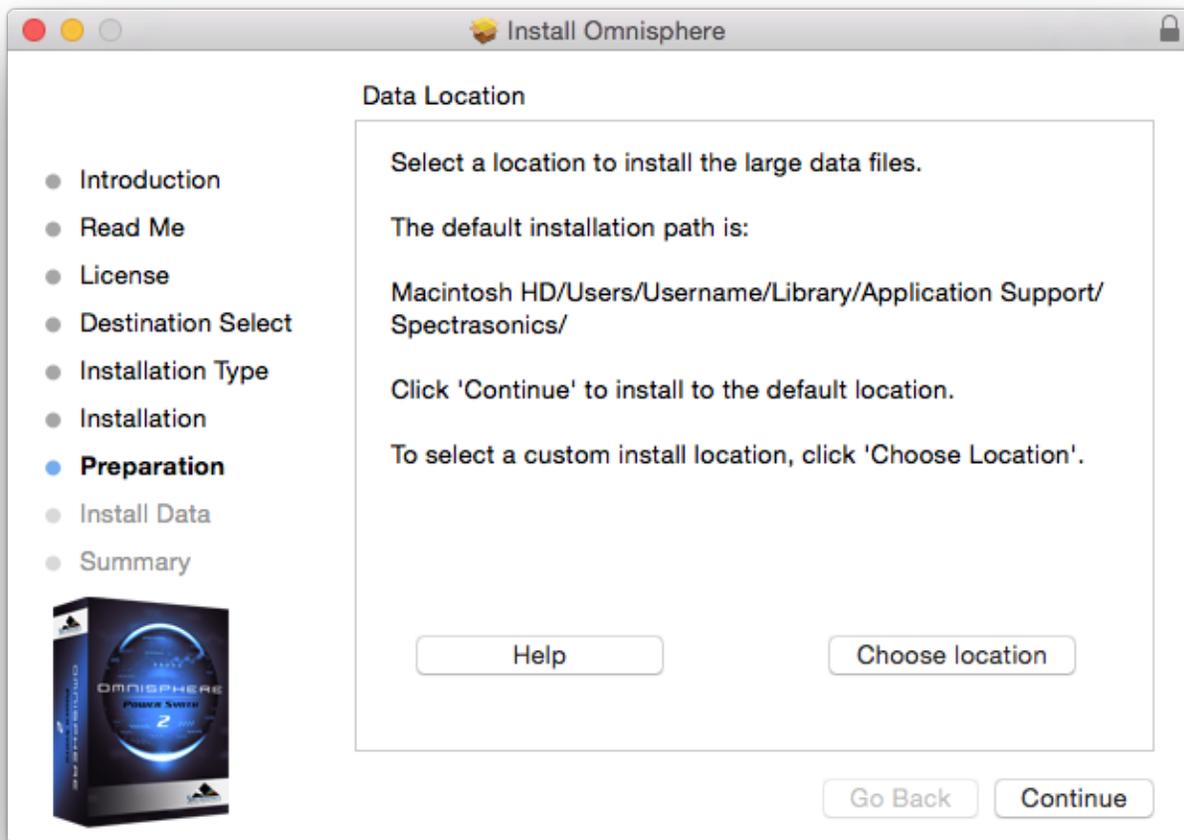
8. Follow the steps as you're guided through the installation process. Make sure to review the Installation Info and Licensing FAQ. Then at the "Destination Select" step, choose the option "Install for all Users of this computer." After the Installation Type information you'll enter your system password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



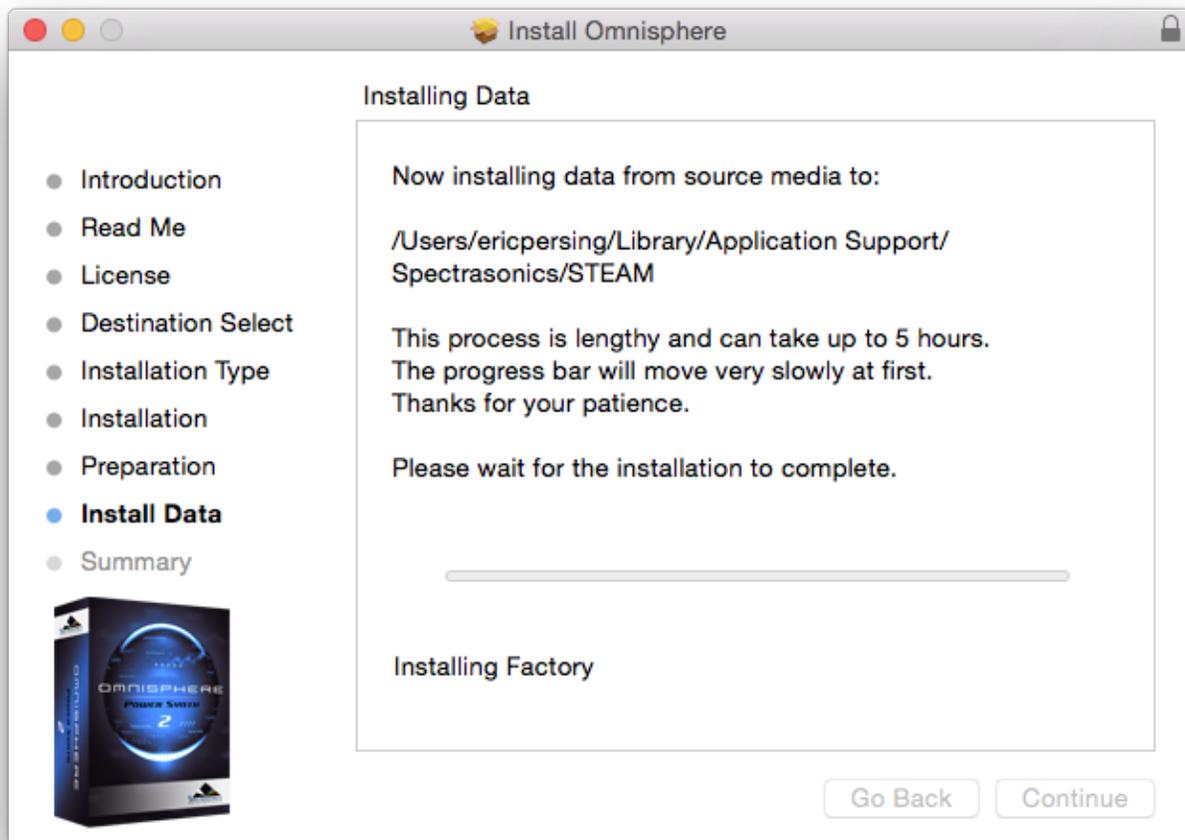
9. The plug-in files will then be installed on your Mac's system drive.



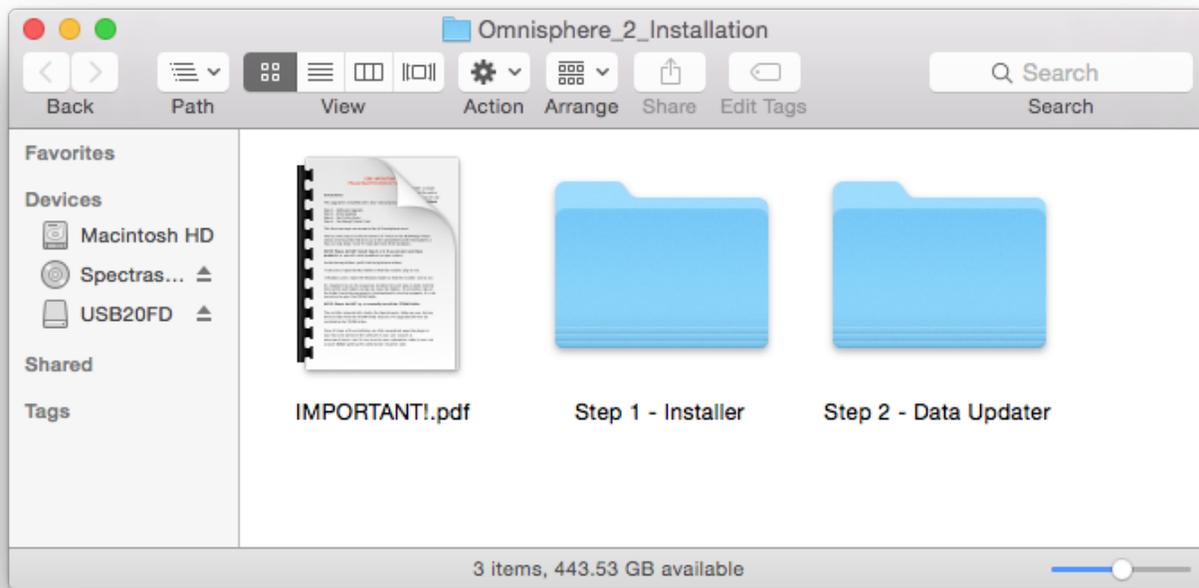
10. Next, at the Preparation step, you'll select where to install the large Core Library files. By default they will be installed to your system drive or choose a secondary drive by selecting the button "Choose Location."



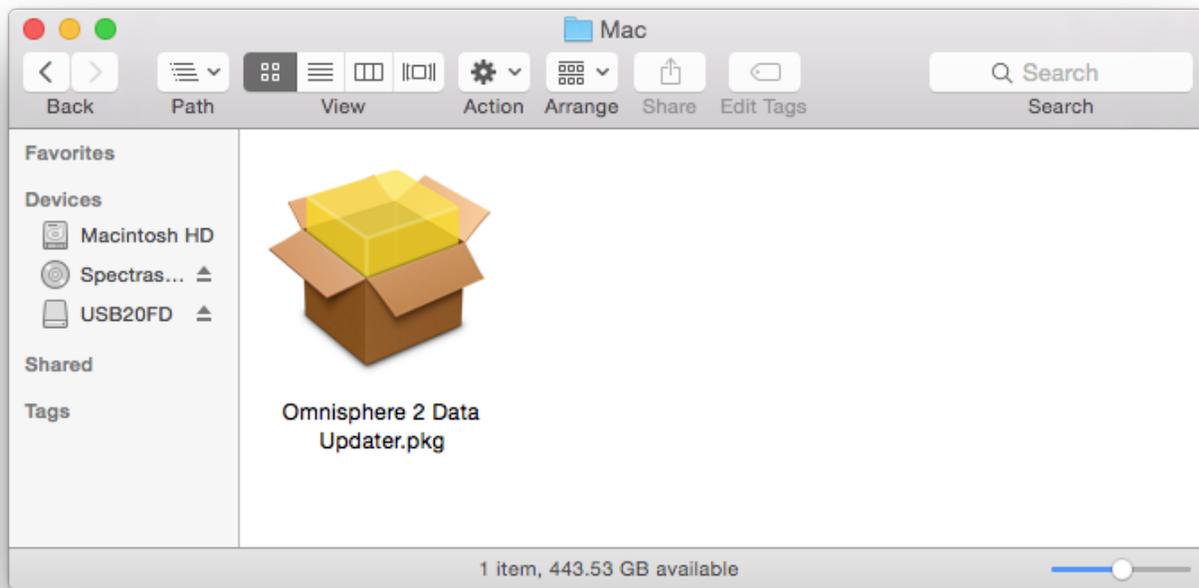
11. The large data files will now be copied from the DVDs to your selected drive. Allow for 30-45 minutes per disc (approximately 4-6 hours for all eight DVDs.)



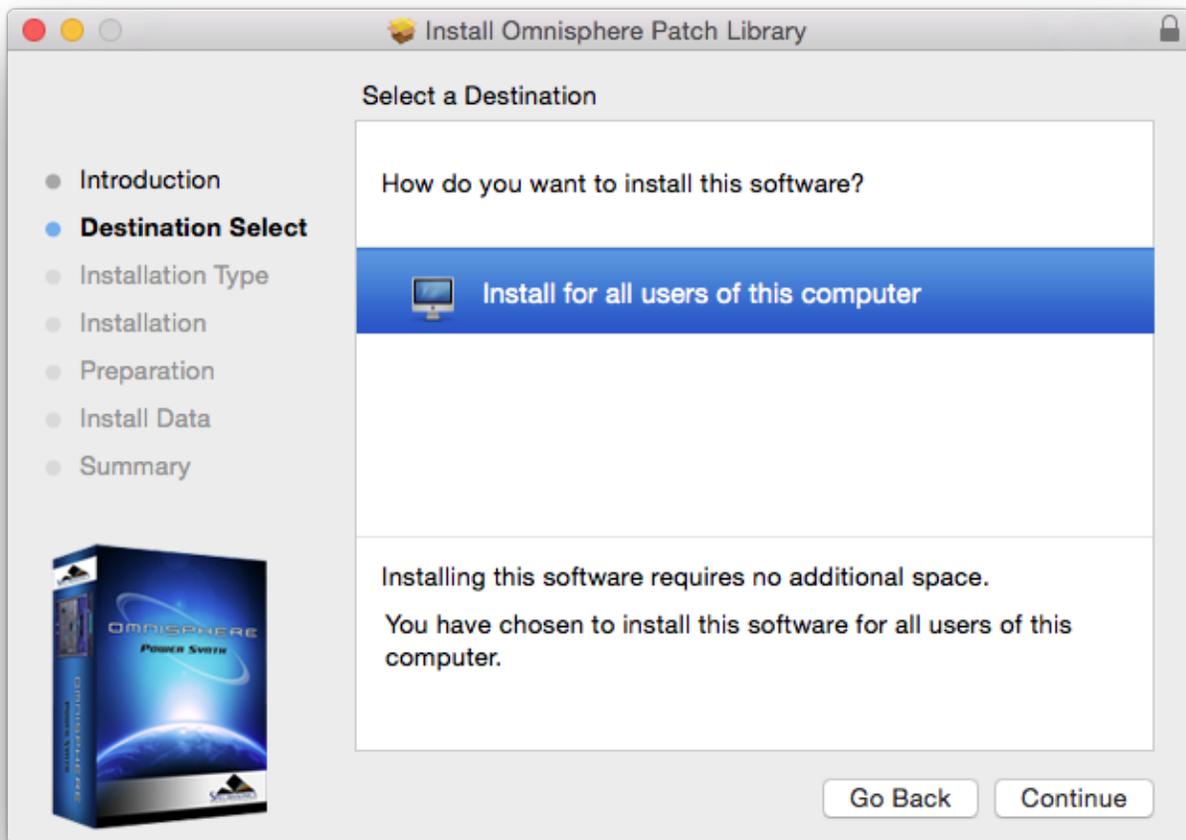
12. After the installation of Disc H is complete, close the installer and return to your "Omnisphere\_2\_Installation" folder and open the "Step 2 – Data Updater" folder.



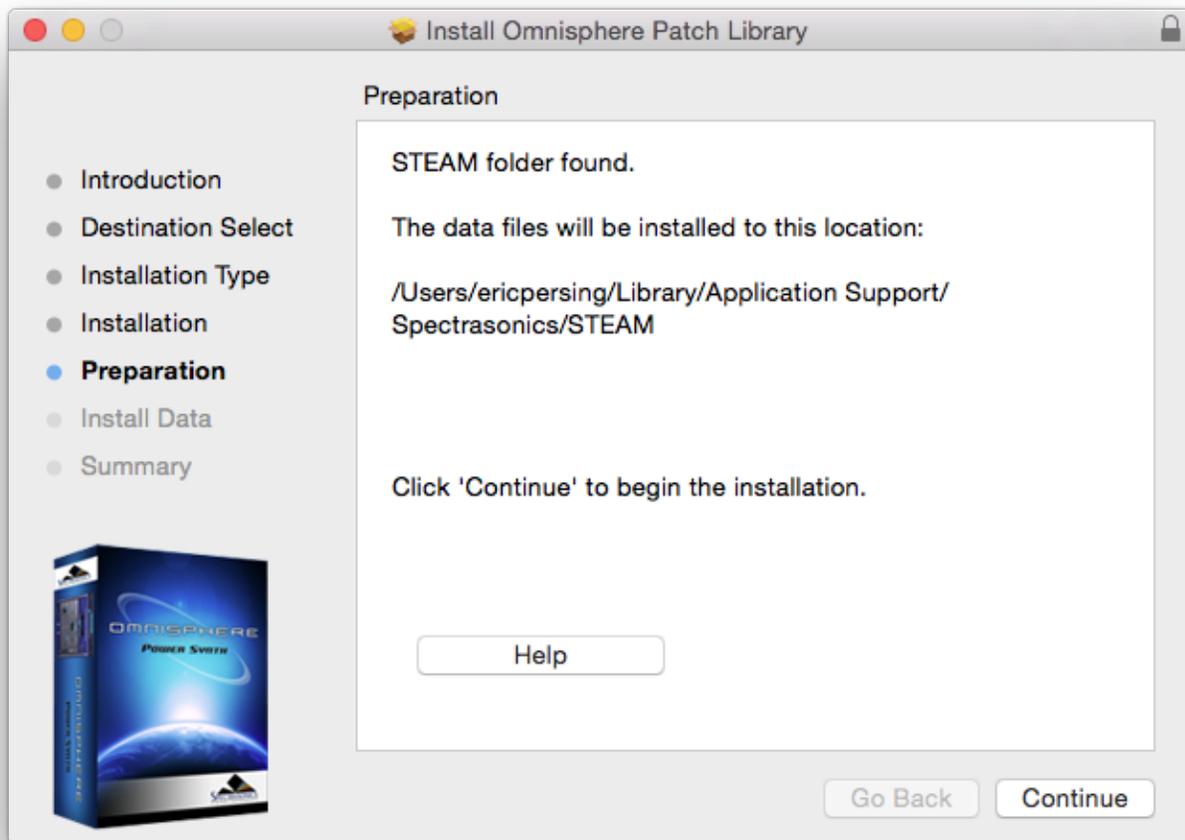
13. Open the Mac folder and run the “Omnisphere 2 Data Updater.pkg”. Again, the installer might need to quit and reopen to ensure support for older versions of MacOS, select “OK.”



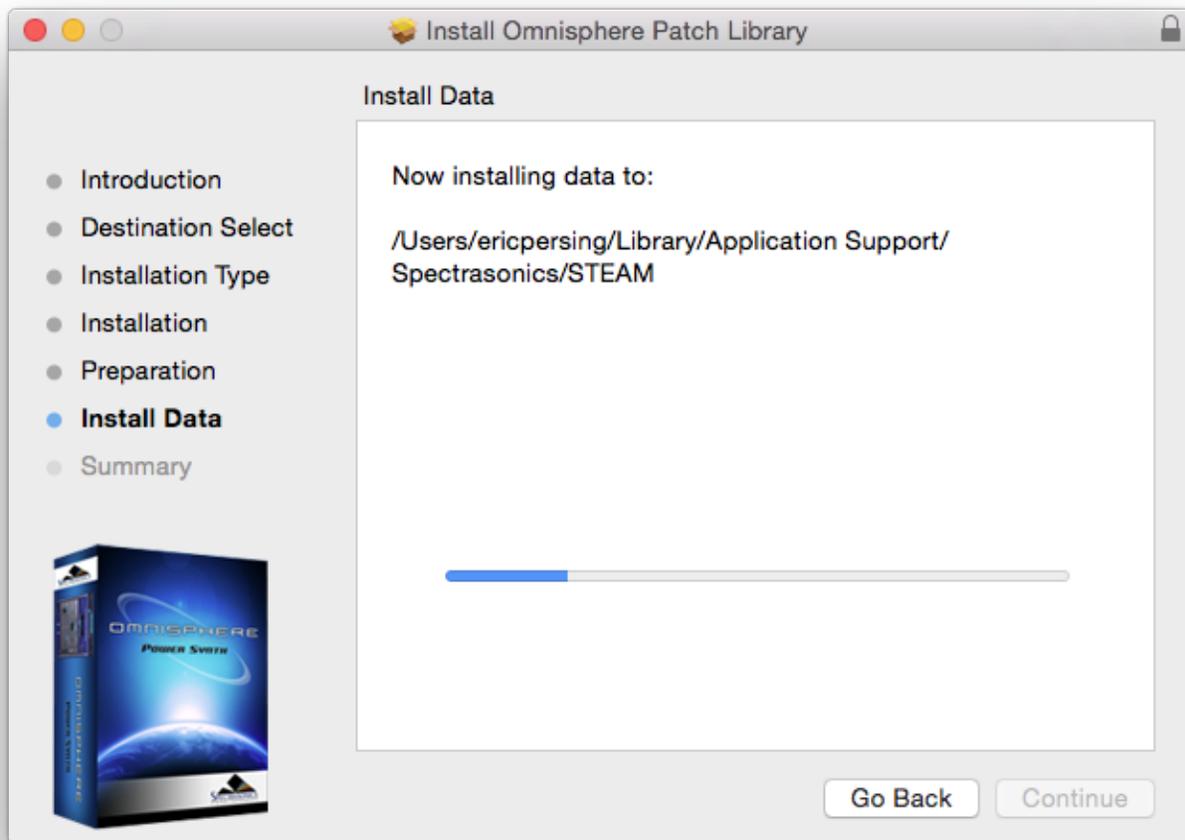
14. Follow the steps as you're guided through the installation process. At the "Destination Select" step, choose the option "Install for all Users of this computer." After the Installation Type information you'll enter your system password to begin the data install process.



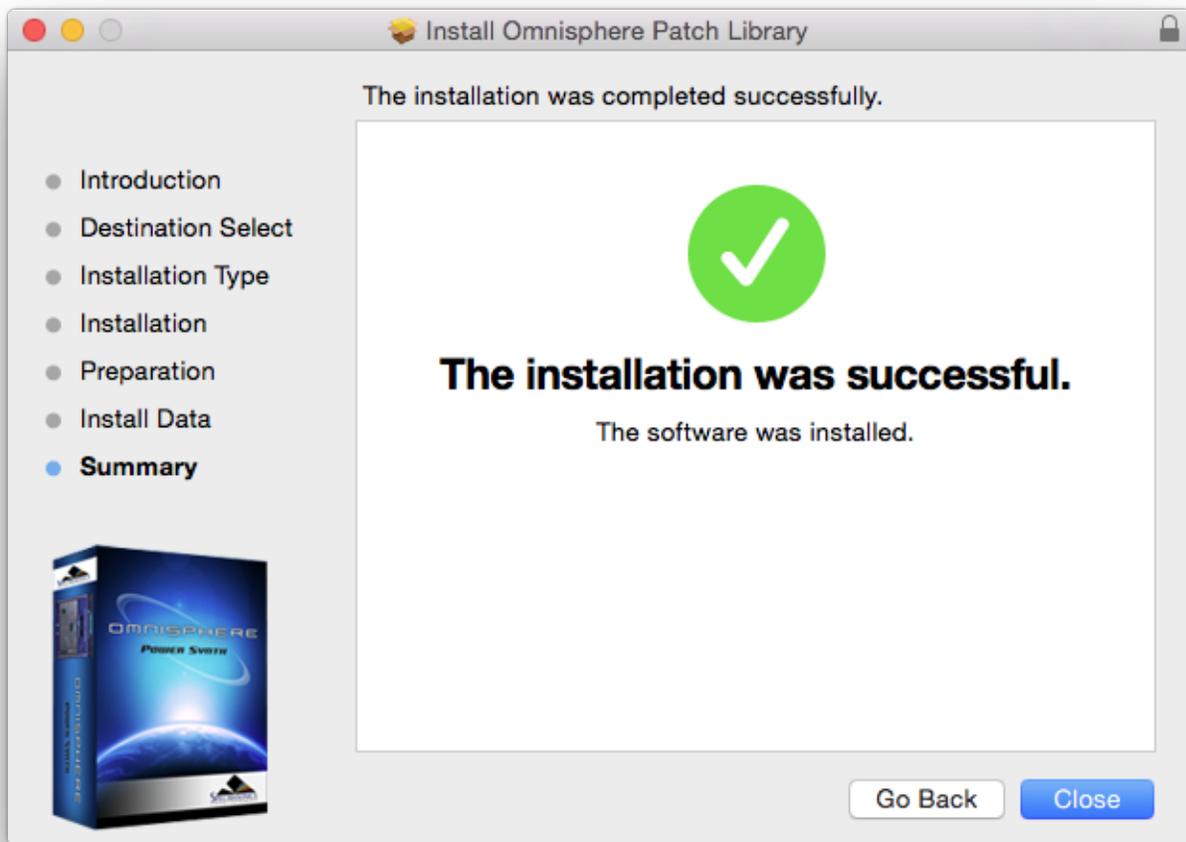
15. At the Preparation step, you'll see where the secondary data files will be installed on your system.



16. The supplemental data files will be added to your STEAM library folder.



17. When the data from the Step 2 installer has been installed, open Omnisphere 2 in your host to authorize it.



Please consult the [Authorization](#) section for assistance with authorizing Omnisphere.

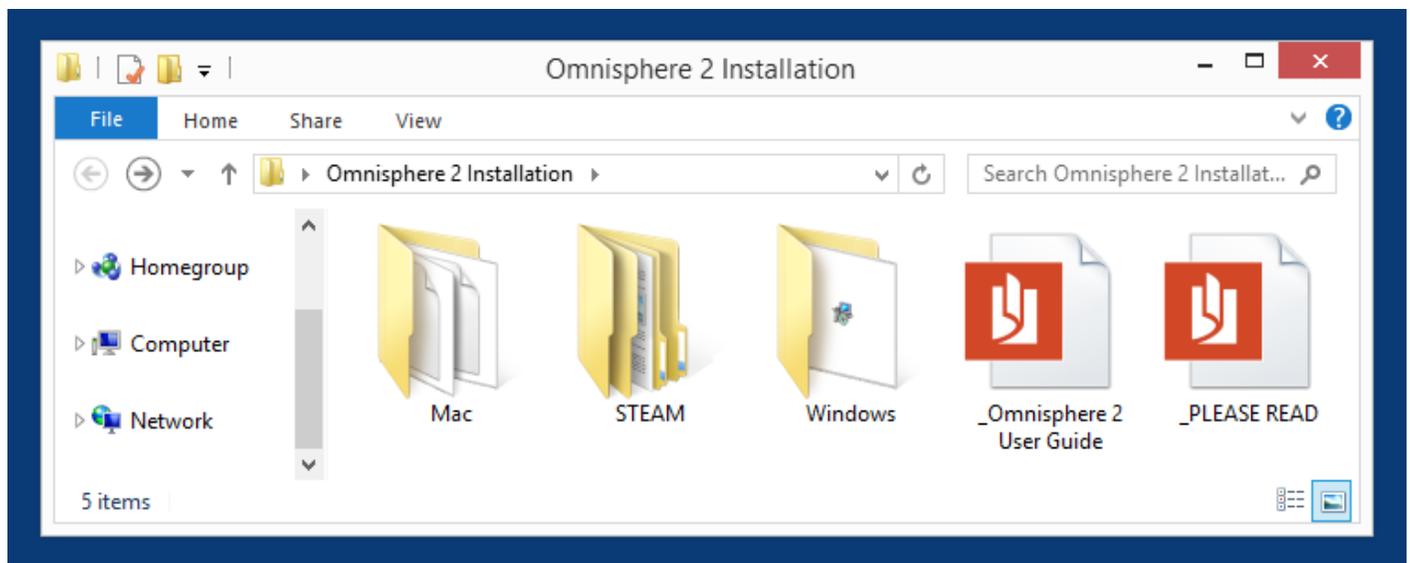
## 1.3.4. Download (Win)

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).

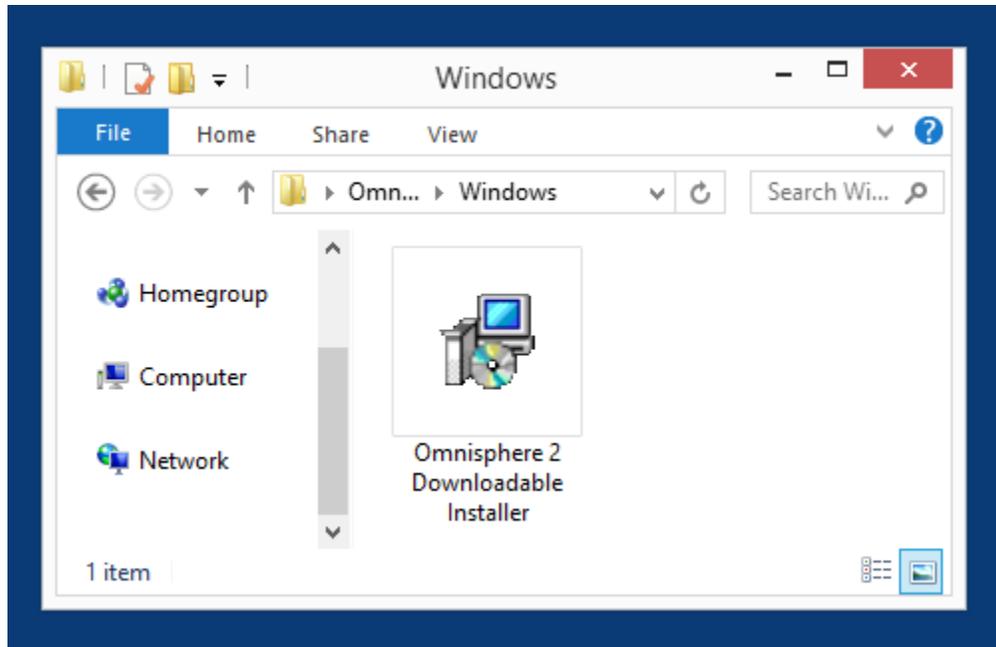
*NOTE: These screen shots are taken in Windows 10. Installation on other versions of Windows may look somewhat different.*

### 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.”



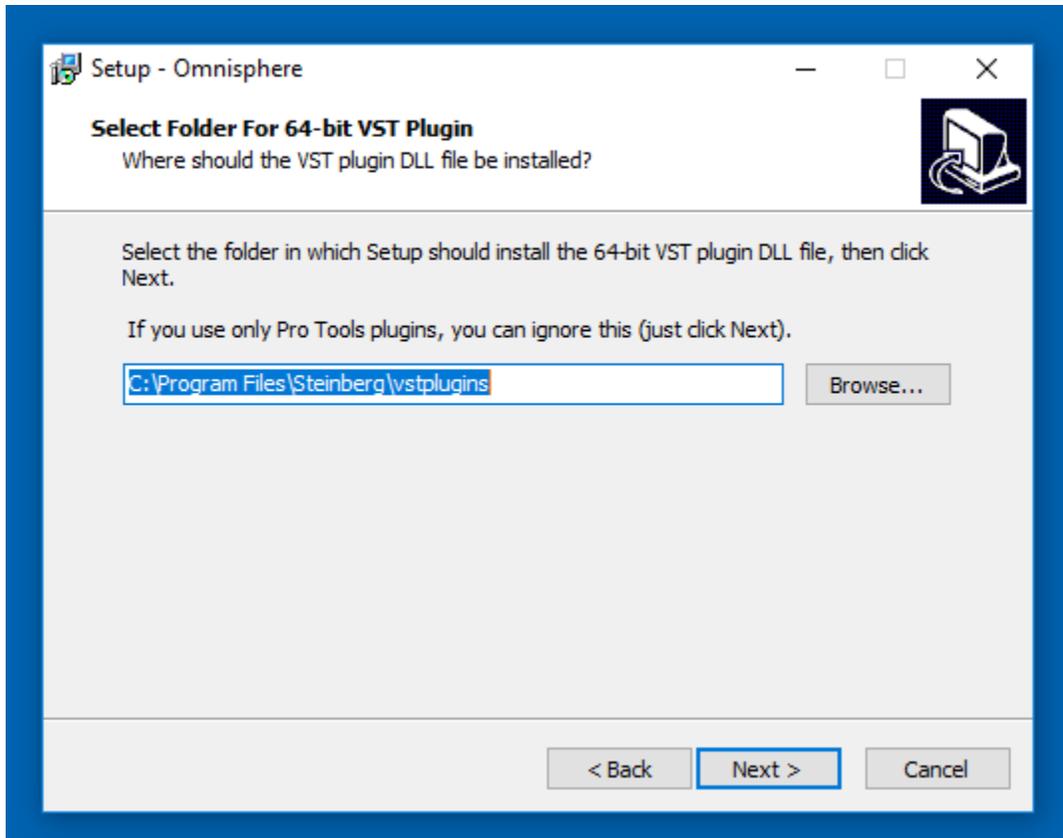
3. Click “Next” to begin the Omnisphere 2 installation process.



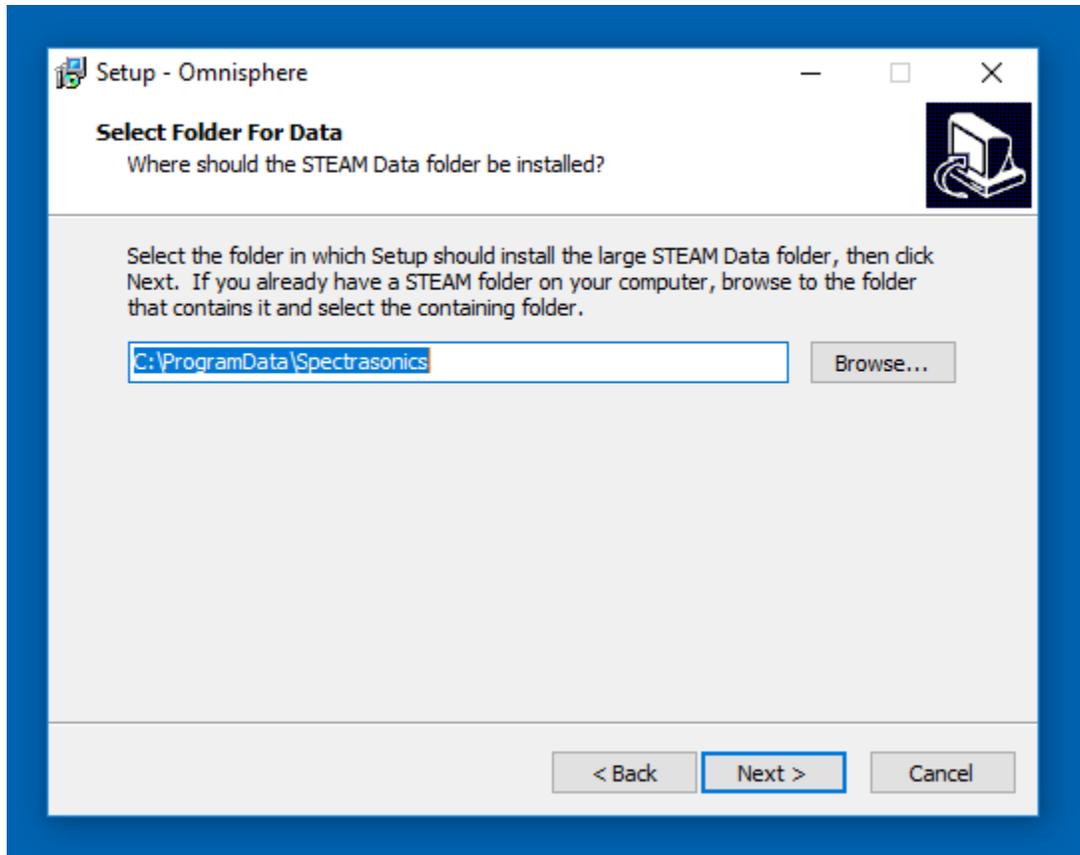
4. Follow the steps as you're guided through the installation process. 5. Make sure to review the Installation Info and Licensing FAQs and accept the license agreement.



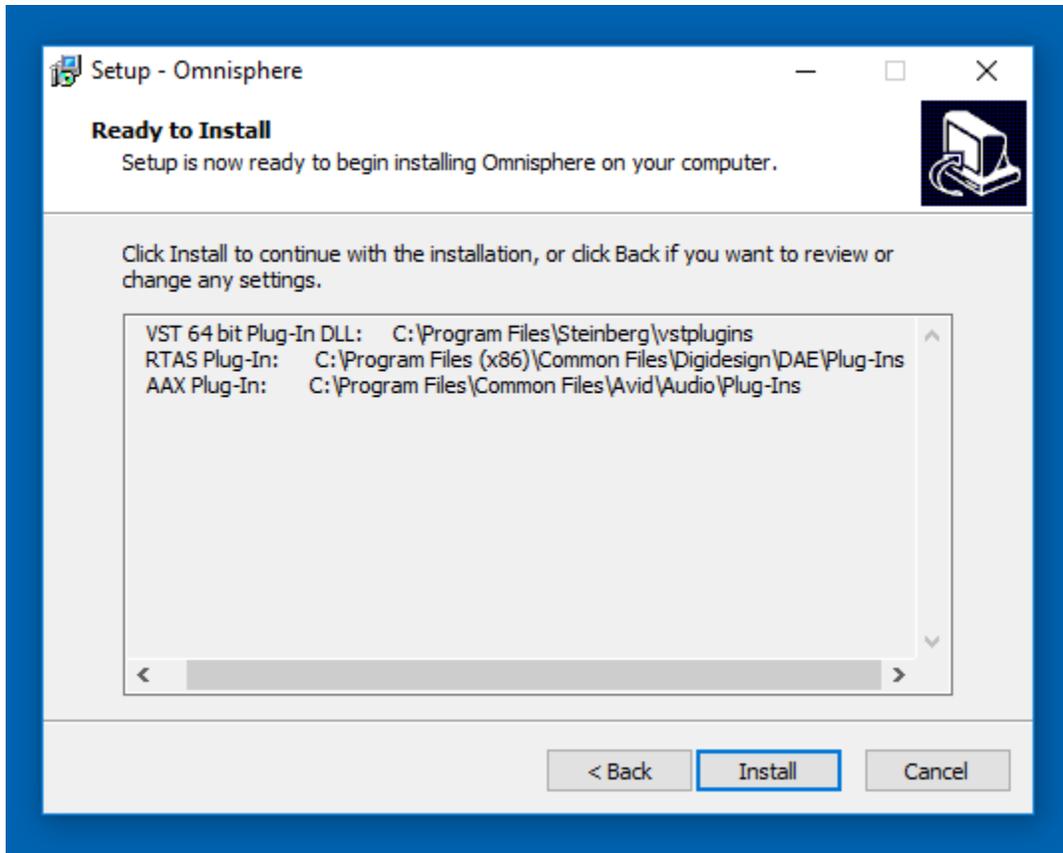
5. At the “Select Folder For 64-bit VST Plugin” step select the VST plug-in path on your system to install Omnisphere into. By default the 64-bit plugin will be installed in **C:\ProgramData\Steinberg\vstplugins\** but you can choose a different path (your host must support 64-bit plug-ins.)



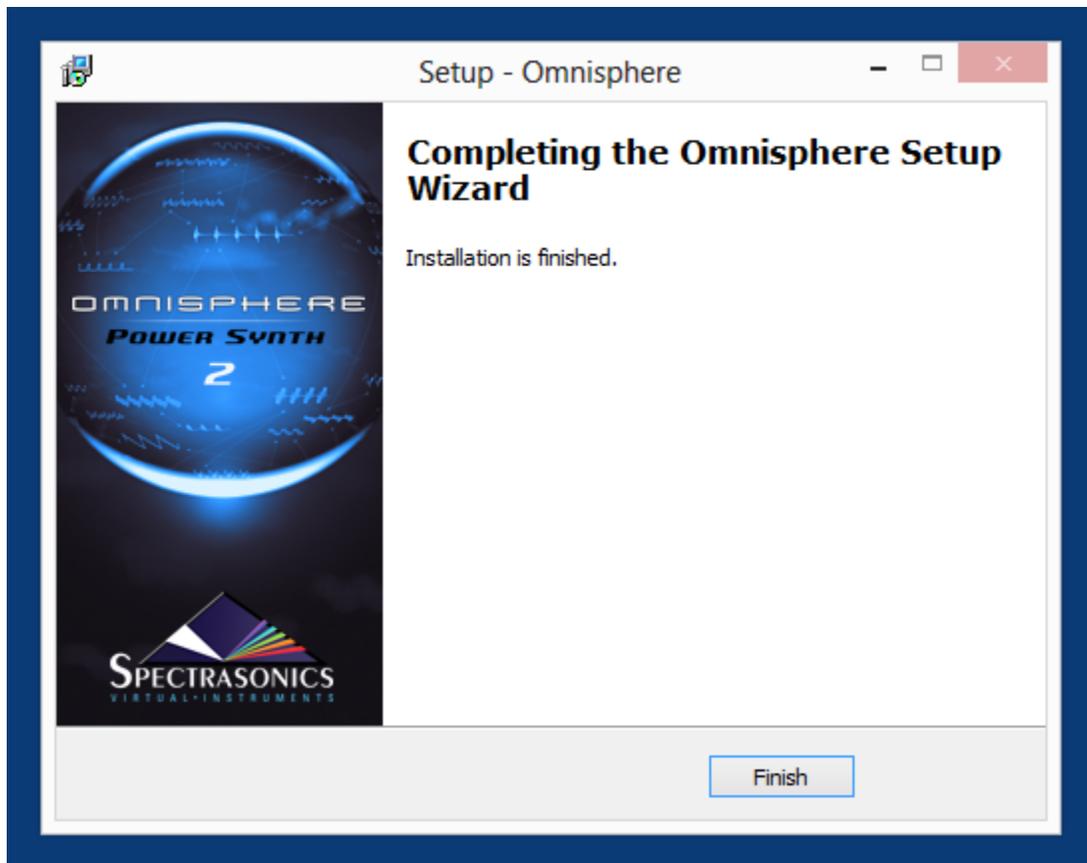
6. The default location of the large Omnisphere data files will be displayed next. If you wish to install the large Core Library files to a secondary drive, click the "Browse" button and choose a different location.



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. USB Drive (Win)

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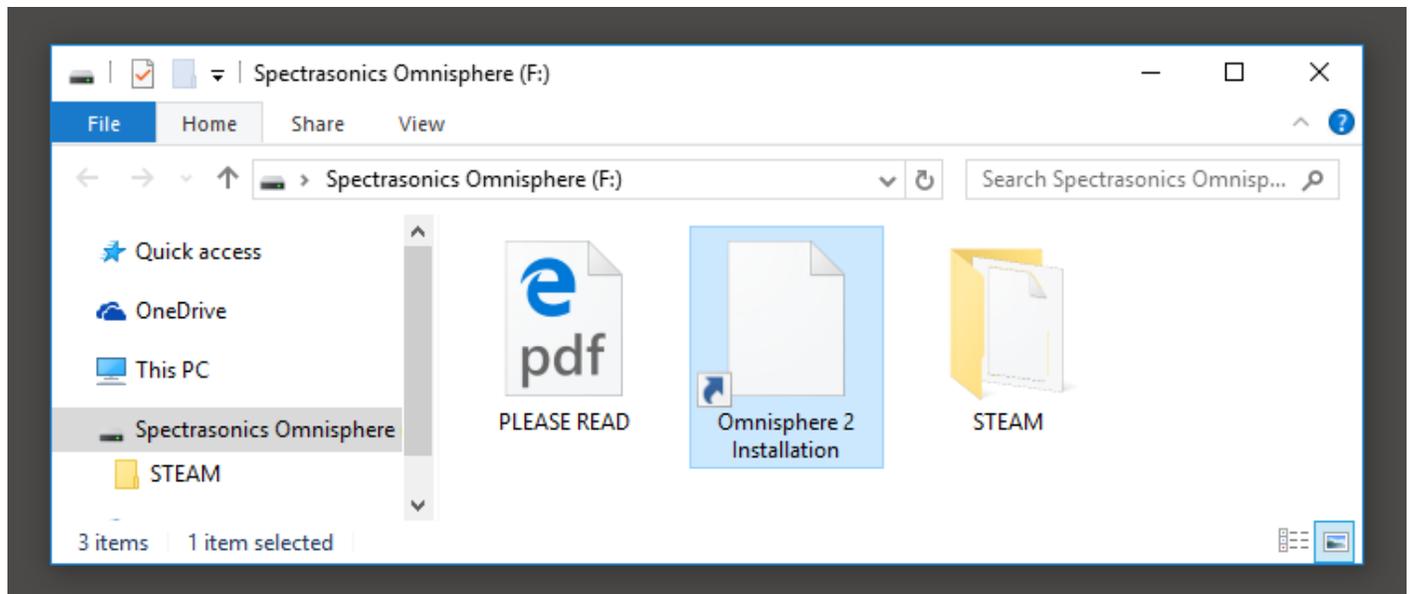


Follow this set of instructions to install Omnisphere 2 from your USB installation drive to your Windows system. You'll need over 64GB of free space available on your hard drive in order to install the instrument.

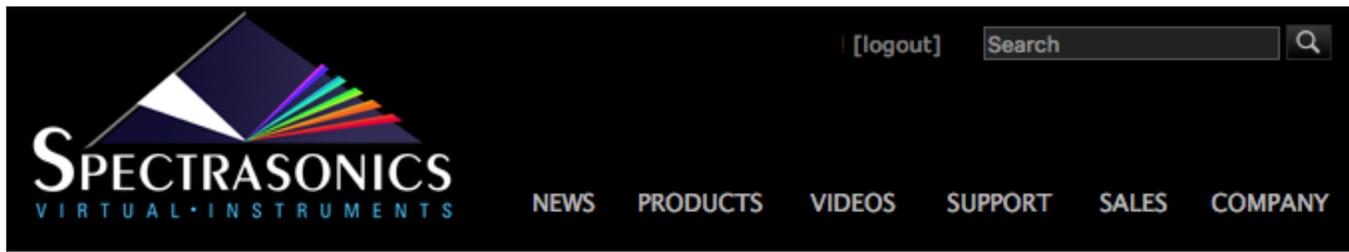
*NOTE: These screen shots are taken in Windows 10. Installation on other versions of Windows may look somewhat different.*

### 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.



## Download the Installers

Omnisphere 2 Installers (123.1 MB)

[Download](#)

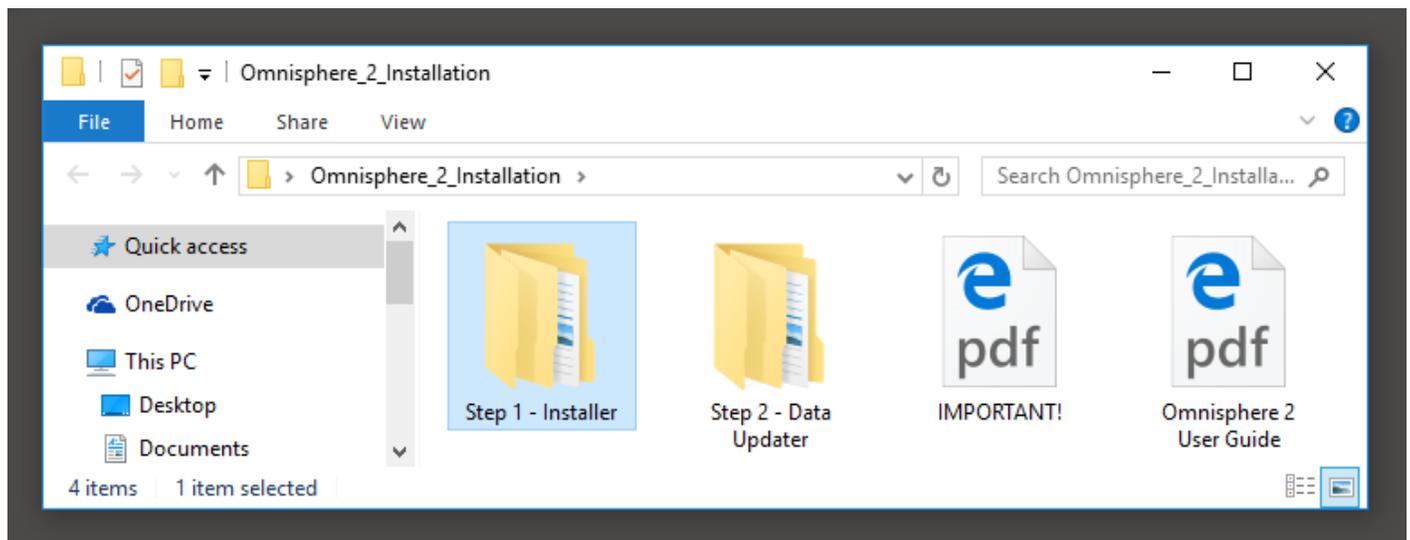


[Installation Instructions for Mac](#)

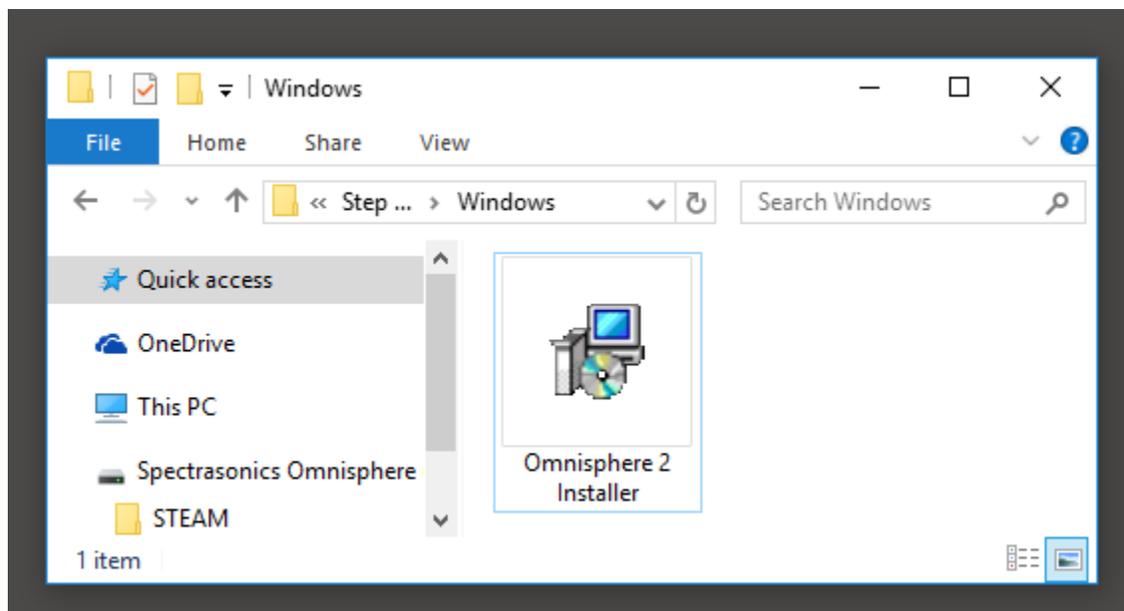


[Installation Instructions for Windows](#)

3. From your Downloads folder, open the “Omnisphere\_2\_Installation” folder, then open the “Step 1 – Installer” folder.



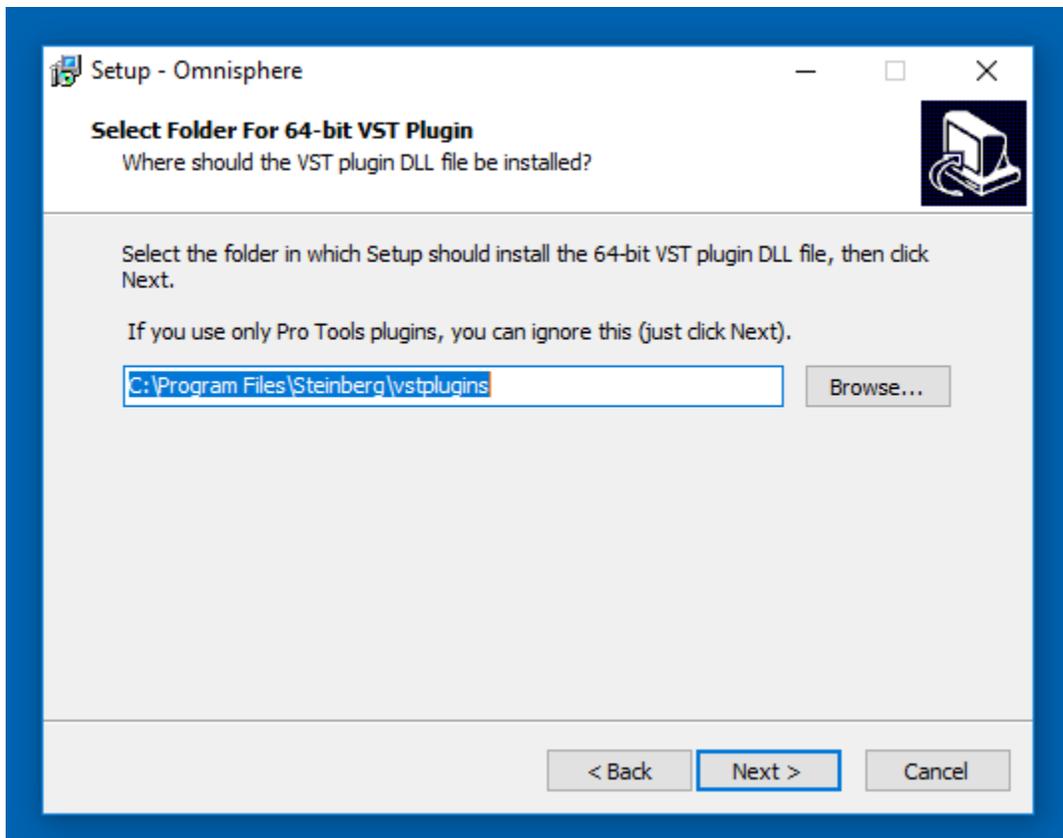
4. Open the “Windows” folder inside of “Step 1 – Installer.” Double-click “Omnisphere 2 Installer.exe” to begin the installation of Omnisphere 2.



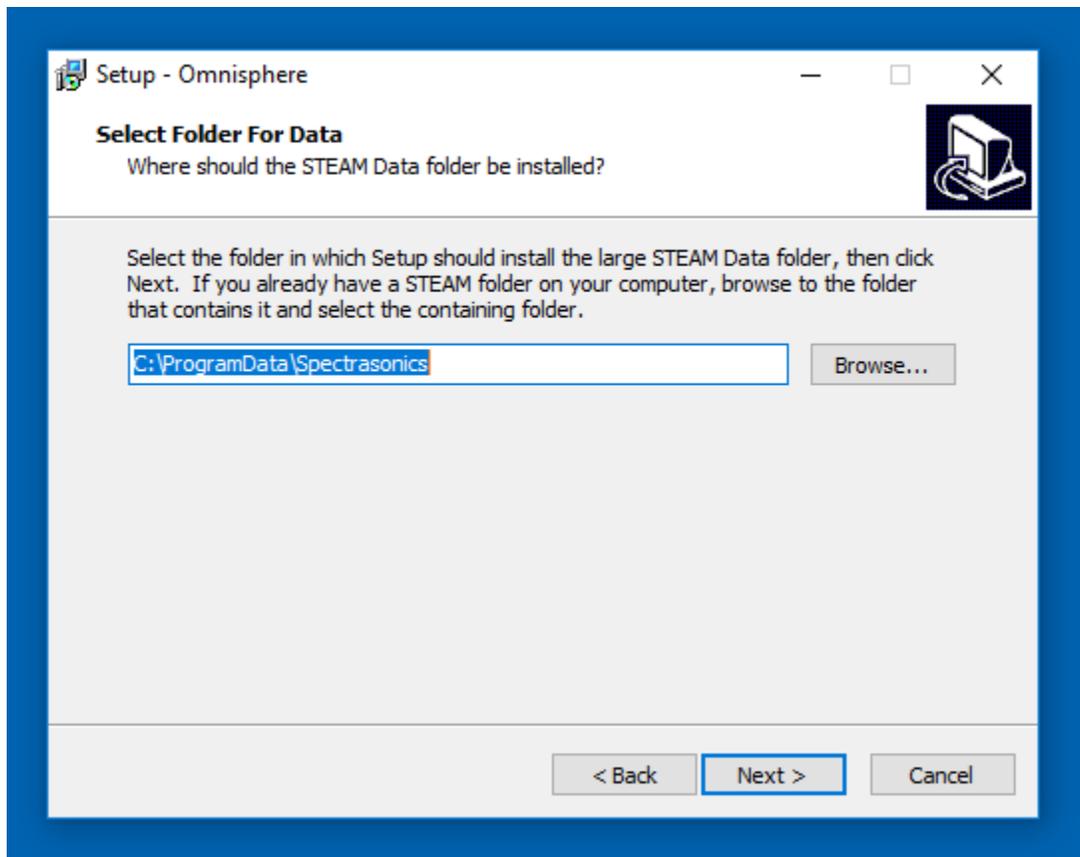
5. Follow the steps as you’re guided through the installation process. Make sure to review the Installation Info and Licensing FAQs and accept the license agreement.



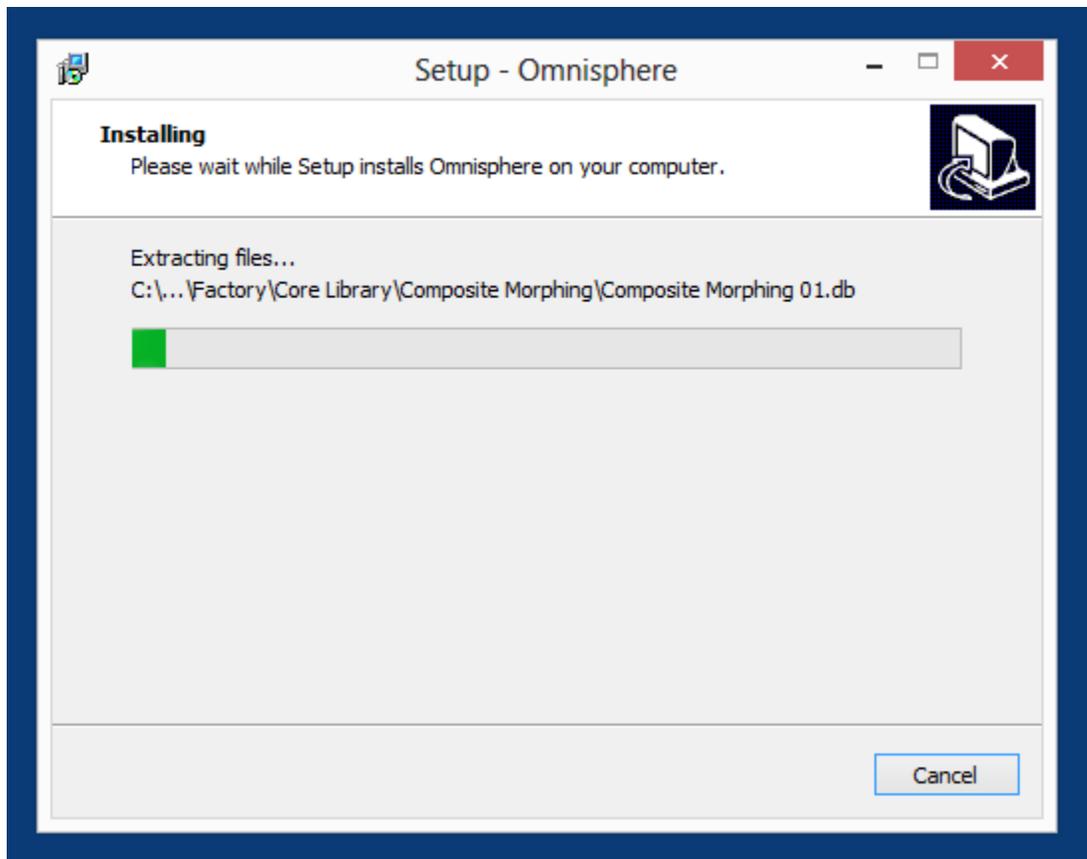
6. At the “Select Folder For 64-bit VST Plugin” step select the VST plug-in path on your system to install Omnisphere into. By default the 64-bit plugin will be installed in **C:\ProgramData\Steinberg\vstplugins\** but you can choose a different path (your host must support 64-bit plug-ins.)



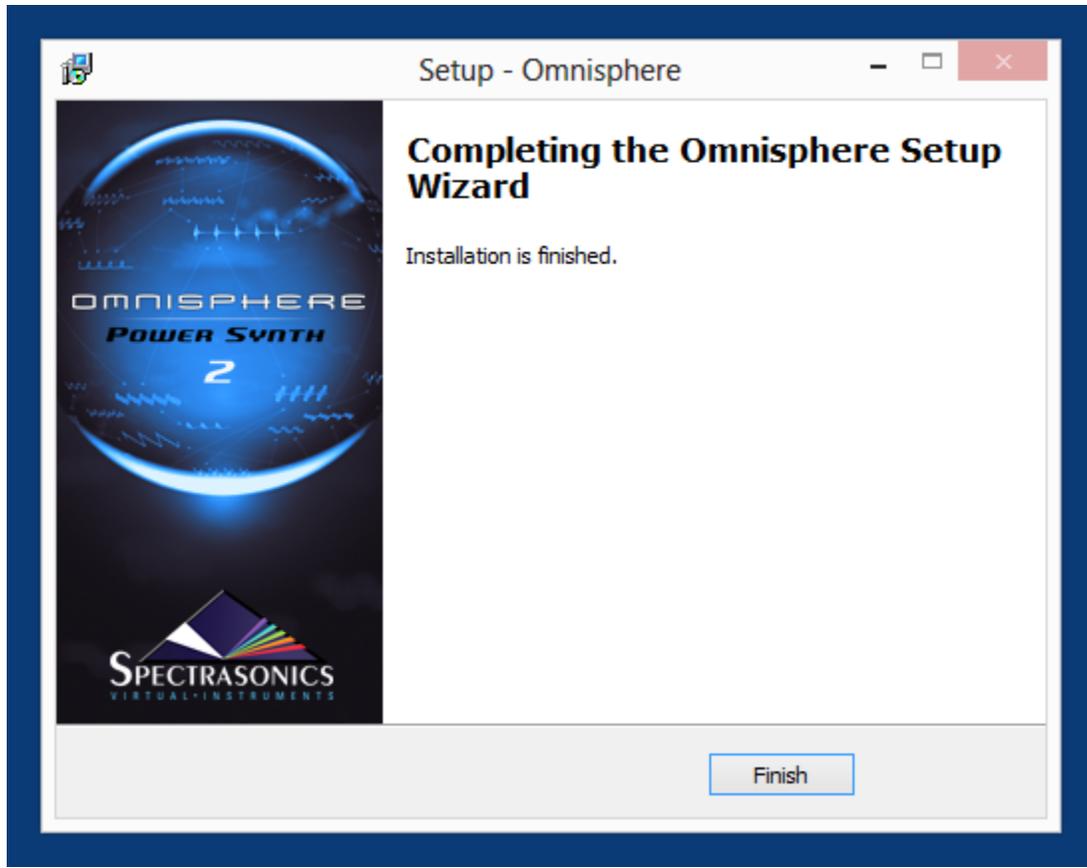
7. The default location of the large Omnisphere data files will be displayed next. If you wish to install the large Core Library files to a secondary drive, click the “Browse” button and choose a different location.



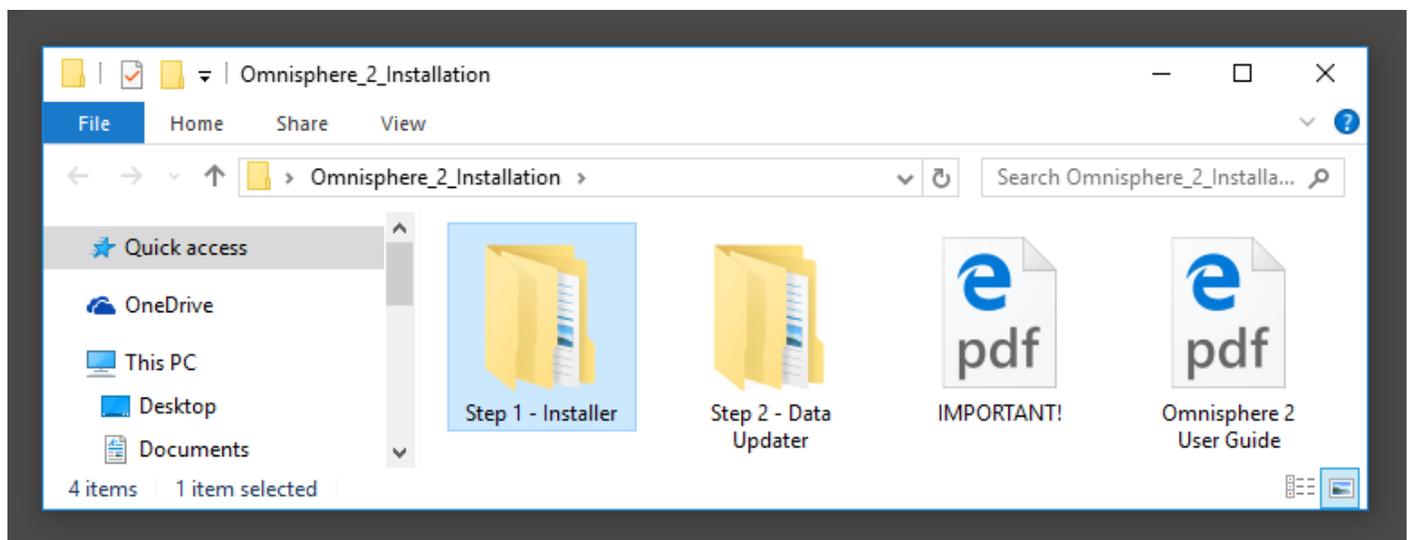
8. Once the installation paths have been confirmed, the installation will begin.



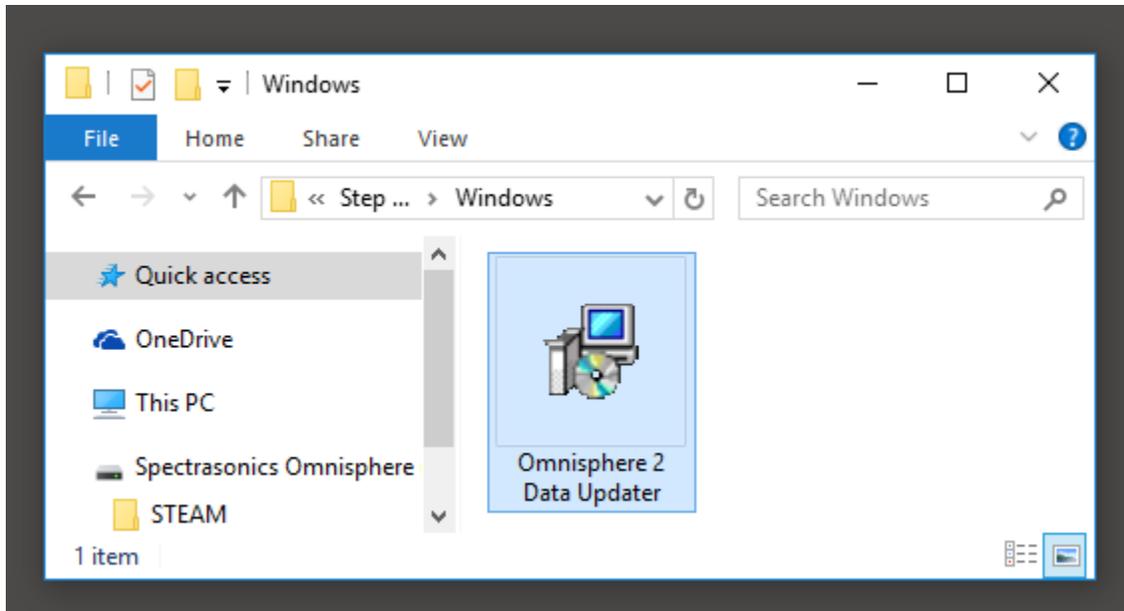
9. After the installation is complete, select "Finish."



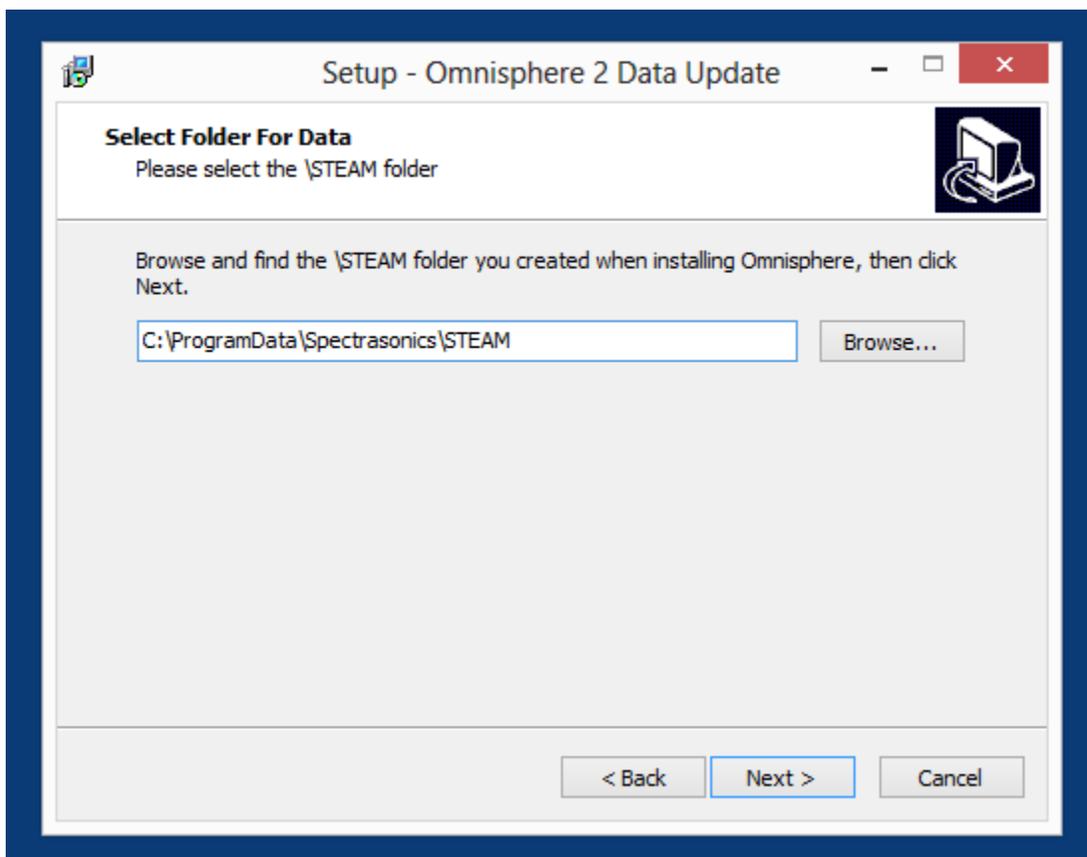
10. From your Downloads folder re-open the “Omnisphere\_2\_Installation” folder, then open the “Step 2 – Data Updater” folder.



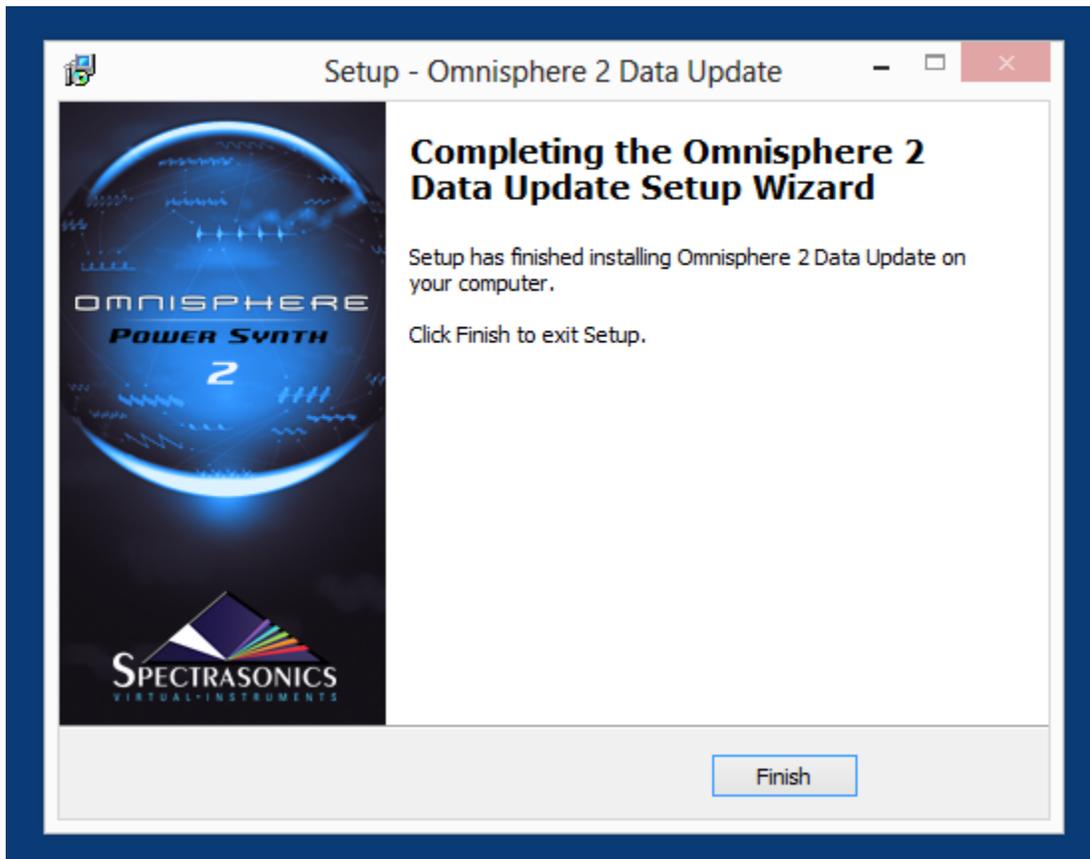
11. Run the “Omnisphere 2 Data Updater.exe.”



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.

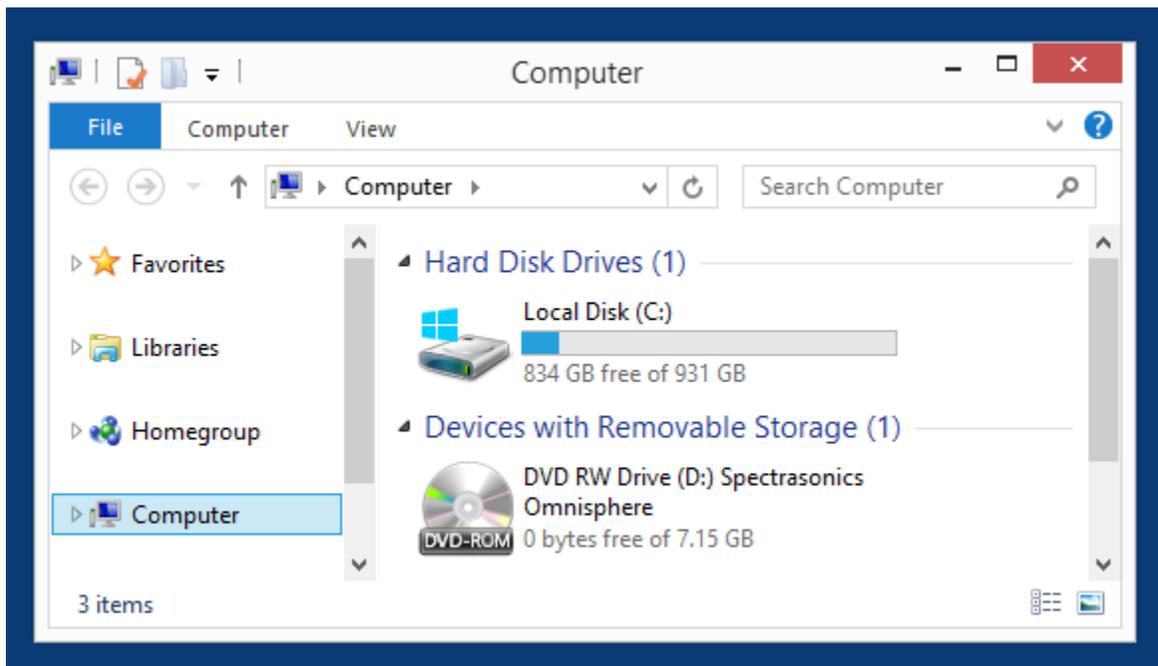
## 1.3.6. DVDs (Win)

Follow this set of instructions to install the Omnisphere large sound library files onto your startup hard drive. You need almost 64GB of free space available on your startup hard drive in order to continue.

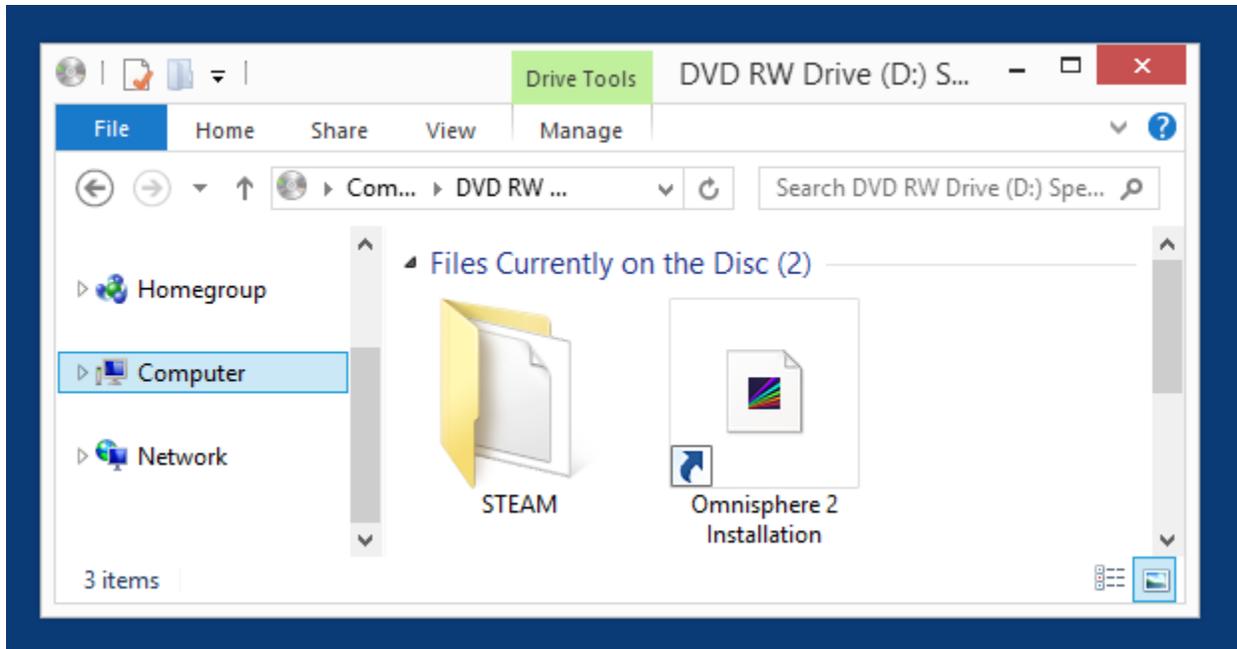
*NOTE: These screen shots are taken in Windows 8. Installation on other versions of Windows may look somewhat different.*

### INSTALLING DISC A

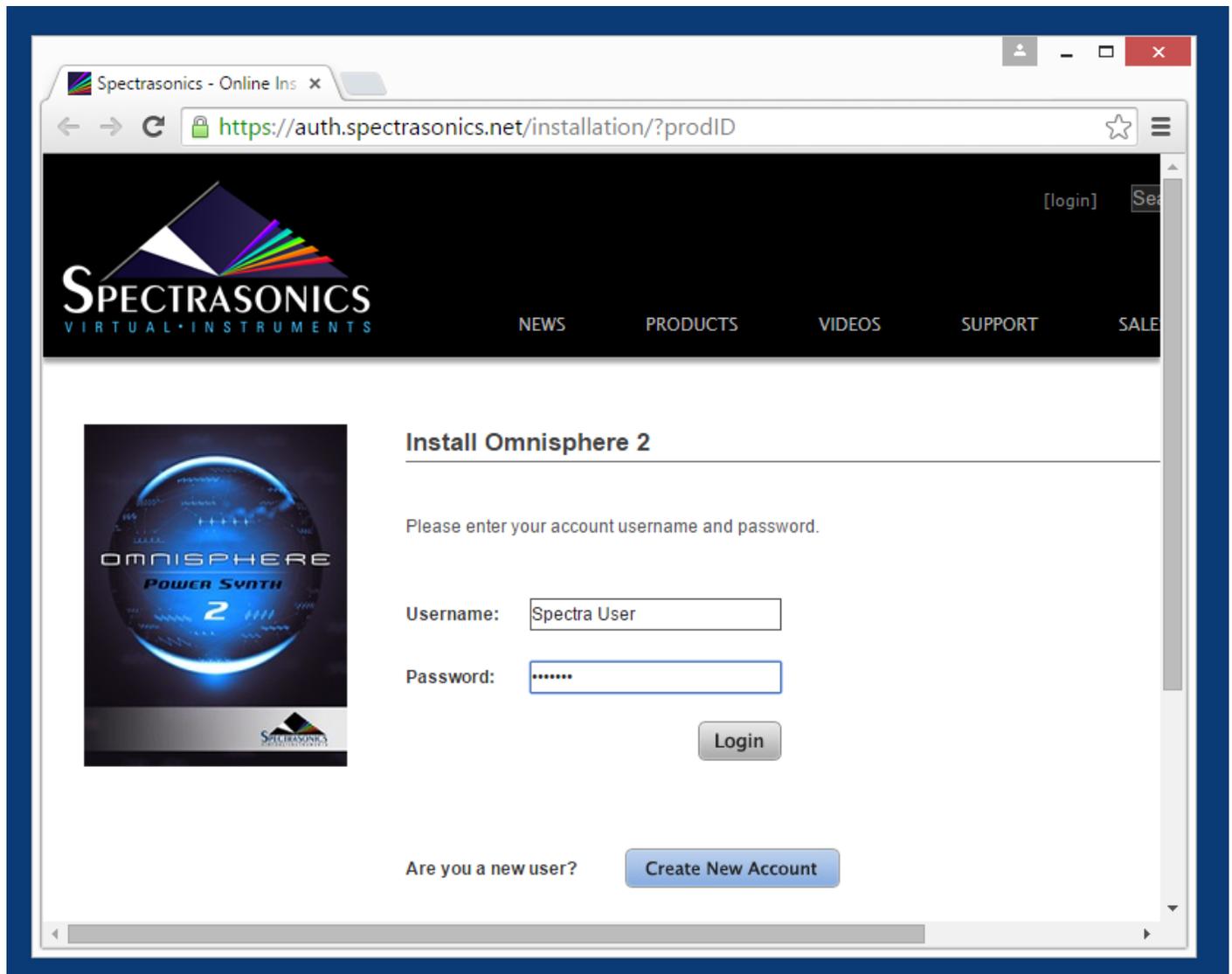
1. After inserting Omnisphere Disc A into the computer, open the disc “Spectrasonics Omnisphere” to reveal its contents on the Desktop.



2. Open the Windows folder, then double-click “Omnisphere 2 Installation.url” to begin the installation.

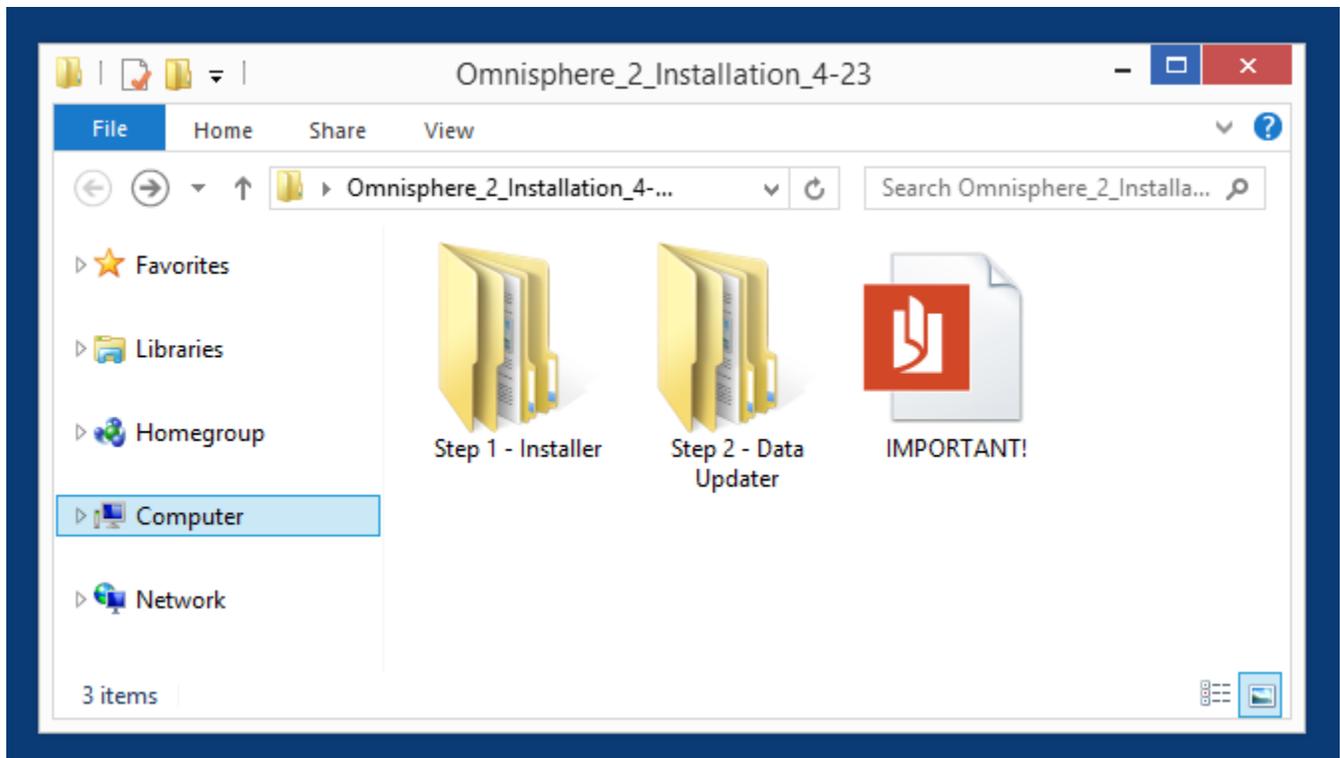


3. You'll be directed to the Spectrasonics website where you'll log in to your User Account. If you don't yet have one, you can create a User Account by selecting the "Create New Account" button. When prompted, enter your Omnisphere serial number (found on the inside of your printed User Guide).

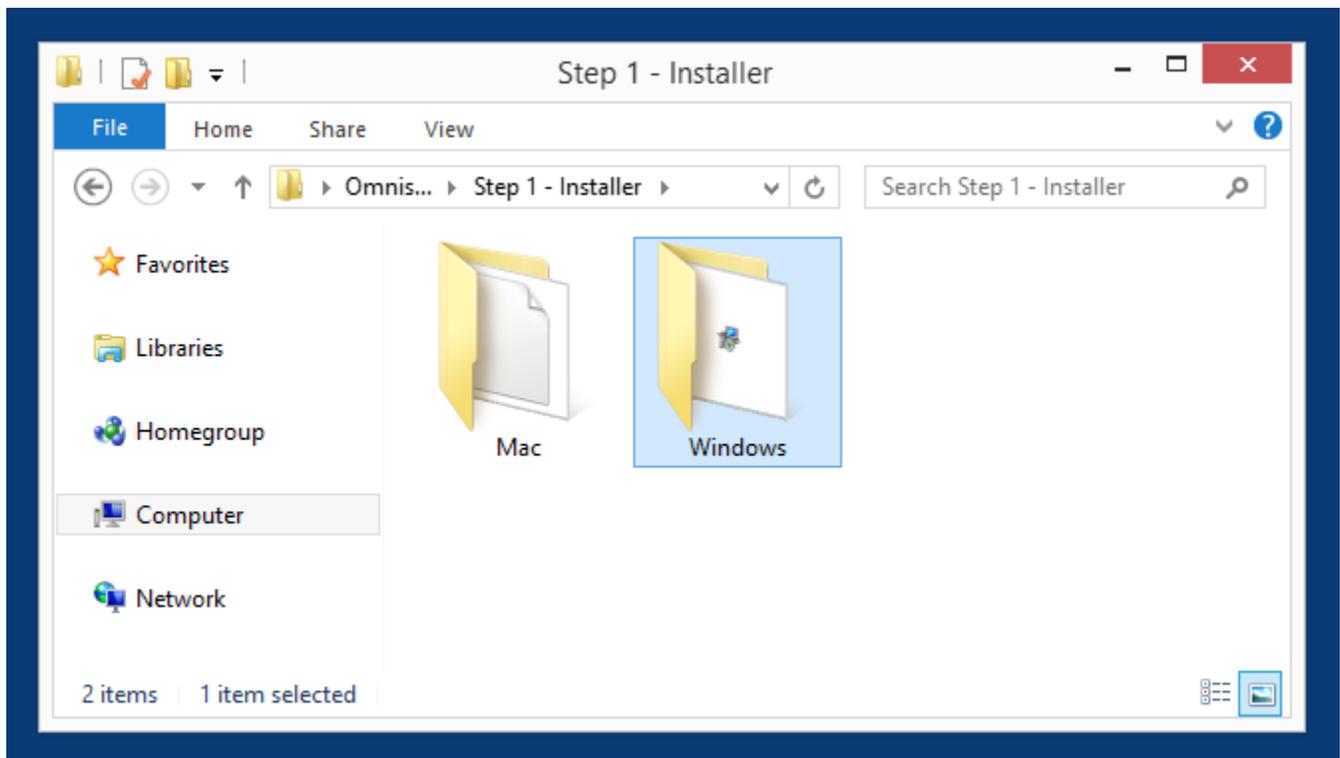


4. You'll select the link to download the Omnisphere 2 Disc Installer.

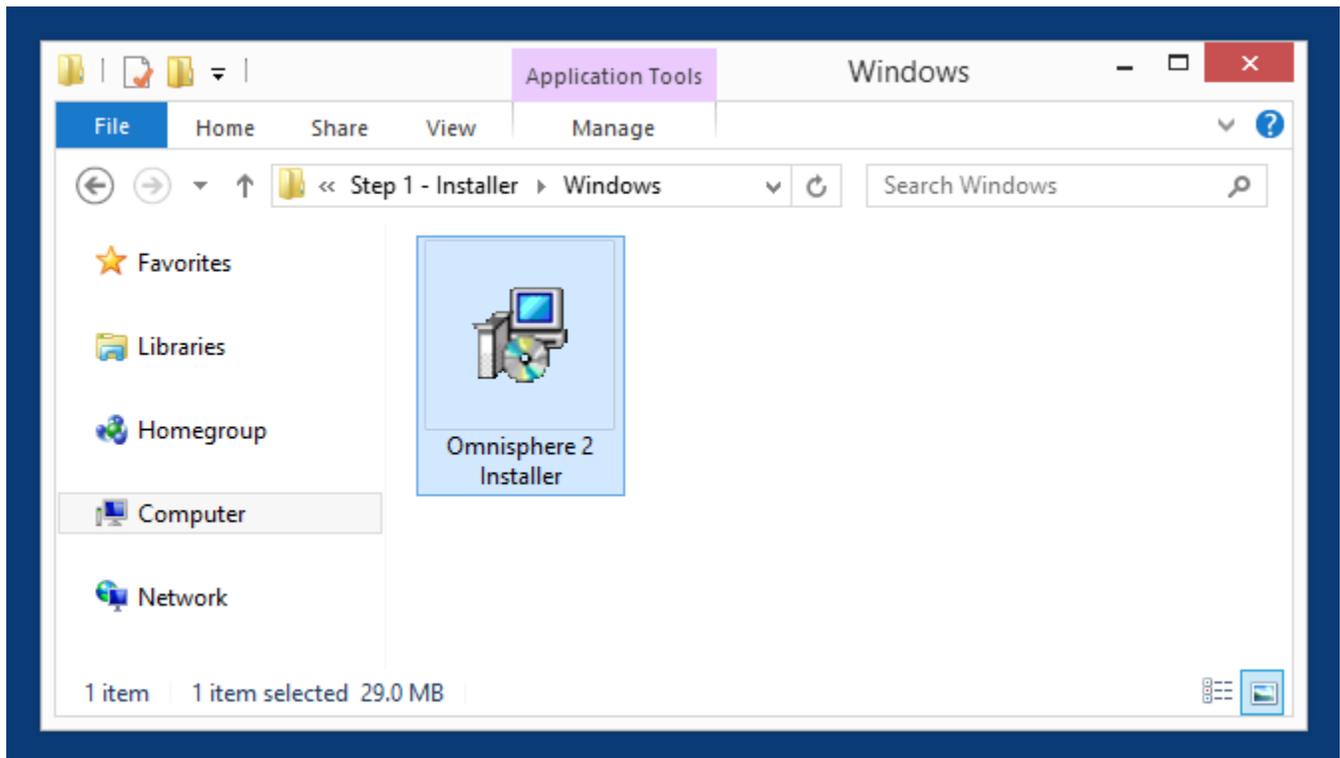
5. Once the .zip file downloads and extracts itself you should have a folder called "Omnisphere\_2\_Installation". Open the folder and first read the file called "Important!" as it contains vital information about the installation process and requirements. Next, open the folder called "Step 1 – Installer."



6. Then open the folder called "Windows."



7. Double-click the file “Omnisphere 2 Installer.exe.”



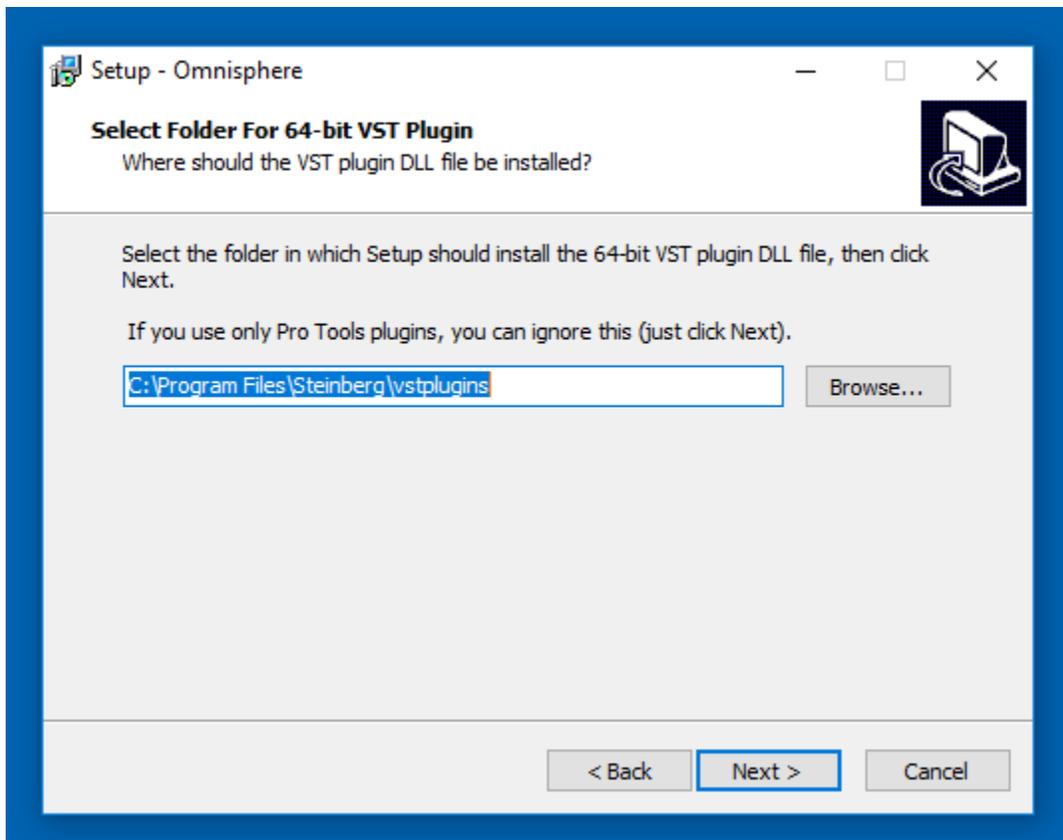
8. Follow the steps as you're guided through the installation process. Make sure to review the Installation Info and Licensing FAQ and then to agree to the license agreement.



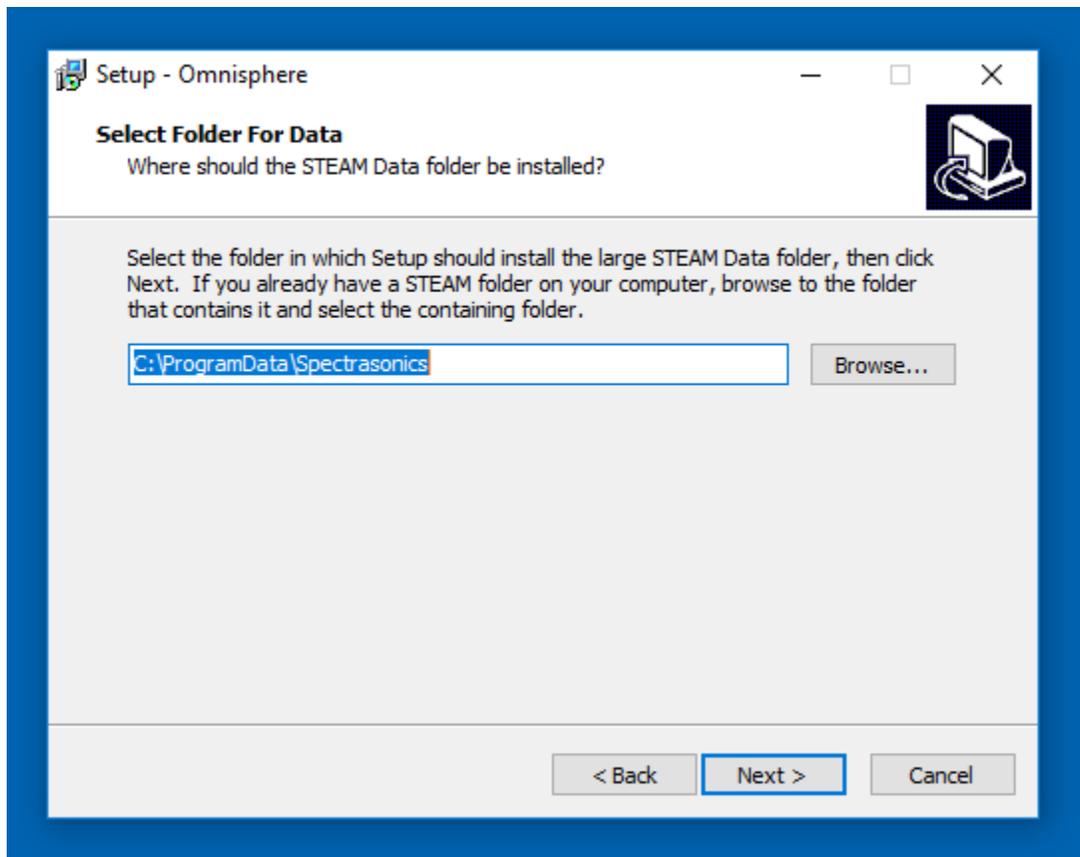
9. The plug-in files will now be installed on your PC's system drive.



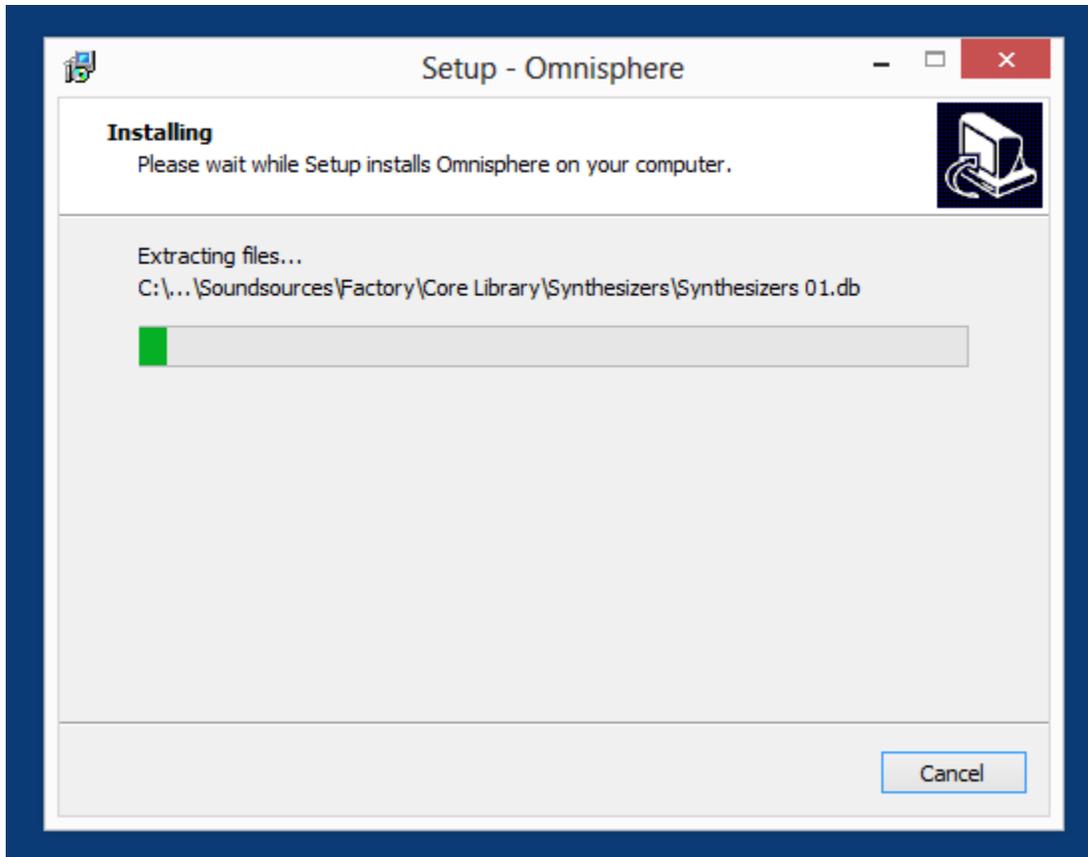
10. At the “Select Folder For 64-bit VST Plugin” step select the VST plug-in path on your system to install Omnisphere into. By default the 64-bit plugin will be installed in **C:\ProgramData\Steinberg\vstplugins\** but you can choose a different path (your host must support 64-bit plug-ins.)



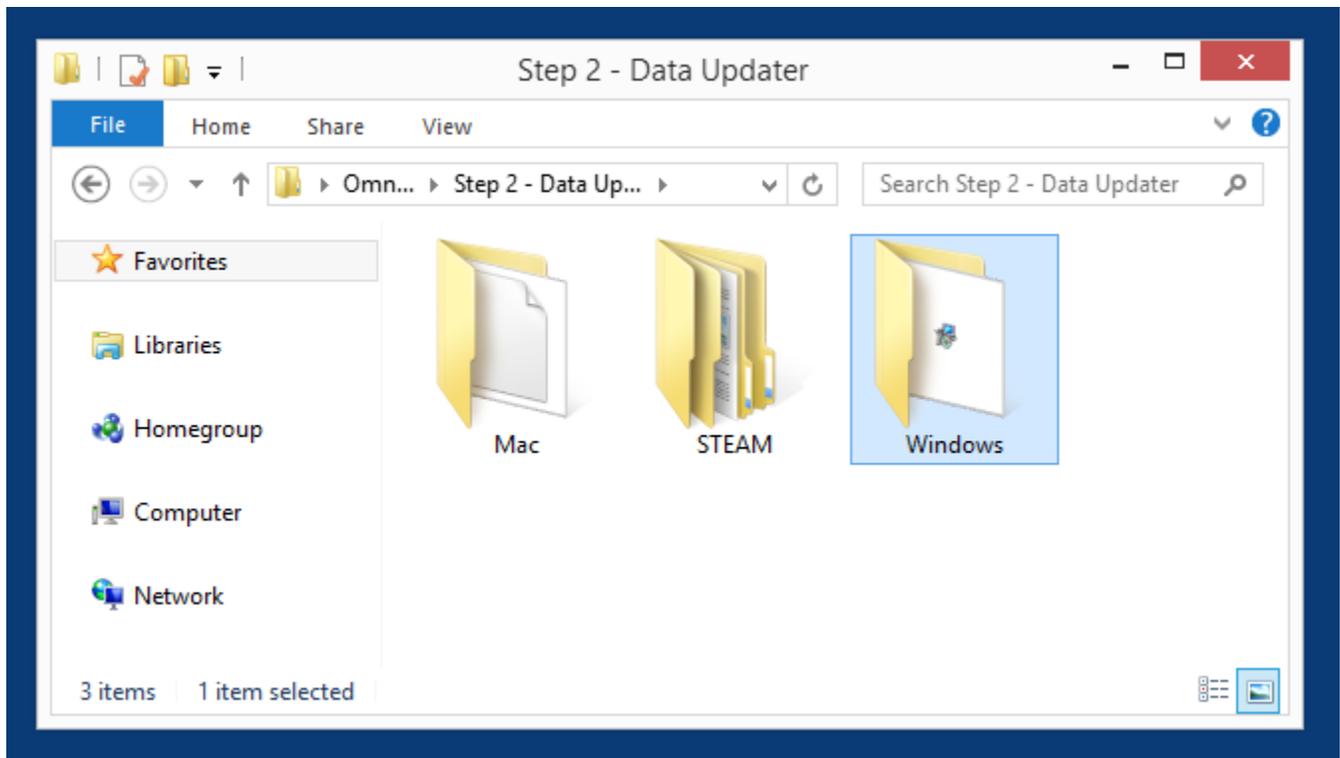
11. The default location of the large Omnisphere data files will be displayed next. If you wish to install the large Core Library files to a secondary drive, click the “Browse” button and choose an alternate location.



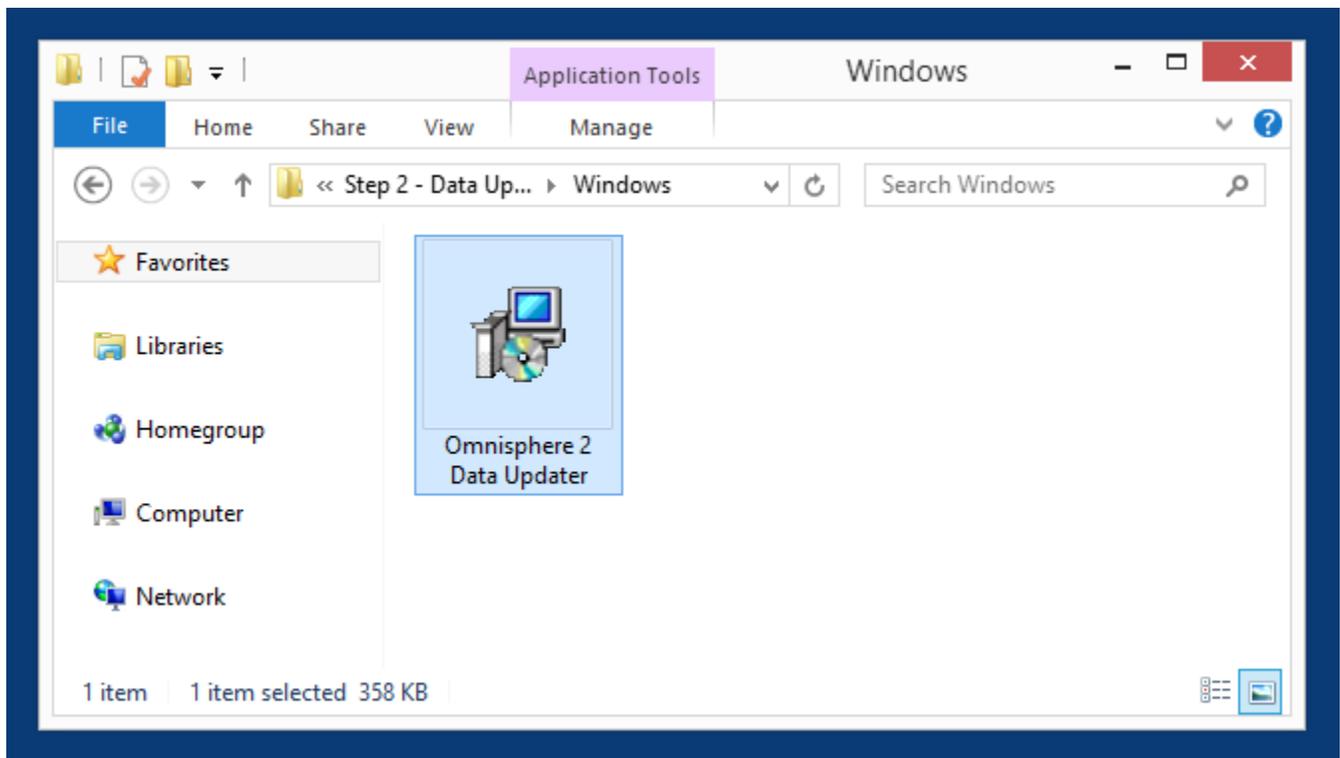
12. The large data files will now be copied from the DVDs to your selected drive. Allow for 30-45 minutes per disc (approximately 4-6 hours for all eight DVDs).



13. After the installation of Disc H is complete, close out the installer and return to your "Omnisphere\_2\_Installation" folder and open the "Step 2 – Data Updater" folder.



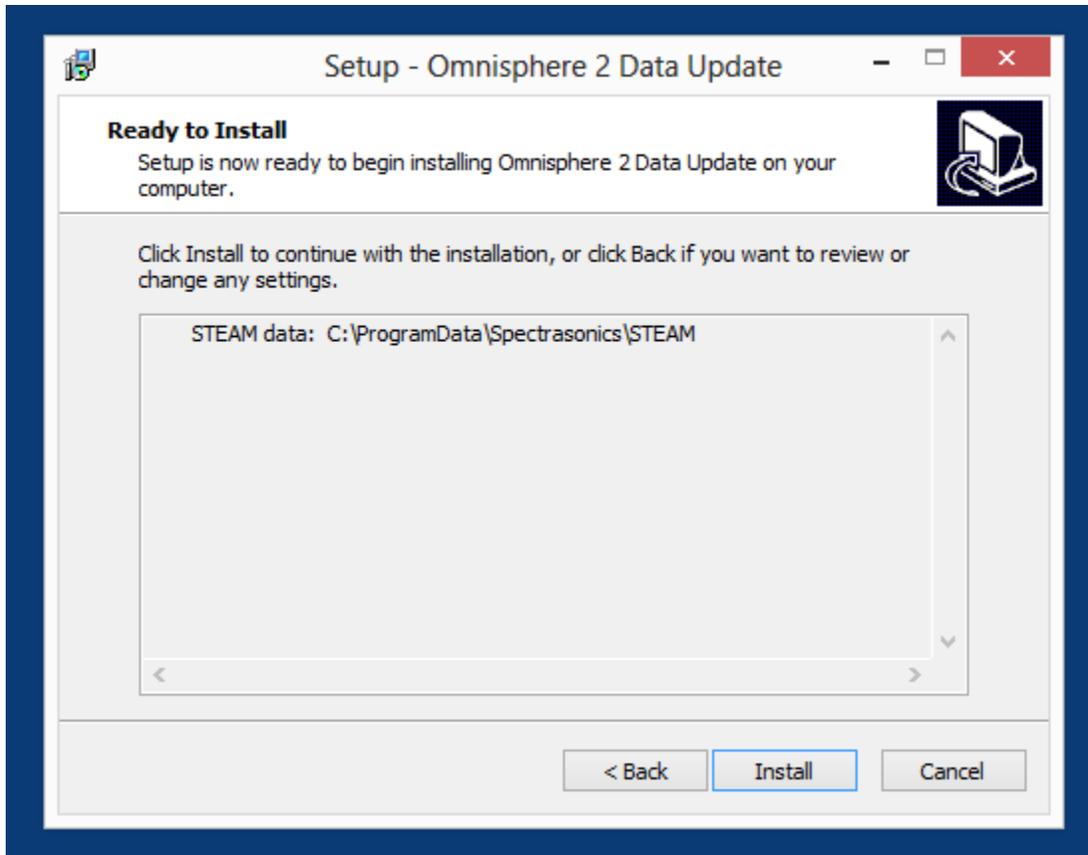
14. Open the “Step 2 – Data Updater” folder, the Windows folder and run the “Omnisphere 2 Data Updater.”



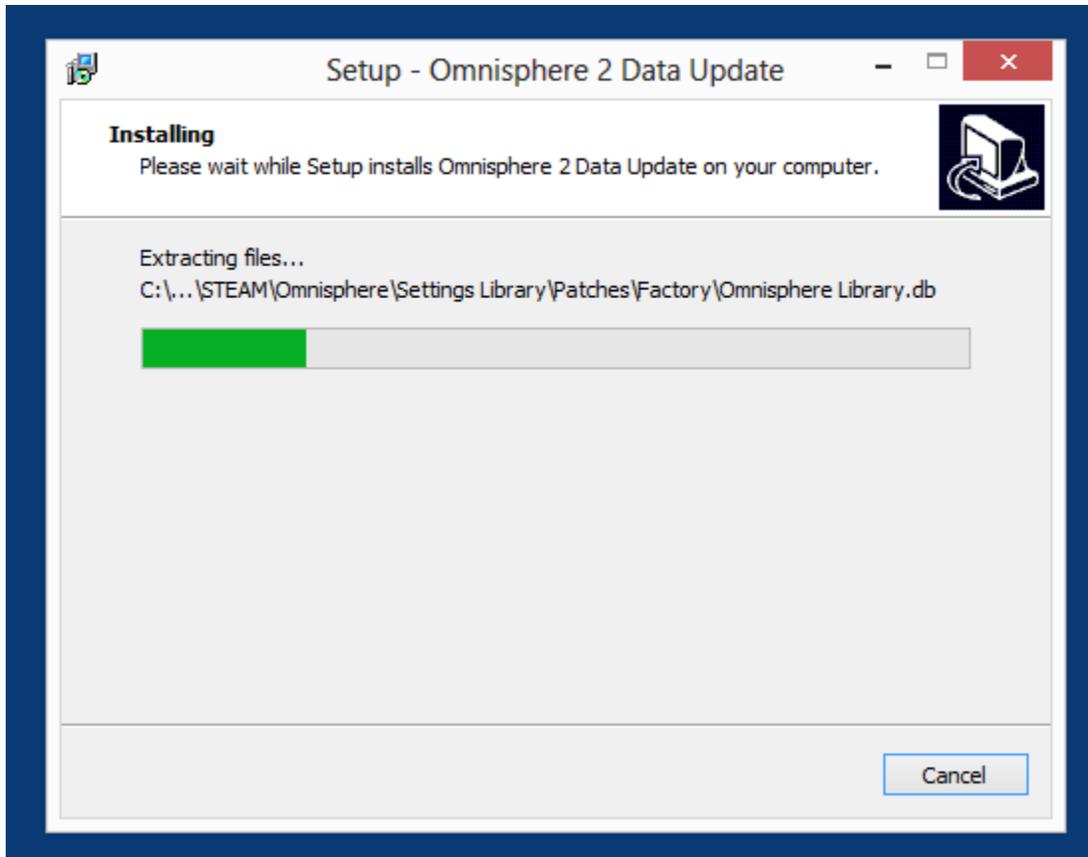
15. Follow the steps as you're guided through the installation process and to agree to the license agreement.



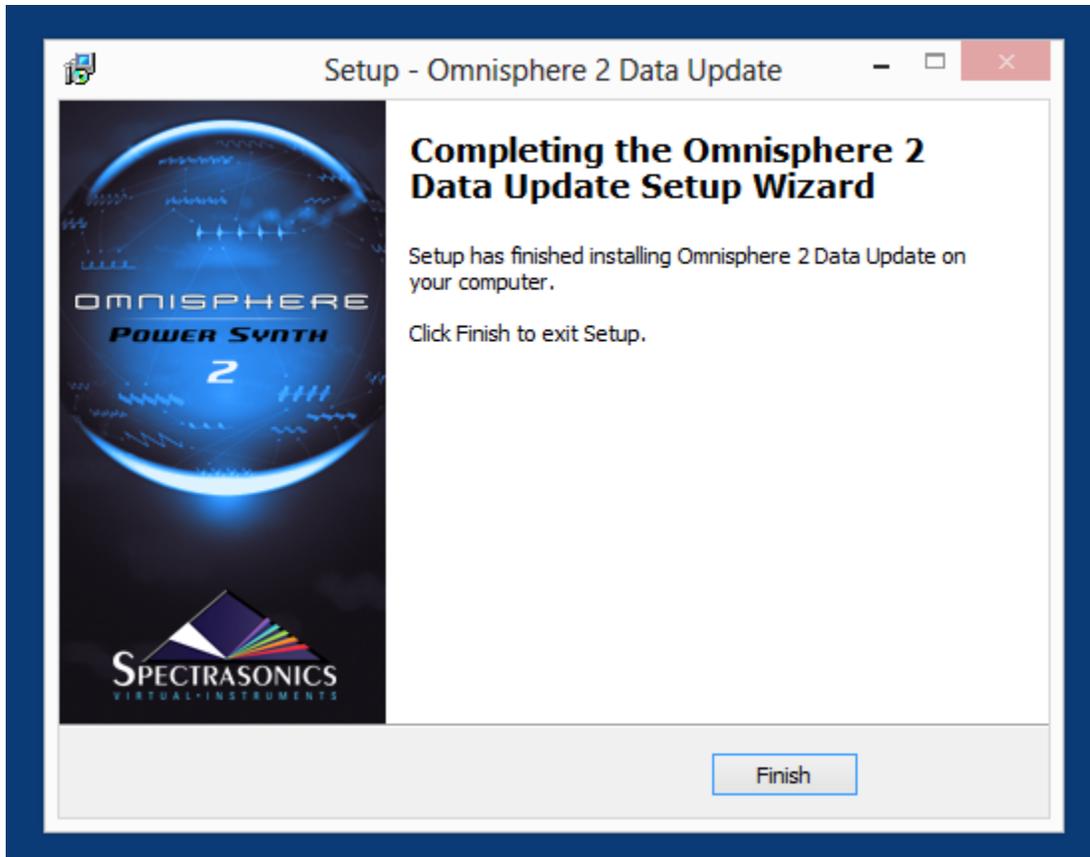
16. The supplemental data files will be added to your STEAM library folder.



17. When the data from the Step 2 installer has been installed, it's time to open Omnisphere 2 in your host and authorize it.



18. Select 'Finish' to quit the installer.



Please consult the [Authorization](#) section for assistance with authorizing Omnisphere.

## 1.4. Authorization



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

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

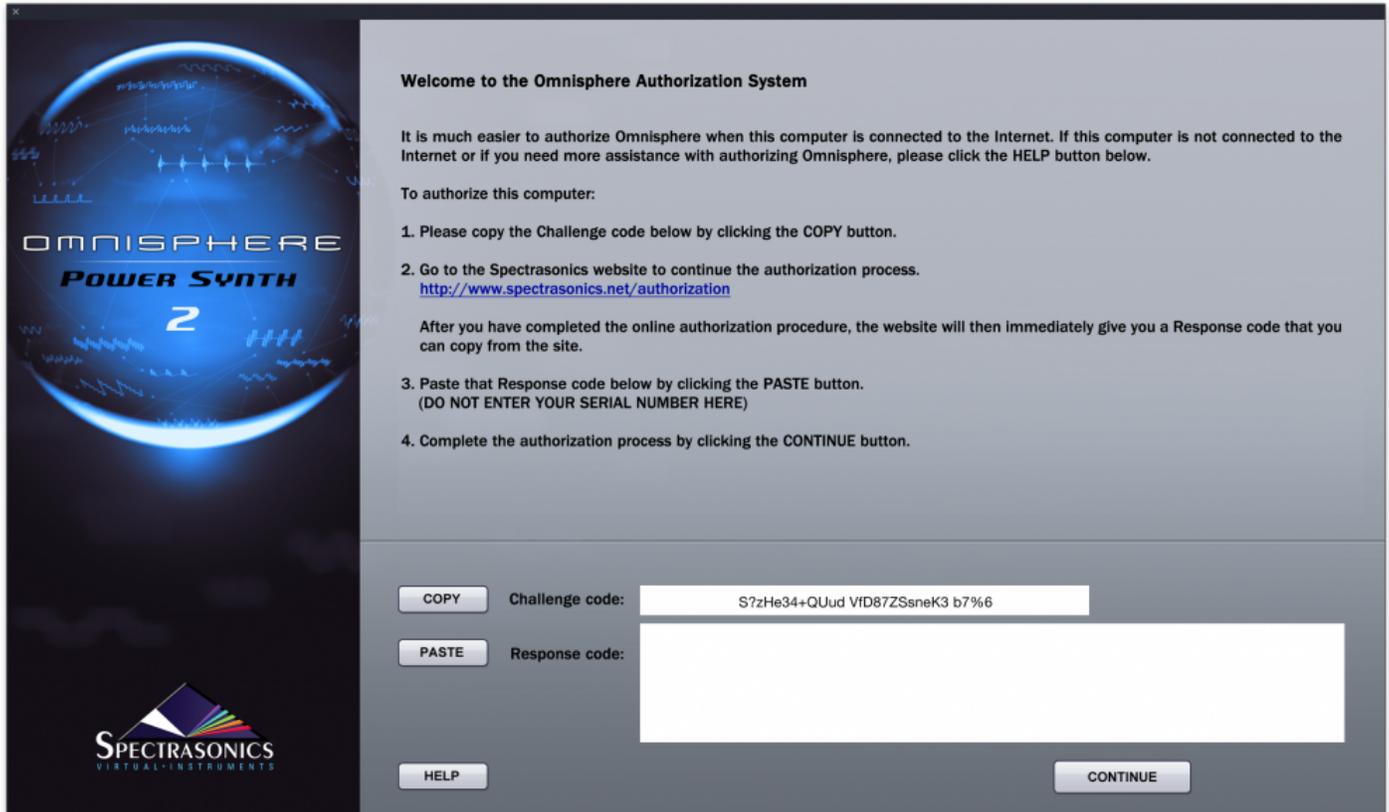
## 1.4.1. With a Net Connection

Your computer must be connected to the internet while following these instructions. If you need directions for authorizing on a computer *not* connected to the internet, please follow the steps detailed [here](#)

1. After instantiating Omnisphere in your sequencer, click the Omnisphere Splash Screen.



You will now see the Omnisphere Authorization System window:



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

- <http://www.spectrasonics.net/authorization>

You will be taken to your User Account page. If you don't yet have a User Account, you can create one.

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

## User Accounts

---

### Your Profile:

**Username:** spectauser  
**Name:** Spectra User  
**Email:** spectauser@email.com  
[Change your communications preferences](#)  
**Address:** 123 Happy St  
 Funkytown CA, 99999 USA  
**Phone:** 818 955 8481

[Edit User Information](#)

AUTHORIZATIONS		UPDATES	
Instruments	Serial No.	License Type	Get Authorization
Omnisphere	000000541	Standard v2 License 	<a href="#">Authorize Omnisphere 2</a>
	<p><i>The following sounds are licensed to be played in Omnisphere. When prompted by the instrument, authorize it using the link on the right.</i></p> <p style="text-align: center;"> <b>SATELLITES</b>            Keyscape            Trilian    <b>BENEFIT LIBRARIES</b>            Bob Moog Tribute Library         </p>		
Keyscape	000000707	Standard v1 License	<a href="#">Authorize Keyscape</a>
Trilian	00000636	Standard v1 License	<a href="#">Authorize Trilian</a>
Stylus RMX	00000417	Standard v1 License	<a href="#">Authorize Stylus RMX</a>

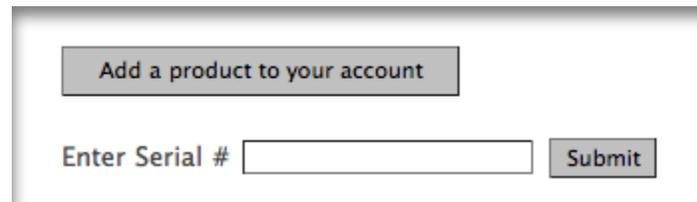
[Add a product to your account](#)


### ADDITIONAL DOWNLOAD INSTALLATIONS

*Need another full installation? Missing original media?*

[SHOW LEGACY](#)

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.



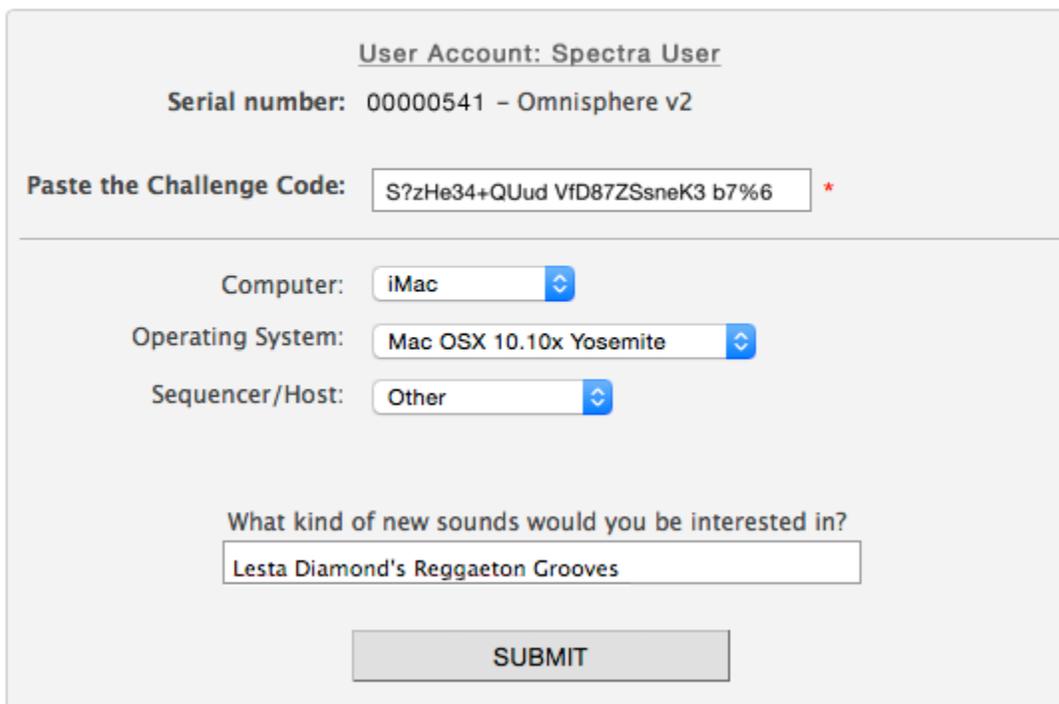
A screenshot of a web form titled "Add a product to your account". The form contains a button labeled "Add a product to your account" and a text input field labeled "Enter Serial #" followed by a "Submit" button.

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

## User Accounts

User Accounts > Authorization

**NOTE - Make sure to install the latest Omnisphere UPDATES before authorizing!**



A screenshot of the "User Account: Spectra User" authorization page. The page displays the following information and form fields:

- User Account:** Spectra User
- Serial number:** 00000541 - Omnisphere v2
- Paste the Challenge Code:** S?zHe34+QUud VfD87ZSsneK3 b7%6 \*
- Computer:** iMac
- Operating System:** Mac OSX 10.10x Yosemite
- Sequencer/Host:** Other
- What kind of new sounds would you be interested in?** Lesta Diamond's Reggaeton Grooves
- SUBMIT** button

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

## User Accounts

User Accounts > Authorization

**NOTE - Make sure to install the latest Omnisphere [UPDATES](#) before authorizing!**

### User Account: Spectra User

Authorization Successful!

Here is the Response code to authorize Omnisphere:

```
dFktuwvTY8o /e8mU@EYs+d 6erd@Gu9:C/ q3fCe=3=F7V FTbPQm2Vp?P cm%P9asekXk pT?5Y4TGrAj
@snmY3otA @9YZ4x3AtuvW /M8Q9omfMTgQ skZgnrC3rVx4 bcuLuV7RtLJj Ss4cesXXXZvt :%mr:rHpC8y
rnG9LxpFSnbU 8g_zb6rC@LsPr/W Ld?=PBiC+Gh2 gmmc2J?NUzba yM@mgEASwUtf q+Yy5+ktNy%F
fevojd6iodai 93FACVhv/BuU Ub8p9kAhKNf G85ES8ofpVA :krj9AHzE8S x4q4vSLwd3h 2qwzVMgXu3m
```

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

That's it!

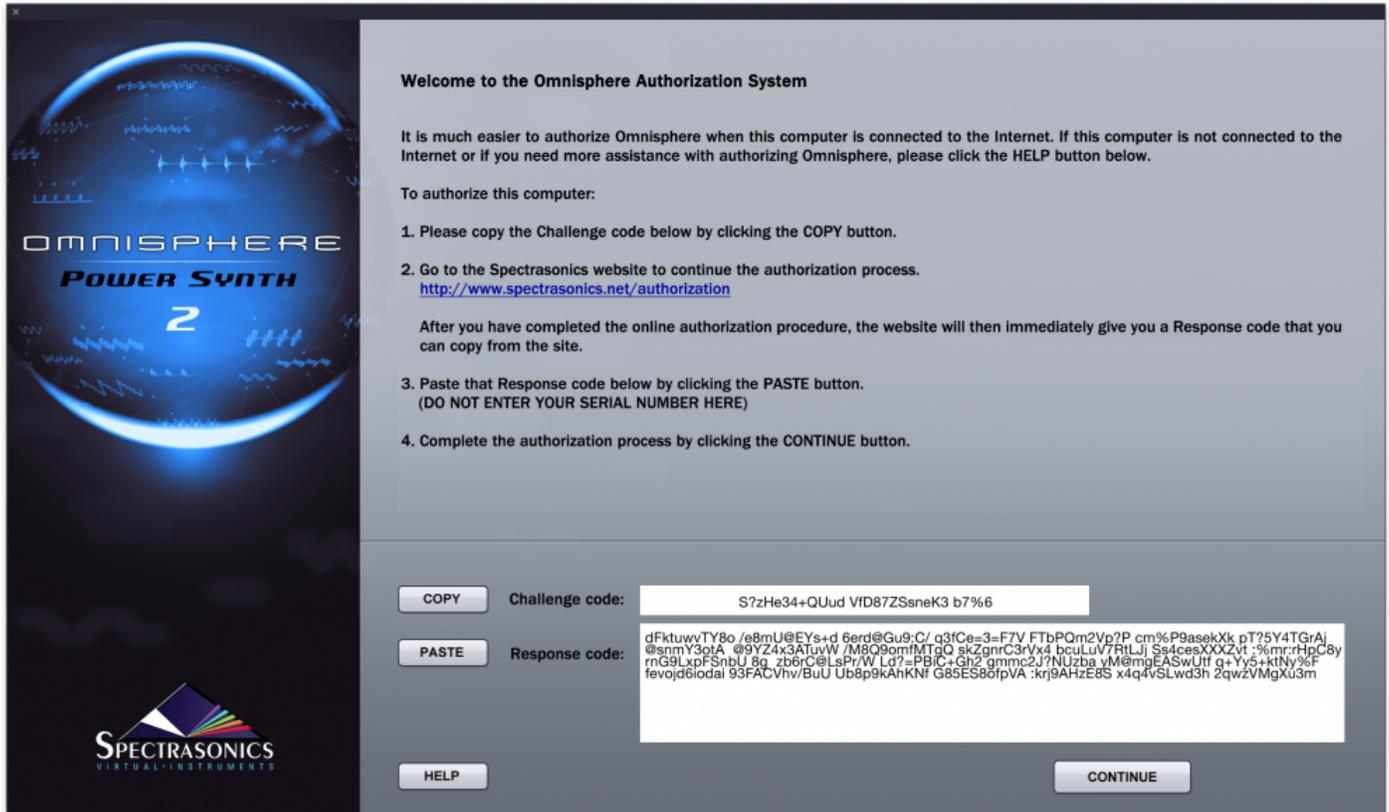
We'll send you a verification email with a copy of your response numbers and registration info.

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

[info@spectrasonics.net](mailto:info@spectrasonics.net)

Thanks for your purchase and please now go to the [Updates](#) page to verify that you have the latest version of the plugin...have fun and let us know what you think!

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



8. Click the CONTINUE button.

9. Remove Omnisphere from your host sequencer.

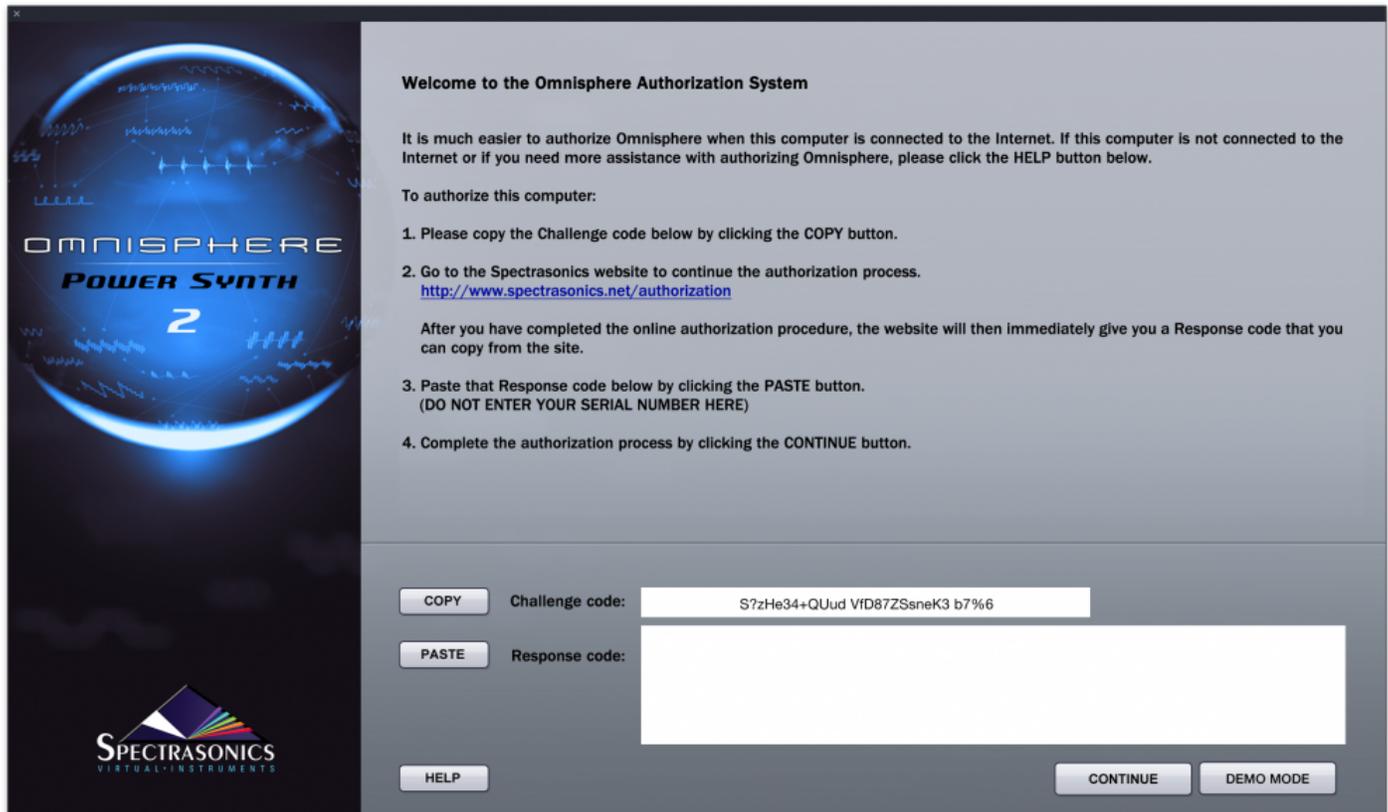
10. Reload a new instance of Omnisphere in your host. Omnisphere will now be authorized and fully functional.

## 1.4.2. Without a Net Connection

1. After opening Omnisphere in your sequencer, click the Omnisphere Splash Screen.



You will now see the Omnisphere Authorization System window:



2. Click the COPY button to copy the Challenge Code.

3. Open a text editor application (such as Text Edit (Mac), Notepad / Wordpad (PC)). Paste (Command/Control-V) into a blank new document. The Challenge Code will now appear in the document. Save the document as a Rich Text File (RTF) with a filename of your choice.

4. Move the RTF file to a flash drive, hard drive, or other portable media. You will need to transport this document to a computer that has an Internet connection. Flash drives are recommended because they are cheap and can be used to quickly move files between computers.

5. Open the RTF file on a computer with an Internet connection. Highlight the entire Challenge Code in the document and Copy it (Command/Control-C).

6. Log in to the Spectrasonics website with your Username and Password

- <http://www.spectrasonics.net/authorization>

You will be taken to your User Account page. If you don't yet have a User Account, you can create one.

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

## User Accounts

### Your Profile:

<b>Username:</b>	spectauser
<b>Name:</b>	Spectra User
<b>Email:</b>	spectauser@email.com <a href="#">Change your communications preferences</a>
<b>Address:</b>	123 Happy St Funkytown CA, 99999 USA
<b>Phone:</b>	818 955 8481

[Edit User Information](#)

AUTHORIZATIONS		UPDATES	
Instruments	Serial No.	License Type	Get Authorization
Omnisphere	000000541	Standard v2 License 	<a href="#">Authorize Omnisphere 2</a>
	<p><i>The following sounds are licensed to be played in Omnisphere. When prompted by the instrument, authorize it using the link on the right.</i></p> <p style="text-align: center;"><b>SATELLITES</b> Keyscape Trilian</p> <p style="text-align: center;"><b>BENEFIT LIBRARIES</b> Bob Moog Tribute Library</p>		
Keyscape	000000707	Standard v1 License	<a href="#">Authorize Keyscape</a>
Trilian	00000636	Standard v1 License	<a href="#">Authorize Trilian</a>
Stylus RMX	00000417	Standard v1 License	<a href="#">Authorize Stylus RMX</a>

[Add a product to your account](#)

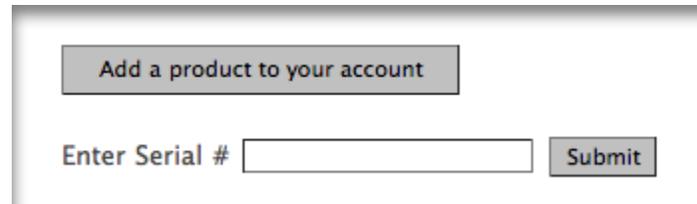


### ADDITIONAL DOWNLOAD INSTALLATIONS

*Need another full installation? Missing original media?*

[SHOW LEGACY](#)

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



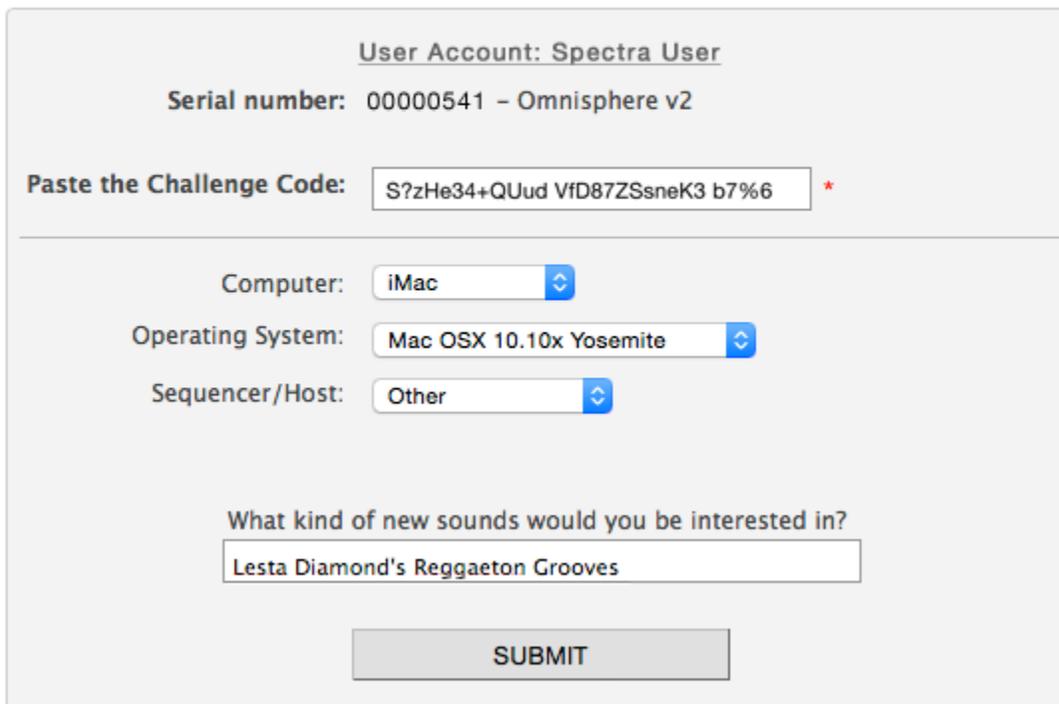
A screenshot of a web form. At the top, there is a button labeled "Add a product to your account". Below it, there is a text input field labeled "Enter Serial #" followed by a "Submit" button.

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

## User Accounts

User Accounts > Authorization

**NOTE - Make sure to install the latest Omnisphere UPDATES before authorizing!**



A screenshot of the "User Account: Spectra User" authorization page. It shows the following fields and options:

- Serial number:** 00000541 - Omnisphere v2
- Paste the Challenge Code:** S?zHe34+QUud VfD87ZSsneK3 b7%6 \*
- Computer:** iMac
- Operating System:** Mac OSX 10.10x Yosemite
- Sequencer/Host:** Other
- What kind of new sounds would you be interested in?** Lesta Diamond's Reggaeton Grooves
- SUBMIT** button

10. After Submitting your Challenge Code you'll receive a Response Code, which you'll select with your cursor and copy (Command/Control-C):

## User Accounts

User Accounts > Authorization

**NOTE - Make sure to install the latest Omnisphere [UPDATES](#) before authorizing!**

### User Account: Spectra User

Authorization Successful!

Here is the Response code to authorize Omnisphere:

```
dFktuwvTY8o /e8mU@EYs+d 6erd@Gu9:C/ q3fCe=3=F7V FTbPQm2Vp?P cm%P9asekXk pT?5Y4TGrAj
@snmY3otA @9YZ4x3ATuvW /M8Q9omfMTgQ skZgnrC3rVx4 bcuLuV7RtLJj Ss4cesXXXZvt :%mr:rHpC8y
rnG9LxpFSnbU 8g_zb6rC@LsPr/W Ld?=PBiC+Gh2 gmmc2J?NUzba yM@mgEASwUtf q+Yy5+ktNy%F
fevojd6iodai 93FACVhv/BuU Ub8p9kAhKNf G85ES8ofpVA :krj9AHzE8S x4q4vSLwd3h 2qwzVMgXu3m
```

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

That's it!

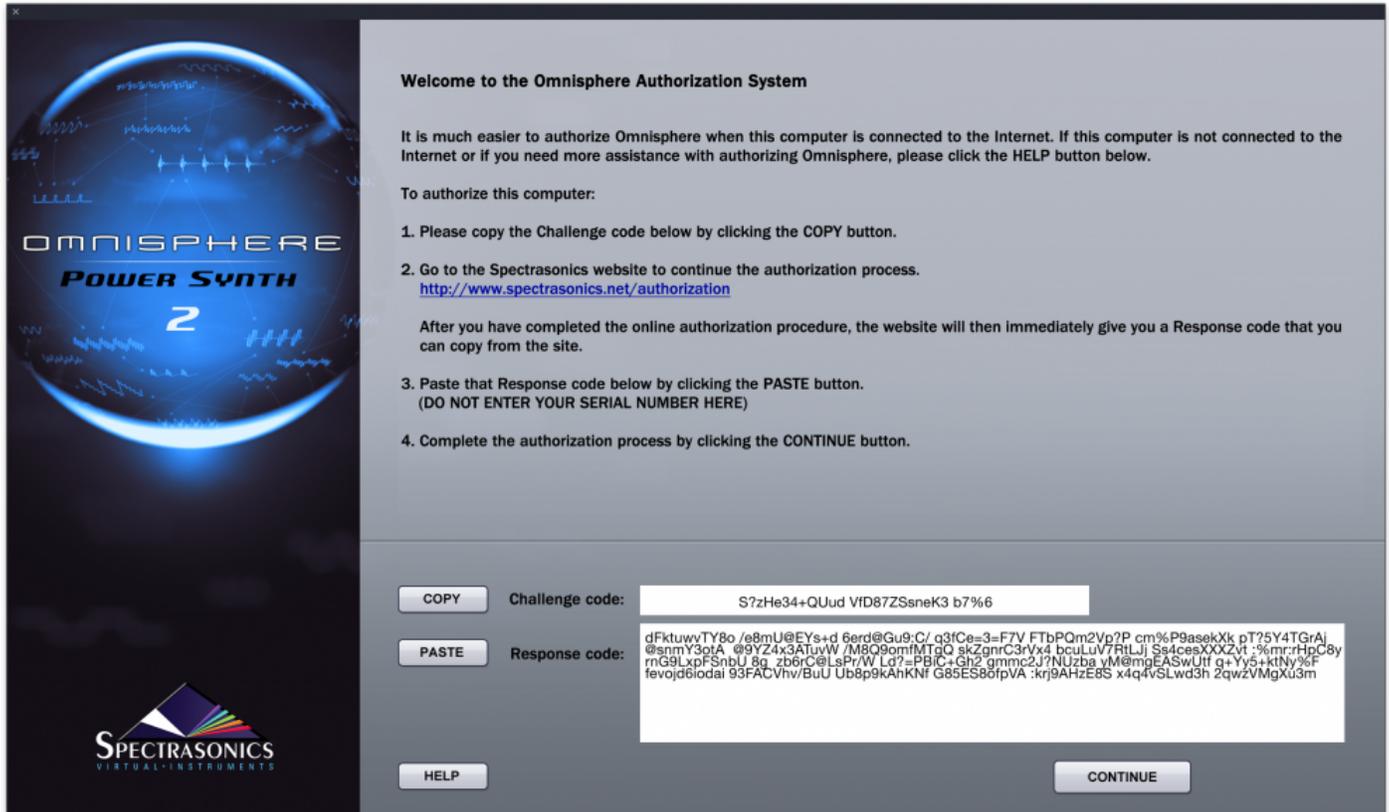
We'll send you a verification email with a copy of your response numbers and registration info.

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

[info@spectrasonics.net](mailto:info@spectrasonics.net)

Thanks for your purchase and please now go to the [Updates](#) page to verify that you have the latest version of the plugin...have fun and let us know what you think!

11. Open up a blank new document in a text editor application. Press Paste (Command/Control-V). The Response Code will now appear in the document. Save the document as a Rich Text File (RTF) with a filename of your choice.
12. Move the RTF file to a flash drive, hard drive or other portable drive. You will need to transport this document back to the music computer.
13. Open up the RTF file which contains the Response Code on your music computer. Select and highlight the Response Code in the document and Copy it.
14. Return to Omnisphere. **Click the PASTE button** and the Response Code will now be displayed in Omnisphere.



15. Click the CONTINUE button.

16. Now remove Omnisphere from your host sequencer and reload a **NEW INSTANCE** of Omnisphere. Omnisphere will now be authorized and fully functional.

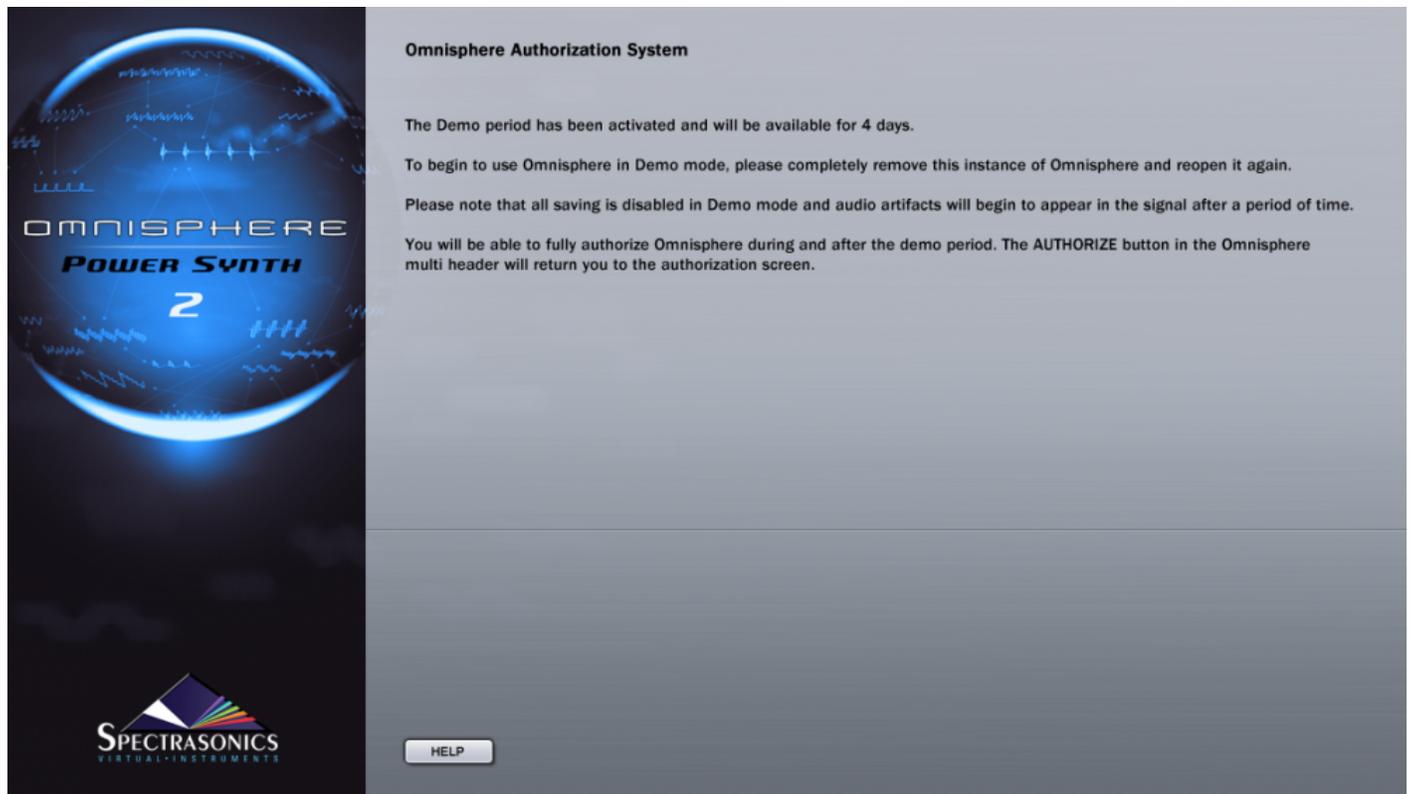
## 1.4.3. Demo Mode

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

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

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



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



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

## 1.4.4. Authorization Troubleshooting



If you are returned to the Welcome to the Omnisphere Authorization System page or the demo mode version of Omnisphere after reopening Omnisphere, that means the plug-in did not accept the Response Code and it may have been incorrectly entered. You can check your Response Code by referring to the email that was sent to you after you registered. Try authorizing again with the instructions given in the [Authorizing](#) section.

**NOTE:** Make sure you are entering the Response Code given by the website and **NOT** the serial number from your User Guide.

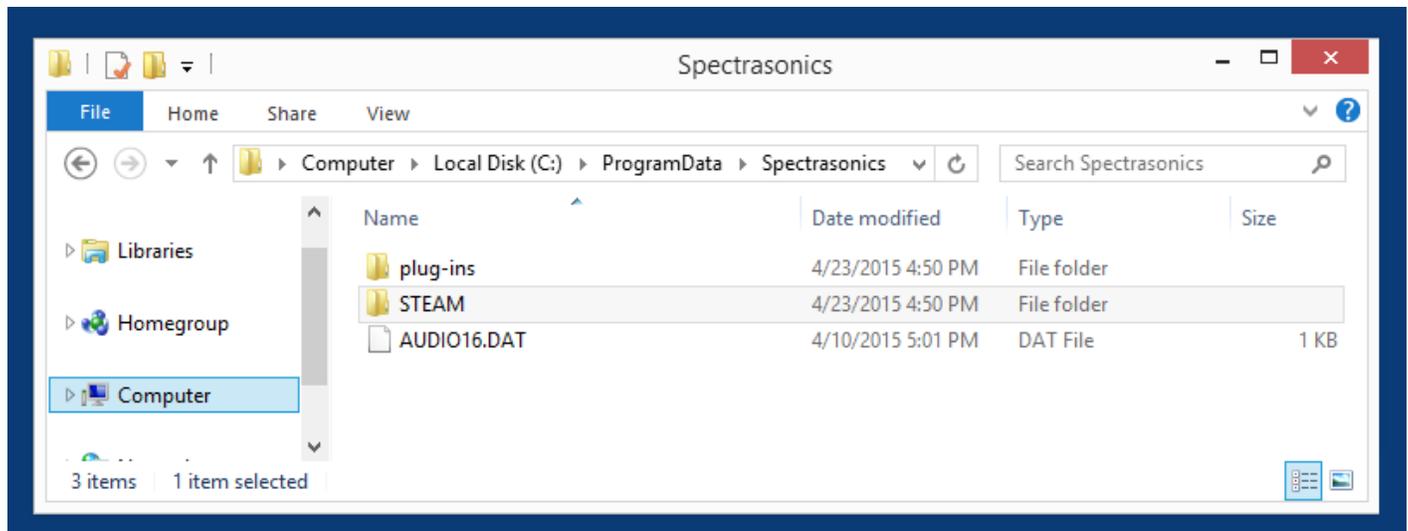
While in Demo Mode, if you accidentally press the Authorize button, simply close the interface window and reopen it.

**NOTE:** If you need further assistance, please contact Tech Support at [info@spectrasonics.net](mailto:info@spectrasonics.net)

## 1.4.5. Moving the STEAM Directory

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

### WINDOWS – MOVING THE STEAM DIRECTORY AFTER INSTALLATION



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

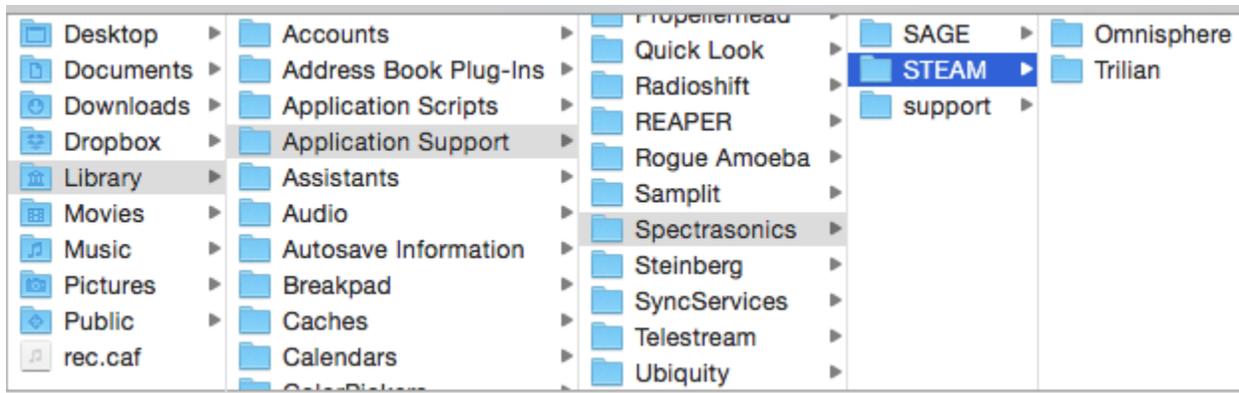
This can be another drive partition, a secondary internal drive, or an external hard drive such as a Firewire or USB (USB 3 recommended) hard drive, etc.

Next, Right-click the STEAM folder in the new location to create a “**Shortcut to STEAM.**”

Copy the shortcut to **C:\ProgramData\Spectrasonics.**

Finally, make certain to remove the words\*“Shortcut to ”\* from the name (including removing the spaces), leaving the folder shortcut named **STEAM.**

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



Drag or copy the **STEAM** folder from the default location here: **Macintosh HD/ Users/ Username/ Library/ Application/ Support/ Spectrasonics/** to the hard drive location of your choice. This can be another drive partition, a secondary internal drive, or an external hard drive such as a Firewire or USB (USB 3 recommended) hard drive, etc.

Next, hold Command-Option on the keyboard, click and drag the **STEAM** folder to the desktop to create an alias of the folder named **STEAM**.

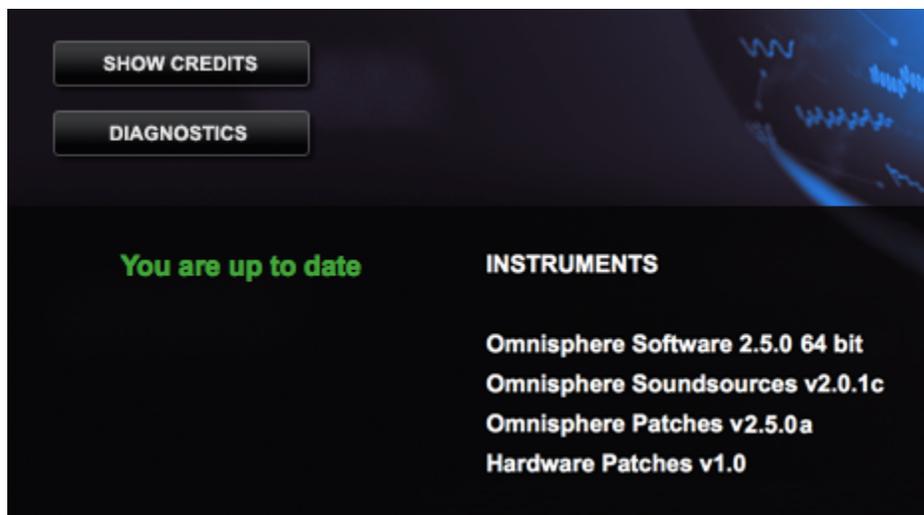
Move the **STEAM** alias from the desktop to **MacintoshHD/ Users/ Username/ Library/ Application/ Support/ Spectrasonics/** and you'll be all set.

## 1.5. Smart Update

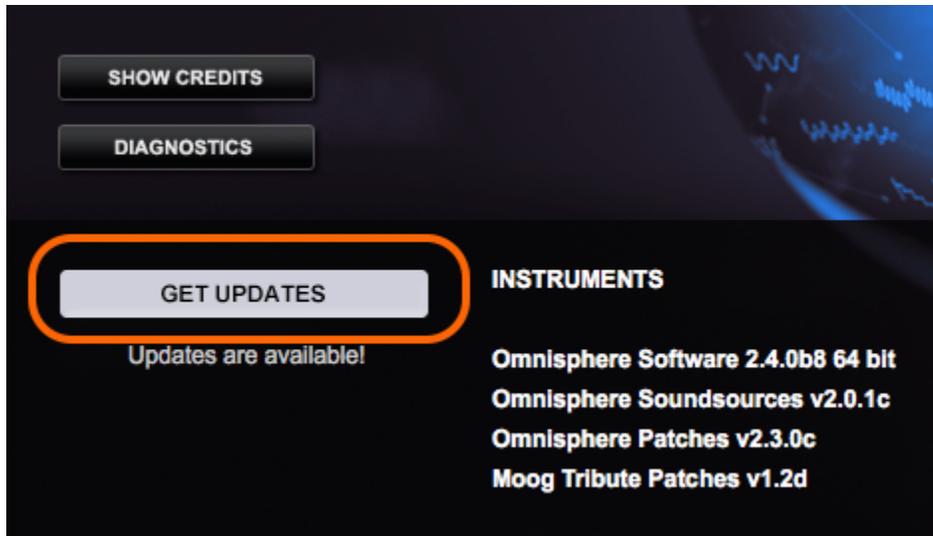
---

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:



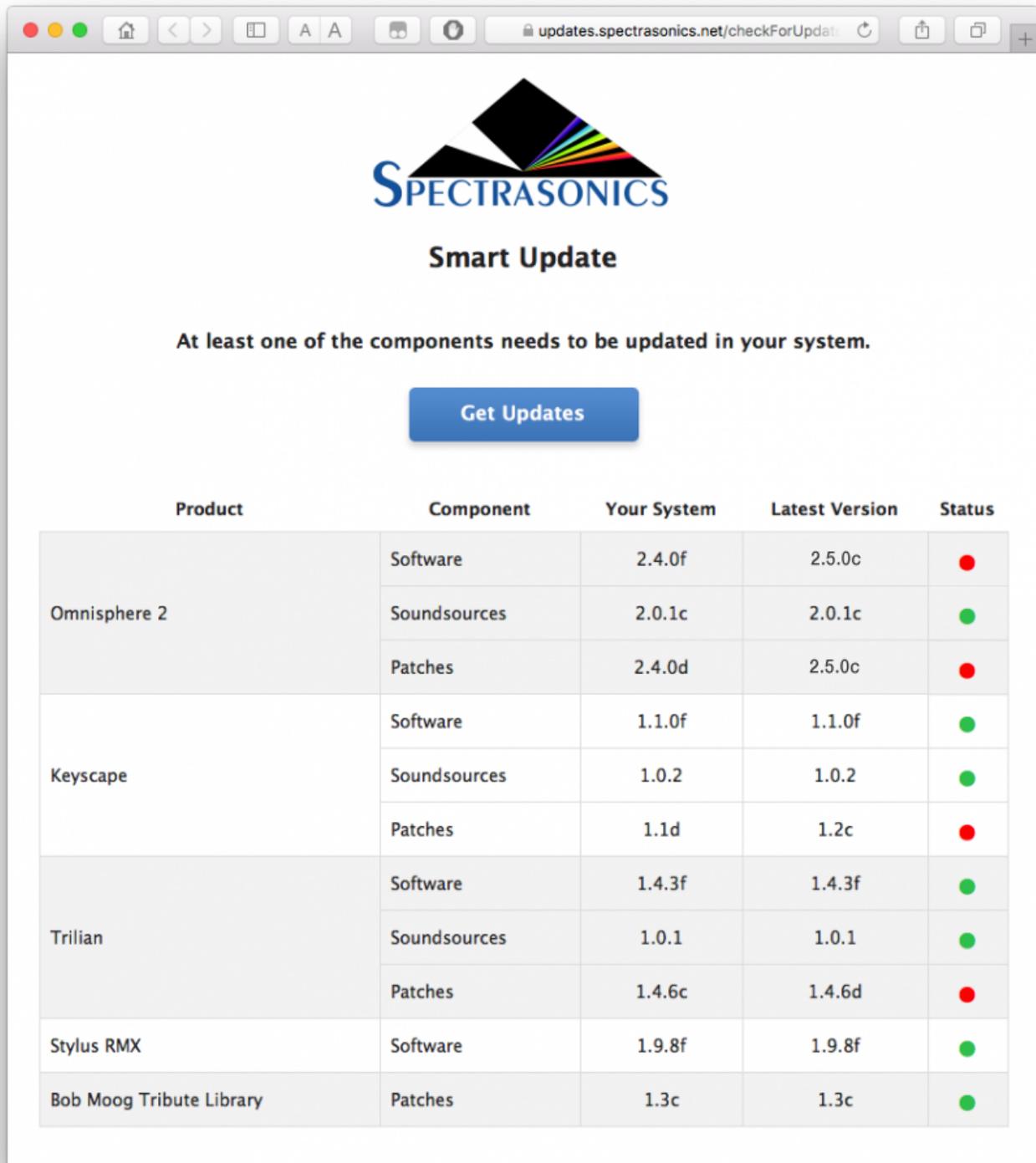
If the software detects that there are updates available, the splash screen will display “Updates are available!” in gray text below the GET UPDATES button:



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.



**SPECTRASONICS**

## Smart Update

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

[Get Updates](#)

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.

updates.spectrasonics.net/checkForUpdate

# SPECTRASONICS

## Smart Update

Compiling your download file

Spectrasonics Updater.zip (28 MB)

The following components will be included in your download:

- Bob Moog Tribute Library Patches 1.3c
- Keyscape Software 1.1.0d
- Omnisphere Software 2.4.0d1
- Omnisphere Patches 2.4.0c

### Release Notes

#### Keyscape Software 1.1.0d

**Includes the following features and fixes:**

- Installs Keyscape standalone
- Spectrasonics Updater: Splash pane shows when updates are available and facilitates download and installation
- Adds feature to allow remote loading of patches via MIDI Program Changes, CC controls or Notes
- Adds GUI magnification options for high-resolution monitors

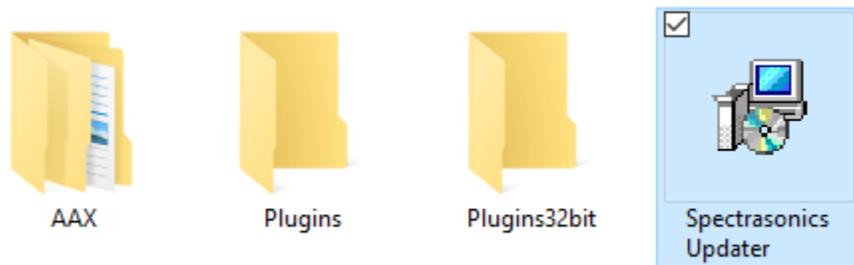
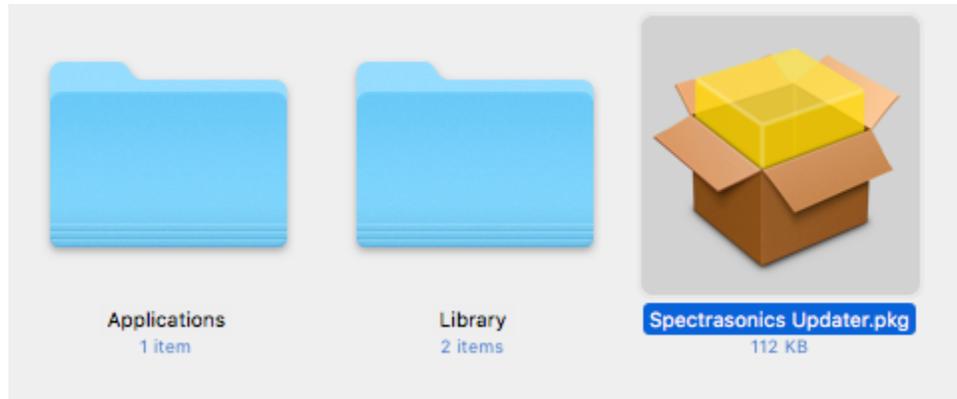
#### Bob Moog Tribute Library Patches 1.3c

**Includes the following features and fixes:**

- Numerous tagging improvements

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. 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.

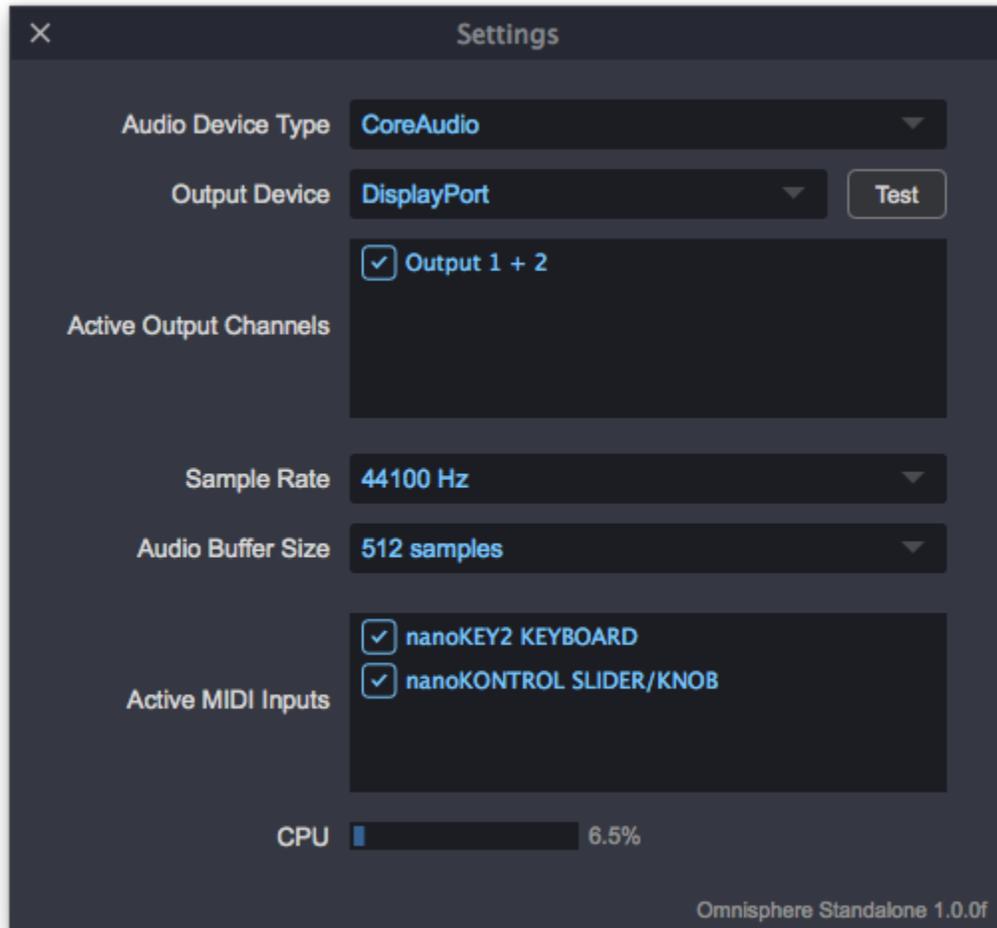
Ideal for live and studio situations, you can edit and save your Patches just like you do when using Omnisphere in your DAW.

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

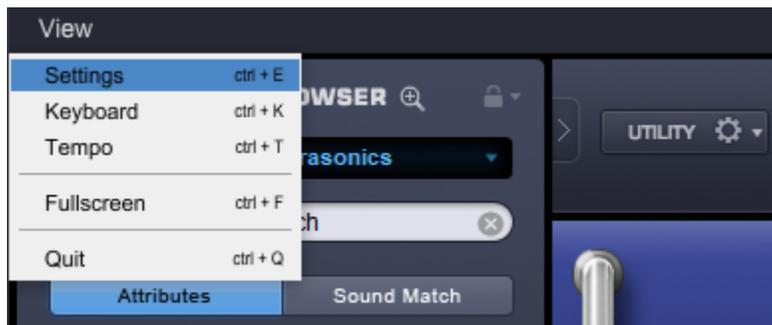
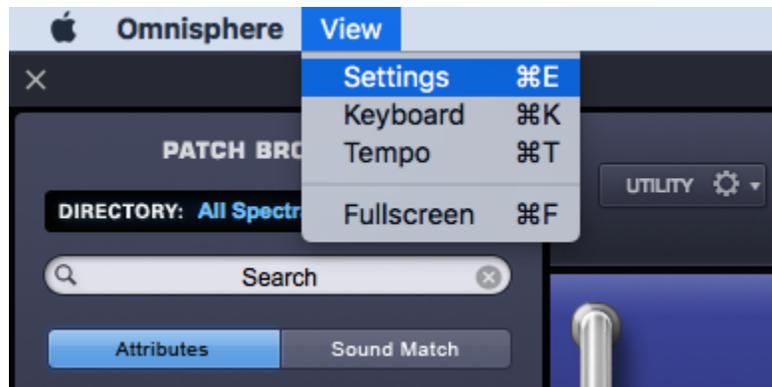
**TIP:** For quick access on a Mac, you might want to place the Omnisphere Standalone in the Dock. A Windows shortcut is automatically placed on the desktop.

## 1.6.1. Settings

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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.

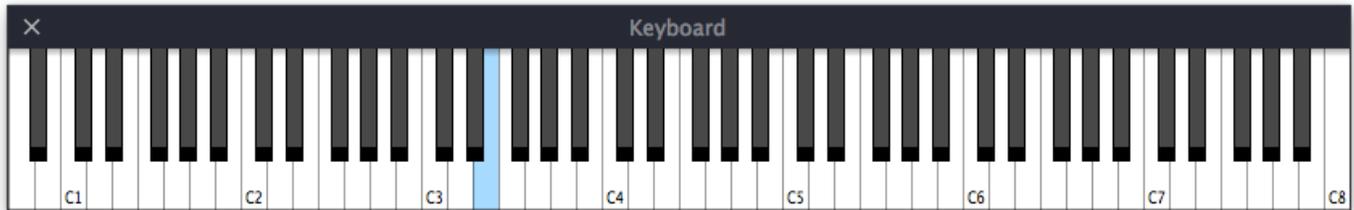
Clicking "Command/Control-E" again or clicking on the "X" in the upper left corner closes the Settings window.

*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.*

## 1.6.2. Keyboard

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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.

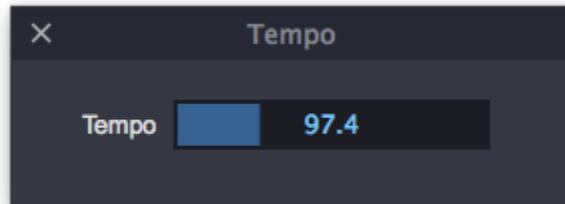
The MIDI velocity is set to 90 and the Spacebar works as a sustain pedal.

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

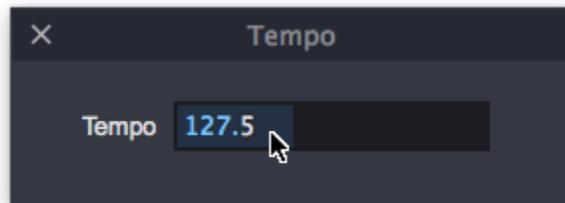
**NOTE:** “Command/Control-W” also closes the Keyboard window when it is in-focus.

## 1.6.3. Tempo

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The Omnisphere stand-alone has the ability to set the instrument's tempo from 20bpm up to 300bpm. You can manually enter any tempo value to one decimal place by double-clicking in the Tempo Rate field:



- Range 20.0 – 300.0

**NOTE:** You can also access the Tempo feature by pressing **Control-3** in Windows or **Command-3** in macOS.

## 1.6.4. Full Screen



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/Control-F” to enter Fullscreen mode.

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

*TIP: By using Fullscreen in conjunction with Magnify, you can set up a large, easy-to-see interface.*



## 2.1. STEAM Engine

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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. 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 multi-timbral 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.

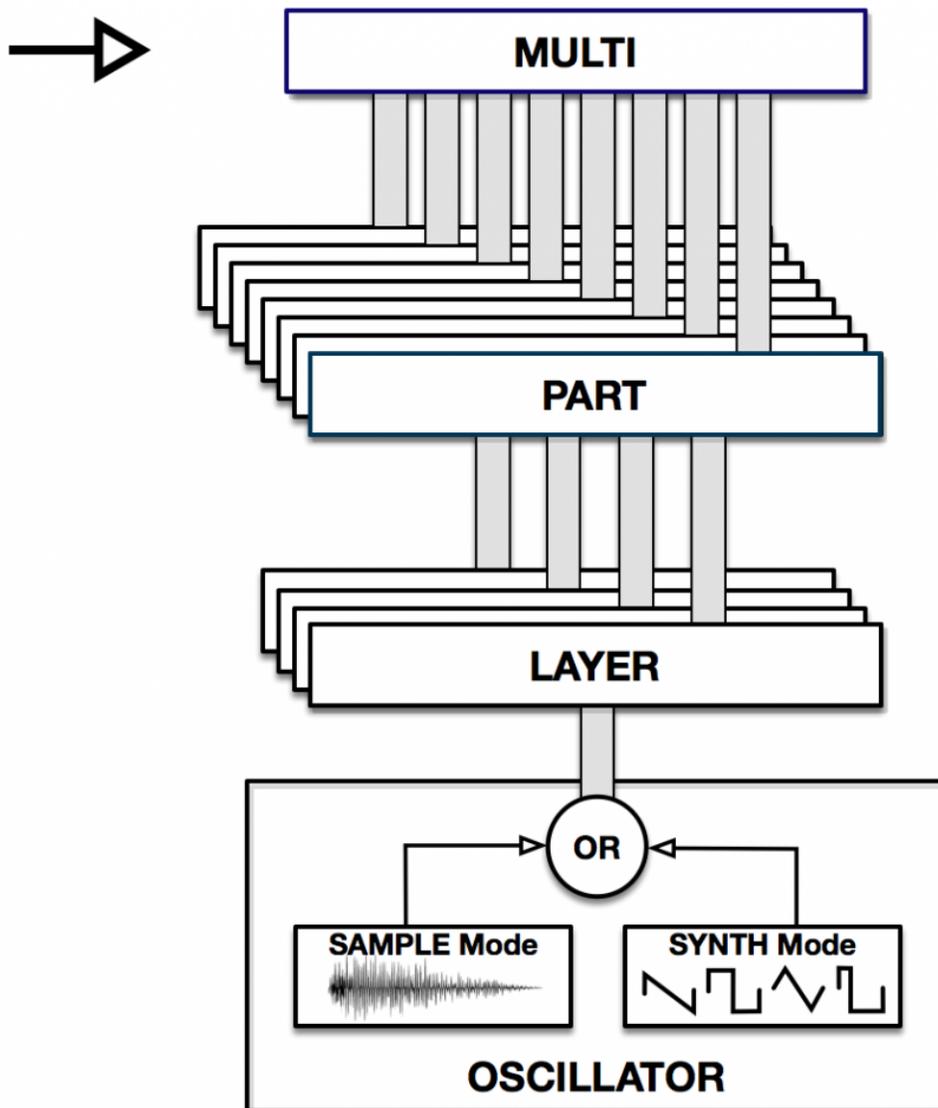
The STEAM Engine® enables us to respond quickly to changes in technology. Our instruments are fully supported across industry changes and this flexible software permits more innovations and faster transitions in the future. Just as Stylus RMX, based on S.A.G.E. technology, made early compatibility with Apple's Intel-Macs possible, new instruments based on STEAM technology will make future transitions much easier for our customers.

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

Virtual instruments powered by STEAM 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](#) well as a Satellite Instrument 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 & Hierarchy

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

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

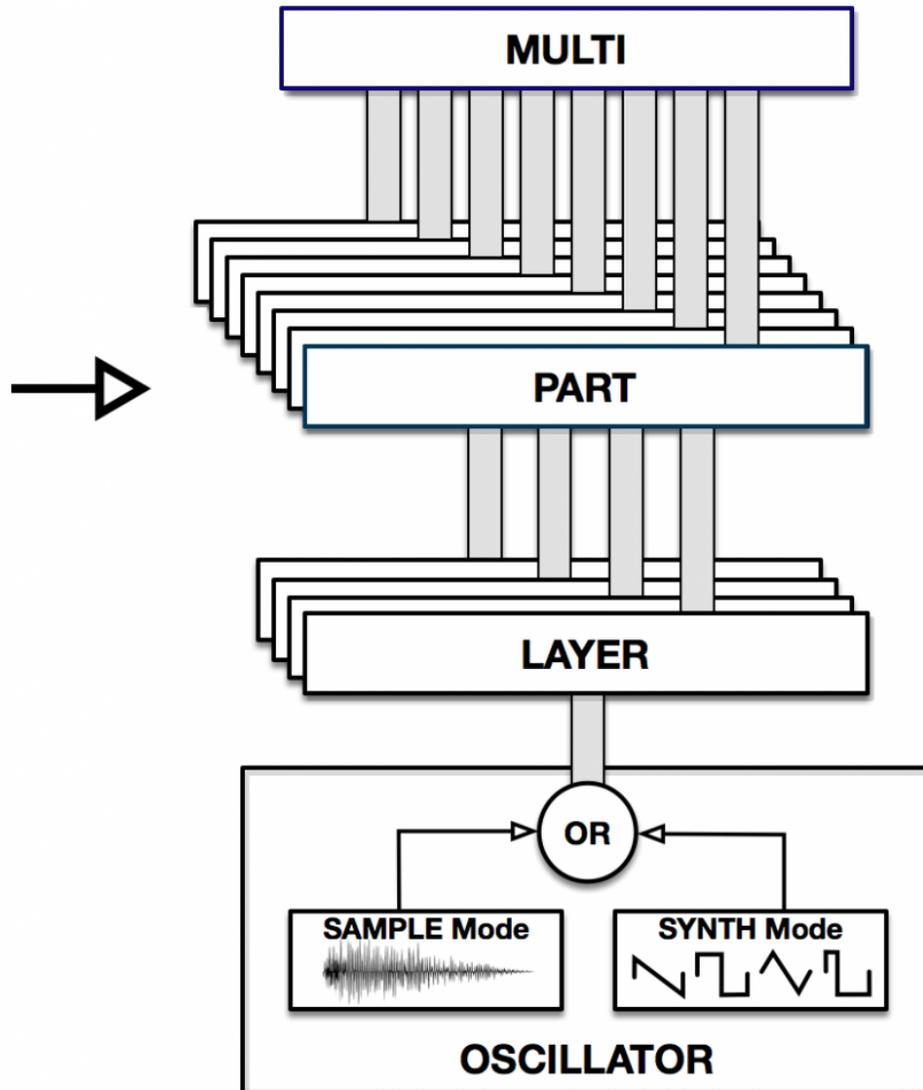
Saving a MULTI is like saving the entire state of the plug-in for future recall. A MULTI stores all of the settings from the MIXER page, the Multi FX, the LIVE MODE and STACK MODE pages, all MIDI Learn assignments, and all of the settings (including any unsaved edits) for each of the eight Parts.

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

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

## 2.2.1. Parts & Patches

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

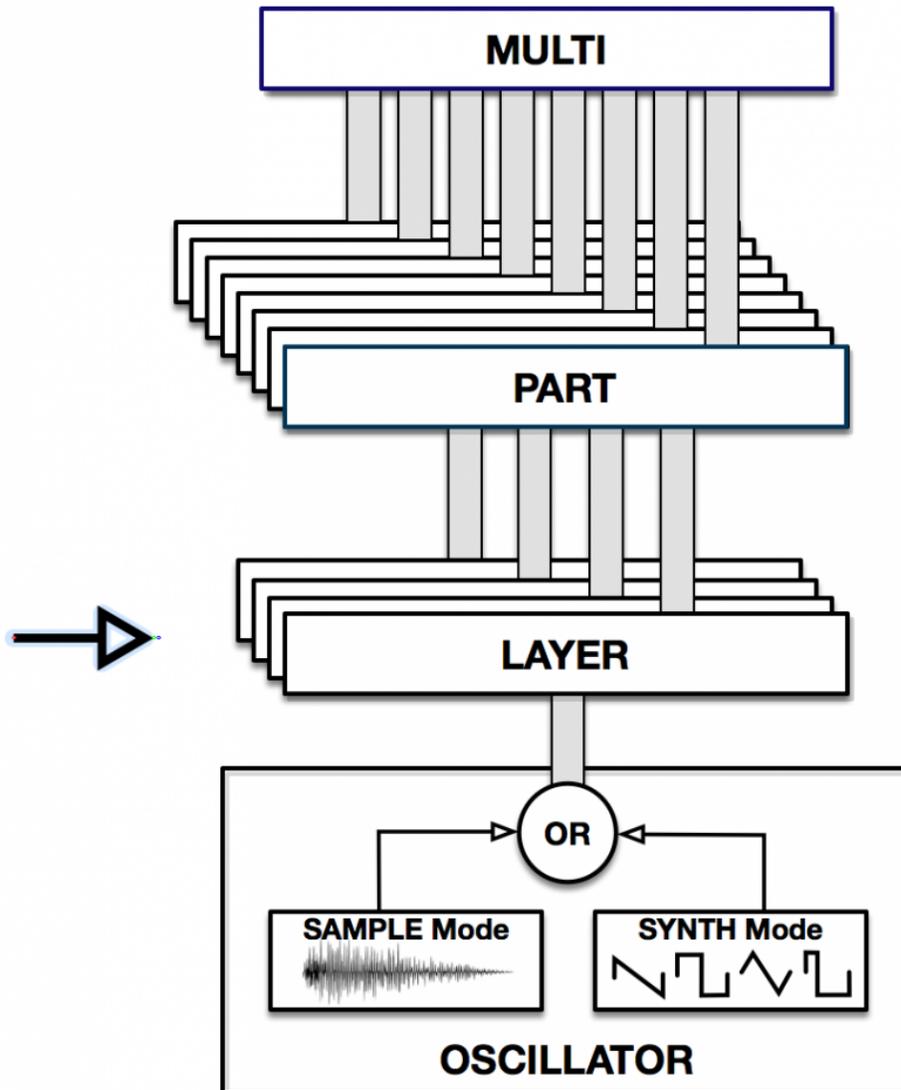
Each of the eight Parts can be thought of as an entire synthesizer, complete with its own oscillators, modulation routings, and FX, and each Part can be played on a different MIDI channel.

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

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

## 2.2.2. Layers & Oscillators

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

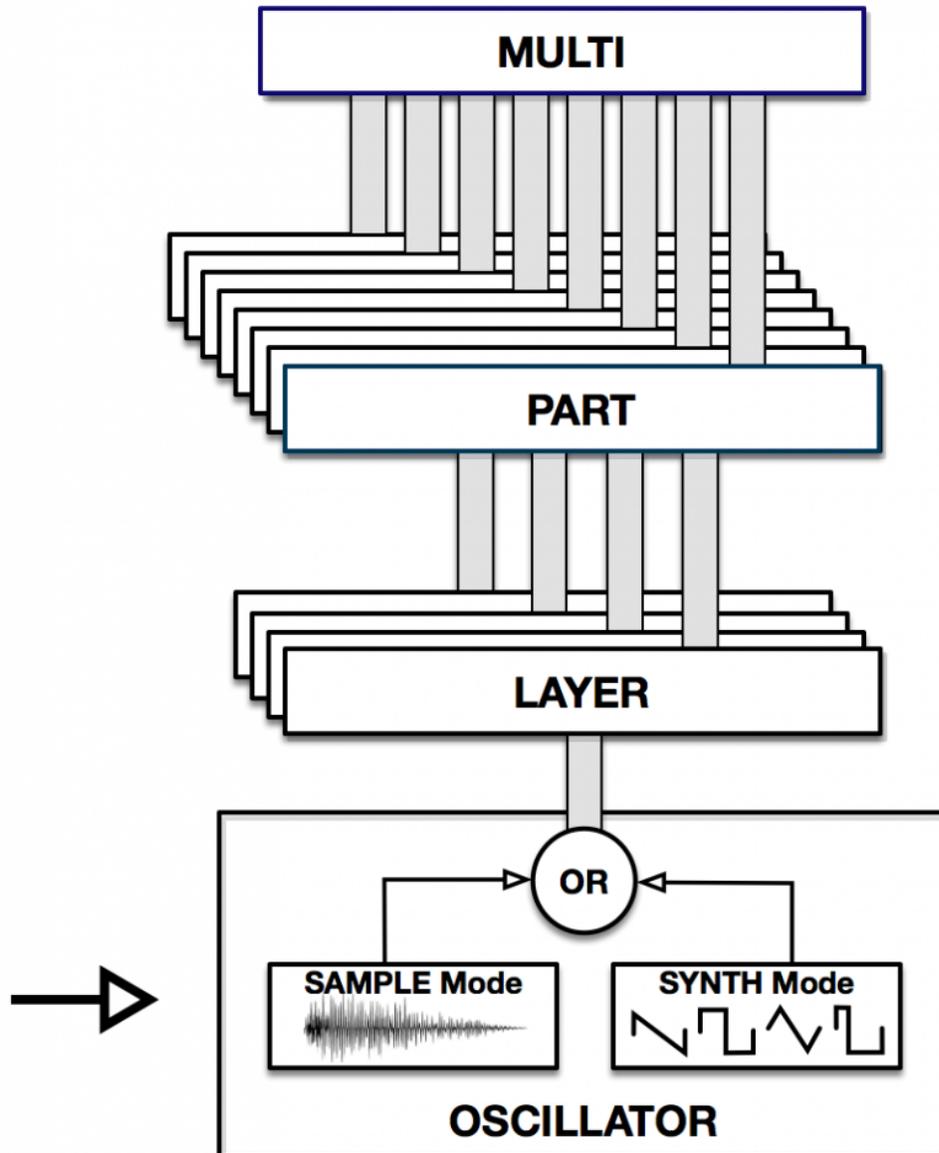
Each Layer has its own polyphonic Primary Oscillator, which can be set to either Sample Mode (using Soundsources) or Synth Mode (using DSP Waveforms). Because each Layer has its own independent Primary Oscillator, you can mix and match the modes by using multiple Layers.

Using Omnisphere's unique Harmonia feature, each Layer can add up to 4 additional oscillators, giving a single Part as many as 20 separate oscillators!

To learn more, please refer to the extensive [Oscillator](#) section of the Reference Guide.

***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. Soundsources



Soundsources allow Omnisphere's synthesis to begin with sampled sounds instead of DSP waveforms. They are accessed by selecting [Sample Mode](#) in the [Oscillator](#).

Soundsources are based on a 'map' of audio samples stored in the Core Library of Omnisphere in Spectrasonics' proprietary STEAM format. A Soundsource can be as simple as a single sample stretched

across the keyboard range or as complex as hundreds of chromatically sampled, velocity-switched multi-samples—like you'd find in a modern sample library.

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

Larger and more complex Soundsources take a longer to load, but still load relatively quickly, since the [STEAM Engine](#) includes streaming technology to allow for playback of very large multisamples. Streaming allows for the samples to buffer off of the computer's hard drive in realtime, instead of all of the samples having to be loaded into the computer's RAM. In addition, Omnisphere's sophisticated Progressive Loading allows sounds with thousands of samples to be played and auditioned while they are still being loaded.

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

- 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. This allows you to take any Patch you like and create thousands of variations by simply changing the Soundsource.

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

The Factory Core Library of Omnisphere is almost 60Gb and includes more than 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 a [Satellite Instrument](#) like 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 Updates](#) feature.

## 2.2.4. Common Parameters



Each Layer has an independent set of synthesis controls, and there are many parameters that will only affect the individual Layer. However, there are also a number of Common parameters that are shared by all four Layers in a Part. Most of these Common Parameters are accessible from the Main Page.

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

Common parameters include the eight LFOs (LFO1 ~ LFO8), the Master Filter, and the four Modulation Envelopes (MOD 1 ~ MOD 4).

In addition, each Part has six FX Racks: a Common FX Rack, an Aux FX Rack, and an FX Rack for each Layer. For additional detail, refer to [FX Architecture](#)

## 2.3. The Header

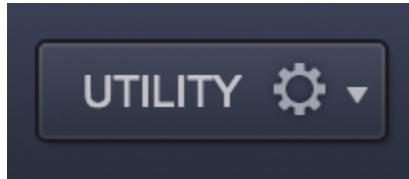
The top area of the Omnisphere interface is the Header. The Header is visible from any page in Omnisphere (except when any Full Browser is open) and is the primary navigation area of the interface.



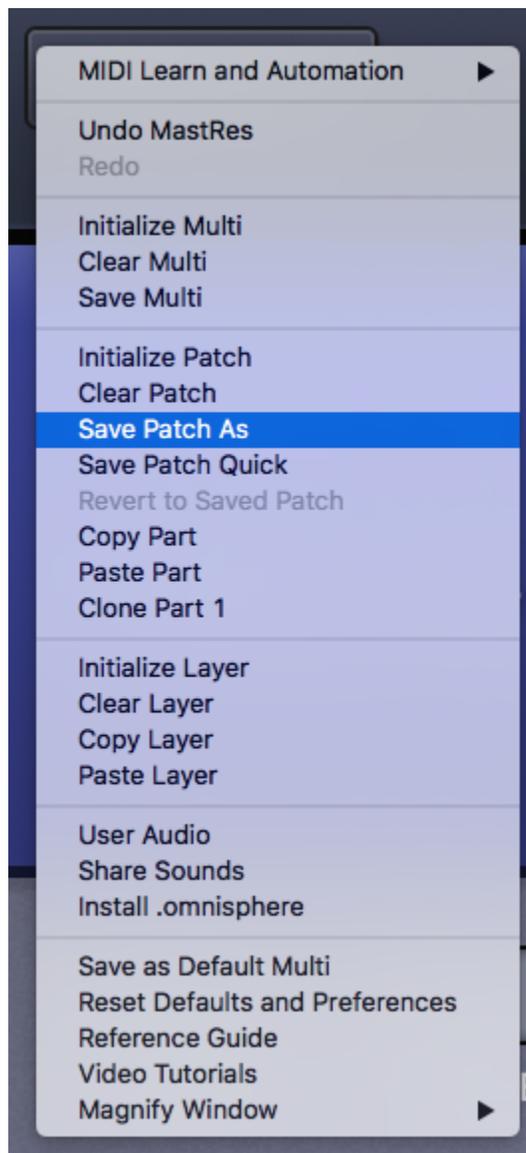
The Header contains the Utility Menu, Multi Information, (including the Multi Name Display) and access to the MULTI Browser, the Hardware Profiles, indicators for when LIVE MODE or STACK MODE are enabled, and Navigation Buttons for selecting any of the 8 Parts, the MULTI Section or the SYSTEM Page. Finally,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

## 2.3.1. Utility Menu

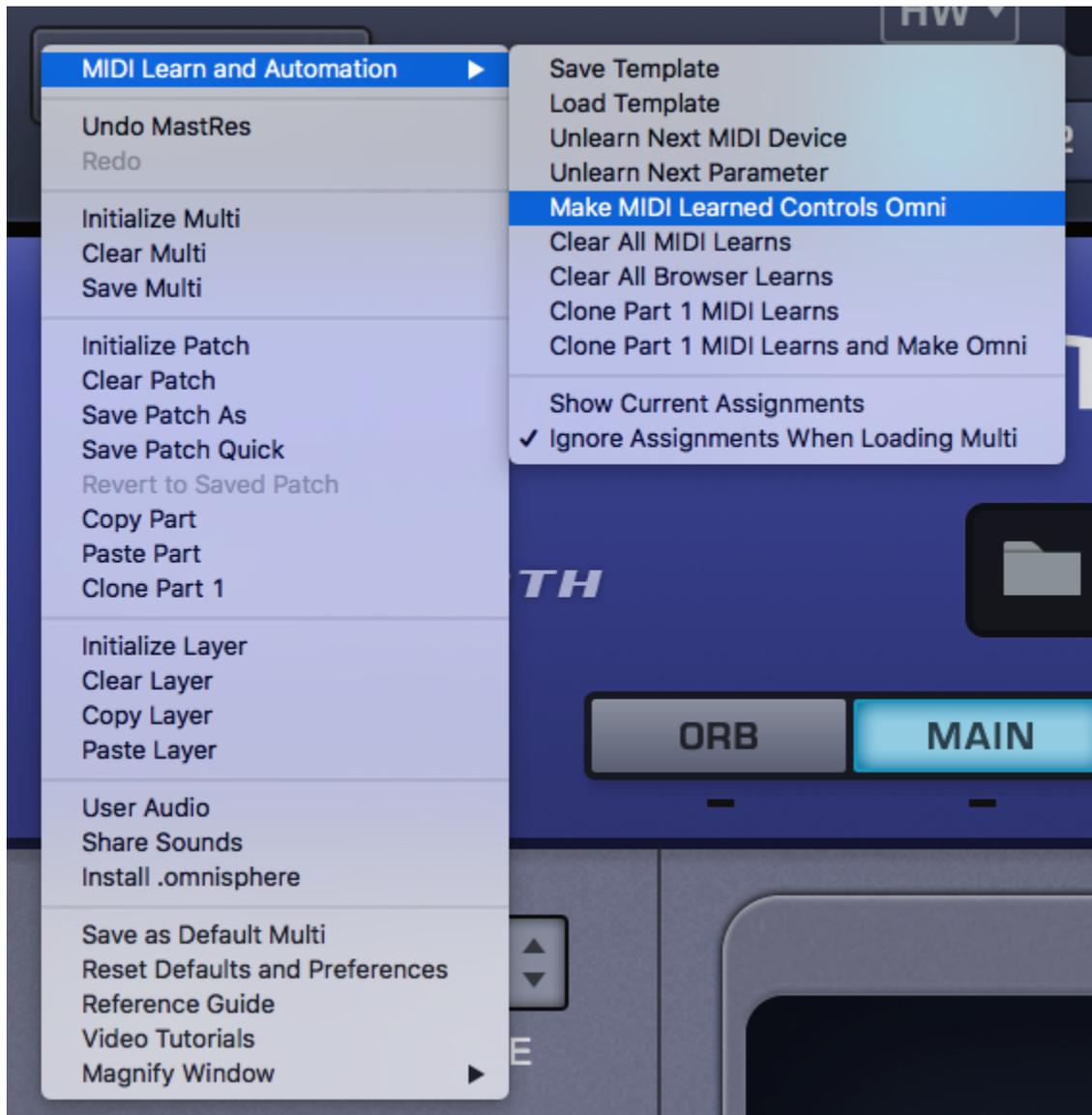
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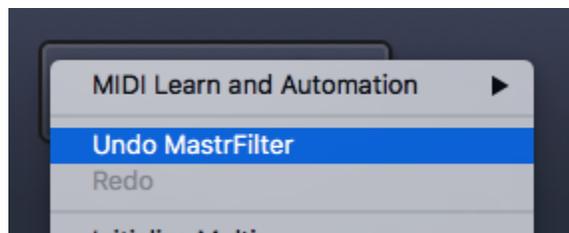
The Utility Menu can be divided into several sections.



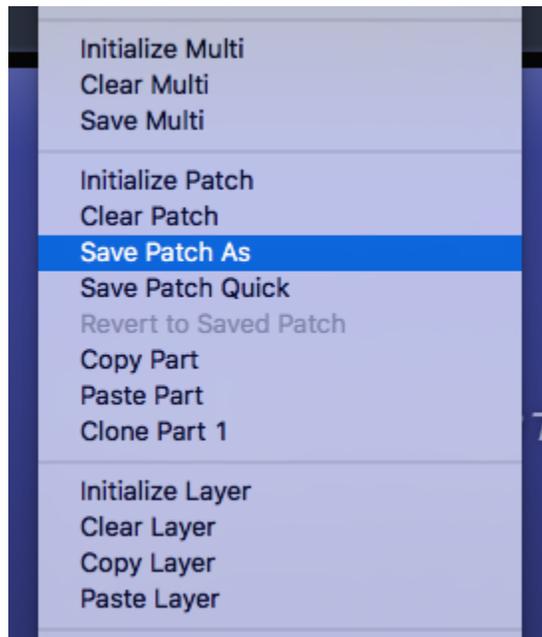
The first section contains a MIDI Learn and Automation sub-menu.



The second provides UNDO and REDO commands.



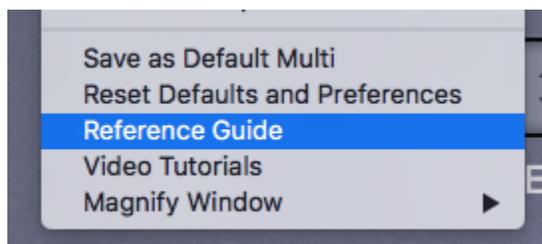
The third section provides various Initialize, Clear, Save, Copy, and Paste functions for Multis, Patches, Parts, and Layers.



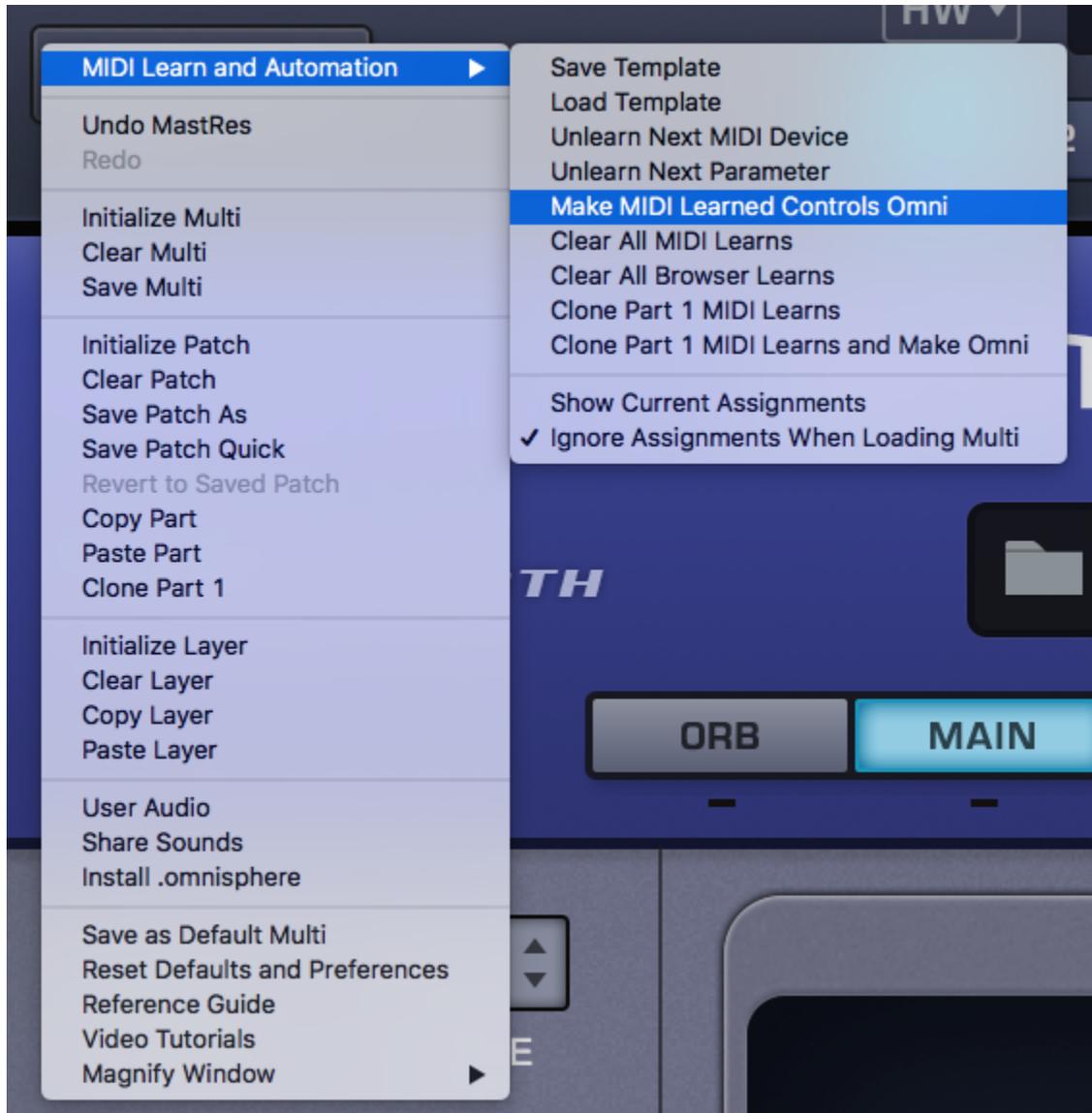
The fourth section is for importing user audio, sharing and adding sounds.



The fifth section provides a “factory reset” option, the ability to save your global settings as a default Multi and gives you direct access to the Omnisphere Reference Guide, Tutorials and the Magnify options.



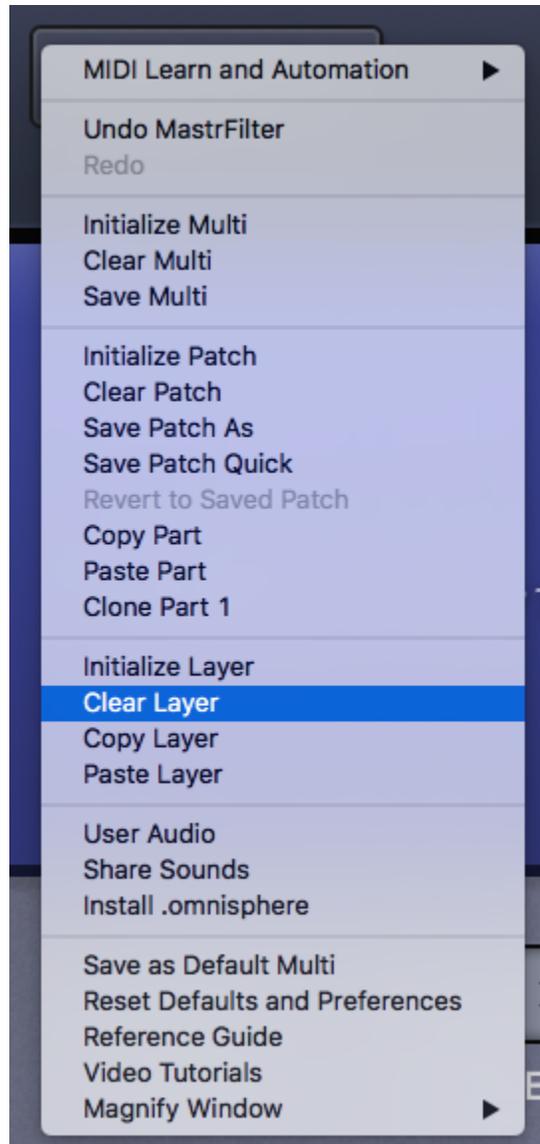
## 2.3.1.1. MIDI Learn



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.

## 2.3.1.2. Clear, Save, Copy, & Paste

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

### Initialize vs. Clear (Multi, Patch, & Layer)

When you select Initialize (Initialize Multi, Initialize Patch, or Initialize Layer), all synthesis parameters for the Multi, Patch, or Layer, will be restored to an unedited 'default' state, including 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 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*

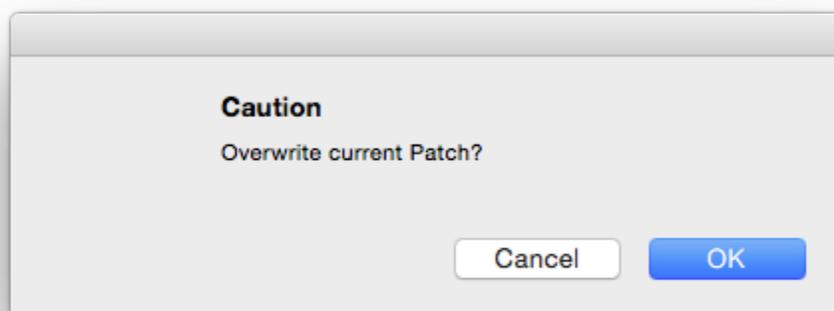
*NOTE: Users can type in non-English characters and words in any language when saving Multis, Patches, or adding tags. These non-English characters or words can also be searched. All other text and warnings in the interface remain in English.*

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. This allows for making edits in Part 1, and then easily copying it to the other parts so all parts have the same Patch.

“Clone Part 1” 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.

***NOTE: Be sure to check the Clone Part 1 MIDI Learns & 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.***

## 2.3.1.3. Add Sounds/User Audio

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### 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](#) features are conveniently collected into a single .omnisphere package. Files with the extension .omnipshere can be added to your library in a single operation, which automatically installs all the necessary components (Multis, Patches and User Soundsources) to play those sounds into your Omnisphere library.

This feature handles the file management for you—you never have to leave Omnisphere.

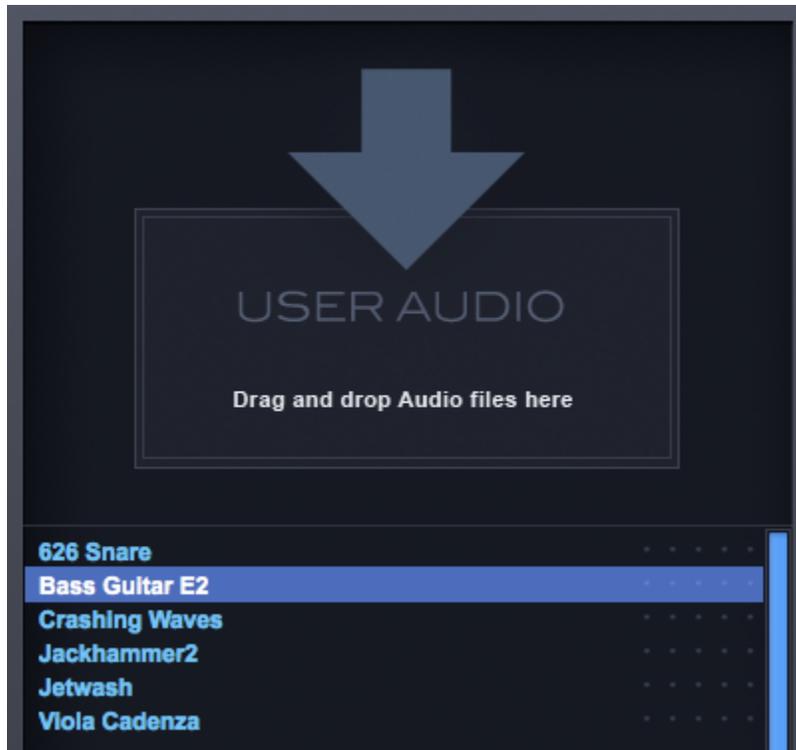
Once you have received the shared .omnisphere file, select “[Install .omnisphere](#)” in the Utility Menu and follow the instructions.

Once the process is done, the added Patches will be found in the “Sharing” Directory of the Patch Browser, Multis will be found in the “Sharing” Directory of the Multi Browser, and Soundsources will be found in the “User” Directory of the Soundsource Browser.

### 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 on your hard drive in the following directory:

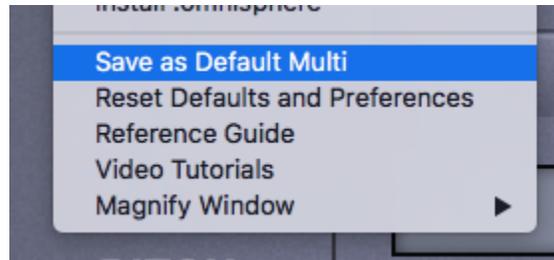
**STEAM/Omnisphere/Soundsources/User/**

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.*

## 2.3.1.4. Save As Default Multi

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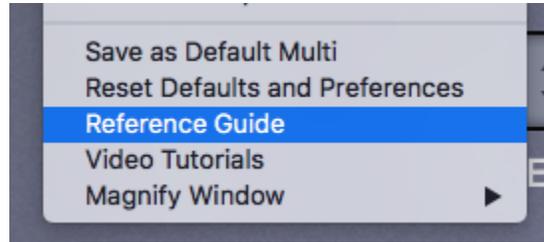


Saving a Multi is like saving the entire state of the plug-in for future recall. A Multi stores all of the settings from the MIXER page, the Multi FX, the LIVE MODE and STACK MODE pages, all MIDI Learn assignments and Automation, as well as all of the settings (including any unsaved edits) for each of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

By saving a Default Multi, you can customize Omnisphere to load all of your preferred settings each time you open a new instance.

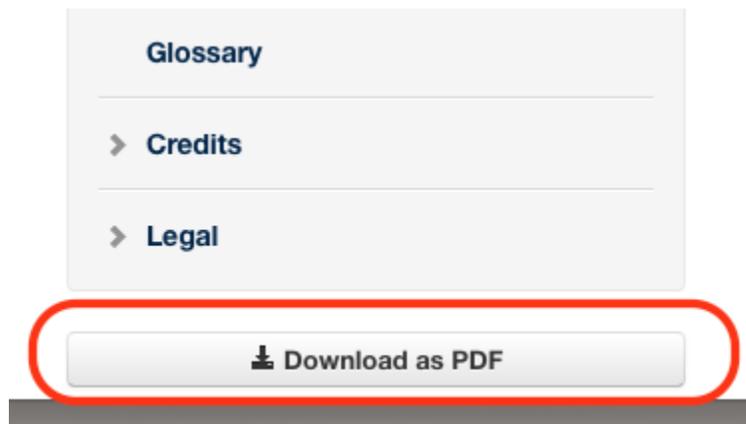
## 2.3.1.5. Reference Guide

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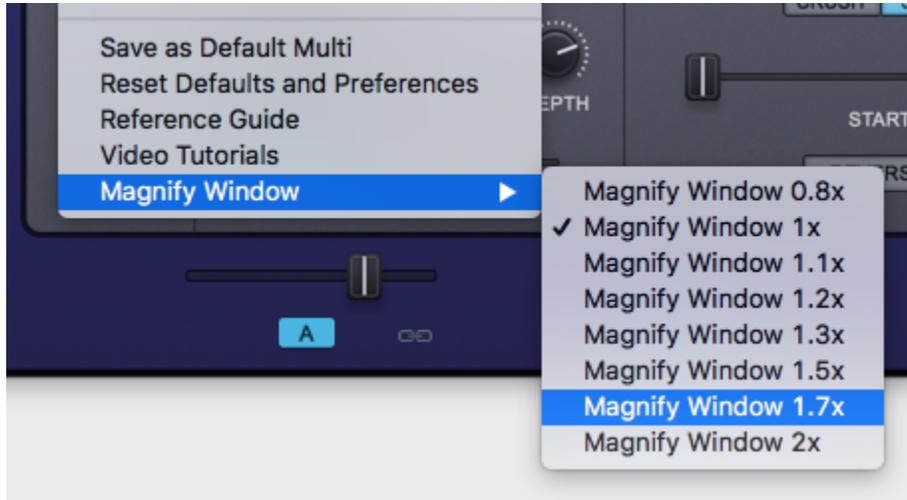


Selecting this option from the Utility Menu will open the online Omnisphere Reference Guide. The Reference Guide will be displayed using your default Web Browser.

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 a PDF. The complete Omnisphere 2 Reference Guide also is available in PDF by selecting the “Download as PDF” button at the bottom of the Directory:



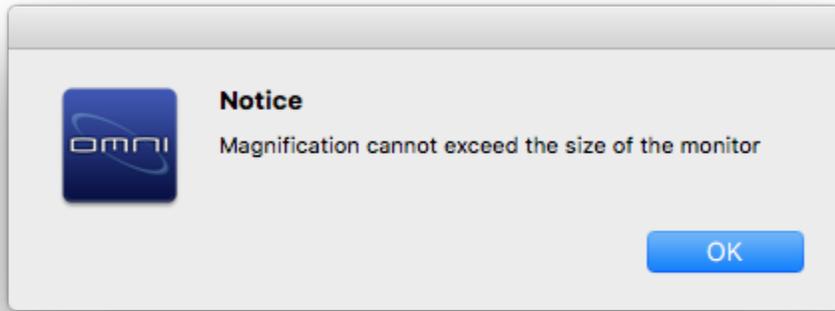
## 2.3.1.6. Magnify Window



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

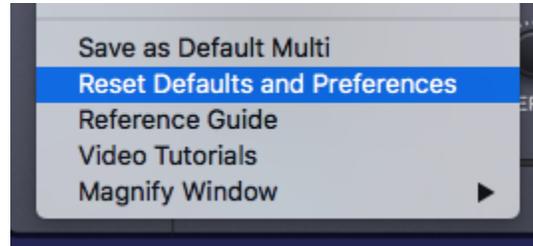
- **Magnify Window 0.8x** – Scaled down to 80%
- **Magnify Window 1x** – Standard size.
- **Magnify Window 1.1x** – Scaled up to 110%.
- **Magnify Window 1.2x** – Scaled up to 120%. (Default for 2.5 and later)
- **Magnify Window 1.3x** – Scaled up to 130%.
- **Magnify Window 1.5x** – Scaled up to 150%.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



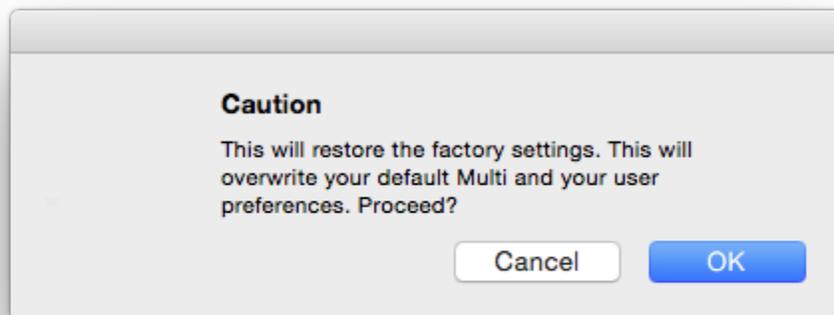
## 2.3.1.7. Reset

---

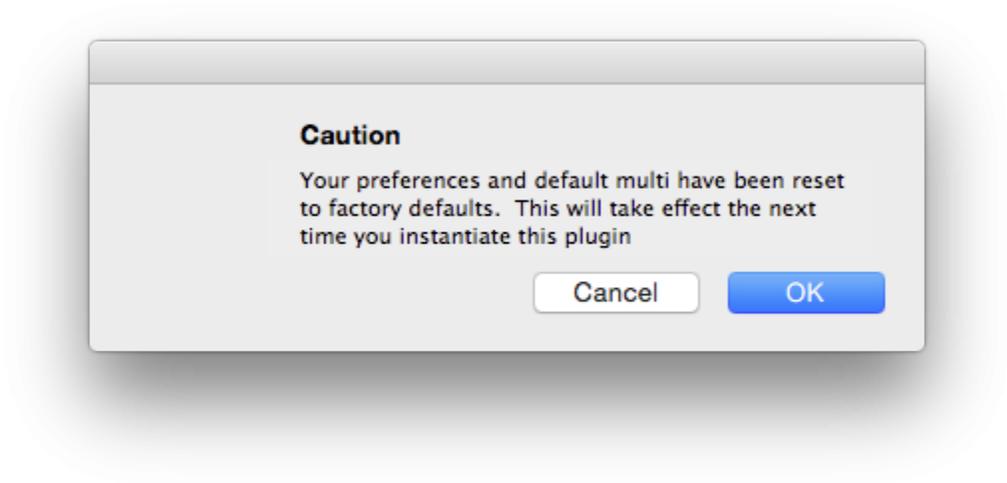


The Utility Menu provides the ability to do a “factory reset” by selecting “Reset Defaults and Preferences”.

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



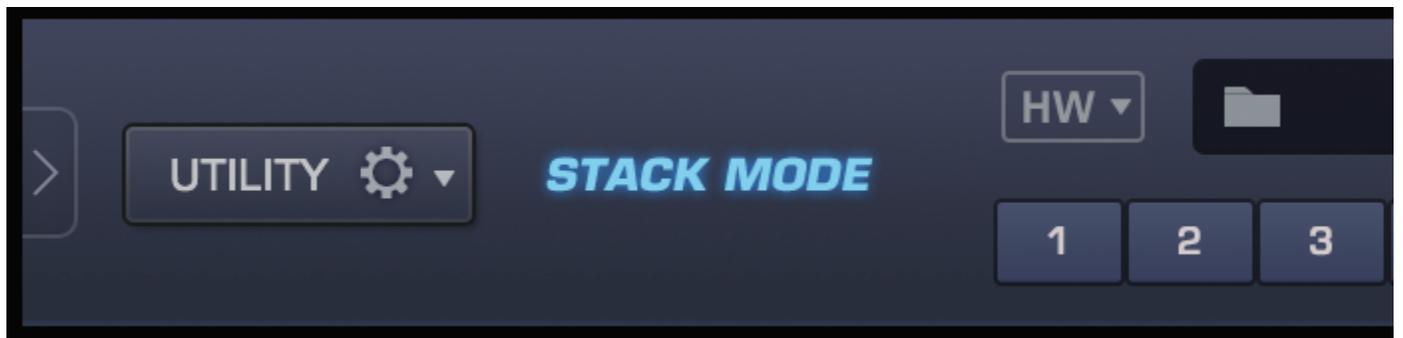
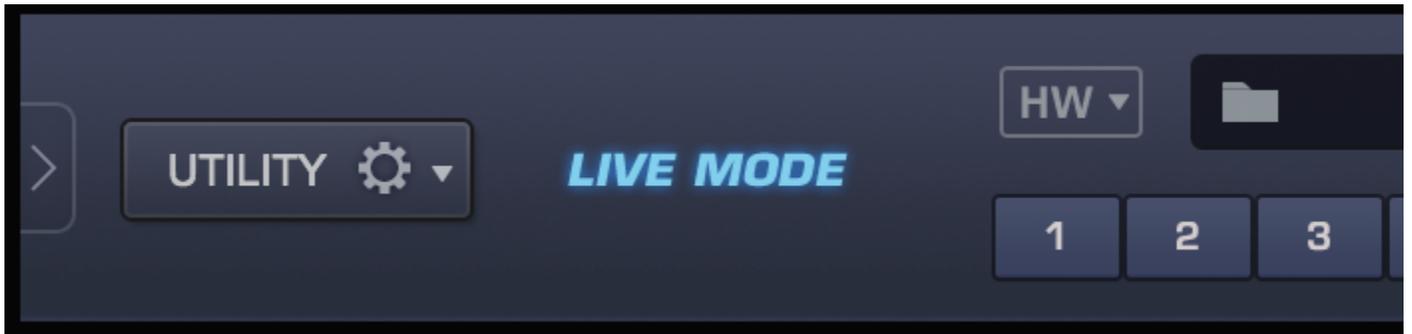
A confirmation dialog will be displayed after the default Multi and preferences are reset.



## 2.3.2. Live Mode/Stack Mode Indicators

---

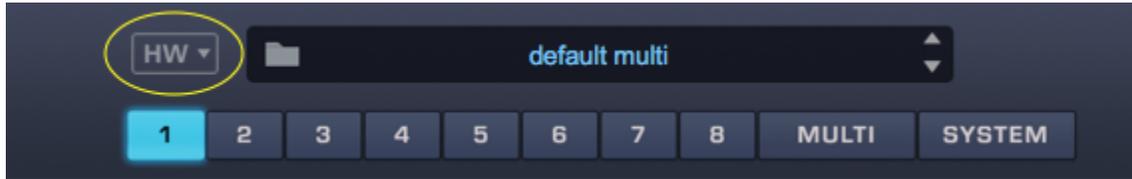
When either LIVE MODE or STACK MODE is enabled, you'll see "LIVE MODE" or "STACK MODE" displayed on the left side of the Omnisphere header.

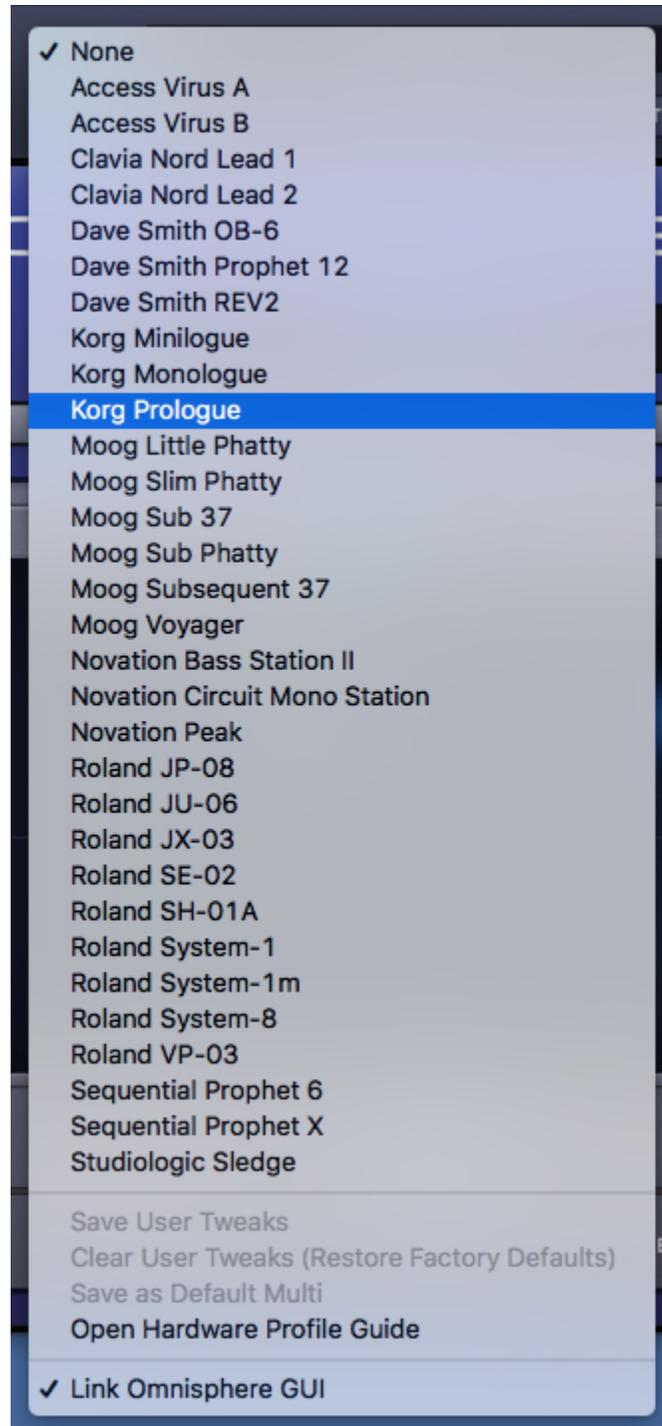


## 2.3.3. Hardware Profiles Menu

---

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

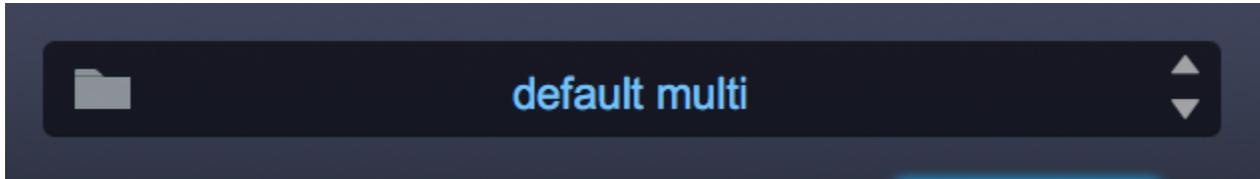




From here, you may select or deactivate any of the [Hardware Profiles](#), as well as [Save User Tweaks and Restore Factory Defaults](#), save your changes to the profile as a [Default Multi](#), open the [Hardware Profile Guide](#), or control the activation of [Link Omnisphere GUI](#).

## 2.3.4. 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.

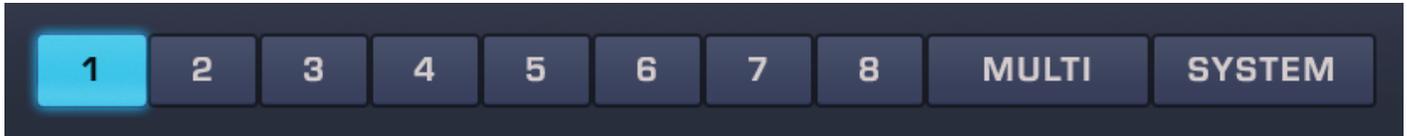
The Multi Stepper buttons (up/down arrows) will load the next or previous MULTI from the Library, based on the current filtered results in the Multi Browser. The buttons step through the available MULTIS one at a time.

## 2.3.5. Navigation Buttons

---

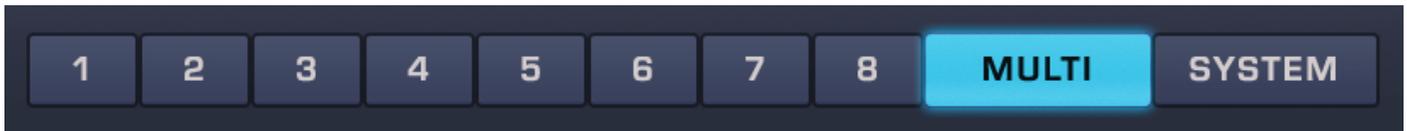
The Navigation Buttons in the header are used to select and view any of the eight Parts, the Multi Section, or the System Page. Only one button can be selected at a time.

### Part Select Buttons (1 ~ 8)



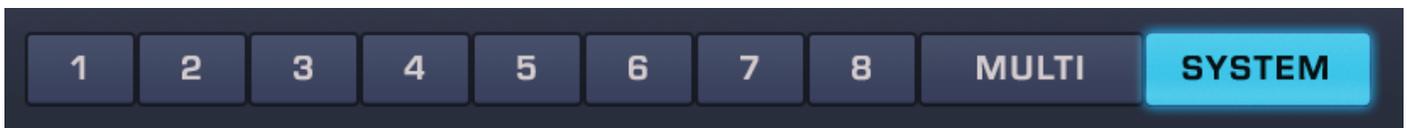
Buttons 1–8 are Part Select Buttons. Selecting a Part lets you access and view any of the pages for that Part, including the [Orb](#), [Main](#), [Layer A](#), [Layer B](#), [Layer C](#), [Layer D](#), [Patch FX](#) pages, and the [Arpeggiator](#) Page.

### 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.

## 2.3.6. Master Volume Control

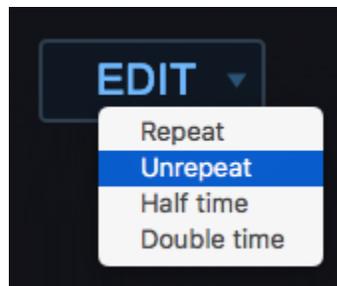
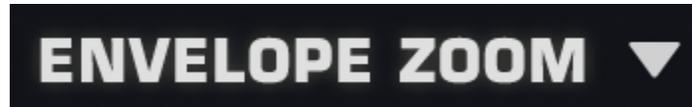
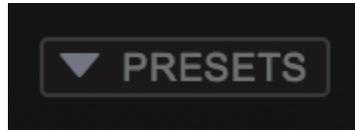
---



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

## 2.4. Interface Conventions

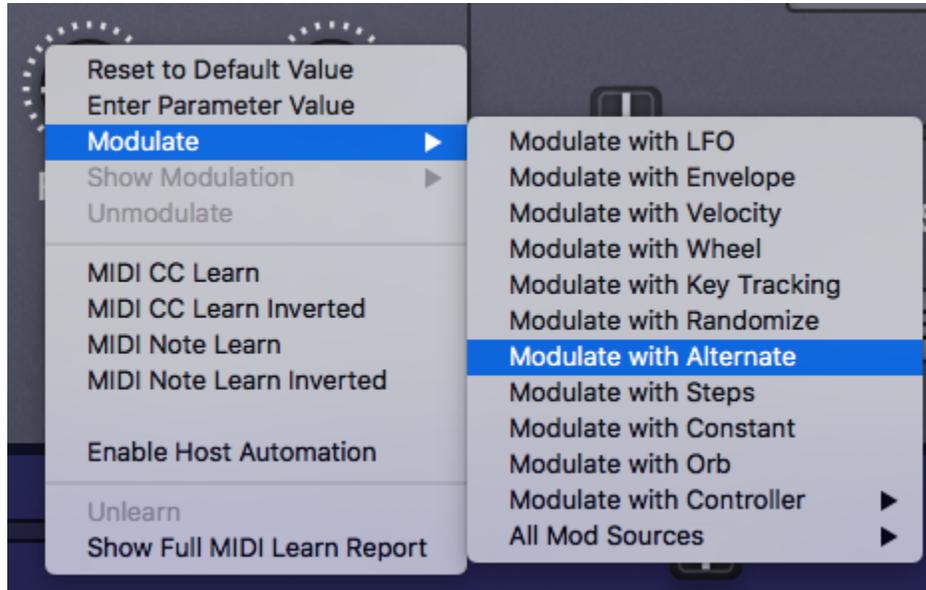
---



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. Please see the following pages.

## 2.4.1. 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.

## 2.4.2. 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.

## 2.4.3. 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.

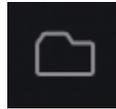
A magnifying glass icon next to a function indicates that a Zoom View is available. Selecting the icon with a "+" inside it opens the Zoom View for that function. When a Zoom View is open, selecting the magnifying glass icon with a "-" inside it, closes the Zoom View.

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.

## 2.4.4. 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.

## 2.4.5. Knobs & Sliders

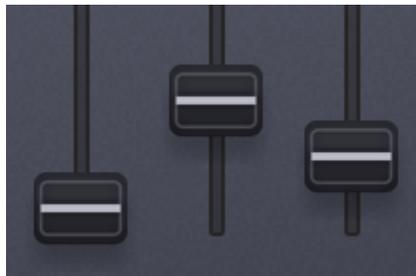
---

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

### Knobs



### Vertical Sliders



### Horizontal Unidirectional Slider



### Horizontal Bidirectional Slider



### Mini Sliders



## 2.4.6. Parameter Values

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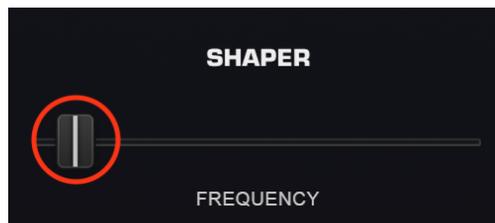


Adjusting Knobs and Sliders will display their current setting or value in a floating display above the controls. Holding down the SHIFT key while adjusting Knobs and Sliders allows for more precise adjustments.

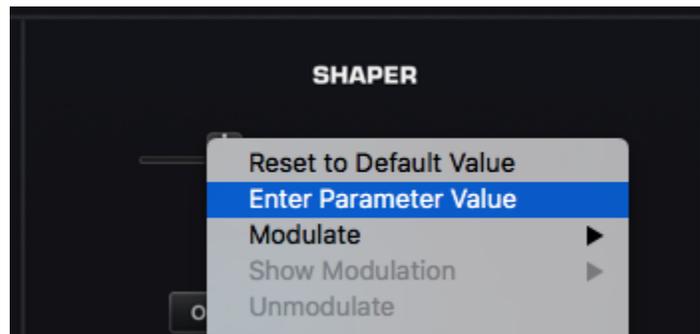
### Enter Parameter Value

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

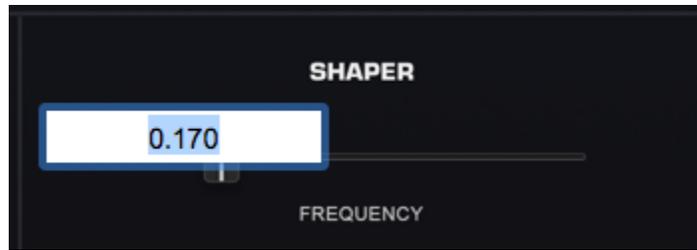
In this example, right-clicking FREQUENCY in the WAVESHAPER will bring up the menu.



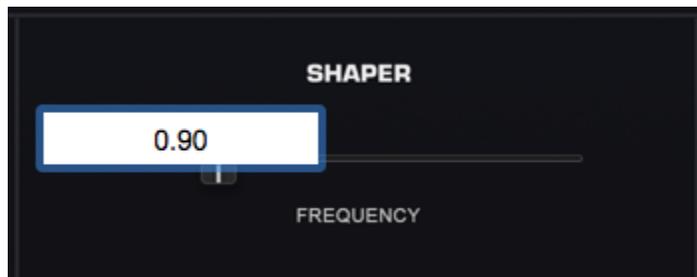
Select "Enter Parameter Value."



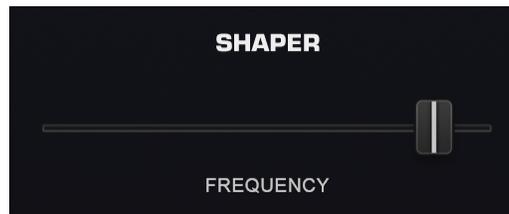
The currently set parameter value will then be displayed.



Enter the desired parameter value.



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



## 2.4.7. Buttons

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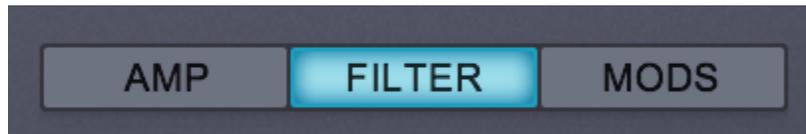
Buttons are used for choosing sections or selecting from among multiples of a single type. When selected, buttons will be highlighted in blue. For example, there are 8 LFO buttons. When one of them is highlighted it means it is selected, and that LFO's settings are displayed.



### Page Buttons



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

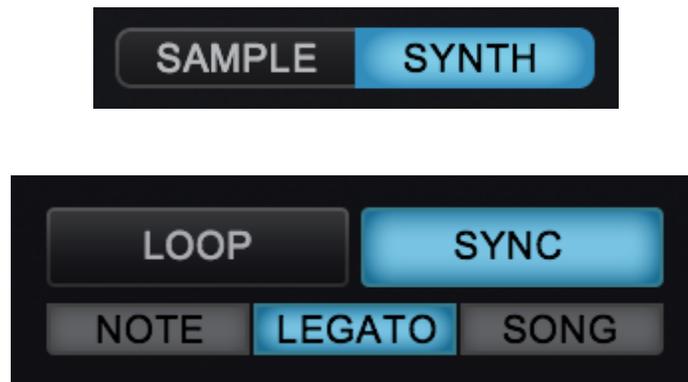


## 2.4.8. Switches

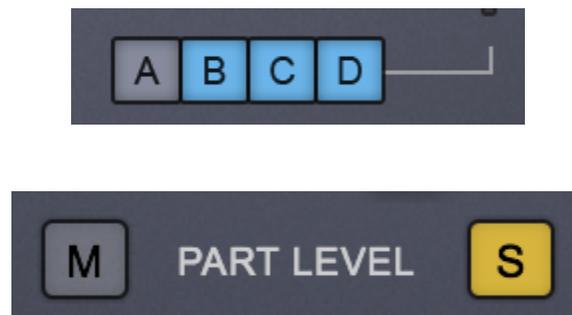
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Switches let you toggle certain parameters ON/OFF or switch between multiple options. When a parameter is enabled or selected, the switch will be highlighted. For example on the Layer Pages, switches toggle between SAMPLE Mode and SYNTH Mode, toggle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

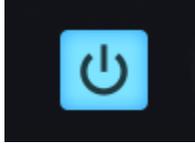


**Switches** (buttons separated by lines are ON/OFF Switches)



**Power ON/OFF Switches**





## 2.4.9. Indicator Switches

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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.

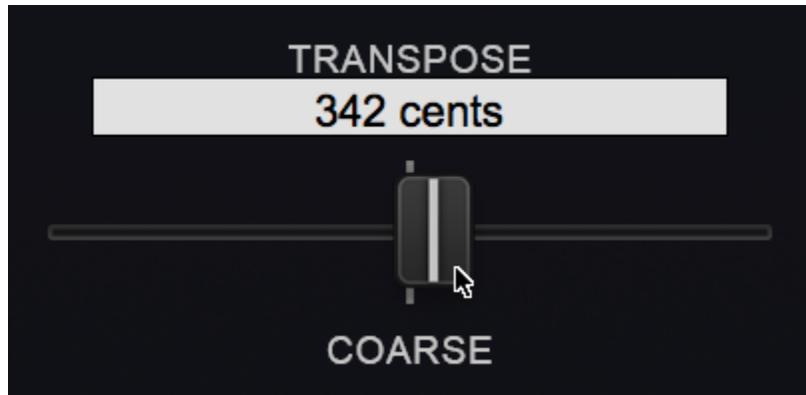
The LED below MAIN is an indicator only and will be lit up when a parameter changes from its default position.

When 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, it means Shared Signal Path is enabled.



## 2.4.10. Modifier Keys

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There are a number of Omnisphere functions that are modified by combining a mouse-click (or click and drag) with one of three Modifier Keys.

- The Command/Control key
- The Shift key
- The Option/Alt key

In the manual these are referred to as:

### Right-Click

- Brings up contextual menus.

### Command-Click (Mac) / Control-Click (Win)

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

### Shift-Click

- Sliders & Knobs: Shift-click and drag allows finer and more precise adjustments to values.
- Envelopes (editing): Shift-click and drag to engage the Zoom X/Y function

**Option-Click (Mac) / Alt-Click (Win)**

- Envelopes (editing): Option-click to engage the Snap function.
- Knobs: Option-click on a parameter to display its value without changing it.

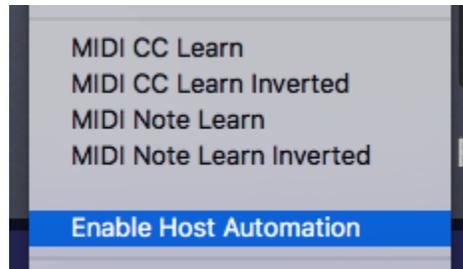
## 2.4.11. Parameter Scrolling

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

## 2.5. Automation & MIDI Learn

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### Understanding Parameter Control

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

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

### Modulation

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

To learn more about Modulation, please refer to the [Modulation](#) section.

### Automation

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

To learn more about Automation, please refer to the [Automation](#) section.

### MIDI Learn

MIDI Learn enables full remote control of Omnisphere's parameters from MIDI Devices. Almost any parameter (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.***

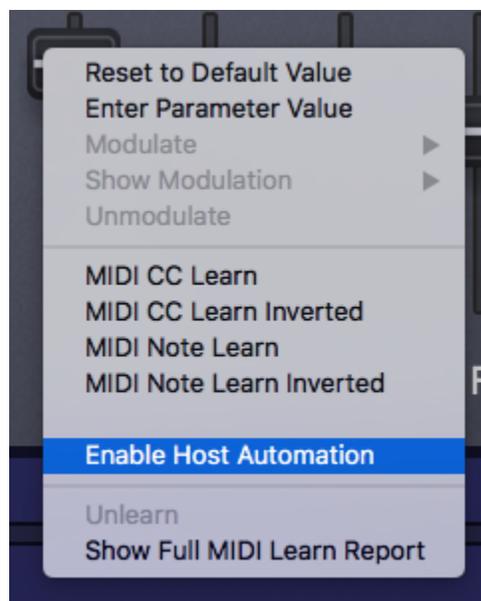
## 2.5.1. Automation

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

### Enabling Host Automation

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



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

**NOTE:** *If your host doesn't display Host Automation assignments by name, use the 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. Each slot is assigned a unique Automation ID, numbered from 0 to 511, which correspond to the list of parameters that can be automated in the host or on your control surface. For example, slot 0 is the first parameter in the host or on the control surface, the next one is number 1, etc. You can assign any parameter in Omnisphere to one of these slots using “Enable Host Automation.” The parameter will be assigned to the next available slot and may then be automated.

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 very useful when opening songs that contain plug-ins controlled by the surface.

Some hosts have a limit on the number of parameters that are available to be 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.

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**

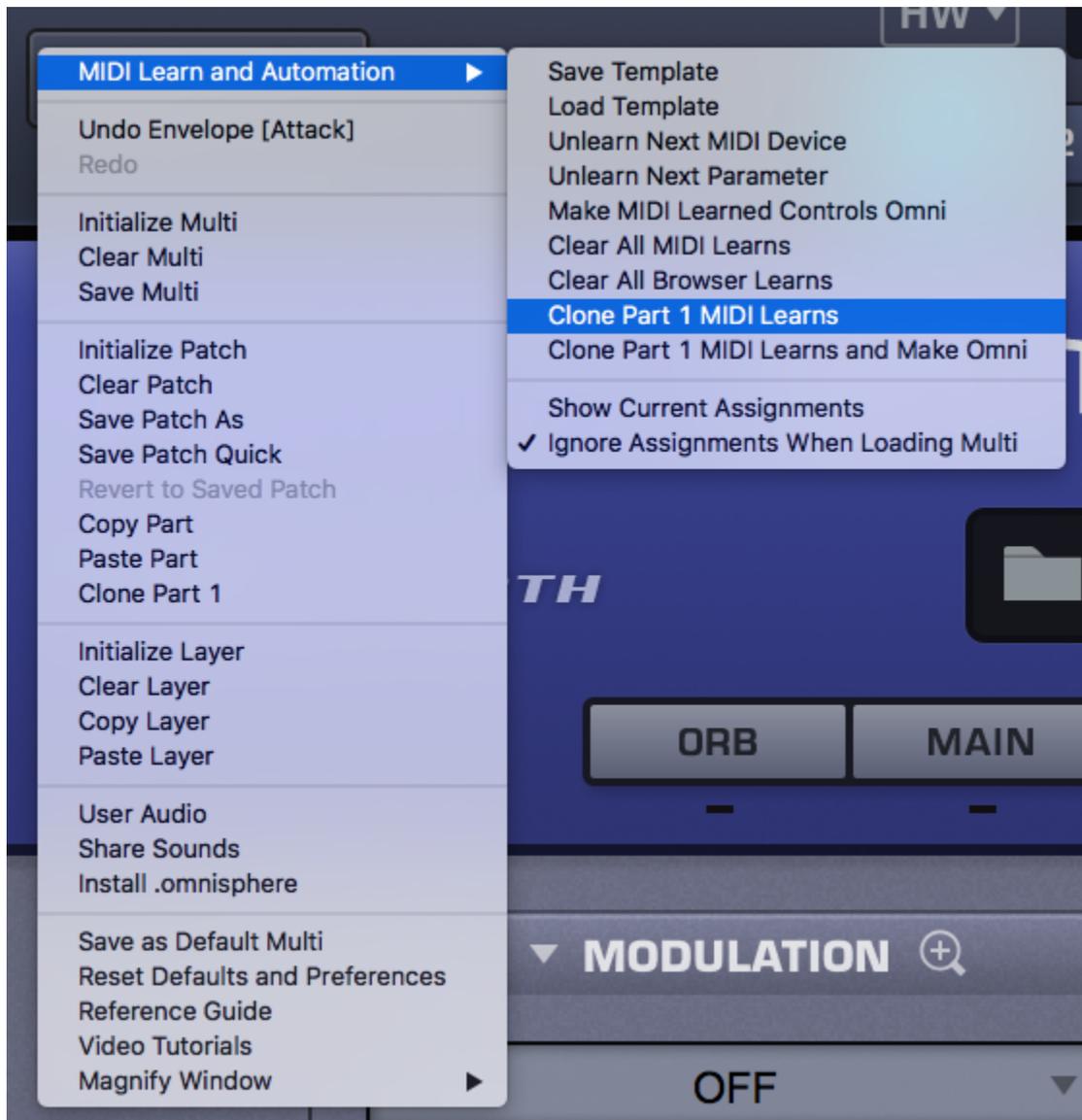
There are a few key MIDI Learn concepts that will help to understand how flexible the system is:

- 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 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 Continuous Controller, Notes, 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

### Utility Menu

The first section of the Utility Menu has several MIDI Learn options.



### 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**

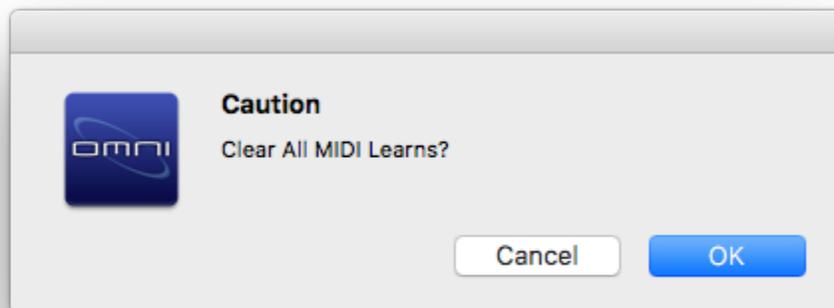
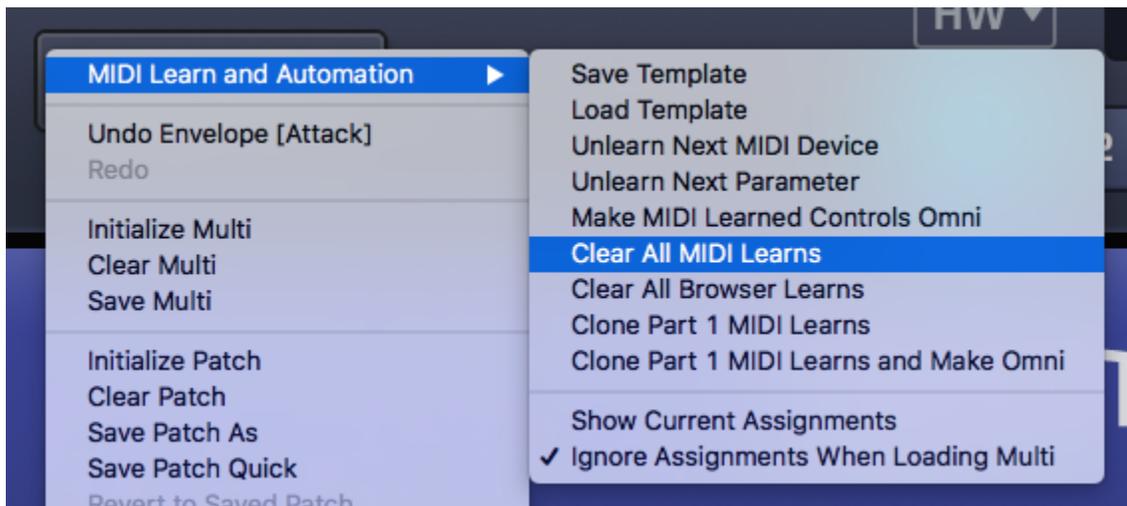
Assignments can be made to receive in MIDI Omni mode so that when a sequencer's track is changed, all of the controls are still active regardless of the incoming MIDI channel assignment.

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

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

### 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 & 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.*

### Ignore Assignments When Loading Multi (Toggle)

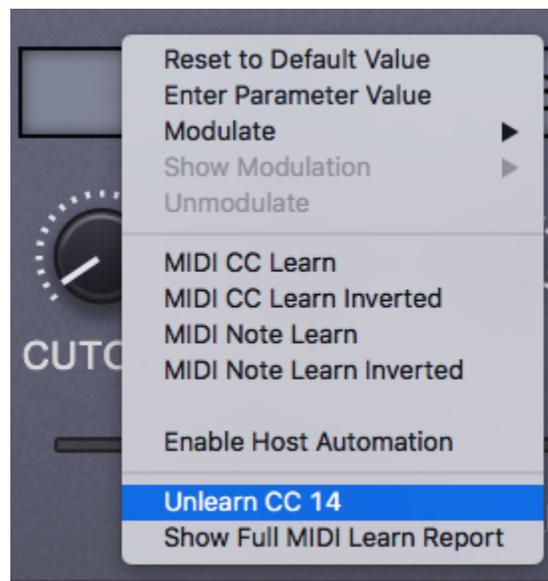
When loading a MULTI, this option determines whether Omnisphere will ignore or load the MIDI Learn assignments that were saved with the MULTI.

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

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

**NOTE:** *The Ignore Assignments option retains its setting across sessions. If you find that MIDI Learn assignments aren't behaving as expected after loading a MULTI, please verify that the Ignore Assignments option is properly set.*

### CONTEXTUAL MENU



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

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

### **MIDI CC Learn**

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

### **MIDI CC Learn Inverted**

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

### **MIDI Note Learn**

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

### **MIDI Note Learn Inverted**

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

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

### **Unlearn**

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

### **Show full MIDI Learn report**

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

## 2.6. CPU Optimization & Conservation

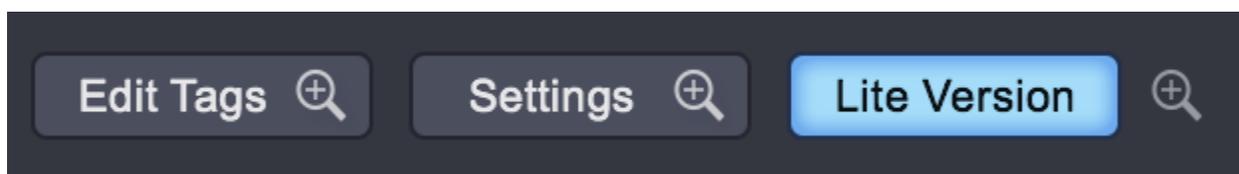
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The vast majority of Omnisphere Patches will play comfortably within your host, without over-stressing the computer's CPU or memory. But some Patches employ sophisticated effects or large numbers of streamed samples, and those may require special attention. 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 could cause audio glitches.

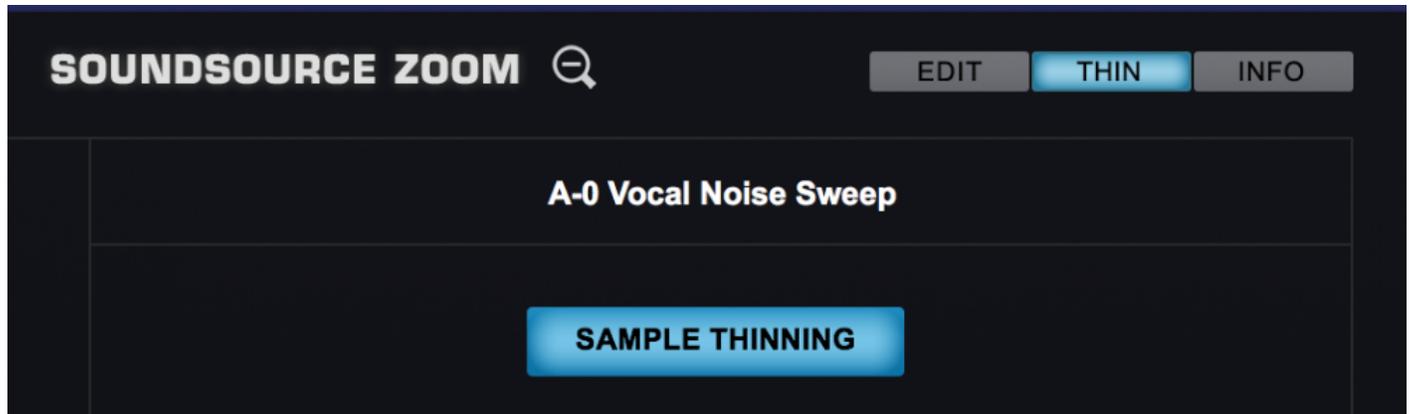
This section describes actions you can take to minimize audio glitches and CPU overload. You should consider all the actions listed, but note that some actions may not be appropriate for your circumstances. The actions are listed in roughly the order you should consider them: starting with the easiest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

### Enable Sample Thinning

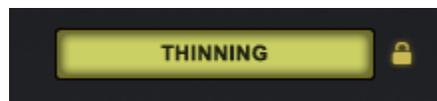
When Omnisphere is loaded with a large number of samples, CPU overload or streaming issues may arise. This is most likely to happen when multiple large sample-based Patches have been loaded into multiple Omnisphere parts, or when using patches originating from the Keyscape instrument. In these situations, 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. Thinning is enabled by turning on the Lite Version button at the bottom of the Patch browser window. You may need to expand the browser window first to reveal these buttons:



An alternative way to thin sample-based Patches is with the SAMPLE THINNING button in the Soundsource Zoom page. This page gives you detailed control of exactly how the samples are thinned.

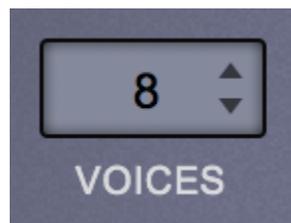


Alternatively, if you are using Keyscape Patches in Omnisphere, you can use the THINNING button on the Settings Page. This will reload the patch with a reduced number of samples. The thinned versions of the Patches have been optimized to maintain the highest possible quality for each sound. The THINNING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



### Limit Voices

Omnisphere allows up to 64 notes to be played simultaneously. 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). Search for background applications and disable or terminate them while you are running your host.

### Increase Host Buffer Size

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 may be needed if you need more CPU power. You set the host buffer size in the host, not in the Omnisphere instrument. 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:



### 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.

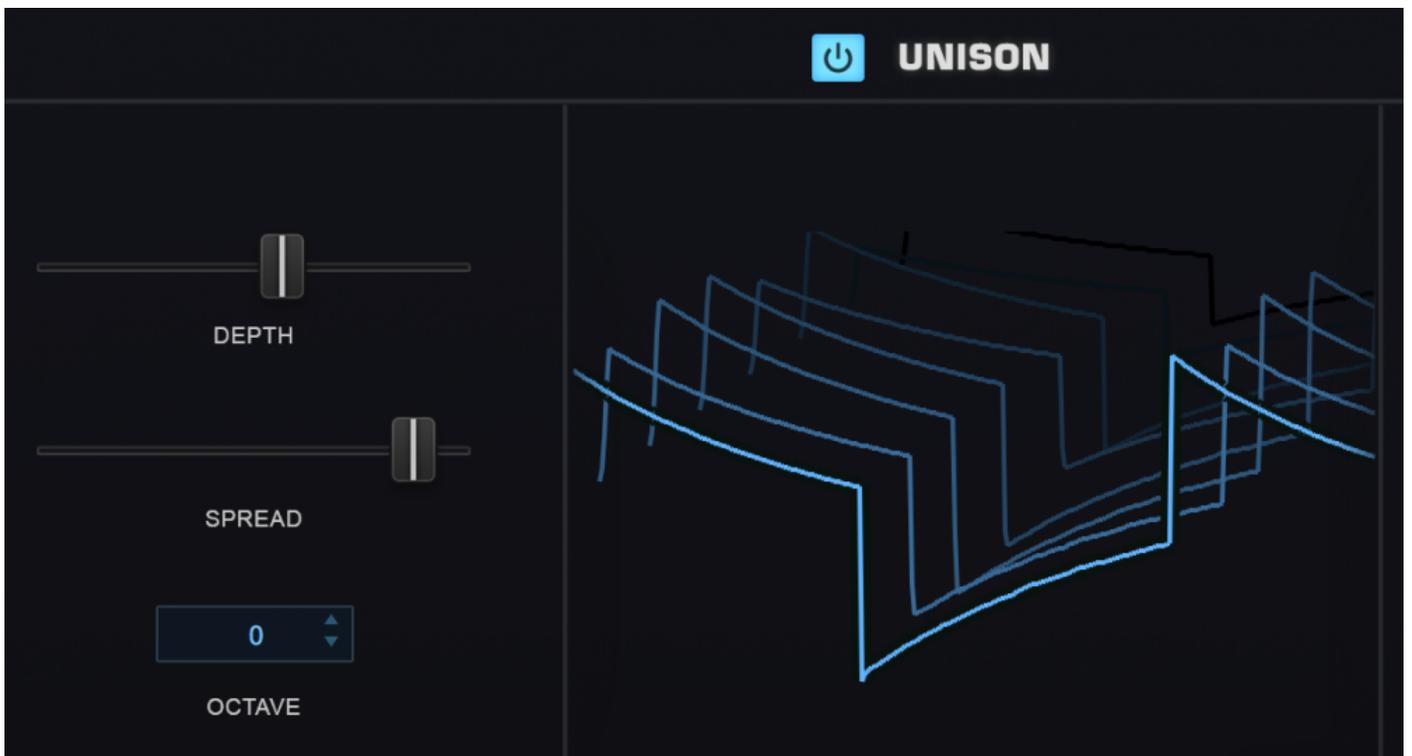
### Disable Effects

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.



### Adjust Unison and Granular

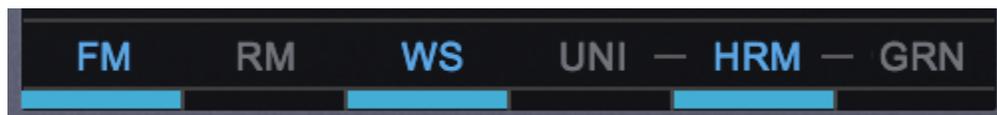
When using Unison and Granular, the Depth sliders control the number of simultaneous voices that are playing, and can have a big impact on CPU usage. You can often achieve the desired effect by using a lower Depth setting.





### 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. 📄



### 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. 📄



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

Using Common or Aux FX 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.  



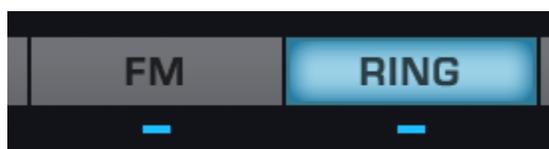
## Adjust Waveshaper

The Waveshaper is a great feature, but it can be very CPU intensive, because it is polyphonic. To save CPU, you can try alternate approaches to achieving the desired sound. For example, try experimenting with the Toxic Smasher effect 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 unused routings. For example if you are modulating FM Depth with a Mod Envelope, but then decide to turn FM off, remove the modulation routing to further reduce demand on the CPU.



## 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, which saves CPU power. If any of the Aux Sends is on, the entire Aux Send system on all Racks and Parts is enabled, even if no audio is passing through it. View the Aux Sends on the MULTI MIXER page. If you are not using Aux effects, the knobs should look like this:



## Move STEAM data to a faster drive

The performance of Omnisphere depends on the speed of the drive that the STEAM data is stored on. The fastest drives are Solid State Drives (SSD), which are preferred over HD disk drives which use a spinning platter. In addition, it is strongly recommended that the STEAM data be placed on an internal drive, using an internal bus such as PCIe or SATA. If you must 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. For example, Logic's bounce feature is within the File > Bounce menu; in Ableton Live use the menu File > Export Audio/Video. If the host provides two bounce/freeze modes (offline and realtime), try them both. Offline bouncing typically yields better results for streamed samples, but realtime mode may also be satisfactory.

## **Consolidate patches into one instance? It depends on the host.**

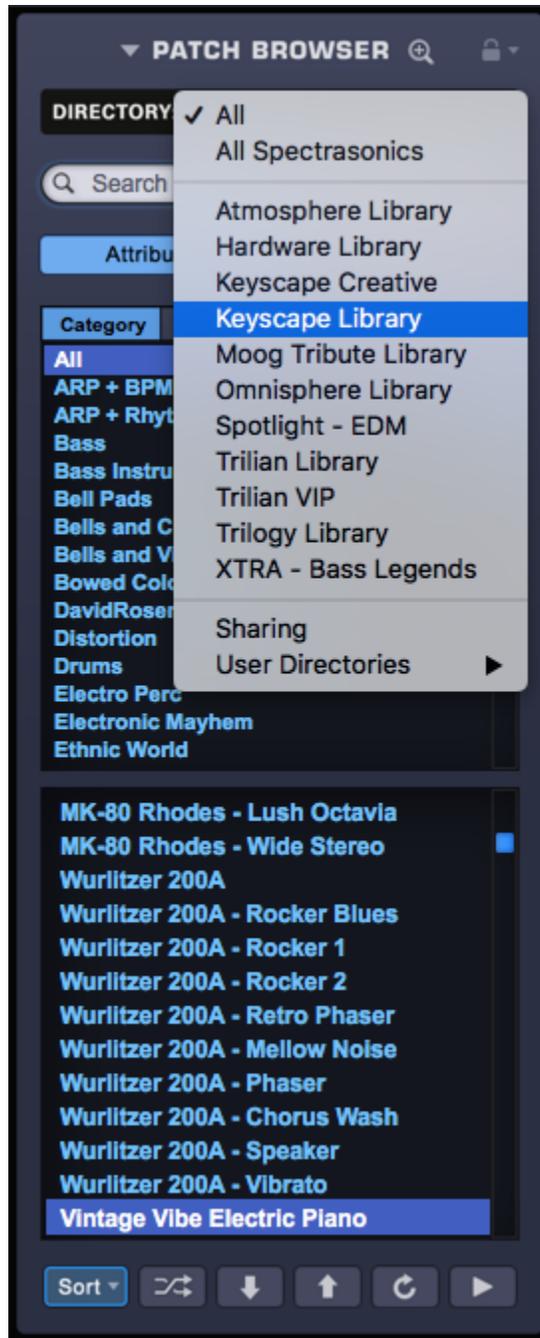
If you have multiple MIDI tracks each with a dedicated instance of Omnisphere, it may be more efficient to instead use a single instance of Omnisphere in multi-timbral mode. Load the various Patches into Omnisphere's parts, and route the multiple MIDI tracks into the single Omnisphere instance using 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 Instruments in Omnisphere



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.

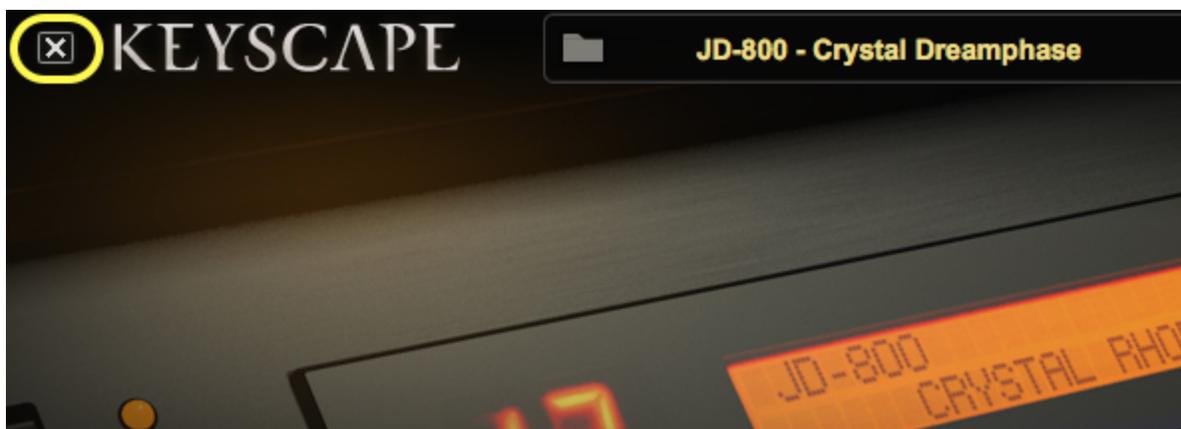


When Satellite Patches are loaded in Omnisphere, that Satellite's Custom Controls page will be automatically displayed when the Patch is loaded from the Mini-Browser or revealed when you close the Full Browser. The Satellite Patches contain their own layout that brings together all the most useful parameters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

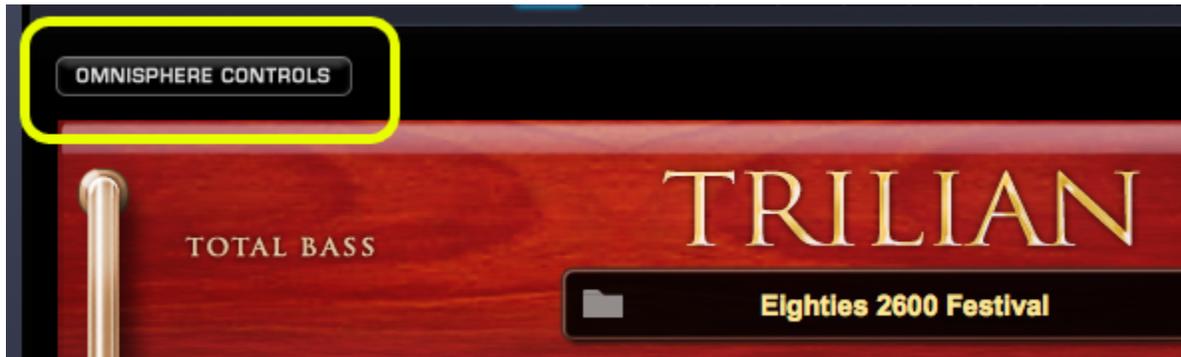


### Satellites and Omnisphere Controls

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

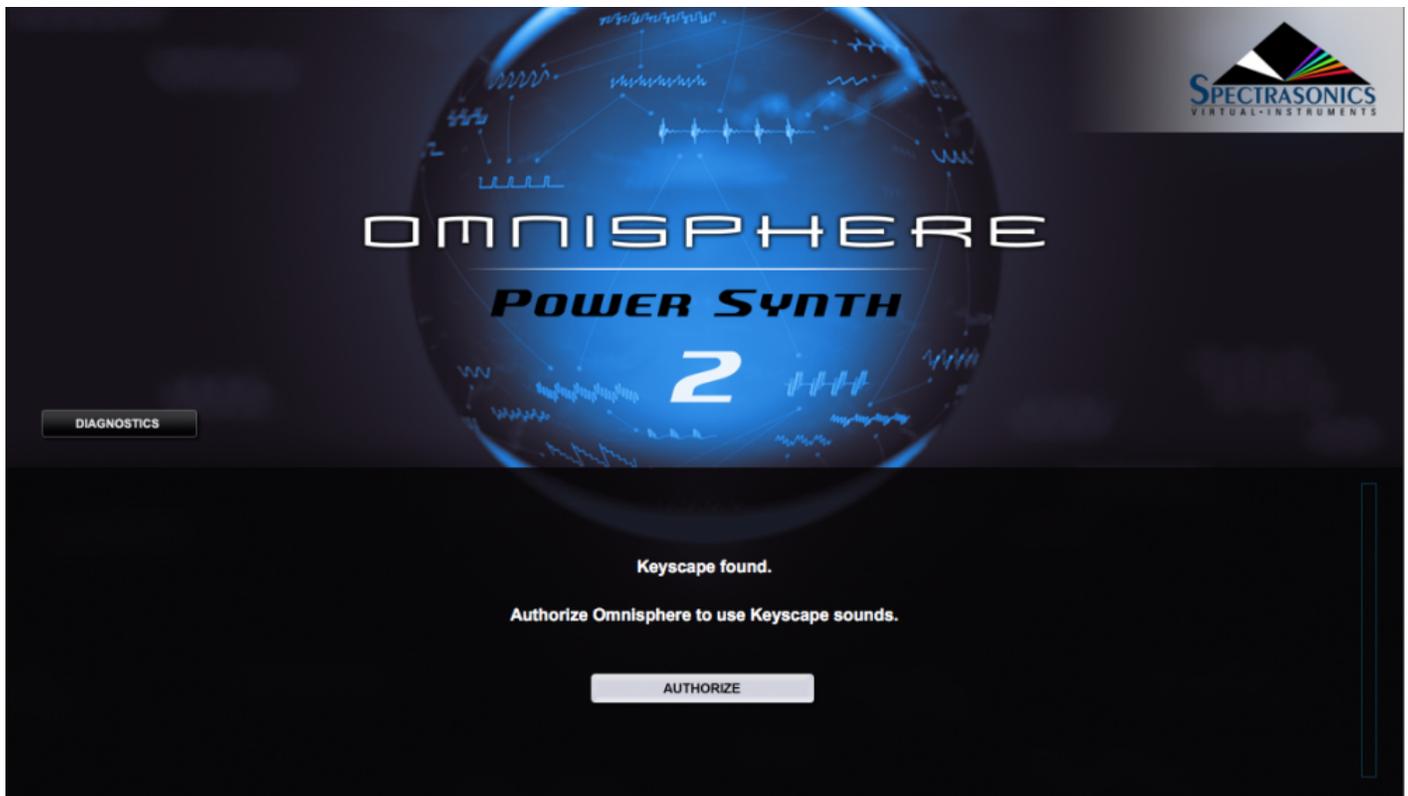
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In order to enable Omnisphere Library Integration, you must have your Satellite Instrument registered in your Spectrasonics account and installed on your system.

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

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





**NOTE:** You must generate a new Response Code via your user account at the Spectrasonics website.

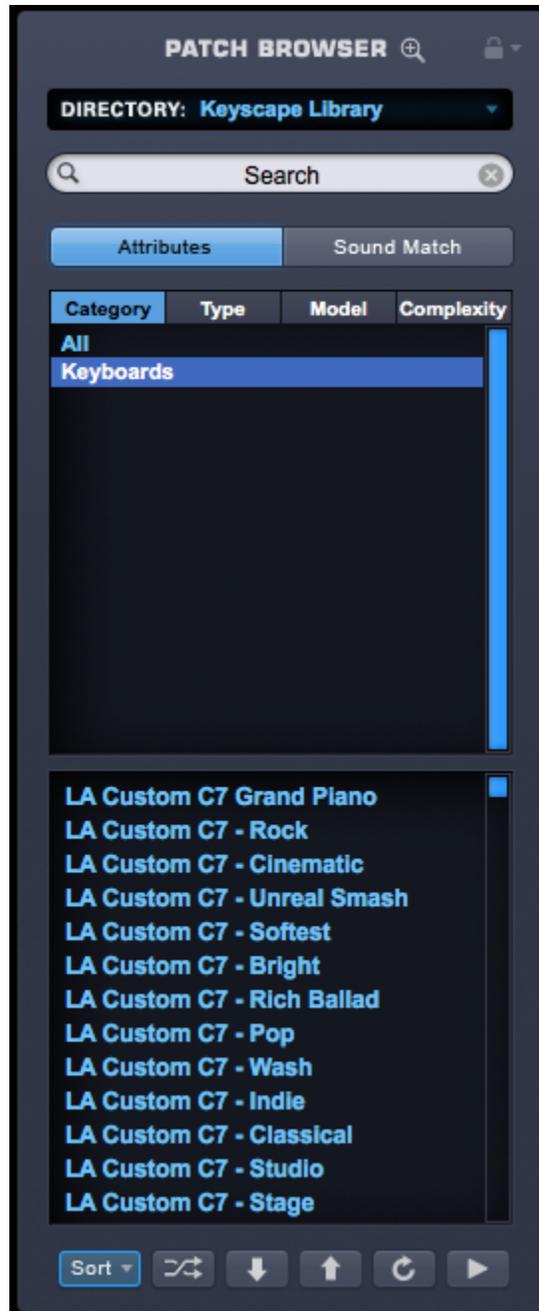
After (re)authorizing Omnisphere, the Trilian and/or Keyscape libraries will appear in your Omnisphere Browsers.

## 2.7.2. Browsing Sounds

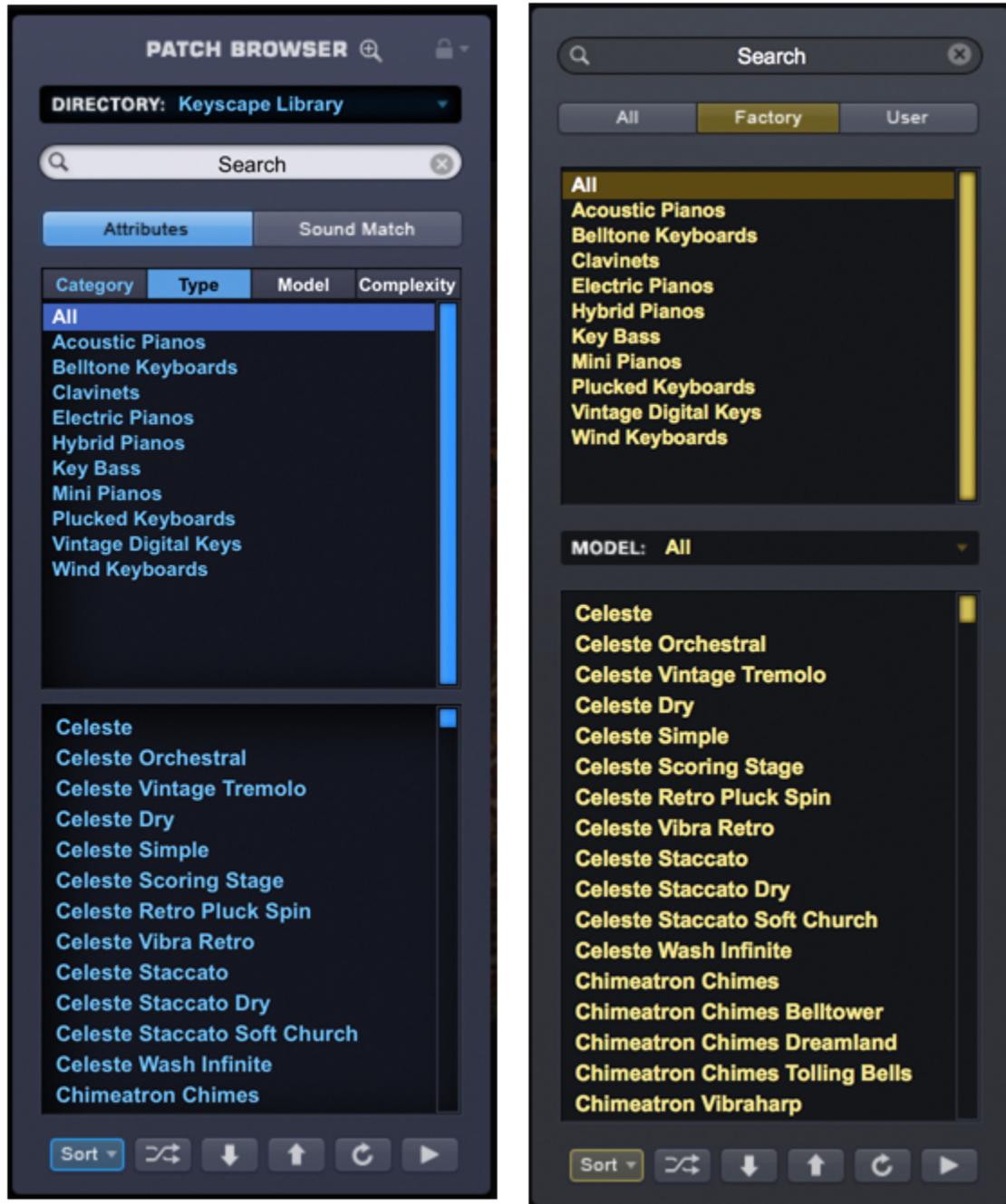
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While Trilian's browser operates in the same manner as the browser in Omnisphere, Keyscape's Patch organization is slightly different. When opening Keyscape sounds in Omnisphere, the sounds are presented in a manner that conforms to Omnisphere's Patch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

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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.

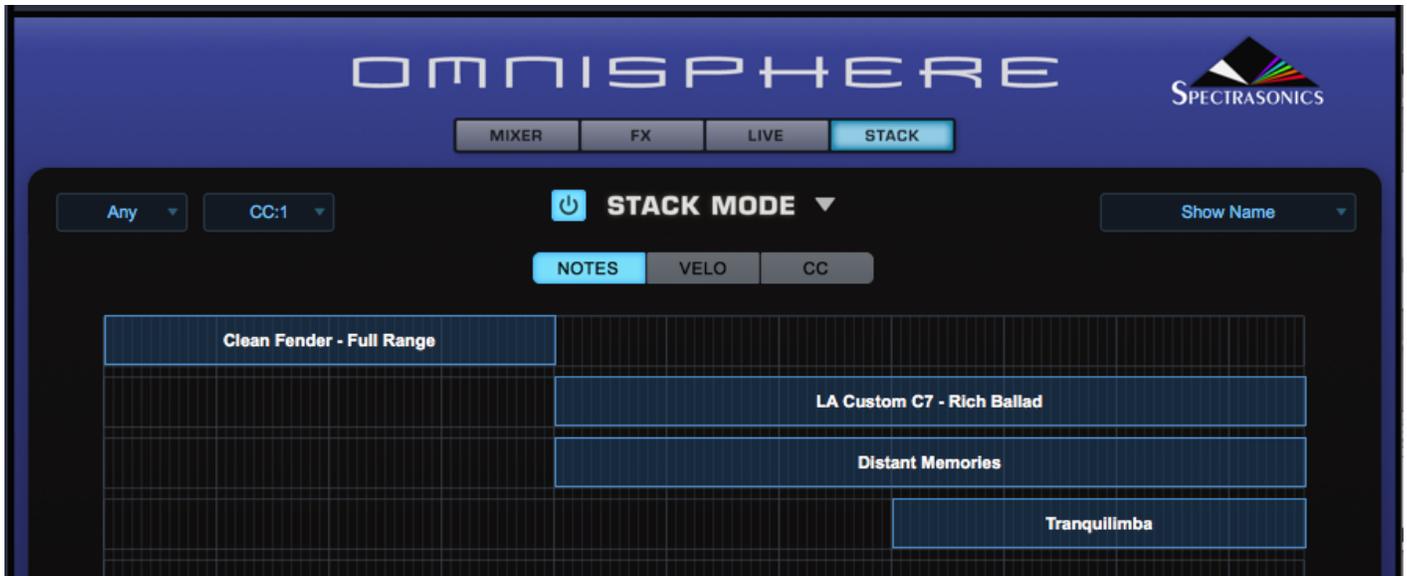
**TIP:** It can often help to use the THINNING controls in the Soundsource Zoom to conserve CPU resources when combining Omnisphere and Satellite sounds.

**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.

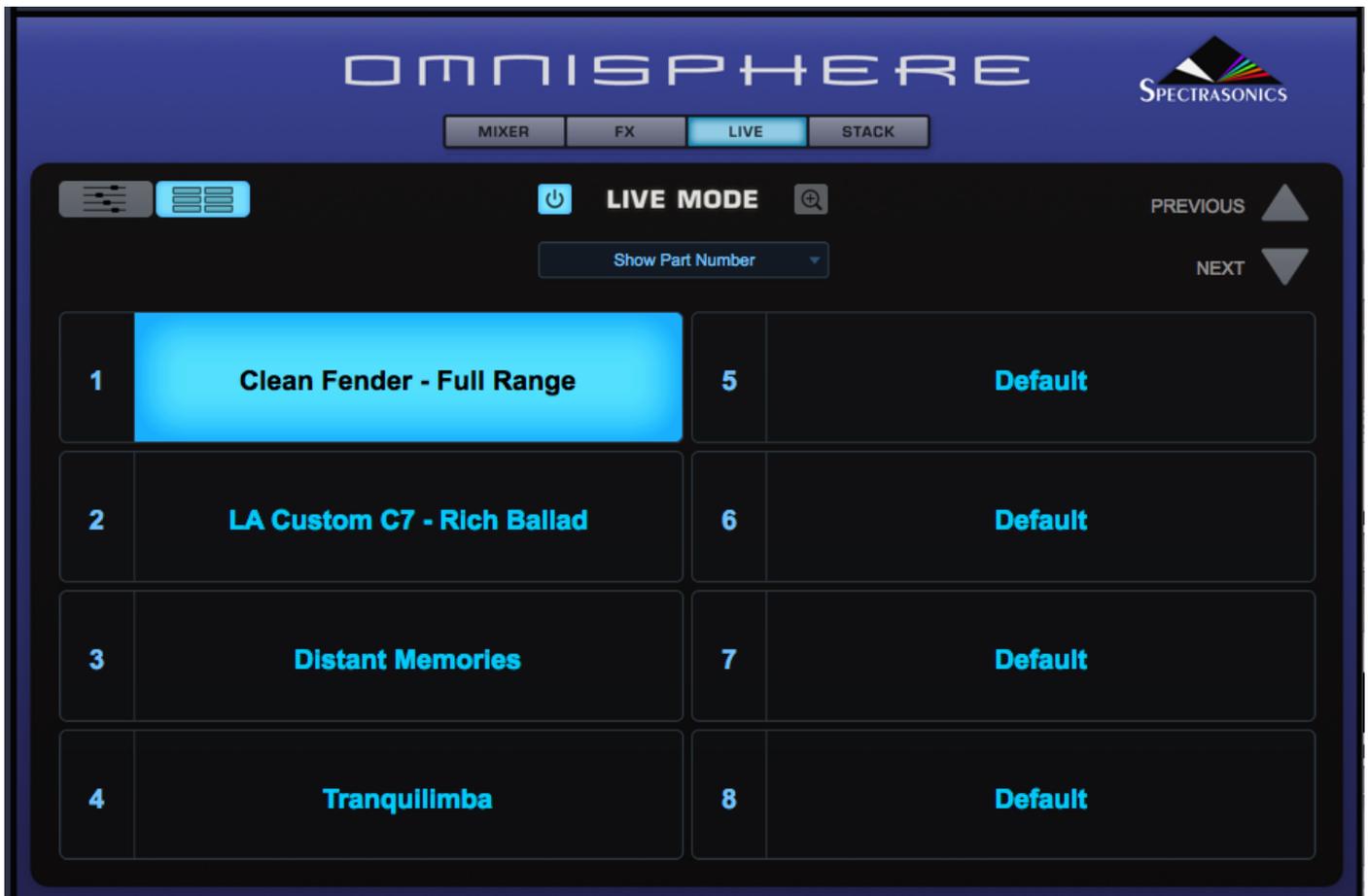
You can use STACK MODE or LIVE MODE to create useful combinations of sounds by using keyboard or velocity splits, layering, or applying Part-switching to a Multi in LIVE MODE.

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 run through Innerspace, an FX unit that creates unique spaces and resonances, and then 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 Soundsources to create unique sounds. In the example below, Granular is applied to Keyscape's Classic Toy Piano sound to create a slowly evolving texture.

The image shows the Omnisphere2 software interface. At the top, the word "OMNISPHERE" is displayed in a stylized font. Below it, there is a "KEYSCAPE" button and a folder selection menu showing "Toy Piano - Classic Octave Pluck". The Spectrasonics logo is in the top right corner. A row of buttons includes ORB, MAIN, A (highlighted), B, C, D, FX, and ARP. The main section is titled "OSCILLATOR ZOOM" and contains sub-sections for "LEGACY" and "GRANULAR". The "GRANULAR" section is active, showing a "SPEED" and "POSITION" menu, a "GRANULAR" button with a power icon, and a "Preset" dropdown set to "Granular Presets". A large waveform display shows a complex granular signal. Below the waveform are eight knobs: GRAIN DEPTH, INTENSITY, SMOOTHING, SPREAD, DETUNING, PITCH GRAINS, INTERVAL, and GLIDING. To the right of these knobs are "Up" and "Normal" buttons. The "MODE" label is at the bottom right of the control area.

## 2.8. iPad Touch Remote App

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Spectrasonics has developed [Omni TR](#) for Apple's iPad which turns it into a performance-oriented, remote control surface for Omnisphere.

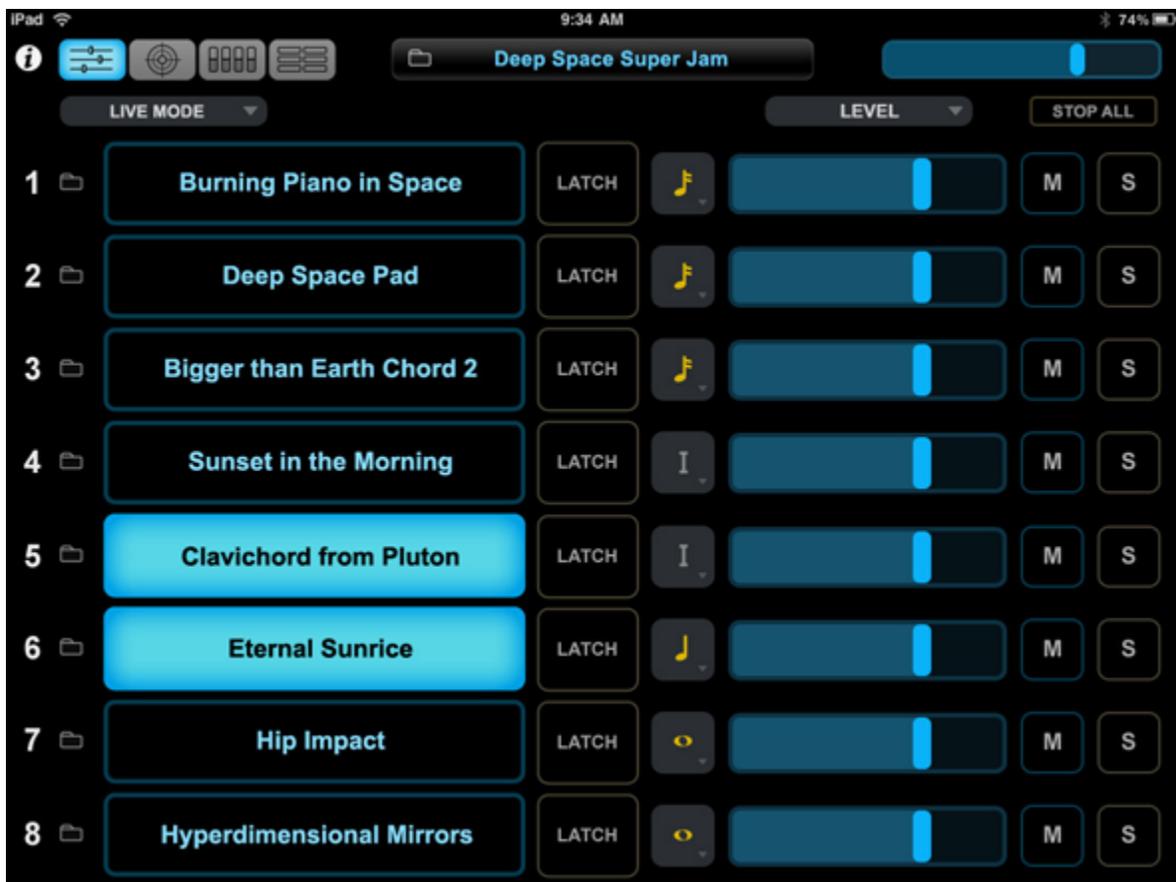
## 2.8.1. Omni TR

Omni TR (Touch Remote) is designed to turn an iPad into a performance-oriented, remote control surface for Omnisphere, running on a Mac or Windows PC. Omni TR offers wireless two-way communication, multi-touch patch selection, remote browsing and editing of Patches and Multis, and the ability to remotely control the Orb.

Omni TR is a four-page app. The pages can be accessed by selecting the icons on the top-left.

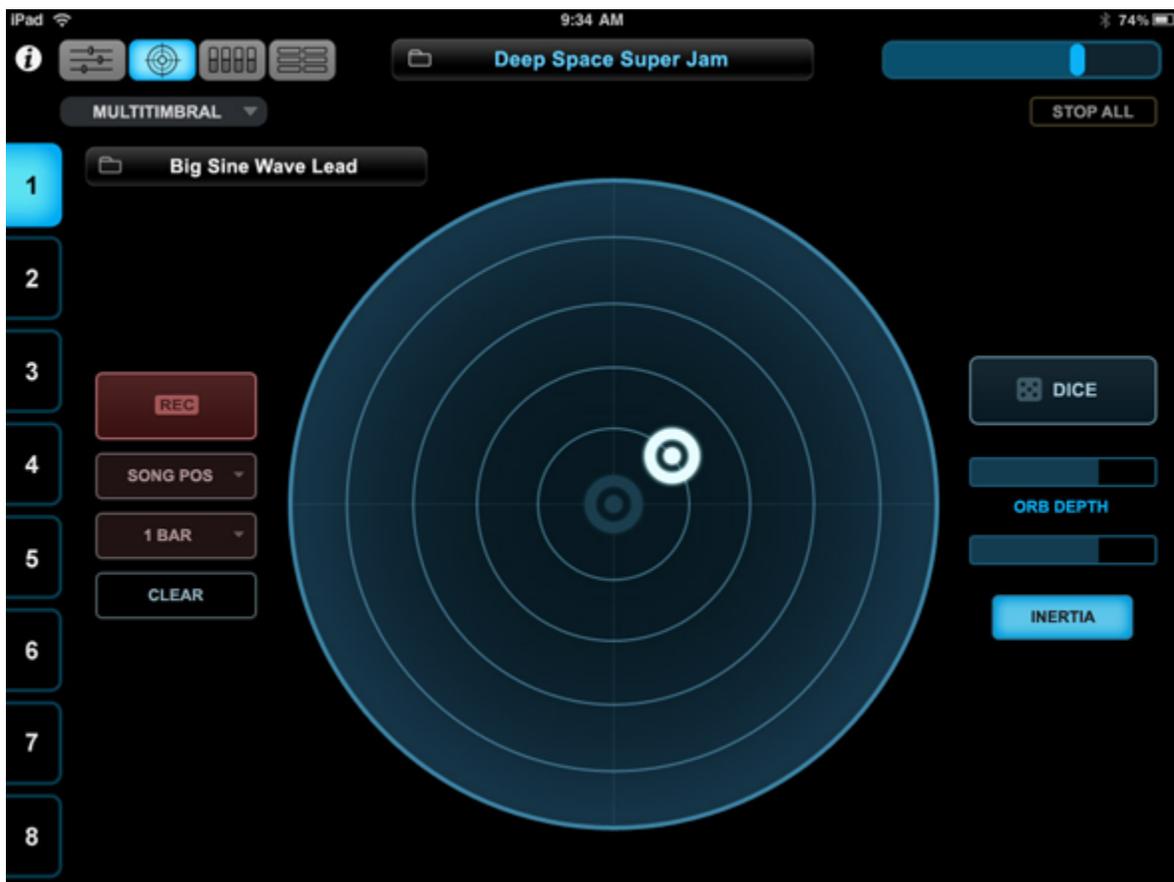


### Main



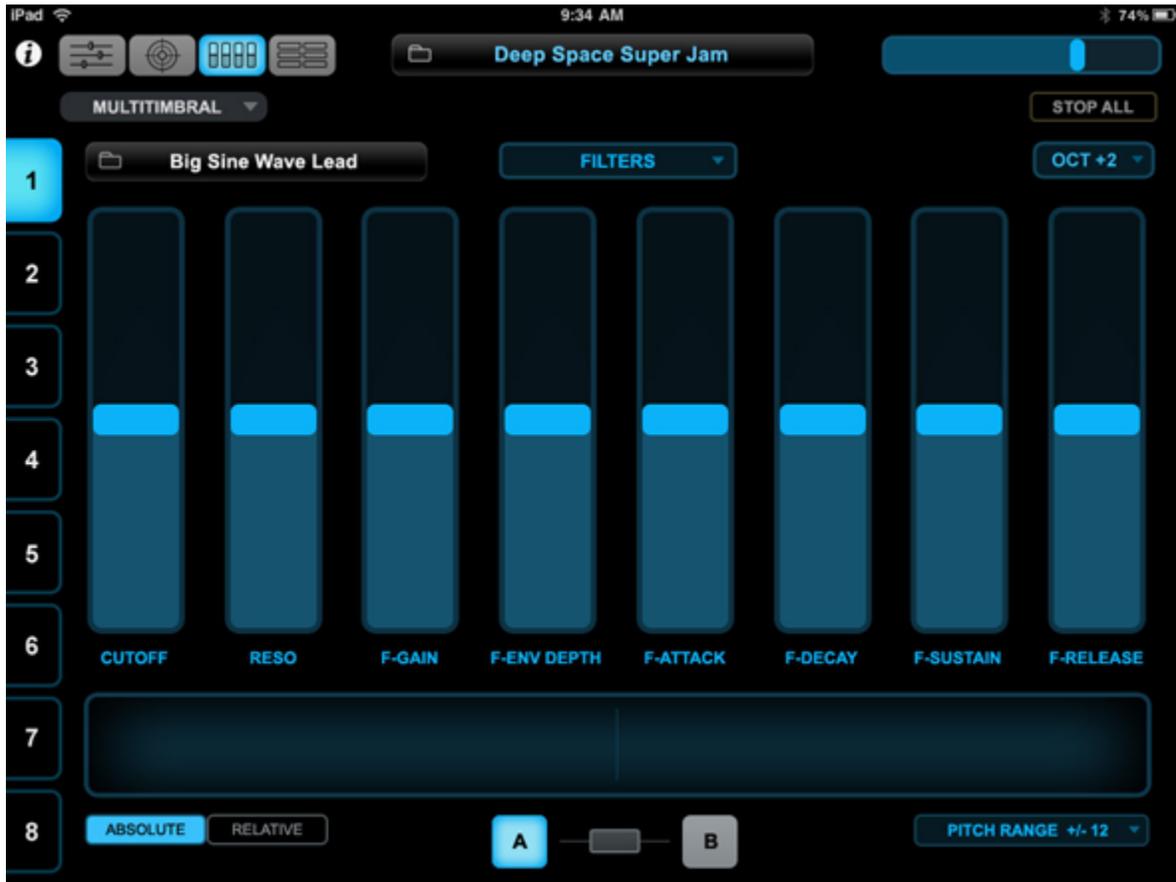
The Main page is designed to give a rapid overview of all 8 parts in Omnisphere. Touch the folder icons to the left of the patch names to select Patches or touch the folder to the left of the “Browse Multis” display to select Multis. The folder menus will reflect what is currently displayed in the respective browser in Omnisphere. Control the mix with the level sliders and the mute/solo buttons on the right side. The top right slider on each page is the Master Volume slider. If you have Omnisphere in LIVE MODE”, you can select which part to play by touching the patch name, and it’s easy to select multiple parts simultaneously. Each Part can be latched individually and you can set the Trigger Mode from the buttons directly to the left of the sliders.

## Orb



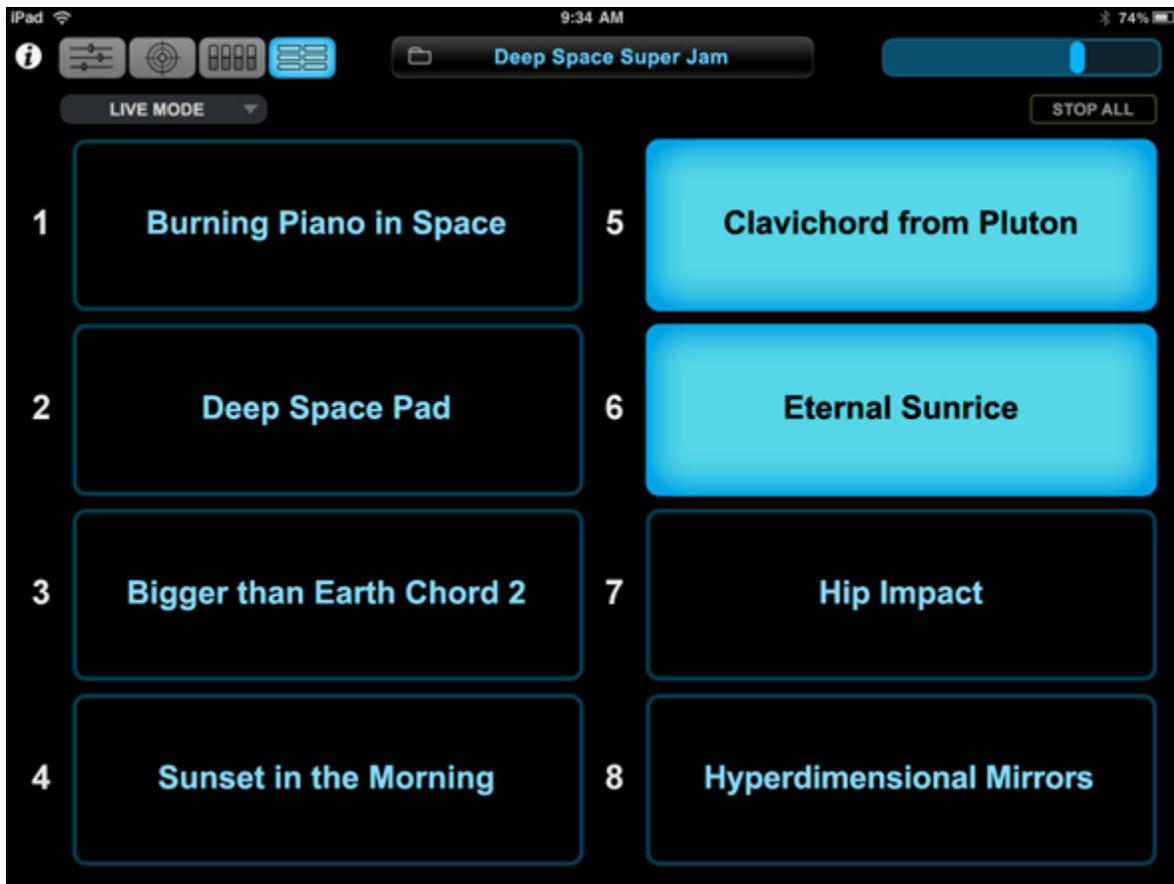
The Orb is a unique circular controller that intelligently modifies Omnisphere sounds in realtime. To create diverse new modifications to your Patches, simply touch the Orb and move your finger. The DICE button will give many interesting variations on the parameters being controlled. Change the Inertia amount to control the speed and duration of the controller after you set it in motion and let go. Use the Depth Slider to control the intensity of the effect. You can also capture movements with the Record button and the movements will become part of the Patch when it is saved.

## Controls



The Controls page offers fast access to some of the most useful performance parameters in Omnisphere and a fun Pitch Ribbon. Select the desired Part from the tabs on the left. Choose from the control templates in the drop-down menu above the faders to change which Omnisphere parameters are displayed. The A/B/C/D Link buttons at the bottom of the page work the same as on Omnisphere's EDIT page, determining which layer's parameters are displayed/edited. Bend the pitch from the Pitch Ribbon Controller along the bottom. Use the Octave Shift Menu in the upper-right to shift the keyboard range

## Jumbo



Sometimes on stage it can be useful to have large, easy-to-read Patch selection buttons. Just like on the Main page, you can select any combination of Patches on-the-fly and it's easy to see the patch names. Make sure "LIVE MODE" is selected from the drop down menu in the top left area.

### Setup

Setup is very simple. With Omnisphere running on the computer and the iPad connected to the same wireless network, launch the Omni TR app on the iPad and press "Connect." Omni TR will recognize the host computer and allow wireless, touchscreen control of Omnisphere.

### Requirements

The Omni TR iPad app requires iOS 4.2 or newer and works with Omnisphere 1.5 or newer on Mac OSX or Windows systems. Windows users must install Bonjour from Apple.

For complete instructions, please visit our website at: [http://www.spectrasonics.net/omni\\_tr\\_app/](http://www.spectrasonics.net/omni_tr_app/)

## 3. Hardware Synth Integration

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Hardware Synth Integration transforms well-known hardware synthesizers into extensive hands-on controllers that unlock Omnisphere's newly expanded synthesis capabilities. This makes using Omnisphere feel just like using a hardware synth!

This feature bridges the gap between software and hardware and allows users to intuitively create and modify Omnisphere sounds by using the familiar layout of their supported hardware synth—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—making the special features of that

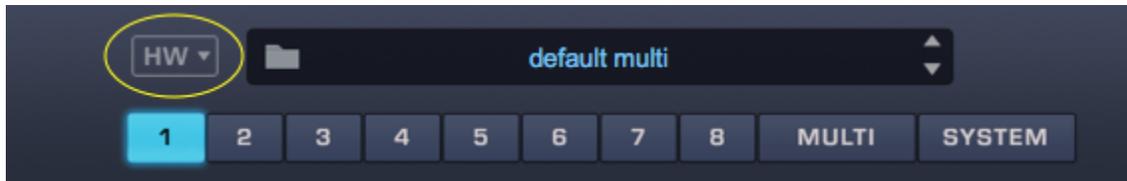
hardware work seamlessly with Omnisphere by translating MIDI messages from the hardware into satisfying sonic results in Omnisphere.

Hardware Profiles enable sophisticated interactions from a single touch of a knob, including the ability for Omnisphere to automatically switch interface pages, recall entire FX racks, assign multiple scaled parameters, and even instantly create complex modulation matrix routings on-the-fly. Most importantly, it's easy for musicians to use. By simply selecting the profile from the drop-down HW menu, Omnisphere is instantly linked to that hardware synth!

Omnisphere users can now experience the joy of a hardware synth workflow and hardware synth users can now expand their capabilities into the vast sonic world of Omnisphere!

## 3.1. What is a Hardware Profile?

---



Hardware Profiles allow hardware synths to act as extensive 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 interactions from a single touch of a knob, including the ability for Omnisphere to automatically switch interface pages, recall entire FX racks, assign multiple scaled parameters, and even create complex modulation matrix routings on-the-fly.

When designing a Hardware Profile, we make decisions that balance faithfulness to the hardware synth's operation with creative use of its panel that makes 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.

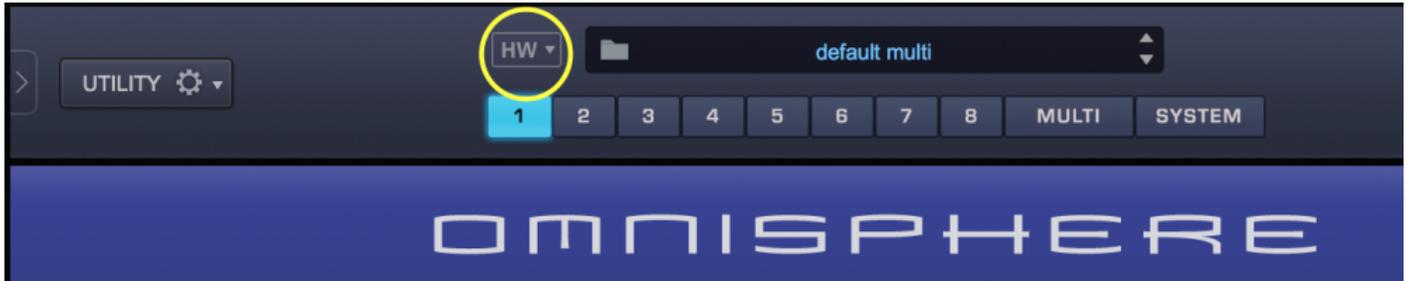
Additionally, this process required us to develop many features to adapt Omnisphere to behave and operate like hardware synths. These range from adding a new "Shared Signal Path," to creating new State Variable Filter types for use with the OB-6, to adding over 100 new wavetables modeled after many of 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. These sounds are included in the "Hardware Library," which contains over 1,000 Patches, featuring a wide range of categories—many with a distinctly "classic analog" flavor. Best of all, these sounds are available for ALL users, regardless whether you use the hardware or not!

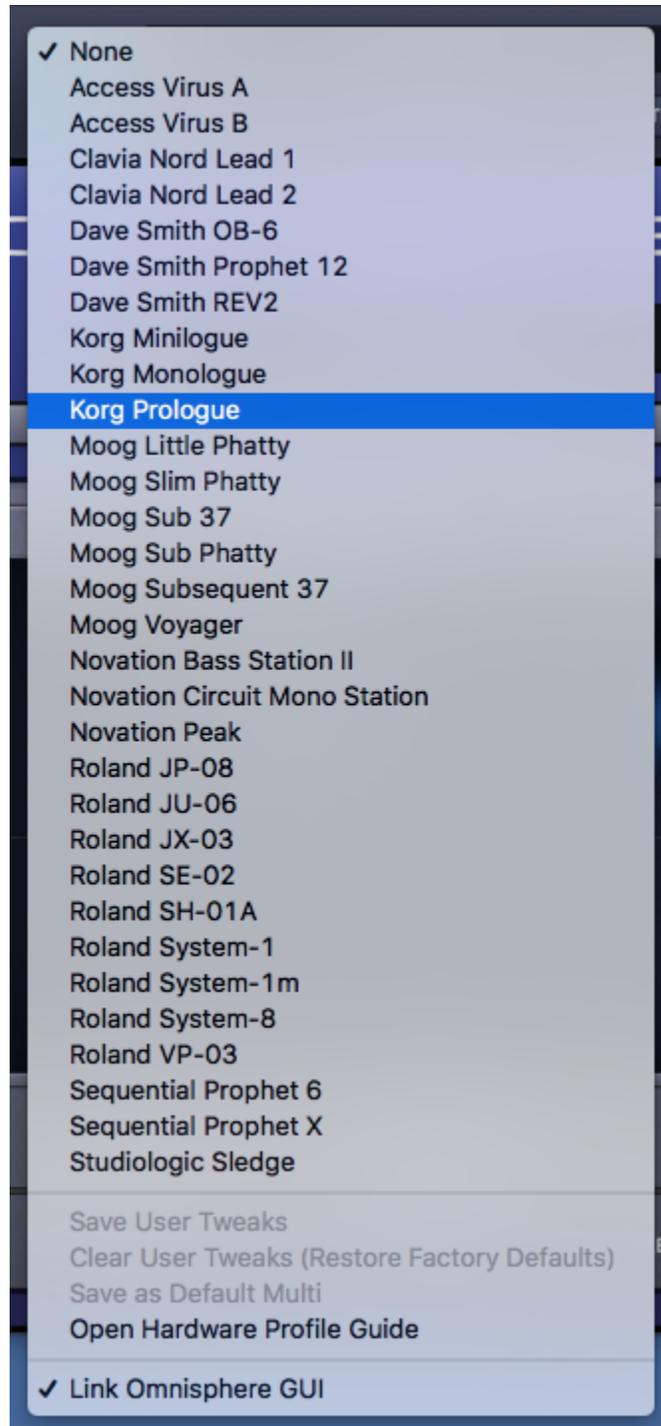
## 3.2. Loading Hardware Profiles

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



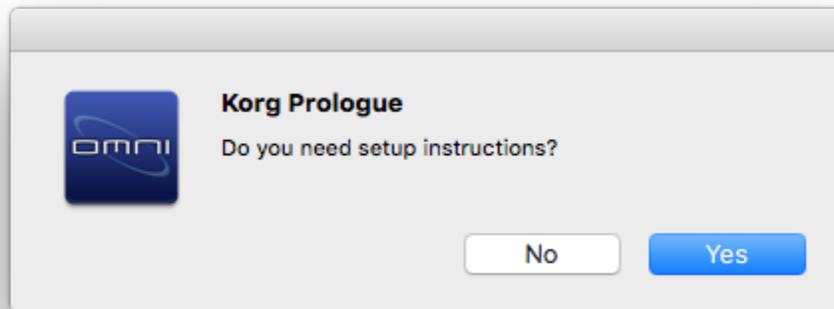
From the drop-down menu, select the hardware synth you want to use to control Omnisphere.



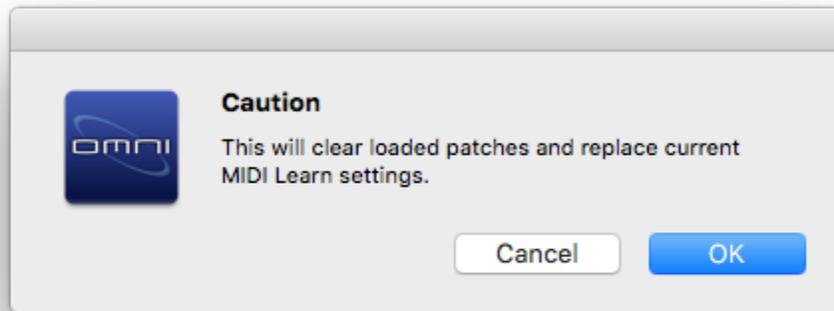
When a profile is selected from the HW Menu, the HW menu button is highlighted in blue and the hardware name will appear in the Name Display.



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.

**PATCH BROWSER** 🔍 🔒

DIRECTORY: Hardware Library

🔍

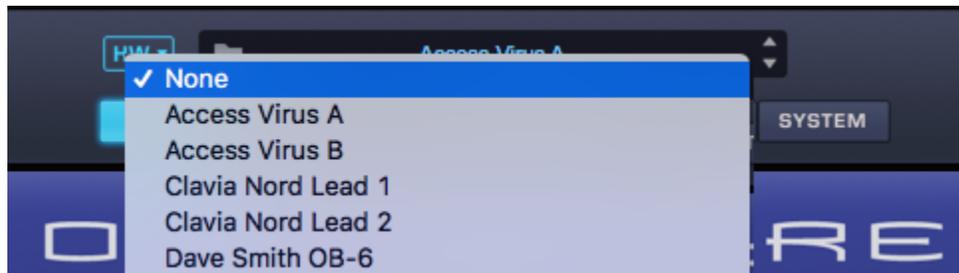
Attributes Sound Match

Category	Type	Genre	Author
All			
ARP + BPM			
Bells and Vibes			
Distortion			
Electronic Mayhem			
Hits and Bits			
Noisescapes			
Organs			
Pads + Strings			
Percussive Organic			
Retro Land			
String Machines			
Synth Bass			
Synth Long			
Synth Mono			
KPRO - Backwards Brass			
KPRO - Cold Blip			
KPRO - Cold Shoulder			
KPRO - Cold Storage			
KPRO - Deep Feelings			
KPRO - Dreamles			
KPRO - Dreamsweeper			
KPRO - Eighties Cheese			
KPRO - Eighties Gold			
KPRO - Eighties Mullets			
KPRO - Farfisa Poly			
KPRO - Fluff Pillows			
KPRO - Fluff Plucks			

Sort 🔽 🔁 ⬇️ ⬆️ ↻ ▶️

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.



## 3.3. Save User Tweaks

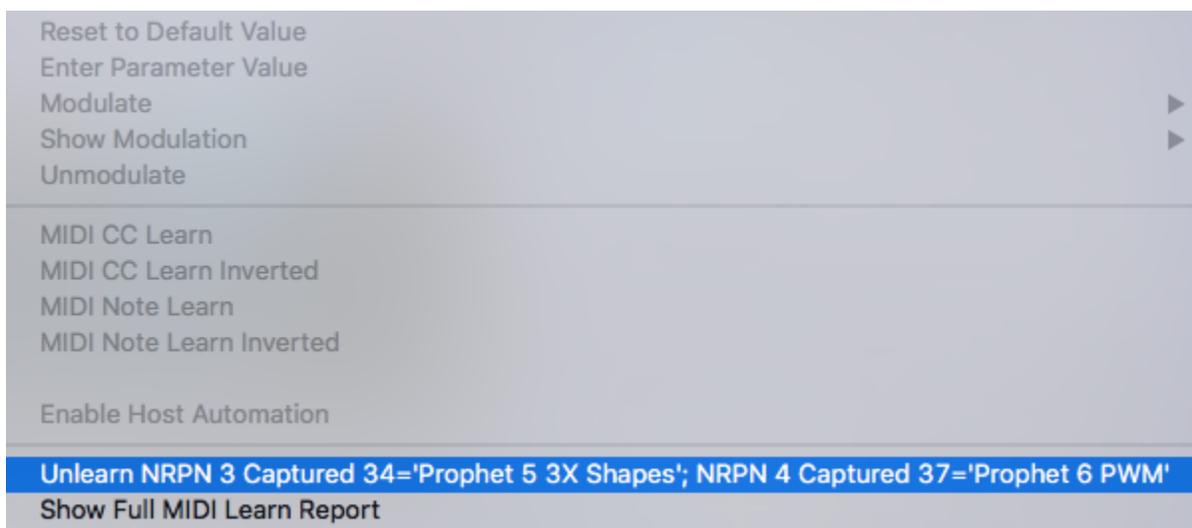
---

When you load a HW profile, Omnisphere is instantly set up to perform a large number of sophisticated actions with the touch 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.

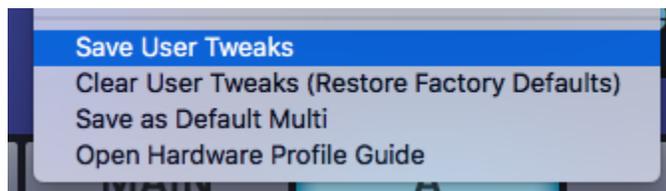
There’s a quick and easy solution.

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



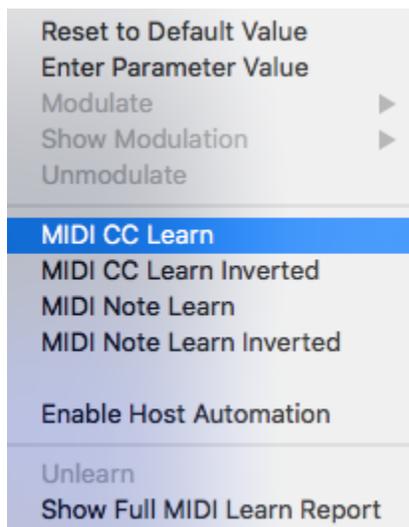
From now on, the Shape knob on the Prophet 6 will still affect the shape slider in Omnisphere, but you are free to use any other wavetables.

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

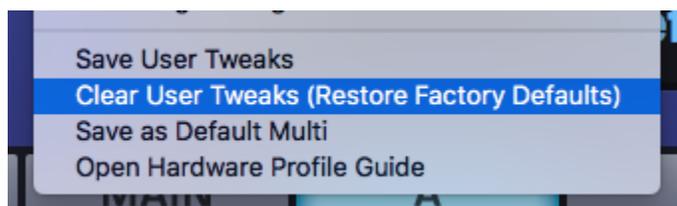


Here’s another scenario—you love using your Roland SE-02 to control Omnisphere, but since the SE-02 doesn’t send MIDI from its volume control, Omnisphere’s Master Volume is not mapped in its profile. However, if you have another keyboard controller next to your synth, you can assign one of its knobs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

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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

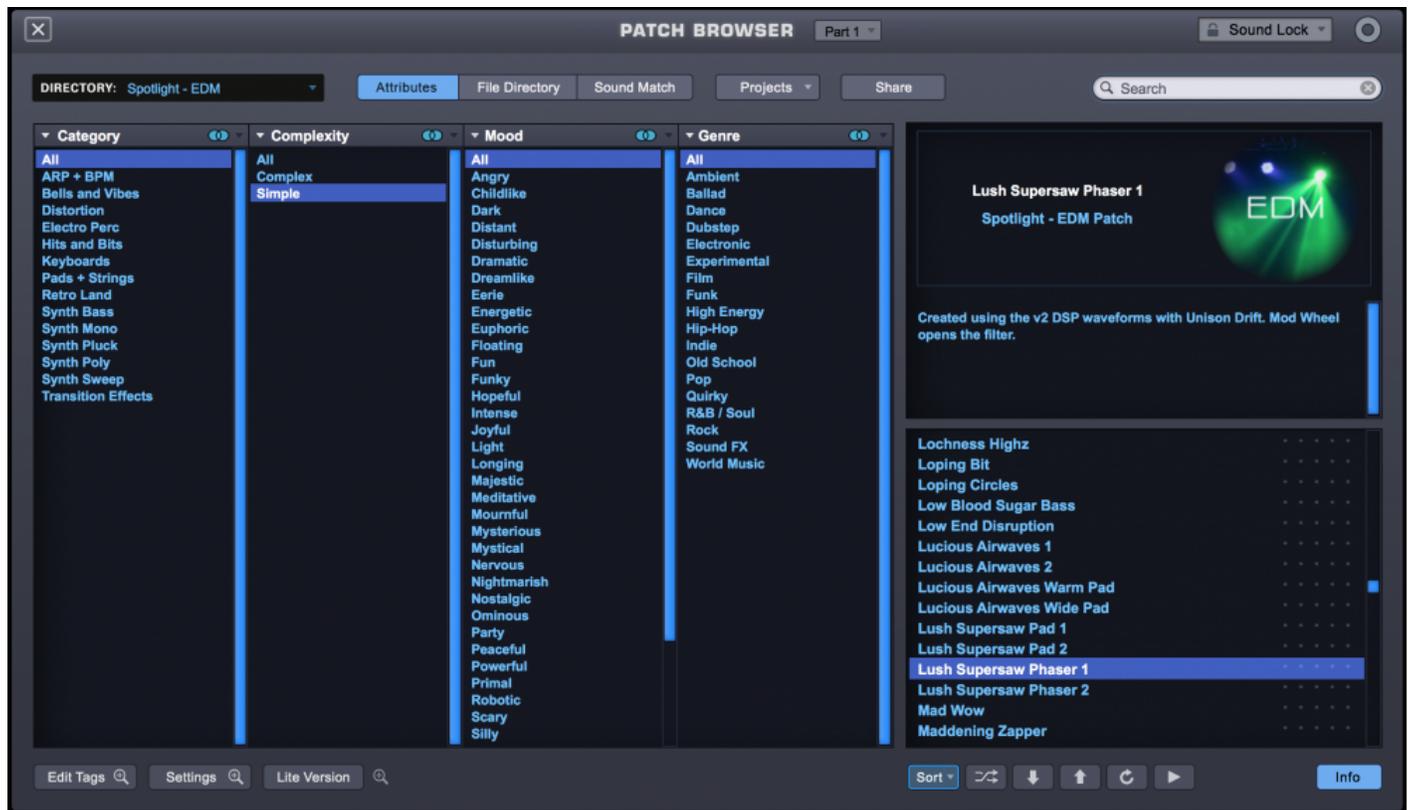
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These are the models currently supported by Omnisphere's Hardware Synth Integration.

- [Access Virus A](#)
- [Access Virus B](#)
- [Clavia Nord Lead 1](#)
- [Clavia Nord Lead 2](#)
- [Dave Smith OB-6](#)
- [Dave Smith Prophet 12](#)
- [Dave Smith REV2](#)
- [Korg Prologue](#)
- [Korg Minilogue](#)
- [Korg Monologue](#)
- [Moog Little Phatty](#)
- [Moog Slim Phatty](#)
- [Moog Sub 37](#)
- [Moog Sub Phatty](#)
- [Moog Subsequent 37](#)
- [Moog Voyager](#)
- [Novation Bass Station II](#)
- [Novation Circuit Mono Station](#)
- [Novation Peak](#)
- [Roland JP-08](#)
- [Roland JU-06](#)
- [Roland JX-03](#)
- [Roland SE-02](#)
- [Roland SH-01A](#)
- [Roland System-1](#)
- [Roland System-1m](#)
- [Roland System-8](#)
- [Roland VP-03](#)
- [Sequential Prophet 6](#)
- [Sequential Prophet X](#)
- [Studiologic Sledge](#)

## **4. Performing Live with Omnisphere**

## 5. The Browsers



Omnisphere ships with a massive library of sounds and requires sophisticated ways in which to search, filter, and browse them. 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](#)), [Projects](#) & [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 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 title at the top of the Browser.

**MULTI BROWSER**

**PATCH BROWSER**

**SOUNDSOURCE BROWSER**

2. The image in the Info Area.



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.

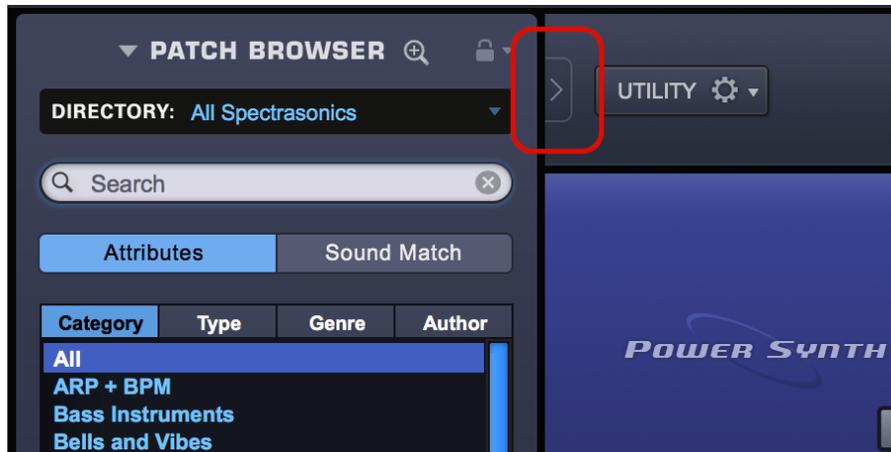
## 5.1. Mini-Browser Overview



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.

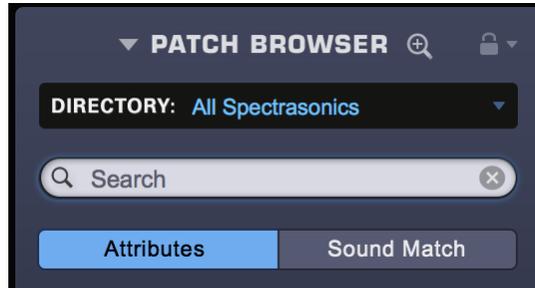
The Browser can be closed to save screen space by clicking on the arrow to the left of the Utility Menu:



Clicking the arrow again reopens the Browser.

## 5.1.1. Browser Header

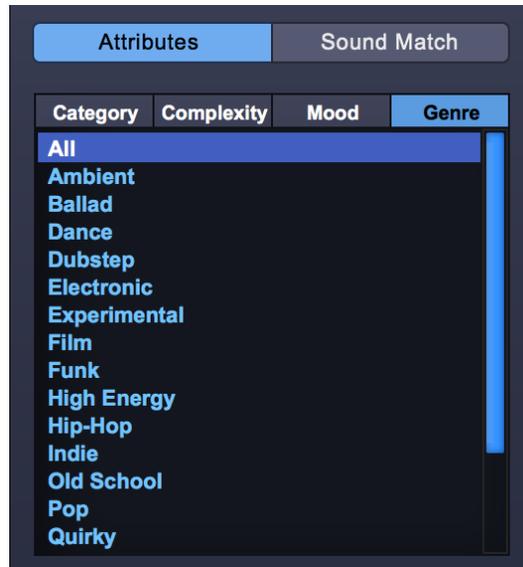
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The Mini-Browser Header contains the Browser Title, access to the Full Browser via the magnifying glass, Sound Lock, Directory Menu, Search Field, and tabs for selecting Attributes-based browsing or Sound Match.

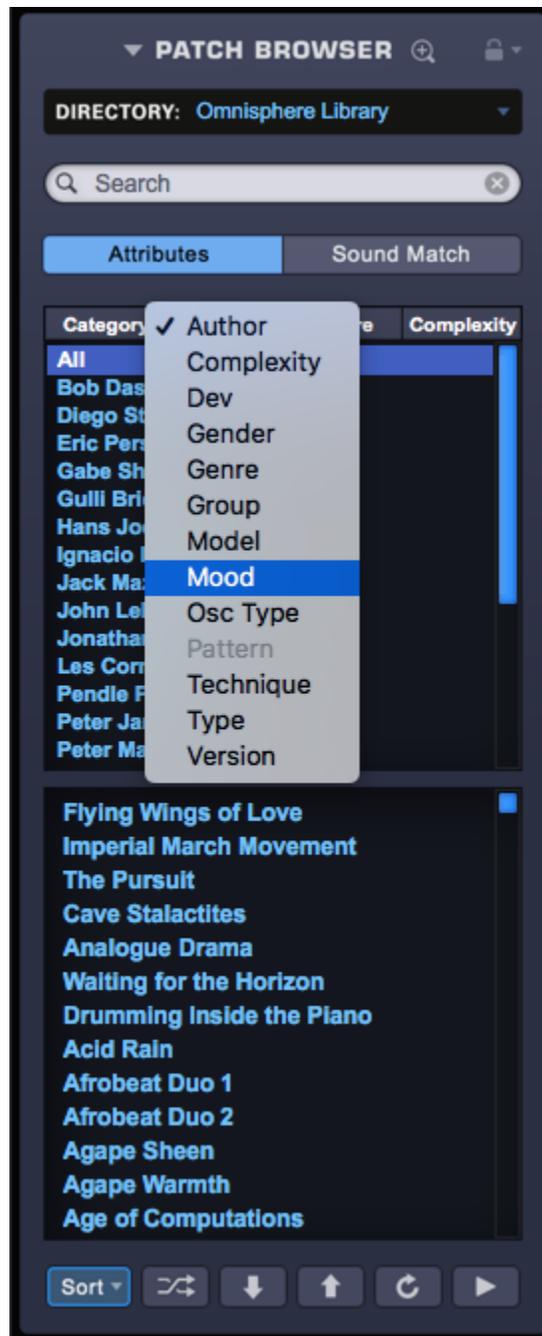
## 5.1.2. Browser Filters

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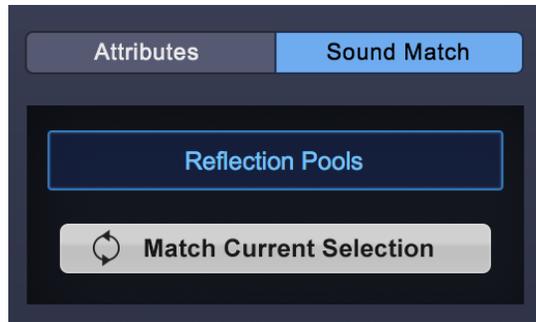


In Attributes Mode, there are four selectable Browser Filters, which display Category and three context-sensitive Attributes for searches based on the tags that have been added to the sounds. When a Category or an Attribute has been changed from All, the title changes to blue, to let you know it is filtered.

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.



## 5.1.3. Results & Info

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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.

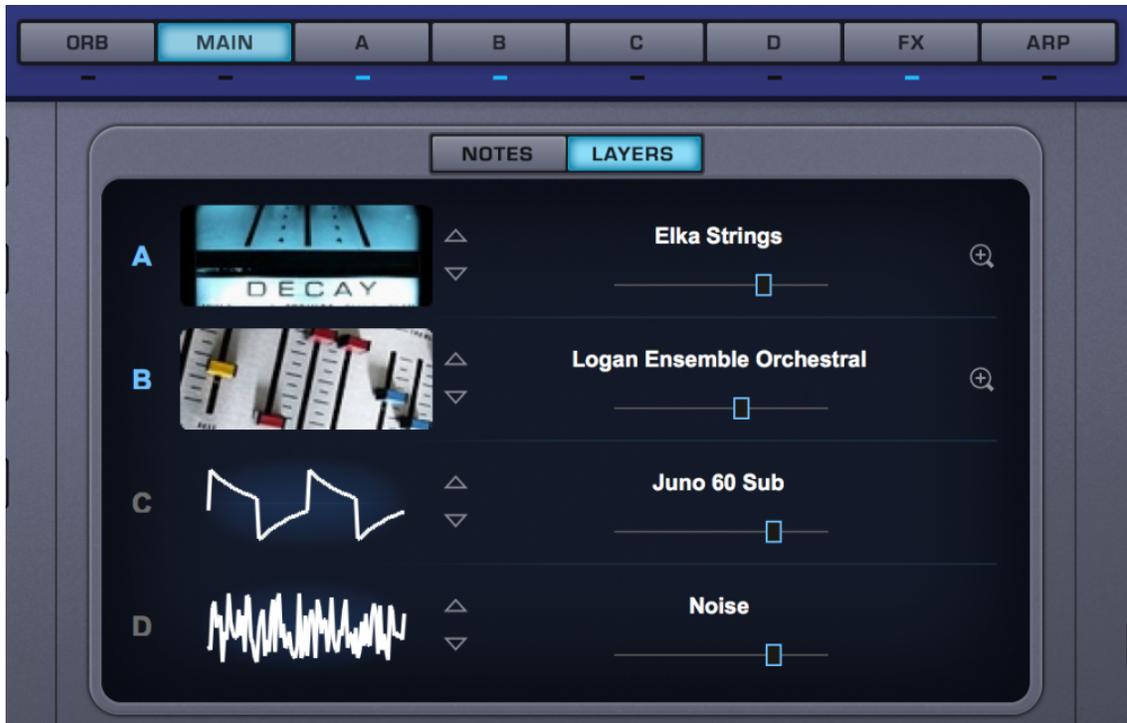


Information about the loaded Patch and is displayed in the middle area of the Main Page.

- 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.

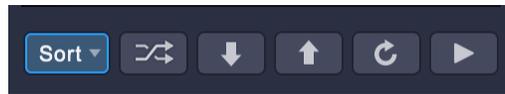


- When this area is set to LAYERS View, it provides the names and a visual representation of the Waveforms or Soundsources that make up the Patch. It also displays other basic Layer controls, like Soundsource/Wavetable steppers, Layer ON/OFF switches and Layer Level sliders.



## 5.1.4. Browser Footer

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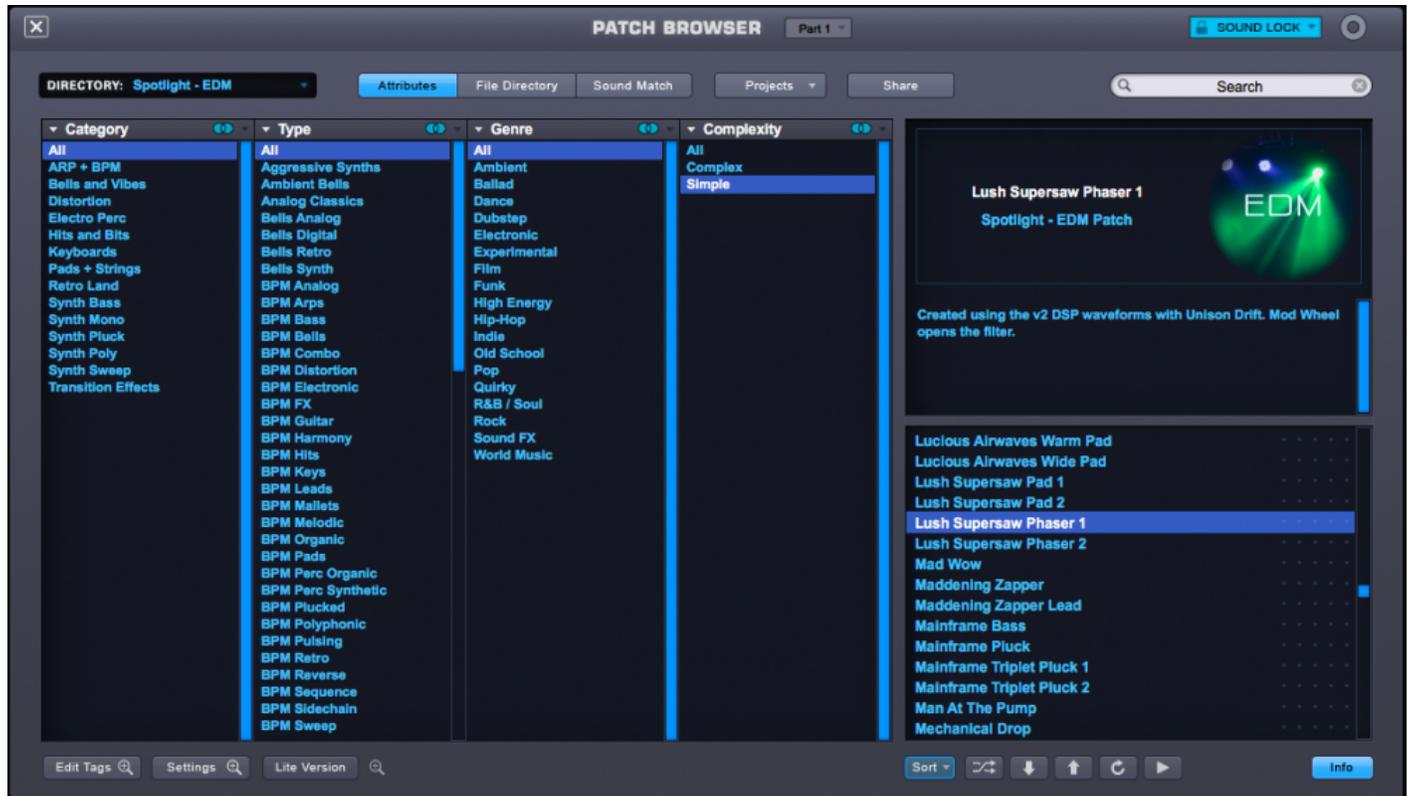
The Mini-Browser footer provides additional sorting options, a Shuffle button, Up/Down stepper arrows, and an Audition button.

### 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.

## 5.2. Full Browser Overview

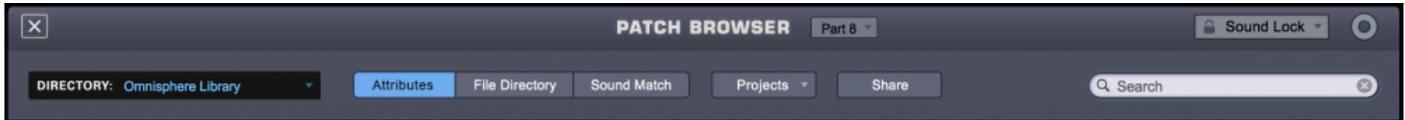


The layout is very similar for all three Full Browsers. Once you familiarize yourself with the common layout and operation of any Full Browser, you will be comfortable with all of them.

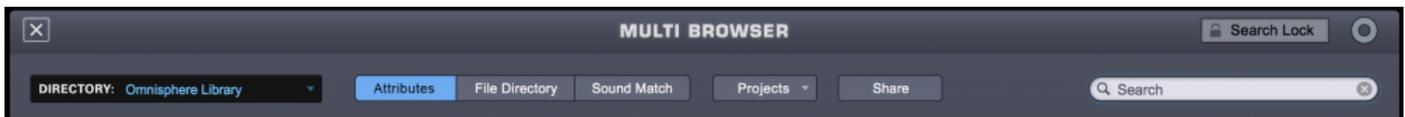
**NOTE:** When using [Satellite Instruments](#) inside Omnisphere, its Soundsources, Patches, and Multis will also display unique images which identify the instrument or feel of the selected sound. When you open a Keyscape or Trilian Patch in Omnisphere, the Custom Controls will become available.

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

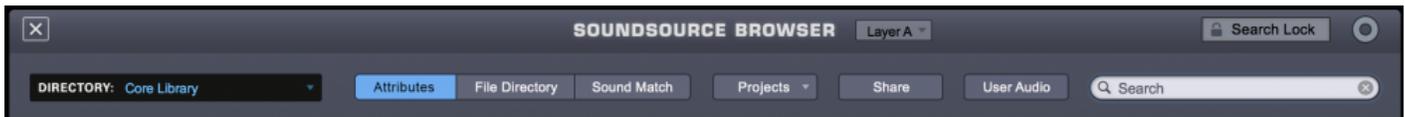
## 5.2.1. Browser Header



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 between 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.



The Full Multi Browser Header contains the Browser Title, a Memory Meter, controls that let you apply filtering options using the Directory Menu, buttons that allow selection between 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.

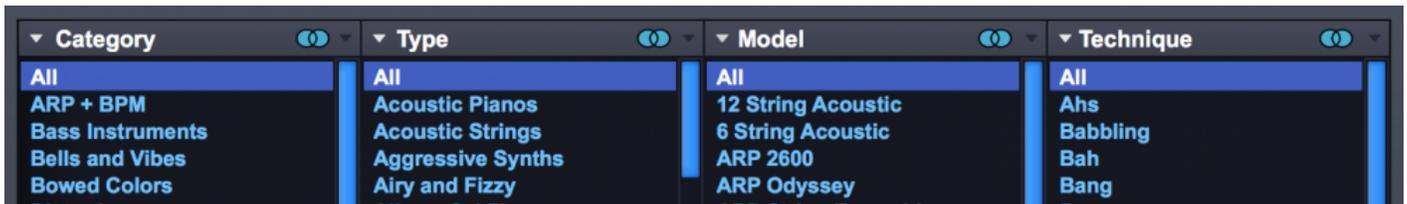


The Full Soundsource Browser Header contains the Browser Title, a Memory Meter, controls that let you apply filtering options using the Directory Menu, buttons that allow selection between the three browsing modes (Attributes, File Directory or [Sound Match](#)), the [Projects](#) menu, the [Sharing](#) menu, [Sound Lock](#), the Search field, and the [User Audio](#) button, which opens the import section.

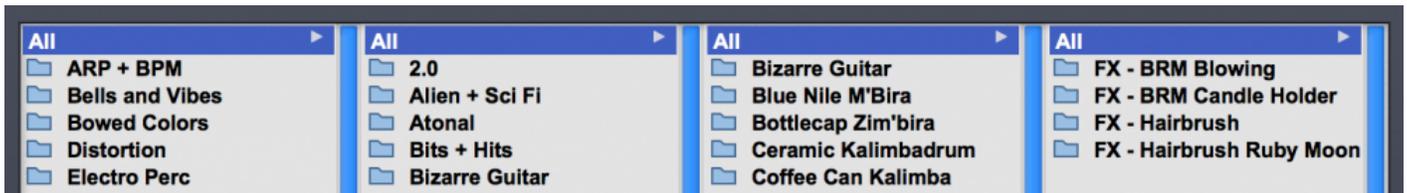
## 5.2.2. Browser Filters

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.



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.



## 5.2.3. Results & 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.

## 5.2.4. Browser Footer

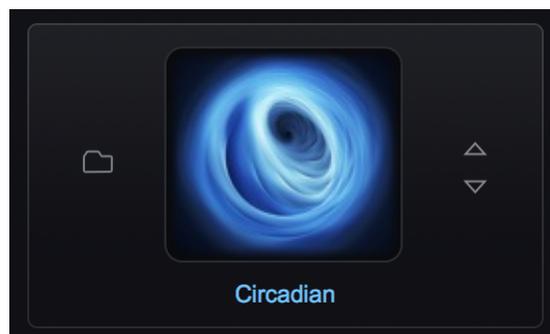
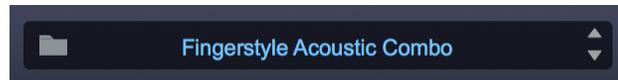
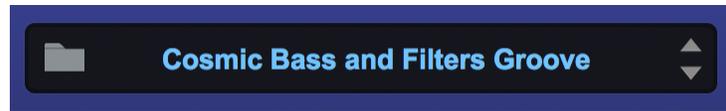
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The Browser Footer provides access to the [Tag Editor](#) and [Browser Settings](#), access to the Lite Version Options, a menu with multiple sorting options, a Shuffle button, Up/Down steppers, Refresh and Audition buttons, and access to the Info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

## 5.2.5. Browser Access

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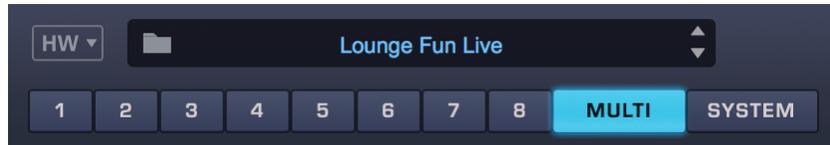


Anywhere that you see a Folder Icon Button, you will be able to access Omnisphere's Full Browser by clicking on the Folder. If there is a Name Display next to the Folder, you can also click inside the Name Display to open the Full Browser.

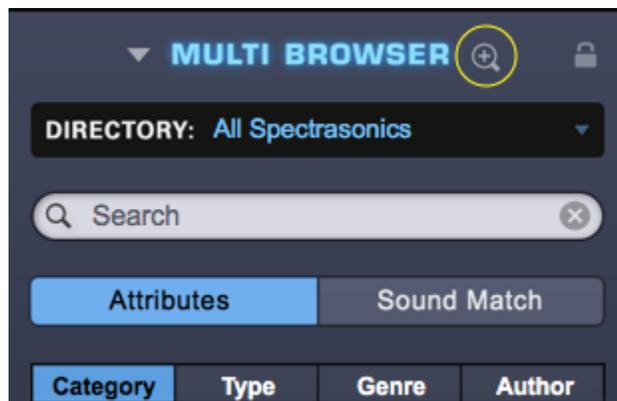
## 5.2.6. Multi Browser

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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	Author	Genre	Category
All	All	All	All
Drum Grooves	Eric Persing		
Latch Mode Examples	Ignacio Longo		
Live Mode Demos	Scott Frankfurt		
Split Patterns	Stephane Bonvallet		
Split Sounds			
Stacked Patterns			
Stacked Sounds			
Velocity Crossfades			
Wheel Crossfades			

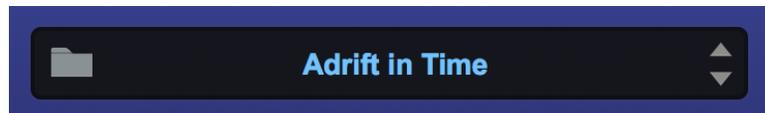
**Lounge Fun Live** USER MULTI  
Omnisphere Library Multi  
96mb  
Fun Lounge patterns to play with in Live Mode.

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

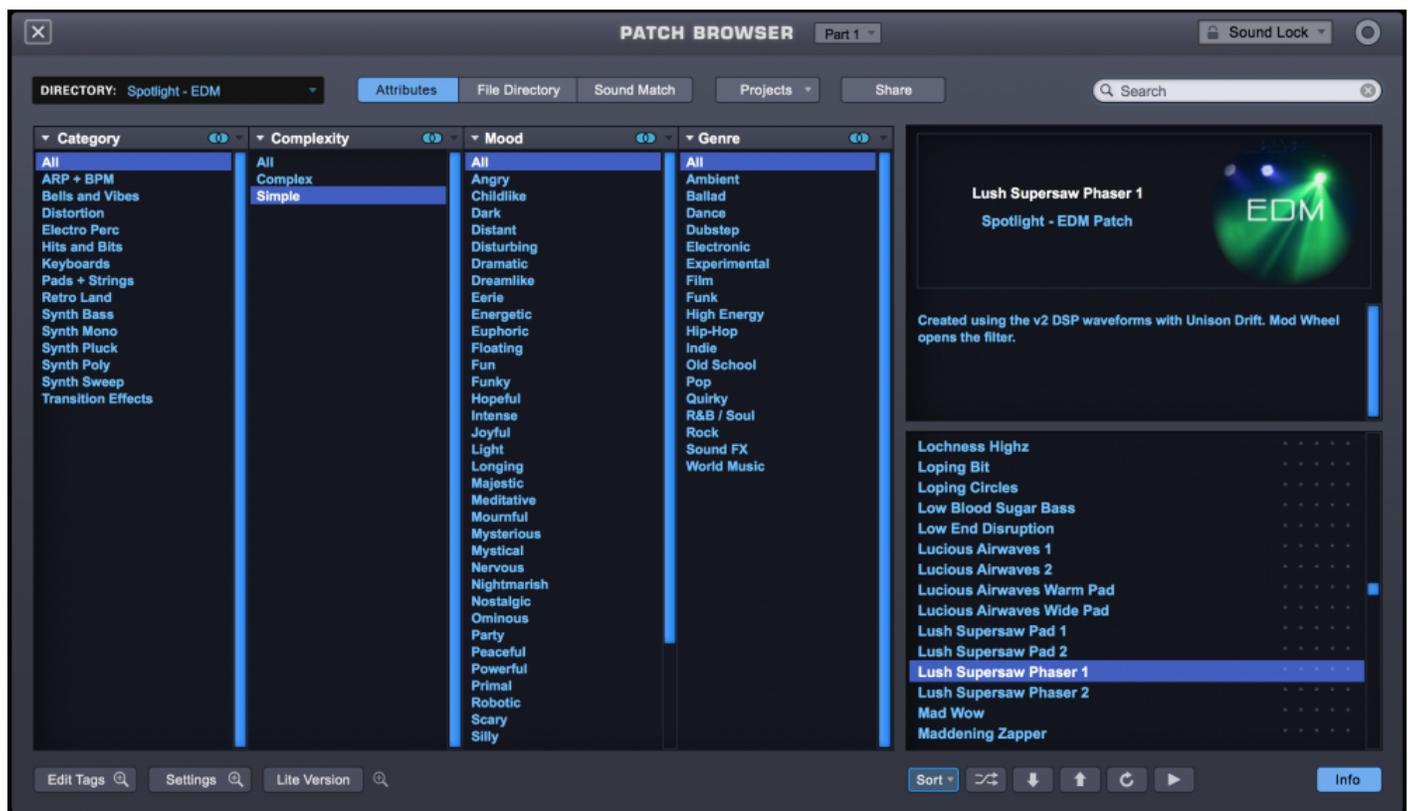
Edit Tags Settings Lite Version Sort [Icons] Info

## 5.2.7. 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.

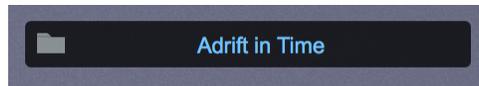


### Full Patch Browser



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.

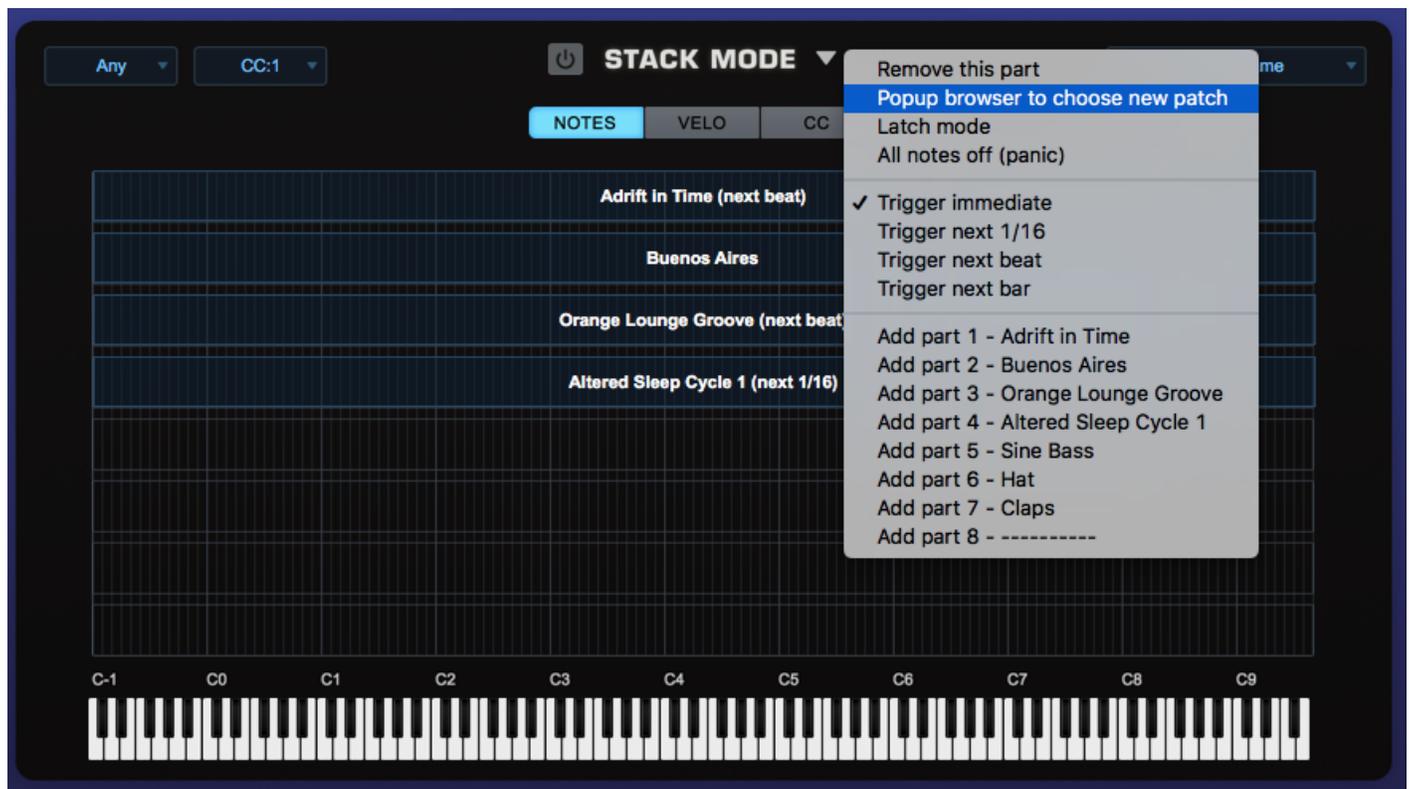
### Mixer Patch Name Display



### Patch Browser Access from LIVE MODE



### Patch Browser Access from STACK MODE



You can also access the Full Patch Browser from [STACK MODE](#) page by control-clicking/right-clicking its Part Region and selecting the “Popup browser to choose new patch” option from the context menu.

## 5.2.8. 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.



## 5.3. Operation

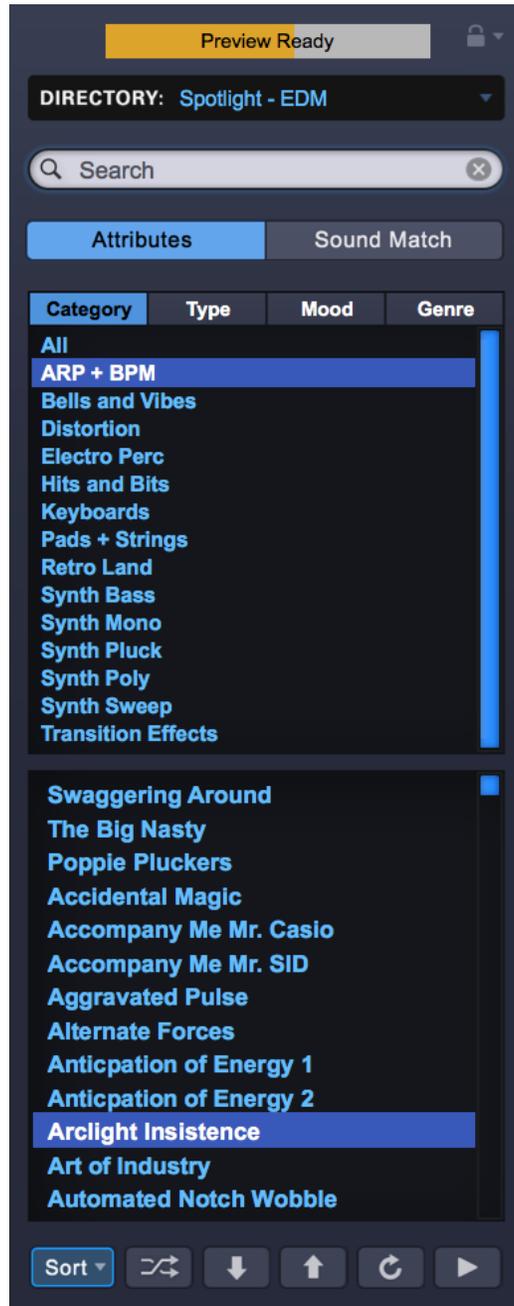
Searching and filtering is done from the Mini-Browser and the Full Browser Header, using the Directory Menu, the Search Field, and the Browser Filter columns. There are several options available for filtering the results (including [Boolean Expressions](#), and choosing how sounds are browsed, displayed,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

Category	Type	Genre	Technique
All	All	All	All
ARP + BPM	Acoustic Pianos	Ambient	Ahs
Bass Instruments	Acoustic Strings	Ballad	Babbling
Bells and Vibes	Aggressive Synths	Dance	Bah
Bowed Colors	Airy and Fizzy	Dubstep	Bang
Distortion	Alien + Sci Fi	Electronic	Bap
Electro Perc	Analog Classics	Experimental	Beads
Electronic Mayhem	Analog Strings	Film	Bends
Ethnic World	Atonal	Funk	Bink

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.

## 5.3.1. 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 is 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 and you can disable it from the [Browser Settings Zoom](#).

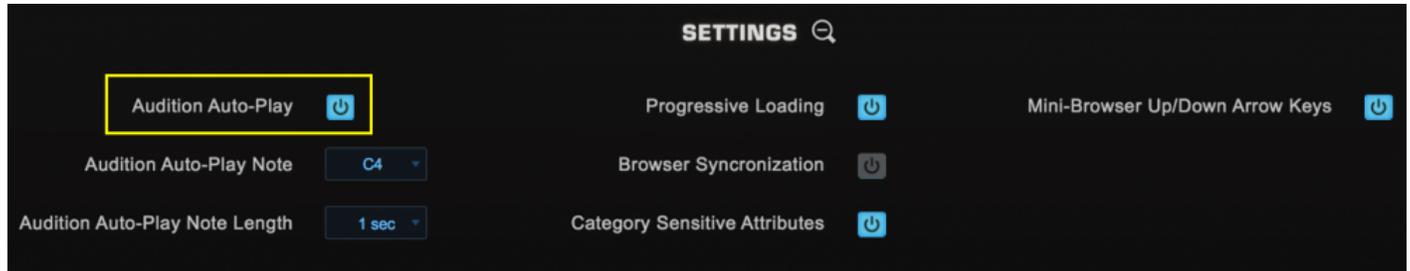
## Remote Loading

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.

## 5.3.2. Auditioning Sounds

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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.



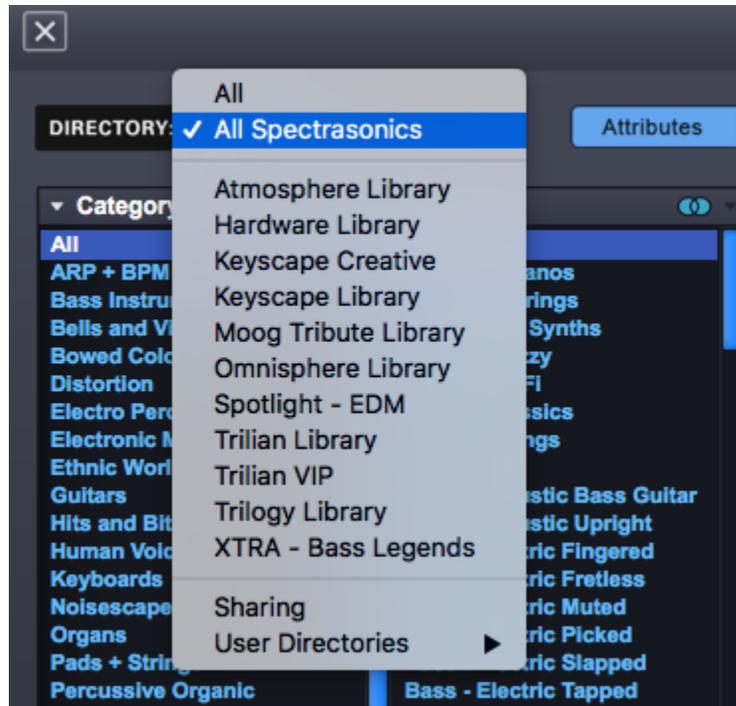
If Audition Auto-Play is enabled in the Browser Settings, then selecting a sound will automatically audition it. The Audition Note and Audition Note Length settings determine the pitch and duration of the auditioned note.



Select the Audition Button in the Browser Footer to hear a note played using the currently loaded sound. The sound will play for as long as the button is selected (or until it decays).

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

## 5.3.3. 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 & Managing Sounds](#) section.

**NOTE:** If you also have [Keyscape or Trilian](#) its libraries will also appear in the **DIRECTORY Menu**.

## 5.3.4. Search Field

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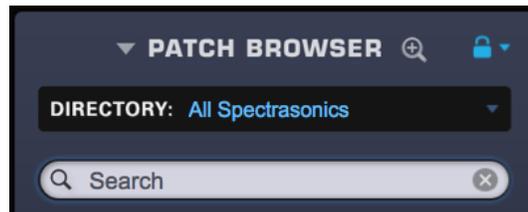
Click anywhere in the Search Field to enter search text. Press the Enter/Return key to search and view the filtered results.



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

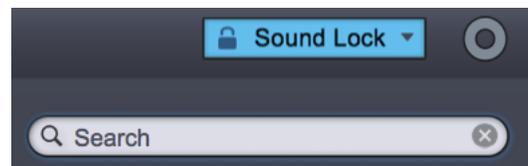
Selecting Attributes in the Browser Filters can refine the search even further. The more selections that are made, using Attributes and the Boolean Search capability, the narrower the search results will be. To search the entire Core Library, be sure to select "All" in each of the Browser Filter columns.

### Search Lock

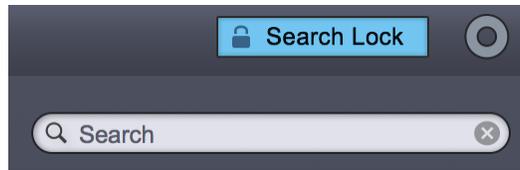


By default, when the Full Browser is closed, the Search text will be cleared. Search Lock allows search entries (and the filtered results) to be retained after the Browser is closed and re-opened.

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



In the Soundsource 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. For example, if you enable Search Lock, it will remain enabled the next time you open an instance of the plug-in.*

*NOTE: When you change the Search Lock setting, that change is applied to all Browsers. For example, enabling or disabling Search Lock in the Patch Browser also enables or disables it in the Multi and Soundsource Browsers.*

### Search Clear



Select the Search Clear button to 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

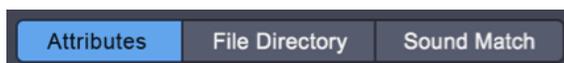
Boolean Search uses the criteria “Or,” “And,” and “Not” and lets you include or exclude certain Attributes to narrow your search. You can also type expressions into the Search field to filter your results.

- 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).

## 5.3.5. Browser Filters

When using the Full Browser, the browser 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 similar sounds 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.

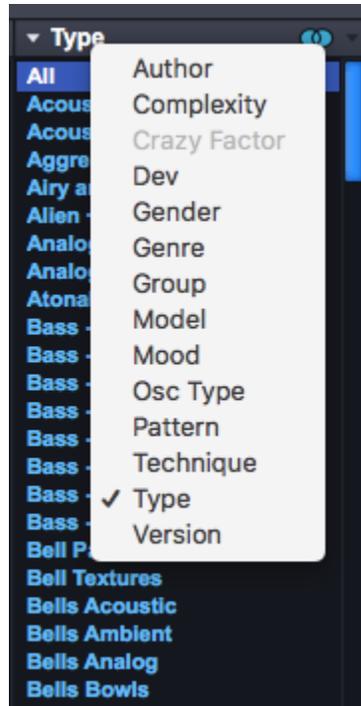
For example, in the Soundsource Browser, if the Category “All” is selected, the Attribute columns will automatically display Type, Genre, and Author.



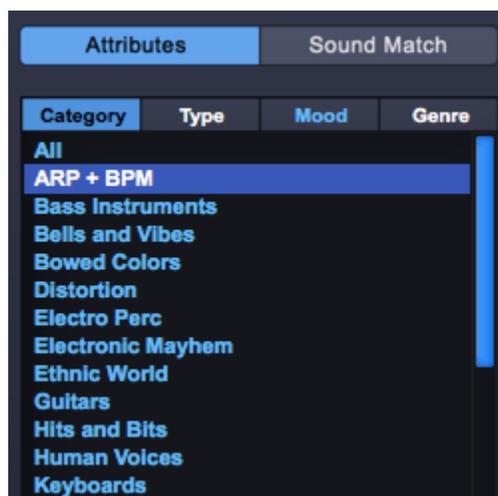
If the Category “ARP + BPM” is selected, the Attribute columns will change to Type, Mood, and Genre.



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.

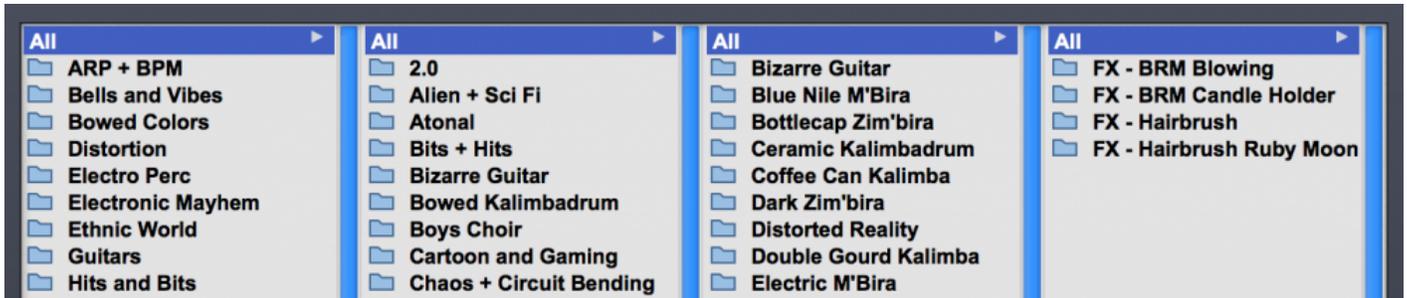


In the Mini-Browser you can right-click on the Attribute Types to make a different selection from the list.

**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.



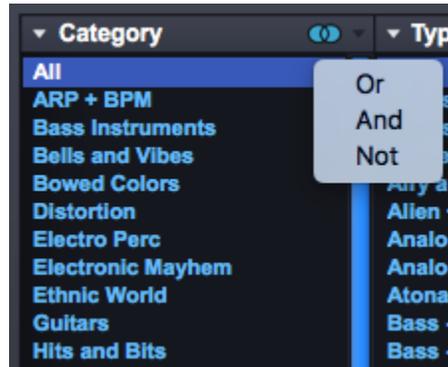
When you select a Folder in a column, the list of sounds will be filtered to include only the sounds that exist in the Folders below it in the file hierarchy.

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.

## 5.3.6. Boolean Filtering

### 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 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



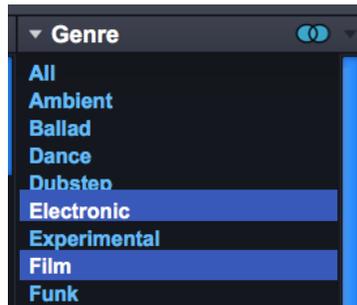
This option says, “Show me results that are tagged with either of these Attributes.”

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.

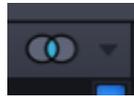
To choose OR, simply select the Attribute (OR is the default filter state).

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.



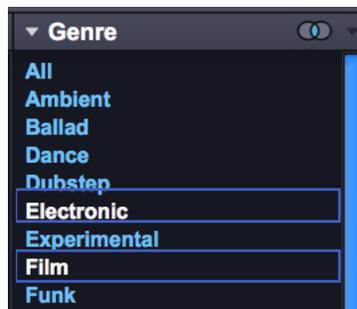
## AND



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.*

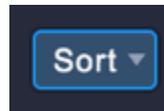
## 5.3.7. Displaying & Navigating Results

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

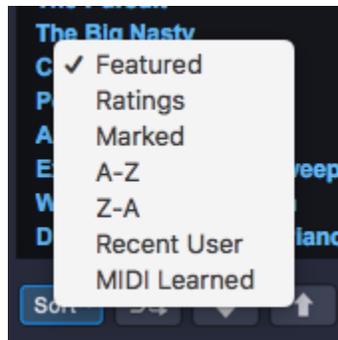
These tools let you sort sounds in various ways, and because there are many thousands of sounds to explore, these controls help you delve deeper into the Library. These Browser controls will also work on filtered results.

### Sort Menu



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

### Featured



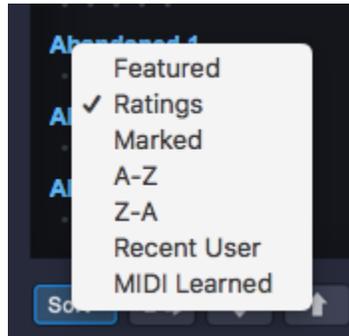
We're continually adding new sounds to Omnisphere and the number of available sounds is pretty massive! In order to make it easier to find the best examples of the newest sounds in the Library, Featured sounds are displayed by default at the top of your list. This list is updated with each Patch update.

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.

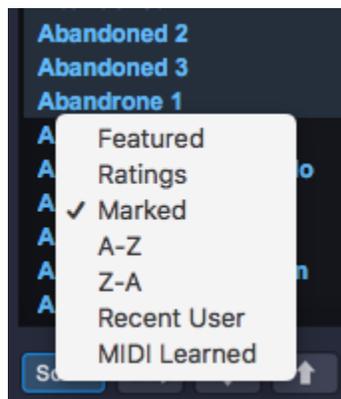
## Ratings

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.



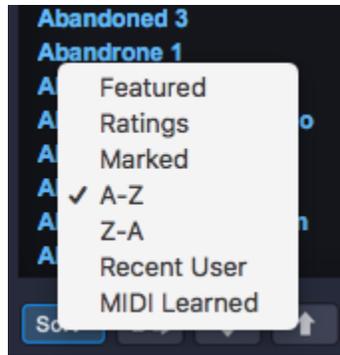
## Marked

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.



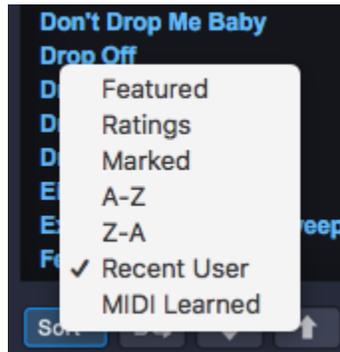
## A–Z and Z–A

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.



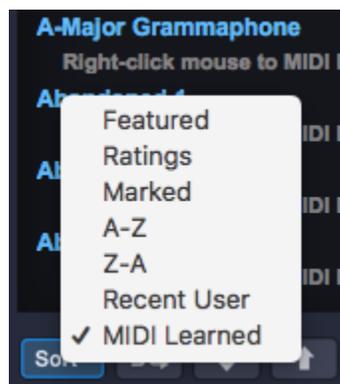
### Recent User

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



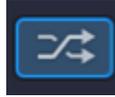
**NOTE:** This feature does not show the most recently added Patches to the Factory Library, just the User Library. If you want to view the most recently added Patches to the Factory Library, enter the version number of the current Patch Library in the [Search](#) field (i.e. 2.5).

### 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.



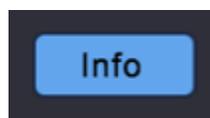
The Browser Stepper buttons are controlled from the Up/Down arrows of your keyboard. They can also be MIDI-Learned, and those assignments will apply to the Stepper buttons in all three Full Browsers, as well as the Mini-Browsers.

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.

## 5.3.8. Remote Loading of Sounds

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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.

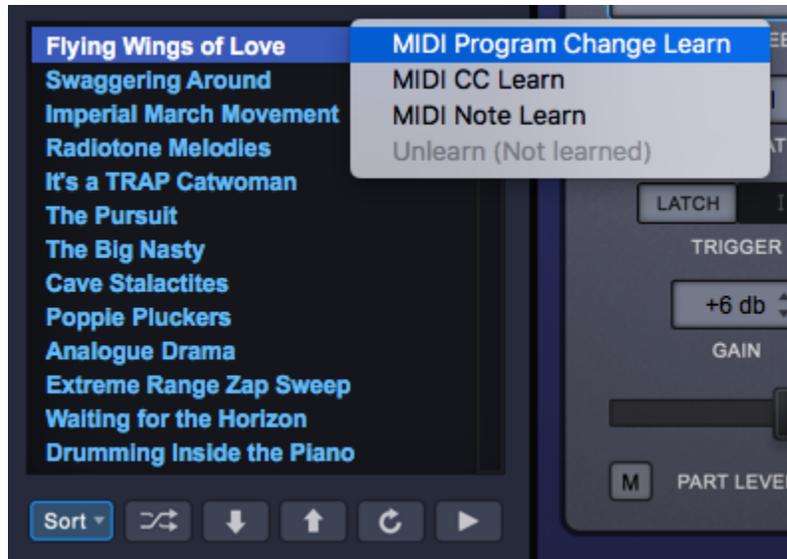
**MIDI Program Change** — Allows Omnisphere's sounds to be mapped to MIDI Program Change messages, like those transmitted by dedicated Patch-selection buttons on keyboard controllers.

**MIDI CC Learn** — CC (Continuous Controller) 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.

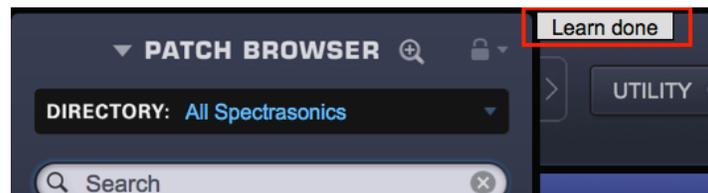
**MIDI Note Learn** — This option allows you to select specific sounds via any key on your MIDI controller.

### MIDI Learn

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.



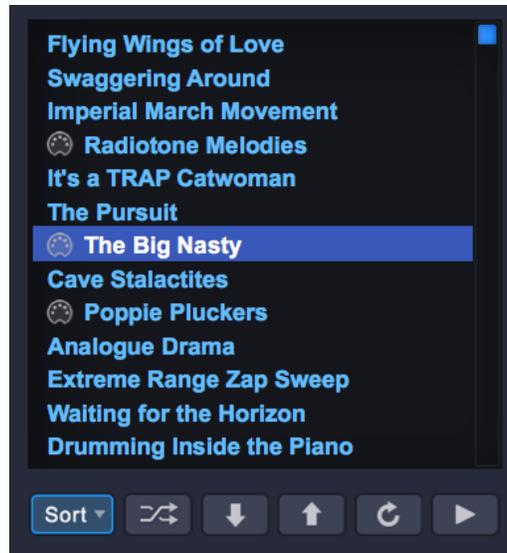
4. Right-click on the sound name and you'll see the message type, value and MIDI channel assigned to that sound.



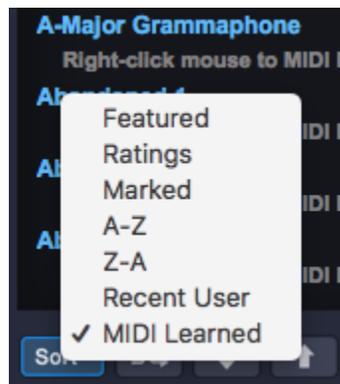
*TIP: If you use Multis when playing live, try using this feature to load them remotely.*

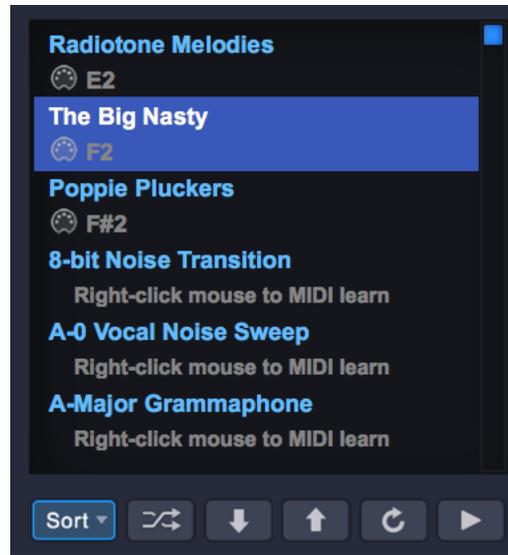
## Sorting

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.



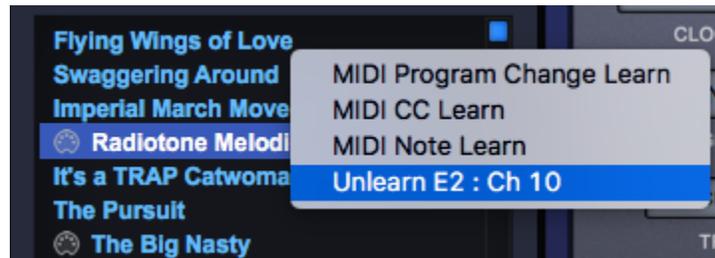
When sounds are sorted by “MIDI Learned” order, the MIDI-Learned sounds will move to the top and their assigned MIDI message will be displayed underneath their names.



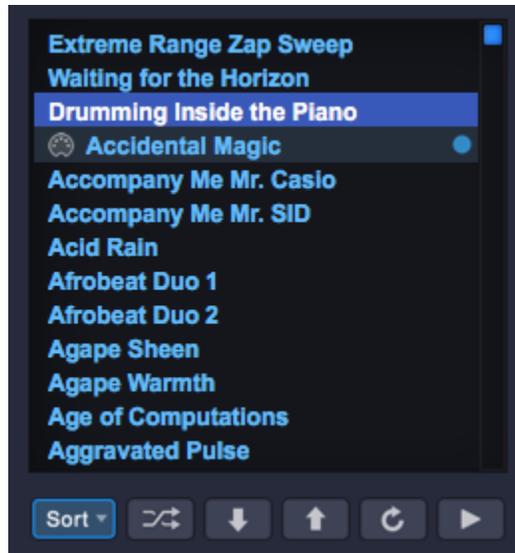


## Unlearning

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

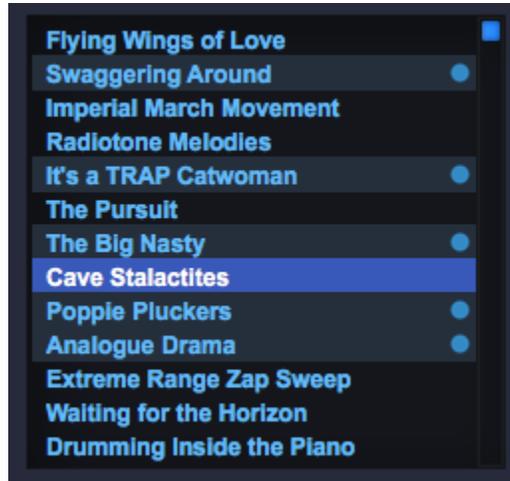


The MIDI connector icon will then be removed and the sound can then be assigned to another remote MIDI assignment.



## 5.3.9. Marking Sounds

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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.

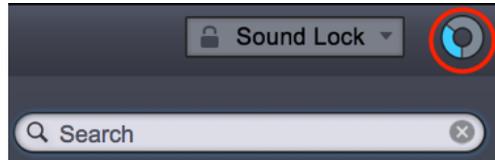
If you want to share the marked sounds, select “[Share Sounds](#)” from the Utility menu or press the “Share” button in the Full Browsers. After the sharing process is complete, the marks will be cleared.

**NOTE:** This method allows you to share only one type of sound of a time (Multis, Patches, or User Soundsources), depending on what 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 marked sounds to Project.” When a sub-menu shows up listing your projects, select the project you want to add sounds to. After doing this, the marks will be cleared.

## 5.3.10. Memory Meter

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### 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 enable the Lite Version of Patches, or reduce the Pre-Load Memory parameter on the System Page.

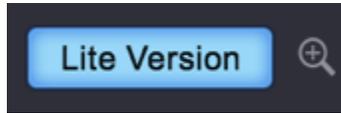


The circular meter is a smaller version of the linear meters that are found on the System Page and the Lite Version Zoom Page in the Patch and Multi Browsers.

**NOTE:** *If you set a Memory Limit on the System Page, this gauge will show the amount of memory used relative to the selected limit. For example, if you set the limit to .5Gb, and load .4Gb of sample data, the gauge will show roughly 80 percent full, even if you have far more system memory available.*

## 5.3.11. Lite Version

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

Enabling the Lite Version Button lets you reduce, or “thin,” the number of samples that are loaded with a Patch or Multi.

When this button is enabled, the thinning settings from the Lite Version Options Zoom are applied.

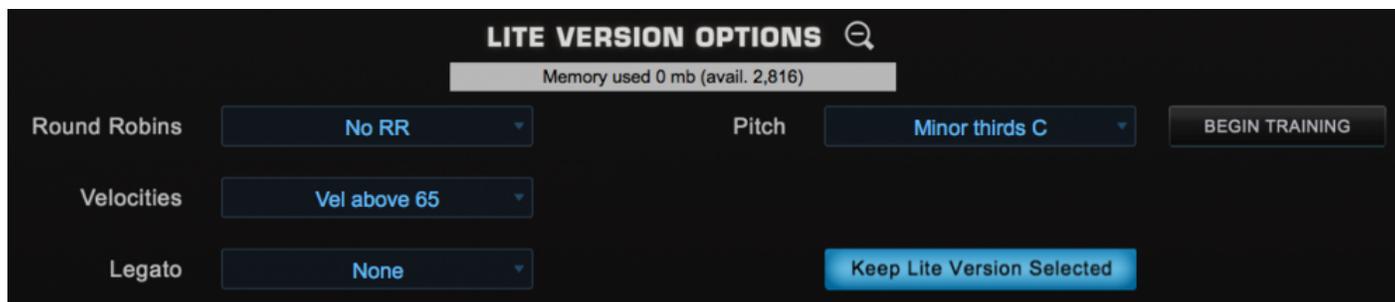
This feature is especially useful when loading [Satellite Instruments](#) (like Keyscape or Trilian) into Omnisphere. Many of those sounds can be quite large and contain thousands of samples, with some being over 2 Gigabytes in size. These can place a heavy demand on available memory and take longer 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 reset to its default disabled state when you close the Browser. To keep it enabled, select the “Keep Lite Version Selected” option in the Lite Version Options Zoom pane.*

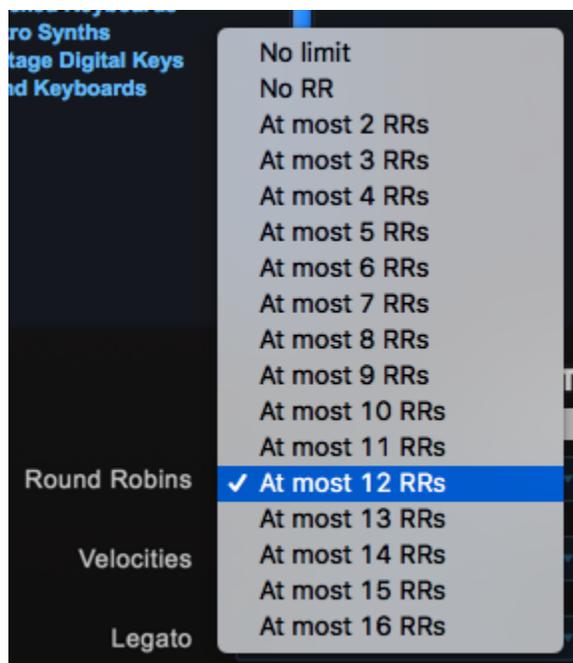
### Lite Version Options Zoom Pane



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

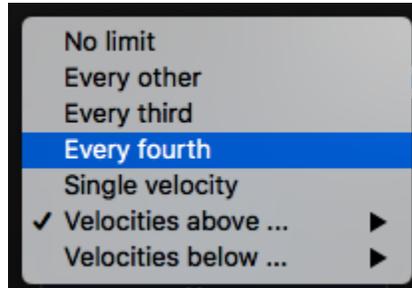


Soundsources can sometimes include a large number of [Round Robin](#) samples per zone, and can add significantly to the size of the Soundsource. This option lets you control the number of Round Robin samples that are loaded with the Patch or Multi.

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

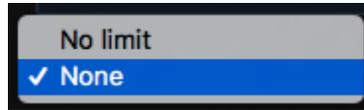


Soundsources may also contain a large number of velocity-switching samples mapped across many regions of the entire keyboard range. This setting provides a variety of options for reducing the number of velocity-switched samples that are loaded with any Patch or Multi. To apply Velocity thinning, select from the options in the drop down menu.

- **No Limit**  
Will load all Velocity-switched samples.
- **Every other**  
Will load every other Velocity-switched sample.
- **Every third**  
Will only load every third Velocity-switched sample.
- **Every fourth**  
Will only load every fourth Velocity-switched sample.
- **Velocities above**  
Selecting a value from this menu, for example, 64, will only load Velocity-switched samples mapped to a Velocity of 64 and above.
- **Velocities below**  
Selecting a value from this menu, for example, 100, will only load Velocity-switched samples mapped to a Velocity of 100 and below.

**NOTE:** *When thinning Velocities, there are no gaps in the sound. The remaining Velocity-switched samples will adjust to be triggered across the full Velocity range.*

## Legato

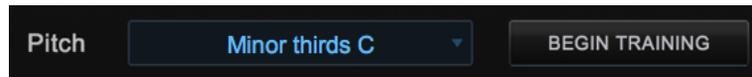


This option determines whether or not Legato Soundsources are loaded.

If “No limit” is selected, Legato Soundsources will be loaded. If “None” is selected, no Legato Soundsources will be loaded.

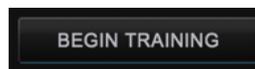
**NOTE: Omnisphere sounds do not currently contain Legato Soundsources. However, if you are loading Keyscape or Trilian sounds in Omnisphere, this feature becomes very important for overall memory management.**

## 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



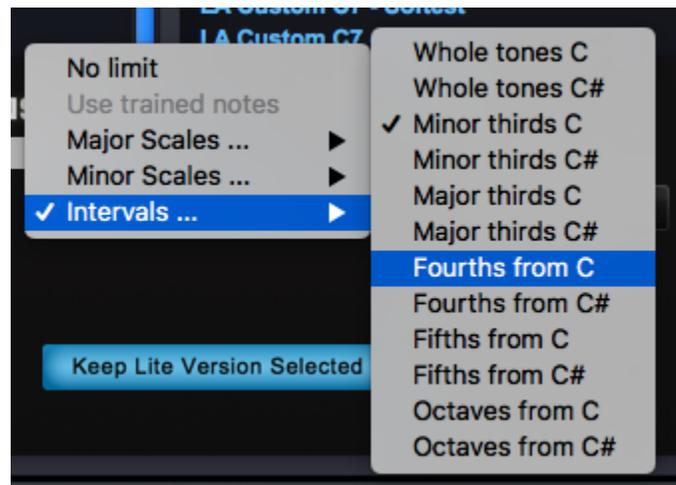
With Trained Pitch Thinning, you can load only the samples used during a performance.

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.

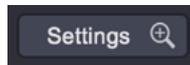
## Keep Lite Version Selected Button



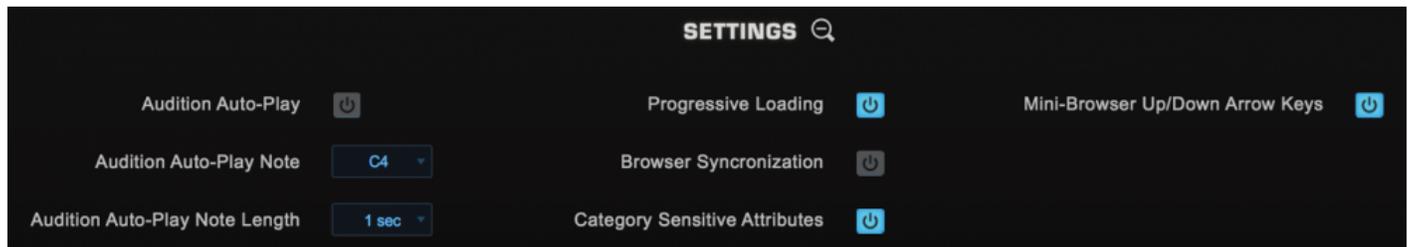
The Lite Version Button will reset to its default, disabled state when you close the Full Browser. When this option is enabled, the Lite Version Button in the Full Browser will remain enabled, even after you close it. Think of it as changing the default state of the Lite Version Button to “enabled.”

## 5.3.12. Browser Settings

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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 to 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 to 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.

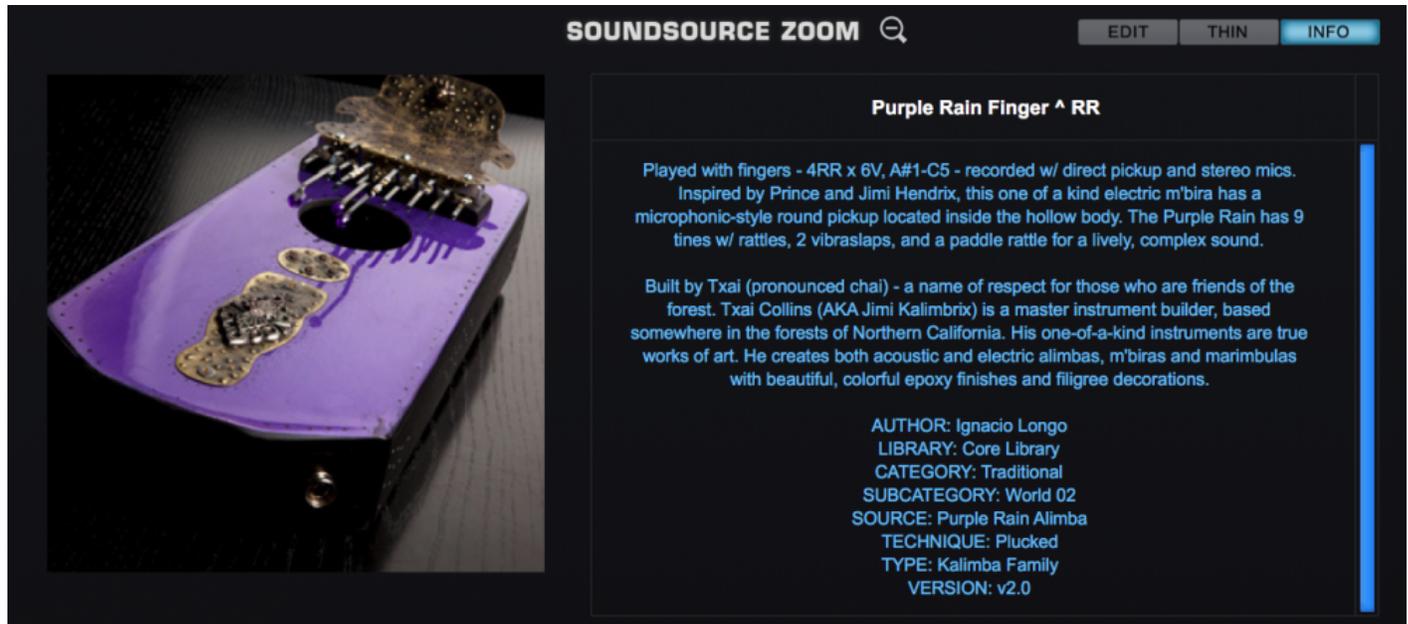
### **Category Sensitive Attributes**

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.

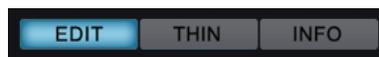
## 5.3.13. Info Zoom Views



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 contains similar information.

The Soundsource Zoom View will typically contain the most information, with details about the origin of the samples and suggestions for their application.

### Soundsource Zoom View: EDIT (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.)

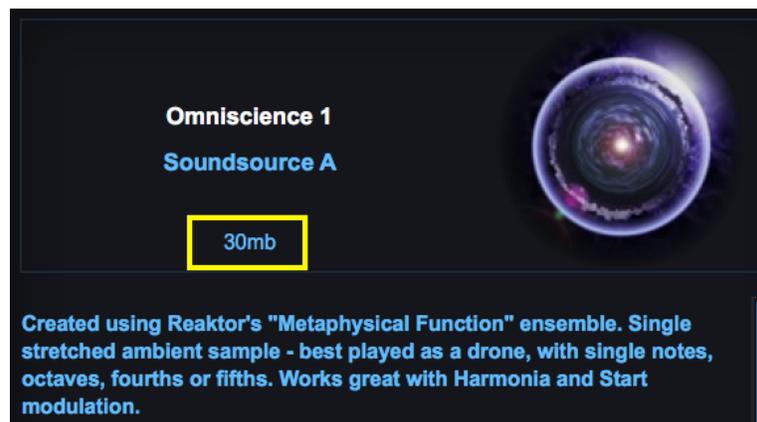
The Info Zoom pane shows the descriptions, keywords, and tags of the Soundsource. This is the default view when opening the Soundsource Zoom from the Soundsource Browser.

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 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

[MORE INFO](#)

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.

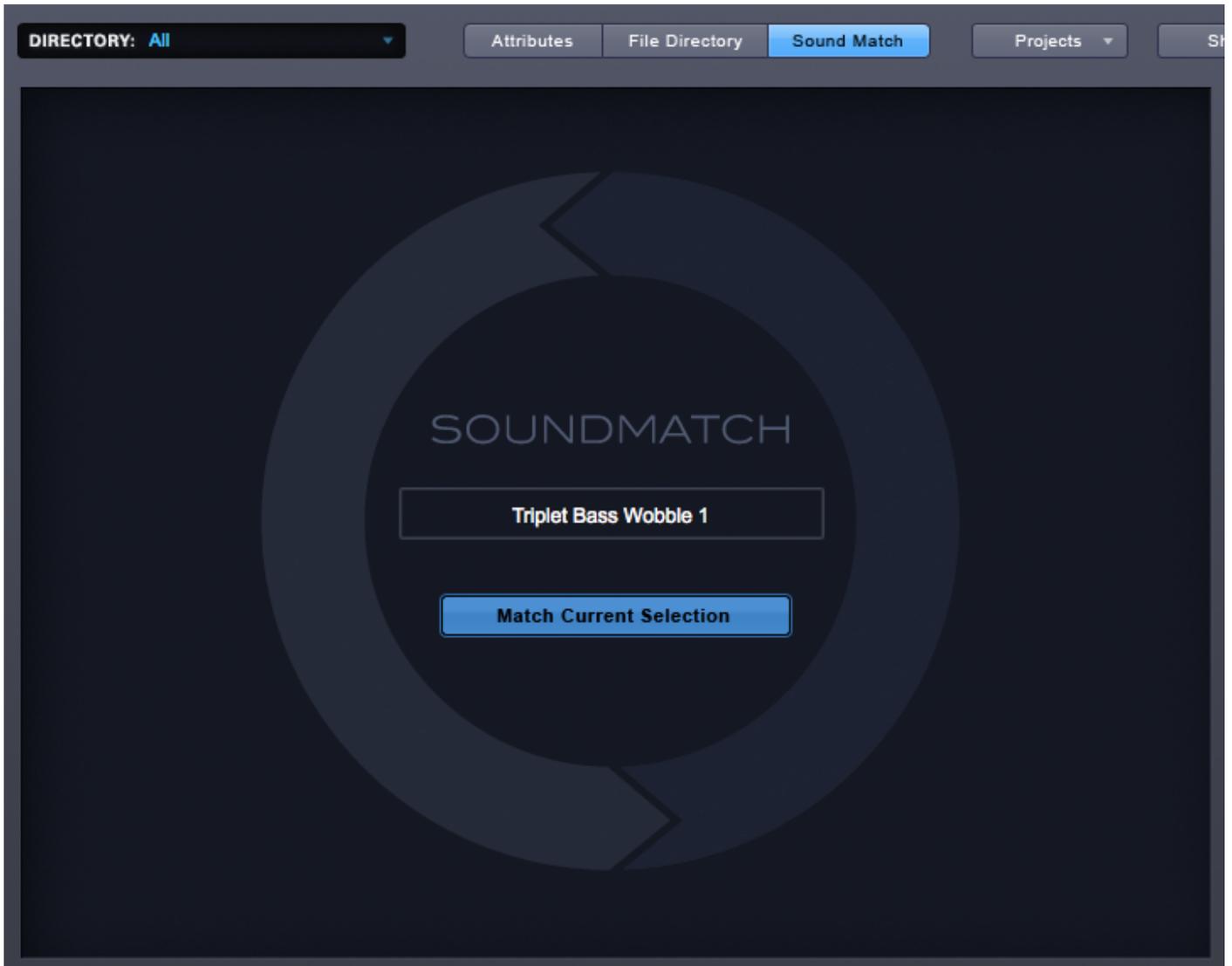
### Legal Info

[LEGAL INFO](#)

This will take you to a page that details all of the legal information about how Omnisphere's Soundsources can (and can't) be used as well as copyright information about how the samples and effects were obtained and licensed.

## 5.4. Sound Match

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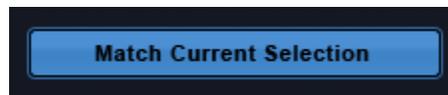


SOUNDMATCH is a powerful browsing feature that lets you explore the library in a brand new way. It allows you to find similar sounds with one simple click.

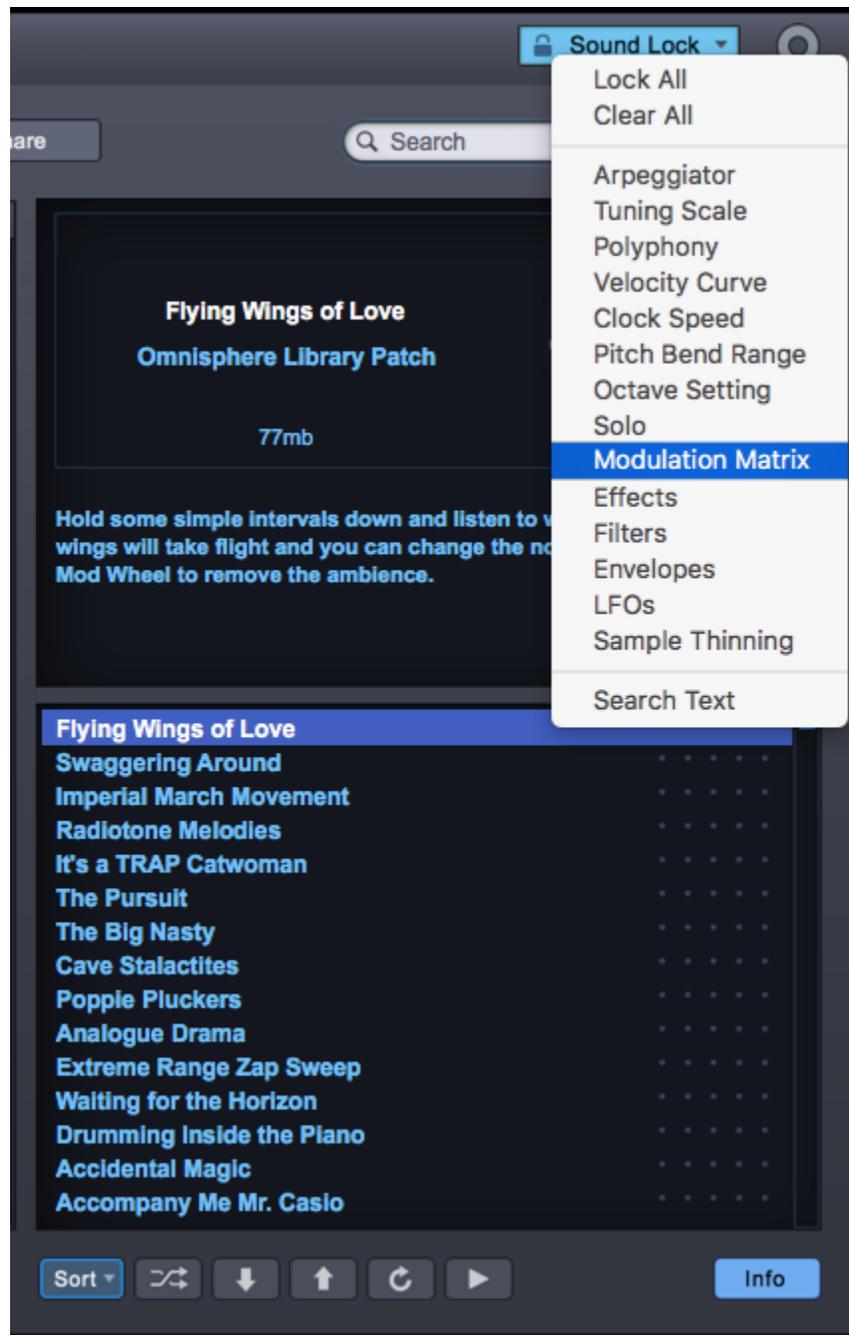
After loading a sound, you might want to search for related sounds to see if they might work better in a track. Selecting SOUNDMATCH instantly gives you all the sounds that are similar. SOUNDMATCH analyzes the tags of every sound and finds ones with comparable characteristics.



Pressing the SOUNDMATCH button will hide the Browser Filters 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.



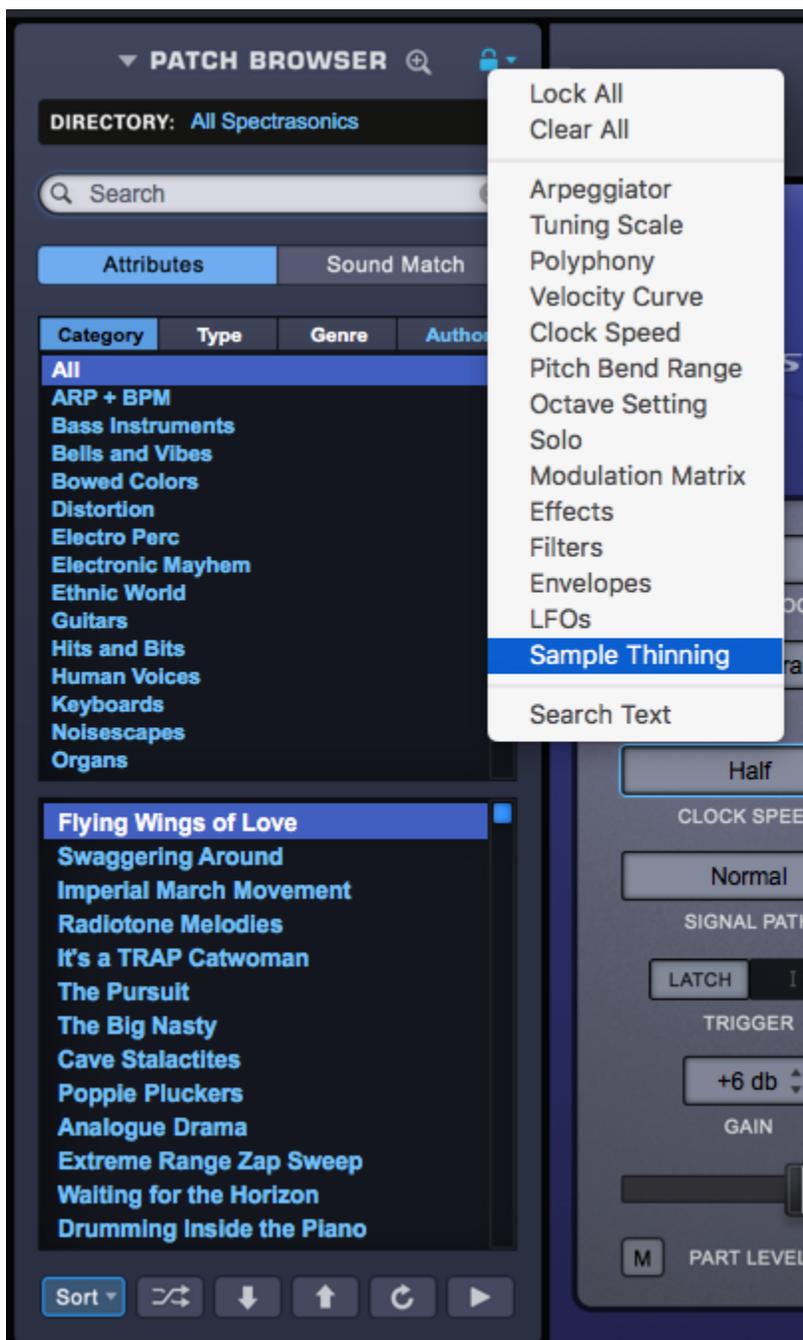
## 5.5. Sound Lock



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—his 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.



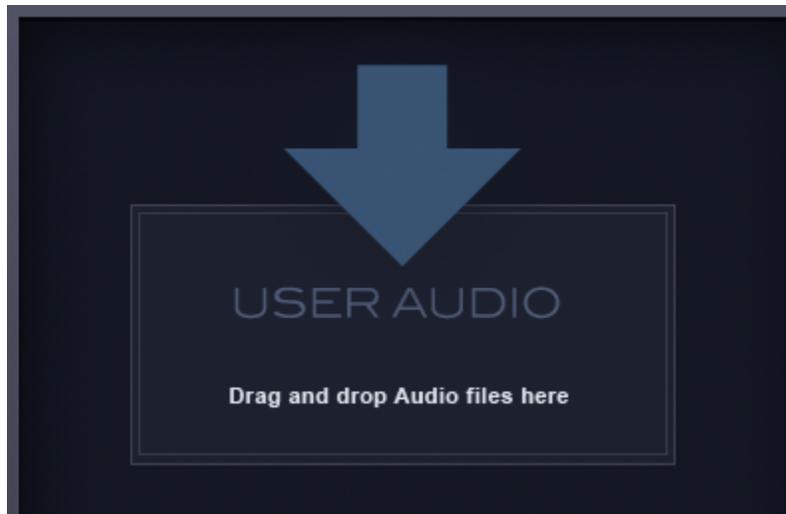
For example, if you are browsing Patches in the Arpeggiator section and select a sound that has an interesting arpeggiated pattern that you would like to apply to other Patches, select Arpeggiator from the Sound Lock menu. Now, any Patch you choose from any category (including non-rhythmic Patches!) 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.*

## 5.6. User Audio

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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.

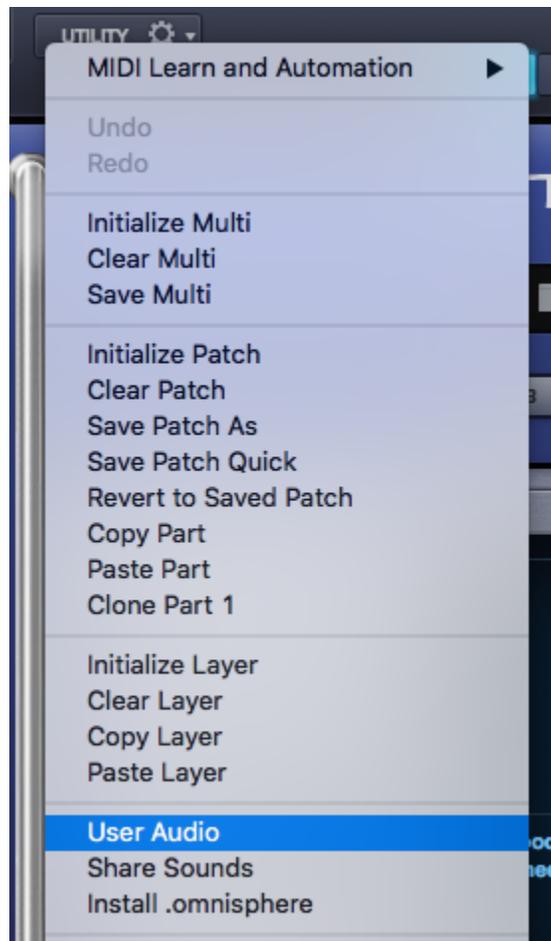
You might want to import a guitar track, a vocal, or even an entire mix and transform them into something completely different: a cinematic texture, a percussive sound or a synth lead. You can then save them as Patches and easily [Share](#) them with other users.

***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.*

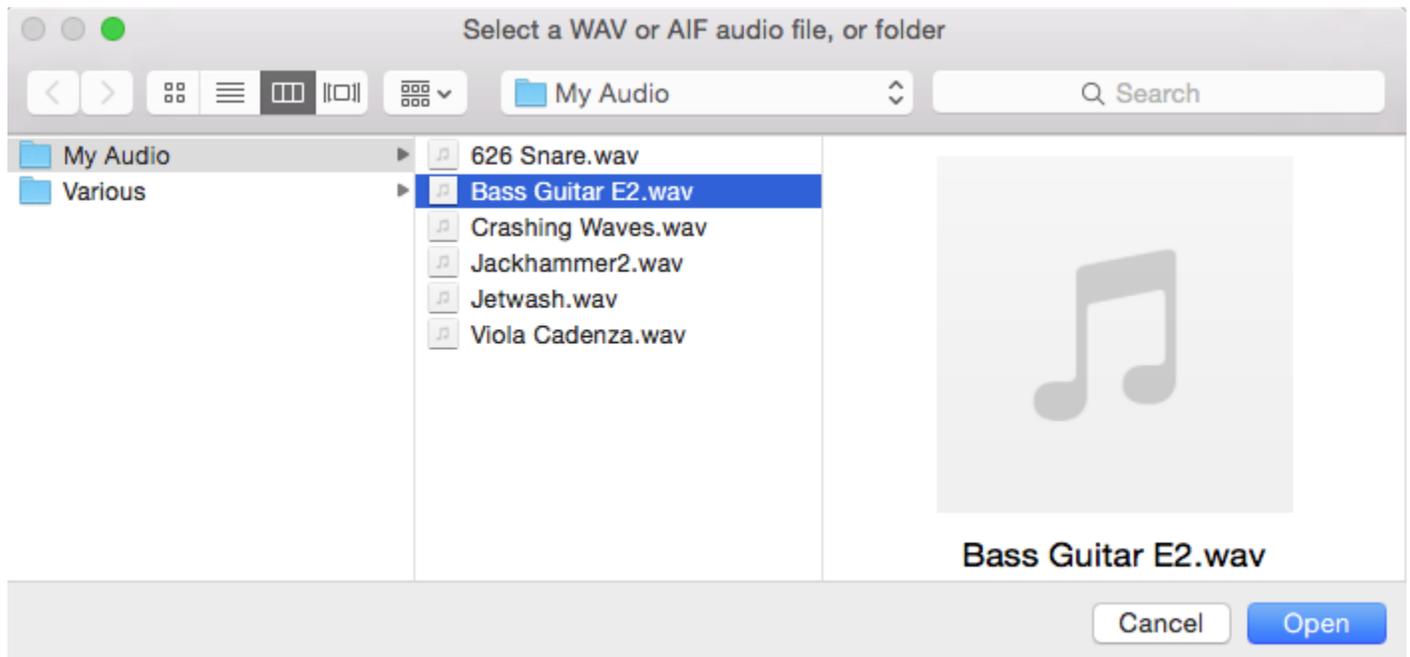
There are two places from which to import User Audio into Omnisphere: from the Utility Menu and from the Soundsource Browser.

### Utility Menu Shortcut

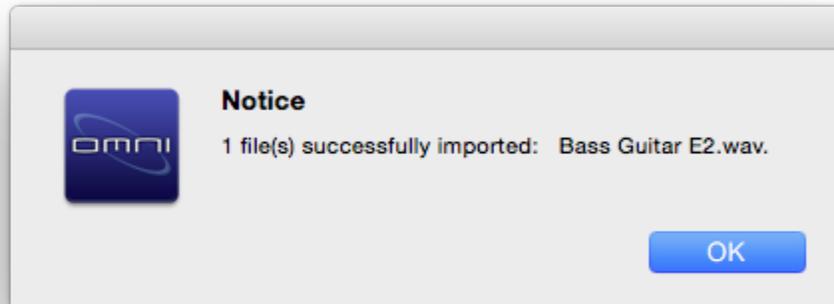


Selecting “User Audio” from the Utility Menu will display a File Dialog prompting you to navigate to the audio file or directory.

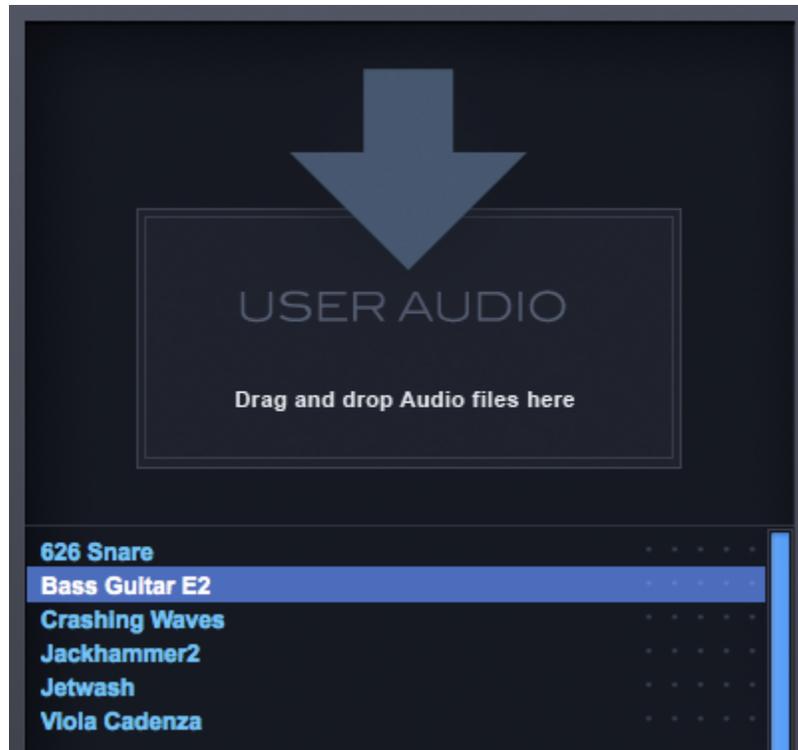
Navigate to the folder or file you wish to import and click “Open.” The import process will begin and they will be added to the User Soundsources directory in Omnisphere.



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.



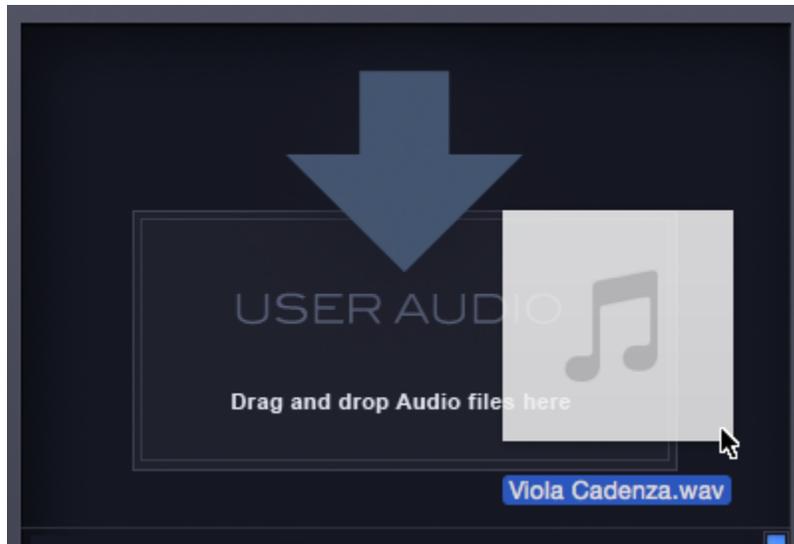
To delete the audio you imported, you can do so by locating it on your hard drive in the following directory:

**STEAM/Omnisphere/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**

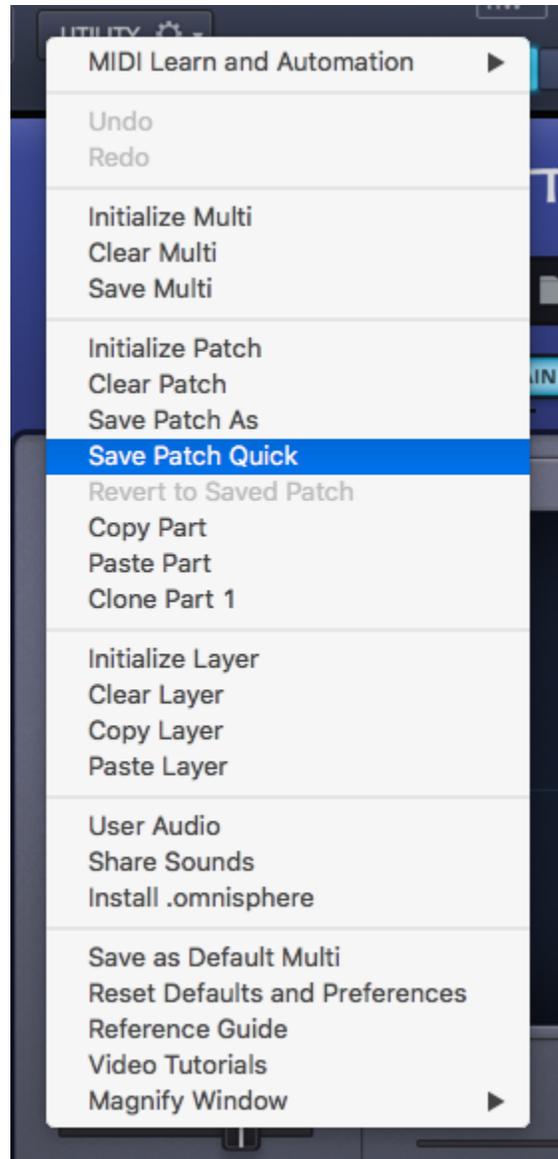


Audio can be imported via the Soundsource Browser. You can drag and drop audio files or folders into this area to automatically start the import process. You can also click on the pane to open a File Dialog prompting you to navigate to the audio file or directory. Clicking “Open” will start the import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

See [User Audio](#) for further details.

## 5.7. Saving & Managing Sounds

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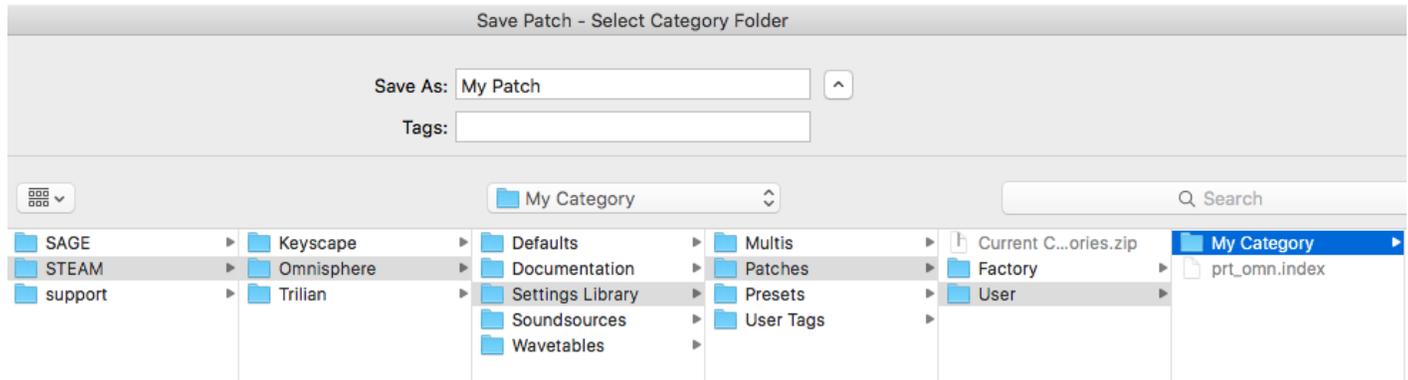


Omnisphere offers a flexible way to manage custom Patches and Multis. You can create custom collections of sounds organized by project or style and they can be searched, selected, filtered, or shared using the Full Browsers.

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.

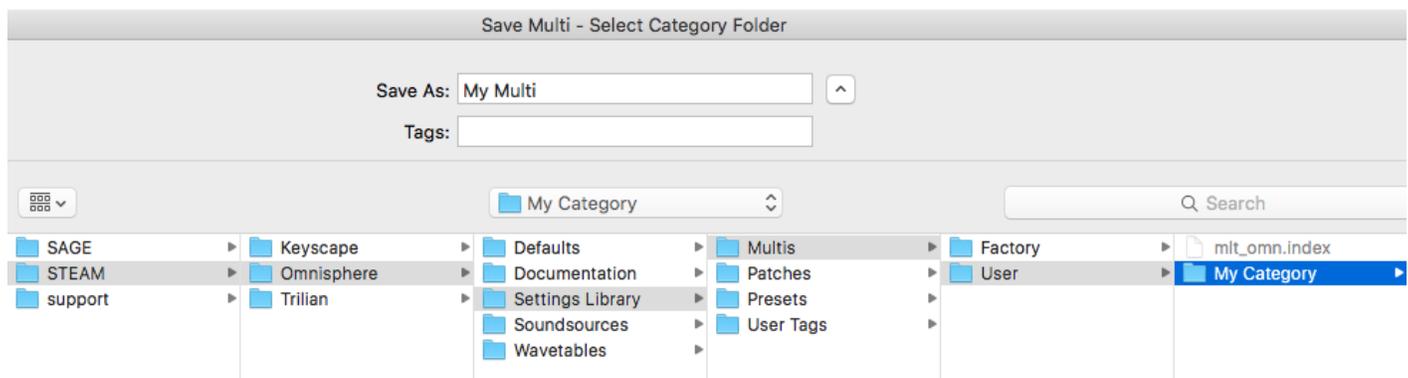
## Saving Patches & Multis



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.*

## 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

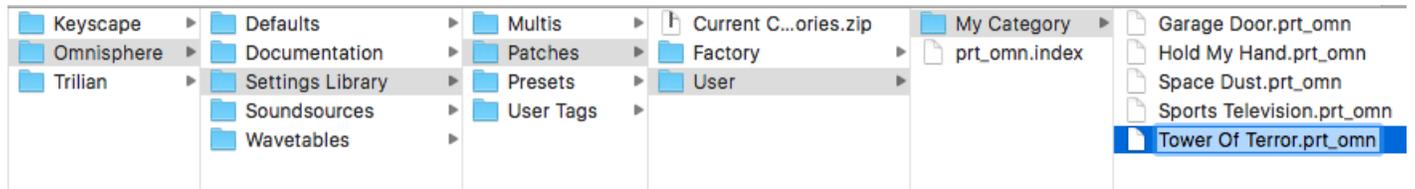
***NOTE: When you rename or create new folders at the top level, you must re-instantiate Omnisphere, then select the Refresh button in order for them to appear in Omnisphere's Browser.***

***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**

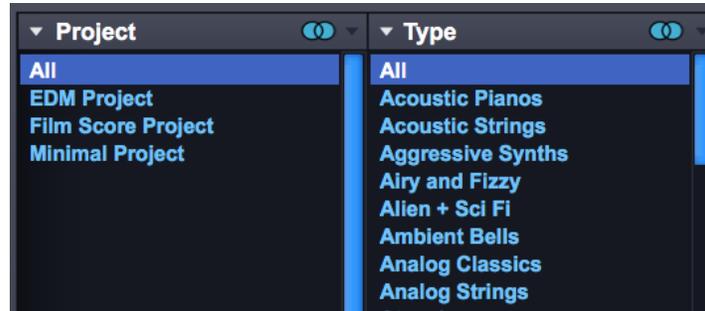


To rename, relocate, or delete a user-saved Patch or Multi, you must use the Mac Finder or Windows Explorer. Navigate to the User folder, locate the desired files, and rename, relocate, or delete them using your file manager. Refresh the appropriate Omnisphere Browser(s) to reflect the changes, by clicking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

## 5.8. Projects

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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 are recallable at any time.

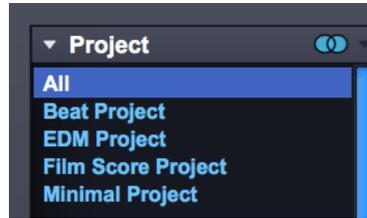
Projects use global tags that are saved automatically, and are always available for later recall. They will be present in any open instance of Omnisphere.

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

Please see [Sharing](#) for more info.

## 5.8.1. Using Projects

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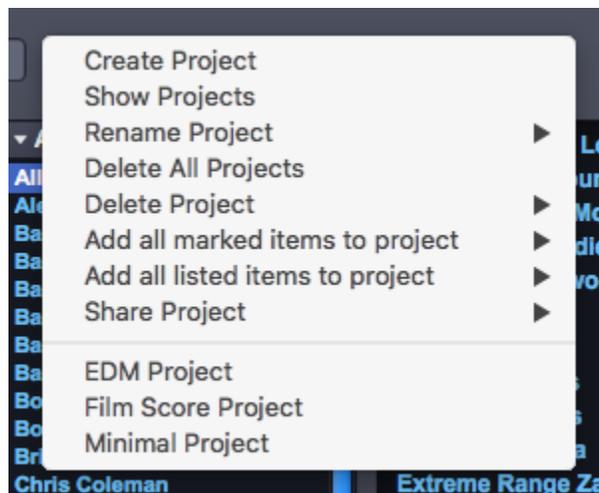
A Project is a user-defined collection of sounds, organized in a single group. This can be applied in many useful ways. For example, Projects can be created and named according to a current job, different sessions, songs, or styles.

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.

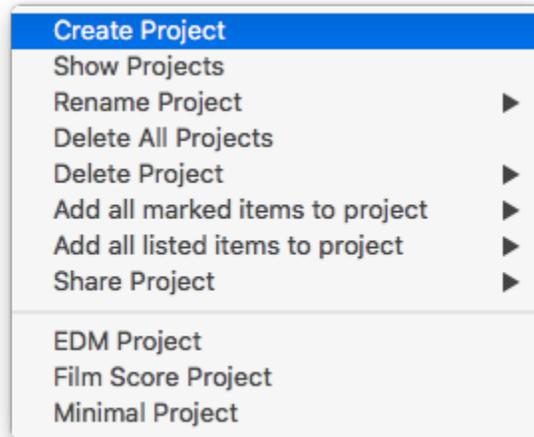
### CREATING, MANAGING, and ACCESSING PROJECTS

#### The Project / Sharing Menu

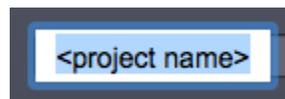


The Projects/Sharing Menu provides all of the options needed to create and manage your Projects. You can Create, Rename, and Delete Projects, Show Projects in the Browser, add or remove sounds from a Project, and [Sharing](#) your projects with a collaborator.

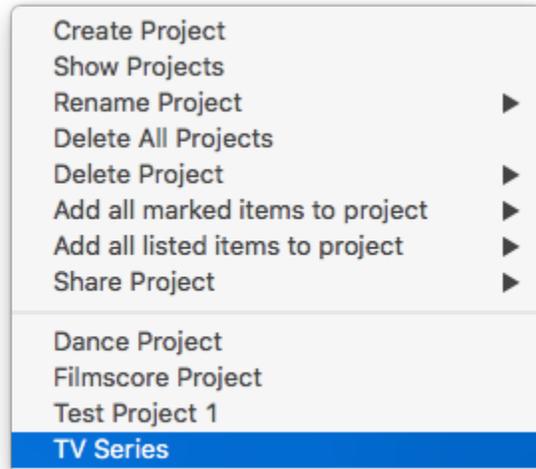
### Create a Project



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

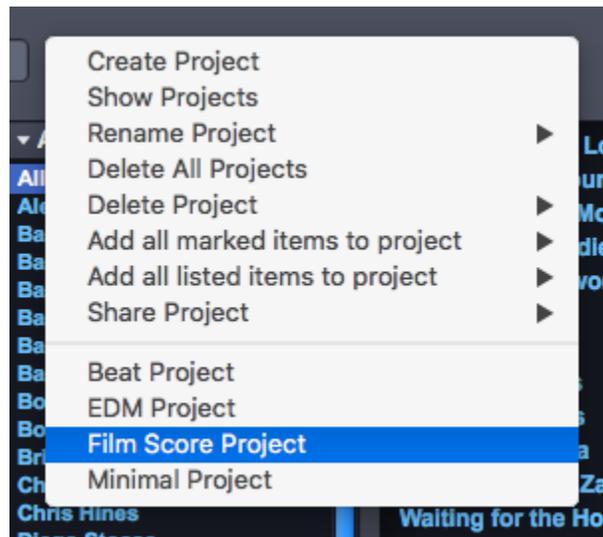


The Project is now created and available for adding sounds.



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

### Add a Sound to a Project



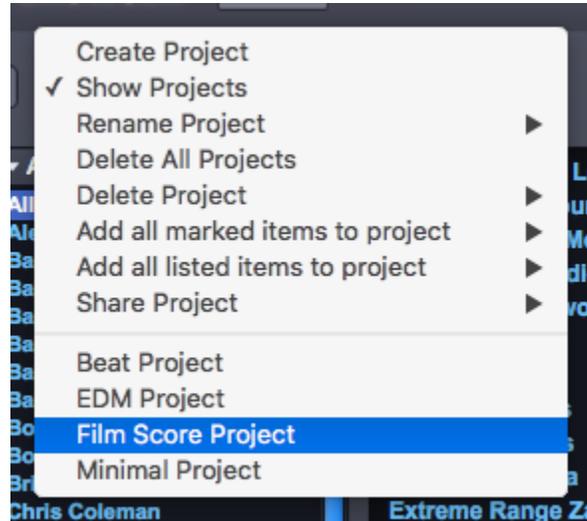
To add a sound to a Project, first select the sound you wish to add in the applicable Full Browser. Next, open the Project Menu and select the Project name to which you wish to add the sound. That's it!

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 it has been added to.

This makes it easy to see if a sound has been added to one or more Projects.

### Remove a Sound from a Project

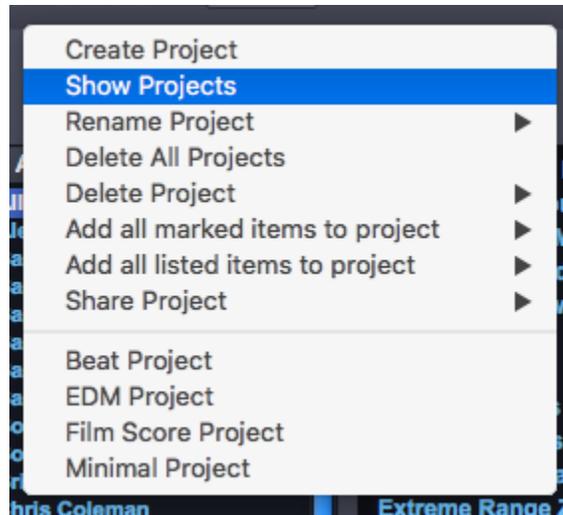


To remove a sound from a Project, first select the sound you wish to remove by selecting it in the Browser. Next, open the Project Menu and select the Project name you wish to remove the sound from (there should be a checkmark next to the Project name). To confirm that the sound was removed from the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

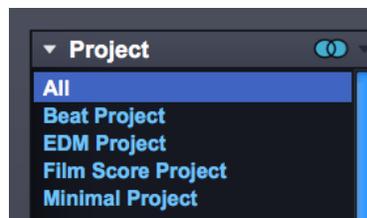
### Show Projects

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.



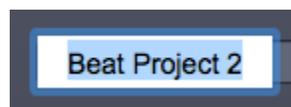
The left-most attribute filter will change from “Category” to “Project,” and all of your Projects will show up in that column. Select a Project from the Project list, and your Browser will display only that Project’s sounds.



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

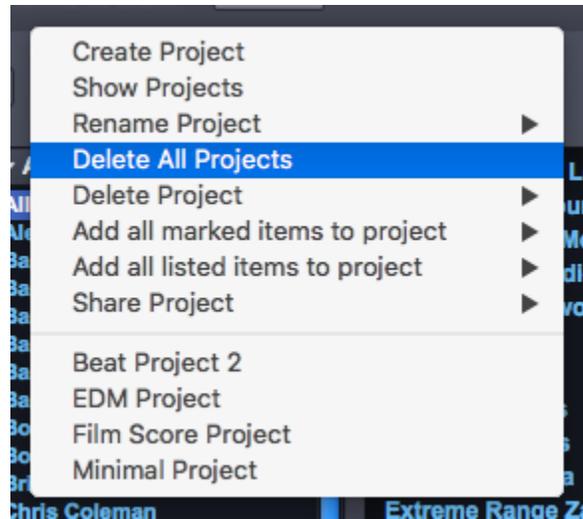
You can also switch between displaying Projects or Categories by selecting the left-most attribute filter menu, and selecting “Project” or “Category.”

### Rename Project

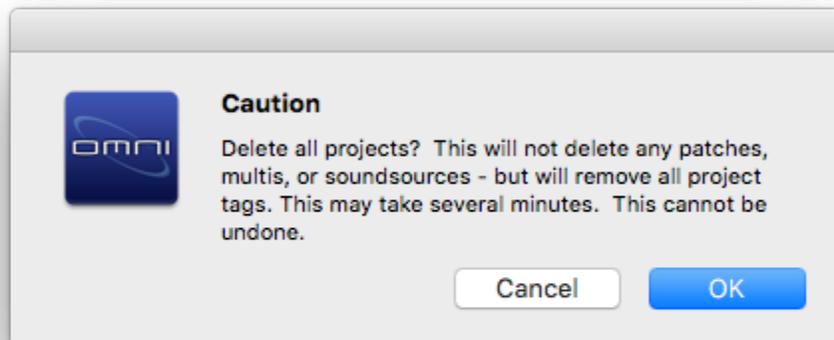


You can rename a Project by selecting it from the “Rename Project” sub-menu.

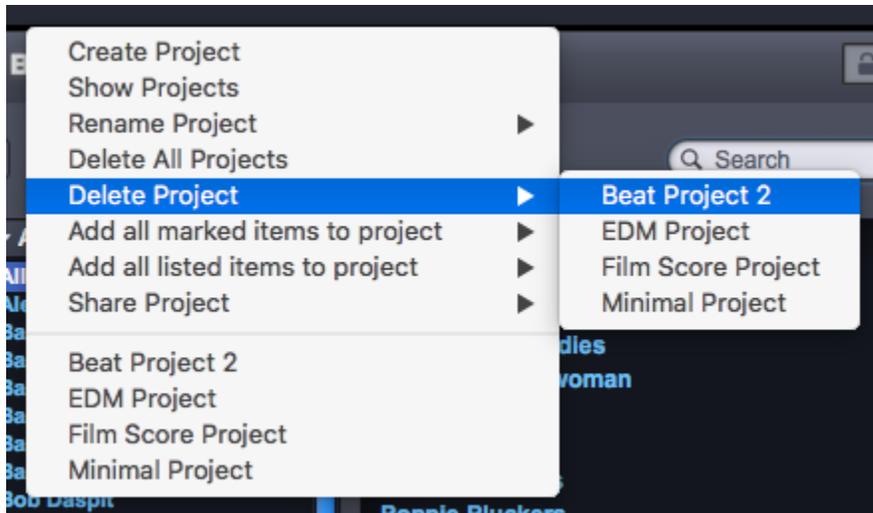
### Delete All Projects



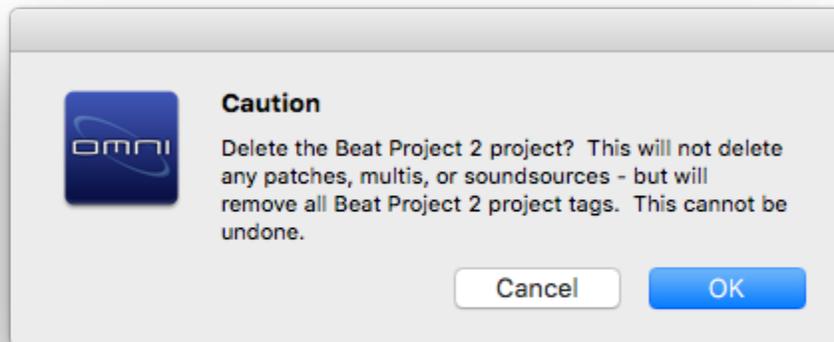
To delete all Projects, open the Project Menu and select “Delete All Projects.” A confirmation pop-up will appear, asking you to confirm the deletion. Selecting OK will delete the Project.



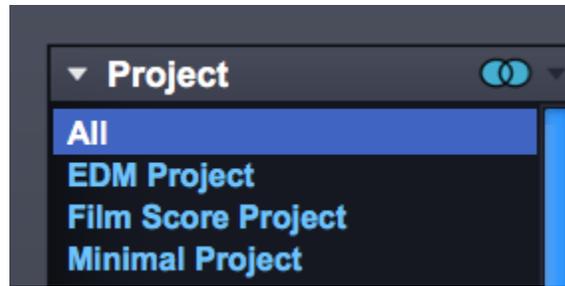
## Delete Project



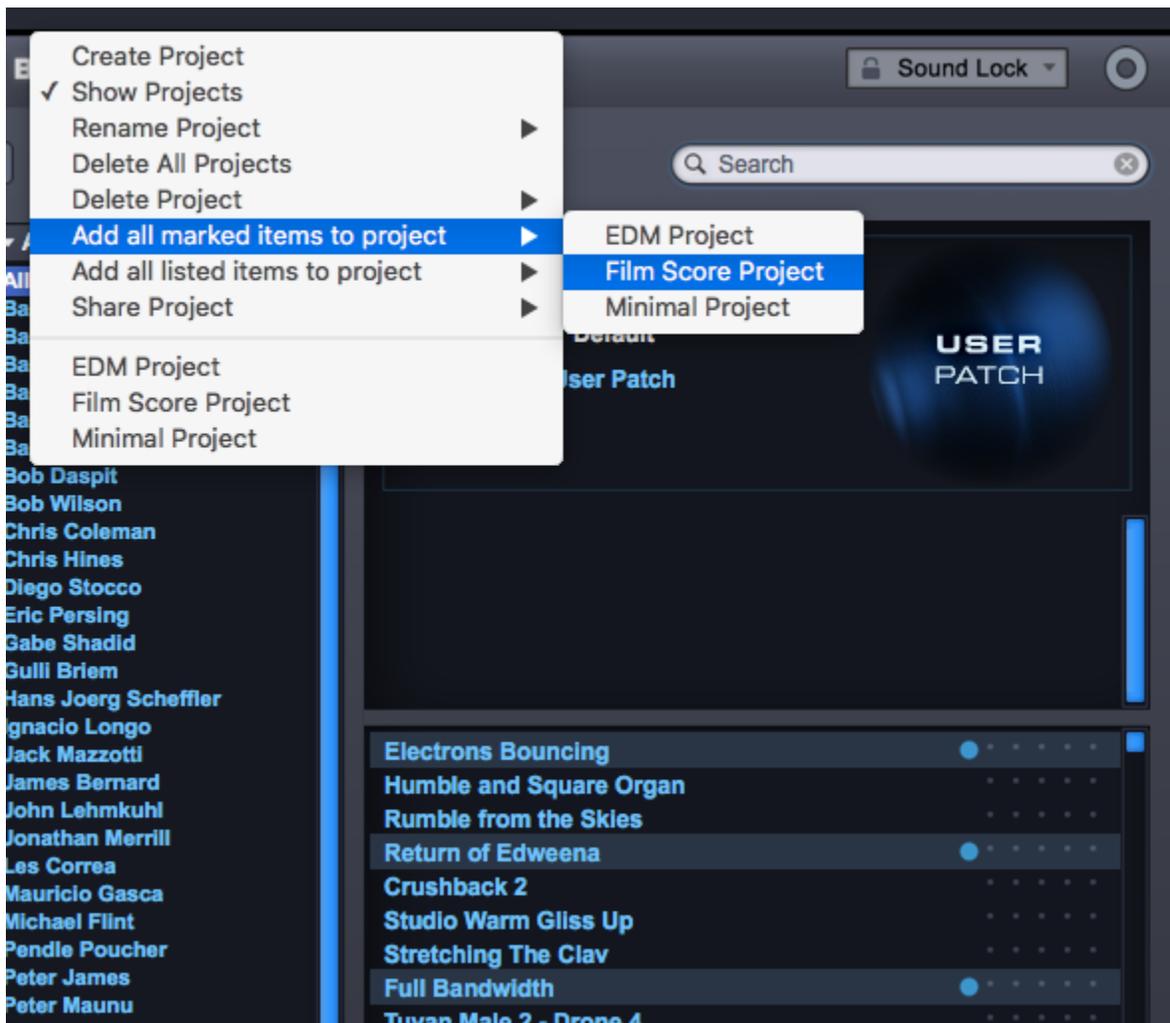
To delete a Project, open the Project Menu and select the Project you wish to delete from the “Delete Project” sub-menu. A confirmation pop-up will appear, asking you to confirm the deletion. Selecting OK will delete the Project.



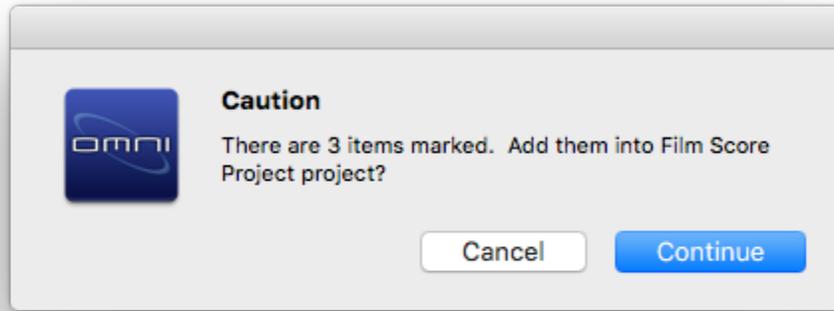
Deleting a Project doesn't remove or delete any sounds from the library. It simply removes the tags assigned to that Project. If you have the same Project also being used in the Multi, Patch and Soundsource Browsers, you will have to delete the Project separately in those Browsers.



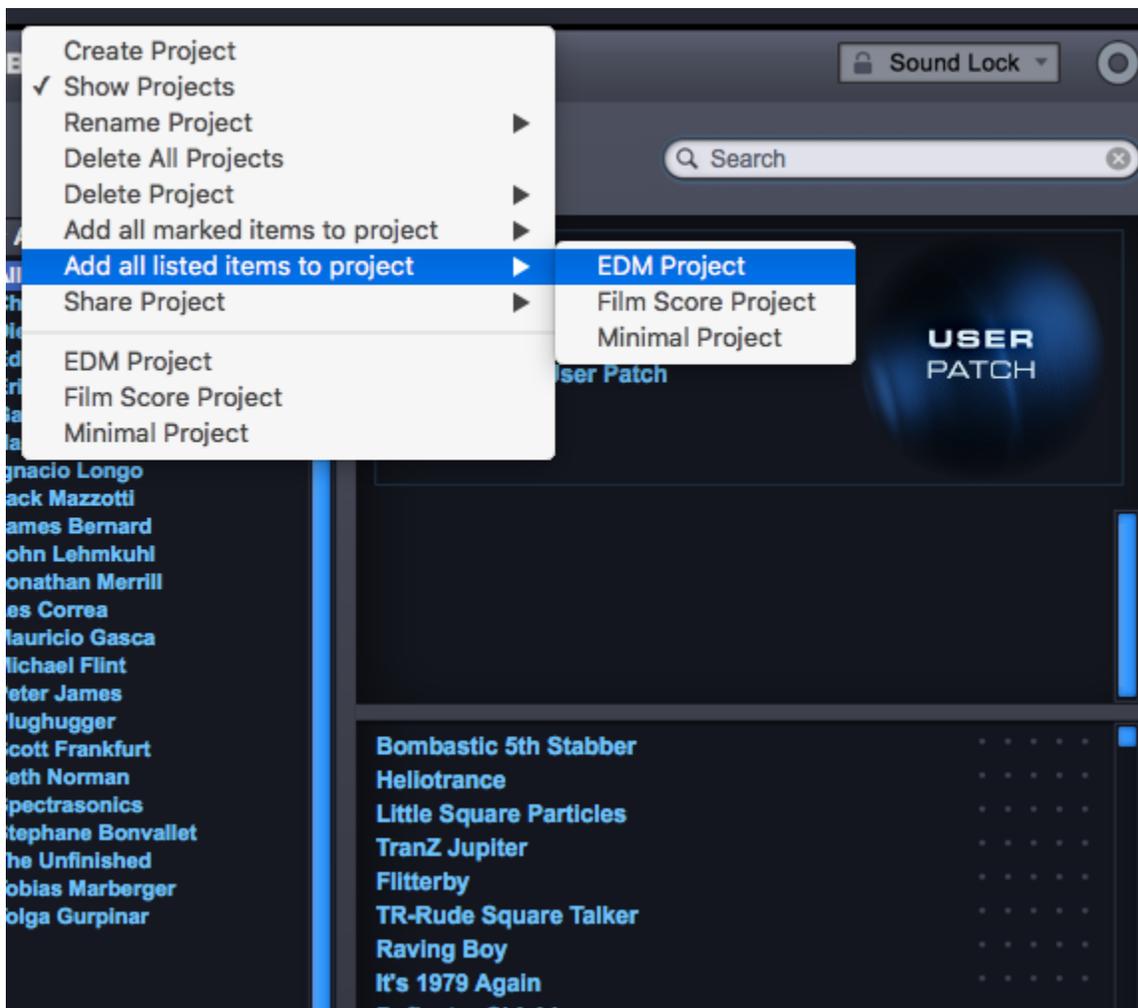
### Add all marked items to a Project



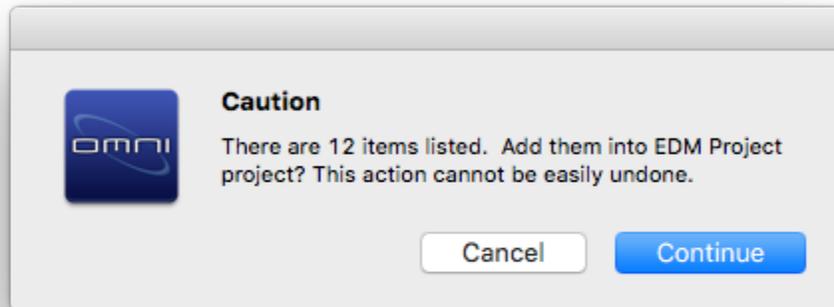
Sounds can be marked so multiple ones can be added to a Project in one step. Open the Project Menu and select “Add all marked items to Project.” From sub-menu that shows up select the Project to which you want to add the marked sounds. A confirmation pop-up will appear, asking you to confirm the action.



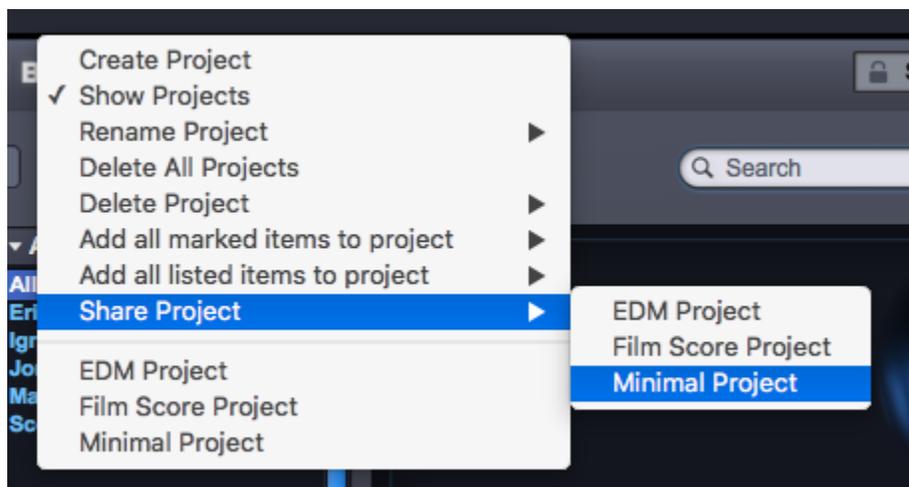
**Add all listed items to a Project**



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



“Share Sounds” and then a Project from the fly-out menu to create an .omnisphere file containing sounds you can share with other Omnisphere users. See [Sharing Sounds](#) for more information.

## 5.9. 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.

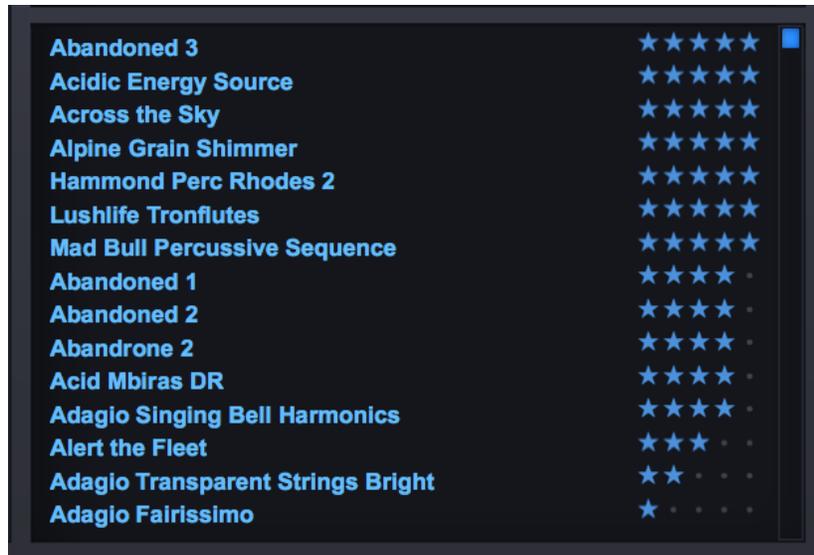
By selecting only the Rating Dots, you can rate sounds without loading them. This allows you to rate a large number of sounds very quickly, without having to load each one as you go along.

## Changing or Removing a Rating

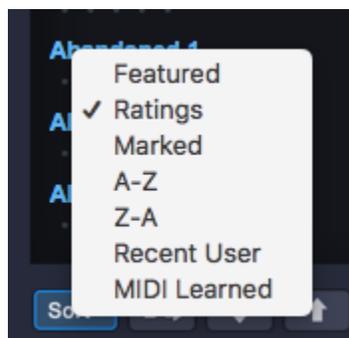
After you have added a Rating to a sound, you can easily change it by selecting more or fewer stars.

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



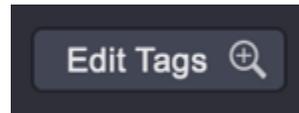
To see your Favorites sorted according to their Ratings, open the Sort Menu in the Browser Footer and select “Ratings.” The sounds in the Browser window will then be displayed with your favorite sounds at the top of the list, in order of their Rating. The top-rated (5-star) sounds will appear first,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

## 5.10. Edit Tags

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



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

EDIT TAGS Part 1

To maintain an excellent browsing experience, take a moment to review the tags below. Attributes in the Red Box are required.

ATTRIBUTE TYPES	OVERVIEW	ASSIGNMENTS
<div style="border: 1px solid red; padding: 2px;"> <div style="background-color: #2d3748; color: white; padding: 2px; text-align: center; font-weight: bold;">Type</div> </div>	Analog Classics, Bright Pads	<ul style="list-style-type: none"> <li>Acoustic Strings</li> <li>Airy and Fizzy</li> <li>Analog Classics</li> <li style="background-color: #2d3748; color: white; padding: 2px;">Bright Pads</li> <li>Epic Pads</li> <li>Euro Pads</li> <li>Evolving Motion</li> <li>Fifth Pads</li> <li>Flutey Colors</li> <li>Glassy Colors</li> <li>Hollow and Pure</li> <li>Hybrid Strings</li> <li>Nostalgia</li> <li>Organic Pads</li> <li>Organish</li> <li>Soft and Warm</li> <li>Sparkling Pads</li> <li>Sweeping Pads</li> <li>Swelling</li> <li>Vibrato Synths</li> <li>Vox Humana</li> <li style="color: red;">Analog Strings</li> </ul>
Genre	Ballad, Electronic, Pop, Rock	
Complexity	Simple	
Author	Eric Persing	
Dev	v2.0 b8	
Version	Omnisphere 2 Library	

KEYWORDS

NOTES

Lovely DSP oscillator pad that morphs between saw and square waves.

WEBLINK

MORE
CATEGORY
SORT

DIRECTORY  
Omnisphere Library

CATEGORY  
Pads + Strings

NAME  
Analog Shapeshifting Pad

CANCEL
SAVE

It is not required to create Tags for custom sounds, but it's strongly recommended to add them, as Tags will make them easier to find when browsing and to share with other Users.

**NOTE:** You won't be able to open the Tag Editor for a Patch or Multi unless it has already been saved to the Library.

## 5.10.1. Attributes

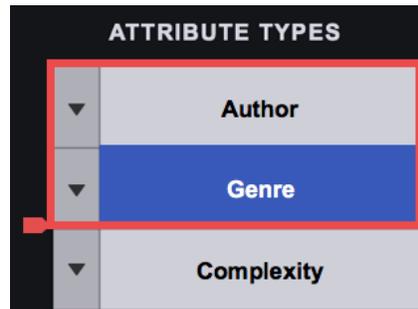
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### ATTRIBUTE TYPES

All of Omnisphere's factory sounds have at least three ATTRIBUTE TYPES assigned to them, and can have up to eight ATTRIBUTE TYPES assigned. Each ATTRIBUTE TYPE can have multiple ATTRIBUTE ASSIGNMENTS.

### Required & Optional Types

There are two kinds of ATTRIBUTE TYPES: Optional and Required. Any ATTRIBUTE TYPE highlighted by a thin red box indicates that it is Required—meaning that Attributes must be assigned to them. Optional ATTRIBUTE TYPES (those without a red box) don't require Attributes assigned to them.



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.

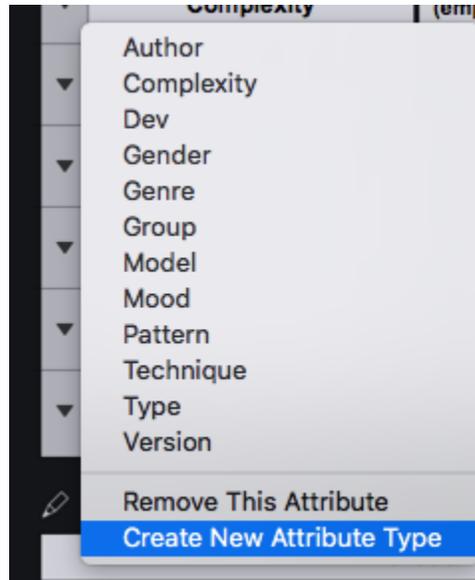
The Required indicator can be expanded or contracted on custom sounds, however Required ATTRIBUTE TYPES in factory presets cannot be changed.

### 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.

ATTRIBUTE TYPES		OVERVIEW		+	ASSIGNMENTS
▼	Author	Bob Daspit			Not Weird Really Weird Sorta Weird
▼	Complexity	Level 2 - Medium			
▼	Type	Edgy Synth			
▼	Weirdness	Really Weird			

### Removing Attributes

The “Remove This Attribute” option is available from the ATTRIBUTE TYPES drop-down menu, and when selected, will do one of two things. If the Attribute Type is a factory Attribute Type (e.g. Author, Complexity, etc.) then all custom ASSIGNMENTS will be removed, but not the Attribute Type itself. If it's a User-created Attribute Type, it will remove it and all of its ASSIGNMENTS.

## 5.10.2. Overview



The Overview area displays all of the ASSIGNMENTS for each Attribute Type.

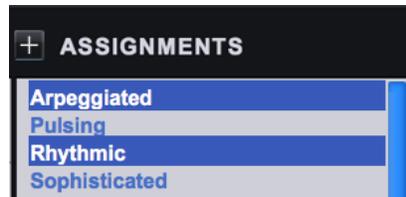
### Reset All



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.

## 5.10.3. Assignments

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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 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.

ATTRIBUTE TYPES		RESET ALL						+ ASSIGNMENTS	
▼	Author	Acoustic Pianos	Bells Chimes	Bowed Decay	Boys Choir	BPM Polyphonic	Classical Choir		
		Acoustic Strings	Bells Digital	Bowed Deep	BPM Analog	BPM Pulsing	Classical Soloists		
		Aggressive Synths	Bells Ethnic	Bowed Drones	BPM Arps	BPM Retro	Clavinets		
▼	Genre	Airy and Fizzy	Bells Gamelan	Bowed Ebowing	BPM Bass	BPM Reverse	Clavs		
		Alien + Sci Fi	Bells Glockenspiel	Bowed Electric Toothbrush	BPM Bells	BPM Sequence	Combinations		
		Analog Classics	Bells Gothic	Bowed Fabric	BPM Combo	BPM Sidechain	Comping Synths		
▼	Group	Analog Strings	Bells Hollow	Bowed FX - Oneshot	BPM Distortion	BPM Strings	Complex Motion		
		Atonal	Bells Hybrid	Bowed FX - Sustain	BPM Electronic	BPM Sweep	Crushed		
		Bass - Acoustic Bass Guitar	Bells Motion	Bowed Glass	BPM FX	BPM Textures	Dance Synths		
▼	Model	Bass - Acoustic Upright	Bells Music Box	Bowed Guitar	BPM Gated	BPM Vox	Darkness		
		Bass - Electric Fingered	Bells Noise	Bowed Kalimba	BPM Guitar	BPM Wobble	Deep Stuff		
		Bass - Electric Fretless	Bells Retro	Bowed Mallet	BPM Harmony	Brassy Pads	Deep Tones		
▼	Technique	Bass - Electric Muted	Bells Synth	Bowed Medieval	BPM Hits	Bright Pads	Digital Bells		
		Bass - Electric Picked	Bells Textural	Bowed Metals	BPM Keys	Calliope	Digital World		
		Bass - Electric Slapped	Bells Vibes	Bowed Octaves	BPM Leads	Cartoon and Gaming	Distorted Bass		
▼	Type	Bass - Electric Tapped	Belltone Keyboards	Bowed Piano	BPM Mallets	Celeste	Distorted Digeridoo		
		Bell Pads	Big Boomers	Bowed Pure	BPM Melodic	Celestial	Distorted Drone		
		Bell Textures	Bits + Hits	Bowed Rattle	BPM Organic	Chaos	Distorted FX		
▼		Bells Acoustic	Bowed Atonal	Bowed Reverse	BPM Pads	Cheese Factory	Distorted Guitaresque		
		Bells Ambient	Bowed Bass	Bowed Scrapes	BPM Perc Organic	Chordal Leads	Distorted Hits		
		Bells Analog	Bowed Banding	Bowed String	BPM Perc Synthetic	Circuit Bending	Distorted Kalimba		
▼		Bells Bows	Bowed Colors	Bowed Winds	BPM Plucked	Claps	Distorted Lead		

## 5.10.4. Category & Sort

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### 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](#)

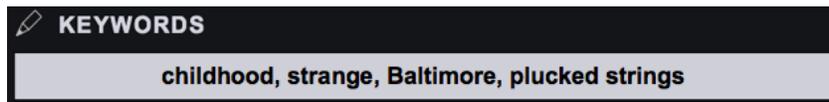
## 5.10.5. Keywords & Notes

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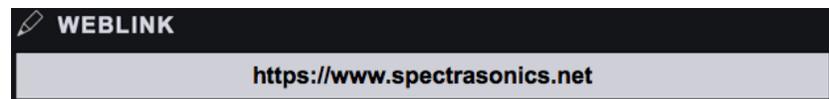
### Keywords

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

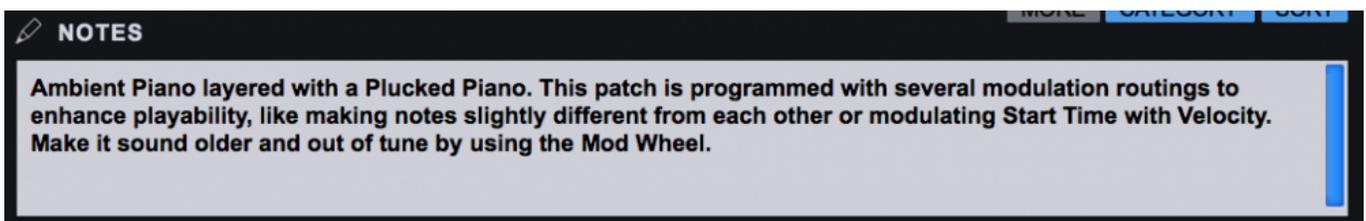


This will configure the weblink on the Patch Zoom or Multi Zoom page.

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](https://www.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.***

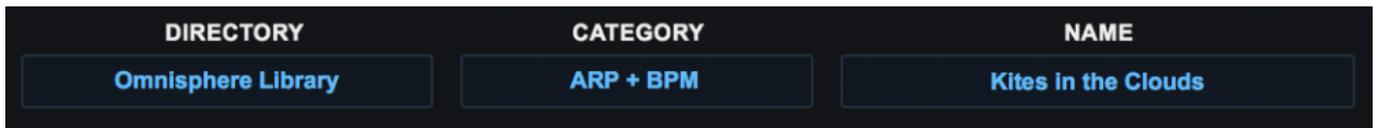
## 5.10.6. Edit Tags Footer

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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 by selecting the appropriate button.



**NOTE:** Saving the Tags also saves the Patch or Multi and any modifications that have been made to it.

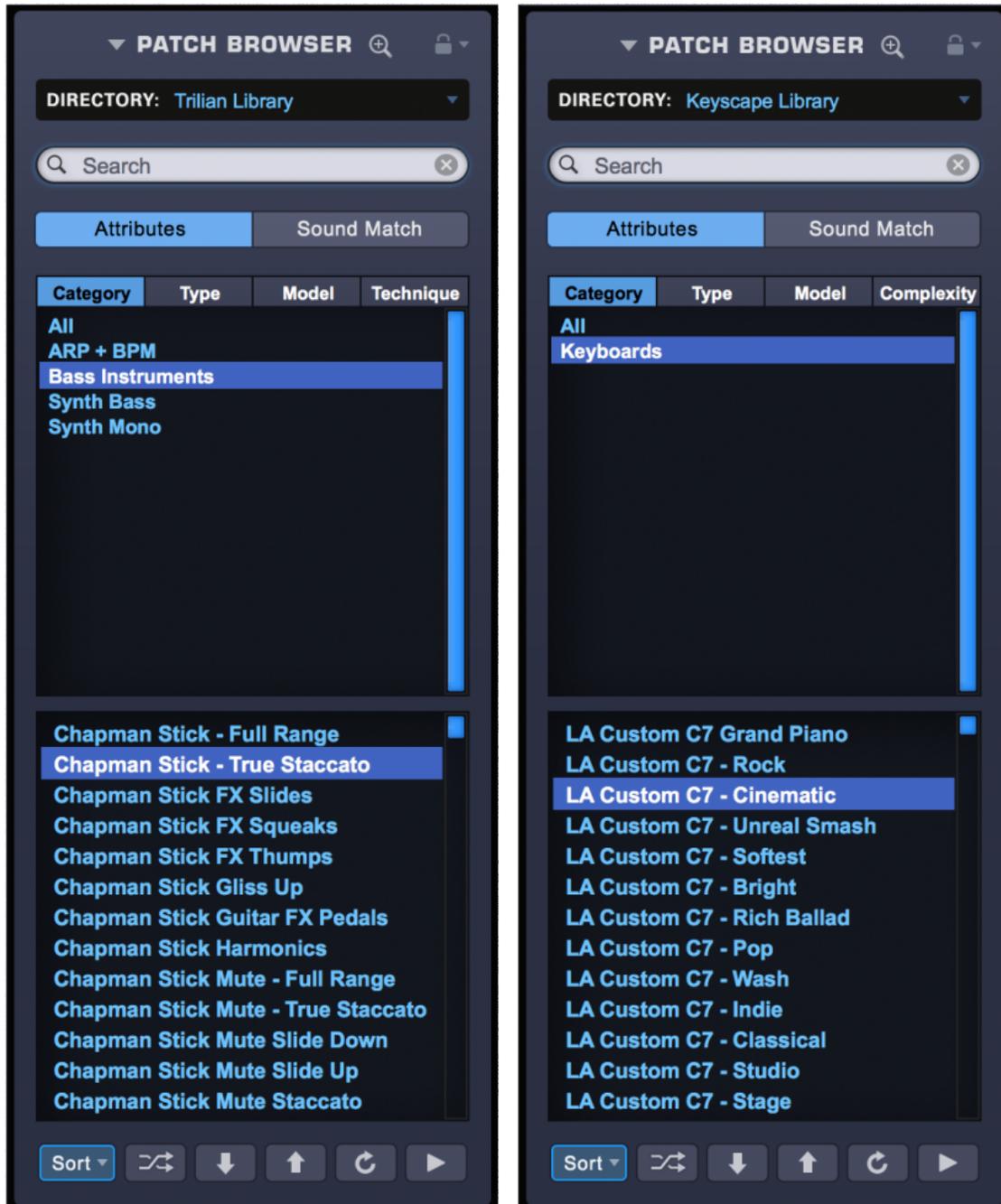
## 5.11. Loading Satellite Sounds

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!



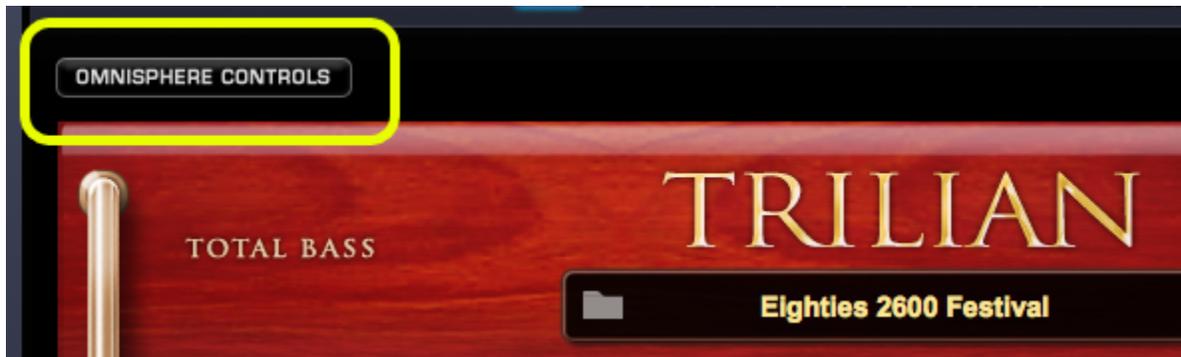
When either Keyscape or Trilian Patches are loaded in Omnisphere, the Main Custom Controls page will be automatically displayed when the Patch is loaded from the Mini-Browser or revealed when you close the Full Browser. Each Patch contains its own Custom Controls layout that brings together all the most 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:





## 6. 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.

## 6.1. Notes View

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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.



The screenshot shows the 'PATCH ZOOM' interface for the patch 'Fishing for Silver'. On the left is a vertical image of a school of fish swimming in clear, shallow water. The right side of the interface contains the following text:

**PATCH ZOOM** 🔍

**Fishing for Silver**

Incessant and persistent retro arp in chord mode that works very well with 3 and 4-finger chords.

The Mod Wheel modulates Harmonia Mix.

AUTHOR: Eric Persing  
LIBRARY: Omnisphere Library  
CATEGORY: ARP + BPM  
COMPLEXITY: Simple  
DEV: v2.0

GENRE: Ambient, Old School, Quirky, Film, Electronic, Indie, R&B / Soul, Pop, World Music

MOOD: Floating, Distant, Light, Dreamlike, Hopeful, Joyful, Nervous, Upbeat  
TYPE: BPM Organic, BPM Polyphonic, BPM Retro, BPM Textures  
VERSION: Omnisphere 2 Library  
OSC TYPE: Sample Only

MORE INFO      LEGAL INFO

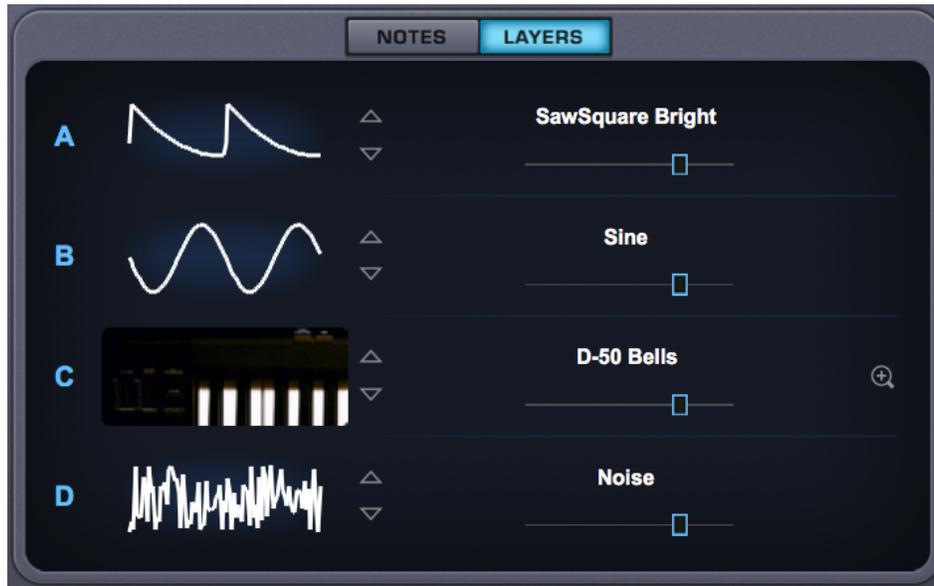
Attributes are also listed here, providing information about timbre, mood, genre, and other descriptions of the Patch, thus enabling Patch selections to be filtered via Omnisphere's Browsers. You can edit these Tags using the powerful [Edit Tags](#) feature of each Browser.

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.

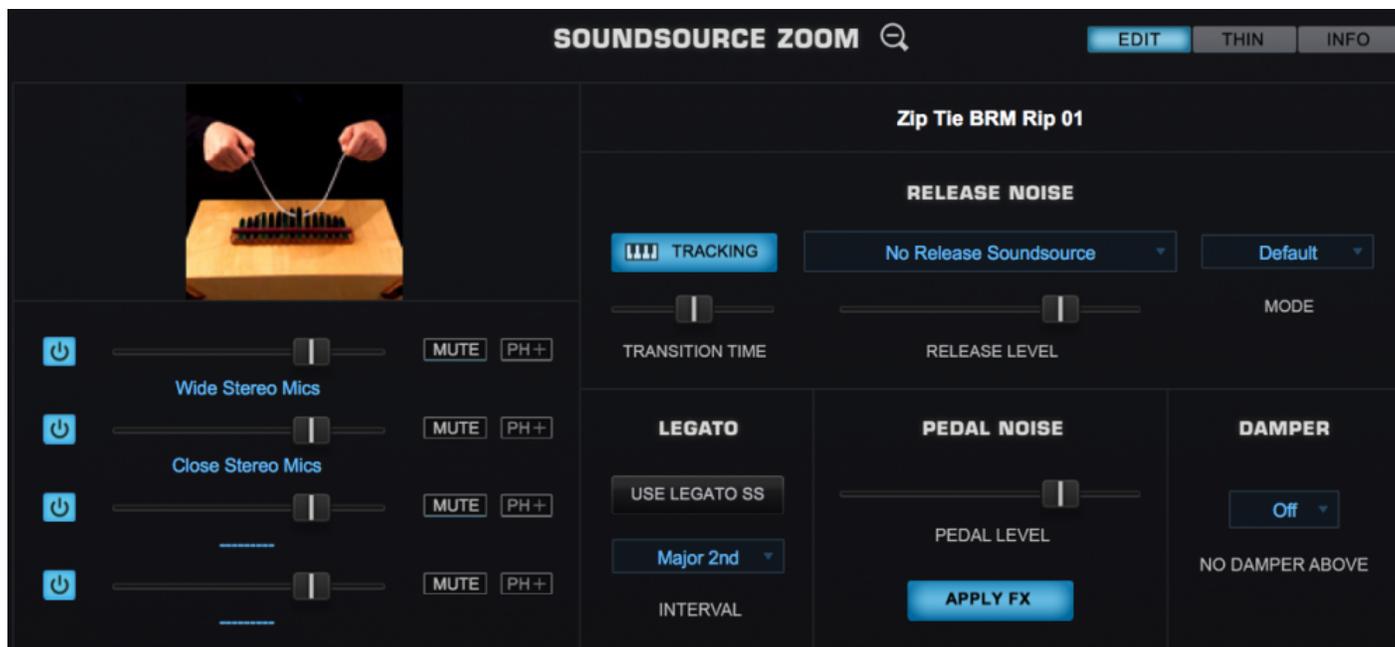
## 6.2. Layers View

The LAYERS view provides the names and a visual representation of the Waveforms or Soundsources that make up the Patch, along with ON / OFF buttons for quick auditioning and Volume faders for each Layer.

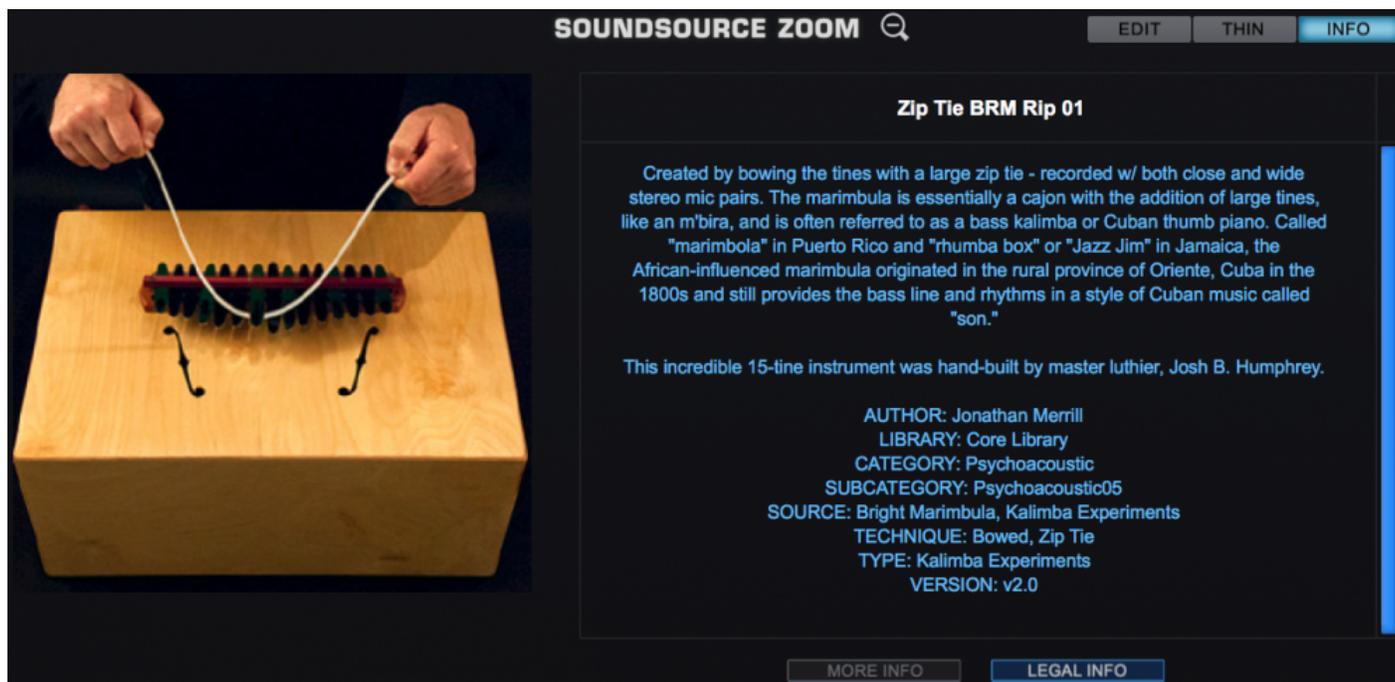


The stepper arrows allow you to step through Waveforms or Soundsources, and for Layers that use Soundsources. The folder icon takes you to the [Soundsource Browser](#) and the magnifying glass takes you to the [Soundsource Zoom](#) for that Layer.

When the Soundsource Zoom is open, you can toggle between Edit View and Info View using the Edit and Info buttons on the Soundsource Zoom pane.



The Soundsource Zoom Edit View allows you to adjust various parameters specific to the Soundsource loaded in the selected Layer. For details please see the [Soundsource Zoom Edit View](#) section.



The Soundsource Zoom Info View provides detailed information about the Soundsource, including information on the origin of the sampled sound and how it was modified or adapted for inclusion in

Omnisphere. There also will be some suggestions for its use and some ideas for modifying it, along with a web link and legal information links with more info about the Soundsource.

This section also displays a wide variety of information, including the author, specifications, and categorization.

The MORE INFO + WWW button can provide further information about the Soundsource and/or its author.



MORE INFO

The LEGAL INFO button provides helpful information about the trademarks and copyrights for Omnisphere's Core Library.



LEGAL INFO

## 6.3. Voices & Octave

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### 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.*

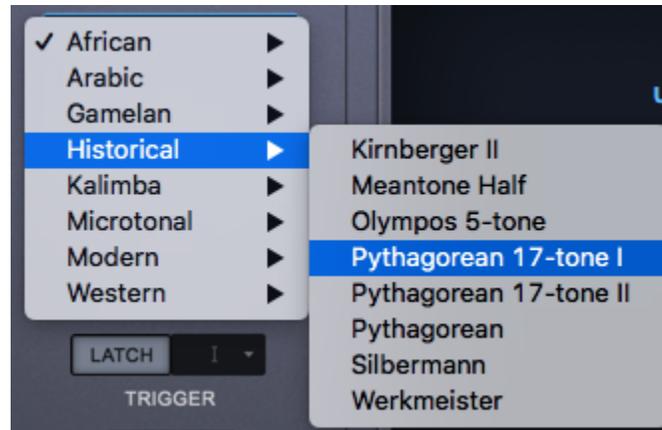
### Octave



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 to +2 octaves*

## 6.4. Scale



One of Omnisphere's versatile features is its ability to utilize different tunings, including historical temperaments, microtonal scales, and user-created temperaments as well. Omnisphere can import any .TUN scale file.

Each Part can have a single Scale active at one time. 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, Multis, and songs. You can select the scale from the menu and the name will be displayed in the Scale pane. The value is used across all tracks, all projects, all patches and is a universal user preference.
- **Multi** allows you to set a unique scale for each Multi or song. 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/song/project. All patches within a multi/song/project 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, remaining 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 or song.**

**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. Tunings with the suffix “AD” mean the notes are mapped in an [Ascending/Descending](#) arrangement.

- Amandinda 240 cent – a whole-step scale in 240 cent steps instead of 200 cent steps.
- Amandinda AD – the same scale, mapped in both directions.
- Balafon 7-Tone
- Charimba AD – 5-Tone scale, ascending and descending
- 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 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 Kalimbadrums
- 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

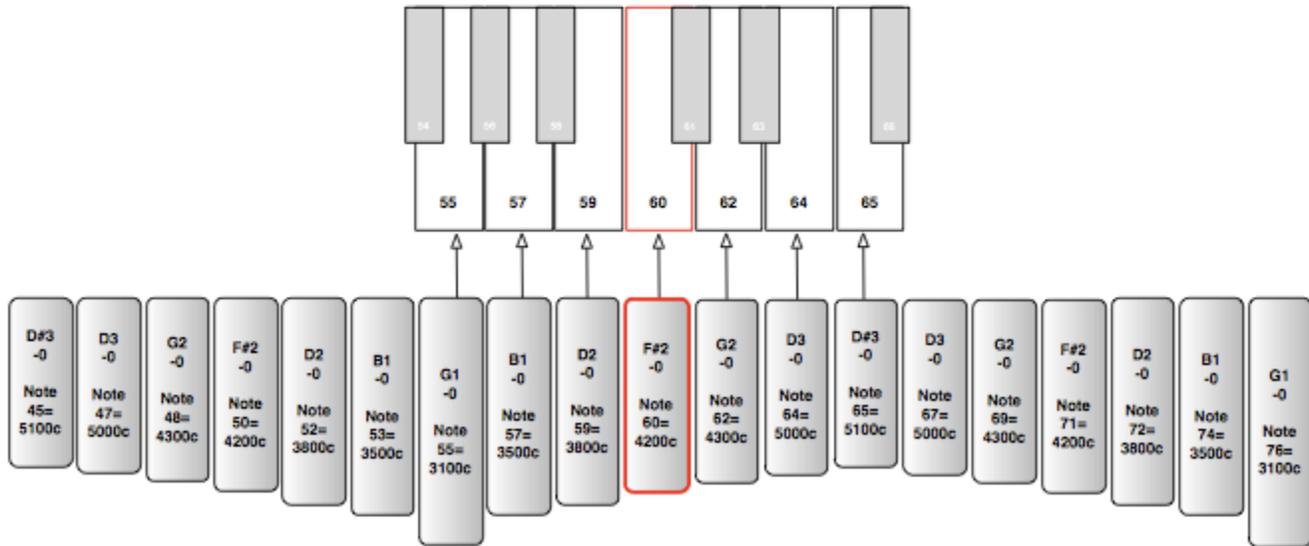
## **Western**

- 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.

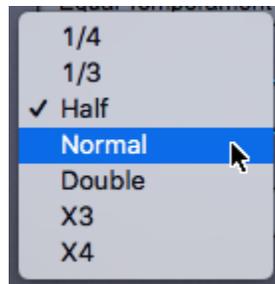
## 6.5. Clock Speed

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All of the time-based parameters in Omnisphere (Arpeggiator, Envelopes, LFOs, and FX) can be synchronized to the host's tempo. For instance, a rhythmic Patch might have the Arpeggiator clock set to 1/16th notes, the LFO set to the rate of 1/4 note, and a delay effect unit with a delay time of a dotted 1/8th note.

CLOCK SPEED provides an easy way to accomplish half-time/double-time of 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.

## 6.6. Signal Path

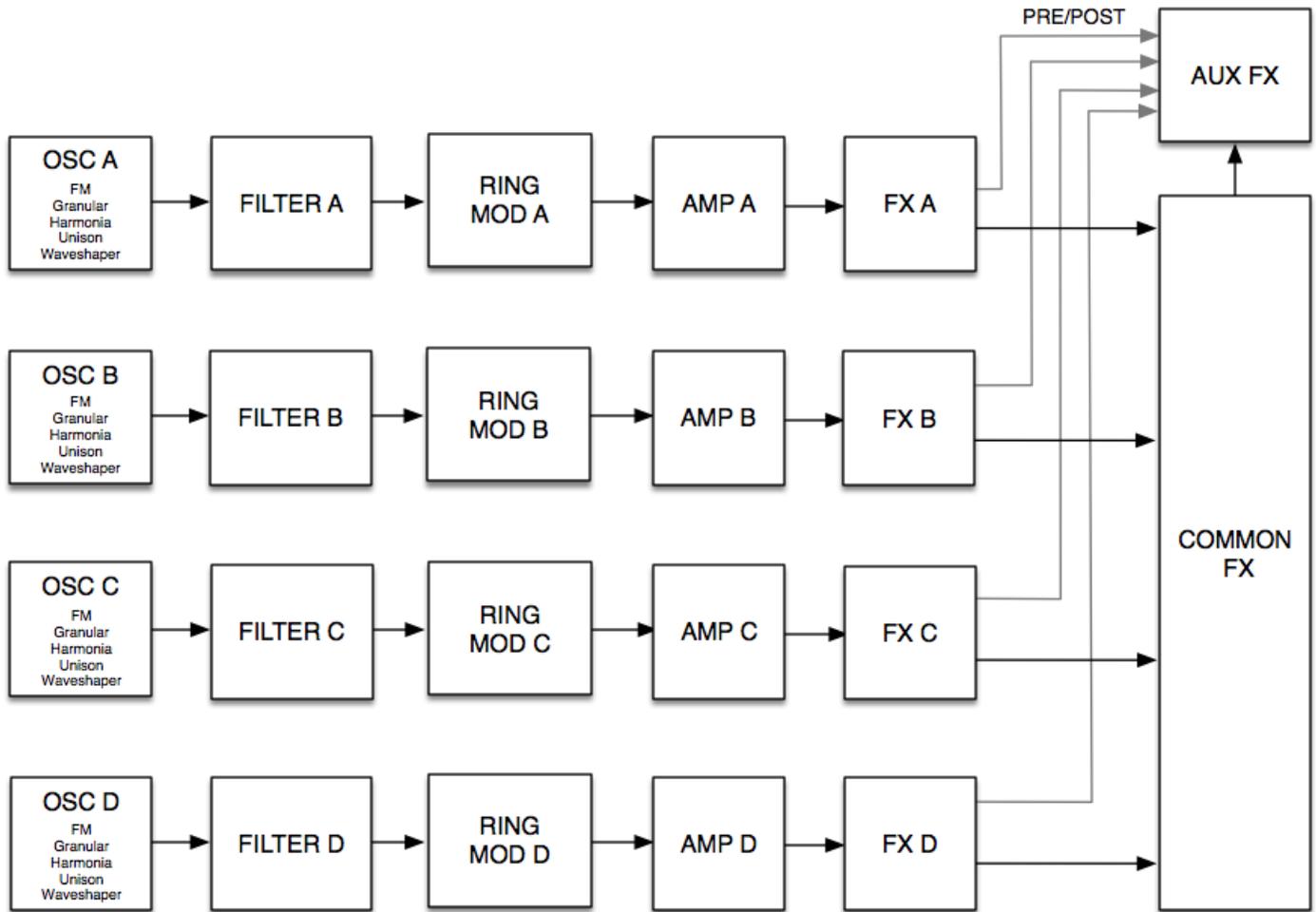
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Whether you are using hardware or software, the path through which an audio signal travels defines its characteristics. The SIGNAL PATH menu presents two options: Normal and Shared.

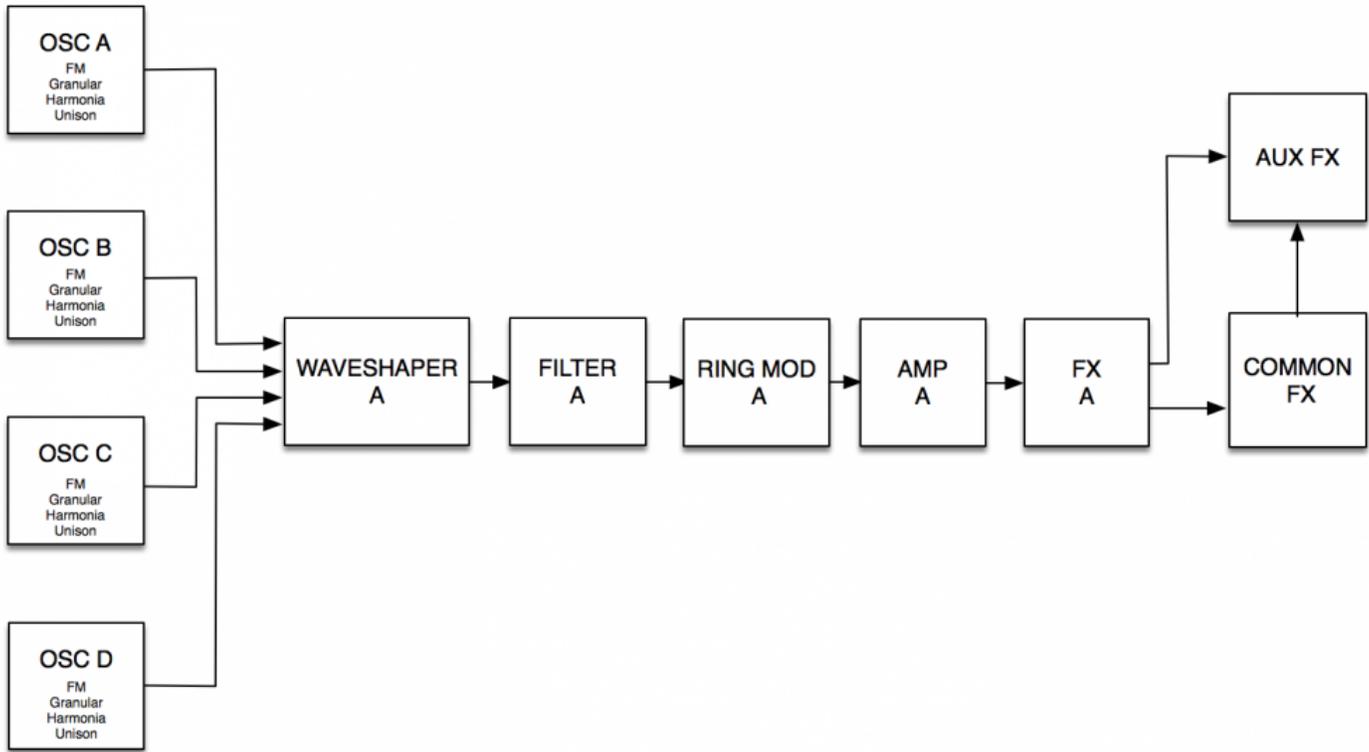
### Normal

In Normal Mode, the signal paths of each of the four Layers are independent. Here, Omnisphere is at its most powerful.

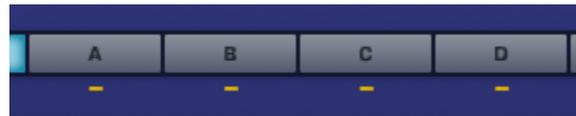


## Shared

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!

## 6.7. Latch & Trigger Modes

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### 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.

*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](#) features.*

*NOTE: Any latched notes will stop as soon as the host transport stops.*

### LATCH



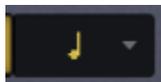
The LATCH button allows you to toggle LATCH ON / OFF for the selected Part.

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.*

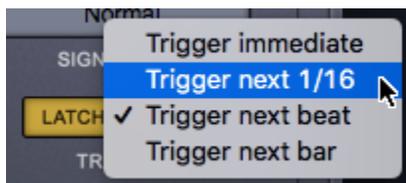
*NOTE: A Part's LATCH status can also be viewed or changed from the LIVE MODE or STACK MODE pages.*

### Trigger Modes



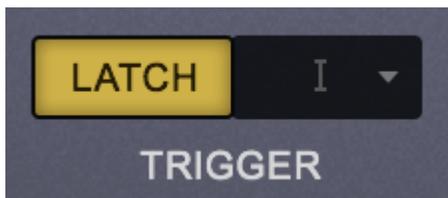
Trigger Modes enable real-time quantization of incoming MIDI notes, so that Parts will always play in sync. This makes it very easy to experiment and improvise along with other clocked sources without losing synchronization. These features are a lot of fun to use for jamming and building ideas quickly!

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.

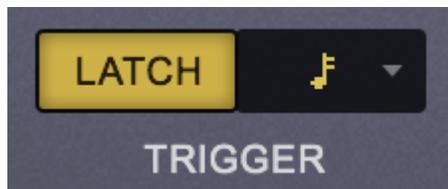


To change Trigger Modes, select the TRIGGER icon and choose the desired Trigger Mode from drop-down menu. A checkmark will appear next to the selected option and the Trigger Mode icon will change to reflect the selected Trigger Mode.

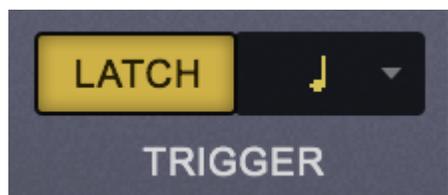
### Trigger Modes



**Immediate:** This is the default Trigger Mode. MIDI input is not quantized, and playback of MIDI notes is immediate.



**Next 16th:** This option delays the playback of incoming MIDI notes to the next 16th note. In other words, notes are quantized in real time to the next 16th note. If you play ahead of the next 16th, there may be a slight delay before the note sounds. This delay will be a maximum of a 16th note at the current tempo. This mode makes it easy to play quick phrases in perfect sync with other Parts or clocked sources.



**Next Beat:** This option delays playback to the next beat. If incoming MIDI notes arrive ahead of the next beat, the delay is a maximum of one beat. Next Beat mode makes it very easy to trigger rhythmic patches in perfect sync, and when used together with Latch Mode, for layering phrases that are quantized to the beat in real time.



**Next Bar:** Delays playback until the next bar. If MIDI messages arrive ahead of the next bar, the delay is a maximum of one bar. This mode is especially useful if you want to synchronize phrases on the downbeat of a measure. You can press a note anytime in the previous bar and it will wait until the next bar to play.

*NOTE: The selected Trigger Mode also affects a Part's [Arpeggiator](#), [LFOs](#), and [Envelopes](#). These will also be delayed until the note itself is triggered.*

*NOTE: A Part's Trigger Mode can also be viewed or changed from the [LIVE MODE](#) or [STACK MODE](#) pages.*

## 6.8. Gain

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### GAIN



The output level of the part can be controlled in 1db increments. The default is -6db.

*Range +10db to -24db.*

***NOTE: The GAIN Menu is MIDI-Learnable.***

## 6.9. Part Level, Mute/Solo

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### 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 to +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.*

## 6.10. V-Curve

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The “V” stands for Velocity. Omnisphere has four velocity curve presets available on the CONTROLS screen. The first curve is linear, then two exponential curves and the last is flat. These curves are provided to quickly adjust the dynamic response of the current Patch to your MIDI controller and playing style.

### Linear



The linear curve is the most commonly used velocity setting. Playing harder on the keyboard will have a direct effect on any parameter that is modulated with velocity in an even and linear way.

### Exponential Positive



The Exponential Positive curve means that when playing softly not much effect will be heard, but when playing at a moderate intensity on the keyboard the velocity modulation will be more dramatic than with a linear curve.

### Exponential Negative



Exponential Negative has the opposite effect of Exponential positive, meaning that it's better-suited for more intense touch and provides the widest musical dynamic range.

### Flat



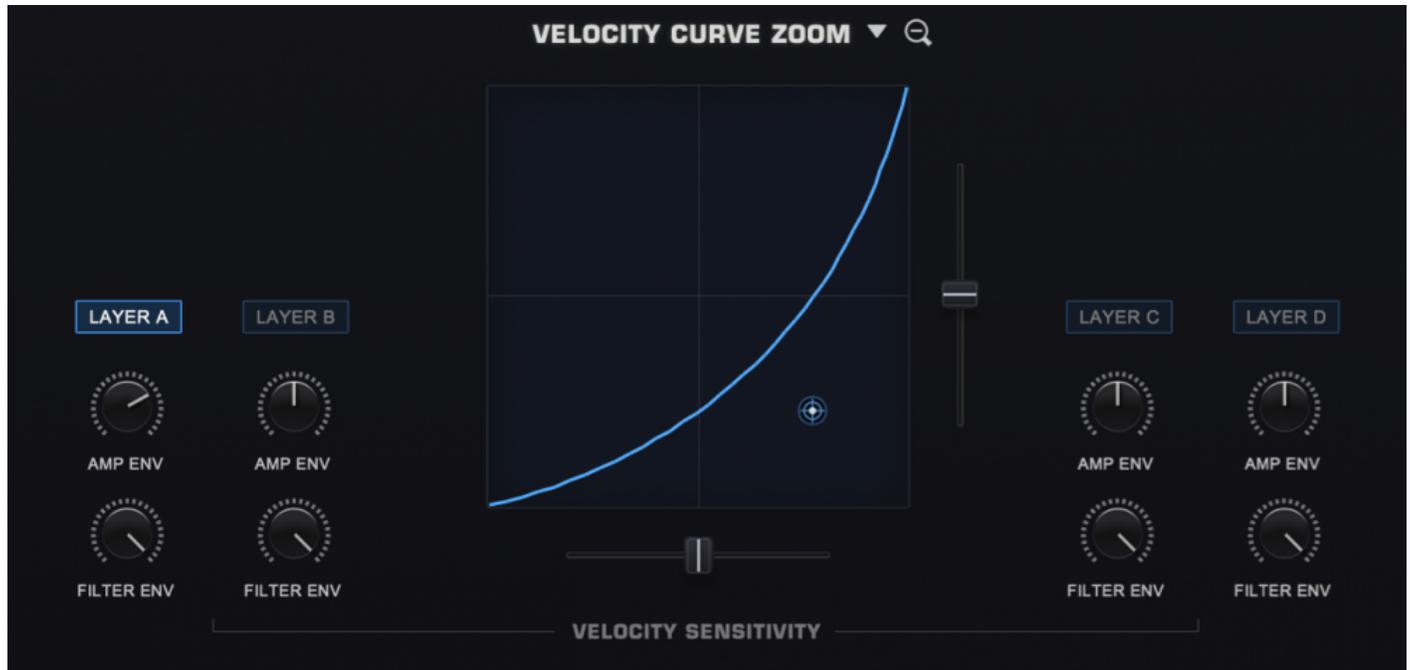
Omnisphere will receive the same velocity value with this flat curve. Useful if a totally consistent and predictable result is desired.

### **V-Curve Zoom**



The V-Curve Zoom button provides access to the [Velocity Curve Zoom](#), for precise editing of the Velocity response of the Patch.

## 6.10.1. V-Curve Zoom



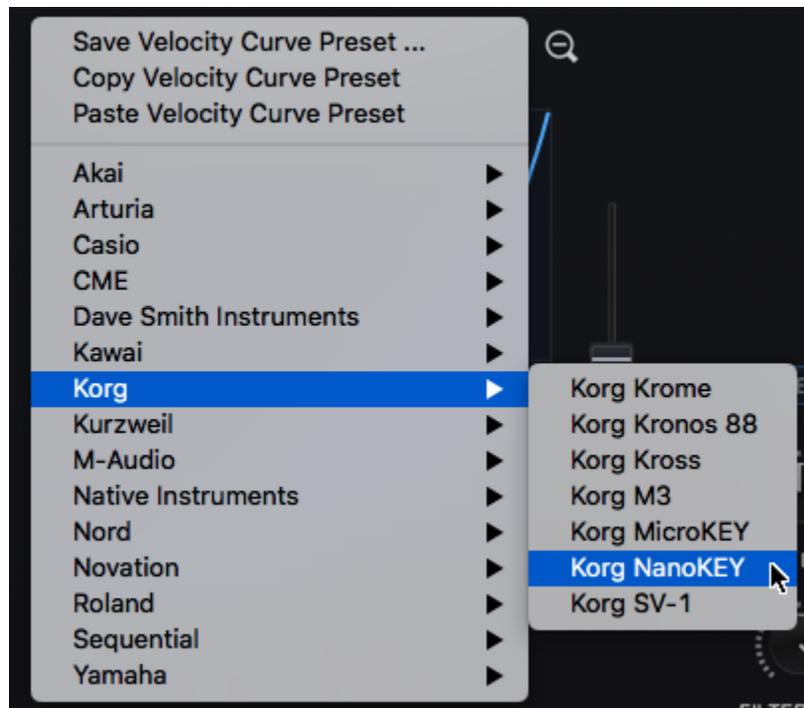
Selecting the Zoom icon next to the different Velocity Curve presets opens the VELOCITY CURVE ZOOM. This page provides detailed controls to modify the velocity curve of a Patch. The Velocity curve settings are global to the Part—meaning they will be applied to both layers, but the amount applied to each layer can be controlled independently.

You can save, copy, and load preset Velocity curves from the drop-down menu next to the VELOCITY CURVE ZOOM header.

### V-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.



*NOTE: You can save your own custom velocity curves as presets from this menu.*

## **CURVE DISPLAY**



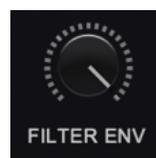
When changes are applied to the SLOPE and OFFSET sliders (described below) the shape of the curve change will change accordingly in this display.

#### **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.

## SLOPE



This horizontal control adjusts the steepness, or slope, of the velocity curve. If the slider is set all the way to maximum, the curve will be very steep. Minimum settings will have a horizontal (or flat) curve.

## OFFSET



This vertical slider offsets the velocity curve by raising and lowering it within the display. At high settings the curve will start at a higher level and moving the slider down will set the velocity curve to a minimum level.

## CONTROL POINT

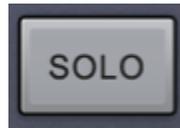


The Control Point determines the shape of the velocity curve, whether it's a linear, convex, or concave curve. The Control Point, OFFSET, and SLOPE sliders can create a wide variety of curves. Move the Control Point around the grid by selecting and dragging it until the desired curve is set.

## 6.11. Solo & Glide

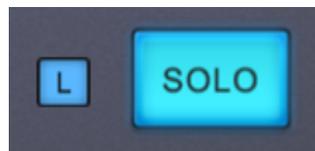
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### SOLO



Solo allows the Patch to play monophonically. SOLO mode is most effective when playing lead or bass lines. It works in conjunction with the LEGATO button 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.

*NOTE: 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 how slowly or quickly that the pitches glide from one note to the next. The higher the control slider is set, the slower the pitch glide between notes.

*Range 0 to 2 seconds*

### **GLIDE LEGATO**



Glide Legato will change the criteria for when GLIDE is enabled. If legato notes are played, then GLIDE will be activated. If quick, staccato notes are played, the Glide effect will not be heard.

### **GLIDE A, B, 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.

Gliding on one Layer only can be an interesting musical effect.

## 6.12. Bend

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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 to 24 semitones*

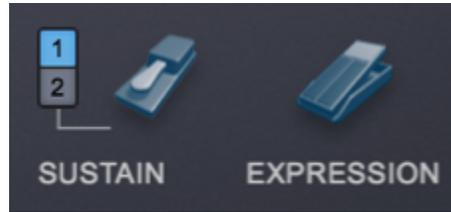
### UP

Determines how much the pitch will bend up using the MIDI controller's Pitch Bender.

*Range 0 to 24 semitones*

## 6.13. Sustain & Expression

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### 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.***

## 6.14. Master Filter



Omnisphere's MASTER FILTER controls the entire Patch, meaning that it affects all Layers. The MASTER FILTER is completely 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 serious sound-shaping.

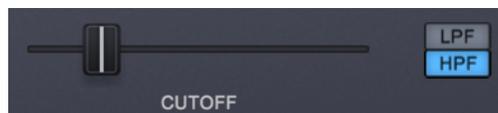
### TYPE (LPF / HPF)



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.”

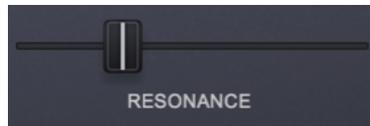
*NOTE: LPF or HPF are exclusive and cannot be enabled simultaneously.*

### CUTOFF



The primary function of the filter 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, turning the control counter-clockwise will remove the higher frequencies. If a Highpass Filter is used, the opposite will occur.

### 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.

**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.*

## 7. 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

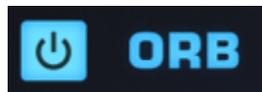
modifications and effects to try. There's no limit to how many serendipitous sonic variations the DICE can create—opening up the vast power of the STEAM engine to every user, regardless of synthesis knowledge. For advanced synthesists seeking maximum flexibility, the Orb can also be setup manually and 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



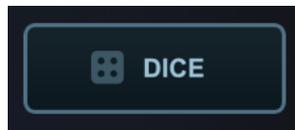
This switch will turn the Orb ON or OFF. Note that turning the Orb ON will activate some processing modules and enable FX units (in the Aux Rack) in your Patch in order to ensure moving the cursor creates some interesting sounds. Turning the Orb OFF deactivates any processing modules and removes any FX that were instantiated when it was ON.

## 7.1. Dice & Depth

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### 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.

## 7.2. Inertia & Attractor

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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.

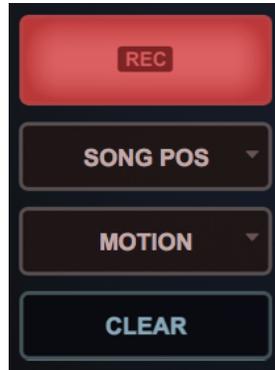
#### Attractor Switch



This turns the Attractor ON or OFF.

## 7.3. Recording

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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.

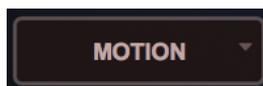
By using the RECORD button and the menus below it, the built-in recorder can be programmed to capture a general idea of the movements (MOTION) or to record precise movements over 1, 2 or 4 bars, relative to your sequence. The recordings can be set to play back synced to [LEGATO](#) or [SONG POSITION](#).

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.

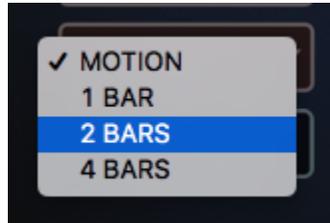
### MOTION



- 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.*

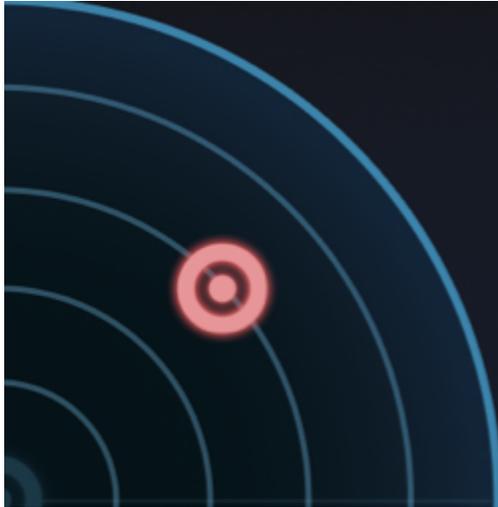
### 1, 2, or 4 BARS



- 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.*

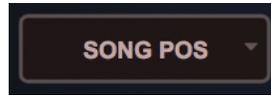
Whenever the the Orb's built-in recorder is in use (either when recording or playing back recorded movements), the Orb cursor will turn red.



If you're not satisfied with the movement that was recorded, press the [CLEAR](#) button to start over.

## 7.4. Trigger Modes

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

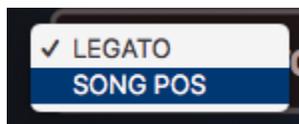
*NOTE: It is important to set the Trigger Mode before recording, as it cannot be modified afterwards.*

### 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.

## 7.5. Clear

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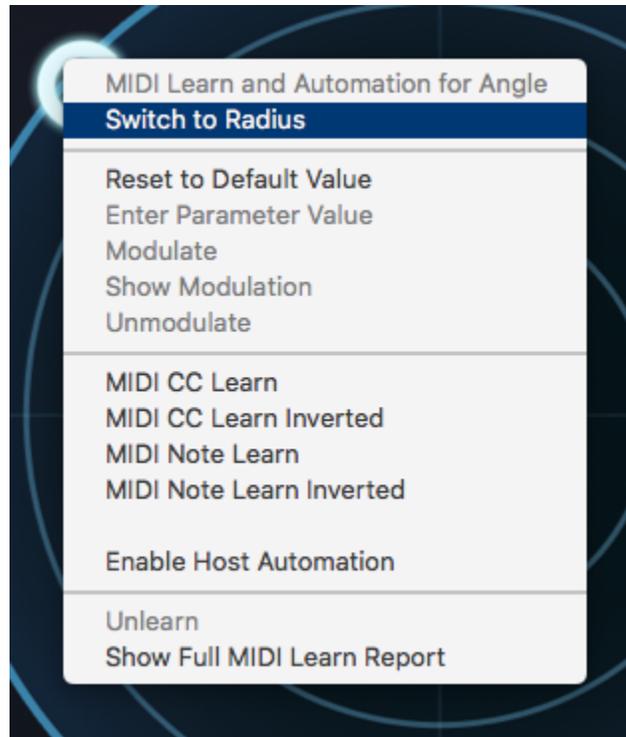


Pressing the CLEAR button will restore the Patch to its original state. The Orb's cursor will be returned to the center and any movements recorded in the built-in recorder will be cleared.

*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.*

## 7.6. Automation

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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.

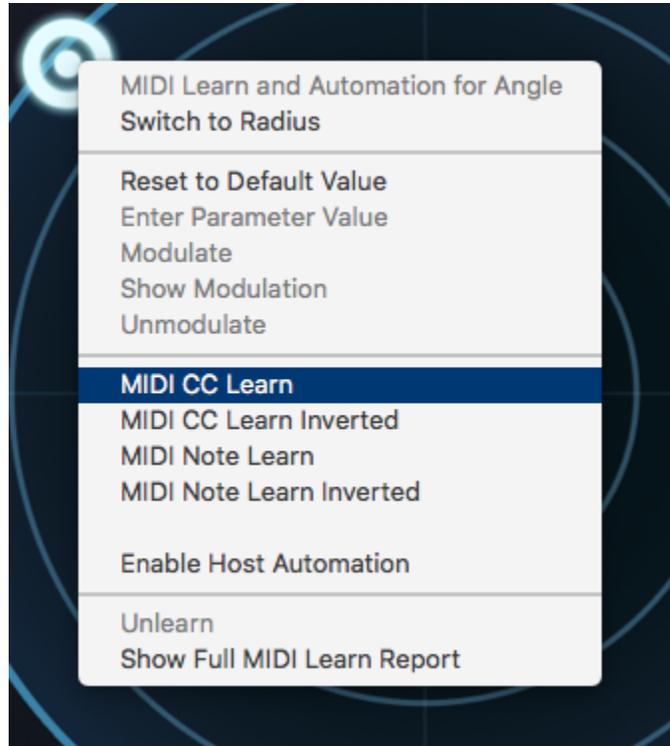
To enable the Orb's host automation, follow these steps:

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.

## 7.7. MIDI Learn

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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.

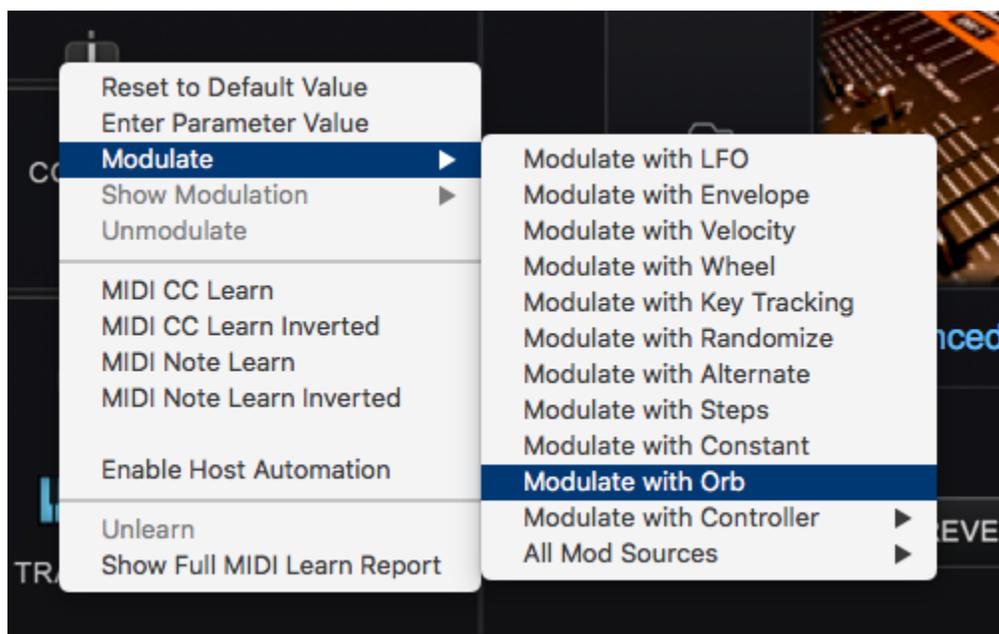
***NOTE: Inertia is a mouse/touch feature only and is incompatible with MIDI input. When the Orb is controlled using a MIDI Controller, the result will be the same as if Inertia was disabled.***

## 7.8. 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.

## 8. 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.

## 8.1. 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.

## 8.1.1. Selecting, Linking, & Soloing Layers

### Selecting Layers

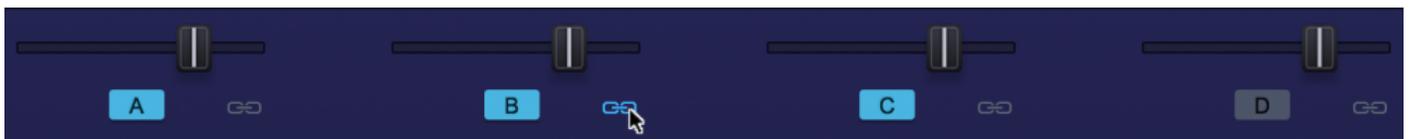
To select a Layer and bring its Edit Page controls into focus, (even if more than one Layer is ON—indicated by LEDs under the Layer tabs or highlighted Layer Selection buttons in the Footer), click on the desired Layer tab or Layer Selection button.



**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:

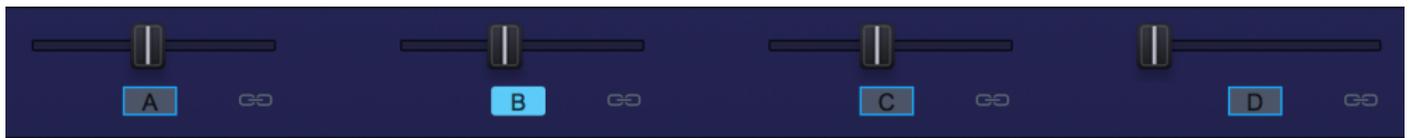
- Option/Alt+Click on any link icon links all Layers together.
- Option/Alt+Click on any link icon that's ON unlinks all Layers.

### Soloing Layers

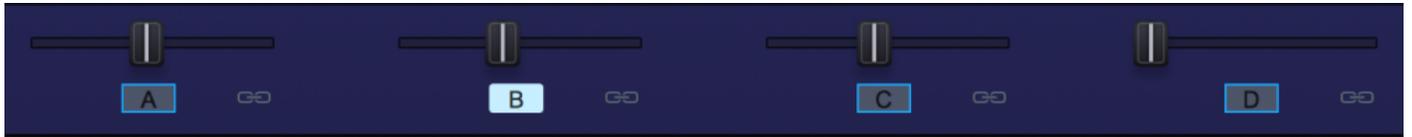
- Option-click on the Layer Selection Buttons in the Footer to solo each Layer's audio WITH FX.



- Option-Shift-click on the Layer Selection Buttons in the Footer to solo each Layer's audio WITHOUT 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:

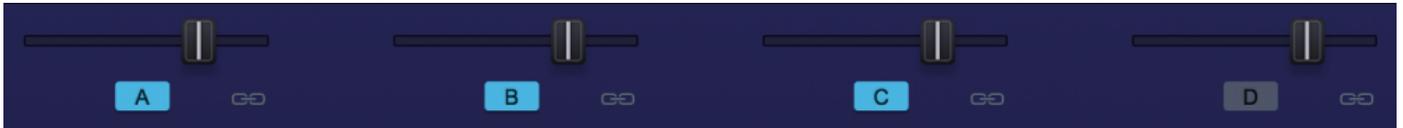
- Per-Layer Level
- Per-Layer Pan
- Per-Layer Soundsource or Wavetable
- Per-Layer ON/OFF
- Per-Layer FX rack

## 8.1.2. Level, Amp, & Pan

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Each Layer has Level and Pan controls in addition to an AMP control—these are commonly used as modulation targets.

### LAYER LEVELS



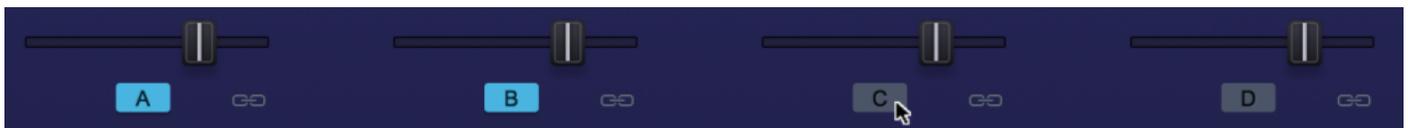
The level sliders are used to blend the Layers. Often, even a subtle change in level can affect the sound dramatically.

The Layer mixer level sliders cover a range of  $-\infty$  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  $-\infty$  dB (silence) to +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 to 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.

## 8.1.3. Pitch Controls

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### 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 to +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 to +4800 cents*

## FINE

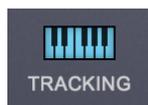


The FINE control is the most precise, changing the pitch in 1-cent increments. The FINE controls shift the pitch 100 cents (one semitone) up or down.

The most common use of the FINE control is to detune oscillators a small amount (less than 15 cents) from each other, causing them to sound richer.

*Range -100 cents to +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.

## 8.2. Modulation



Modulation adds motion and complexity to sounds. Simply put, modulation is any source that affects a target parameter in some way. The most common form of modulation in synthesizers is vibrato, where an LFO modulates the pitch of an oscillator. Modulation is used in synths for adding richness and variety to a sound in real-time. Omnisphere's modulation capabilities are extensive, but simple to use with the Flex-Mod system we've designed. Omnisphere also features a traditional MOD MATRIX ZOOM view that provides more precise control over modulation routings and an overview of all assigned routings.

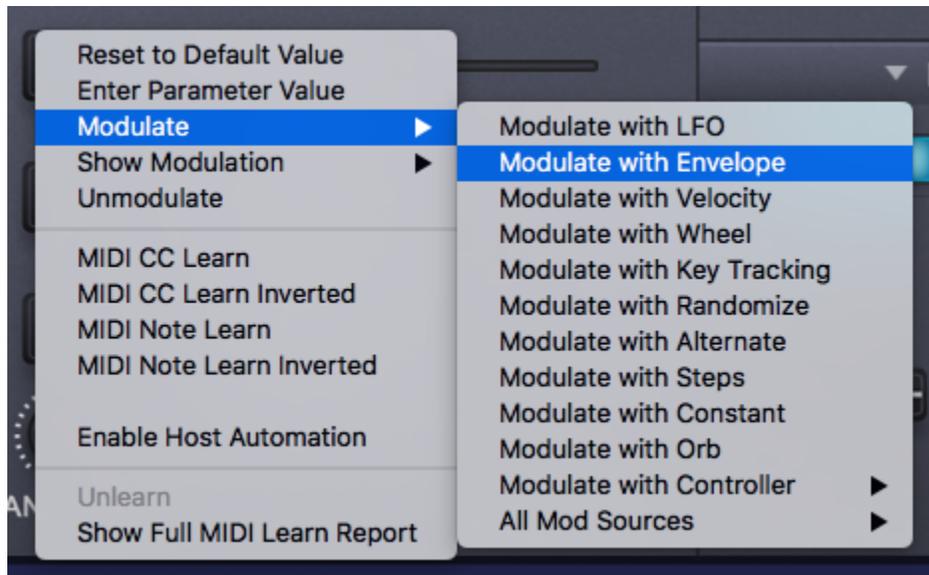
There are four ways to set up modulation routings in Omnisphere:

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.

## 8.2.1. 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 MODULATION, then 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 EDIT page.

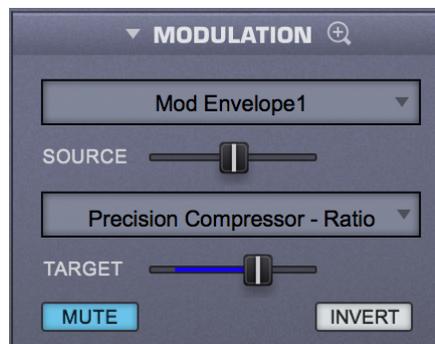
\*Not all controls are modulatable, but the majority are.

***NOTE: If all six LFOs have been routed as Modulation Sources and “Modulate with LFO” is selected, it will default to LFO1. This is the same with the Modulation Envelopes—when all eight are in use, any additional “Modulate with Envelope” routings will default to MOD Envelope 1.***

## 8.2.2. 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 in 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).

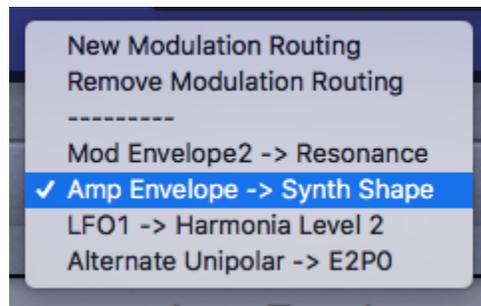


The Modulation sections display the most recent modulation routing, which can also be edited there. The key concept of the Modulation section is that only one Modulation Routing is displayed at a time (the MOD MATRIX ZOOM shows many routings simultaneously).

To display a specific Modulation Routing, right-click on the Target Parameter (i.e. Arpeggiator Speed) and select the routing from the “Show Modulation Menu.” The routing will be displayed in the left column of the plug-in while the Arpeggiator page is shown. 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 on the magnifying glass icon with the minus (-) sign to the right of the column’s 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 40 Modulation Sources and “OFF” negates any Modulation Source.



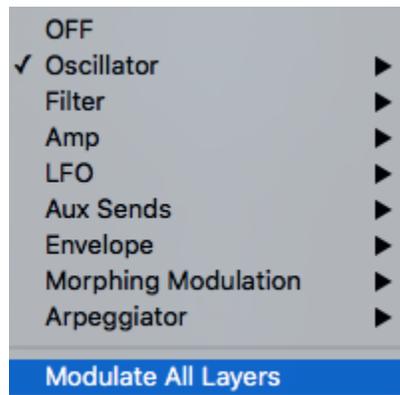
This slider is a duplicate of the AMOUNT slider in the Mod Matrix and controls the amount of modulation that will be sent from the Modulation Source to the Modulation Target. If the slider is set to minimum, the Modulation Source will have no effect on the Modulation Target. The higher the setting, the more the source will affect the target. However, it is possible to send too much signal from the Modulation Source, which causes unusual behavior in the Modulation Target because the values are out of range.

## 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.

## 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.

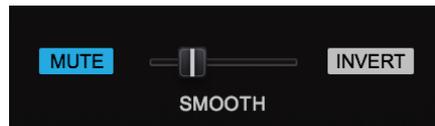
## INVERT



The Invert button inverts the Modulation Polarity.

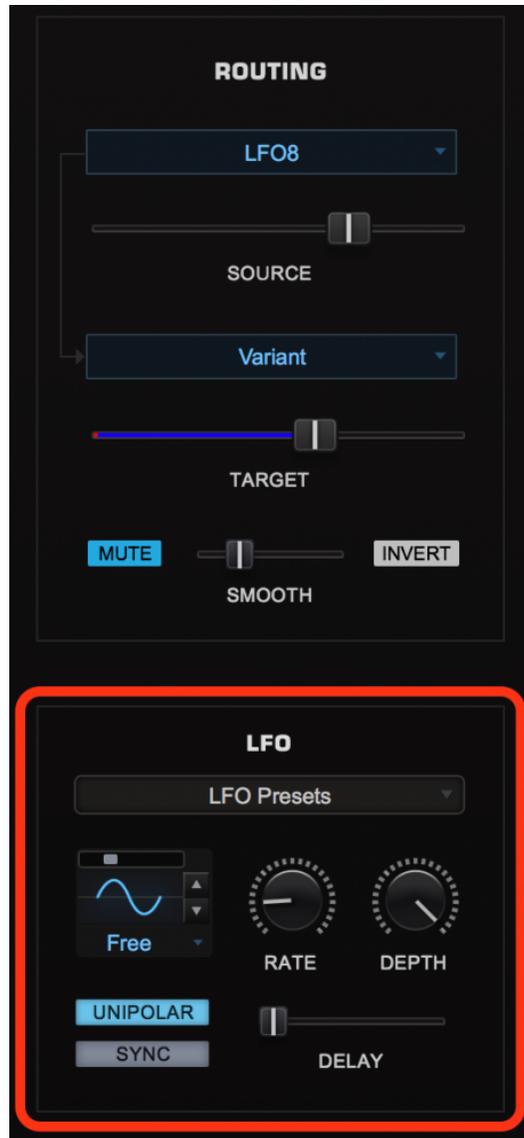
For example, if the Modulation Source is an LFO with an ascending ramp wave as its waveform, it will invert the polarity, resulting in a descending ramp modulation.

### **SMOOTH (left column only)**



The SMOOTHING control takes the incoming Modulation Source and 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.

### **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.

## 8.2.3. Modulation Sources

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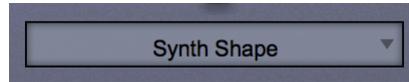
The SOURCE menu brings up a list of the 40 available Modulation Sources available in Omnisphere:

- **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)
- **Constant** -
- **Constant Bipolar** -
- **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 Continuous Controller (or MIDI CC value defined from the System page) [System](#) page
- **Morphing Source** – a special-purpose Modulation Source described in the [Morphing Modulation](#) chapter.

## 8.2.4. Modulation Targets

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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 Symmetry** – 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**

- **Morphing Input A** – Explained in the [Morphing Modulation](#) section
- **Morphing Input B** – Explained in the [Morphing Modulation](#) section
- **Morphing Input A/B Xfade** – Explained in the [Morphing Modulation](#) section

### **Arpeggiator**

- **Arp Length** – The length of Arpeggio Steps
- **Arp Swing** – The Swing amount of the Arpeggio
- **Arp Speed** – The Ppeed 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*

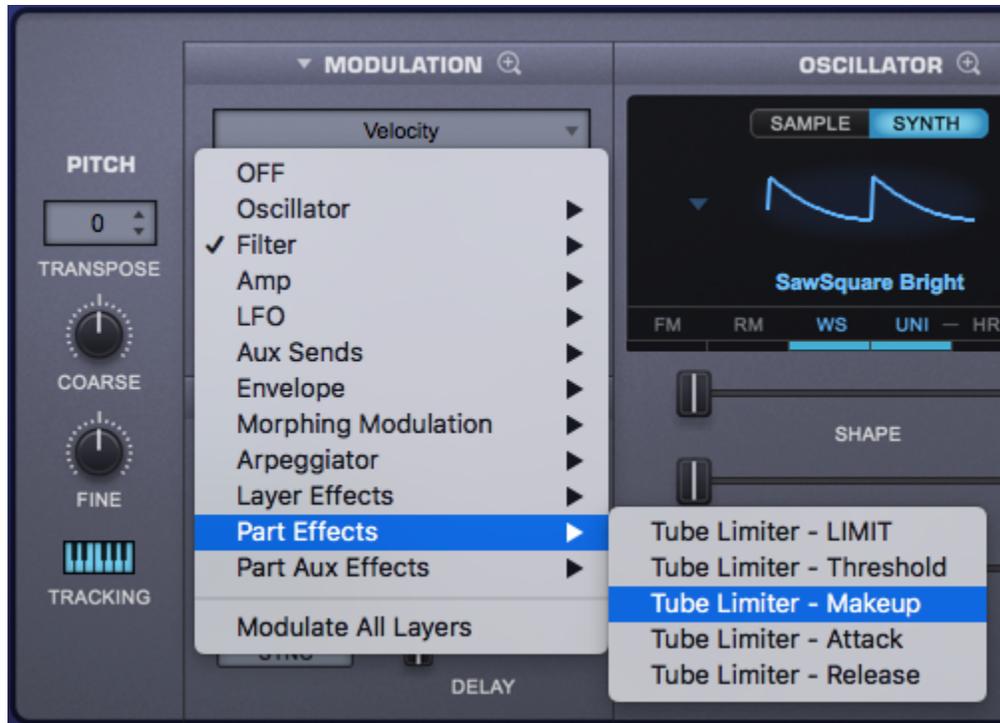
## 8.2.5. FX Modulation



The fact that Omnisphere can modulate almost 100 synthesis parameters per Layer 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 (including all menu items in every FX unit) in all of Omnisphere's 58 effects modules can be modulated, which means there are dozens of effects parameters available in addition to all the synthesis parameters!

### Modulation FX Menu

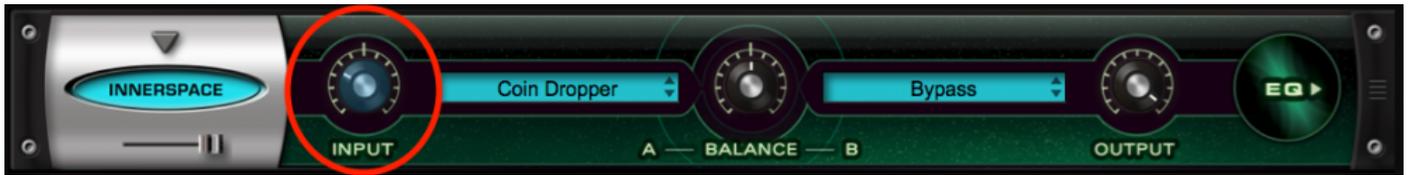
Any effect that's added to an effect rack (Aux, A, B, C, D, or Common) is available as a Modulation Target. After an effect has been added to a rack, a new category named for the rack (Layer FX, Part Aux FX, etc.) will appear at the bottom of the list of target categories.



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.



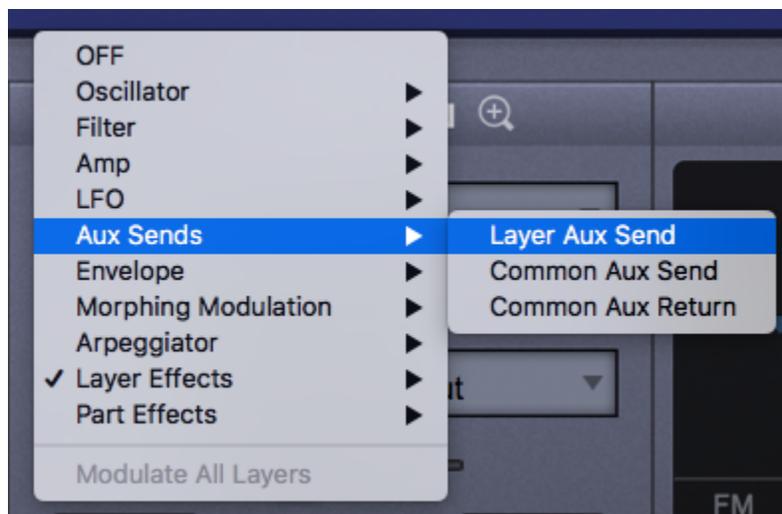
After a parameter has been assigned as a Modulation Target, the control will become shaded with a bluish tint (in the example below, the Input control is now blue).



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.



## 8.2.6. 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 from the EDIT overview page, as well as some controls unique to the MOD MATRIX ZOOM, like smoothing. 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.

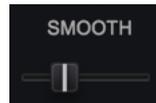
It's important to note that Omnisphere also has a number of fixed modulation routings as well. Many of the typical routings have already been hardwired in the STEAM engine, so they don't have to be assigned. These include Velocity control over Envelope depth, Key Tracking of Filter depth, Filter Envelope to Cutoff, and so on.

### Page Switch



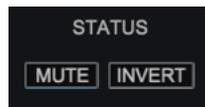
Toggles between the four Mod Matrix sub-pages. It's generally a good rule of thumb to fill up the first modulation page before any mod routings are added on the additional modulation pages. Each page displays twelve routings at a time. The MOD MATRIX ZOOM shows modulation routings for all Layers simultaneously.

## Smoothing



The modulation Smoothing control takes the incoming modulation source and slows the sharper points down, smoothing them out. This means that the character of the modulation source will not have quite as drastic or harsh an effect on the modulation destination. It works in a similar way to the Lag processors on some vintage synthesizers. This is the same principle that is used in GLIDE, but applied to any source and target.

## STATUS

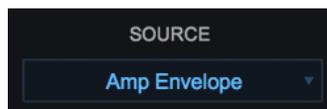


This is a shared area with two switches, MUTE & INVERT.

The MUTE control virtually disconnects the modulation routing. This is a quick way to hear what kind of effect it's having on the part.

The INVERT 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 34 modulation sources and "Off" negates any Modulation Source.

## AMOUNT



This control determines to what degree the Source affects the Modulation Target. The higher the setting, the more the Amount 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.

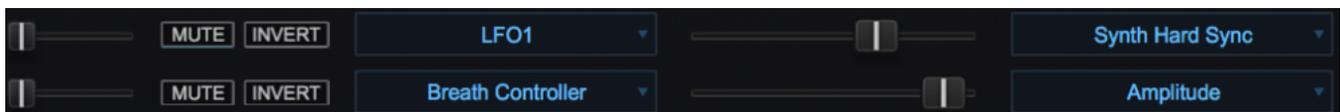
The full list of Targets is listed in the MODULATION section [here](#)

## TARGET PARAMETER

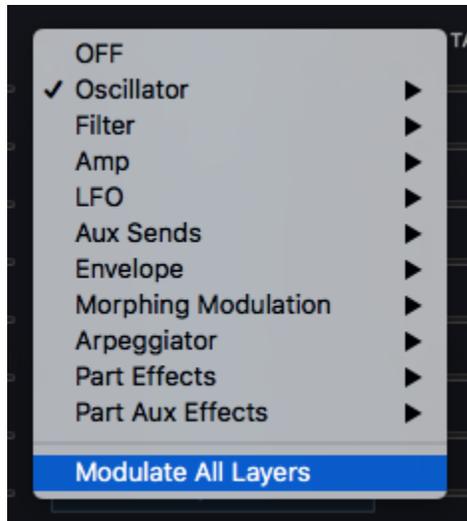


This control is another representation of the TARGET PARAMETER setting.

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.

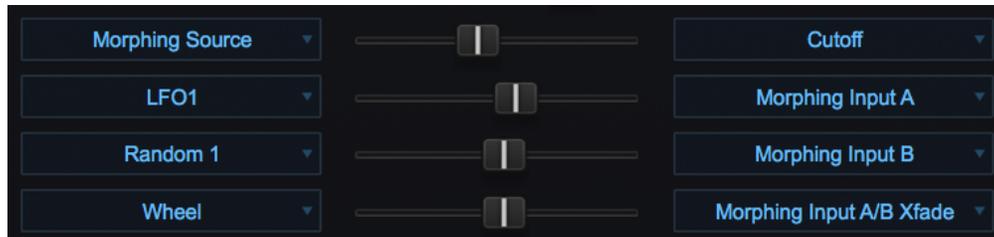


## Modulate All Layers

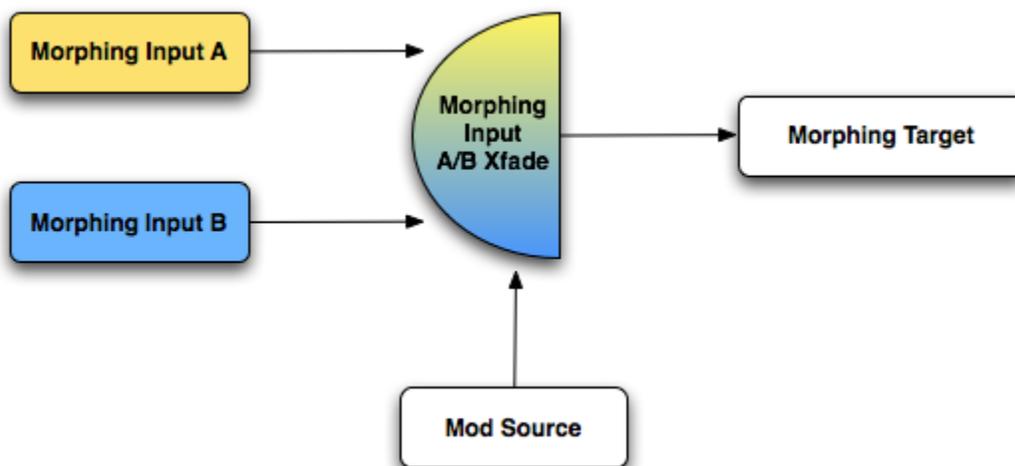


When “Modulate All Layers” is selected, that Modulation Source applies to the relevant Modulation Target in all 4 Layers.

## 8.2.7. Mod Matrix Morphing



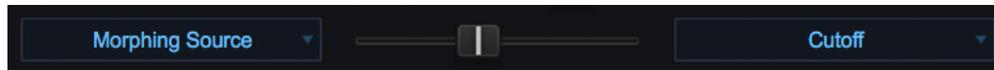
Omnisphere has a very special modulation feature that goes beyond the standard method of modulating a single target with a single source, called Morphing Modulation. This system uses dual Sources to modulate a single Target and adds a morphing component to crossfade interactively between the outputs 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 its necessary to define Morphing Input A as the Target.

### Morphing Input B



This is the other Morphing Source that will modulate the Target. After the Source is chosen, then Morphing Input B needs to be selected as the Target.

It’s important to make the Source in Morphing Input B different from Morphing Input A—if they are the same source then the morphing will have no effect.

### Morphing Input A/B Xfade



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

## 8.3. 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 be 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
- AM** • Ring Modulation Synthesis
- WS** • The Wave Shaper
- UNI** • Unison
- HRM** • Harmonia
- GRN** • Granular Synthesis

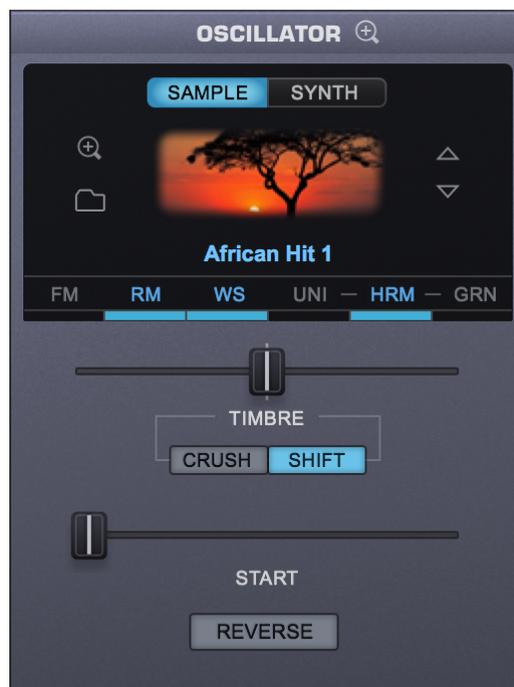
***NOTE: The Main Oscillator Zoom Sub-page doesn't have an indicator—it is accessed directly by clicking on the magnifying glass icon in the Oscillator header.***

## 8.3.1. 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](#).

## 8.3.1.1. Timbre

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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.

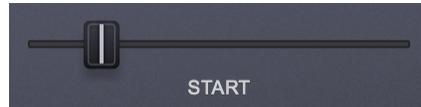
- **TIMBRE CRUSH MODE** – Polyphonic Bit-Crushing (Distortion) and filtering are applied to the Soundsource. Bit-Crushing with a Low-Pass Filter is applied left of the center-point. Right of the center-point, Bit-Crushing with a High-Pass filter is applied. Timbre Crushing works effectively with any 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 vice 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.*

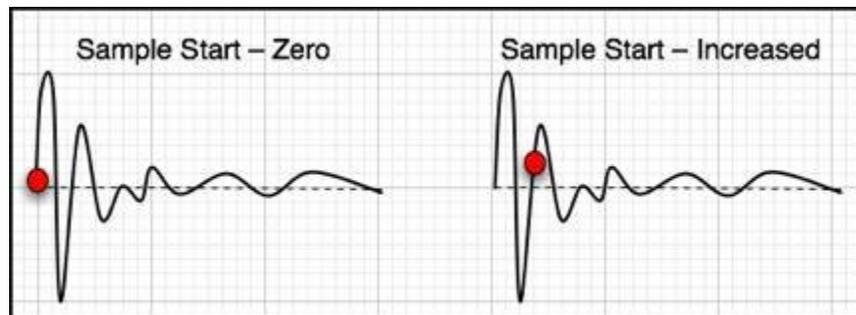
## 8.3.1.2. Start

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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.



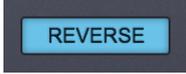
Soundsources can have a single sample (such as a Texture) mapped across the entire keyboard. Other types of Soundsources often have many samples mapped to different ranges on the keyboard. These ranges are called “Zones.”

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.

## 8.3.1.3. Reverse

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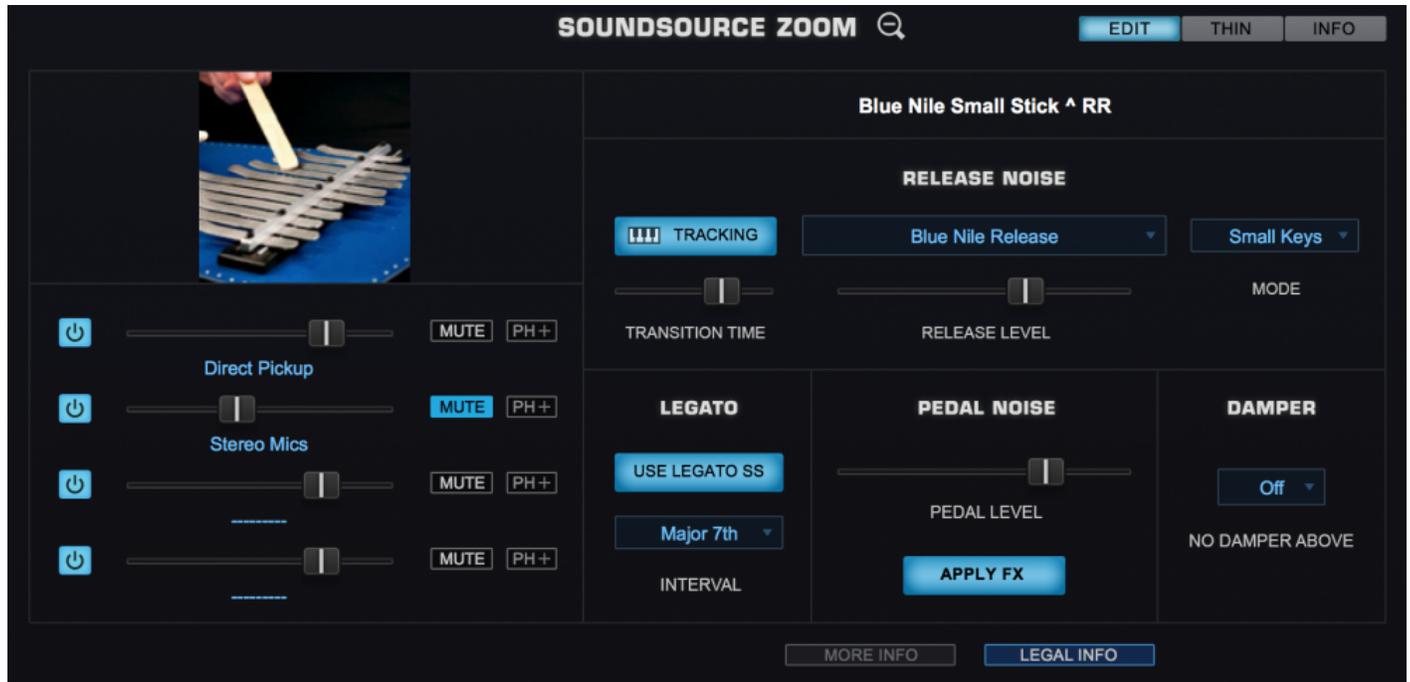
REVERSE

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 will hear if loops are active.
- Without either an attack or decay, looped samples generally don't sound much different when played forward or backward.

## 8.3.2. Soundsource Zoom



The Soundsource Zoom Edit View provides controls for managing the complex Soundsources in Omnisphere. This single interface provides important sound shaping and memory management capabilities.



Selecting the Zoom icon in the Soundsource Display will open the Soundsource Zoom Edit View by default. The SOUNDSOURCE ZOOM has three sub-panes, the Edit View, the Thin View, and the Info View, accessed by selecting the EDIT, THIN, and INFO buttons in the upper right.



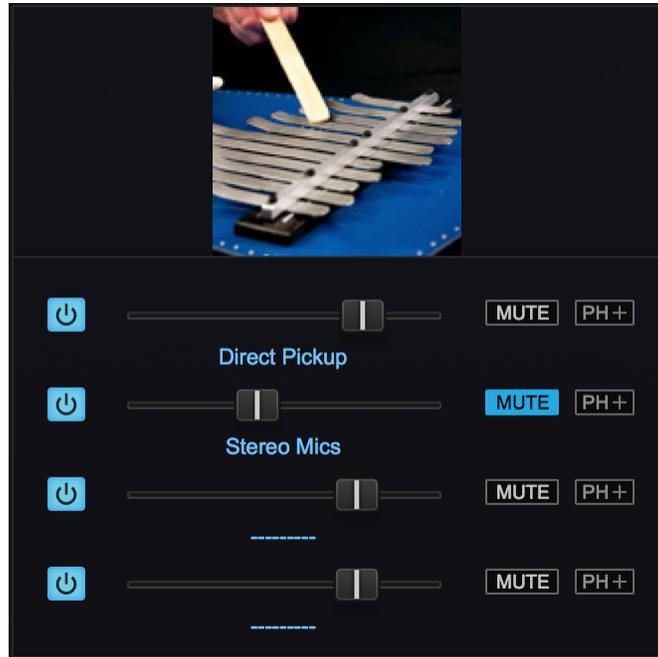
The Soundsource Zoom Edit View, accessible from the EDIT tab, allows you to mix the levels of multiple channels (these controls remain, no matter which tab is selected), such as Microphone and Direct Pickup outputs, and select and adjust the desired Release Noise and Legato articulation triggering.

***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 Soundsource Zoom Thin view, accessible from the THIN tab, helps to manage resources by limiting the number of Round Robin samples, the Velocity-switched samples, or by turning off Legato Soundsources.

The Soundsource Zoom Info View area, accessible from the INFO tab, 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.

## 8.3.2.1. 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 not only mutes the audio but also 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.

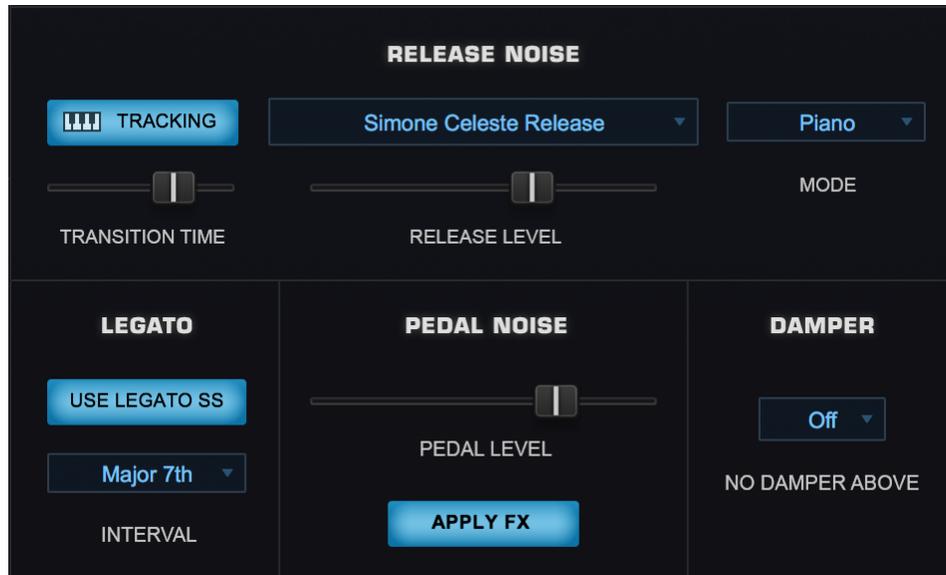
**MUTE**

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)**

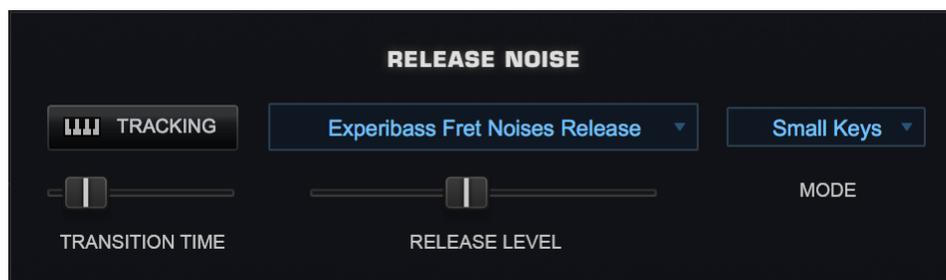
Selecting this button reverses the phase of the Sublayer.

## 8.3.2.2. Release, Legato, Pedal



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.

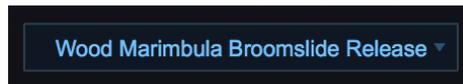
## TRANSITION TIME



This fader affects the transition time between Sustain Soundsources and the Release Noise Soundsources. 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

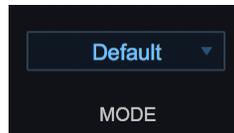
When no Release Soundsource is selected and you let go of the key, the Amp Envelope Release time has the same musical result that you would expect on any synth. For example, all the synth bass patches in Omnisphere and Trilian are programmed with no Release Soundsource, so they behave in this way.

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 Bases in Trilian are set up this way and have their Release Times set quite high so that the full decay of the noise samples can be heard.

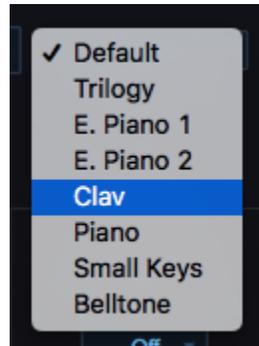
When no release Soundsource is selected, you will hear the same note-on sample you initially triggered when you let go of the key, so the AMP release time has the same musical result that you would expect on any synth. For example, all the synth bass patches in Omnisphere and Trilian are programmed with no Release Soundsource, so they behave this way.

If a release Soundsource is selected, then you'll hear that new Soundsource which consists of just the release noises triggered when you let go of the key. Note that the Amp release feature is still working, but is now affecting the amp release of the noise samples only. All the Electric and Acoustic Bases in Trilian are set-up this way and have their Release Times set quite high so that the full decay of the noise samples can be heard.

### RELEASE LEVEL



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 Soundsources—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



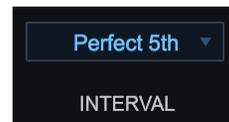
## Use Legato SS



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 it is possible to select the interval within which the Legato Soundsources will be triggered. The possible ranges are from one semitone to two octaves.

## 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!

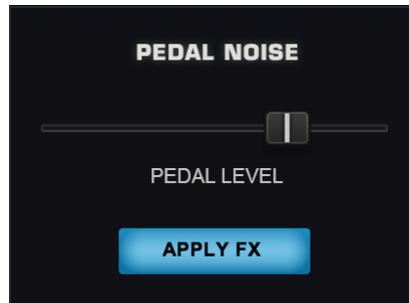
Enabling Use Legato SS will change the way the instrument responds to notes that are played Legato. Successive Legato notes that are played within the specified Legato Interval will behave much like a lead synth using SOLO mode. That is, the next note played will cut-off the previously played note. If 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.***

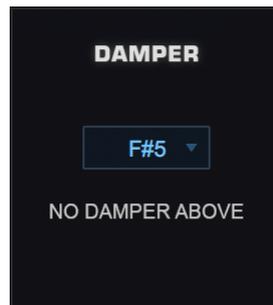
**NOTE:** “Use Legato SS” is a Patch Common parameter. Changing its setting will affect both Layers in the Patch.

## 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.

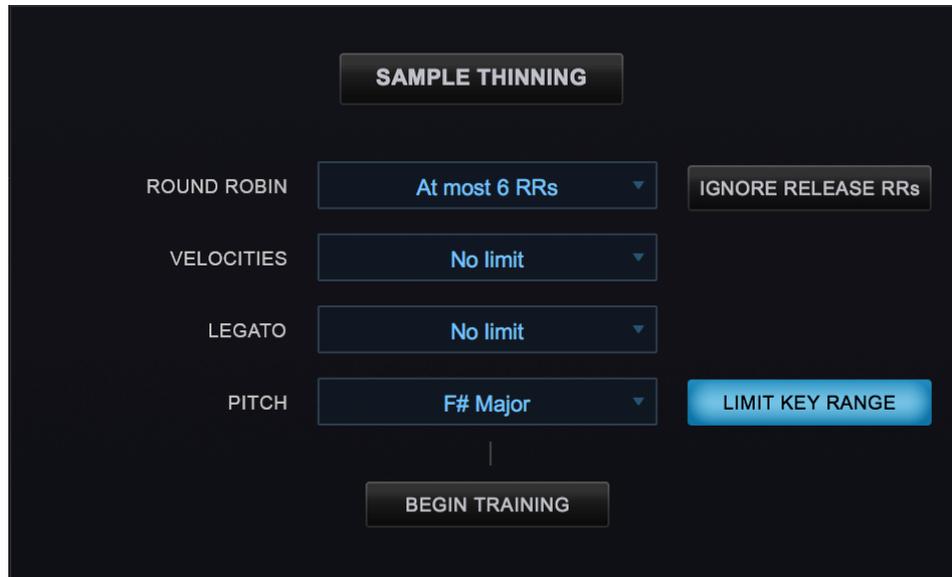
## DAMPER



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.



## 8.3.2.3. 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.

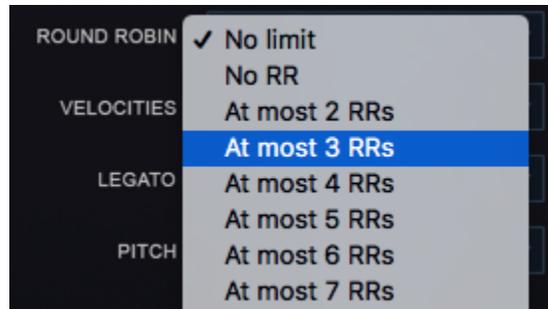
By limiting the number of Round Robin samples, or velocity-switched samples, or by turning off Legato Soundsources, you can dramatically reduce memory used.

### 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

- Will load all velocity-switched samples.

### Every other

- Will load every other velocity-switched sample.

### Every third

- Will only load every third velocity-switched sample.

### Every fourth

- Will only load every fourth velocity-switched sample.

### Velocities above

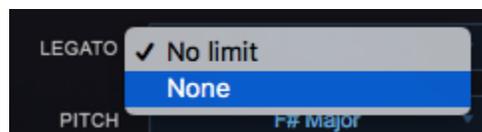
- Selecting a value from this menu, for example, 64, will only load velocity-switched samples mapped to a Velocity of 64 and above.

### Velocities below

- Selecting a value from this menu, for example, 100, will only load velocity-switched samples mapped to a Velocity of 100 and below.

**NOTE:** When thinning Velocities, there are no gaps in the sound. The remaining velocity-switched samples will adjust to be triggered across the full Velocity range.

## LEGATO



This menu has two options, No Limit and None, which determine whether or not Legato Soundsources will be loaded with the sound.

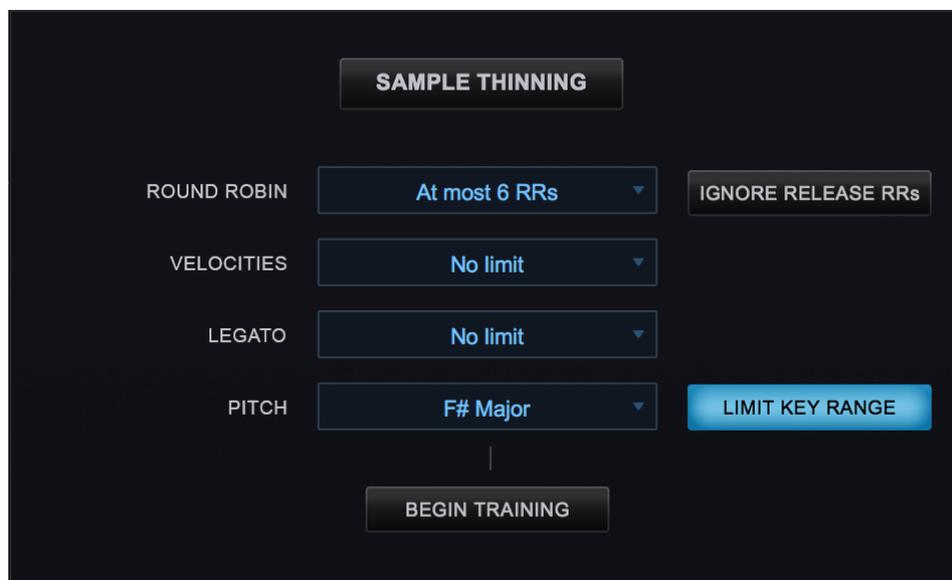
If No Limit is selected, Legato Soundsources will be loaded if the Soundsource has Legato Soundsources associated with it. If None is selected, the Legato Soundsources will be unloaded.

**TIP:** If you choose to load the Legato Soundsources, you must also enable the Use Legato SS button to trigger them when playing.

**NOTE:** If you are not using 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 the Legato Soundsources will be loaded or not, while the Use Legato SS button determines the behavior of the Part (whether it will “solo” notes played Legato that are half step or a whole step apart).

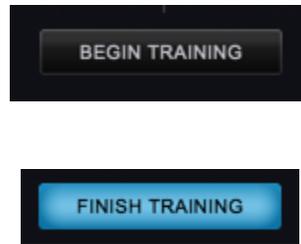
## SAMPLE THINNING



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



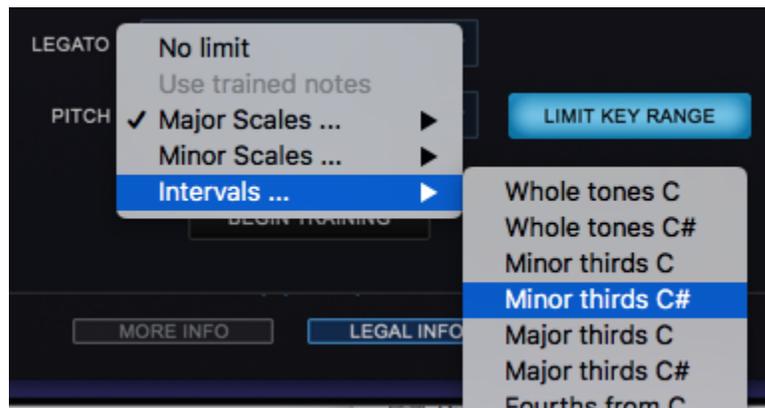
With Trained Pitch Thinning, you can load only the samples used during a performance.

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.*

## 8.3.3. Synth Mode

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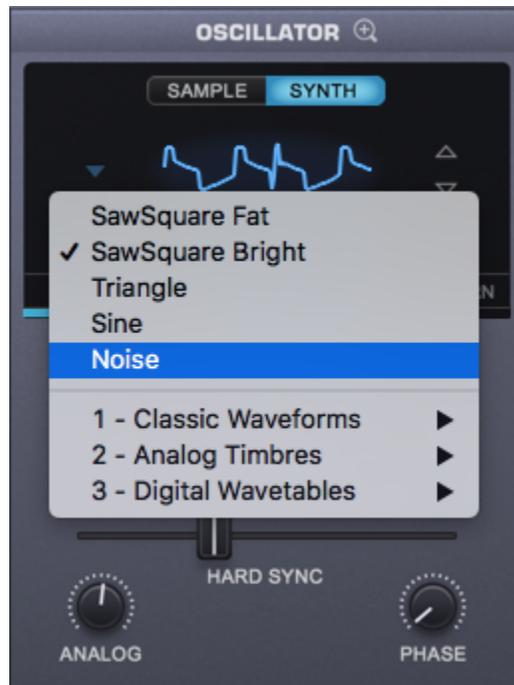


When the OSCILLATOR is in Synth Mode, Omnisphere uses DSP wavetables generated in real-time by the STEAM engine. A wavetable is a collection of single-cycle waveforms that can be swept through smoothly (using the SHAPE slider), creating dynamic timbral changes. These changes can be subtle or dramatic, depending on the timbral variety of the waveforms in a wavetable.

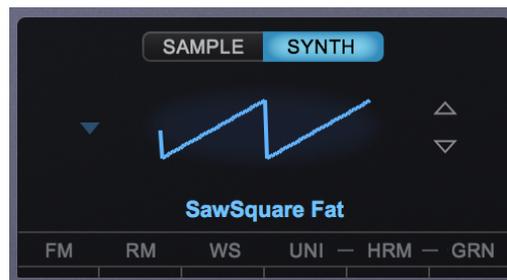
Omnisphere has over 500 available wavetables, ranging from classic vintage synthesizer waveforms to aggressive, digital waveshapes. SYNTH mode's Waveform Display features a graphic representation of the waveshape. Changes that are made to the three unidirectional sliders in the MAIN section below will dynamically and visually alter the contour of the waveform.

## 8.3.3.1. 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



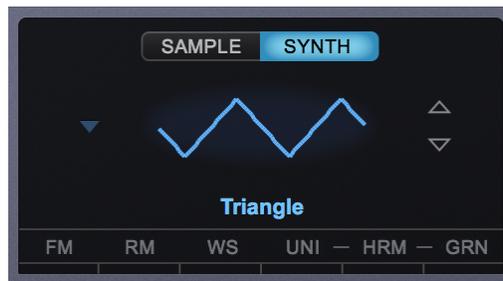
### SawSquare Bright



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.

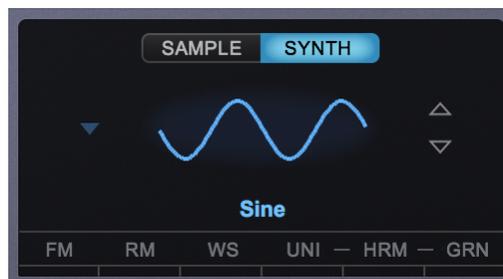
The Bright and Fat versions of the SawSquare waveform are similar, but with a different character. The SawSquare Bright has a bit leaner and buzzier timbre and is excellent for polyphonic applications. The SawSquare Fat has a thicker sound, especially in the low end and is ideal for monophonic lead sounds.

### Triangle Waveform



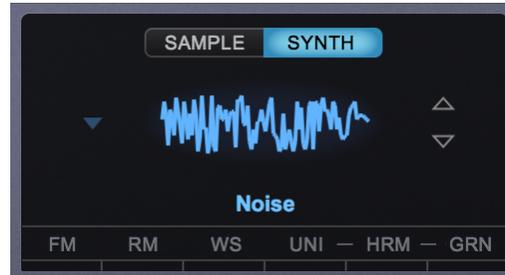
A Triangle wave is more symmetrical than the SawSquare waveforms and has a mellower character, as it contains fewer overtones. By moving the SHAPE slider towards maximum it will sound richer and more like a Square wave.

### Sine Waveform



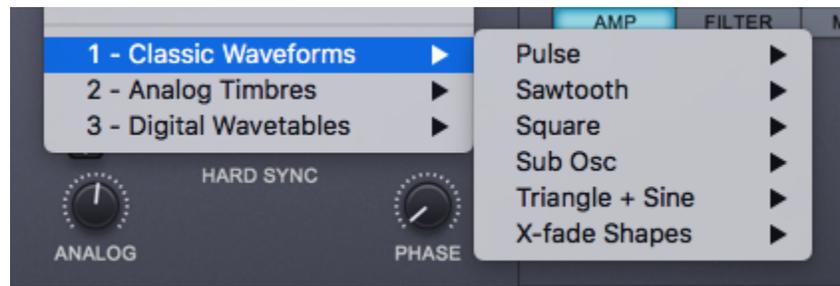
The sine wave is the most symmetrical and since it has no overtones, it sounds very pure. But with the SHAPE, SYMMETRY, and HARD SYNC controls, overtones can be added to alter its character.

### Noise Waveform



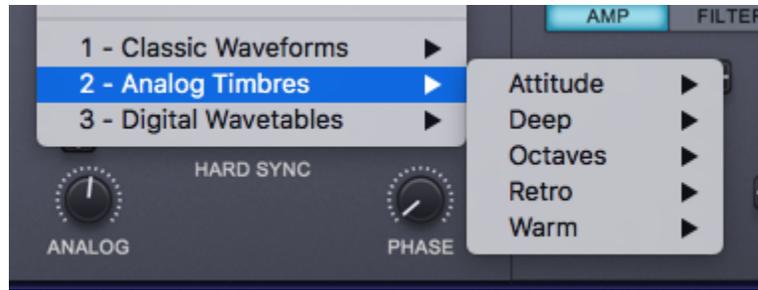
Just like the color white contains all colors, White Noise contains all frequencies at equal amplitude, therefore it is pure noise. Since changing the wave's contour with the SHAPE control would not normally make any difference to noise, the three sliders in the MAIN section have different functions 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



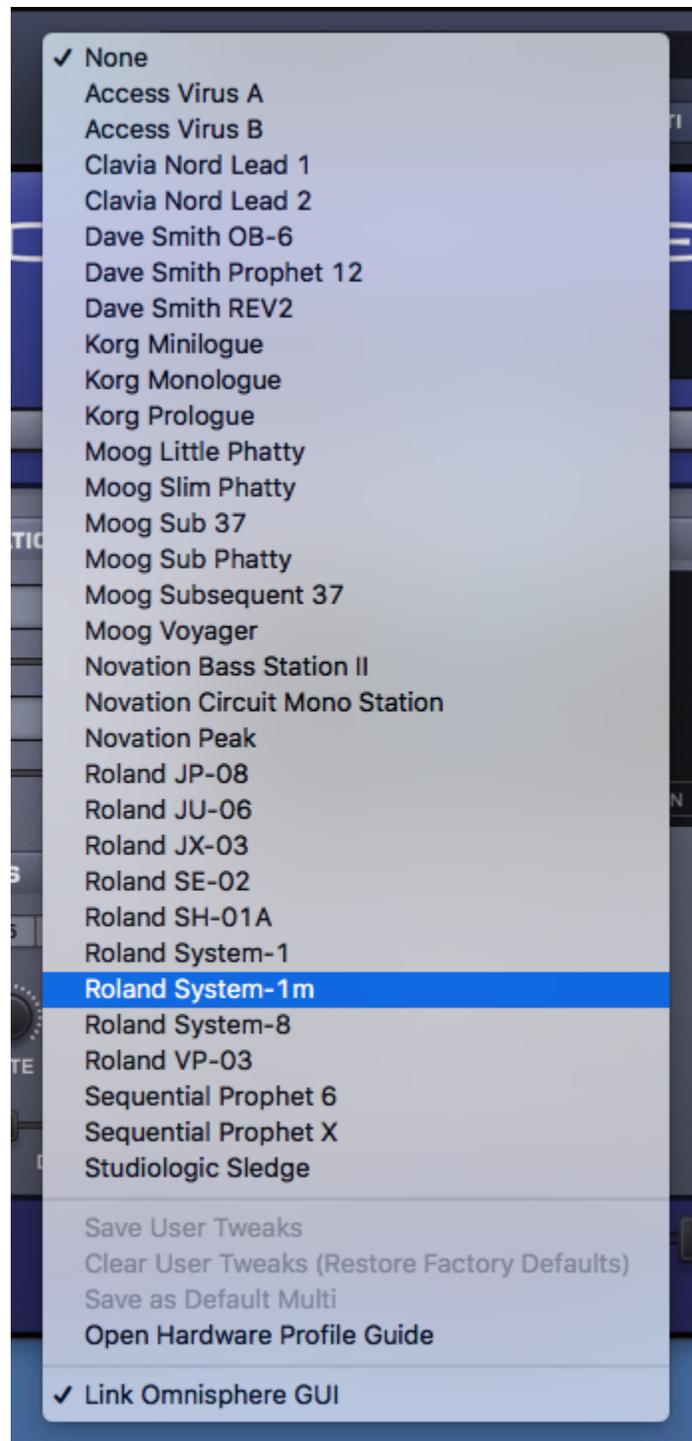
The wavetables in “Analog Timbres” are modeled after sounds created with analog synthesizers that are more complex than those found in “Classic Waveforms.” They range from aggressive to warm and the amount of waveforms per wavetable varies, and SHAPE produces many interesting timbres.

### 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.

### Hardware Profiles



The “Hardware Profiles” directory contains sounds modeled after the waves from all the hardware synthesizers in our [Hardware Synth Profiles](#).

## 8.3.3.2. Shape

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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.*

## 8.3.3.3. Symmetry

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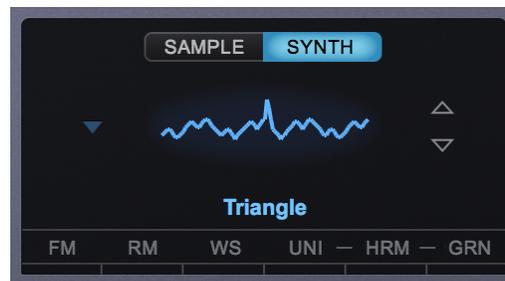
SYMMETRY varies the span of the waveform and is most commonly used for Pulse-Width Modulation (PWM). This is especially useful when SYMMETRY is used as a Modulation Target, as it adds shifting tone color and movement to the sound. The waveform display will dynamically change the waveshape as the slider 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.*

## 8.3.3.4. 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.*

## 8.3.3.5. Analog

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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.

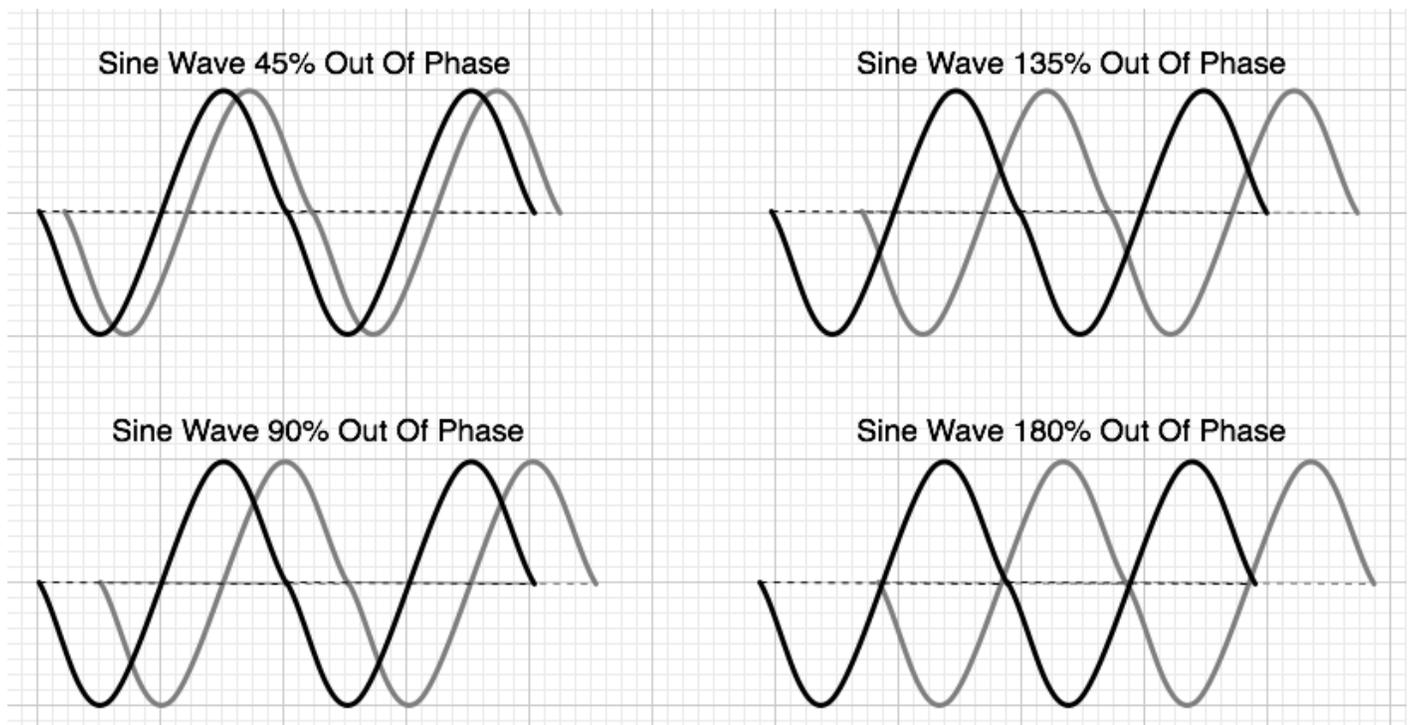
## 8.3.3.6. Phase



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.***

## 8.3.4. Oscillator Zoom



To access the OSCILLATOR ZOOM, click on the magnifying glass next to the word OSCILLATOR.



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. OSCILLATOR ZOOM is the center of Omnisphere's vast sound design capabilities.

To close the OSCILLATOR ZOOM, click on the magnifying glass icon in the header.

## 8.3.4.1. 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

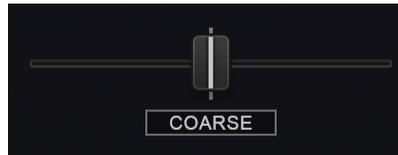


TRANSPOSE works like MIDI transposition and pitch changes are made in semitones. Changes in pitch don't affect the sound quality of the Oscillator. This control is most often used to set the oscillators at different semitone values, such as octaves or other intervals. TRANSPOSE offers the best available sound quality, but it is not modulatable.

*Range -24 semitones to +24 semitones*

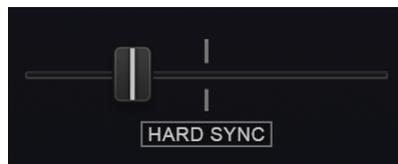
## COARSE

The COARSE control operates in a similar way to a fine pitch 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 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)\_

## 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.

<b>Single Sample</b>	All of the keys will play the same pitch
<b>Multi-Sample</b>	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.
<b>Chromatic Sample</b>	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

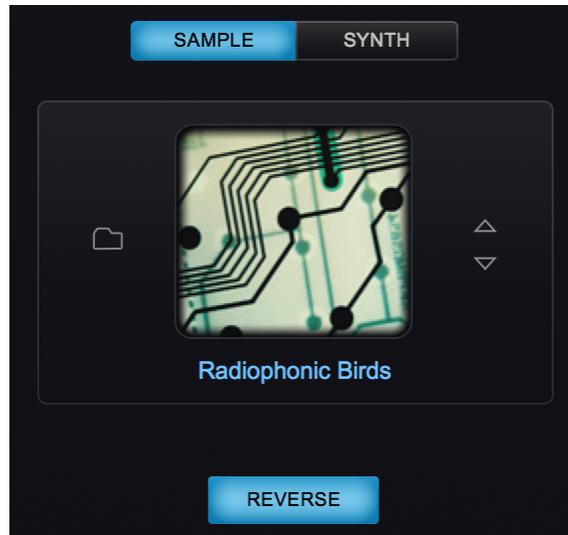


Selecting either mode switch will determine whether the Layer will be able to load a Soundsource (SAMPLE) or will utilize a DSP Wavetable (SYNTH).

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 will hear if loops are active.
- Samples which play something worthwhile when looped in reverse generally don't sound much different when played forward or backward.

### TIMBRE (SAMPLE ONLY)



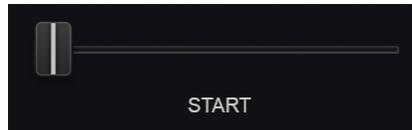
The TIMBRE slider alters the tonal characteristics of the Soundsource in different ways. There are two TIMBRE modes, CRUSH, and SHIFT. The center-point of this bidirectional slider is null—meaning no TIMBRE change will occur.

- **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 vice 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 and then select the **INFO** button. The number of samples used is listed after “**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.

## START (SAMPLE ONLY)

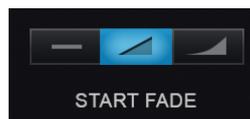


The **START** control determines at which point in the sample playback will begin when the oscillator is triggered. Among other things, it can be useful to remove sharp attacks or clicks at the start of a sample. This setting will vary depending on the number of samples in the Soundsource.

Soundsources can have a single sample mapped across the entire keyboard (Textures are a typical example of this). Other types of Soundsources often have many samples mapped to different ranges on the keyboard. These ranges are called ‘Zones.’

The number of zones determines the maximum range of the Start slider. If the Soundsource has more than 12 Zones mapped (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. The .60 range is especially useful when modulating long, evolving Texture Soundsources and using the [Arpeggiator](#).

## 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 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)



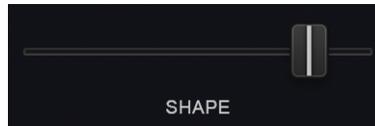
The PHASE control will only have an audible effect when it is heard combined with another layer, as phase changes can only be perceived in relation to another audio signal. The best way to understand the PHASE control is to set up a SYNTH sound on Layer A (with the ANALOG control to zero). Then, from 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.

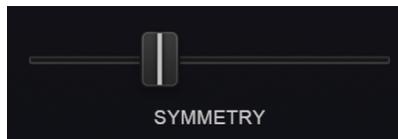
Many interesting composite waveforms can be created with the PHASE control this way, and this technique is particularly useful for Synth Bass sounds.

### 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.

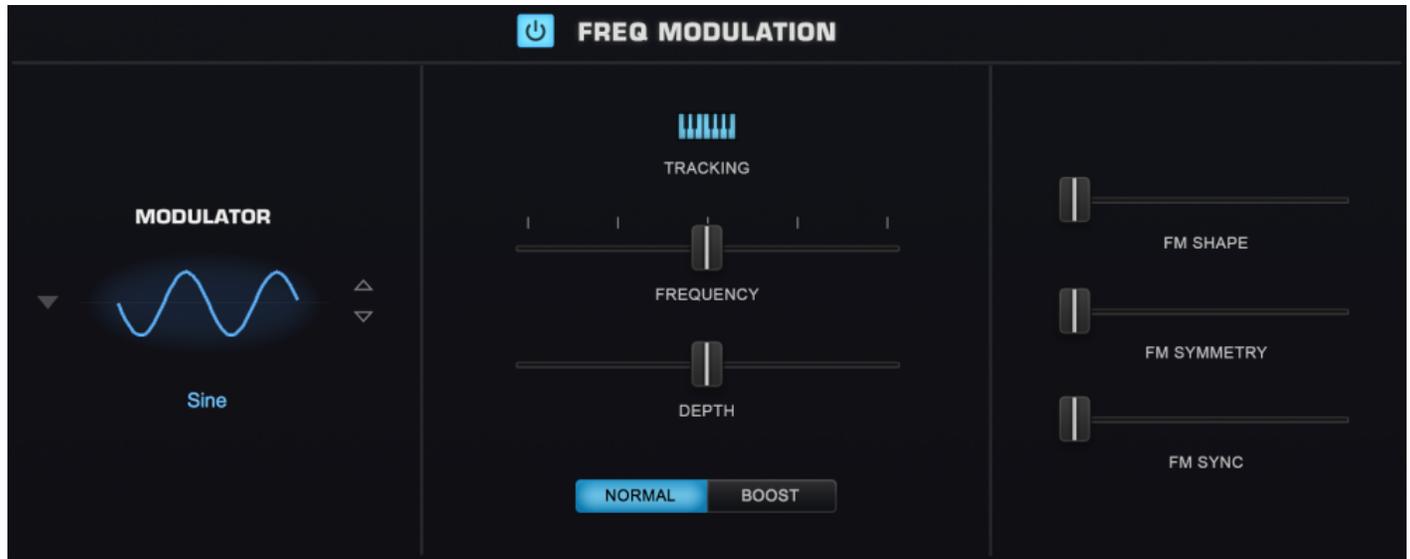
### HARD SYNC (SYNTH ONLY)



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.

## 8.3.4.2. Frequency Modulation



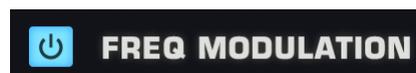
FM stands for Frequency Modulation. FM has been a feature on synthesizers since the 1960s, but it was popularized in Yamaha's DX/TX series of digital synthesizers in the 1980s. It was well known for producing glassy, metallic sounds and for creating sounds that are more harmonically complex.

FM is a form of audio synthesis where the timbre of one waveform, called the “carrier,” is changed by modulating it with the frequency of another waveform, called the “modulator”—hence Frequency Modulation synthesis.

FM can take simple waveforms, like sine waves, and make them sound quite complex. In Omnisphere, the exciting thing is that any Soundsource or DSP wavetable can be modulated with FM.

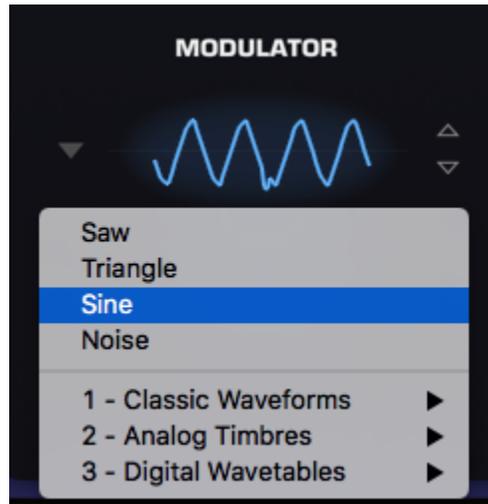
Each Layer in Omnisphere has a dedicated FM Oscillator, which acts as the modulator. This dedicated oscillator can utilize different waveforms and its frequency, depth, shape, symmetry, and hard sync can be modulated.

### FM POWER SWITCH



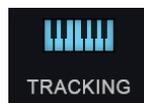
Turns the FM modulating oscillator ON or OFF.

## 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.

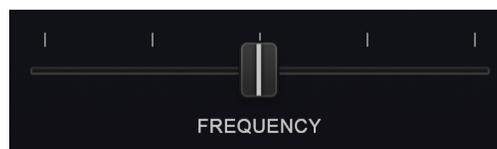
## TRACKING



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.

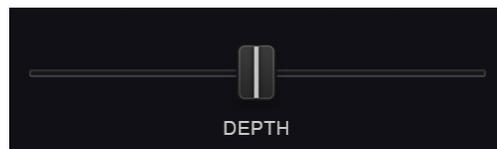
The notches along the FREQUENCY slider are markers for the frequency ratios that will produce the most musically-useful results.

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*

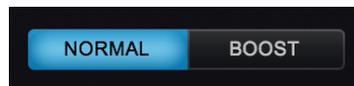
## DEPTH



Controls the modulator's depth. The higher the DEPTH slider is set, the more the dedicated modulator is affecting the timbre of the Oscillator.

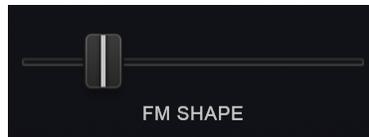
*Range 0.000 to 1.000*

## 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.

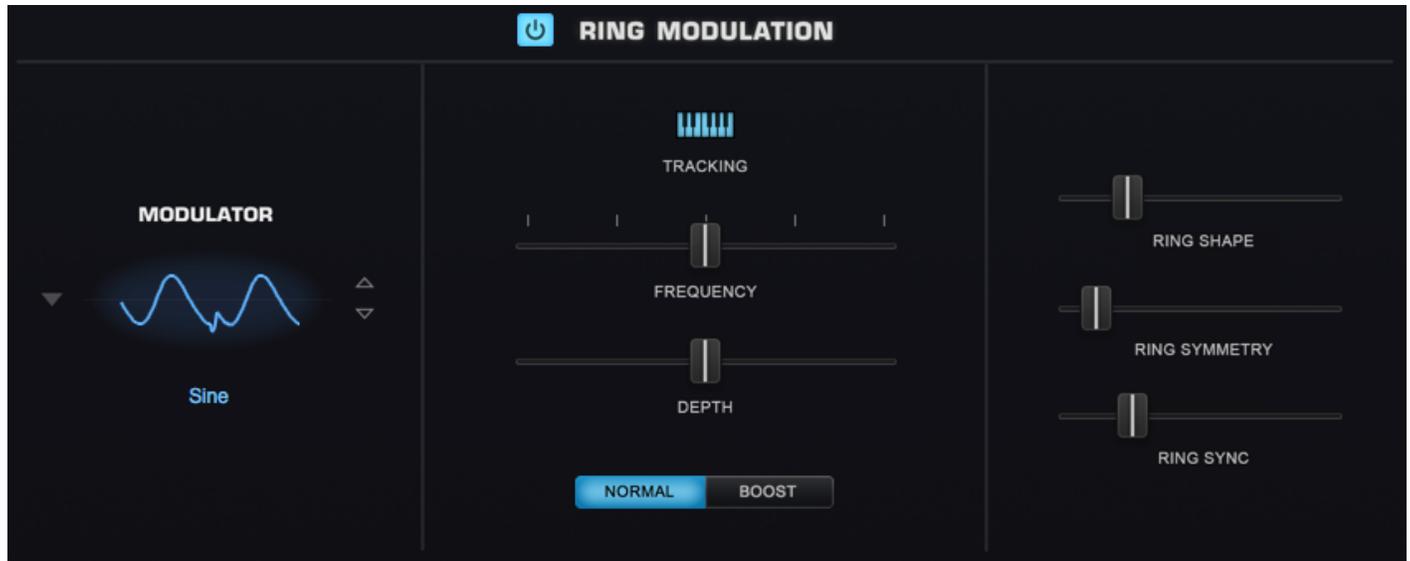
## FM SYNC



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. 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. The waveform display will dynamically change the waveshape as the FM SYNC slider is moved.

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.

## 8.3.4.3. Ring Modulation

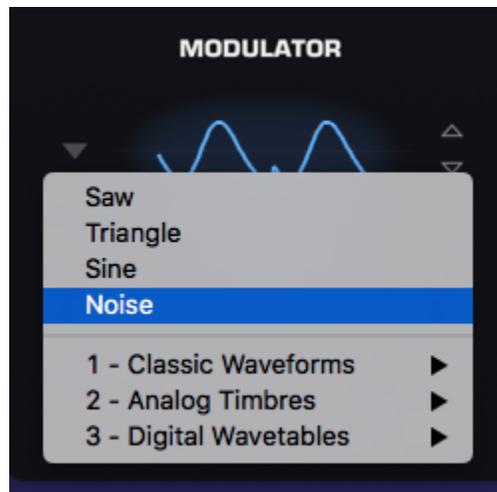


RING is short for Ring Modulation, which is similar in concept to FM (and the parameters are exactly the same as those in the FM sub-page). In Ring Modulation the frequencies of both oscillators are multiplied, which changes their overall amplitude.

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 hard sync can be modulated.

### RING MODULATOR



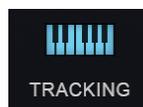
You can select any of the over 500 waveforms or wavetables to act as the modulator. You can select them from the menu by clicking on the waveform display or by using the stepper arrows to the right of the image.

### RING MOD POWER SWITCH



Turns the modulator oscillator ON or OFF.

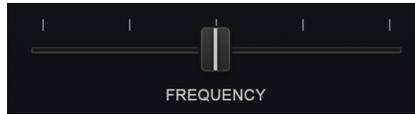
### TRACKING



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.

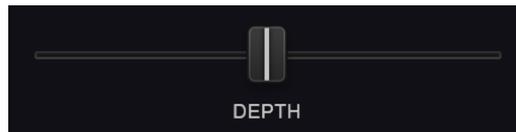
The notches along the FREQUENCY slider are markers for the frequency ratios that will produce the most useful results.

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 Oscillator and the Modulation Oscillator.

*Range 0.000 to 1.000*

## DEPTH SWITCH



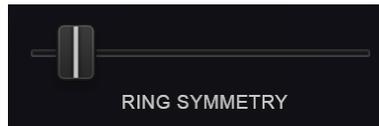
This horizontal slider controls the depth of the Ring Modulation, meaning how much interaction occurs between the modulator and carrier.

## 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. 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 taste—they change the overtones and harmonic structure instead. The waveform display will dynamically change as the RING SYNC slider is moved.

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.

## 8.3.4.4. Waveshaper



Omnisphere's Waveshaper takes the Oscillator's waveform and passes it thru 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.

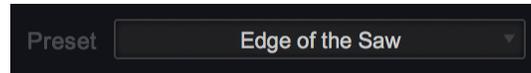
The MIX, AUDIO PATH, and GAIN controls apply to all three sections.

## POWER SWITCH



This turns the Waveshaping effect ON or OFF.

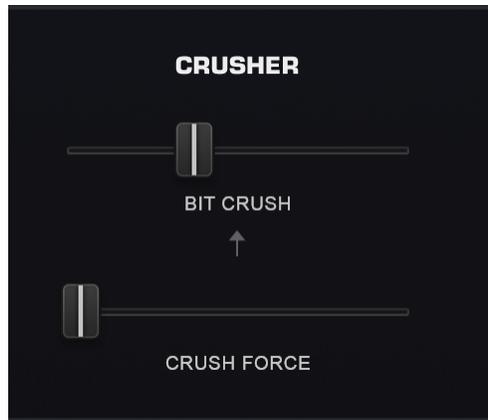
## PRESETS



Waveshaper Presets can be copied, pasted, or saved from this menu.

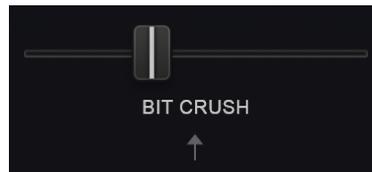
## 8.3.4.4.1. Crusher

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The CRUSHER section offers parameters for controlling the bit depth of the oscillator.

### BIT CRUSH

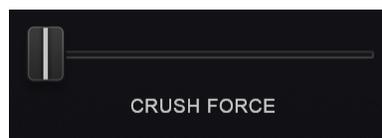


Bit-crushing introduces distortion by reducing the resolution of digital audio. This lowers the dynamic range and increases the noise floor. Use this for achieving grainy or lo-fi sounds—it really adds character to your sound. The effect can range from slightly distorted to very harsh, depending on the 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*

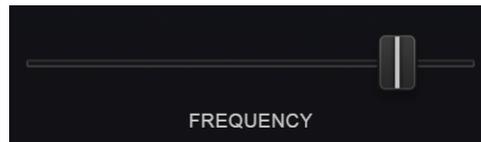
## 8.3.4.4.2. Shaper

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The SHAPER section offers controls for introducing Waveshaping to the Oscillator.

### DEPTH

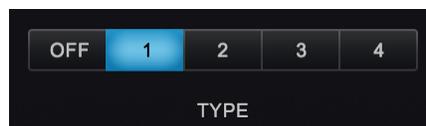


In the SHAPER section, you can control the amount of Waveshaping that is applied to your sound by using the DEPTH slider. The farther to the right this is set, the more pronounced the effect of the Waveshaper will be.

DEPTH is Modulatable.

*Range 0.000 to 1.000*

### TYPE

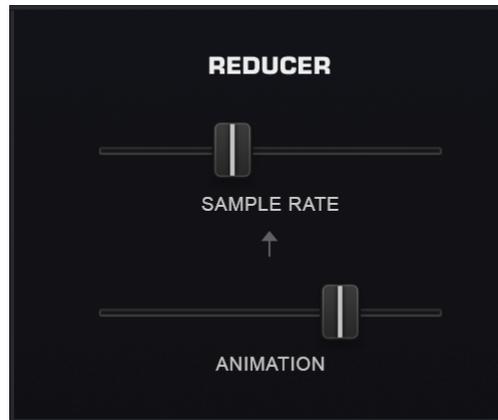


You can change the type of Waveshaping by selecting one of the four preset Waveshaping algorithms. These range from softer to more aggressive—1 being the most subtle and 4 the most extreme.

***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.***

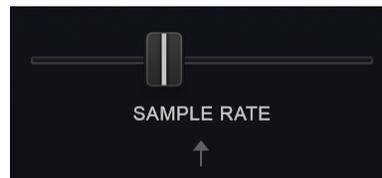
## 8.3.4.4.3. Reducer

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The REDUCER section offers parameters for controlling the Sample Rate of the Oscillator.

### SAMPLE RATE

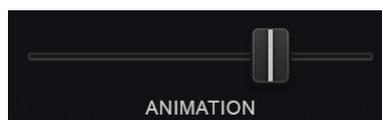


This controls the amount of Sample-Rate Reduction that is introduced to the Oscillator. By reducing the sample rate, distortion and artifacts called “aliasing” are introduced to the sound. Generally, aliasing is avoided in digital audio, but here it can be used in a controlled manner to add wildly different 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*

## 8.3.4.4.4. Mix Path Gain



### MIX

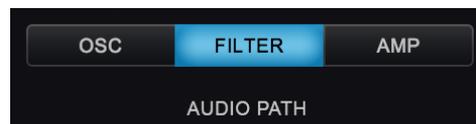


The MIX slider controls the balance between the original Oscillator's signal and the Waveshaped sound. If the mix is at the minimum setting, then the effect of the Waveshaper is not heard. When set to the maximum, only the Waveshaped signal is heard.

MIX is modulatable.

*Range 0.000 to 1.000*

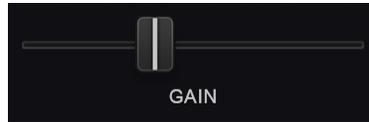
### AUDIO PATH



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*

## 8.3.4.5. Unison



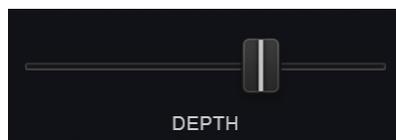
In vintage analog polyphonic synthesizers, Unison was used to trigger all of the voices cards of the synthesizer at the same time for a rich, detuned, monophonic sound. Omnisphere takes Unison to the next level by offering polyphonic Unison, with numerous enhancements and controls. Just a few or many 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

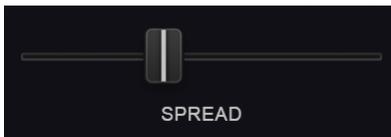


The DEPTH slider controls the amount of UNISON voices added. Increasing the setting of this slider increases the number of UNISON voices. The more UNISON voices used, the richer the sound, but the higher the demand on the CPU.

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.

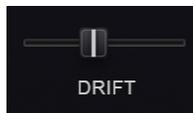
## FINE/COARSE RANGE



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 on 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-phase. Perfectly in-phase produces results like digital synthesizers. Out-of-phase settings produce classic analog-like results.



## 8.3.4.6. 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 its own HARMONIA section, it can add up to sixteen additional oscillators per patch, for a total of eighteen!

## 8.3.4.6.1. Controls

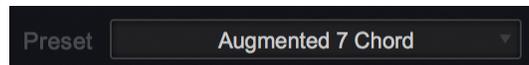
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### POWER SWITCH



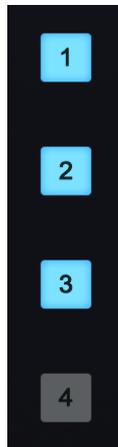
This turns HARMONIA ON and OFF and is useful for comparison to the original sound.

### 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 saved.

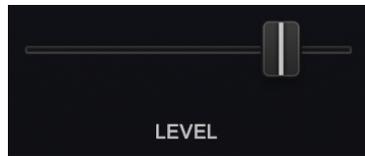
### VOICES 1-4



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*

## TRANSCOPE



Each of the HARMONIA voices can be transposed over a four-octave range. Selecting the INTERVAL switch will bring up a drop-down menu of half-step transpositions, either up or down by 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*

## 8.3.4.6.2. Synth Controls



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

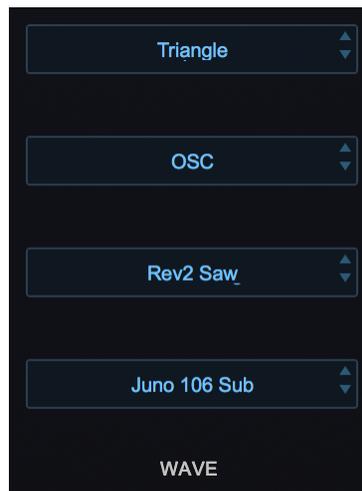


The SYNC control is unique to SYNTH Oscillators. This is an offset of the HARD SYNC control on the MAIN OSCILLATOR page. Each of HARMONIA's four voices can have its own SYNC offset. The center position indicates that the HARMONIA voice's SYNC is identical to the main Synth Oscillator's HARD SYNC.

**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.

## 8.3.4.7. 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.

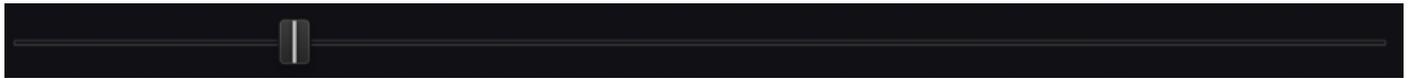
**NOTE:** *The WILD mode will not work in LEGACY mode.*

## 8.3.4.7.1. Modes

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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 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*

## 8.3.4.7.2. Grain Controls

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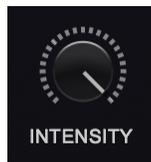
### GRAIN DEPTH



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.

## 8.3.4.7.3. Pitch Controls

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### 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.

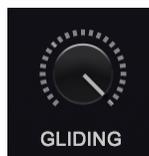
### INTERVAL



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*

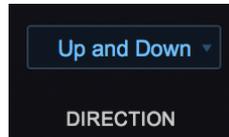
### GLIDING



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

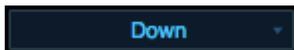


The items in the DIRECTION menu determine which direction the PITCH GRAINS are transposed.

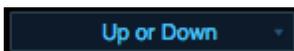
There are four PITCH GRAIN DIRECTIONS available:



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.***

## 8.4. Filters



The Filter is a key component of subtractive synthesis. It's designed to remove frequencies from a sound, 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.

### POWER SWITCH



Enables or disables the FILTERS.

**NOTE:** Turning the Filter OFF saves CPU power, since every voice played has it's own dual-filter per Layer.

## FILTERS PRESETS



Omnisphere has a wide variety of customized filter configurations, called presets. The presets represent the settings of Omnisphere's complex dual stereo filter. Filter presets can be selected, copied, pasted, and saved from this menu.

**TIP:** If you find a Patch that has an interesting custom filter configuration, you can save it into your Preset library to use with your own Patches.

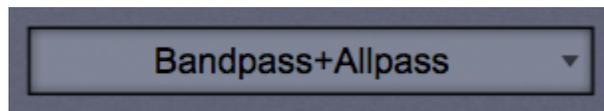
The Presets are categorized into several sub-categories; Bandpass Filters, Highpass Filters, Lowpass Filters and Specialty Filters. For the sake of space, the preset names are abbreviated, but this is what the different abbreviations indicate:

<b>BPF</b>	Band Pass Filter
<b>HPF</b>	High Pass Filter
<b>LPF</b>	Low Pass Filter
<b>UVI</b>	UVI Filter from Atmosphere®
<b>db</b>	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.*

## 8.4.1. Cutoff

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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  
=

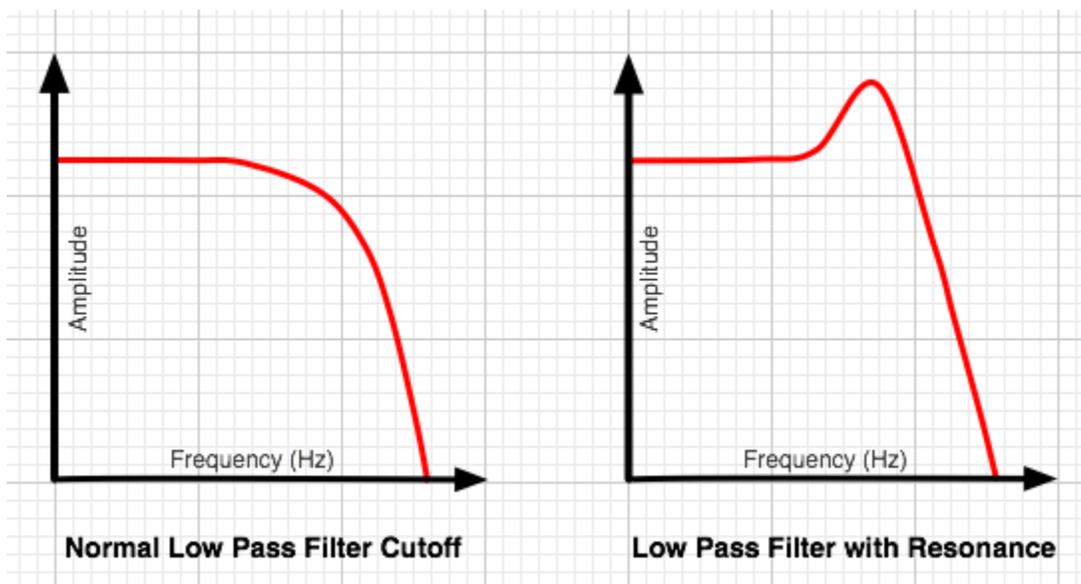
*Range 00.05Hz to 19.00kHz*

Omnisphere has many specialized filters, some of which are based on tuned delay lines (e.g. Metal Pipe +/- and Resonator +/-). In those cases, the Cutoff is used to tune the filter’s pitch.

## 8.4.2. 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.

## 8.4.3. Key Tracking

---



The Filter Tracking is a dedicated modulation control. It determines to what extent the cutoff frequency will track the keyboard. The higher the KEY value is set, the more the filter will open over the upper range of the keyboard and close in the lower ranges of the keyboard.

For example, if a low pass filter is loaded and the Cutoff is set below 1.00KHz, the notes played below Middle C will become increasingly darker in tone, and keys above Middle C will be increasingly brighter. At the minimum setting, higher and lower notes have no effect on the Cutoff frequency.

*Range 0 to 127*

### 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.*

## 8.4.4. 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 affect 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 to 127*

### ENV INVERT SWITCH



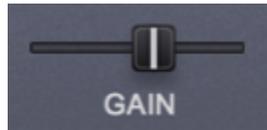
This control inverts the Filter Envelopes contour and so it will have the effect of closing the filter (lowering the cutoff frequency). ENV will change to inverted text when tracking is inverted.

*TIP: Inverting the Filter's Envelope can be useful for creating unusual contours, such as double triggering and release effects*

## 8.4.5. Gain

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### GAIN



By default the FILTER GAIN is set at 0.0dB. Changing this control alters the output level of the Filters. For example, if the Filter is closed down, the tone is quite dark, and rather low in output, the level could be compensated by using the 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.*

## 8.4.6. Variant

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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 Filter Cutoff.
- In the Resonator +/- Filter types, VARIANT controls the tone of the Filters.

## 8.4.7. Filter Zoom



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.

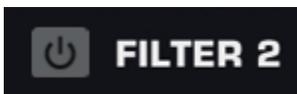
There are primary Cutoff, Resonance, and Variant controls for the entire Filter, but FILTER 1 and FILTER 2 both have their own independent CUTOFF, RES, and VARIANT Offsets which are applied to those primary values.

### POWER SWITCH



Enables or disables the entire Filter. It is a duplicate of the power button on the EDIT page. The entire Dual-Filter can be turned on and off with this switch, which provides a quick way to compare what it sounds like with and without filtering.

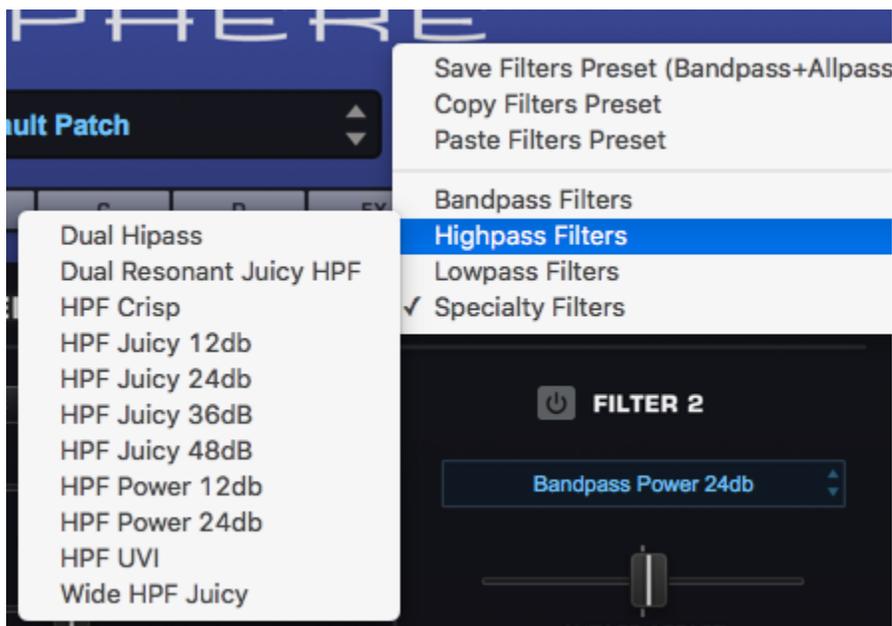
### FILTER 1 & FILTER 2 POWER SWITCHES



Enables or disables FILTER 1 and/or FILTER 2.

*NOTE: If both FILTER 1 and FILTER 2 are turned off, the GAIN slider is the only control on the FILTER ZOOM page that will still change the sound.*

## 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.*

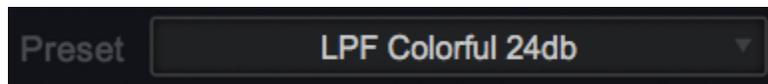
*TIP: If you find a Patch that has an interesting custom filter configuration, you can save it into your Preset library to use with your own Patches.*

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, but this is what the different abbreviations mean:

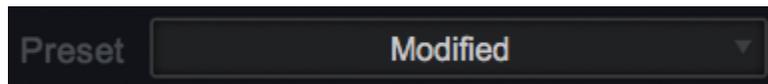
<b>BPF</b>	Band Pass Filter
<b>HPF</b>	High Pass Filter
<b>LPF</b>	Low Pass Filter
<b>UVI</b>	UVI Filter from Atmosphere®
<b>db</b>	Short for Decibel. Names like 12db, 24db, refer to the roll off slope of the filters.

## 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.

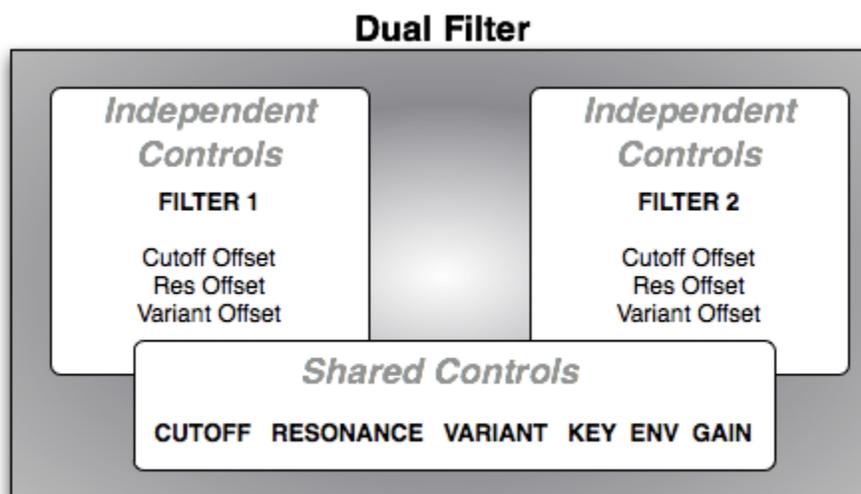


**NOTE:** Filter Presets are not designed to recall CUTOFF, RES, KEY and ENV settings. This is done because it's the best way to audition the different Filter Presets within the context of your current Patch.

## 8.4.7.1. 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.

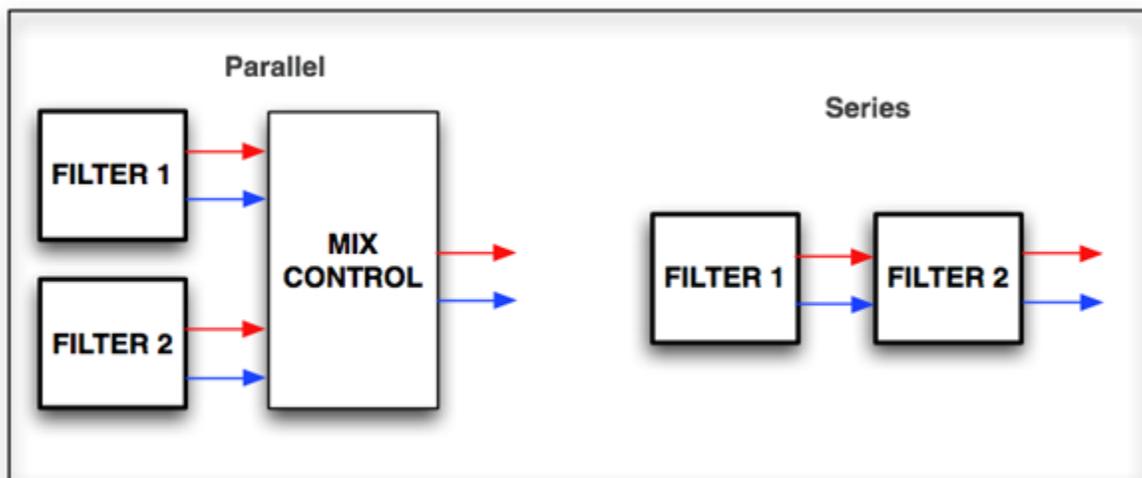


The CUTOFF, RES, VARIANT, KEY, ENV, and GAIN controls mirror those in the Filter section on the LAYER pages. Any changes made to these controls are reflected on the LAYER pages as well, and vice-versa.

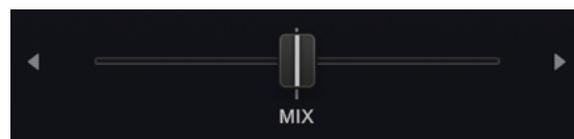
## SERIES / PARALLEL



When Omnisphere's two Filters are in "Series," it means that 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" means the two Filters are both working, but they are not directly affecting the other—they are operating side-by-side and mixed together. The MIX controls the balance between the two filters.



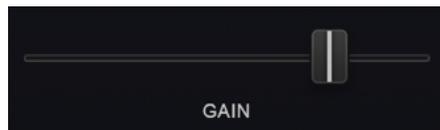
## MIX



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)*

## 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*

## 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

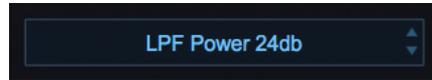


The GAIN Control is applied before the Filters.

**POST**

POST means that the GAIN Control will be applied after the Filters.

## 8.4.7.2. Type



The Filter Type menu allows you to select the actual Filter algorithm to be used in FILTER 1 or FILTER 2. Omnisphere comes with a wide range of filter types. Each of the two stereo filters has the same 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.

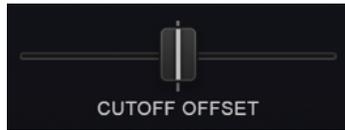
<b>OFF</b>		The Filter is off.
<b>LOW PASS</b>	Gentle 6db	A subtle, 1-pole LPF.
	Crisp 12db	A brighter, 2-pole LPF.
	Warm 12db	A fuller, 2-pole LPF.
	Juicy 12db	This 2-pole LPF has a very smooth response at high resonances.
	Power 12db	This is the 12db LPF from the Power Filter FX module.
	Warm 24db	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.
<b>HIGH PASS</b>	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 LPF from the Power Filter FX module..
<b>OTHER</b>	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 thru a narrow 'notch,' also known as a 'Band-Reject' filter.
	Allpass	All frequencies are passed equally, but it changes the phase relationship between the frequencies.
	Metal Pipe +	A complex stereo comb-filter that produces flanger-like metallic overtones.
	Metal Pipe -	A complex stereo comb-filter, inverted.
	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.

## 8.4.7.3. Offsets

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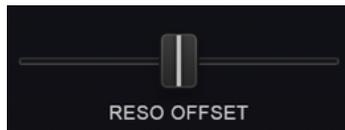
### CUTOFF OFFSET



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.

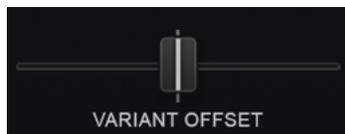
### RESONANCE OFFSET



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.

## 8.4.7.4. Cutoff

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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.

**6dB** = 1 Pole

**12dB** 2 Pole  
=

**18dB** 3 Pole  
=

**24dB** 4 Pole  
=

*Range 00.05Hz to 19.00kHz*

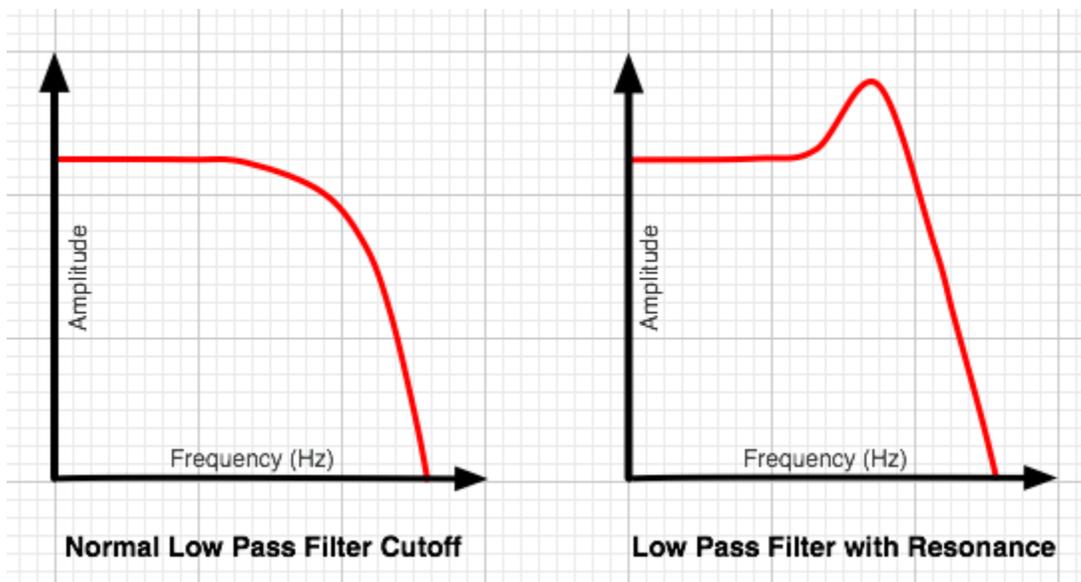
Omnisphere has many specialized filters, some of which are based on tuned delay lines (e.g. Metal Pipe +/- and Resonator +/-). In those cases, CUTOFF is used to tune the filter’s pitch.

## 8.4.7.5. 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

## 8.4.7.6. Variant

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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 filter Cutoff.
- In the Resonator +/- filter types, VARIANT controls the tone of the filters.

## 8.4.7.7. Key Tracking

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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.

## 8.4.7.8. Envelope

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The 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*

## 8.5. 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 combined both ideas into one, offering the best of both worlds. Omnisphere's envelopes are extremely powerful and at the same time very easy to use, regardless of the envelope style.

Envelopes are the contours that shape the sound coming from the Oscillators and the Filters—over time.

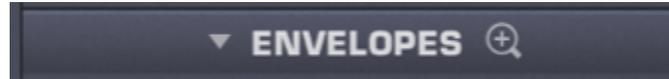
A basic ADSR-style envelope determines how quickly a sound will begin, its initial decay, what level it sustains at, and how long it will fade out after the note has been released. The different elements of the envelope are called stages. Most synthesizers have 4-stage envelopes, often called ADSR envelopes, which stands for Attack, Decay, Sustain, and Release.

Complex envelopes contain contours with more than four stages and allow a much greater degree of control in shaping the sound. They offer tremendous flexibility when shaping sounds and can be very useful in creating rhythmic shapes.

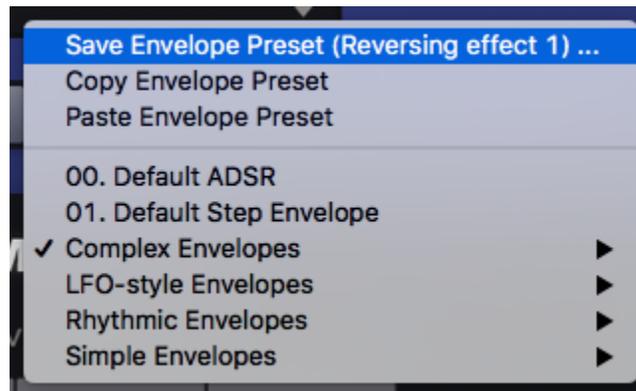
Each Part in Omnisphere has 12 envelopes. Each can be used either as a basic 4-stage ADSR envelope, or as a Complex envelope. Each of the four Layers has a dedicated AMP (Amplitude) envelope and a dedicated FILTER envelope, and there are four MOD ENVELOPES that are common to all Layers.

## 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



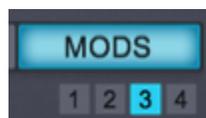
Each Part also has four dedicated FILTER Envelopes, one for each Layer. These shape the Filter Cutoff for each Layer. A dedicated Velocity knob controls the dynamic output of the FILTER Envelopes based on MIDI Velocity.

## 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.

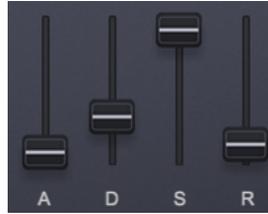
**1, 2, 3, 4** (Modulation Envelope buttons)



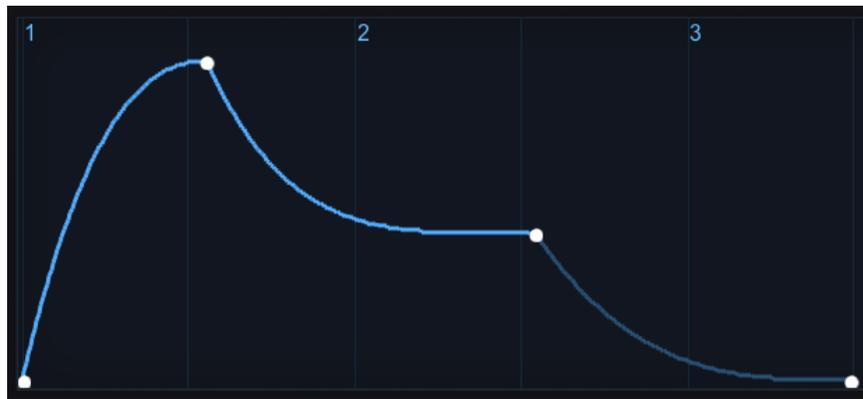
Under the MODS sub-page, there are 4 small switches with which you can select any of the four Modulation Envelopes.

Instead of a dedicated VELO (Velocity) control, each of the four Modulation Envelopes has its own DEPTH control knob.

## 8.5.1. ADSR Controls



The ADSR Envelope slider interface operates the same way for all the different envelope types in Omnisphere.



The screenshot above is from the Envelopes Zoom page, but illustrates what a standard ADSR Envelope looks like. The first to second point (or Stage) is the Attack time; the second 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 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.

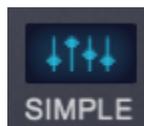
## R – RELEASE



'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.

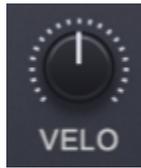
## X BUTTON



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 in the AMP and FILTER ENVELOPES 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.*

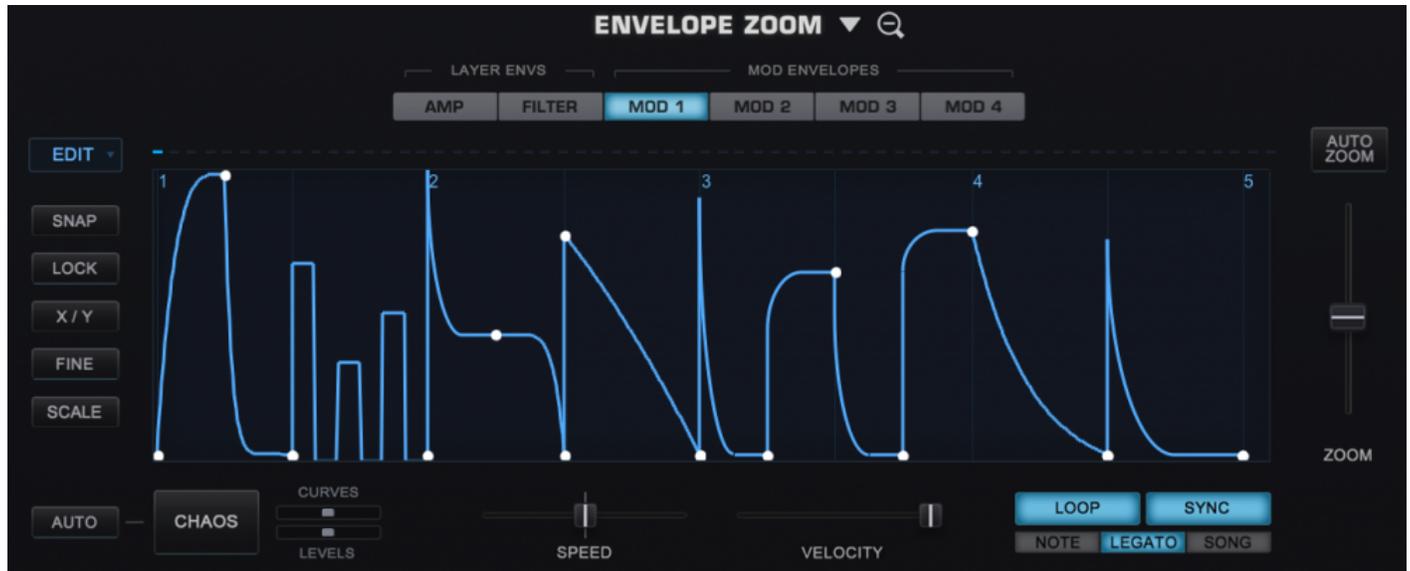
## DEPTH



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.

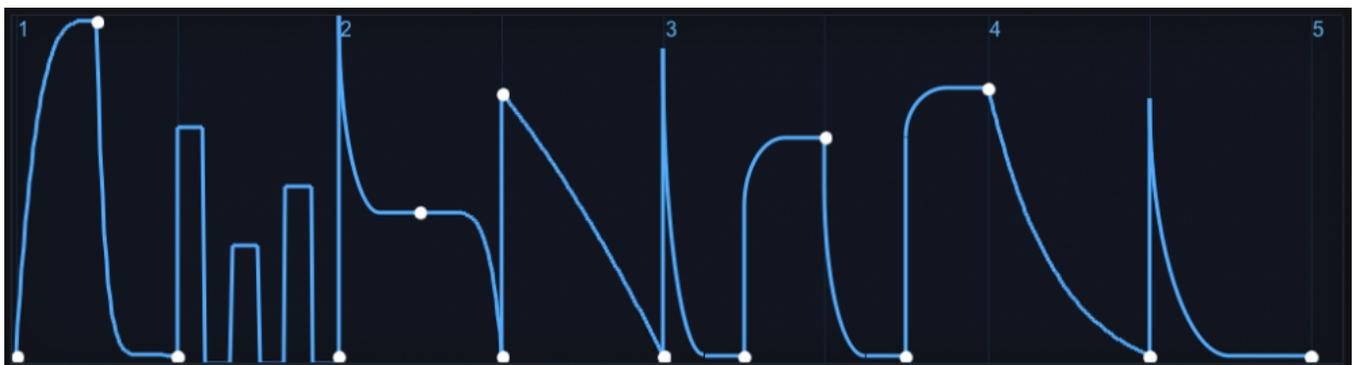
***NOTE: The DEPTH controls for the Modulation Envelopes are independent. The DEPTH control will affect only the selected envelope.***

## 8.5.2. 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.

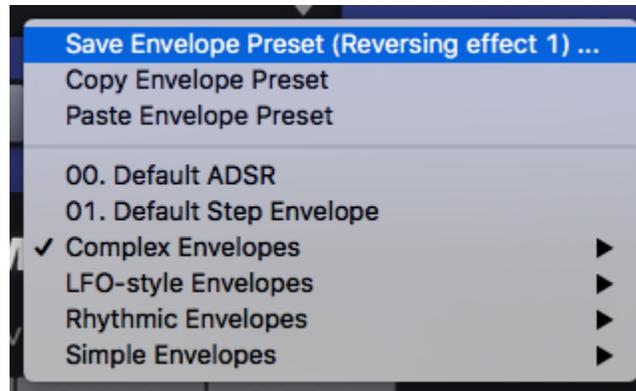


The Envelope Zoom has a special [CHAOS](#) feature, which can randomize the envelope's shape. CHAOS can also be set to automatically change on every cycle, creating constantly changing envelopes. The degree that CHAOS will affect the Envelope is determined with dedicated probability mini-sliders.

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.

## 8.5.2.1. Presets

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There are two drop-down menus that provide access to Envelope Presets. One is on the LAYER pages next to the ENVELOPES label, the other is found in the 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 envelopes, Layers or Parts using the Copy/Paste Envelope Preset functions. This provides a quick and convenient way to work with envelopes, and Omnisphere comes with a large number of interesting and useful Envelope Presets for you to explore.

### Saving & Loading Envelope Presets

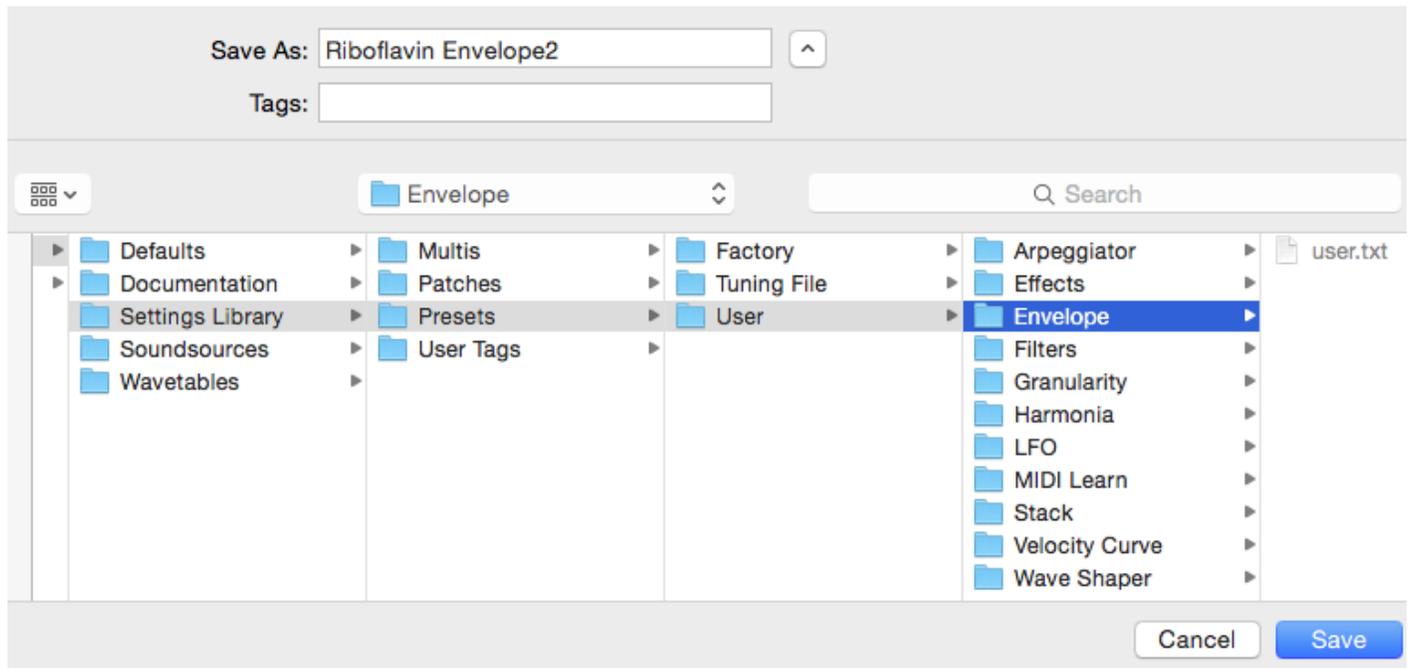
To save a customized Envelope setting select "Save Envelope Preset" and a standard "Save" dialogue will appear. Make sure that the preset that's being saved is given a name. Omnisphere will automatically add the ".env" extension to the name.

By default the Envelope preset will be saved in the following directory in your STEAM folder:

- STEAM/Omnisphere/Settings Library/Presets/User/Envelope

You can also create custom sub-folders within the Envelope folder to organize custom Presets according to your own preferences.

After a new Preset has been saved it can be loaded using the Envelope Presets menu. Use one of the drop-down menus and browse to your newly-saved Preset.



**NOTE:** In order to load a shared envelope preset, it must first be placed in the following folder:

- *STEAM/Omnisphere/Settings Library/Presets/User/Envelope*

*Only then it will appear on the list of presets.*

### Copying and Pasting Envelope Presets

Select “Copy Envelope Preset” from the Presets menu to copy the current Envelope’s contours. Then select the Envelope to which you wish to apply it. This can be any of the Envelopes in the current, or 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.*

## 8.5.2.2. Page Buttons

---

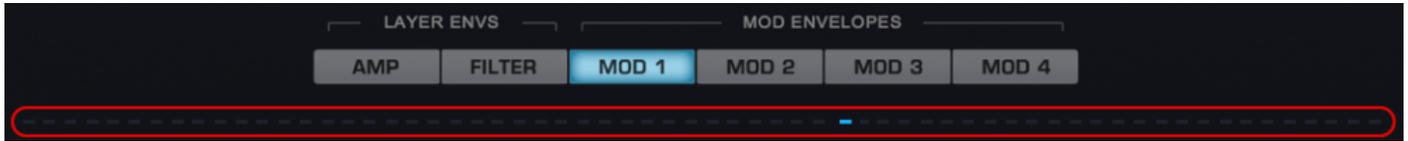


Above the Envelope Display area are six buttons that select the controls for the current Layer's AMP and FILTER Envelopes and the four global MOD ENVELOPES which are shared by all Layers for the Part.

*NOTE: Other Layers must be selected to see their AMP/FILTER envelopes.*

## 8.5.2.3. Timeline

---



Each of the four MOD ENVELOPES has 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.

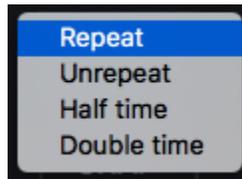
**NOTE:** *Until a MOD envelope has been set up as a modulation source to a target in Omnisphere, the LED display will be off.*

## 8.5.2.4. 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.



- |                    |                                                                                                                       |
|--------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>Repeat</b>      | Every time 'Repeat' is selected, all of the stages in the Envelope will be duplicated, doubling the number of points. |
| <b>Unrepeat</b>    | Can undo any Repeats that have been done. Unrepeat can also be used to "halve" the number of segments in an envelope. |
| <b>Half time</b>   | Each time this is selected, Half time will slow the speed of the Envelope's contour by half.                          |
| <b>Double time</b> | The speed of the Envelope's contour will double every time this is selected.                                          |

## 8.5.2.5. 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 the last two points on the right are the Sustain level and the Release time stages. Time is represented horizontally and Level is on the vertical axis.

To add an additional stage to the Envelope, Right/Control-Click and select “add” from the pop-up menu. When an additional point is added, all points to the right are shifted to make room for the new stage. When selecting between two points, a new point is inserted in the middle of the stage and the points to the right are not shifted.

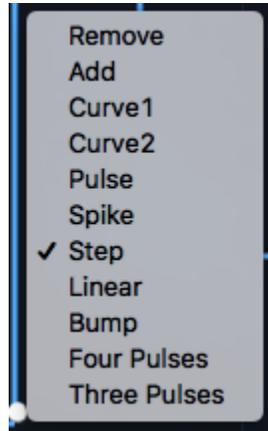
Selecting and dragging any point in the display will change the position of the point. Selecting anywhere there is no line or point will move the background grid forward and back.

When clicking and holding on a point, a small numerical window will appear above the display that indicates the level settings for that point (0.000 is minimum and 1.000 is maximum).

Right/Control-Clicking in the display area will bring up the [Envelope Curves](#) menu.

## 8.5.2.6. 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 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.

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**

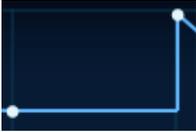
A steeper, more exponential slope between the points.

**Pulse**

Places a three-angle pulse shape between two points.

**Spike**

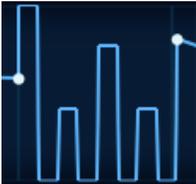
A sharp point with a gradual slope on one side.

**Step**

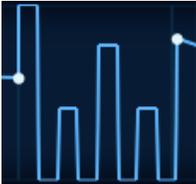
Adds a right angle between the points.

**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

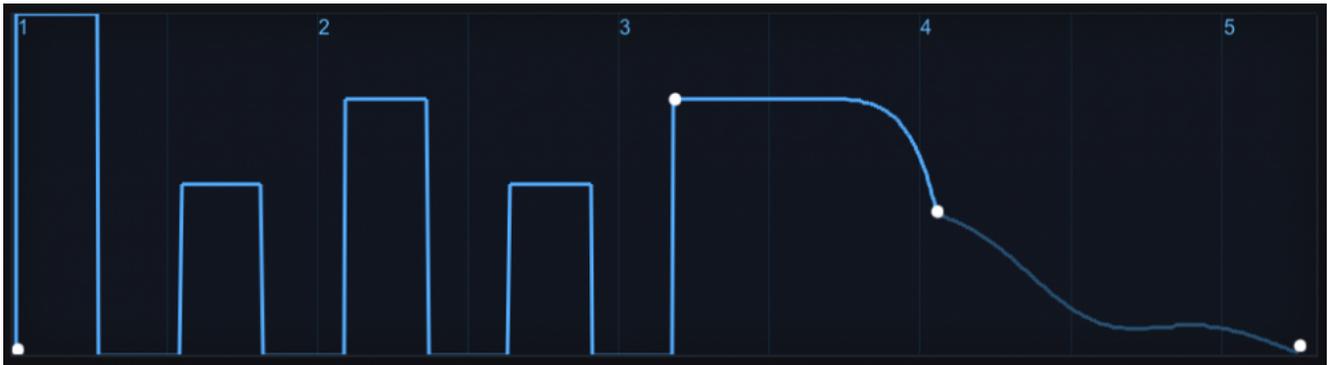
**Three Pulses**

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 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.



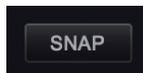
## 8.5.2.7. Editing Controls

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These mode switches in the ENVELOPES ZOOM offer several methods for precise editing of the Envelopes.

### SNAP

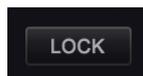


When SNAP is selected, any horizontal repositioning of a point is limited to 16th notes. The Envelope Display has vertical reference lines, which are helpful when using SNAP to line up the points at the 16th note divisions.

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 – Option/Alt*

### LOCK



When LOCK is enabled, all the points to the right of the point selected can be moved as one single group of stages. The only restriction is the current range of the Envelope Display.

*Keyboard Shortcut -Command/Control*

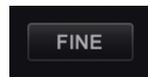
### X/Y



This control will constrain the movements vertically or horizontally.

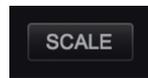
*Keyboard Shortcut – Shift*

## **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**



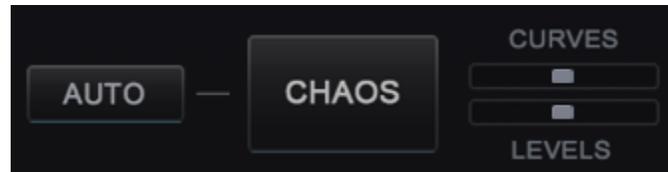
The duration of the Envelope will be scaled by dragging any of the points within it (except the first one). Dragging to the right will increase the duration and dragging to the left decrease it. Scaling the Envelope beyond the limit of Envelope Display will appear to “squish” many of the points together, 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.*

## 8.5.2.8. Chaos

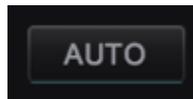
---



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 four Modulation Envelopes have an automatic feature that randomizes the CHAOS on every cycle of the Envelope.

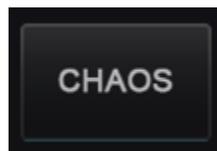
### CHAOS AUTO



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 available on all four MOD 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 smooth out the sharper Envelope transition types, such as bump, pulse, spike, linear, and the three and four pulse curves.

## CHAOS LEVELS

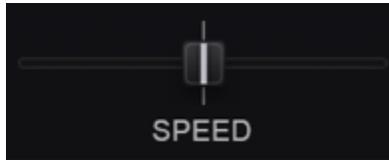


The amplitude of the Envelope points will be changed more or less frequently, depending on the setting of this control. At minimum setting, the levels of the points will only change slightly. Maximum settings will produce more dramatic shifts in the Level values of the stages.

***NOTE: LEVELS changes are strictly vertical; no point is moved horizontally with CHAOS.***

## 8.5.2.9. Speed

---



Controls how quickly the envelope will cycle. This is a rate-based control, based on the duration of the Envelope.

For example, if the Envelope's cycle is 1 second, and the SPEED slider is set to 0.50, the Envelope will take 2 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 0.10x-10.0x (1.00X is the default)*

## 8.5.2.10. Velocity

---

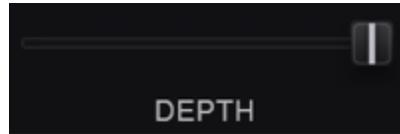


The VELOCITY slider is a duplicate of the knob found in the AMP and FILTER Envelope section of the Layer pages. This slider controls the effect of MIDI Velocity on the output of the AMP and FILTER envelopes. Moving the slider to the right increases the dynamic sensitivity of the envelope and moving it to the left decreases it.

***NOTE:** Each of the VELOCITY controls for the four AMP and four FILTER envelopes are independent and affect only the selected envelope.*

## 8.5.2.11. Depth

---



The DEPTH slider is a duplicate of the knob found in the MODS Envelope Section of the Layer pages. At the minimum settings, little or no modulation will be sent to the Modulation Matrix and at the maximum setting, the full output is sent.

*Range 0 to 1.00*

## 8.5.2.12. Trigger

---



Several modes are available to determine how the Envelope is triggered and cycled. The NOTE, LEGAT, and /SONG modes are only available on MOD ENVELOPES.

### LOOP



This switch toggles Envelope looping. When selected the Envelope will continually repeat.

### SYNC



The Envelope will sync to the song's tempo. Both LOOP and SYNC can be selected at the same time so the Envelope will cycle and sync to the song's tempo.

### NOTE/LEGATO/SONG



These three mode switches are only available on the Modulation Envelopes as they are related to the MOD ENVELOPES Timeline display.

- **NOTE** – The Envelope is retriggered 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.

## 8.5.2.13. Auto-Zoom

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### AUTO ZOOM



Selecting the button will auto-fit all of the points into the Envelope Display.

### ZOOM



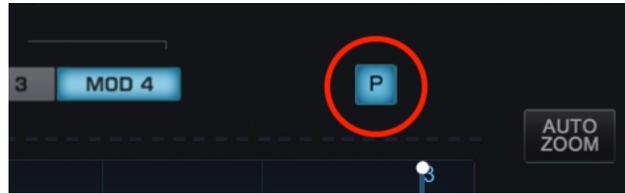
This slider controls the how much of the Envelope Display is visible in the pane. At the minimum value it will display a small part of the first segment and a maximum setting all 100 bars are visible.

If your mouse has a scroll wheel, you can hold your mouse over the Envelope display and scroll to zoom.

**NOTE:** *If the Envelopes contour is very short (less than 1/4 of a bar), the ZOOM slider will not be able to fill the Envelope Display area with the full Envelope.*

## 8.5.2.14. 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.***

## 8.5.3. Groove Lock Envelopes



Groove Lock is one of Omnisphere's most innovative features. With Groove Lock you can lock the groove of the Envelopes to the feel of any Stylus RMX or Standard MIDI file. This dramatically expands the rhythmic potential of the Omnisphere Envelopes. You can instantly create a Groove Lock envelope by simply dragging and dropping any standard MIDI file (for example, from Stylus RMX) onto the Envelope Display. This can be applied to any of the available envelope types; AMP, Filter, and Mod.

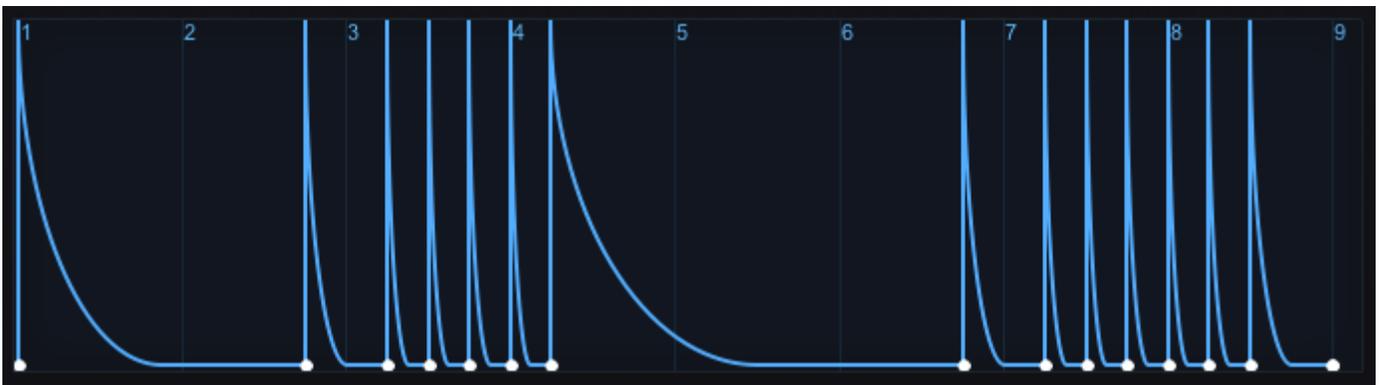
When you drop a MIDI file onto the Envelope Display, it imports the rhythmic information contained in that MIDI file, resulting in a complex rhythmic envelope.

This is a very fast and convenient way to create complex envelopes, and can dramatically reduce the time required to create such envelopes from scratch.

### Original ADSR Envelope



### Complex Envelope after Groove Lock applied



Using MIDI files provides a great starting point for creating interesting new envelopes. It allows envelopes to be Groove Locked to other Spectrasonics plug-ins, or to any MIDI-based musical phrase in your project.

**NOTE:** When you drop a MIDI file onto the Envelope Display, it will replace the existing envelope. If desired, you can save your current envelope as an [Envelope Preset](#) before creating the new Groove Lock envelope.

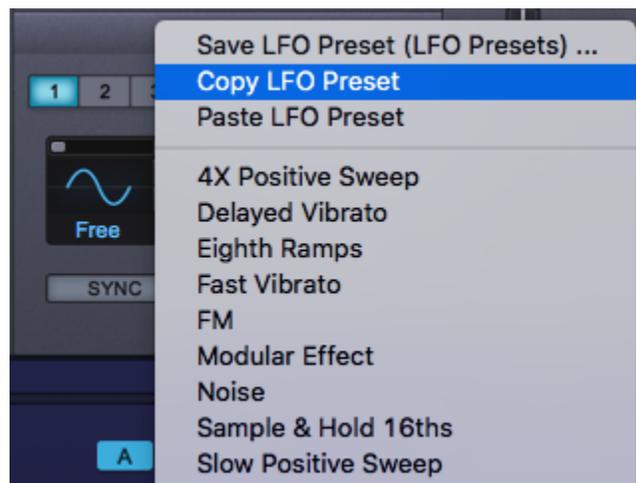
## 8.6. LFOS



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.

## 8.6.1. 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** – Is a positive/negative-shape like the Sine, but without curvature. Useful for sweeps and vibrato.



**Square** – Starts at maximum positive value and then drops to maximum negative value. Useful for trills and pulsing effects.



**\*Rounded Square\*** – A smoothed Square wave. Ideal for smooth pulsing.



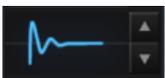
**Ramp** – A linear slope from highest to lowest to highest value. This waveform is also frequently referred to as a sawtooth wave. Useful for sweeps.



**\*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 step, 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.

## 8.6.2. Rate

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RATE controls the speed of the LFO's cycle. The RATE knob 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 is measured in Hz. The rate increases as it's turned clockwise.
- SYNC ON – The LFO's rate is synchronized to the host's tempo. Changing the rate in SYNC mode scrolls through different rhythmic value groups: starting with metric values at the beginning of the knob's range, followed by dotted and later triplets as the RATE knob is increased.

8x – this value stretches a cycle across eight bars.

1/8 – this value cycles the LFO every eighth-note.

1/8 dot – this value cycles the LFO every dotted eighth-note.

1/8 triplet – this value cycles the LFO every eighth-note triplet

*Range (SYNC Mode ON)*

32X, 16X, 8X, 7X, 6X, 5X, 4X, 3X, 2X,

1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96,

1/1 dot, 1/2 dot, 1/4 dot, 1/8 dot, 1/16 dot,

1/1 triplet, 1/2 triplet, 1/4 triplet, 1/8 triplet, 1/16 triplet

*Range (SYNC Mode OFF) 0 to 48Hz*

## 8.6.3. Depth

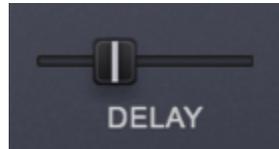
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DEPTH controls the LFO's depth. The higher the setting, the wider the range of the LFO is sent to the Mod Matrix.

## 8.6.4. Delay

---



DELAY 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 retrigger the start of the LFO delay. The LFO Trigger Mode has no effect on the DELAY slider.

## 8.6.5. Sync

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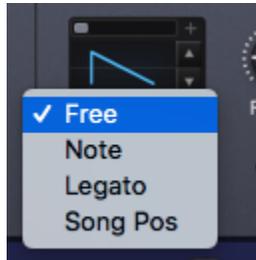


The SYNC switch determines how the LFO rate behaves. When SYNC is enabled, the LFO rate is locked to the host's tempo and the values assigned to the RATE knob will change. Instead of displaying a value in Hz, the values are displayed in rhythmic values.

See the [LFO RATE](#) for the different values available when SYNC is enabled.

## 8.6.6. 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 independently cycle regardless of when a note is triggered.
- **Note** – The LFO will restart its cycle with every new note that is played.
- **Legato** – The LFO will start its cycle when the first note is played, but will continue its cycle when additional legato notes are played. If staccato notes are played, it reverts to “NOTE” and the LFO will restart its cycle with each note.
- **Song Pos** – The LFO will track the bars and beats of the song. ‘Song Position’ ensures repeatable results in playback.

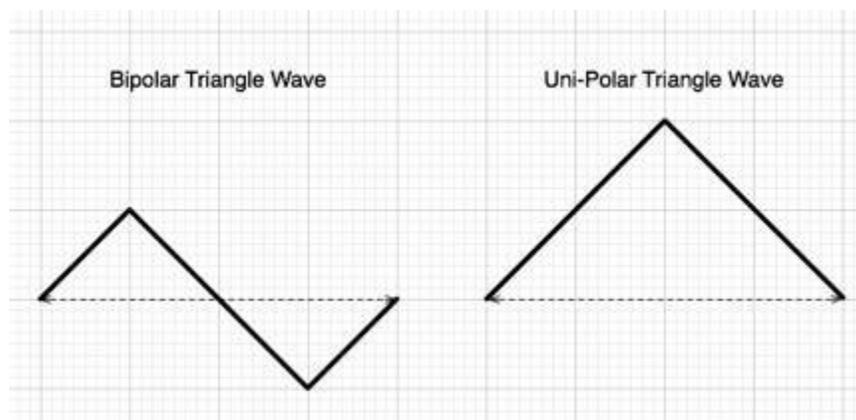
## 8.6.7. Unipolar Switch



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.



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.



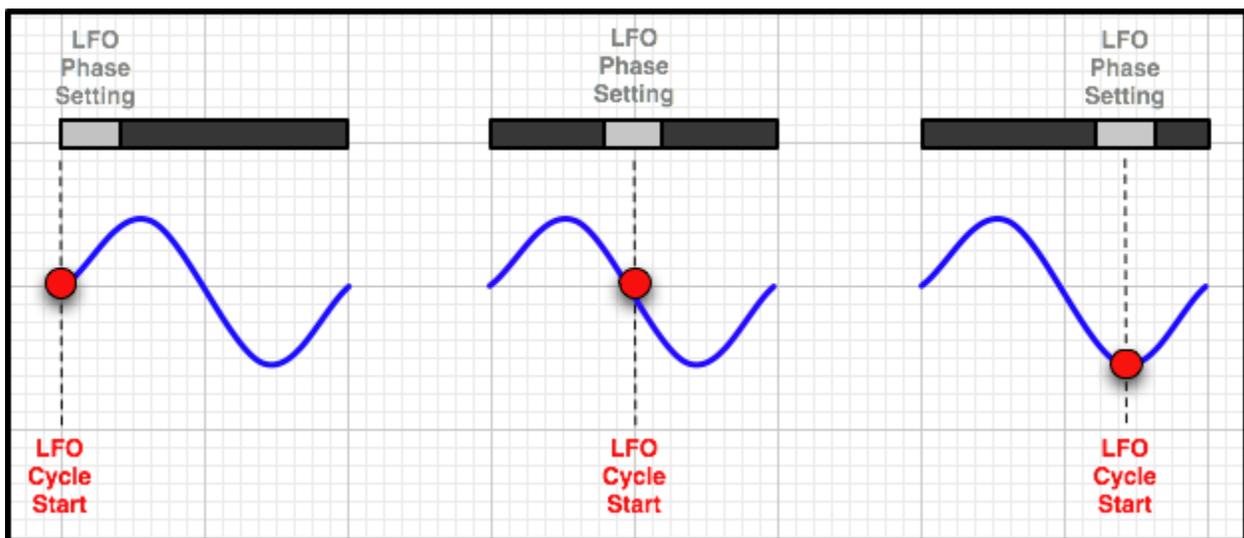
For example, a UNIPOLAR LFO applied to Oscillator pitch is great for simulating guitar-string bending, as guitarists typically bend strings only in one direction. Another use is for a UNIPOLAR LFO to modulate the Filter Cutoff. This will often create better filter sweeps than a bipolar LFO, as a bipolar LFO cycles below the mid-point—so no result is heard if the cutoff frequency is low.

***NOTE: If you want the value to go negative instead of positive, simply select the **INVERT** button in the [Modulation](#) section.***

## 8.6.8. 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.

## 8.6.9. Polyphonic

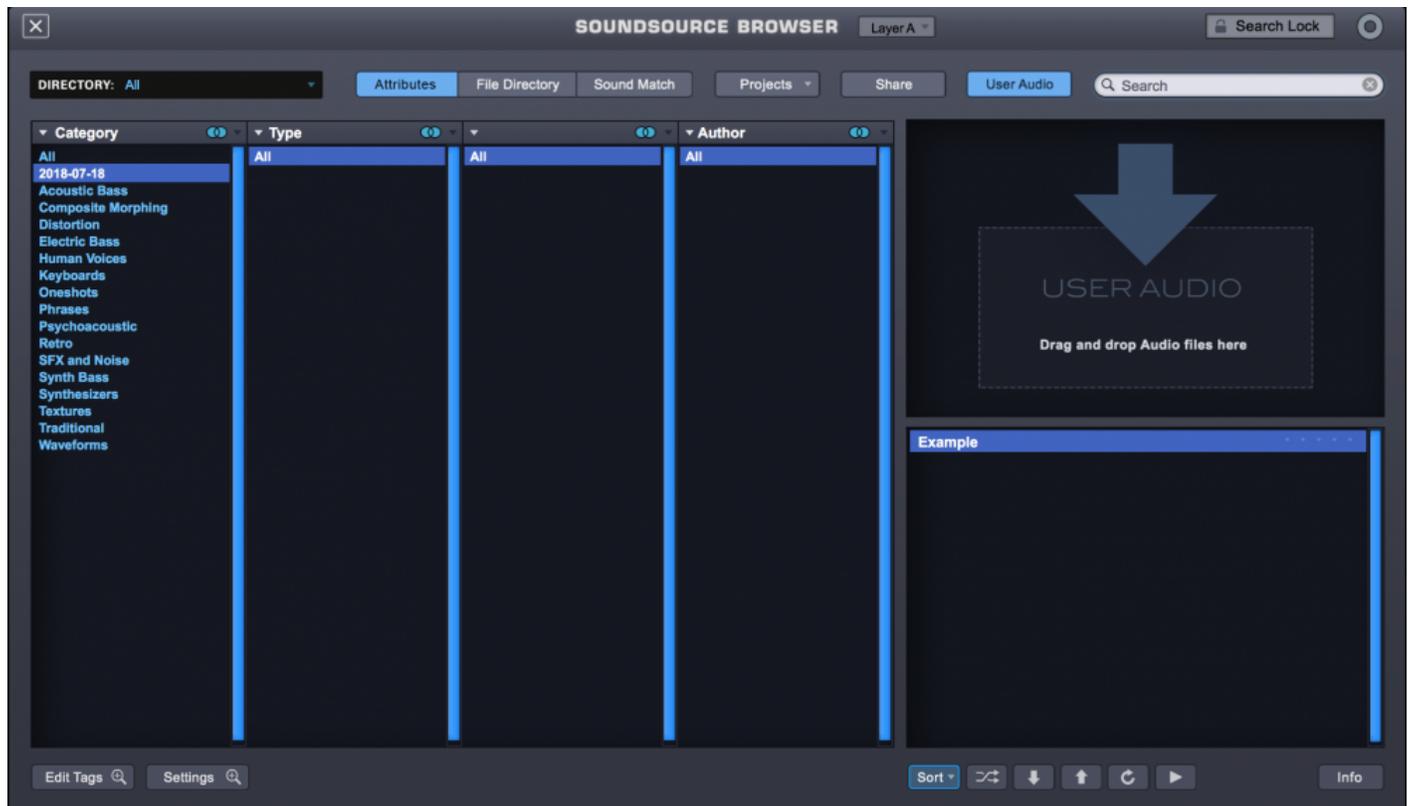
LFO 8 can be monophonic or polyphonic. When you select LFO 8, you will see a small button, labeled “P” in between the RATE and DEPTH knobs.



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.

## 9. User Audio



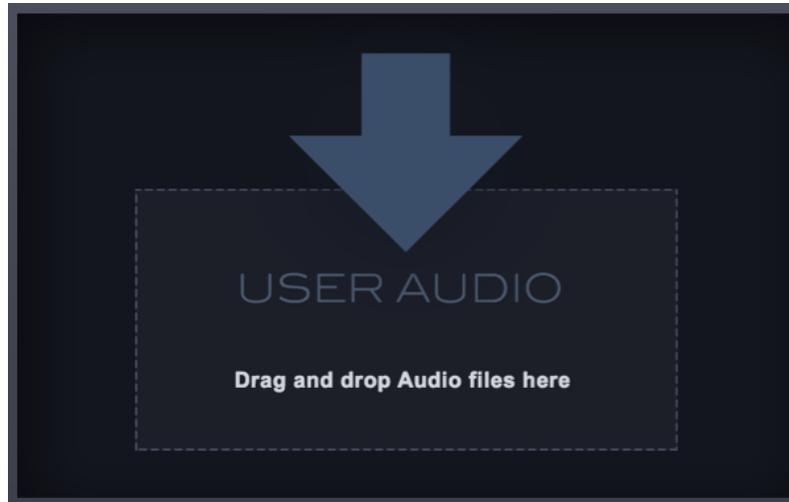
Omnisphere is an extremely powerful synthesizer that allows you to import your own audio to use as Soundsources for the creation of your own Patches and Multis. This lets you creatively morph, meld, and mangle your own audio the same way you can with the included Factory Soundsources. Each imported audio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

## 9.1. Importing User Audio

---

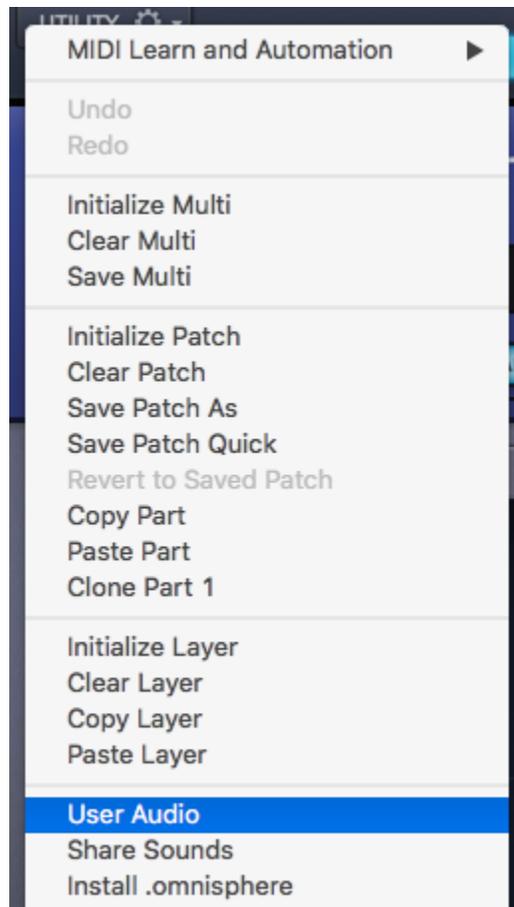


Omnisphere allows you to import your own audio to use as Soundsources and to create your own Patches and Multis. You can process and manipulate your own audio in creative ways using Omnisphere's powerful synthesis capabilities.

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.

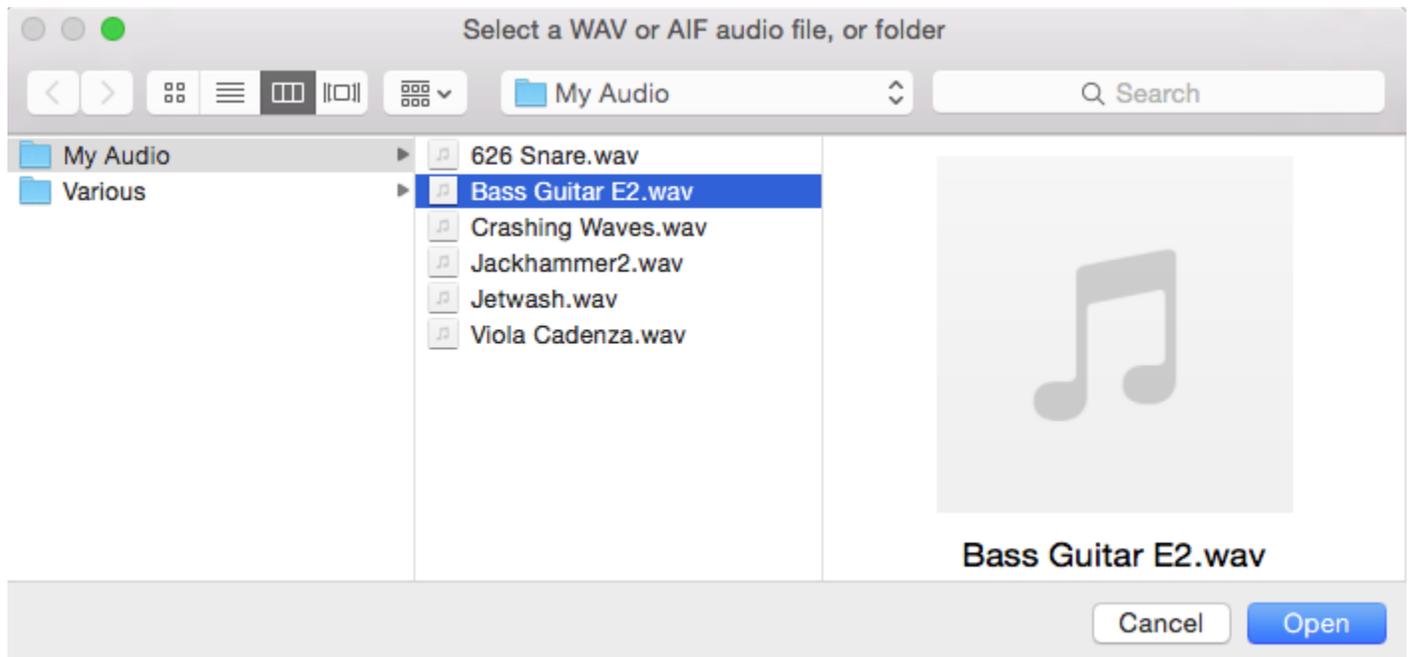
There are three ways to import User Audio feature to Omnisphere: using the Utility Menu, the Soundsource Browser or the Granular page.

### Utility Menu

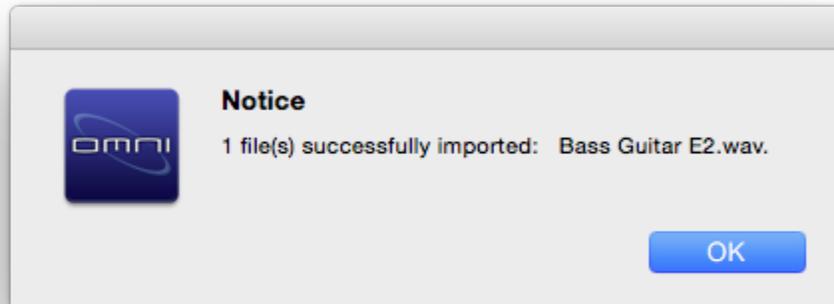


Selecting “User Audio” from the Utility Menu will display a File Dialog prompting you to navigate to the audio file or directory.

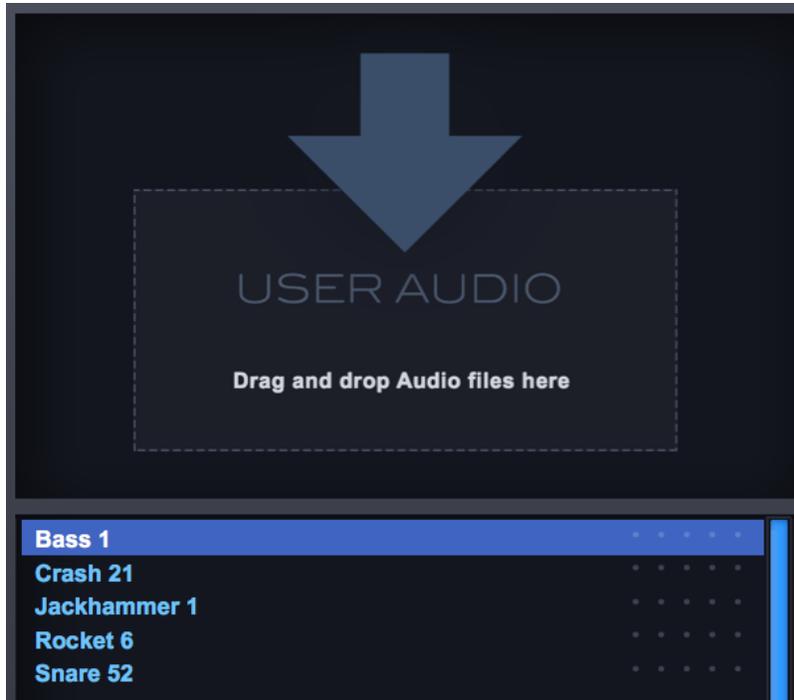
Navigate to the folder or file you wish to import and click “Open.” The import process will begin and your selection will be added to the User Soundsources directory in Omnisphere.



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:

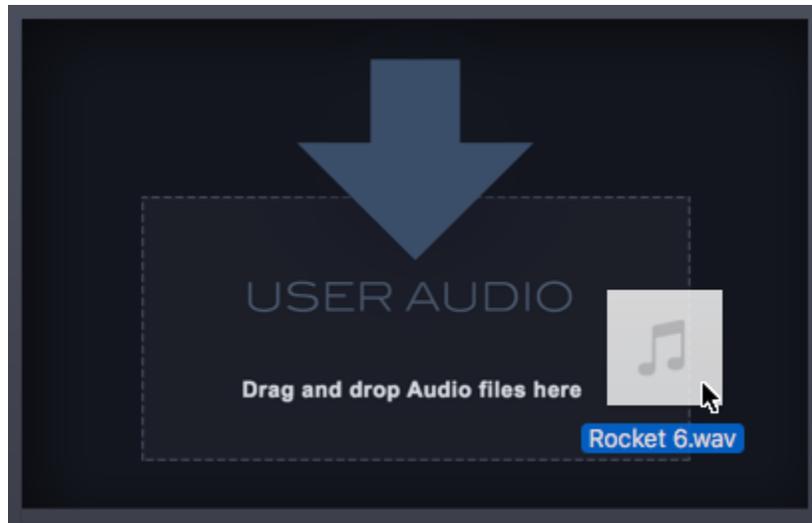
**STEAM/Omnisphere/Soundsources/User/**

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.



The image shows the 'OSCILLATOR ZOOM' interface in a dark theme, specifically the 'GRANULAR' mode. At the top, there are tabs for 'MAIN', 'FM', 'RING', 'WS', 'UNISON', 'HARM', and 'GRAN'. Below these are sub-tabs for 'SPEED' and 'POSITION'. A central 'GRANULAR' button is visible, along with a 'Preset' dropdown menu set to 'Granular Presets'. On the left, a waveform visualization is partially visible. A white dialog box with the 'omni' logo is centered on the screen, displaying a 'Notice' that reads '1 file(s) successfully imported: Low Bell.' with an 'OK' button. At the bottom, there are eight rotary knobs for 'GRAIN DEPTH', 'INTENSITY', 'SMOOTHING', 'SPREAD', 'DETUNING', 'PITCH GRAINS', 'INTERVAL', and 'GLIDING'. To the right of these knobs are two dropdown menus for 'DIRECTION' (set to 'Up') and 'MODE' (set to 'Normal').

## 9.1.1. Files And Directories

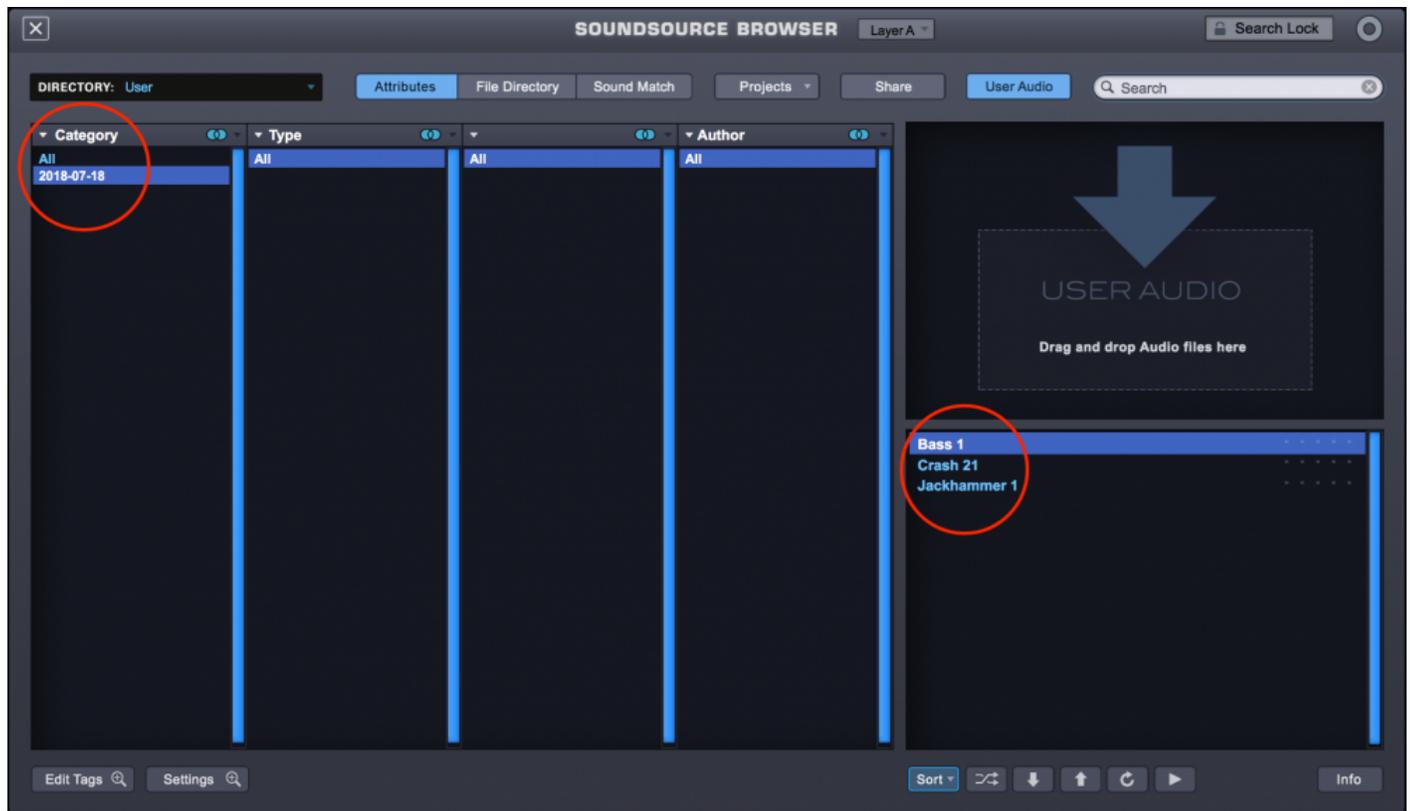
---

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.

Name	^	Date Modified	Size	Kind
 Cello C3.wav		12/9/11, 2:38 PM	1 MB	Waveform audio
 Engine Drone.wav		12/9/11, 2:38 PM	1.3 MB	Waveform audio
 Foghorn.wav		12/9/11, 2:38 PM	944 KB	Waveform audio
 OB-1 Sawtooth.wav		12/9/11, 2:38 PM	918 KB	Waveform audio
 Seagulls.wav		12/9/11, 2:38 PM	1.1 MB	Waveform audio



That folder resides here on your drive:

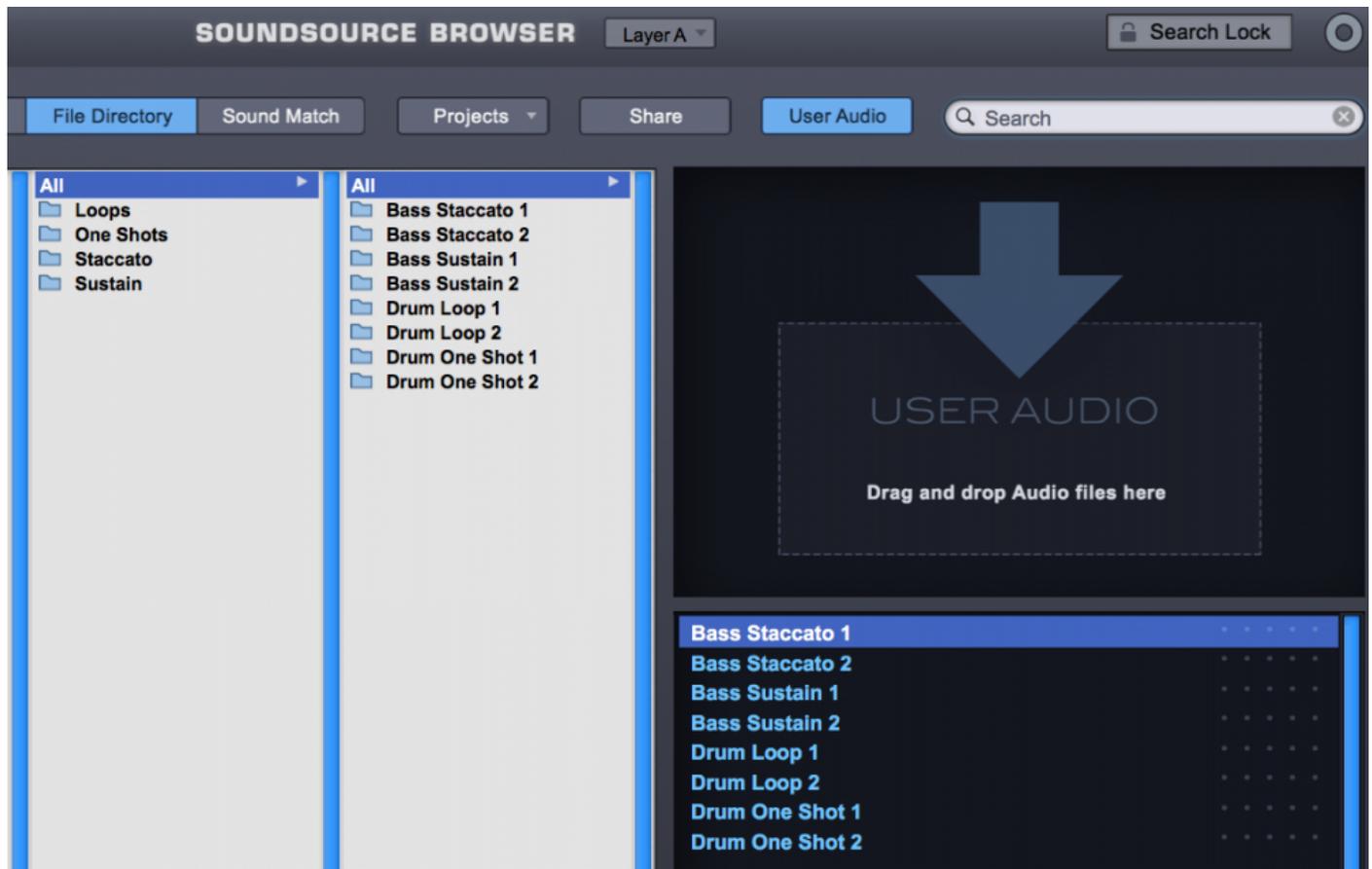
- STEAM/Omnisphere/Soundsources/User

### 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.

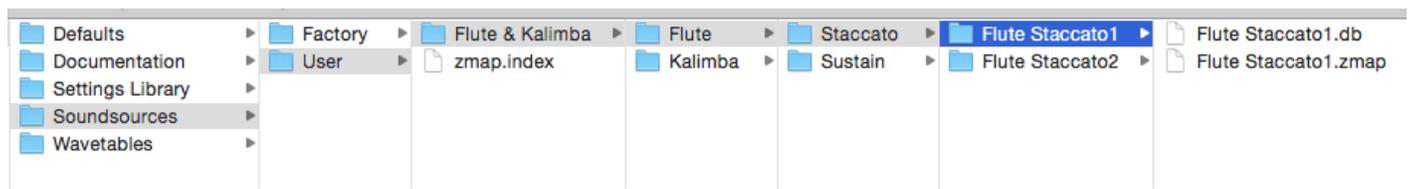
Name	Size	Date Modified	Kind
▼ Flute And Kalimba	177.2 MB	Today, 7:29 PM	Folder
▼ Flute	60.5 MB	Today, 7:28 PM	Folder
▼ Staccato	30.2 MB	Today, 7:28 PM	Folder
Flute Staccato1.wav	29.4 MB	12/7/13, 4:50 AM	Waveform audio
Flute Staccato2.wav	791 KB	12/7/13, 4:47 AM	Waveform audio
▼ Sustain	30.2 MB	Today, 7:28 PM	Folder
Flute Sustain1.wav	791 KB	12/7/13, 4:47 AM	Waveform audio
Flute Sustain2.wav	29.4 MB	12/7/13, 4:50 AM	Waveform audio
▼ Kalimba	116.7 MB	Today, 7:26 PM	Folder
▼ Bowed	58.4 MB	Today, 7:27 PM	Folder
Kalimba Bowed1.wav	28.9 MB	12/7/13, 5:05 AM	Waveform audio
Kalimba Bowed2.wav	29.5 MB	12/7/13, 4:56 AM	Waveform audio
▼ Plucked	58.4 MB	Today, 7:26 PM	Folder
Kalimba Plucked1.wav	29.5 MB	12/7/13, 4:56 AM	Waveform audio
Kalimba Plucked2.wav	28.9 MB	12/7/13, 5:05 AM	Waveform audio

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.

## 9.2. Loops, Sample Rates, etc.

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### Format, Sample Rate, and Bit Depth

Omnisphere can import standard stereo or mono PCM, .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 PCM, .wav, or air 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).

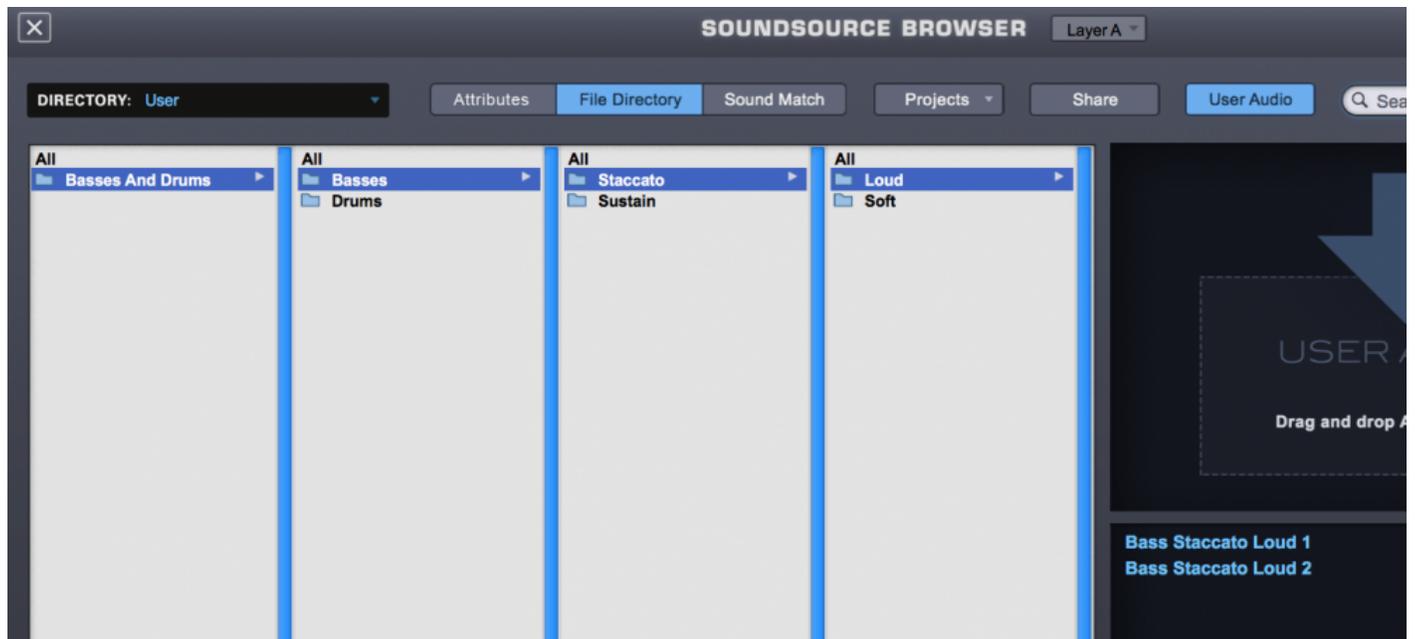
## 9.3. Organizing User Audio Libraries

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.

Name	Size	Date Modified
▼ Soundsources	57.68 GB	Today, 12:57 PM
▶ Factory	57.44 GB	Today, 12:57 PM
▼ User	237.7 MB	Today, 12:32 PM
▼ Flute & Kalimba	237.7 MB	Today, 12:57 PM
▼ Flute	121 MB	Today, 12:57 PM
▼ Staccato	60.5 MB	Today, 12:57 PM
▼ Loud	30.2 MB	Today, 12:57 PM
▼ Flute Staccato Loud1	29.4 MB	Today, 12:28 PM
Flute Staccato Loud1.db	29.4 MB	Today, 12:28 PM
Flute Staccato Loud1.zmap	519 bytes	Today, 12:28 PM
▼ Flute Staccato Loud2	792 KB	Today, 12:28 PM
Flute Staccato Loud2.db	792 KB	Today, 12:28 PM
Flute Staccato Loud2.zmap	517 bytes	Today, 12:28 PM
▼ Soft	30.2 MB	Today, 12:57 PM
▼ Flute Staccato Soft1	29.4 MB	Today, 12:28 PM
Flute Staccato Soft1.db	29.4 MB	Today, 12:28 PM
Flute Staccato Soft1.zmap	519 bytes	Today, 12:28 PM
▼ Flute Staccato Soft2	792 KB	Today, 12:28 PM
Flute Staccato Soft2.db	792 KB	Today, 12:28 PM
Flute Staccato Soft2.zmap	517 bytes	Today, 12:28 PM
▶ Sustain	60.5 MB	Today, 12:57 PM
▼ Kalimba	116.7 MB	Today, 12:57 PM
▶ Bowed	58.4 MB	Today, 12:28 PM
▶ Plucked	58.4 MB	Today, 12:28 PM
zmap.index	6 KB	Today, 12:28 PM



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.

## 9.4. FAQ

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### **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.

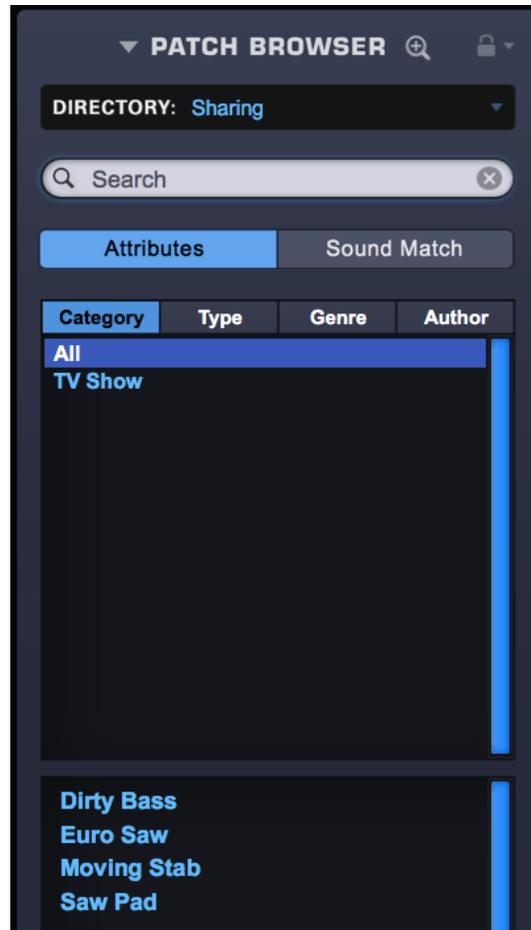
Please see [Granular](#) for more info.

**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.

# 10. Sharing

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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.

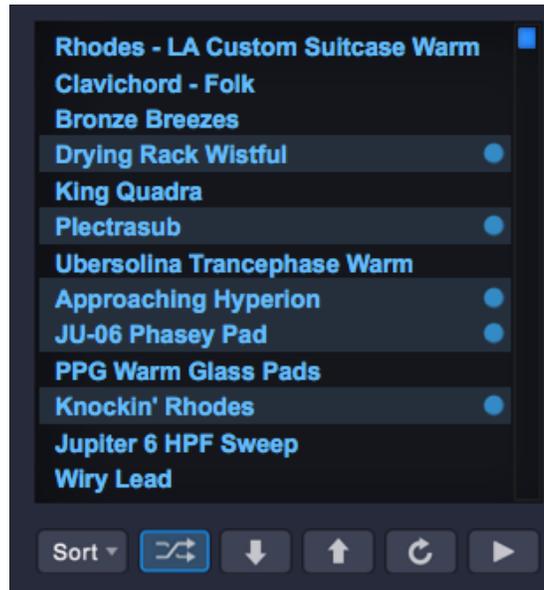
### **Publish Library**

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.

## 10.1. Share Sounds

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Using the applicable browser, choose the sounds you want to share by using Shift-click.

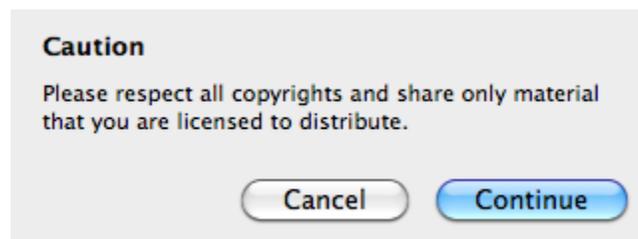


**NOTE:** Use Option-click if you wish to de-select them all in one step.

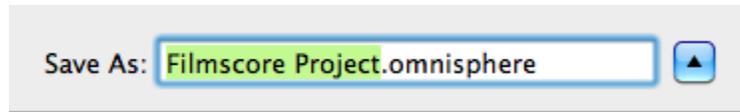
Next, select “Share Sounds” from the Utility Menu or press the “Share” button in the Full Browsers to create an .omnisphere file containing the selected sounds.



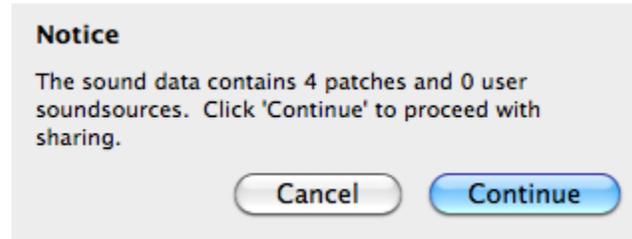
**NOTE:** If a Patch or Multi you are sharing employs User Soundsources, those will be included as part of the .omnisphere package.



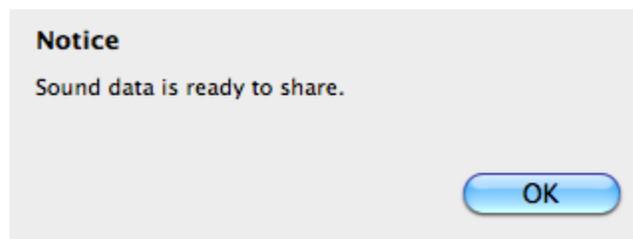
After viewing the copyright message, you will be prompted to enter a name and select a location where you wish to store the .omnisphere package.



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



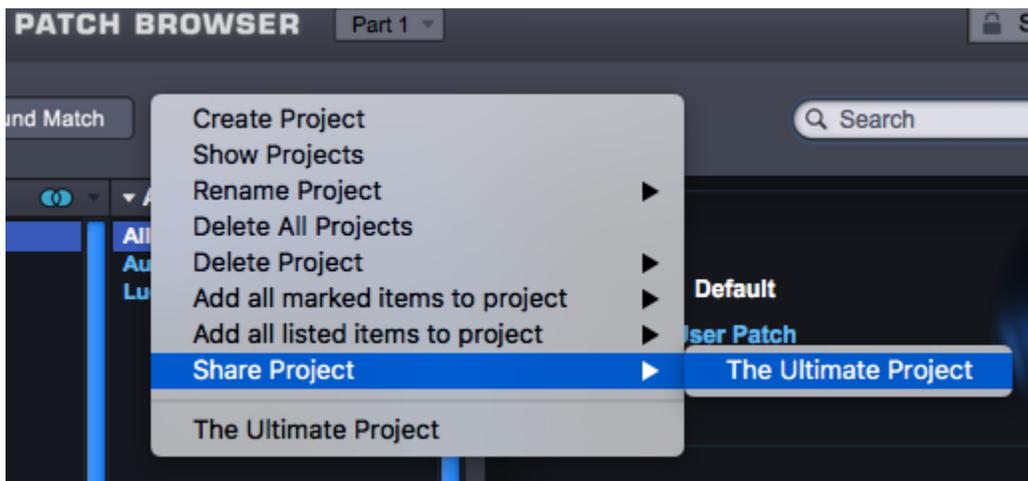
**NOTE:** When you want to share only one type of sound at a time, (Multis, Patches, or User Soundsources), this is the quickest and simplest method. If you wish to share multiple types of sounds at once, see *Share Projects* or *Publish Library*.

## 10.2. Share Projects

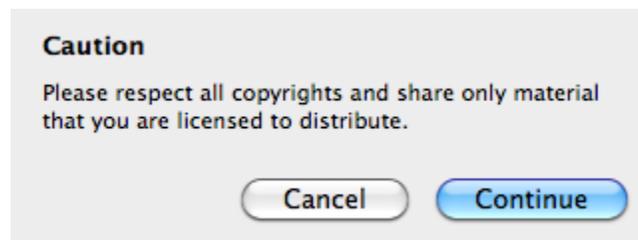
Sharing Projects lets you assign sounds to a specific Project and share them with other users. This method uses the Project features located in the Full Browsers. You can share any combination of Patches, Multis, and User Soundsources with a few simple steps. All the necessary components will be collected 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.

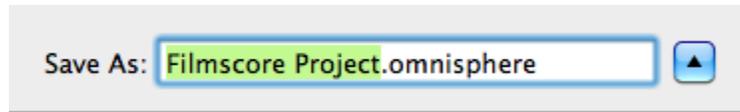
*TIP: If the Patches or Multis you want to share have been created with [User Soundsources](#), those Soundsources will be automatically included in the .omnisphere file. If you want to share a User Soundsource that is not used in a Patch or Multi, just add it to a Project by itself.*



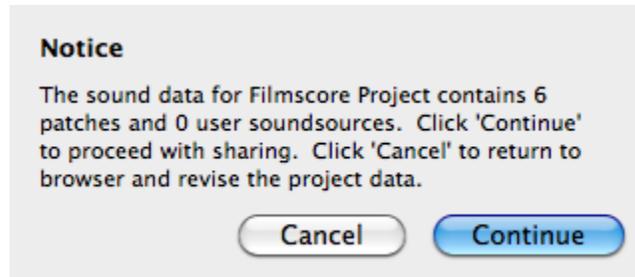
You will get this message reminding you to respect all applicable copyrights.



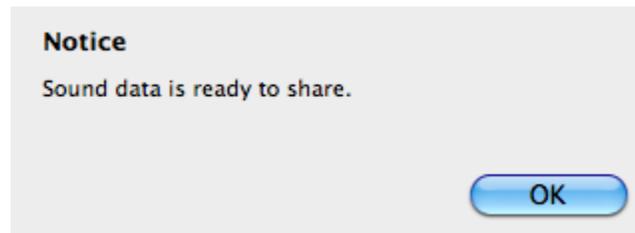
Then you will be prompted to name the archive and select a location to store it.



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.

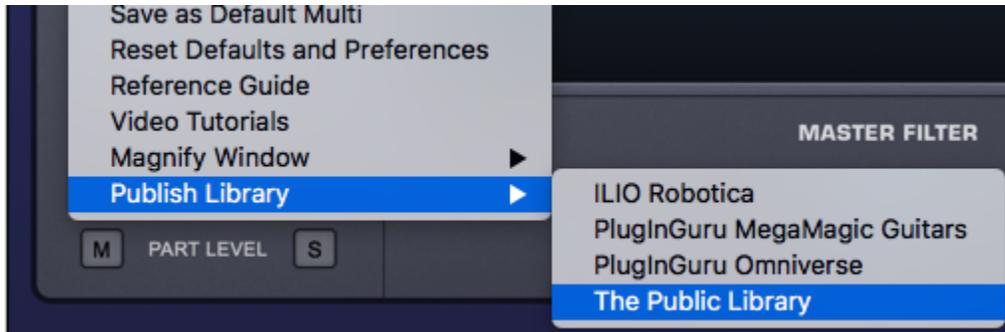


You can send the .omnisphere file to other Omnisphere users and they can use Install .omnisphere to import the shared archive.



## 10.3. Publish Library

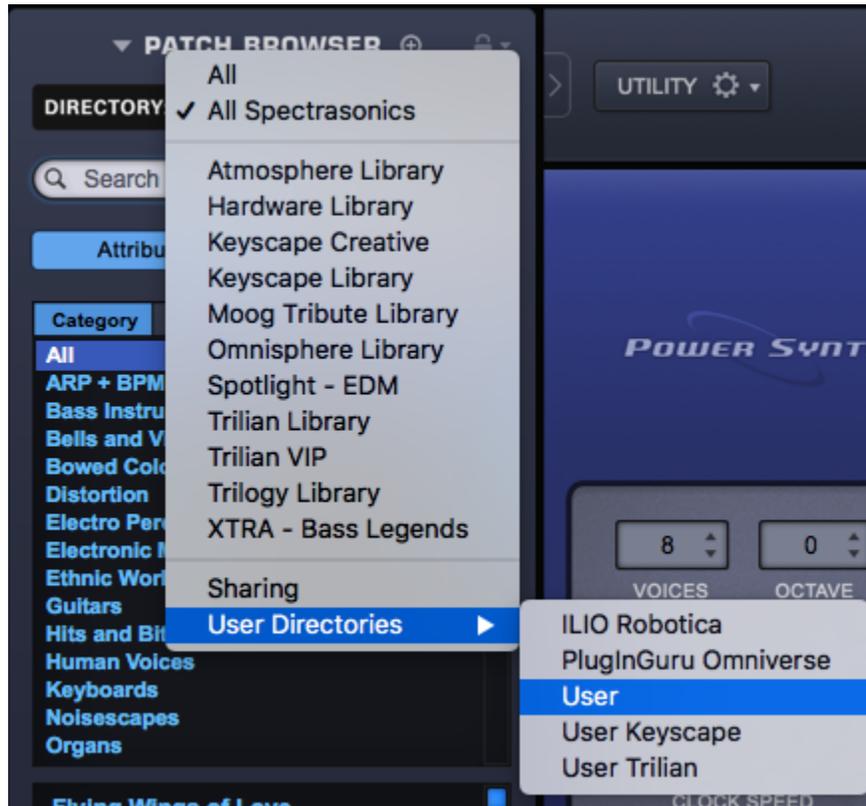
---



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, Patches, and all associated Soundsources in a single .omnisphere package. End-users can then install this package into their systems with a single step.

## 10.3.1. Overview

Libraries are directories in specific locations in your STEAM folder and they are displayed in the DIRECTORY menu in Omnisphere's browsers. The folders inside libraries are displayed as Categories.



In order to create a library, you must create a directory using the Finder (Mac) or Explorer (Windows). Patches, Multis, and Soundsources are located in separate directories in your STEAM folder. If you wish to publish a library that includes Patches and Multis, the libraries where those Patches and Multis are located must have the same name. User Soundsources used by any Patch or Multi in the library you want to publish will be automatically added to the .omnisphere package, so there is no need to create a Soundsource library with a matching name.

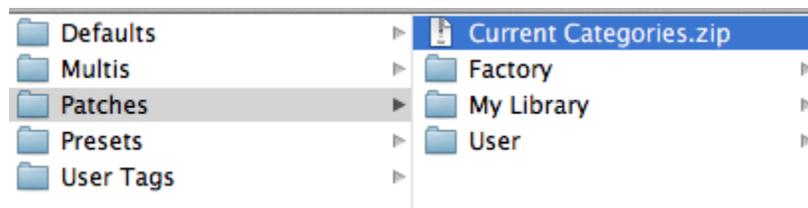
## 10.3.2. Creating a Library

---

To create a Patch library, make sure your host is not running and create a new folder in the Finder (Mac) or Explorer (Windows), here:

### **Spectrasonics/STEAM/Omnisphere/Settings Library/Patches**

*NOTE: Before uncompressing the Current Categories.zip archive, make sure you are up-to-date with the latest version of the Omnisphere 2 Factory Patch Library. The official tags are constantly being updated, so it's important that you begin tagging with the current version.*



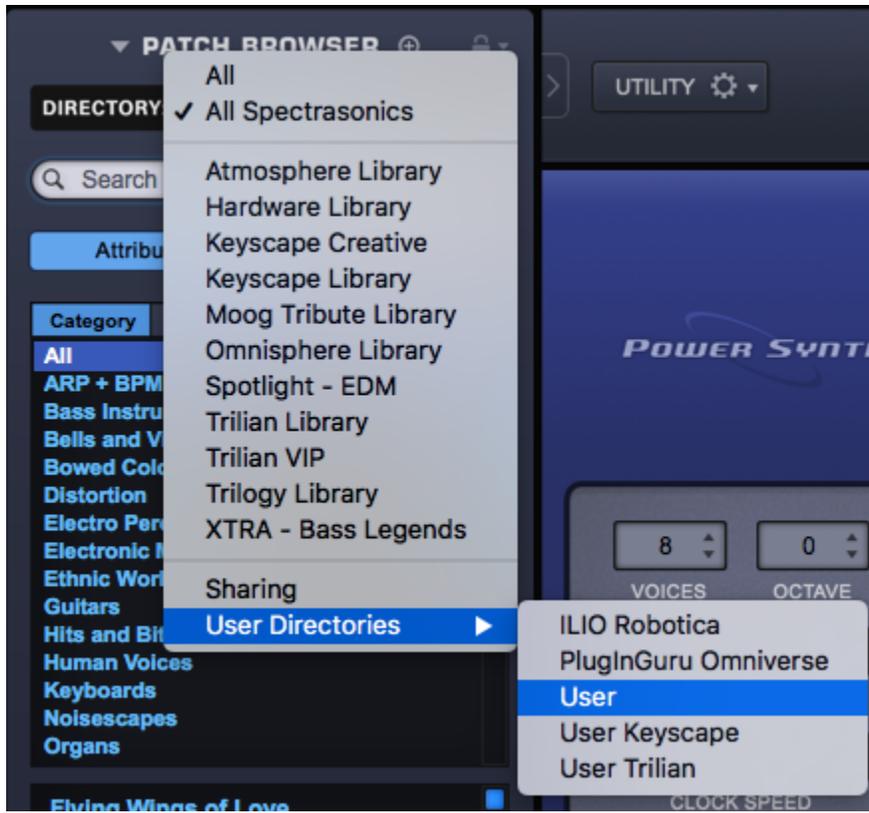
Give the folder a name, such as “My Library.” This new folder is next to the ”User” folder, Inside “Patches.” Create empty sub-folders in “My Library,” one for each category you plan to have.

To facilitate this process, we’ve provided a “Current Categories.zip” file located here:

### **Spectrasonics/STEAM/Omnisphere/Settings Library/Patches**

Uncompress the “Current Categories.zip” file to open a folder containing the most up-to-date categories used in the Spectrasonics Factory Patch Library. 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 (e.g. “My Library”) and save your Patches to its sub-folders.

Once you save a Patch in one of its sub-folders, the Library will be displayed in the Directory menu.



## 10.3.2.1. Creating a Multi Library

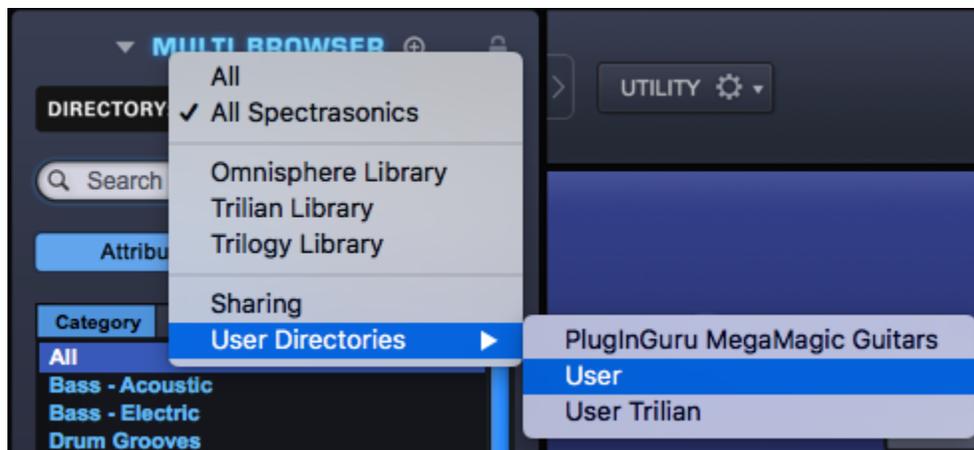
---

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**

Give the folder a name, such as “My Library.” This new folder resides next to the “User” folder, inside “Multis.” Next create empty sub-folders under “My Library,” one for each category you plan to have.

Once you save a Multi in one of its sub-folders, the library will be displayed in the menu.



**NOTE:** To publish a library that includes Patches and Multis, the Patch and Multi library names must match.

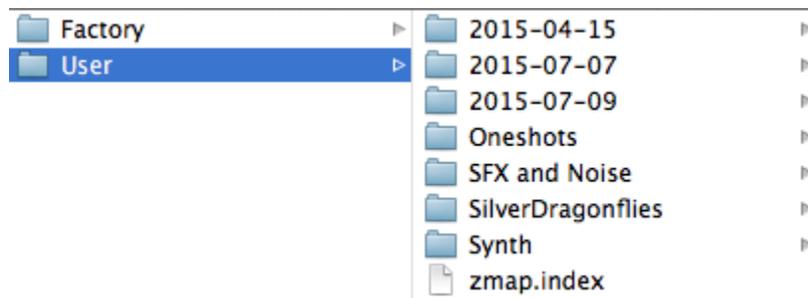
## 10.3.2.2. Soundsources

---

If User Soundsources are used in Patches or Multis being published, they will be included as part of the exported package. User Soundsources are created by importing your own audio into Omnisphere. They are automatically stored here:

### **Spectrasonics/STEAM/Omnisphere/Soundsources/User**

Omnisphere will only publish Soundsources located in the User folder specified above.

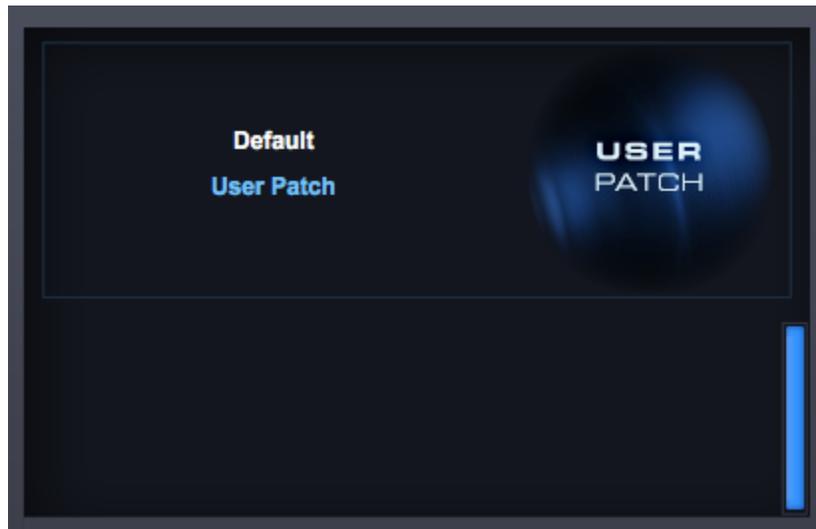


## 10.3.3. Adding Images

---



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.

## 10.3.3.1. Soundsources

---



To add images to a single Soundsource, you will need three .jpg files with the following naming convention and dimensions:

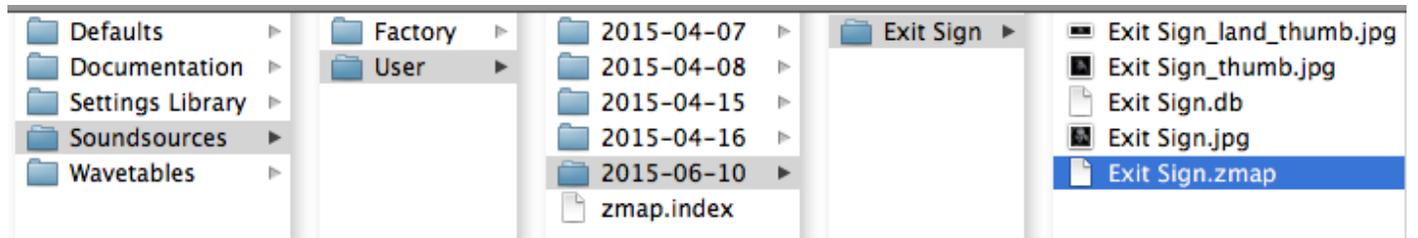
(replace “Soundsource Name” with the name of the Soundsource to which you want to add images):

- *Soundsource Name.jpg* [300w x 300h]
- *Soundsource Name\_thumb.jpg* [125w x 125h]
- *Soundsource Name\_land\_thumb.jpg* [125w x 50h]

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.”



## 10.3.3.2. 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

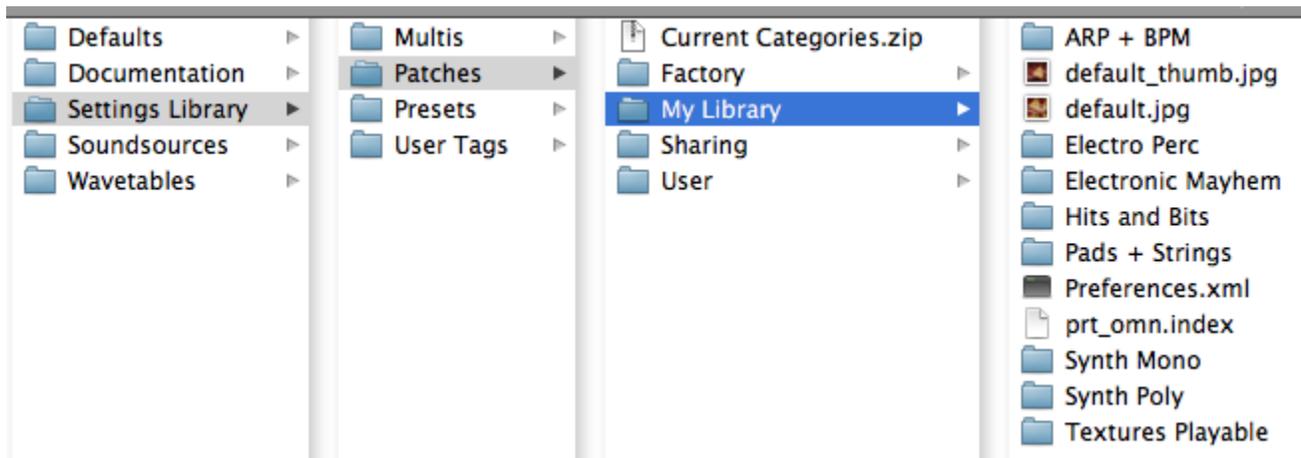
An image can be shared by all the Patches in a Library. You will need two .jpg files with the following naming convention and dimensions:

- default.jpg [300w x 300h]
- default\_thumb.jpg [125w x 125h]

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:

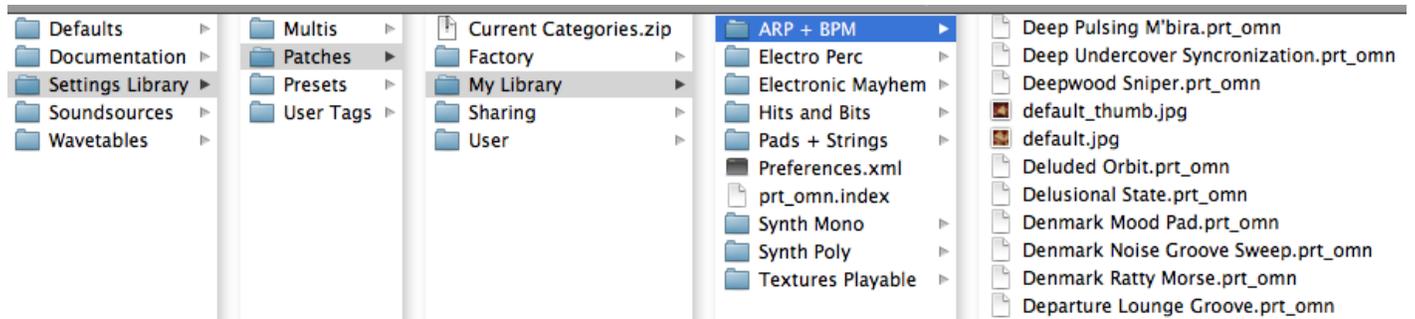
- default.jpg [300w x 300h]

- default\_thumb.jpg [125w x 125h]

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

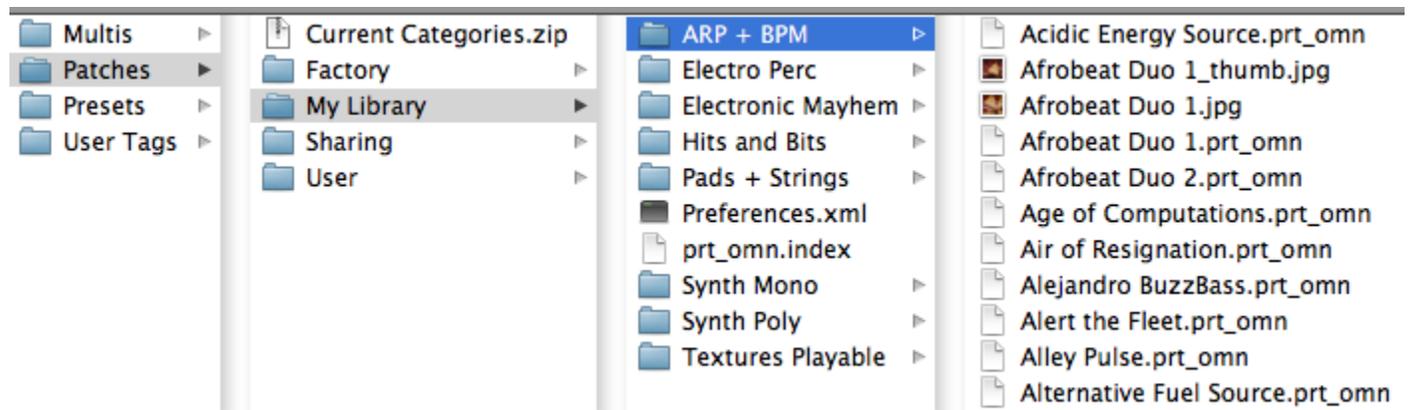
To add images to a Patch, you will need two .jpg files with the following naming convention and dimensions (replace “Patch Name” with the name of the Patch):

- Patch Name.jpg [300w x 300h]
- Patch Name\_thumb.jpg [125w x 125h]

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.

## 10.3.3.3. 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

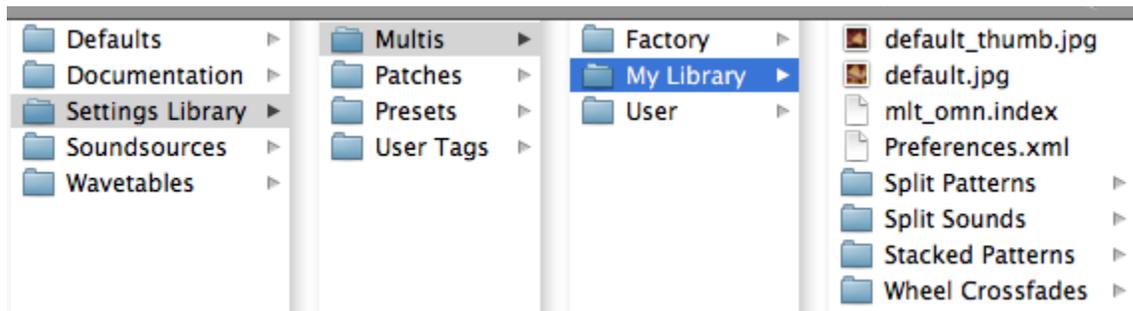
A set of images can be shared by all the Multis in a library. You will need two .jpg files with the following naming convention and dimensions:

- default.jpg [300w x 300h]
- default\_thumb.jpg [125w x 125h]

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

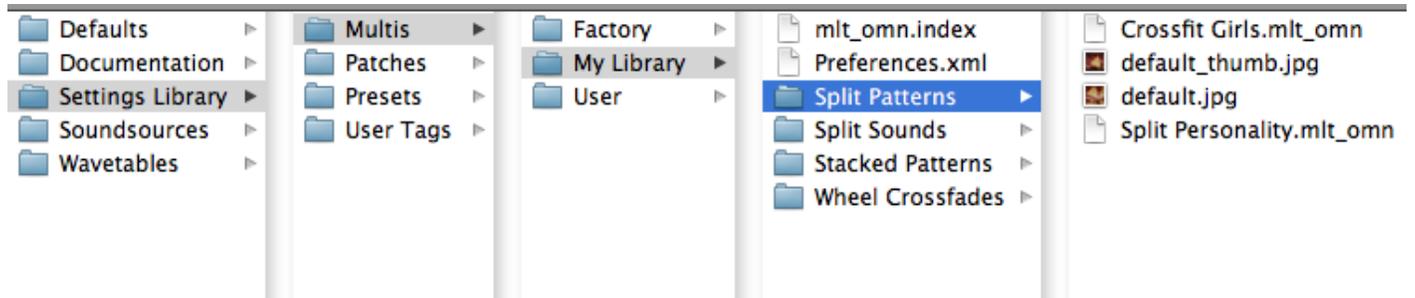
A set of images can be shared by all the Multis in a Category. You will need two .jpg files with the following naming convention and dimensions:

- default.jpg [300w x 300h]
- default\_thumb.jpg [125w x 125h]

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

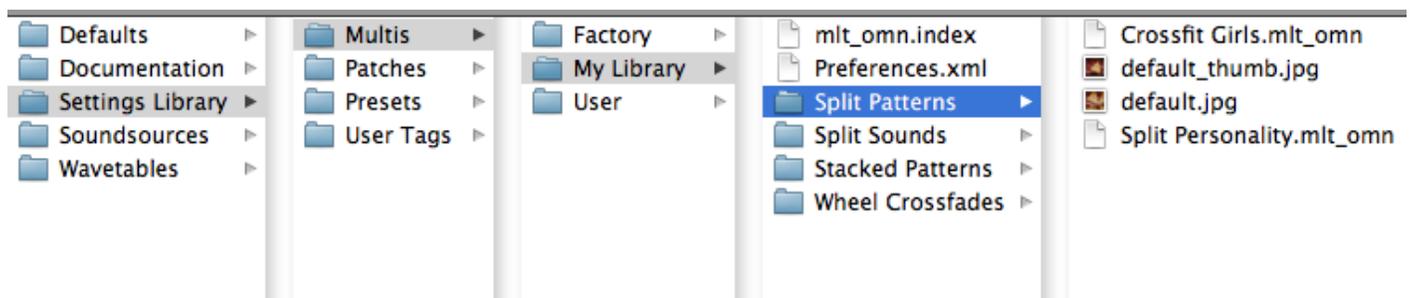
To add images to a Multi, you will need two .jpg files with the following naming convention and dimensions (replace “Multi Name” with the name of the Multi):

- *Multi Name.jpg* [300w x 300h]
- *Multi Name.jpg* [125w x 125h]

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.”

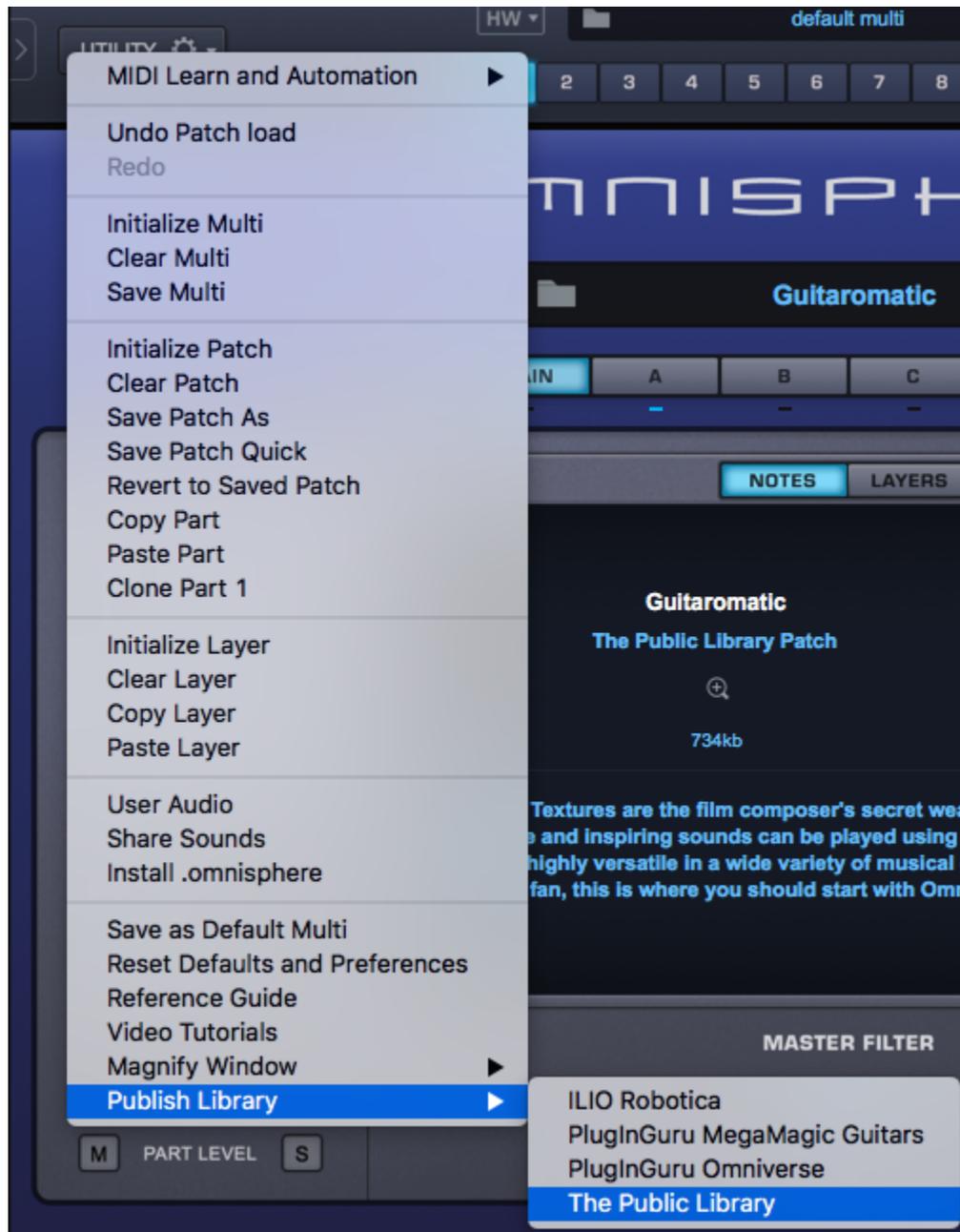


## 10.3.4. Publish a Library

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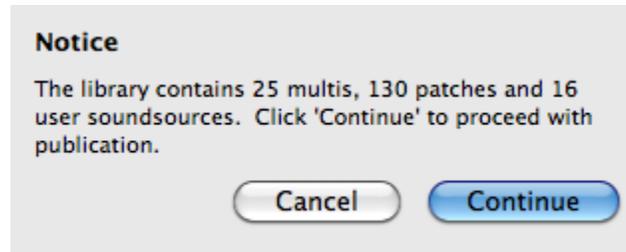
Published Libraries can contain Multis and/or Patches and any associated User Soundsources. They can also contain images which will be displayed in Omnisphere's interface when those sounds are loaded.

Once a Library 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 want to publish and, after viewing the copyright message, you will be prompted to enter a name and select a location to store the .omnisphere package. At this point you have the option to rename it.



**NOTE:** If you are publishing a library of Multis and Patches (both libraries must have the same name) the library will only show up once in the “Publish Library” sub-menu. Selecting it will include both Multis and Patches and any associated Soundsources and images.

When completing these steps, you will see a report of the data to be included in the .omnisphere package.



Click "Continue," and an **.omnisphere** file will be created and made ready for sharing.



## 10.4. Adding Sounds

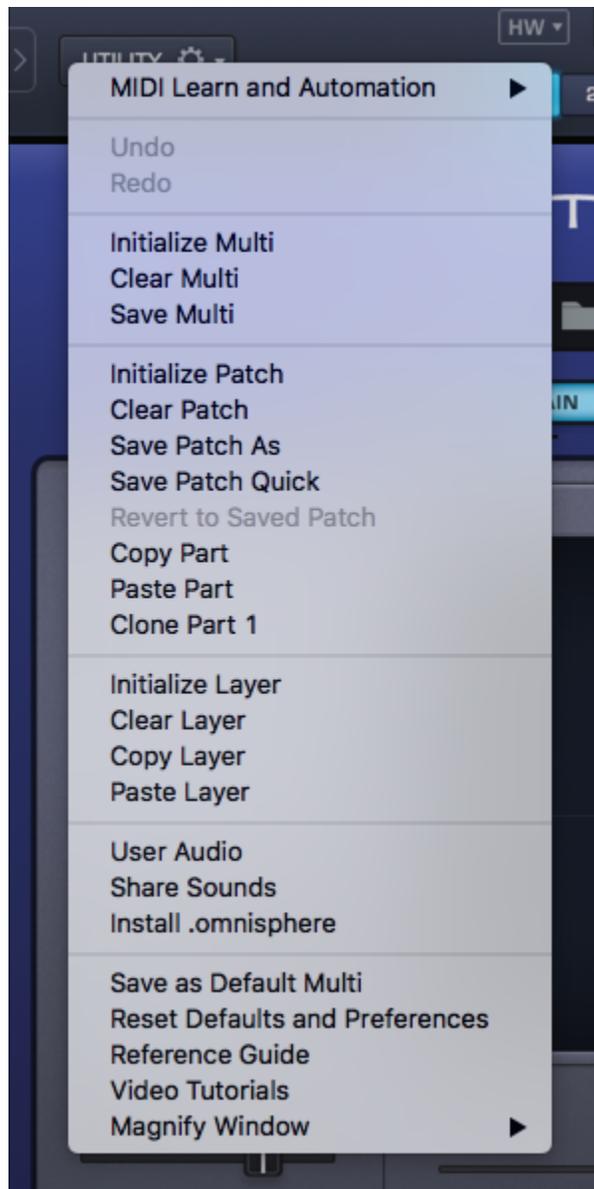
---

Adding sounds to your library that have been [Shared](#) by other Omnisphere users is simple!

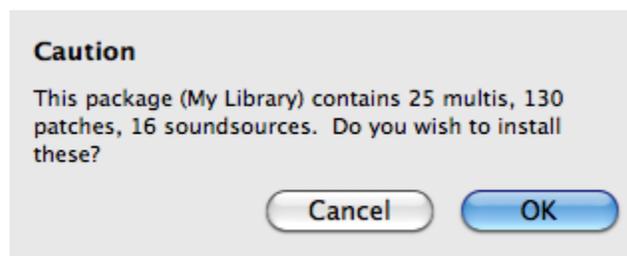
Omnisphere sounds that have been shared using the [Sharing](#) feature are conveniently collected into a single .omnisphere file. Files with the extension .omnipshere can be added to your library in a single operation.

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

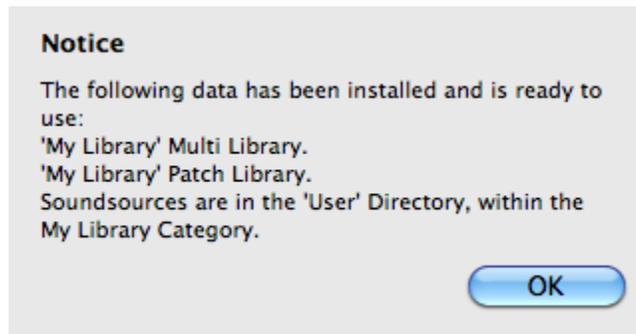
Once you've received the shared .omnisphere file, select "Install .omnisphere" in the Utility Menu.



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**

# 11. The FX Page



FX are an important part of Omnisphere's sound palette, and are used to enhance the sonic character of Patches and Multis. They can add space, density, 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).

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.

## 11.1. FX Architecture



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).

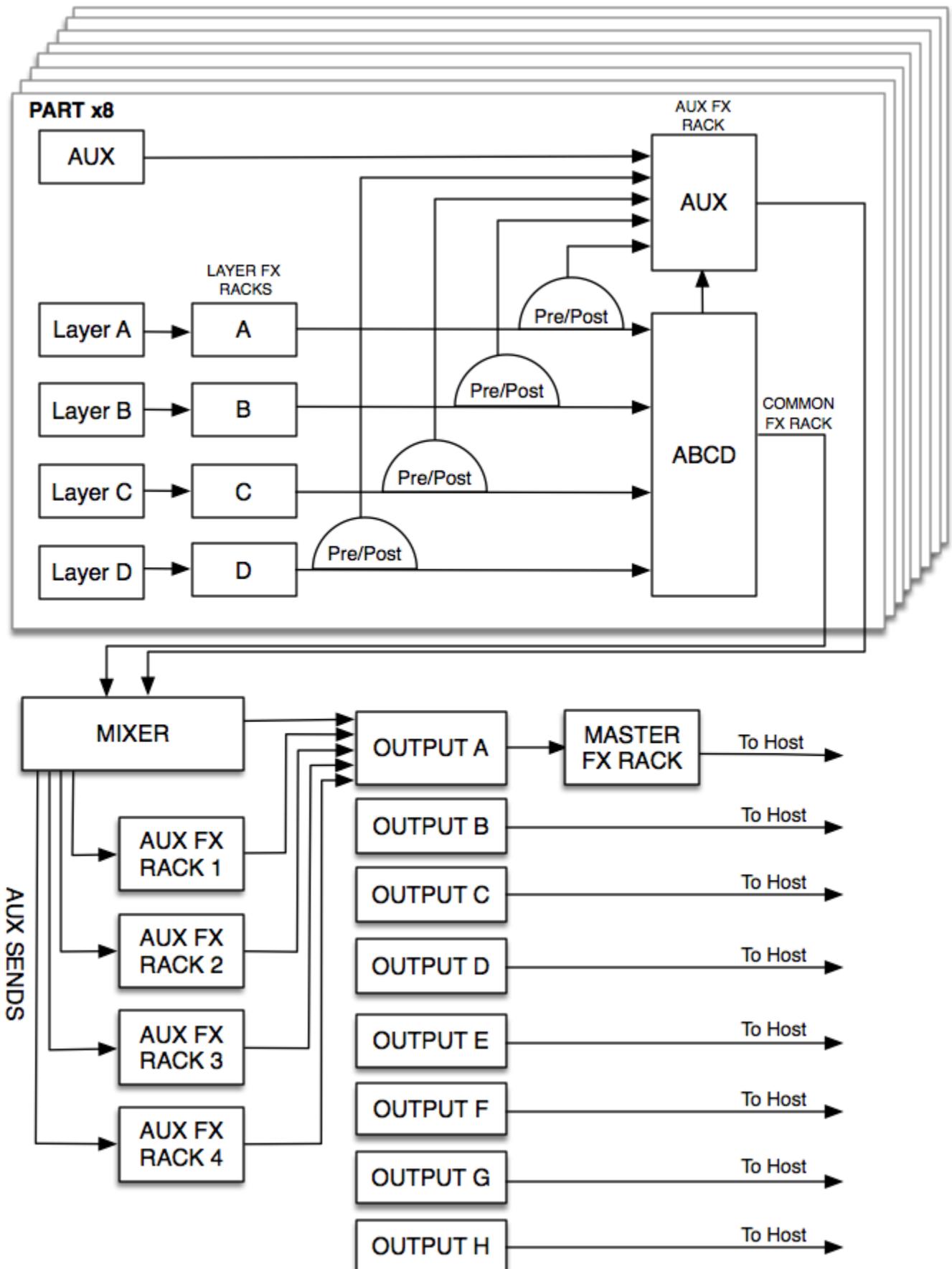
To access the FX Racks for the four Aux Sends and the MASTER Rack, select the MULTI tab in the header and then select the FX button.

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.



## 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.

## 11.2. FX Descriptions



There are 58 different professional-quality internal FX Units that exist within Omnisphere. For more detailed descriptions of the controls and operation, please click on the FX Unit names.

### COMPRESSOR/LIMITER GAIN FX

**[Tube Limiter](#)** Both a limiter and compressor—modeled on the fat, warm sound of the world-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 very 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 very warm and musical tone.

**[Vintage 3-Band EQ](#)** Modeled after the Pultec™ EQP series tube equalizers, renowned for their extremely fat and musical 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

**[Envelope 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.

## **AMPLIFIER FX**

[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, which models a nice variety of amps and cabinets, modeled after hand-made amps from smaller, boutique, custom amp manufacturers.

**[Thriftshop Speaker](#)** This unit is designed to trash your audio by running it through old funky speakers/telephones/megaphones that you might find in a thrift shop.

## MODULATION FX

**[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 very 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 '60's Surf music and '70s Soul and R&B.

## CREATIVE

**[Quad Resonators](#)** This unit is based on comb filters and adds tuned resonances to any input signal. Robots are taking over the world!

**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 LCR (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!

## REVERB

**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 utility that can be used to widen the stereo image, correct phase, and much more, including syncable auto-pan.

### ***Can you use more than four effects units at a time?***

Yes! It’s actually possible to have a huge number of simultaneous FX Units active at the same time in one instance of Omnisphere. Any of the FX Units can be put into one of the four slots in an Omnisphere FX Rack and depending in your computer’s processing power, 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

That is 212 in total!

### **Considerations when 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 & 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.

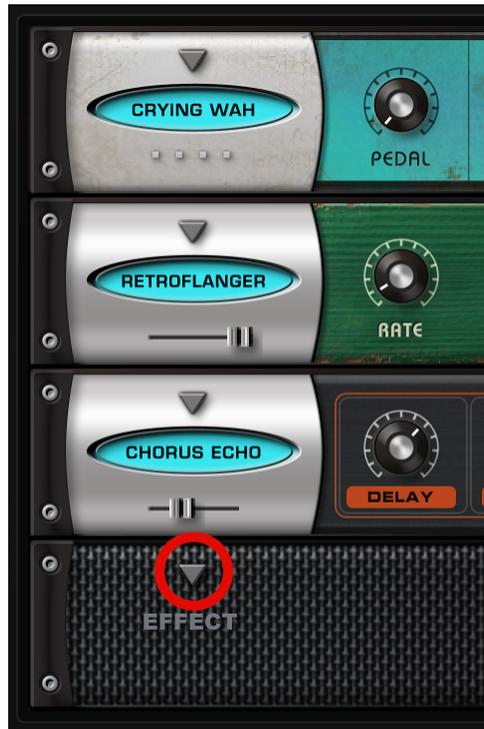
Some FX Units have two pages. The second page parameters can be reached by clicking the arrow on the right side of the plug-in. Usually, it's labeled "MORE" or indicates the parameters found on the second page.

You can also use external third-party FX plug-ins with Omnisphere by utilizing the multiple outputs feature of Omnisphere with your host.

## 11.3. FX Basics

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To load an FX Unit into a Rack, click the downward facing triangle (above the word, "EFFECT") 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.



## 11.3.1. Changing an FX Unit

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To select a different FX Unit in the same FX Slot, click the same downward arrow and choose a different one from any of the categories from the drop-down menu list.

## 11.3.2. Bypassing FX Units

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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 lit up with a light blue color.



To Bypass an FX Unit, click the oval FX Name Window. The Name Window darkens when bypassed.



Clicking the Name Window again reactivates the FX Unit.

**NOTE:** *Bypassing an Effect DOES save CPU power.*

### Bypassing All FX Units

Omnisphere 2'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.***

## 11.3.3. Reordering 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**.

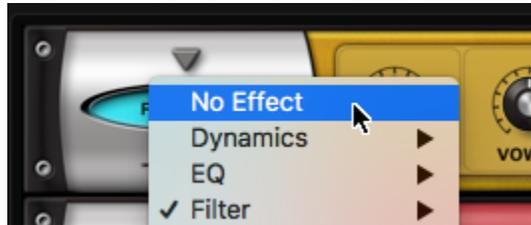
FX units can be easily repositioned in any of the FX pages by clicking on the rack ear's handles and dragging the unit to the desired position.



To move an FX unit to another rack, you can copy the effect preset from the Presets menu and paste it to another rack.

## 11.3.4. Removing an FX Unit

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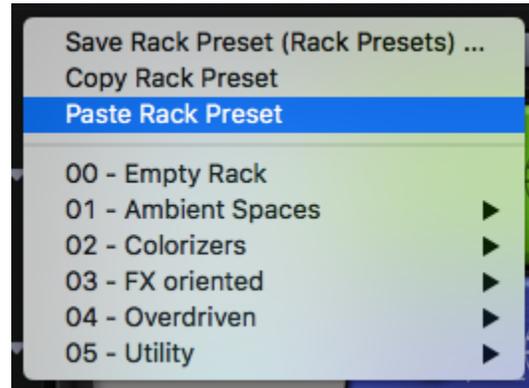
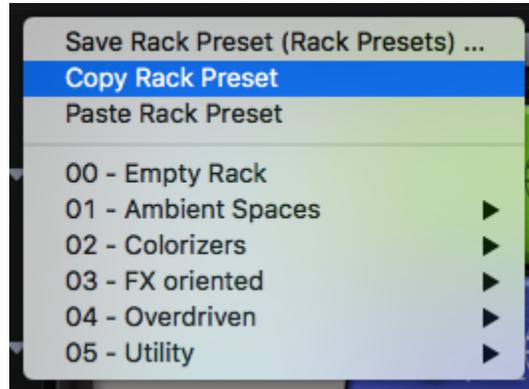


To remove an FX unit from the rack, click the downward facing triangle on the active slot and choose NO EFFECT from the top of the list.

***NOTE:** Removing any unneeded FX units saves memory when the Patch is loaded. It is recommended that you remove any unnecessary FX before saving Patches, Multis, or Songs.*

## 11.3.5. 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.

There are two kinds of FX Presets: FX Unit Presets and FX Rack Presets.

FX Presets may be:

- Saved with custom names
- Loaded from a drop-down menu
- Copied from any FX Slot or Rack
- Pasted to any FX Slot or Rack

- Freely shared across any platform or host

***TERMINOLOGY: “Programs,” “Patches,” or “Settings” are common terms in other products for “Presets.” They all mean essentially the same thing. In Omnisphere, we use the term “Presets” exclusively in reference to the settings of individual components, like FX, Envelopes, etc. The term “Patch” always refers to a completed sound in Omnisphere.***

***HINT: Spectrasonics has included an extensive factory library of hundreds of useful Presets to give you a glimpse into the world of Omnisphere FX. They are a fantastic starting point for exploring the diverse sonic possibilities with the FX system—don’t miss them!***

## 11.3.5.1. FX Presets



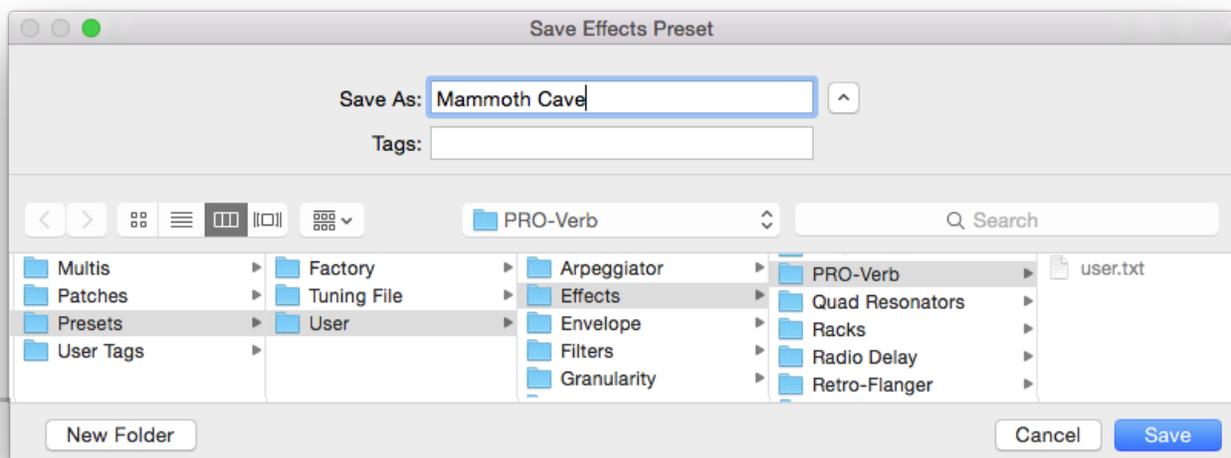
An FX Unit Preset consists of the complete customized parameter settings of a specific FX Unit, which allows for “total recall” of that one effect. It’s very useful to build a library of FX Unit Presets that you like. You can also experiment by using Presets created for one purpose for a completely different application.

FX Unit 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.



To save your own FX Unit Presets, click on the down-arrow to the left of the unit. User FX Unit Presets must be saved in a specific location in order for Omnisphere to see them. When saving a Preset, a file dialog will appear, prompting you to save to the correct location:

Omnisphere/Settings Library/User/Presets/Effects/\_name of the effect unit\_



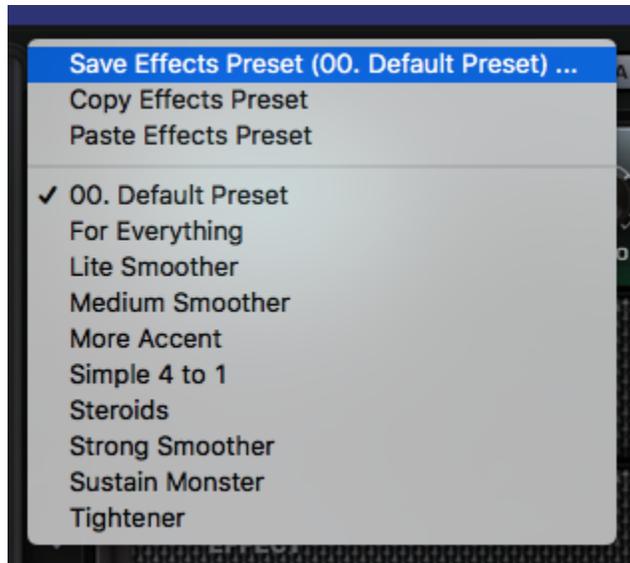
User Presets will appear in the Preset menu below the Factory Presets, divided by a solid line.



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**

## 11.3.5.2. Saving FX Presets

---



Saving an FX Preset allows you to give a Preset a custom name and recall it later from a list of Presets. This is a convenient way to build a custom FX library.

To Save a Preset:

- Select the drop-down arrow to the left of the unit.
- A drop-down menu will appear.
- Select SAVE EFFECTS PRESET.
- A Save dialog box will appear allowing you to name the FX Preset. The Save dialog box defaults to the directory for that particular FX Unit.

**NOTE:** *There is no Delete Preset command. To remove a Preset, you must navigate to the Preset via your computer's directory structure and remove it manually. The same is true for renaming Presets.*

## 11.3.5.3. Copying & Pasting FX Units



In addition to reorganizing FX units by [dragging and dropping](#), 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:

- Select the drop-down arrow to the left of the FX unit you'd like to copy.
- Select "Copy Effects Preset."
- Choose any other FX Slot.
- Select the drop-down arrow to the left of the unit.
- Select "Paste Effects Preset."

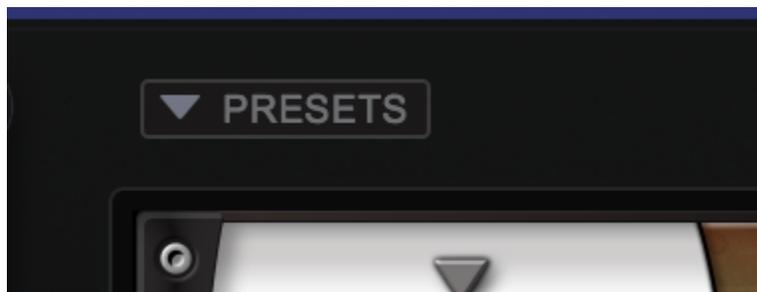
This FX Slot now has the exact same FX Unit and settings as the original FX Unit.

## 11.3.5.4. Rack Presets



A Rack Preset saves the settings of all four FX Slots into a single Preset. You can save any combination of up to four FX Units and their respective settings. This feature gives you instant “total recall” of an entire FX Rack to try on any sound in Omnisphere. The possible combinations of Effects and settings are an endless source of inspiration.

Selecting the PRESETS menu in the upper left of the FX Rack accesses FX Rack Presets.

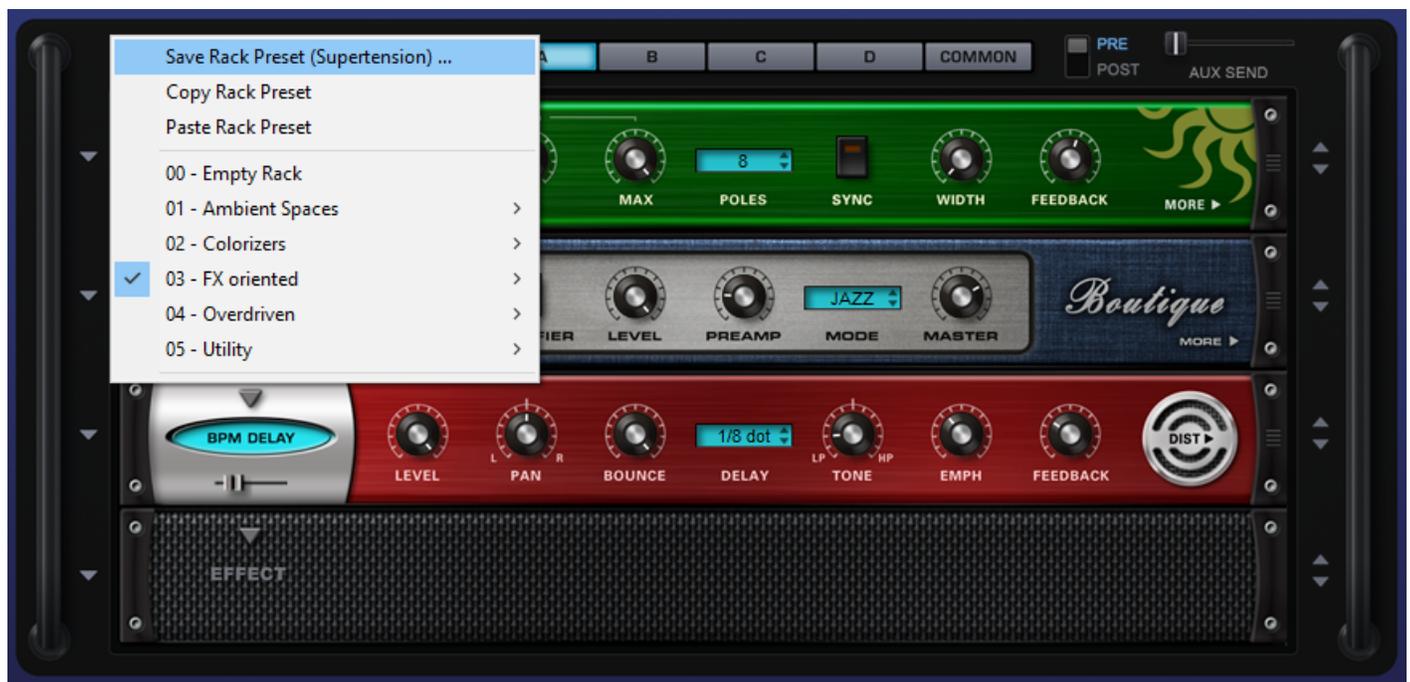


## 11.3.5.5. Saving Racks

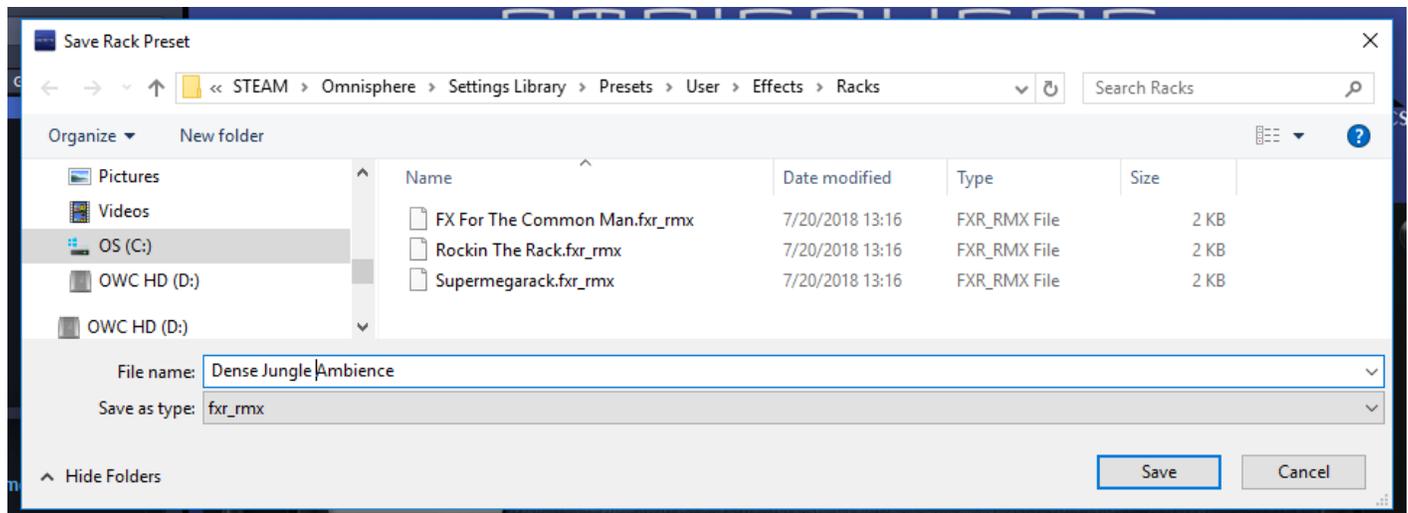
Saving a full Rack Preset allows you to give the Preset a custom name and recall it for future use. This is a convenient way to build a custom library of Rack Presets that you like to use.

To Save an FX Rack:

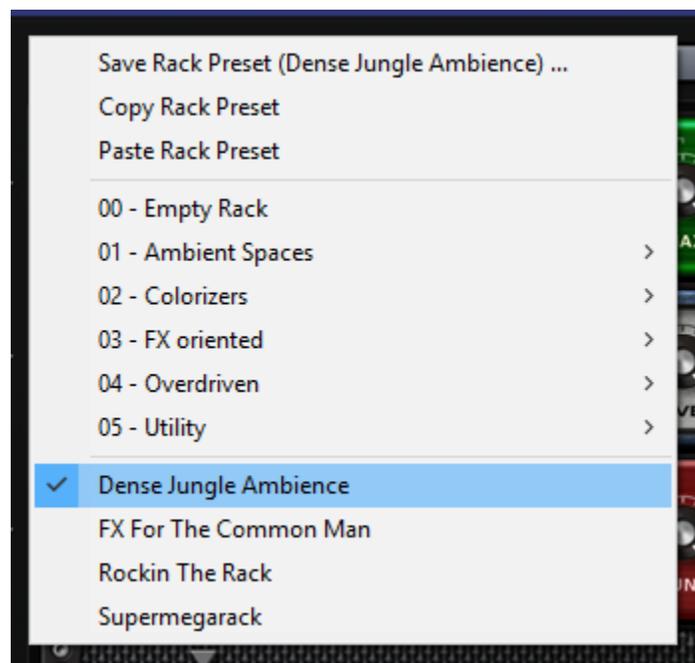
- Select the PRESETS menu arrow above the FX rack on the left, just to the left of the AUX tab.
- A drop-down menu will appear like the one below.



- 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.

## 11.3.5.6. Loading Racks

Loading FX Rack Presets from the menu is an easy way to use your favorite FX combinations at any time. Also, it allows you to quickly experiment with many combinations of different settings in different musical contexts.

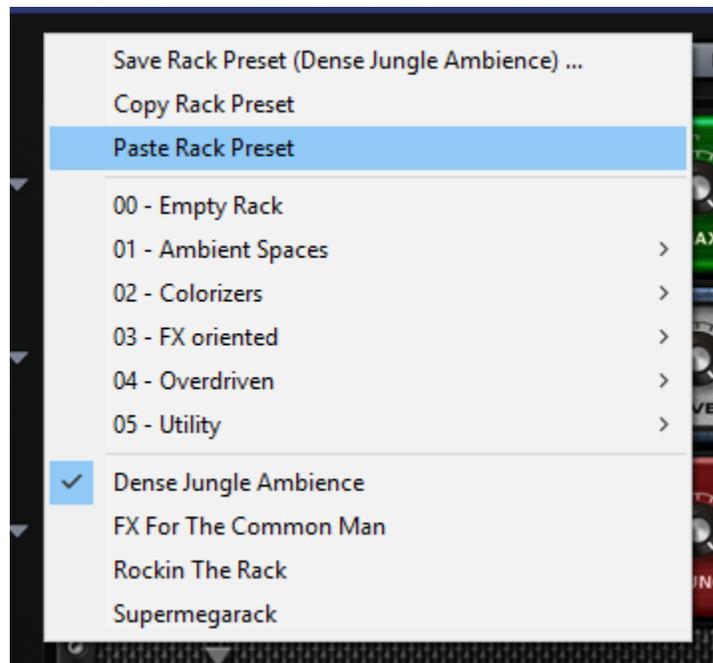
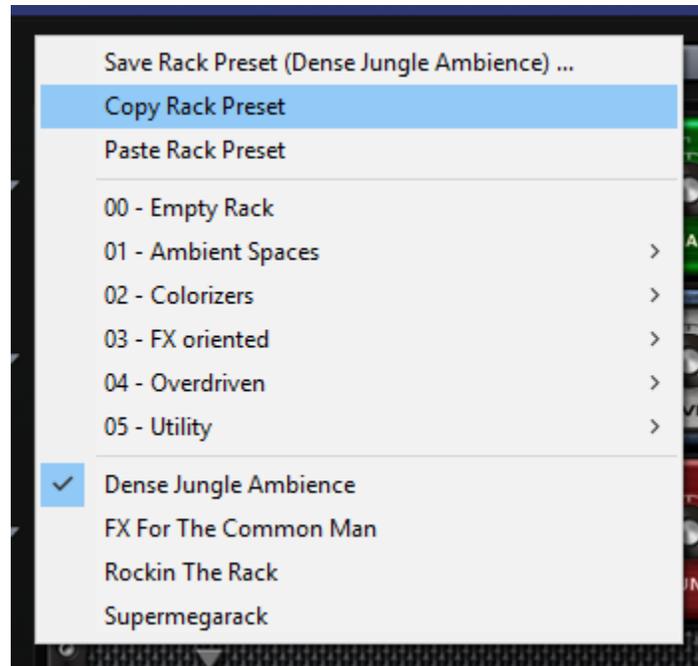
To load an FX Rack Preset:

- Select the PRESETS menu arrow above the FX Rack.
- A drop-down menu will appear.
- Select a Rack Preset from the menu to load the new Rack.



## 11.3.5.7. Copying & Pasting Racks

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Copying an FX Rack (along with all of its current parameter settings) and pasting to a different Rack is a quick and useful way of working with FX Racks. It's not required to Save a Preset in order to copy it to

another Rack. You can simply Copy the Rack with its current settings and Paste it into any other Rack. You can also Paste over an existing Rack.

**To Copy and Paste an FX Rack:**

- Select the PRESETS menu arrow above the FX rack.
- Select “Copy Rack Preset.”
- Choose another FX Rack. (It does not matter whether or not the targeted Rack has any FX Units loaded.)
- Select the PRESETS menu arrow above the FX rack.
- Select “Paste Rack Preset.”

This FX Rack now has the exact same Effects and settings as the original FX Rack.

# 11.4. 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](#)

## 11.4.1. Tube Limiter



The TUBE LIMITER in Omnisphere is both a limiter and compressor. It was modeled on the warm sound of the famous Fairchild™ 670 tube limiters of the 1960s. The Tube Limiter has a slower and smoother response than the other compressors in Omnisphere. Not only does the Tube Limiter work great as a stereo bus compressor/limiter, it also works well for individual instruments. It has a fixed internal compression ratio that matches the character the old Fairchild™ units. The Tube Limiter is an ideal tool for pumping things up in a musical way.

### 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.

### THRESHOLD

Sets the audio level at which the unit starts to compress the signal. If the input signal is below the Threshold level, the unit does not apply any compression. Once the level crosses the Threshold, then the compression begins to affect the signal. Range: 0 to -60db

### GAIN

A gain make-up stage that adjusts the overall output to compensate for compression level reduction. Range 0 to 24 db.

### PEAK/RMS

Allows the choice of PEAK Limiting or RMS Compression curves. Peak Limiting detects audio transients that are louder than the set Threshold level and applies compression to control those Peaks to whatever level you’ve set. RMS Compression detects an audio signal’s average level and applies compression to the overall signal. This helps make the whole audio signal louder. With RMS, there is no specific ceiling for the audio as there is with Peak Limiting.

**ATTACK**

Adjusts the amount of time that the compressor takes to start compressing once the audio goes over the Threshold level. Range: 0.1ms to 400ms

**RELEASE**

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the Threshold level. Range: 10ms to 5000ms.

## 11.4.2. Tape Slammer

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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 to 100%.

#### **AGE**

Allows you to control the age of the “tape stock.” Range: Bright to 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 to -60db.

#### **ATTACK**

Adjusts the amount of time that the compressor takes to start compressing once the audio has gone above the Threshold level. Range: 0.1ms to 400ms.

#### **RELEASE**

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the Threshold level. Range: 10ms to 5000ms.

**GAIN**

A gain make-up stage that adjusts the overall output to compensate for compression level reduction. Range 0 to 24 db.

**PAGE TWO CONTROLS****LIMIT**

Engages and disengages an additional “brick wall” limiter at the output. The compression controls continue to work regardless of whether the 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.

## 11.4.3. Modern Compressor



The MODERN COMPRESSOR has a bright, “solid-state” sound character with a fast and snappy response curve. The Modern Compressor was modeled after the legendary SSL™ compressors found in their renowned consoles that have been used on so many hit records. This compressor is great for the stereo master buss if you want a very 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, then the compression begins to affect the signal. Range: 0 to -60db.

### RATIO

The range of dynamic compression once the compressor engages. Range is 1:1 to 8:1.

### GAIN

A gain make-up stage that adjusts the overall output to compensate for compression level reduction. Range 0 to 24 db.

### PEAK/RMS

Allows the choice of PEAK Limiting or RMS Compression curves. Peak Limiting detects audio transients that are louder than the set Threshold level and applies compression to control those Peaks to whatever level you've set. RMS Compression detects an audio signal's average level and applies Compression to the overall signal. This helps make the whole audio signal louder. With RMS, there is no specific ceiling for the audio as there is with Peak Limiting.

**ATTACK**

Adjusts the amount of time that the compressor takes to start compressing once the audio has gone above the Threshold level. Range: 0.1ms to 400ms.

**RELEASE**

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the Threshold level. Range: 10ms to 5000ms.

**LIMIT**

Engages and disengages an additional “brick wall” limiter at the output. The compression controls continue to work regardless of whether the limiter is engaged or not.

## 11.4.4. Vintage Compressor



Although the MODERN COMPRESSOR and VINTAGE COMPRESSOR have nearly identical controls, the sound and response characteristics couldn't be more different. The VINTAGE COMPRESSOR was modeled on vintage UA LA-2A™ and 1176™ style response curves, but given more flexibility to tailor the sound. This unit is very warm and musical-sounding and works best with individual elements.

### THRESHOLD

Sets the audio level at which the unit starts to compress the signal. If the input signal is below the Threshold level, the unit does not apply any compression. Once the level crosses the Threshold, then the compression begins to affect the signal. Range: 0 to -60db.

### RATIO

The range of dynamic compression once the compressor engages. Range is 1:1 to 16:1.

### GAIN

A gain make-up stage that adjusts the overall output to compensate for compression level reduction. Range 0 to 24 db.

### PEAK/RMS

Allows the choice of PEAK Limiting or RMS Compression curves. Peak Limiting detects audio transients that are louder than the set Threshold level and applies compression to control those Peaks to whatever level you've set. RMS Compression detects an audio signal's average level and applies Compression to the overall signal. This helps make the whole audio signal louder. With RMS, there is no specific ceiling for the audio as there is with Peak Limiting.

### ATTACK

Adjusts the amount of time that the compressor takes to start compressing once the audio has gone above the Threshold level. Range: 0.1ms to 400ms.

**RELEASE**

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the Threshold level. Range: 10ms to 5000ms.

**LIMIT**

Engages and disengages an additional “brick wall” limiter at the output. The compression controls continue to work regardless of whether the limiter is engaged or not.

## 11.4.5. Precision Compressor

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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.

### **RATIO**

The compression ratio can be set from 1:1 (no compression) to 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.

### **RELEASE**

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the threshold level.

### **LEVEL**

A gain make-up stage that adjusts the overall output to compensate for compression level reduction.

## 11.4.6. 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.

### **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.

### **RELEASE**

Adjusts the amount of time that the compressor takes to stop compressing once the audio has gone under the threshold level.

### **GAIN**

A gain make-up stage that adjusts the overall output to compensate for compression level reduction.

## 11.4.7. Gate Expander

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The GATE EXPANDER is a traditional Noise Gate type of effect. It also works well as an Expander, which is the inverse of a compression effect.

### **THRESHOLD**

Controls the audio level at which the Gate starts to open. Range: 0 to 35db.

### **ATTACK**

Adjusts the speed at which the gate opens. Range: 0.1 ms to 400ms.

### **HOLD**

Adjusts how long the gate remains open. Range: 0 to 2000ms.

### **RELEASE**

Adjusts the speed at which the gate closes. 0.1 to 4000ms.

### **RANGE**

Controls the dynamic range of the gate's attenuation. Range: -90 to 0db.

# 11.5. Equalizers



Omnisphere includes seven equalizers that range from the super-musical Pultec-style, to graphic sculpting, to parametric EQs with surgical precision.

- [Studio EQ](#)
- [Vintage 2-band EQ](#)
- [Vintage 3-band EQ](#)
- [Graphic 7-band EQ](#)
- [Graphic 12-band EQ](#)
- [Parametric 2-band EQ](#)
- [Parametric 3-band EQ](#)

## 11.5.1. 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 1][BAND 2] FREQ**

Selects the frequency of BAND 1 and BAND 2.

### **[BAND 1][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:

- Lo Shelf
- Peaking
- HPF

### **[BAND 2] MODE**

Selects a filter type for BAND 2 from the following options:

- Hi Shelf
- Peaking
- LPF

## 11.5.2. Vintage 2-band EQ



The VINTAGE EQ2 was modeled after the great fixed-frequency design of the vintage Pultec™ EQP2-A model tube equalizer. The unique characteristic of this classic design is that on each EQ band, the same frequency can be broadly cut and boosted simultaneously. It also includes a gentle low pass filter for the hi-band, which results in very warm and musical tones that can have a lot of gain without getting harsh.

### [LOW BAND] BOOST

Increases gain of the selected frequency. Range: 0 to +20 dB.

### [LOW BAND] FREQ

Drop-down menu that provides frequency options of 20, 30, 50, 60, 75, 100, 200 Hertz

### [LOW BAND] CUT

Reduces the gain of the selected frequency. Range: 0 to -20 dB.

### [HIGH BAND] BOOST

Increases gain of the selected frequency. Range: 0 to +20 dB.

### [HIGH BAND] Q

Controls the resonance of the selected frequency. Range: 0 to .1

### [HIGH BAND] FREQ

Drop-down menu that provides EQ frequency choices of 2000, 3000, 4000, 5000, 8000, 10000, 12000, 140000, 16000, 18000 Hertz.

### [HIGH BAND] CUT

Reduces the gain of the selected frequency. Range: 0 to -20 dB.

**[HIGH BAND] FILTER**

Adjusts the frequency cutoff of the LPF. Range: 5000 to 18000 Hz.

## 11.5.3. Vintage 3-Band EQ



The VINTAGE EQ3 was modeled after the great fixed-frequency design of the vintage Pultec™ EQP series tube equalizers—renowned for their extremely musical and fat tones. They can provide a lot of gain without harshness.

### [LOW] FREQ

Drop-down menu that provides frequency options of 20, 30, 50, 60, 75, 100, 200 Hertz.

### [LOW] GAIN

Adjusts the gain of the Low Band. Range: -20 to +20 dB.

### [MED] FREQ

Drop-down menu that provides frequency choices. Choices: 300, 500, 800, 1200, 1600 Hz.

### [MED] GAIN

Adjusts the gain of the Mid Band. Range: -20 to +20 dB.

### [HIGH] FREQ

Drop-down menu that provides frequency choices of 2000, 3000, 4000, 5000, 8000, 10000, 12000, 140000, 16000, 18000 Hertz.

### [HIGH] GAIN

Adjusts the gain of the High Band. Range: -20 to +20 dB.

### LEVEL

Adjusts the overall output volume. Range: 0 to 13 dB.

## 11.5.4. Graphic 7-Band EQ



The GRAPHIC EQ7 is very useful for tailoring a full spectrum audio source with broad control of multiple bands. With the Q control, it is much more versatile than an average graphic EQ—capable of achieving comb filter FX and even basic speaker simulation effects.

### PAGE ONE CONTROLS

**50Hz, 100Hz, 500Hz, 1k, 5k, 10k, 15k**

Each knob controls the gain of the corresponding frequency. Range: -18 to +18 dB.

### PAGE TWO CONTROLS

**Q**

Controls the resonance of all seven frequency bands. Range: 0.1 to 2.

**LEVEL**

Adjusts the overall output volume. Range: 0 to 13 dB.

## 11.5.5. Graphic 12-Band EQ



The GRAPHIC EQ12 is very useful for tailoring a full spectrum audio source with fine controls of multiple bands for precision control. With the Q control, it's much more versatile than an average graphic EQ—capable of comb filter FX and even basic speaker simulation effects.

**63Hz, 125Hz, 250Hz, 400Hz, 630Hz, 1k, 1.6k, 2.5k, 4k, 6.3k, 10k, 16k**

Each knob controls the boost or cut gain of the corresponding frequency. Range: -16 to +16 dB.

**Q**

Controls the resonance of all twelve frequency bands. Range: 0.1 to 2.

**LEVEL**

Adjusts the overall output volume. Range: 0 to 13 dB.

## 11.5.6. Parametric 2-Band EQ



The PARAMETRIC EQ2 has the benefit of precision frequency control, with two fully sweepable, overlapping bands. This type of EQ is best suited for “surgical” equalization, particularly in pinpoint cutting or reducing of an undesirable frequency in the source audio.

### **[LOW] FREQ**

Selects a frequency. Range: 30 to 7000 Hz.

### **[LOW] Q**

Controls the resonance. Range: 1.9 to 0.1.

### **[LOW] GAIN**

Adjusts the gain of the Low Band. Range: -20 to +20 dB.

### **[HIGH] FREQ**

Selects a sweepable frequency. Range: 1000 to 16000 Hz.

### **[HIGH] Q**

Controls the resonance. Range: 1.9 to 0.1.

### **[HIGH] GAIN**

Adjusts the gain of the High Band. Range: -20 to +20 dB.

### **LEVEL**

Adjusts the overall output volume. Range: 0 to 13 dB.

## 11.5.7. Parametric 3-band EQ



The PARAMETRIC EQ3 has the benefit of precision frequency control, with three fully sweepable, overlapping bands. This type of EQ is best suited for “surgical” equalization, particularly in pinpoint cutting or reducing of an undesirable frequency in the source audio.

### [LOW] FREQ

Selects a frequency. Range: 30 to 600 Hz.

### [LOW] Q

Controls the resonance. Range: 1.9 to 0.1.

### [LOW] GAIN

Adjusts the gain of the Low Band. Range: -20 to +20 dB.

### [MID] FREQ

Selects a frequency. Range: 100 to 6000 Hz.

### [MID] GAIN

Adjusts the gain of the Mid Band. Range: -20 to +20 dB.

### [HIGH] FREQ

Selects a frequency. Range: 1000 to 16000 Hz.

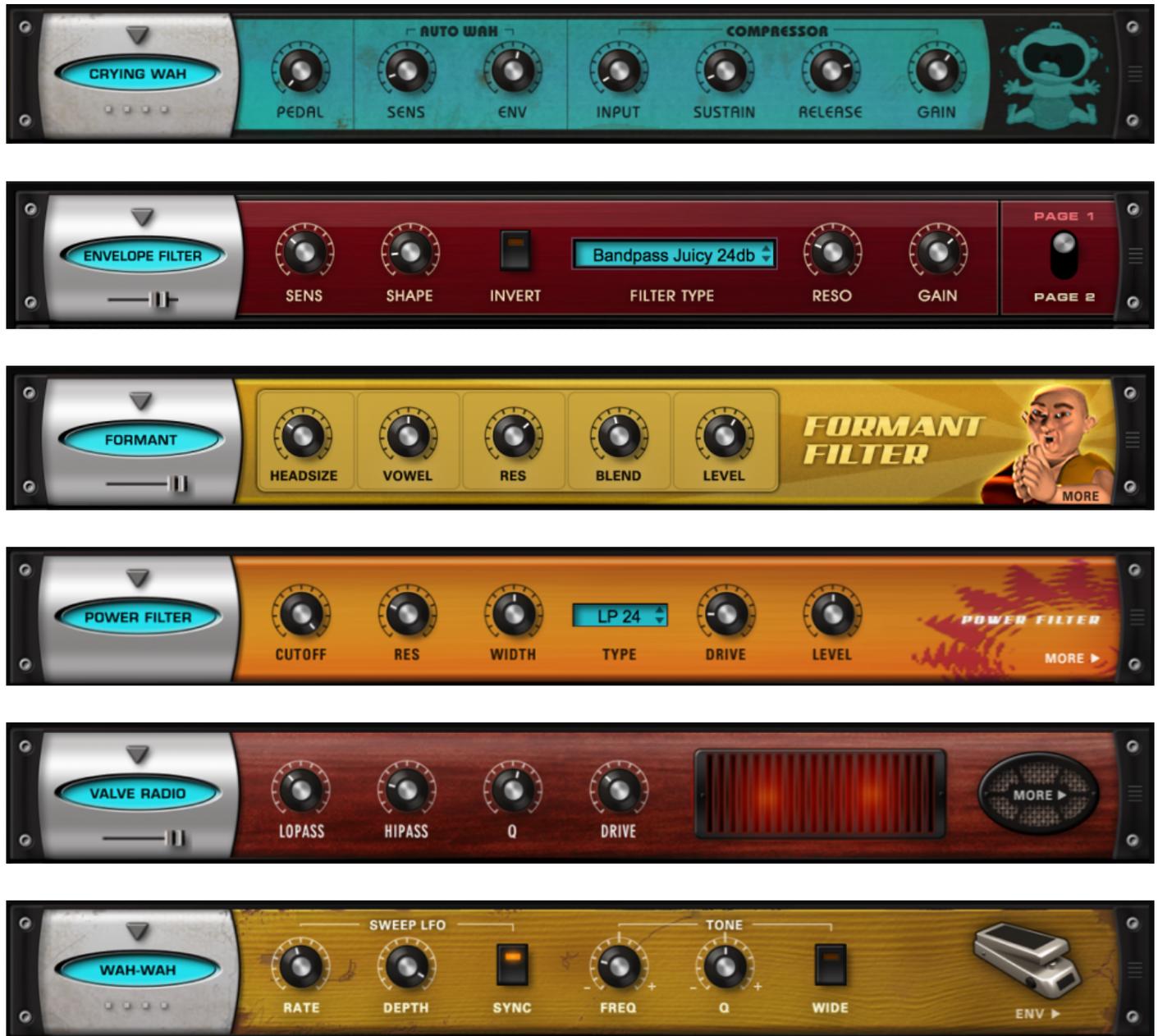
### [HIGH] Q

Controls the resonance. Range: 1.9 to 0.1.

**[HIGH] GAIN**

Adjusts the gain of the High Band. Range: -20 to +20 dB.

## 11.6. 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](#)

## 11.6.1. 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 to 100%.

### PAGE ONE CONTROLS

#### **SENS**

Controls the depth of the envelope applied to the filter.

#### **SHAPE**

Controls the response of the envelope follower. The envelope reacts faster at lower settings and slower at higher settings.

#### **INVERT**

Inverts the contour of the envelope follower.

#### **TYPE**

Drop-down menu determines the filter type.

**RESO**

Controls the amount of filter resonance.

**GAIN**

Master volume.

**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.

**[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.

**[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.

**[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.

**[COMPRESSOR] RELEASE**

Adjusts the amount of time that the compressor takes to stop compressing once the audio has dipped under the threshold level.

**[COMPRESSOR] GAIN**

A gain make-up stage that adjusts the overall output volume to compensate for compression level reduction.

## 11.6.2. Formant Filter



The FORMANT FILTER adds the characteristics of the human voice to a sound. It simulates the formants of the human voice by chaining a narrow set of bandpass filters, set at specific frequencies.

### PAGE ONE CONTROLS

#### HEADSIZE

Simulates the resonating qualities, based on the size of a human head. Higher values will have a deeper resonance. Range: 0.00Cm to 1.00Cm.

#### VOWEL

Selects the type of vocal formant, or vowel character, that will affect the sound. Sweeping the control gradually changes between different vowel sounds. Range: 0.00Hz to 1.00Hz.

#### RES (Resonance)

Emphasizes the formant's frequency. Range: 0.00 to 1.00.

*CAUTION: High RES levels can cause loud oscillations.*

#### BLEND

Blends in the higher frequencies of the original sound, to add clarity to the filtered result. Range: 0.00Amp to 1.00Amp.

## LEVEL

Determines the overall Formant Filter effect level. Range: -infdB to 0dB.

## PAGE TWO CONTROLS

These are two dedicated modulation LFOs for both the HEADSIZE and the VOWEL controls on Page One.

### [HEADSIZE] RATE

Controls the speed of the Headsize modulation. The rate types are either in Hz or in rhythmic values depending on whether the SYNC button is enabled or not.

Range:

Synced: 32x, 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 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.

Unsynced: 0.00Hz to 15.000Hz.

### [HEADSIZE] DEPTH

Controls the amount of the modulation. Range: 0 to 1.

### [HEADSIZE] SYNC

There are two ways to control the rate of the Headsize modulation—by Hz and by various sync rates with the host. When SYNC 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, 1/1 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.

Unsynced: 0.00Hz to 15.000Hz.

### [VOWEL] DEPTH

Controls the intensity of the vowel modulation. Range: 0 to 1.

### [VOWEL] SYNC

There are two ways to control the rate of the vowel modulation, by Hz and by sync rates with the host. When the SYNC button is enabled, the values will change to musical rates.

## 11.6.3. Power Filter



The POWER FILTER is a brand new filter developed in cooperation with GMedia, and 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—useful for producing formant and vowel sweeps.

**CAUTION:** The POWER FILTER has tremendous headroom and is capable of very loud sounds that can hurt your ears and damage your speakers if you aren't careful. GMedia's warning that it "Screams like a Bastard" should be heeded! Please be mindful of this when working with the Resonance, Drive, and Gain knobs.

### PAGE ONE CONTROLS

#### CUTOFF

Controls the cutoff frequency of the Filter. Range: 17.125 to 18318 Hz.

#### RES

Controls the resonance or "Q" of the filter, which emphasizes the cutoff frequency to the point of oscillation at the highest settings.

#### WIDTH

Controls the amount of frequency separation between the filters. Range: 0 to 1.

**TYPE**

Drop-down menu determines the sonic character of the different filter options.

Low Pass 24dB, Band Pass 24dB, High Pass 24dB, LP/LP, BP/BP, HP/HP, LP/BP, LP/HP, BP/HP

**DRIVE**

Controls the amount of overdrive/saturation. Range: 0 to 1.

**LEVEL**

Adjusts the overall output. Range: 0 to 1.

**PAGE TWO CONTROLS****[CUTOFF] RATE**

Controls how fast or slow the filter cutoff cycles.

Range:

Synced: 32x, 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 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.

Unsynced: 0.00Hz to 15.000Hz.

**[CUTOFF] DEPTH**

Controls the range of the cutoff LFO. Range: 0 to 1.

**[CUTOFF] SYNC**

Engages and disengages synchronization of the LFO rate with the host's tempo.

**[WIDTH] RATE**

Controls how fast or slow the filter width cycles. Range: Synced: 32x, 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 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. Unsynced: 0.00Hz to 15.000Hz .

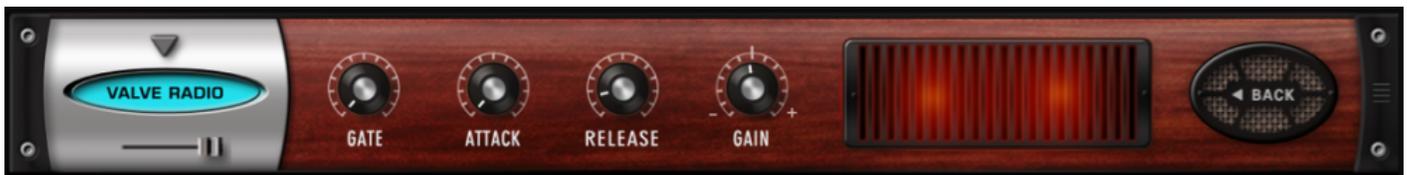
**[WIDTH] DEPTH**

Controls the range of the width LFO. Range: 0 to 1.

## **[WIDTH] SYNC**

Engages and disengages synchronization of the LFO rate with the host's tempo.

## 11.6.4. Valve Radio



The VALVE RADIO is a unique device, which functions equally well as a dual filter and also a distortion device. The combination of these two effects can produce 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 balance of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 100%.

### PAGE ONE CONTROLS

#### LOPASS

Controls the frequency cutoff of the LPF. Range: 100 to 22000 Hz.

#### HIPASS

Controls the frequency cutoff of the HPF. Range: 20 to 10000 Hz.

#### Q

Controls the resonance of the two filters, which emphasizes the cutoff frequencies. Range: .5 to 3.0.

#### DRIVE

Increases the amount of overdrive distortion. Range: 0 to 100%.

**PAGE TWO CONTROLS****GATE**

Sets the audio level at which the threshold for the Gate starts to open. Range: 0 to 35dB.

**ATTACK**

Adjusts the speed at which the gate opens. Range: 0.1 ms to 400ms.

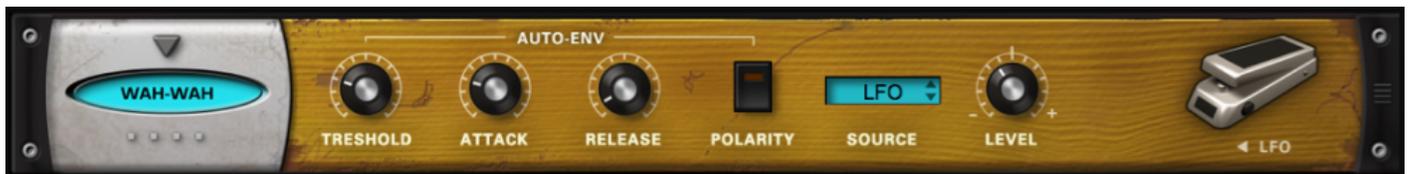
**RELEASE**

Adjusts the speed at which the gate closes. 0.1 to 4000ms.

**GAIN**

Adjusts the overall output. Range: 0 to 3.5 dB.

## 11.6.5. Wah-Wah



The WAH-WAH 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 Omnisphere filters. This FX unit works both as a sweeping wah-wah and also as an "auto-wah" envelope filter effect by using the controls on Page 2.

### PAGE ONE CONTROLS

#### [SWEEP LFO] RATE

Controls the rate of the LFO.

Range:

Synced: 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/2 D, 1/4 D, 1/8 D, 1/16 D, 1/2 T, 1/4 T, 1/8 T, 1/16 T.

Unsynced: 0 to 8.8Hz.

#### [SWEEP LFO] DEPTH

Controls the range of the LFO. Range: Off to 100%.

#### [SWEEP LFO] SYNC

Engages and disengages synchronization of the LFO rate with the host's tempo.

#### [TONE] FREQ

Controls the center frequency range of the filter wah. Range: -10 to +10%.

**[TONE] Q**

Controls the resonance or emphasis of the wah frequency. Range: -10 to +10%.

**[TONE] WIDE**

A phase reversal that inverts the left and right modulation for a stereo wah effect.

**PAGE TWO CONTROLS****[AUTO ENV] THRESHOLD**

The audio level at which the Envelope Follower modulation begins. Range 0 to -90dB.

**[AUTO ENV] ATTACK**

The time of the Envelope Follower modulation beginning slope. Range 200 to 8000 ms.

**[AUTO ENV] RELEASE**

The time of the Envelope Follower modulation ending slope. Range 25 to 1500 ms.

**[AUTO ENV] POLARITY**

The polarity of the Envelope Follower modulation. Choices: HIGH/LOW, LOW/HIGH.

**SOURCE**

Drop-down menu that allows a choice between LFO and AUTO-ENV as source of wah-wah modulation.

**LEVEL**

Adjusts the overall output. Range: 0 to 13 dB.

## 11.6.6. 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.

### **[AUTO WAH] SENS**

Controls the depth of the envelope applied to the filter.

### **[AUTO WAH] ENV**

Controls the response of the envelope follower. The envelope reacts faster at lower settings and slower at higher settings.

### **[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.

### **[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.

**[COMPRESSOR] RELEASE**

Adjusts the amount of time that the compressor takes to stop compressing once the audio has dipped under the threshold level.

**[COMPRESSOR] GAIN**

A gain make-up stage that adjusts the overall output to compensate for compression level reduction.

## 11.7. 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 Distortion](#)
- [Metalzone Distortion](#)
- [Toxic Smasher](#)
- [Foxy Fuzz](#)

## 11.7.1. Stompbox Modeler

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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.

### 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.

### LEVEL

Master volume.

### MODEL

Selects one of the Stompbox models:

#### **Boss BD-2 Blues Driver™**

Classic, creamy, blues tones from one of the best overdrive pedals of its type.

#### **Ibanez Tube Screamer™**

Boosted midrange overdrive, loved by blues players. Think Stevie Ray Vaughn.

#### **Boss SD-1 Overdrive™**

Provides a warm, tube-like distortion, while retaining clarity.

**DOD 250 Overdrive™**

Smooth, Classic Rock tone.

**Arbiter Fuzz Face™**

Classic from the 1960s, used by the Beatles, The Who, Jimi Hendrix, Pink Floyd, to name only a few.

**Sola Tone Bender™**

A descendant of the Arbiter Fuzz-Face, this cool distortion pedal from the mid-sixties was a Classic Rock staple and made a comeback in 2012.

**MXR Distortion +™**

Tons of sustain in this mustard-colored classic, often used in Classic Rock and Heavy Metal.

**Pro Co RAT™**

Another descendant of the Arbiter Fuzz-Face, used extensively by David Gilmour, Jeff Beck, and Joe Walsh

**Big Muff Pi™**

Electro-Harmonix developed this from earlier models called Axis Fuzz and Foxy Lady, obvious nods to Hendrix.

**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.

**DOD FX69 Grunge™**

Super-heavy distortion, named for the Pacific Northwest Grunge scene of the '90s!

## 11.7.2. Flame Distortion



FLAME is an extremely versatile distortion unit capable of anything from mild tube overdrive to nasty bit-crushing and radical fuzzbox effects. The DRIVER has many different types of waveshaping types and the unique structure of not only pre/post gain, but pre/post filtering with mixable LP/HP filters on each side of the drive circuit. All of which makes for a killer distortion processor!

### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 100%Wet.

### [PRE] GAIN

Adjusts the amount of gain BEFORE being processed by the driver. Range: -200 to +10 dB.

### [PRE] TYPE

Adjusts the balance of two filter types applied to the audio BEFORE being processed by the FLAME Driver. Range: 100% Low Pass to 100% High Pass.

### [PRE] FILTER

Controls the cutoff frequency of the filter. Range: 100 to 21924.17 Hz.

### DRIVER

Drop-down menu with different waveshaping drive options.

Choices: Warm, Heat, BURN, Fuzzy, Scorch, Loud, Glow, Roast, Toast, 2 Bits, Torch, Bake, Ignite, Gater, Psycho, Cook, Blaze, Smoke, MELT, Topkill, Tube, Valve.

**CAUTION:** *Some of these drivers can produce extremely loud sounds, so watch out!*

**[POST] GAIN**

Adjusts the amount of gain AFTER being processed by the FLAME Driver. Range: -200 to +10 dB.

**[POST] TYPE**

Adjusts the balance of two filter types applied to the audio AFTER being processed by the FLAME Driver. Range: 100% Low Pass to 100% High Pass.

**[POST] FILTER**

Controls the frequency of the filter. Range: 100 to 21924.17 Hz.

## 11.7.3. Metalzone Distortion

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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.

### **LOW**

Bipolar control which cuts or boosts low frequencies.

### **MID**

Bipolar control which cuts or boosts mid frequencies.

### **HI**

Bipolar control which cuts or boosts high frequencies.

### **LEVEL**

Master volume control.

## 11.7.4. Toxic Smasher



TOXIC 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.

#### 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.

#### 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.

## **GAIN**

Adjusts the overall output.

## **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.

### **REDUCE ANIM**

The Animation slider adds a dynamic, time-variant character to the sample-rater-eduction. This parameter will have no effect if the REDUCE knob is set to zero.

### **FILTER**

Drop-down menu for selecting the filter type: LPF, BPF, HPF, or OFF.

#### **[FILTER] CUTOFF**

Controls the filter cutoff frequency.

#### **[FILTER] RESO**

Controls the filter resonance.

#### **[FILTER] PRE/POST**

Controls where the filter sits in the audio path: "PRE" places it before the crushed/reduced/waveshaped signal, POST places it after.

## 11.7.5. Foxy Fuzz

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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.

### **MELLO-BRITE**

This knob controls the tone and ranges from (you guessed it!) mellow to bright!

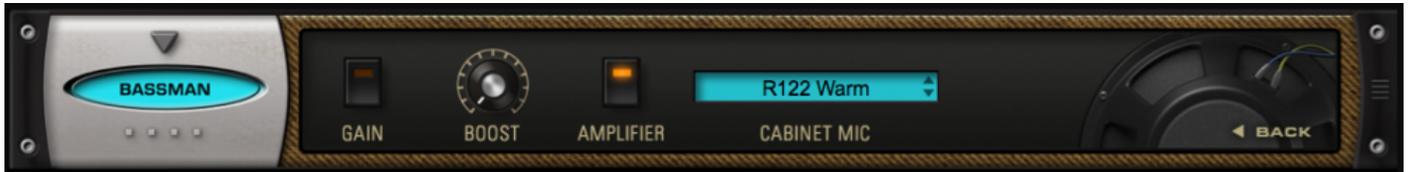
### **VOLUME**

Adjusts the overall output volume.

### **OCTAVE**

This switch acts like an octaver—adding harmonic distortion an octave above.

## 11.8. Amplifier

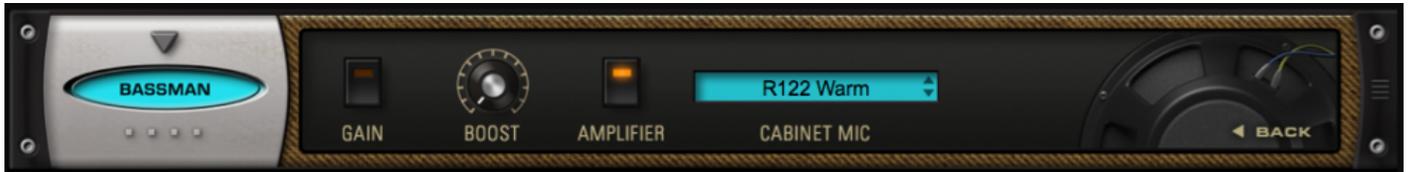




Omnisphere includes nine amplifier models for unique sonic coloration. From clean, bell-like tones and fat, classic tube distortion, to sounds you can only get from the cheesiest transistor radio speaker!

- [Bassman](#)
- [Boutique](#)
- [Brit-Vox](#)
- [Classic Twin](#)
- [Hiwattage](#)
- [Rock Stack](#)
- [San-Z-Amp](#)
- [Smoke Amp](#)
- [Thriftshop Speaker](#)

## 11.8.1. 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.

#### **MID**

Bipolar control which cuts or boosts mid-range frequencies.

#### **TREBLE**

Bipolar control which cuts or boosts high frequencies.

#### **PRESENCE**

Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies and slightly rolls off the low end.

## **VOLUME**

This knob controls how much signal is sent through the “tubes” in the first gain stage. Higher settings can introduce a pleasing distortion.

## **MASTER**

Master volume.

## **PAGE TWO CONTROLS**

### **GAIN**

This switch introduces a gain boost into the guitar amp, like a “High Gain” switch.

### **BOOST**

This is a tone control that when increased boosts the high frequencies at the same time it attenuates the low end.

### **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.

## 11.8.2. 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 gain 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.

#### **PREAMP**

The PREAMP knob controls how much signal is sent through the “tubes” in the first gain stage. Higher settings can introduce a pleasing distortion.

#### **MODE**

This drop-down menu allows you to select different models: Jazz, Brite, and Mid.

#### **MASTER**

Master volume.

**PAGE TWO CONTROLS****BASS**

Bipolar control which cuts or boosts low frequencies.

**MID**

Bipolar control which cuts or boosts mid-range frequencies.

**TREBLE**

Bipolar control which cuts or boosts high frequencies.

**PRESENCE**

Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies and slightly rolls off the low end.

**CABINET MIC**

Drop-down menu for selecting an impulse response of the speaker cabinet using a variety of preamps and mics.

## 11.8.3. 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 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.

#### **MID**

Bipolar control which cuts or boosts mid-range frequencies.

#### **TREBLE**

Bipolar control which cuts or boosts high frequencies.

#### **PRESENCE**

Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies and slightly rolls off the low end.

#### **LEVEL**

The Level knob controls how much signal is sent through the “tubes” in the first gain stage. Higher settings can introduce a pleasing distortion.

**MASTER**

Master volume.

**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.

**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.

## 11.8.4. 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.

#### **MID**

Bipolar control which cuts or boosts mid-range frequencies.

#### **TREBLE**

Bipolar control which cuts or boosts high frequencies.

#### **PRESENCE**

Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies and slightly rolls off the low end.

## **VOLUME**

The Volume knob controls how much signal is sent through the “tubes” in the first gain stage. Higher settings can introduce a pleasing distortion.

## **MASTER**

Master volume.

## **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.

### **BRIGHT**

When enabled, this switch boosts high frequencies.

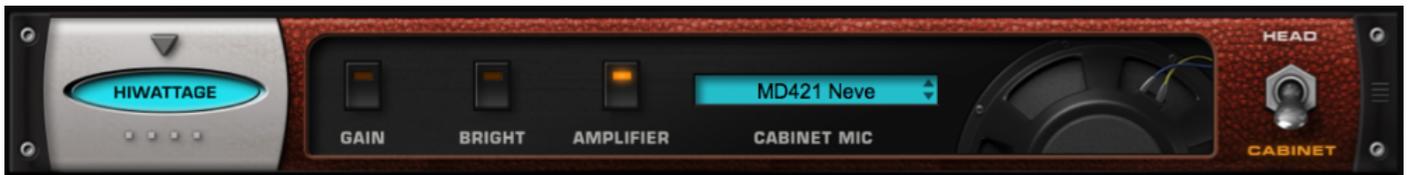
### **AMPLIFIER**

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.

## 11.8.5. 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.

#### **MID**

Bipolar control which cuts or boosts mid-range frequencies.

#### **TREBLE**

Bipolar control which cuts or boosts high frequencies.

#### **PRESENCE**

Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies and slightly rolls off the low end.

## **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 will be.

## **VOLUME**

The VOLUME knob controls how much signal is sent through the “tubes” in the first gain stage. Higher settings can introduce a pleasing distortion.

## **MASTER**

Master volume.

## **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.

## 11.8.6. 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.

#### **MID**

Bipolar control which cuts or boosts mid-range frequencies.

#### **TREBLE**

Bipolar control which cuts or boosts high frequencies.

#### **PRESENCE**

Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies and slightly rolls off the low end.

**LEVEL**

The Levels. knob controls how much signal is sent though the “tubes” in the first gain stage. Higher settings can introduce a pleasing distortion.

**MASTER**

Master volume.

**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.

**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.

## 11.8.7. 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 will be.

### LOW

Bipolar control which cuts or boosts low frequencies.

### HIGH

Bipolar control which cuts or boosts mid-range frequencies.

### 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 midrange (Hi Gain).

### AMP

This drop-down menu allows you to select the different amplifiers after which this unit has been modeled: American Tweed (Fender), Classic British (Vox), or Modern California (boutique).

**MASTER**

Master volume.

## 11.8.8. Smoke Amp



SMOKE has a full set of amplifier controls, speaker combinations and modeled versions of several classic guitar amplifiers.

### PAGE ONE CONTROLS (AMP)

#### AMP

Enables or disables the amplifier model. If the switch is OFF, then none of the amplifier models will be active (although the SPEAKER, GAIN, DRIVE, and MASTER controls will still be operational).

#### MODEL

These are representations, or models, of well-known guitar amplifiers;

- **USA** – Fender™ Deluxe
- **Plexi** – Marshall™ Plexi
- **British** – VOX-AC-30
- **Chief** – Matchless™ Chieftain
- **Rectify** – Mesa Boogie™ Rectifier
- **Twin** – Fender™ Twin

#### MIC

This is a switch to control on-axis versus off-axis micing of the speakers.

## **SPEAKER**

There are three different algorithms that simulate the number of speaker cones in an amplifier housing. If OFF is chosen, no speaker modeling will be heard.

- **1×12** – one active 12-inch speaker
- **2×12** – two active 12-inch speakers
- **4×12** – four active 12-inch speakers

## **GAIN**

The Gain switch introduces a gain boost into the guitar amp, like a “High Gain” switch.

## **DRIVE**

Sometimes referred to as Overdrive, DRIVE sets the amount of the overloading of the amplifier—which is what creates distortion. The higher this control is set, the more distorted the signal will be. Range: 0-100.

## **MASTER**

This is the output level of the amplifier. When set to a minimum setting, no signal will be heard. Range: 0-100.

## **PAGE TWO CONTROLS (TONE)**

### **TONE**

This switch enables the four tone controls. When turned off, the settings of the BASS, MID, TREBLE and PRESENCE are disabled.

### **BASS**

Controls the amount of low frequencies. Range: 0-100.

### **MID**

Controls the amount of mid-range frequencies. Range: 0-100.

### **TREBLE**

Controls the amount of high frequencies. Range: 0-100.

## **PRESENCE**

Sometimes referred to as Brilliance or Edge, PRESENCE boosts very high frequencies. Range: 0-100.

## 11.8.9. Thriftshop Speaker



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 ambiances 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.

### [DISTORTION] TYPE

Drop-down menu for selecting one of the distortion models from the Stompbox Modeler: Boss BD-2 Blues Driver™, Ibanez Tube Screamer™, Boss SD-1 Overdrive™, DOD 250 Overdrive™, Arbiter Fuzz Face™, Sola Tone Bender™, MXR Distortion +™, Pro Co RAT™, Big Muff Pi™, Boss DS-1 Distortion™, and 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.

### [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.

# 11.9. Modulation



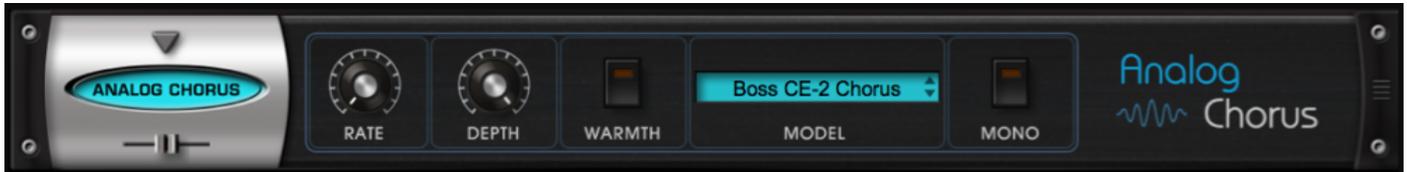


Omnisphere includes twelve modulation processors that span the history of recording, from vintage and modern phasers, flangers, and choruses to vibey vibrato and tasty tremolo.

- [Analog Chorus](#)
- [Ultra Chorus](#)
- [Solina Ensemble](#)
- [Analog Phase](#)
- [Retro-Phaser](#)
- [PRO-Phaser](#)
- [EZ-Phaser](#)
- [Analog Flanger](#)
- [Retro Flanger](#)
- [Flanger](#)
- [Analog Vibrato](#)

- [Vintage Tremolo](#)

## 11.9.1. 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:

- Boss CE-2  
Rare and highly-collectible, this famous, robin's egg blue pedal has a smooth, warm sound.
- Boss CE-5 Chorus Ensemble  
Newer version of the CE-2, with added filter controls. Different and cool-sounding.

- 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.

## 11.9.2. 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.

ULTRA CHORUS has a dedicated LFO, a 'Lush' control, which gives this unit a very dense, rich character compared with other Choruses.

### PAGE ONE CONTROLS

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 100%.

#### RATE

This control sets the cycle speed of the LFO. Minimum settings will produce a sweeping effect, higher settings will make for a more warbling effect. Range: 0.00Hz to 15.000Hz.

#### DEPTH

The DEPTH control adjusts the amount of pitch modulation from the LFO. Range: 0.01 to 0.98.

#### DELAY

Controls the delay time. Range: 0.00-1.00.

## **SHAPE**

These three waveforms control the contour of the pitch change applied to the delay.

Sine – a symmetrical, smoothly cycling wave

Random – non-symmetrical changes in the wave make randomized pitch changes.

Linear – a symmetrical, linear cycle.

## **LUSH**

Sums the left and right signal, which adds more density to the sound.

## **PAGE TWO CONTROLS**

### **FEEDBACK**

Applied to the Delay, FEEDBACK repeats the delays for more sonic density. At minimum settings the difference is minor, at maximum settings it creates flanging metallic overtones. Range: 0.01 to 0.98.

### **INVERT**

Reverses the phase of the chorus.

### **WIDTH**

Pans the chorused signal to left and right, widening the stereo image. Range: 0.00-1.00.

### **TONE**

Tone is a combination Highpass and Lowpass filter. When set at 12-O'Clock (.500) the tone is neutral. When shifted clockwise, a Highpass filter is applied, when changed counter-clockwise, a Lowpass filter is applied. Range: 0.00-1.00.

### **LEVEL**

Adjusts the overall output. Range: -inf to 0.00.

## 11.9.3. 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 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.

### MONO

Engaging this switch makes the effected signal mono.

## 11.9.4. 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 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 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:

- **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.

- **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.

## 11.9.5. RetroPhaser



RETROPHASER has a vintage, low-fi vibe. On the surface it looks similar to the EZ-PHASER, but has more features and a dedicated page for tone shaping.

### PAGE ONE CONTROLS

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 100%.

#### RATE

Controls how fast the LFO cycles. The value of the RATE control is determined by the SYNC control. If SYNC is engaged, then the values 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, 1/1 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.

Unsynced: 0.00Hz to 15.000Hz.

#### DEPTH

Controls the sweep range of the modulation. Range: 0 to 1.

**SYNC**

Engages and disengages synchronization of the LFO rate with the host's tempo.

**POLES**

Drop down menu that selects how many stages or "poles" the phaser uses. More poles equal a more resonant sound character. Range: 4, 6, 8, or 12 poles.

**MANUAL**

Controls the center point of the phaser. Range: 0-100%.

**FEEDBACK**

Controls the amount of resonance/feedback of the phaser. High settings will oscillate. Range: 0-100%.

**INVERT**

Changes the phase angle by 180°, which changes the tone character of the phasing.

**PAGE TWO CONTROLS****DIRT**

Adds subtle overdrive to the phaser's signal.

**TONE**

This control is a simple tone filter control. Range: Dark Tone ~ Bright Tone.

**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 to 13.0 dB.

## 11.9.6. PRO-Phaser



PRO-PHASER is one of the richest and most versatile phaser designs ever created. It is 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 to 100%.

### PAGE ONE CONTROLS

#### [LFO] RATE

Controls how fast or slow the LFO cycles.

Range:

Synced: 32x, 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 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.

Unsynced: 0.00Hz to 15.000Hz.

#### [LFO] MIN

Controls the minimum point of modulation depth of the LFO. Range: 0 to 100%.

**[LFO] MAX**

Controls the maximum point of modulation depth of the LFO. Range: 0 to 100%.

**POLES**

Drop-down menu that selects how many stages or “poles” the phaser uses. More poles equals a more resonant sound character.

Choices: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 poles.

**SYNC**

Engages and Disengages synchronization of the LFO rate with the host’s tempo.

**WIDTH**

Controls the width of the stereo image of the phasing signal. Range: 0–360°.

**FEEDBACK**

Controls the amount of resonance/feedback of the phaser. High settings will oscillate. Range: 0 to 100%.

**PAGE TWO CONTROLS****SOURCE**

Continuous mix control that blends between LFO and Envelope Follower modulation sources. Range: 0 to 100%.

**[ENVELOPE] ATTACK**

The time of the Envelope Follower modulation beginning slope. Range: 0 to 400ms.

**[ENVELOPE] RELEASE**

The time of the Envelope Follower modulation ending slope. Range: 0 to 1000ms.

**[ENVELOPE] MIN**

Controls the minimum point of modulation depth of the Envelope. Range: 0 to 100%.

**[ENVELOPE] MAX**

Controls the maximum point of modulation depth of the Envelope. Range: 0 to 100%.

**DRIVE**

Controls the amount of overdrive at the final output. Range: 0 to 100.

**LEVEL**

Adjusts the overall output. Range: -200 to +10db.

## 11.9.7. 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 its own unique sonic character. EZ-PHASER is best-suited to recreate classic phaser effects—it is simple to use and understand.

### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 1

### RATE

Controls the speed of the Phaser cycles.

Range:

Synced: 32x, 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 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.

Unsynced: 0.00Hz to 15.000Hz.

### DEPTH

Controls the range of the LFO. Range: 0 to 1.

### SYNC

Engages and disengages synchronization of the LFO rate with the host's tempo.

### POLES

Drop down menu that selects how many stages or “poles” the phaser uses. More poles equals a more resonant sound character.

Choices: Four or Eight poles.

### **MANUAL**

Controls the center frequency of the phaser. Range: 0.005 to 0.1.

### **FEEDBACK**

Controls the amount of resonance/feedback of the phaser. Range: 0 to 1.

### **LEVEL**

Adjusts the overall output. Range: -infinity to 0 Unity gain.

## 11.9.8. 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.

### DEPTH

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.

### COLOR

Controls the tone of the affected signal, creating darker results at low settings and brighter results at higher settings.

### ENHANCE

Controls the amount of delay feedback, which produces a stronger flanging resonance.

## **MONO**

Engaging this switch makes the effected signal mono.

## 11.9.9. Retro-Flanger



Flanging is a sweeping, comb-filter type effect. RETROFLANGER has special features that give the sound a more lo-fi, vintage character.

### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 1.

### PAGE ONE CONTROLS

#### RATE

Controls how fast or slow the flanger cycles. This is the RETROFLANGER'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, 1/1 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.

Unsynced: 0.00Hz to 15.000Hz.

#### DEPTH

Controls the range of the LFO. Range: 0.01 to 1.

**SYNC**

Engages and disengages synchronization of the LFO rate with the host's tempo.

**DELAY**

Controls the center frequency/delay time of the flanger. Range: 0.005 to 0.1ms.

**FEEDBACK**

Controls the amount of delay feedback, which produces a stronger flanging resonance. Range: 0.01 to 0.99.

**INVERT**

Reverses the phase of the delay feedback signal, producing a throatier tone.

**LEVEL**

Adjusts the overall output volume. Range: -infinity to 0 Unity gain.

**PAGE TWO CONTROLS****DIRT**

Adds overdrive to the RETROFLANGER's signal.

**TONE**

A simple tone filter control that adjusts the brightness of the signal. Range: Dark Tone ~ Bright Tone.

**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. Range: 0-100%.

## 11.9.10. Flanger



The simple to use FLANGER provides many types of traditional flanging and tuned resonance effects. The invert switch allows for a wider range of sonic characteristics offered by most flangers.

### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 1.

### RATE

Controls how fast or slow the flanger cycles.

Range:

Synced: 32x, 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 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.

Unsynced: 0.00Hz to 15.000Hz.

### DEPTH

Controls the range of the LFO. Range: 0.01 to 1.

### SYNC

Engages and disengages synchronization of the LFO rate with the host's tempo.

### DELAY

Controls the center frequency/delay time of the flanger. Range: 0.005 to 0.1ms.

**FEEDBACK**

Controls the amount of delay feedback, which produces a stronger flanging resonance. Range: 0.01 to 0.99.

**INVERT**

Reverses the phase of the delay feedback signal, producing a throatier flanging tone.

**LEVEL**

Adjusts the overall output. Range: -infinity to 0 Unity gain.

## 11.9.11. 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.

### DEPTH

The DEPTH control adjusts the amount of pitch 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 from the vibratos after which this effect has been modeled:

- 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.
- 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.

### ENHANCE

Controls the amount of delay feedback, which produces a stronger resonance.

**MONO**

Engaging this switch makes the effected signal mono.

**LEVEL**

Adjusts the overall output.

## 11.9.12. 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!

### RATE

This control sets the speed of the tremolo.

### 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.

### 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.

### WAVE

This drop-down menu allows you to select from the different tremolo waveforms: Opto (Square), Sine, and Triangle.

## **LEVEL**

Master volume.

## **PANNING**

Engaging this switch enables alternating left-right panning.

## 11.10. 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](#)

## 11.10.1. Quad Resonator



RESONATORS 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 to 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.

## 11.10.2. Innerspace



Designed to apply acoustic resonances 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) ambiances 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 ambiances.

### PAGE ONE CONTROLS

#### INPUT

This knob controls the input level to the effect unit.

#### A / B

Select the ambiance in slot A and/or slot B from these drop-down menus.

#### BALANCE

Controls the balance between the ambiances loaded in slots A and B.

#### OUTPUT

Master volume.

**PAGE TWO CONTROLS (EQ)**

**50Hz, 100Hz, 500Hz, 1k, 5k, 10k, 15k**

Each knob controls the gain of the corresponding frequency.

**Q**

Controls the resonance of all seven frequency bands.

## 11.11. 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.

## 11.11.1. Chorus Echo



Inspired by the classic Roland Chorus-Echo units from the 1970s, CHORUS ECHO combines both analog-style delay and chorusing, but includes new features, like stereo width control and a dedicated 'DIRT' control for a more gritty sound.

### PAGE ONE CONTROLS

#### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 100%.

#### DELAY

The value of the DELAY control is determined by which MODE is currently enabled. These can be time values or ratio values.

- CHORUS 1 Range: 1ms – 100ms.
- CHORUS 2 Range: 5ms – 500ms.
- ECHO Range: 50ms – 2000ms.
- BPM Range: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/2 D, 1/4 D, 1/8 D, 1/16 D, 1/2 T, 1/4 T, 1/8 T, 1/16 T.

**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 to 8.8Hz.

**DEPTH**

Controls the amount of pitch modulation. Range: 0-100%.

**MODE**

Four modes are available which determine the character of the Chorus/Echo. The first three modes are time-based, ignoring the host's tempo. The last mode, BPM, is based on the host's tempo, and is based on a wide variety of note values.

- CHORUS 1 – Based on 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 two seconds long.
- BPM – Delays based on musical value (host tempo).

**INVERT**

Inverts the delayed signal, making it 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 Tone~Bright Tone.

**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. Range: 0-100%.

**LEVEL**

Adjusts the overall output. Range: 0 to 13.0 dB.

## 11.11.2. BPM Delay



BPM DELAY offers a single “true-stereo” delay unit that is always in-sync with the host’s tempo. The FEEDBACK and DRIVE controls can produce some cool sounds with the built-in resonant filtering.

### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 100%.

### PAGE ONE CONTROLS

#### LEVEL

Adjusts the overall output. Range: 0 to 1.

#### PAN

Controls the placement of the delayed audio in the stereo field.

#### BOUNCE

Controls how much the delayed audio bounces between the left and right channels. Range: 0 to 100%.

#### DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 dot, 1/1 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.

## **TONE**

Controls whether the delayed audio goes through a high-pass or low-pass filter. In the center, the filter is OFF, similar to the Master Filter on the Edit Page. Range: 0 to 1.

## **EMPH**

Controls the resonance of the TONE control's cutoff frequency in the delayed signal. Range: 0 to 1.

## **FEEDBACK**

Feeds the delay signal back to the input for echo repeats. Range: 0 to 1.

## **PAGE TWO CONTROLS**

### **[OVERDRIVE] FBK LOOP**

Inserts the OVERDRIVE and TONE Filter into FEEDBACK. This is useful for producing echoes that get darker with each successive repeat, and also for creating infinite dub-style echo feedback.

***CAUTION: Turning this switch ON can produce extremely loud and powerful howling feedback signals which can damage your ears and your speakers, so watch out!***

### **[OVERDRIVE] TYPE**

Selects between Odd or Even harmonic distortion for the delayed signal.

### **[OVERDRIVE] DRIVE**

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1.

### **[OVERDRIVE] PRE/POST**

Selects between the overdrive circuit being placed before TONE (PRE), or after TONE (POST).

## 11.11.3. BPM Delay X2



BPM DELAY X2 offers dual-mono delays that are always synchronized to the host's tempo. The FEEDBACK and DRIVE controls can produce some cool sounds with the built-in resonant filtering.

### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 100%.

### +PAGE ONE CONTROLS +

#### [DELAY1] LEVEL

Controls the volume of the delayed audio. Range: -inf to 0dB.

#### [DELAY1] DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 dot, 1/1 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.

#### [DELAY1] PAN

Controls the placement of the delayed audio in the stereo field.

**[DELAY2] LEVEL**

Controls the volume of the delayed audio. Range: -inf to 0dB.

**[DELAY2] DELAY**

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 dot, 1/1 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.

**[DELAY2] PAN**

Controls the placement of the delayed audio in the stereo field.

**FEEDBACK**

Feeds the delay signal back to the input for echo repeats. Range: 0 to 1.

**PAGE TWO CONTROLS****[COLOR] TONE**

Controls whether the delayed audio goes through a high-pass or low-pass filter. In the center, the filter is OFF, similar to the Master Filter on the Edit Page. Range: 0 to 1.

**[COLOR] EMPH**

Controls the resonance of the TONE control cutoff frequency in the delayed signal. Range: 0 to 1.

**[COLOR] FBK TONE**

Inserts the OVERDRIVE and TONE filter into FEEDBACK. This is useful for producing echoes that get darker with each successive repeat, and also for creating infinite dub-style echo feedback.

***CAUTION: Turning this switch ON can produce extremely loud and powerful howling feedback signals which can damage your ears and your speakers, so watch out!***

**[OVERDRIVE] TYPE**

Selects between Odd or Even harmonic distortion for the delayed signal.

**[OVERDRIVE] DRIVE**

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1.

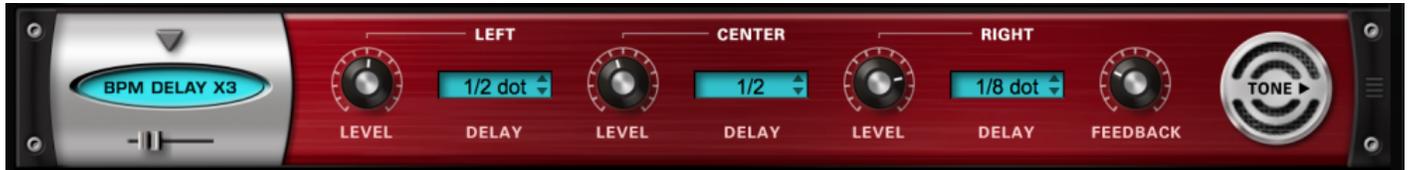
**[OVERDRIVE] PRE/POST**

Selects between the overdrive circuit being placed before TONE (PRE), or after TONE (POST).

**GAIN**

Adjusts the overall output. Range: 0 to 1.

## 11.11.4. BPM Delay X3



The BPM DELAY X3 offers triple-mono (L-C-R) delays that are always synchronized to the host's tempo. The FEEDBACK and DRIVE controls can produce some cool sounds with the built-in resonant filtering.

### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 100%.

### PAGE ONE CONTROLS

#### [LEFT] LEVEL

Controls the volume of the delayed audio. Range: -inf to 0dB.

#### [LEFT] DELAY

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 dot, 1/1 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.

#### [CENTER] LEVEL

Controls the volume of the delayed audio. Range: -inf to 0dB.

**[CENTER] DELAY**

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 dot, 1/1 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.

**[RIGHT] LEVEL**

Controls the volume of the delayed audio. Range: -inf to 0dB.

**[RIGHT] DELAY**

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 dot, 1/1 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.

**FEEDBACK**

Feeds the delay signal back to the input for echo repeats. Range: 0 to 1.

**PAGE TWO CONTROLS****[COLOR] TONE**

Controls whether the delayed audio goes through a high-pass or low-pass filter. In the center, the filter is OFF, similar to the Master Filter on the Edit Page. Range: 0 to 1.

**[COLOR] EMPH**

Controls the resonance of the TONE control cutoff frequency in the delayed signal. Range: 0 to 1.

**[COLOR] FBK TONE**

Inserts the OVERDRIVE and TONE Filter into FEEDBACK. This is useful for producing echoes that get darker with each successive repeat, and also for creating infinite dub-style echo feedback.

***CAUTION: Turning this switch ON can produce extremely loud and powerful howling feedback signals which can damage your ears and your speakers, so watch out!***

**[OVERDRIVE] TYPE**

Selects between Odd or Even harmonic distortion for the delayed signal.

**[OVERDRIVE] DRIVE**

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1.

**[OVERDRIVE] PRE/POST**

Selects between the overdrive circuit being placed before TONE (PRE), or after TONE (POST).

**GAIN**

Adjusts the overall output. Range: 0 to 1.

## 11.11.5. 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 great trick with this delay is that it can be “de-synched” 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 to 100%.

### PAGE ONE CONTROLS

#### [FILTERS] HPF

Controls the cutoff frequency for the high pass filter. Range: 20 to 10000Hz.

#### [FILTERS] LPF

Controls the cutoff frequency for the low pass filter. Range: 100 to 22000Hz.

#### [FILTERS] Q

Controls the resonance of the cutoff frequency of the filters in the delayed signal. Range: 0 to 1.

**[DELAYS] LEFT**

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 dot, 1/1 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.

**[DELAYS] TEMPO**

Controls the speed of the delays from host-synched to any independent tempo setting. Range: SYNC, 42.30 to 500 BPM .

**[DELAYS] RIGHT**

Drop-down menu that allows you to choose the time value of the delayed audio.

Choices: 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/96, 1/1 dot, 1/ 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.

**FEEDBACK**

Feeds the delay signal back to the input for echo repeats. Range: 0 to 100%.

**PAGE TWO CONTROLS****FBK LOOP**

Inserts the OVERDRIVE and TONE Filter into FEEDBACK. This is useful for producing echoes that get darker with each successive repeat, and also for creating infinite dub-style echo feedback.

***CAUTION: Turning this switch ON can produce extremely loud and powerful howling feedback signals which can damage your ears and your speakers, so watch out!***

**DRIVE**

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1.

**WIDTH**

Controls the stereo width of the delay and dry signal. Range: 0 to 100%.

**GAIN**

Adjusts the overall output. Range: 0db to 12db.

## 11.11.6. Retroplex



RETROPLEX is specially 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 often unpredictable!

### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 100%.

### PAGE ONE CONTROLS

#### VARI-SPEED

Smoothly controls the tape speed/delay time of the echoes. Range: 1% to 100%.

#### FEEDBACK

Feeds the delayed signal back to the input for echo repeats. Range: 0 to 100%.

#### TAPE MODE

Drop-down menu offering different preset types of echo and delay ranges.

Choices: ECHO 1, ECHO 2, DELAY 1, DELAY 2

**[FLUTTER] AMOUNT**

Simulates the tape flutter motor instability of vintage tape echo machines that make the echoes vary in pitch from one repeat to the next. Range: 0 to 100%.

**[FLUTTER] SPEED**

Controls how fast the motor instability affects the tape flutter pitch modulation of the echoes. Range: 0 to 100%.

**YEAR**

Drop-down menu that contains a list of “years” from 1960–2000. Choosing a year simulates the fidelity of the chosen era. Earlier years have less fidelity.

**WIDTH**

Controls the width of the echo stereo imaging. Range: 0( mono) to 100% (full stereo).

**PAGE TWO CONTROLS****DRIVE**

Controls the amount of overdrive distortion in the delayed signal. Range: 0 to 1.

**SMASH**

Adjusts the bit resolution of the delayed audio for additional distortion. Range: 32bit to 4bit.

**FREEZE**

Locks the echo buffer for a continuous playback loop of what is in the echo buffer. Useful for simulating sound-on-sound style tape looping techniques.

*NOTE: The FREEZE buffer is cleared when Omnisphere is closed. To save the FREEZE buffer, you need to render Omnisphere to an audio file.*

**GAIN**

Adjusts the overall output. Range: 0 to 100.

## 11.12. Reverbs



Omnisphere includes three reverb units that include the highly detailed, high-end [PRO-Verb](#), the quick and easy-to-use [EZ-Verb](#), and the ultra-realistic, classic [Spring Verb](#).

## 11.12.1. 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 very well.

### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 100%.

### PAGE ONE CONTROLS

#### SIZE

Controls the Room/Hall size of the reverberation. Range: 0 to 100.

#### TIME

Controls the overall length of the reverb. Range: 100 to 20000ms.

#### PREDELAY

Controls the amount it takes for the first reflection to appear. Range: 0 to 500ms.

**CPU LOAD**

Controls the quality of the reverb by allowing to plug-in to use more or less CPU power to create a higher- or lower-quality of reverb effect. Also very useful for making different density variations. Range: 0 to 100%.

**DENSITY**

Controls the smoothness or coarseness of the reflections. Range: 0 to 1000.

**[TONE] LOWS**

Controls the level of the low frequencies of the reverb. Range: -18 to +6 dB.

**[TONE] HIGHS**

Controls the level of the high frequencies of the reverb. Range: -18 to +6 dB.

**PAGE TWO CONTROLS****[REVERB SHAPING] LO FREQ**

Chooses the low crossover frequency of the reverb signal. Range: 25 to 1000Hz.

**[REVERB SHAPING] LO TIME**

Controls the specific length of the reverb's low frequencies. Range: 10 to 400.

**[REVERB SHAPING] HI FREQ**

Chooses the high crossover frequency of the reverb signal. Range: 500 to 22000Hz.

**[REVERB SHAPING] HI TIME**

Controls the specific length of the reverb's high frequencies. Range: 10 to 400.

**WIDTH**

Adjusts the stereo width of the wet signal. Range: 0 to 100%.

**DIFFUSION**

Controls the amount of chaotic variation in the reverb reflections. Range: 0 to 100.

**FREEZE**

Locks the reverb signal that is currently in the buffer to create an infinite reverb effect.

*NOTE: The FREEZE buffer is cleared when Omnisphere is closed. To save the FREEZE buffer, you need to render Omnisphere to an audio file.*

## 11.12.2. EZ-Verb

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The EZ-VERB is a simple-to-use, good-sounding, basic reverb unit, with tone controls.

### **MINI-SLIDER**

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 100%.

### **TIME**

Controls the length of the reverb. Range: 0 to 0.98.

### **PREDELAY**

Controls the amount it takes for the first reflection to appear. Range: 0 to 100ms.

### **HF DAMP**

Controls the amount of High Frequency Damping of the wet signal. Range: 1.0 to .014

### **LF DAMP**

Controls the amount of Low Frequency Damping of the wet signal. Range: 0 to .329

### **LEVEL**

Adjusts the overall output volume. Range: 0 to 1.

## 11.12.3. Spring Verb



SPRING was included in the Omnisphere FX family because we felt that our other reverbs in Omnisphere were sounding too good! This unit faithfully recreates the “less-than-pristine” vibe of the ancient spring reverbs of 1960s era guitar amplifiers. It’s a limited effect to be sure, but when you have need of a retrosonic blast from the past—this baby’s more than up to the challenge!

### MINI-SLIDER

Controls the mix of the dry signal and the processed (wet) signal. The percentage indicated is the amount of the signal that is wet. Range: 0 to 100%.

### PAGE ONE CONTROLS

#### [REVERBERATION] TIME

Controls the length of the reverb. Range: 0 to 100%.

#### [REVERBERATION] TONE

Controls the basic tone color of the reverb character. Range: -10 to +10.

#### [REVERBERATION] WIDTH

Controls the stereo width of the audio. Full left is Mono, center is normal stereo and full right is ultra-wide “fake” stereo.

**PAGE TWO CONTROLS****[TONE] EQ**

Engages and disengages the EQ/TONE controls.

**[TONE] BASS**

Controls the amount of low frequencies. Range: -15 to +15 dB.

**[TONE] TREBLE**

Controls the amount of high frequencies. Range: -15 to +15 dB.

**[TONE] INSERT**

Allows you to position the EQ before or after the reverb. Choices: PRE or POST.

**GAIN**

Adjusts the overall output volume. Range: -24 to +24 dB.

## 11.13. Utility

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The unit in this section provides useful tools for control over the stereo image and phase.

- [Imager](#)

## 11.13.1. Imager



IMAGER is a very useful “Swiss army knife” utility device that can be used as stereo image widener, phase corrector, mono-izer, panner, channel inverter, leveler, gain-booster and more!

### 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 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 the rate of the auto-panning.

When Synced: 16x, 8x, 7x, 6x, 5x, 4x, 3x, 2x, 1/1, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/2 D, 1/4 D, 1/8 D, 1/16 D, 1/2 T, 1/4 T, 1/8 T, 1/16 T.

**NOTE:** The *D* means “dotted” and the *T* means “triplet.”

Unsynced: 0 to 8.8Hz.

**[AUTO PAN] DEPTH**

Controls how far left and right from center. Range: OFF to 100%.

**[AUTO PAN] SYNC**

Engages and disengages synchronization with the host's tempo.

**GAIN**

Adjusts the overall output. Range: 0 to 13 dB.

# 11.14. Technology Partners

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## 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
- Foxy 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.

## 12. Arpeggiator



Many hardware synths include arpeggiators. An arpeggiator receives incoming MIDI notes, and outputs a sequenced pattern of notes based on a defined set of rules (such as arpeggios). Similar in concept to a step sequencer, an arpeggiator has a number of differences that set it apart. Like a step sequencer, an arpeggiator allows you to create and transpose a pattern, but it also interacts directly with the chords and intervals that you play from the keyboard.

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

Each Part in Omnisphere can have its own ARPEGGIATOR, each with 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 many presets available to help get you started exploring the ARPEGGIATOR's capabilities. Select different presets to hear the kinds of patterns that can be created. Patterns that you create or modify can be saved as presets for later use.

### POWER BUTTON



Engages the ARPEGGIATOR.

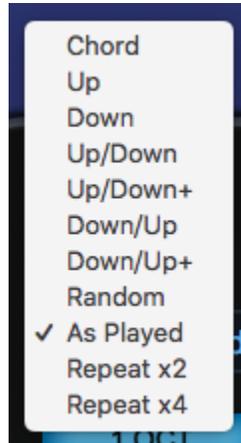
## 12.1. Presets Menu



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 preset patterns. Any custom arpeggios can be saved as presets. You can also copy and paste patterns between Omnisphere's Parts with the Copy/Paste functions.

## 12.2. Mode

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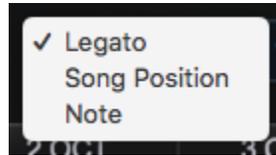


Clicking on the MODE field reveals the eleven different patterns/modes.

- **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, Up/Down+ repeats the upper note and the lower 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, Down/Up+ 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.

## 12.3. Trigger

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### **Legato**

The pattern will continue through all of the steps in the pattern as long as notes are played legato. If you lift your hand from the keys before the pattern has finished, the pattern will restart from the beginning.

### **Song Position**

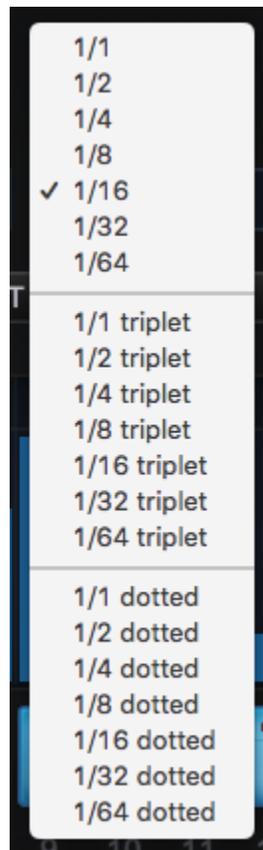
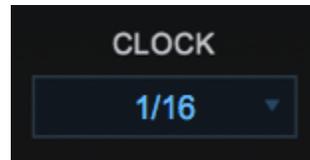
The pattern will follow the song position (bar & beats) of the host.

### **Note**

Every time a new note is triggered, the pattern will restart from the first step.

## 12.4. Clock

---



The CLOCK setting lets you change the internal resolution of the pattern, and determines the time value of each step. For example, if you select 1/8 then each step will be equal to an eighth note. In addition to straight steps, triplets, and dotted note values are available.

Available ranges are:

- Straight steps: 1/1–1/64
- Triplets: 1/1 triplet–1/64 triplet
- Dotted notes: 1/1 dotted–1/64 dotted

## 12.5. Octave

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### 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.

## 12.6. Reset

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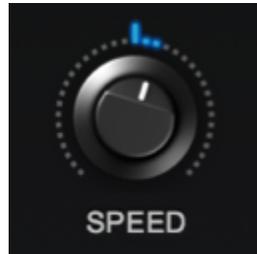


When selected, the pattern will immediately reset to the first step.

**NOTE:** Using *RESET* will start playback from the first step regardless of [Trigger](#) mode.

## 12.7. Speed

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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.



**NOTE:** *SPEED is modulatable, MIDI-Learnable, and automatable.*

## 12.8. Length



Allows the overall length (the interval between MIDI note-on and note-off) of all events in the arpeggio to be shortened or lengthened. In the example below, the length of each event is at the maximum.



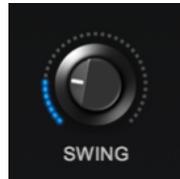
After changing the LENGTH control to its minimum value, all of the events are of a very short duration.



**NOTE:** Changing the length of individual events is discussed in the [Pattern Programming](#) section.

## 12.9. Swing

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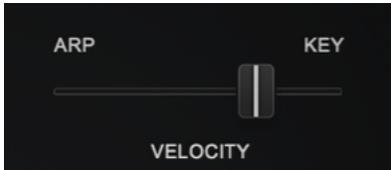


At the minimum setting, all the events are aligned to the tempo grid. As SWING is increased, the events will have a greater swing groove. At high settings the swing will be exaggerated.

*NOTE: If the SWING control is selected, the [GRROVE LOCK STRENGTH](#) slider will be forced to maximum setting.*

## 12.10. Velocity

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VELOCITY determines how much the velocity of incoming notes affects the dynamics of the 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 will determine the dynamics of the pattern. Generally a setting of 50% is a good balance, since it allows the incoming MIDI velocity to interact with the dynamics of the pattern.

## 12.11. Pattern Programming



Omnisphere's ARPEGGIATOR can have up to 32 steps in a pattern. Each step can have its own length, transposition, and velocity value.

To change the velocity of a step, click and hold at the top of the step and drag it up or down to raise or lower the velocity value of the step.

Two or more steps can be combined to create a tie. The fastest way to tie steps together is to double-click the next step to the right. Finer adjustments 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.

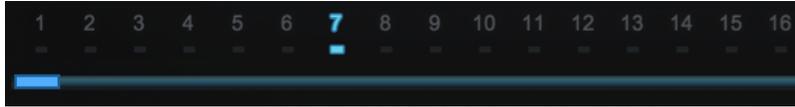


There is a transposition offset above each step with a range of +/- 24 semitones. Click on the "0" to reveal the menu and select the desired semitone transposition.



## 12.12. Range

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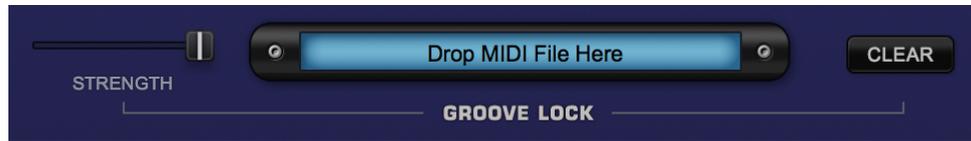


The thin blue bar under the steps determines how many steps the pattern will have. To change the number of steps, select the right end of the Range Slider and drag it left or right until the desired number of steps is set.

*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.*

*Range 1–32*

## 12.13. Groove Lock



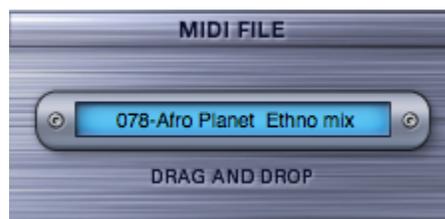
GROOVE LOCK is one of Omnisphere's most innovative features. In the past, arpeggiators have always had a fixed timing, so they've had limited usefulness in genres outside of electronic music. With GROOVE LOCK you can lock the groove of the ARPEGGIATOR to the feel of any [Stylus RMX](#) or [Standard MIDI 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.



GROOVE LOCK is not limited to Stylus RMX MIDI data—any standard MIDI file can be dragged into Omnisphere's GROOVE LOCK feature. This is explained in the [MIDI file browsing](#) section.

## 12.13.1. Strength & Clear

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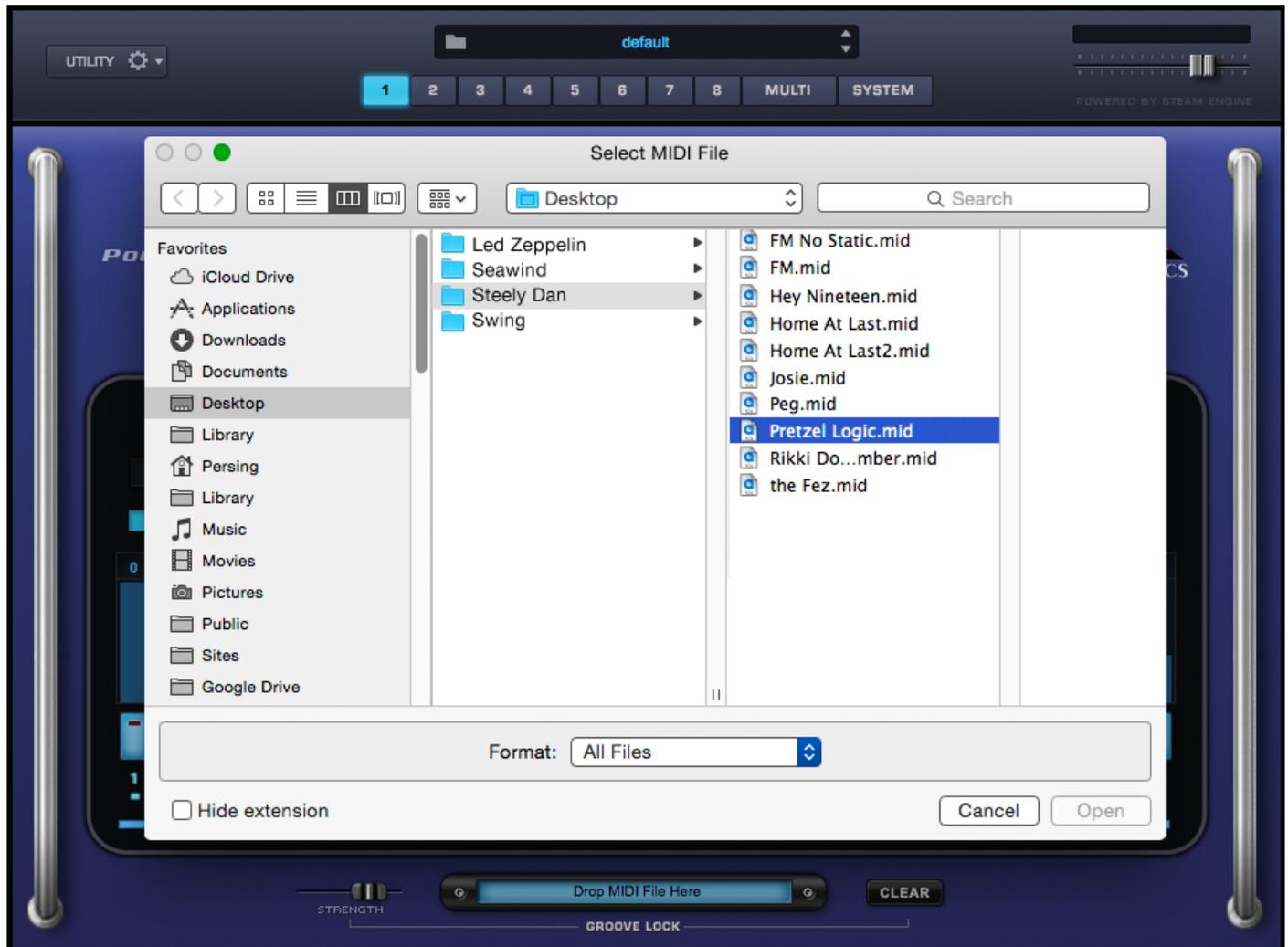


STRENGTH is a blend control that determines how much the imported MIDI groove will affect the feel of the ARPEGGIATOR's pattern. At minimum setting, Omnisphere will ignore the imported MIDI groove in favor of a standard, straight "grid" feel. With STRENGTH set to maximum, the imported MIDI groove will completely override the grid and base the feel of the pattern on the imported groove.

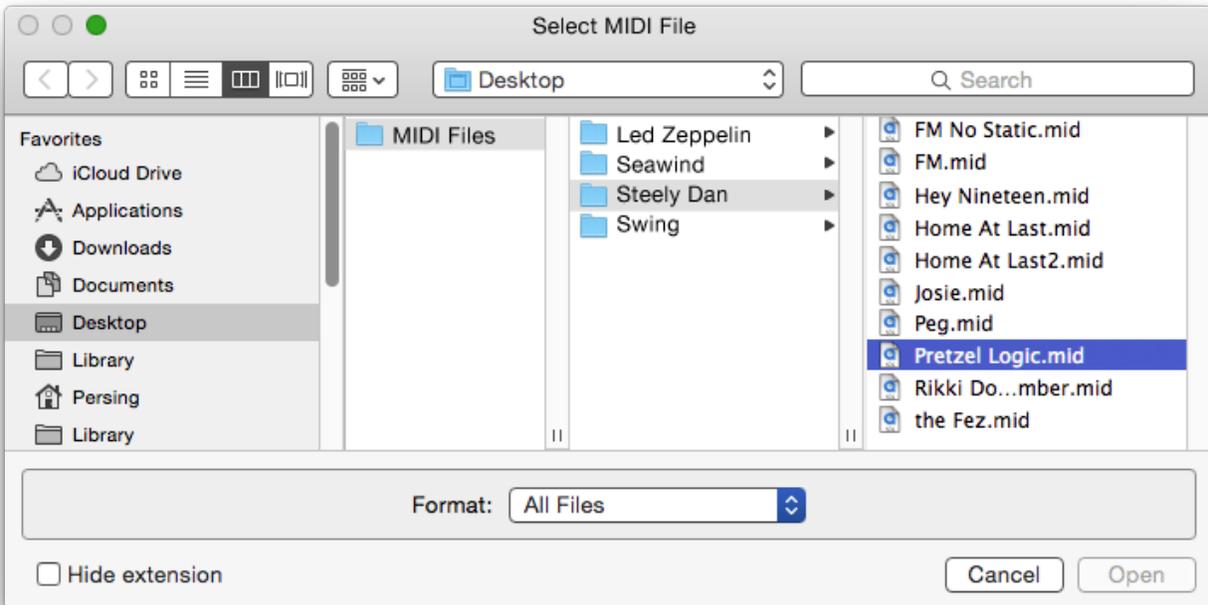


CLEAR removes the MIDI file from the from the GROOVE LOCK field.

## 12.13.2. 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.



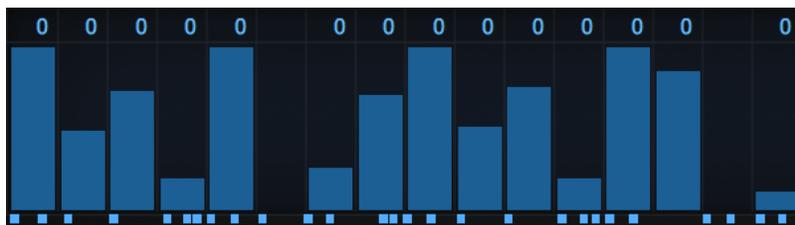
**NOTE:** Omnisphere will only recognize the first 128 MIDI note events in a .MID file—any subsequent notes are ignored.

## 12.13.3. Indicator Dots

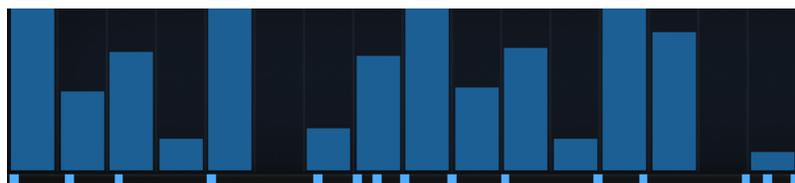


When a MIDI file has been imported or dragged into the GROOVE LOCK field, a series of small blue dots will appear directly below the steps. These dots serve a dual purpose. They confirm that GROOVE LOCK has received MIDI data and provide a visual reference for the feel of the MIDI content. Changing the 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.

# 13. 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 & Pan
- AUX Sends 1 ~ 4

# 13.1. Part Number & MIDI Channel

---

## Part Number



Each of Omnisphere's eight Parts is numbered along the far left of the MIXER page.

## MIDI Channel



By default, Parts 1–8 are assigned sequentially to MIDI Channels 1 ~ 8. However, each Part in a MULTI can be set to respond to any one of 16 MIDI channels. Select the desired channel from the MIDI Channel drop-down menu.

*Range 1–16*

**NOTE:** While either [LIVE MODE](#) or [STACK MODE](#) is enabled, these settings are ignored.

## 13.2. Mute & Solo

---



### Mute



Selecting the “M” Button mutes the audio output for that Part. However, the Part is still playing in the background when muted, and will continue to use CPU resources.

### Solo



Selecting the “S” Button will Solo a Part. When the Solo button is selected, only that Part will be heard and all other Parts will be muted. You can solo multiple Parts by selecting additional Solo buttons.

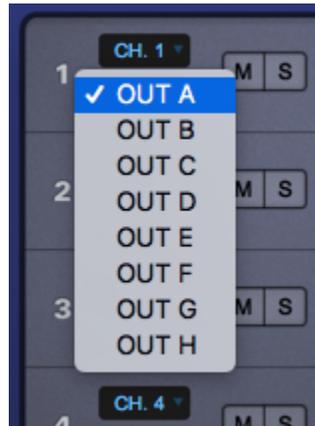
**NOTE:** *The Solo and Mute Buttons can be MIDI-Learned. Using this feature can make it easy to mute or solo multiple Parts simultaneously. Check out the [MIDI Learn](#) chapter for more information.*

## 13.3. Output

---



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.

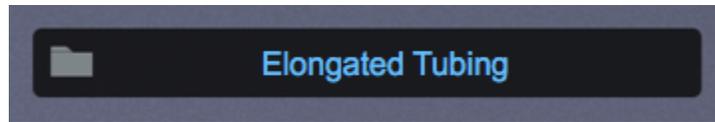


*Range OUT A–OUT H.*

**NOTE** – Please refer to the [FX Architecture](#) section for more detail about how Omnisphere’s Outputs and FX are routed.

## 13.4. 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.*

## 13.5. Level & Pan

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### LEVEL



Each Part has a Part LEVEL fader. Moving the fader to the left decreases volume, moving the fader to right increases volume.

The LEVEL meter displays the Part's current signal level. Although the meter can go into the "red," Omnisphere will rarely distort on the Part level, so distortion is not a problem at this stage.

*Range -inf to + 9.54dB*

**NOTE:** Use Command/CTRL-click to reset the fader to 0dB.

### PAN



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*

**NOTE:** Use Command/CTRL-click to reset the knob to center.

## 13.6. Aux Sends

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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

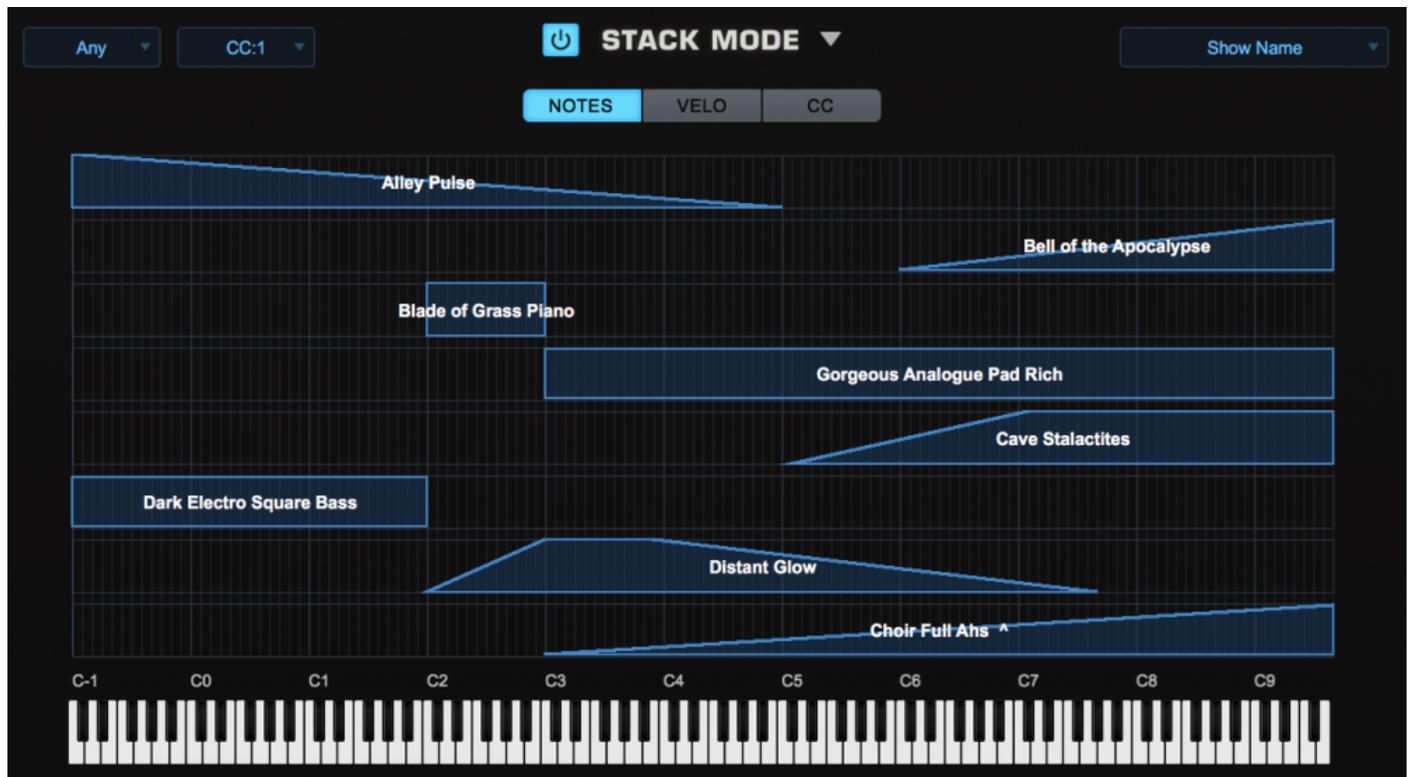
When all 32 AUX knobs are in the zero position (fully counter-clockwise), all aux send FX will be internally bypassed to conserve CPU power.

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.*

# 14. 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.

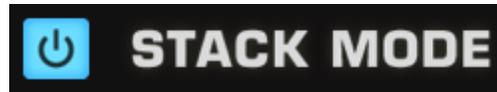
Use STACK MODE instead of [LIVE MODE](#) when you want to create splits and crossfades, and play all the Parts using a single MIDI channel.

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

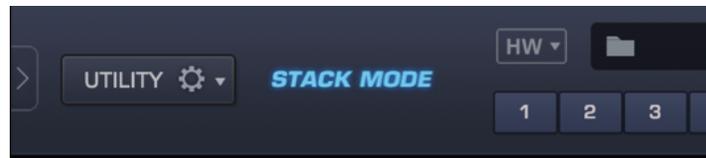
range, so no matter where you are playing on the keyboard, different Part regions can be triggered by playing harder or softer. Using CC, Part regions can be switched and crossfaded using MIDI Continuous Controller messages.

**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.**



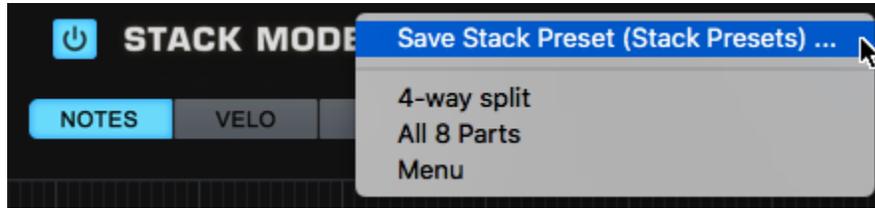
To enable STACK MODE, select the Power Button to the left of the STACK MODE label.

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.



## 14.1. Presets Menu

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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 MULTI specifically for use with STACK MODE enabled.

In addition to saving and loading complete MULTIS, Stack Presets can be independently saved and loaded from the drop-down menu at the top of the STACK MODE page.

A Stack Preset only saves and recalls the layout of the STACK MODE Grid. This includes the positions of all added Part Regions, and the original Part numbers associated with those Regions.

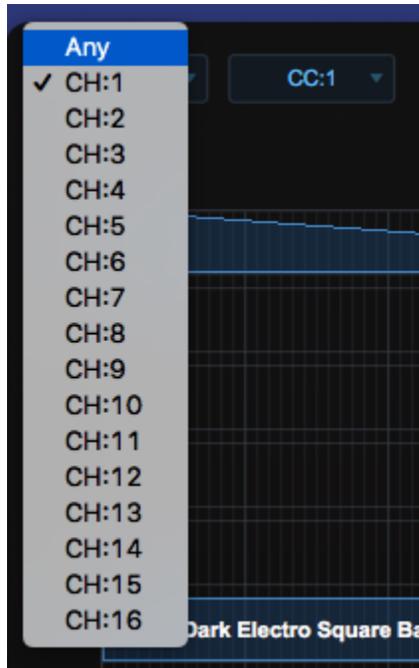
When a Stack Preset is loaded, it will replace the layout of the STACK MODE Grid. Part Regions will be automatically matched to the same Part numbers they were assigned when the Preset was saved.

***NOTE: Stack Presets do not store Patches, Part Names, CC assignments, or which setting (NOTES, VELOCITY or CC) was selected at the time the Stack Preset was saved.***

## 14.2. MIDI Channel Menu

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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 CH menu to select which MIDI Channel STACK MODE will use.

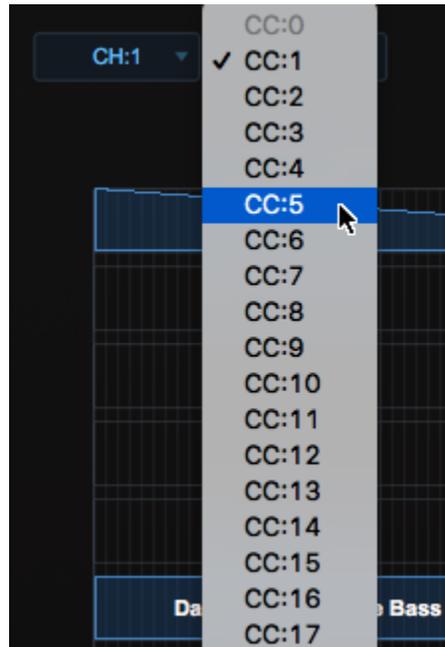


*Range Any, CH: 1 – CH: 16.*

## 14.3. MIDI CC Menu

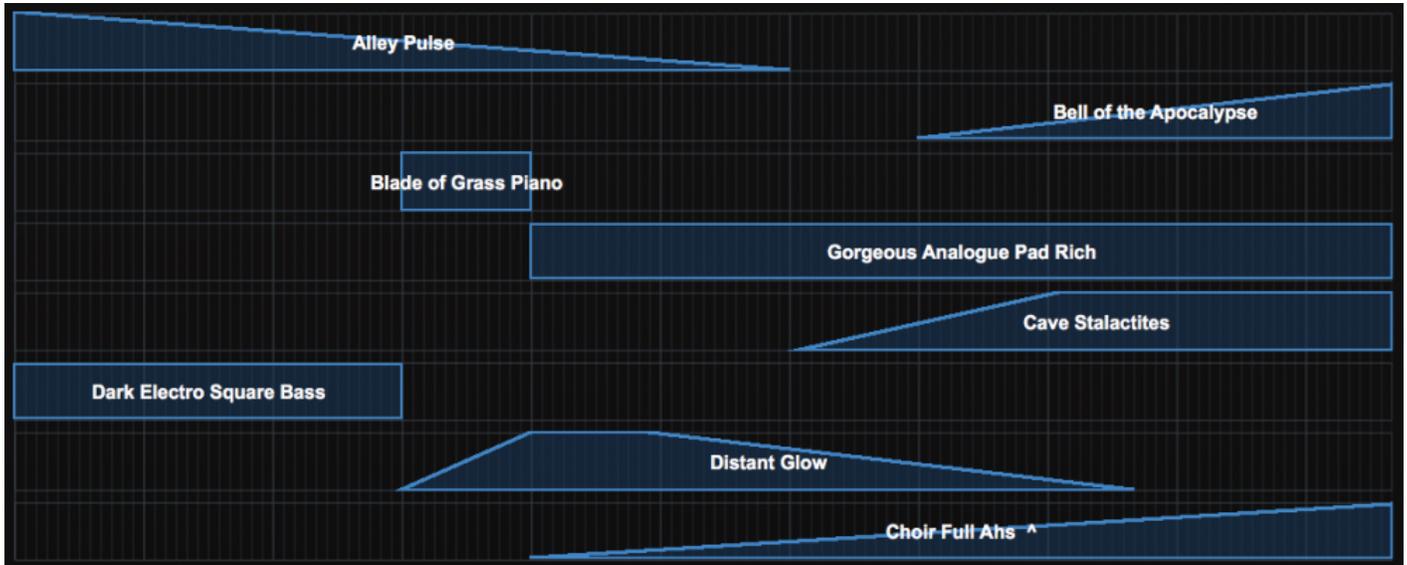
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Use the MIDI CC menu to select which MIDI Continuous Controller number STACK MODE will respond to when using the CC setting.



**NOTE:** When using CC, all Parts added to the [Stack Mode Grid](#) will be triggered simultaneously when notes are played, even if their Regions are outside the CC value range, and not outputting audio. Therefore, this feature can put a high demand on the [CPU](#) on your system.

## 14.4. Stack Mode Grid



The STACK MODE Grid is made up of 8 horizontal rows, each divided by 128 lines corresponding to the full-range of possible MIDI values.

Up to 8 Parts can be arranged on the STACK MODE Grid as Regions. A Region will always correspond to one Part, and is displayed horizontally along a Row. Once added to the grid, Regions can be moved, resized or edited using the Mouse.

One Row can contain multiple Part Regions, but each Part can only be present in one Row at a time.

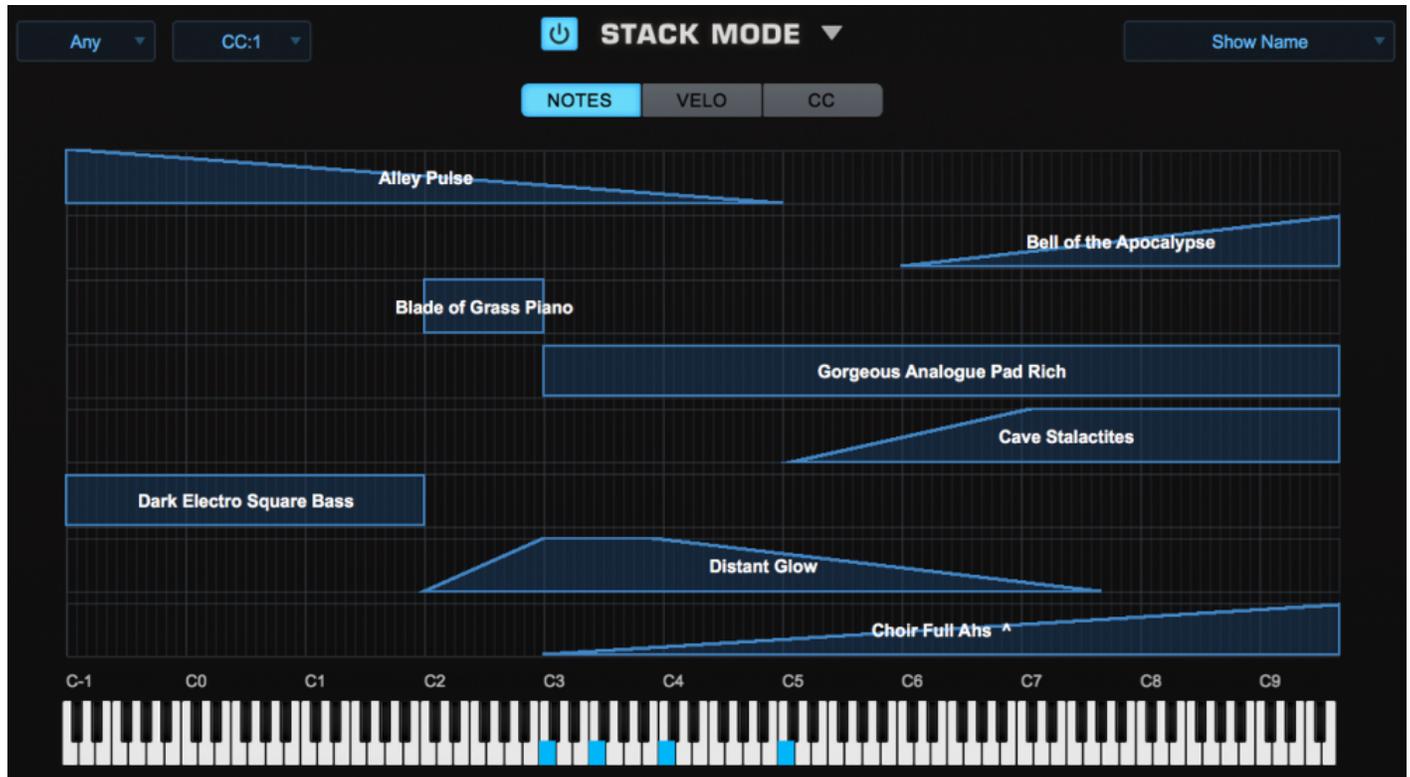
## 14.5. Stack Mode Operations

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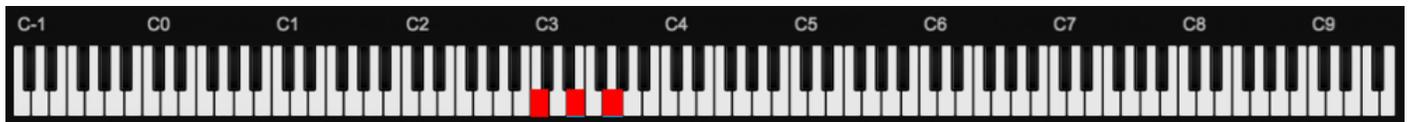


There are three ways that Part Regions can be used in STACK MODE: [NOTES](#), [VELO](#), and [CC](#). Only one of these can be active at a time.

## 14.5.1. Notes Mode



When NOTES is selected, Part Regions are mapped to a MIDI note range, allowing you to map splits, layers and positional crossfades across the keyboard. Each of the 128 lines in the grid correspond to a MIDI Note number, and Regions can be mapped over a ten-octave range. When NOTES is selected, a mini-keyboard is displayed at the bottom of the STACK MODE Grid.



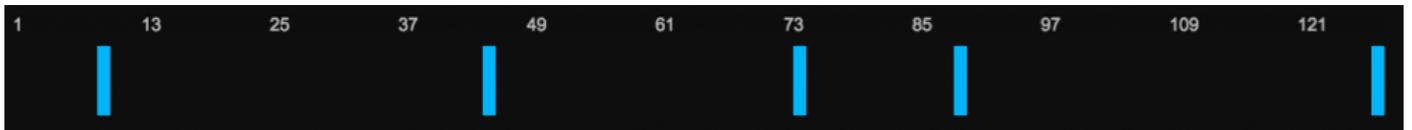
**NOTE:** The mini-keyboard will highlight notes in blue as they are played. Notes highlighted in red are notes that have been MIDI Note-learned in [LIVE MODE](#), and are shown for reference only.

## 14.5.2. Velo Mode

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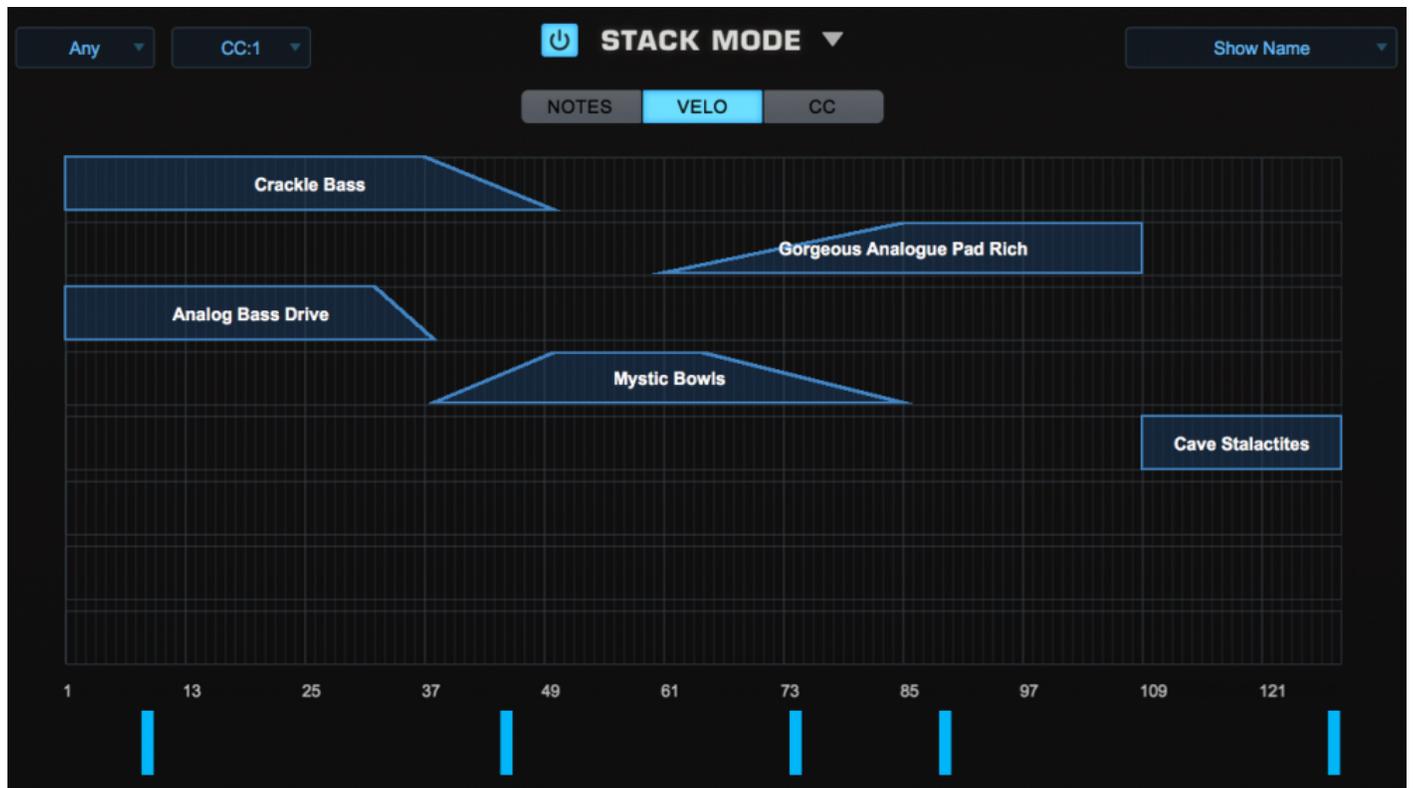
When VELO is selected, Part Regions are mapped to a specific velocity range. The mini-keyboard is not displayed. Instead, the horizontal axis represents the 128 Velocity values. This allows velocity-switching and crossfading of Parts, i.e. which Part responds depends on how hard or soft the MIDI keyboard is played.

The horizontal axis shows white reference numbers for velocity values and also displays incoming MIDI note messages. The markers on the horizontal axis range from 1-127. When you play notes, their velocity values will be displayed by blue vertical bars.

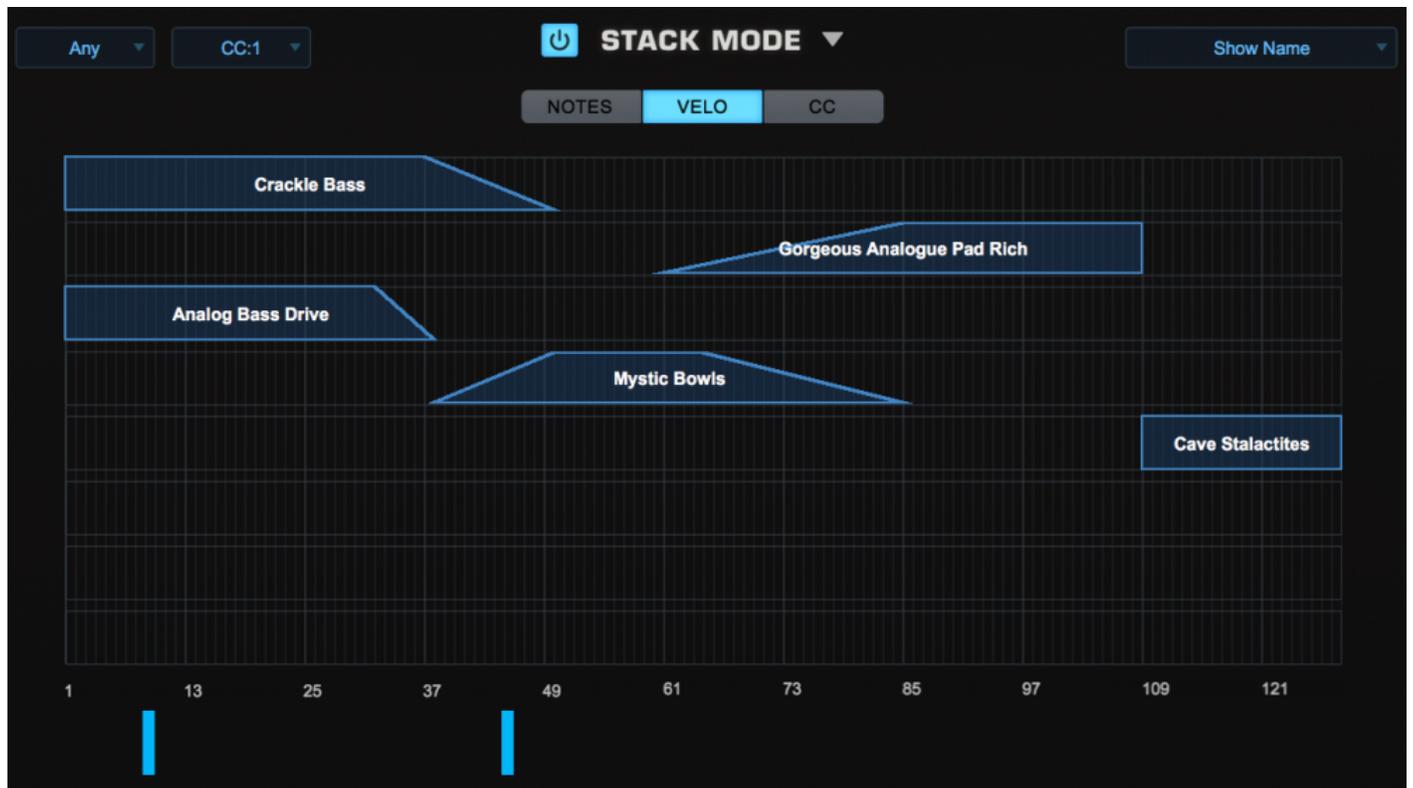


Parts on the left side of the Grid will be triggered at lower velocity levels, while at higher velocity, Parts on the right side of the Grid will be triggered.

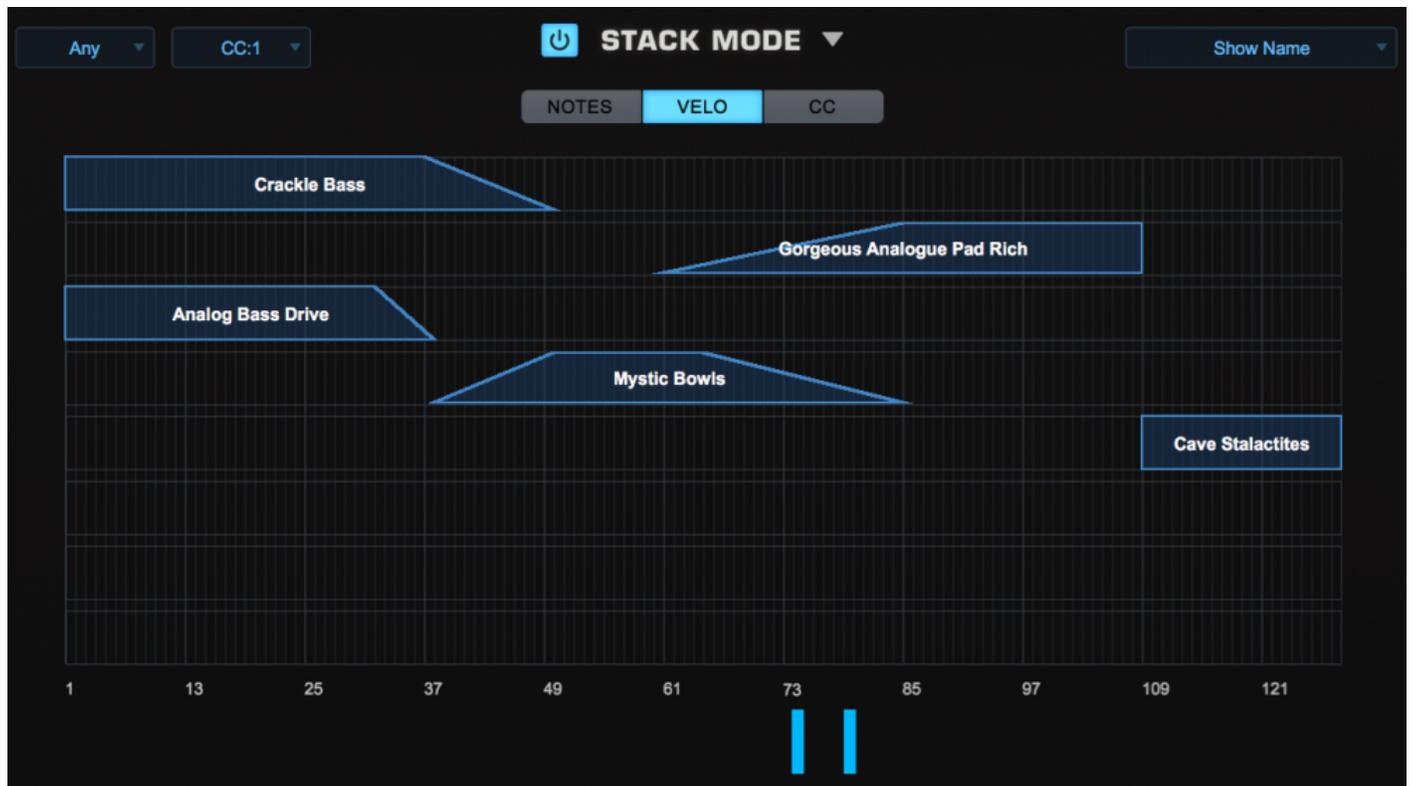
In the example below, all the Parts will be triggered except the Region at the far right, which is mapped to a velocity range of 109-128.



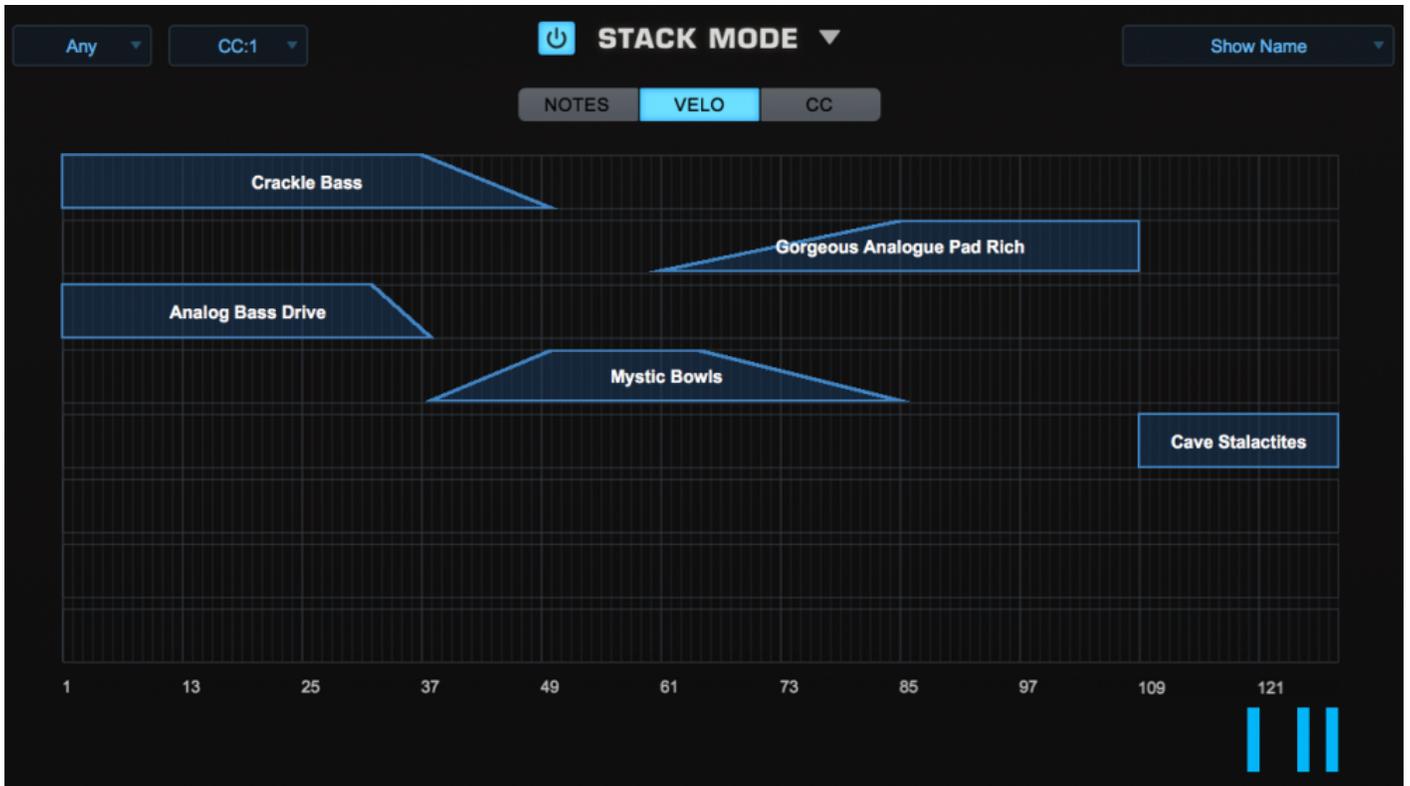
In this example, playing at lower velocity values triggers the two Parts on the left.



In this example, playing at medium velocity values crossfades to the Region in the center of the Grid.



Finally, as velocity increases further, the next Region to the right will be triggered by higher velocity values.

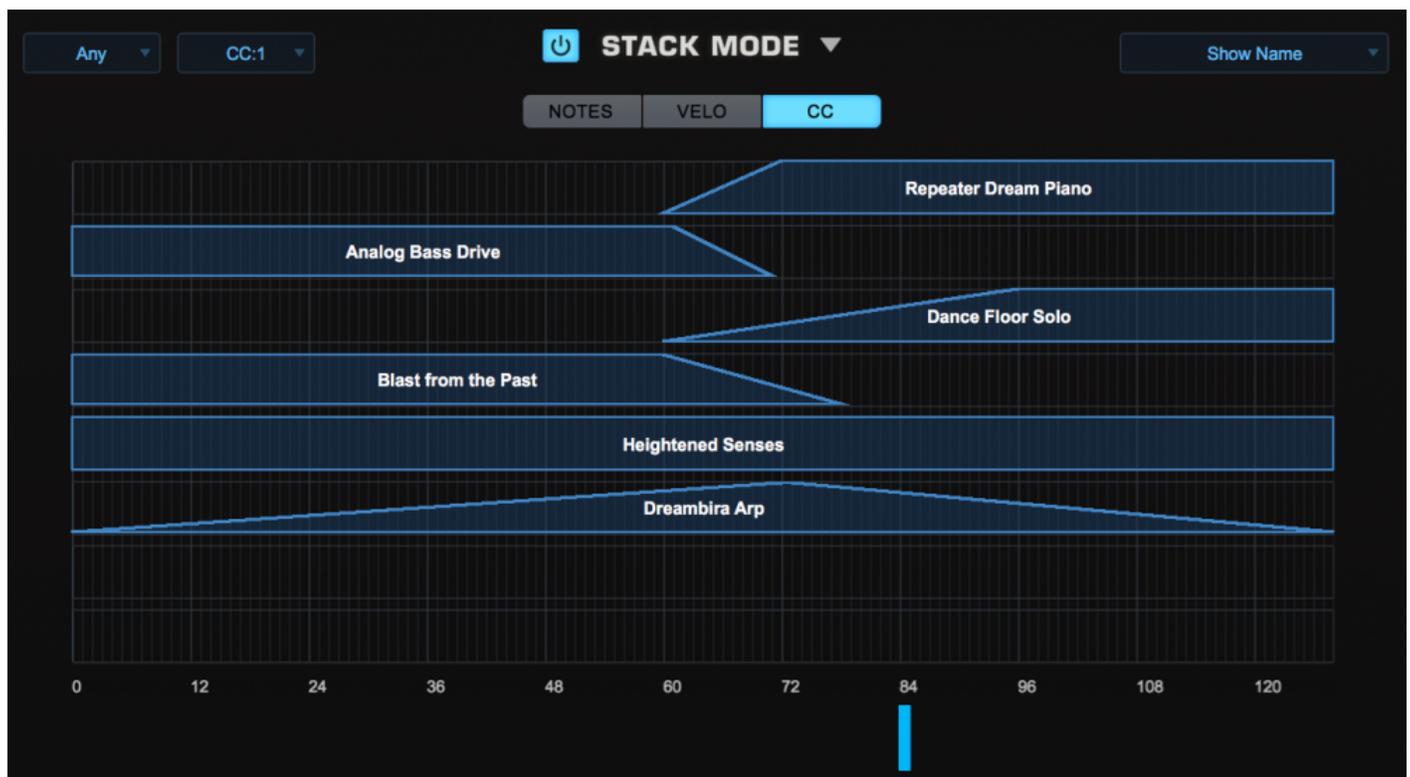


## 14.5.3. CC Mode

When CC is selected, Part Regions can be switched or crossfaded using MIDI CC messages. This is useful for crossfading patches from a MIDI hardware slider or knob. Each Region can be mapped to specific values across the MIDI CC's range. The MIDI Continuous Controller number that STACK MODE uses is chosen from the MIDI CC menu on the STACK MODE page.



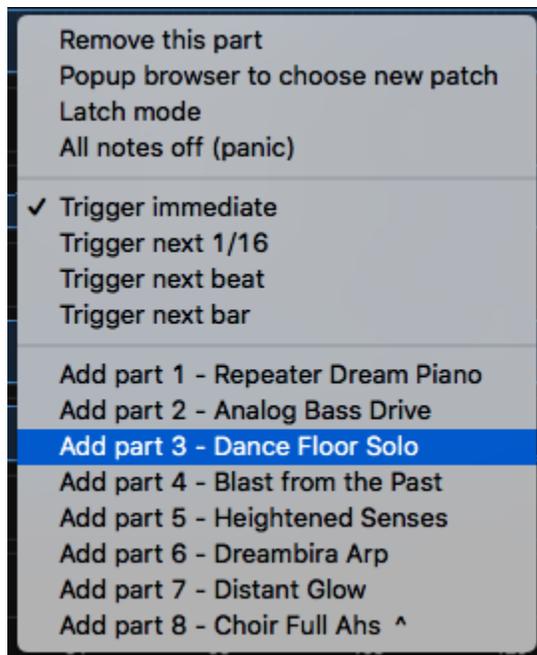
Once the MIDI Continuous Controller Number has been chosen, all of the Regions will respond to that CC number. The current MIDI CC value is displayed at the bottom of the STACK MODE Grid, similar to VELO mode, but only the current value is visible. While holding notes down, the value display will update as you sweep across the range of CC values.



***NOTE: When using CC, all Parts added to the STACK MODE Grid will be triggered simultaneously when notes are played, even if their Regions are outside the CC value range, and not outputting audio. Therefore, this feature can put a high demand on the [CPU](#) on your system.***

***NOTE: MIDI CC 32 (bank select) is not available.***

## 14.6. Adding & Removing Parts



To add a Part, Right/Control-Click on the desired Row in the STACK MODE Grid, then choose a Part from the menu. All of the Patches loaded into the current Multi will appear in this menu. Any unassigned Parts will display as “\_\_\_\_\_.”

**NOTE:** You can add Parts to the STACK MODE Grid that have no Patches loaded yet.

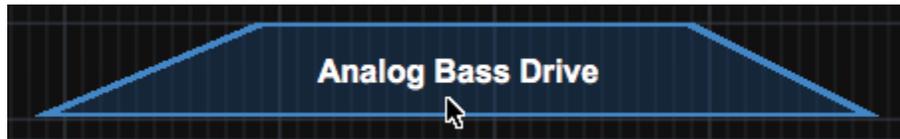
To place two or more Parts on the same Row, simply Right/Control-click on a Row again, and select “Add Part” for each Part that you want to add. Up to 8 Parts can be added to a single Row, however it is usually simplest to assign each Part to its own corresponding Row.

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.

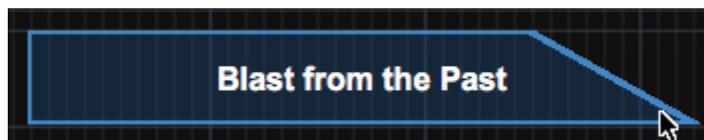
## 14.7. Moving, Crossfades, & Resizing

**Moving** – To move a Region, click inside the Region and drag horizontally.



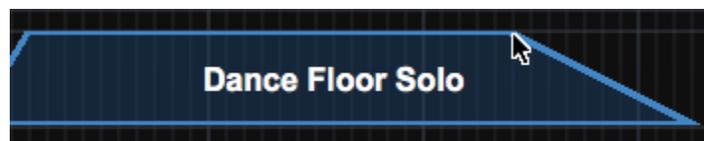
*NOTE: You can only drag Regions horizontally, and not vertically across Rows. To relocate a Part to another Row, simply add the Part to the desired Row using the Add Part menu. The Part will relocate with its Region settings (position, width, and fades) intact.*

**Resizing** – Click and drag the lower right or lower left corner of a Region to increase or decrease its width. If two Regions are on the same Row and crossfaded together, resizing will only change the width of the selected Region.

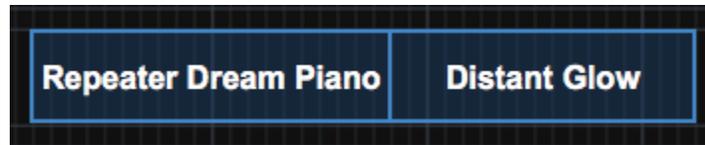


**Fading** – To add a fade to a Region, select the upper-right or upper-left corner of the Region and drag the corner inward. The further the corner is dragged, the more gradual the ramp and the longer the fade will be.

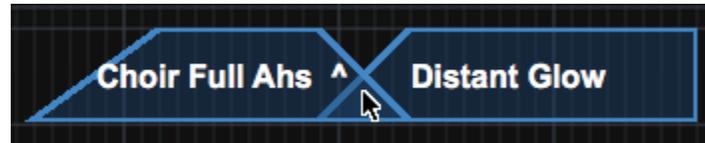
You can shorten or remove a fade by dragging the upper corner of the fade outward.



**Contiguous & Crossfade** – To have contiguous or crossfaded Regions, both Regions must be on the same Row. Once on the same Row, Regions can be placed side-by-side for contiguous layout.



To crossfade two Regions, place two Regions on the same Row. Create a fade on one Region (on the side facing the other Region), then drag the faded Region toward the other. When the Regions touch, Omnisphere will automatically create a crossfade.

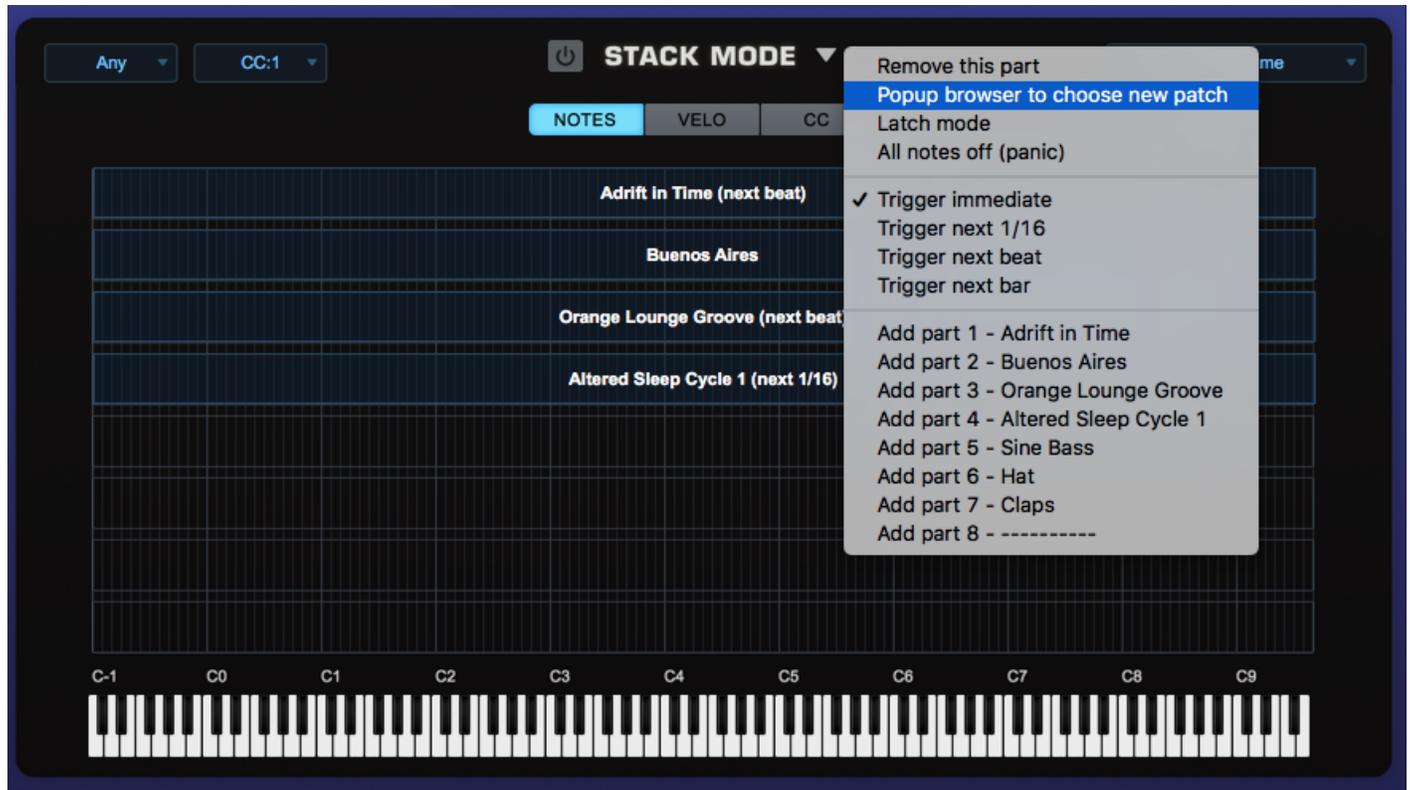


Dragging inside the crossfaded area will move the crossfade without changing its length. This will not move the Regions themselves, although the relative length of the Regions will change accordingly.

Dragging on the upper corners of the crossfade will increase or decrease the length of the crossfade, without moving either Region. Again, the relative length of the Regions will change accordingly.



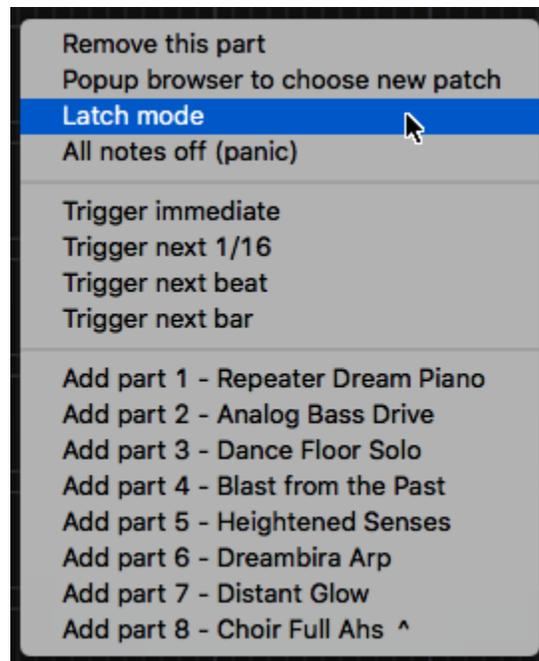
## 14.8. Patch Browser Access



To access the Patch Browser for a specific Part, Control/Right-click its Part Region and select the “Popup browser to choose new patch” option from the menu. Closing the Patch Browser will take you back to the STACK MODE page.

## 14.9. Latch & Trigger Modes

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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 with full synchronization between Parts, and across multiple Omnisphere, Trilian, and Stylus RMX instances, without the need for traditional sequencing techniques.

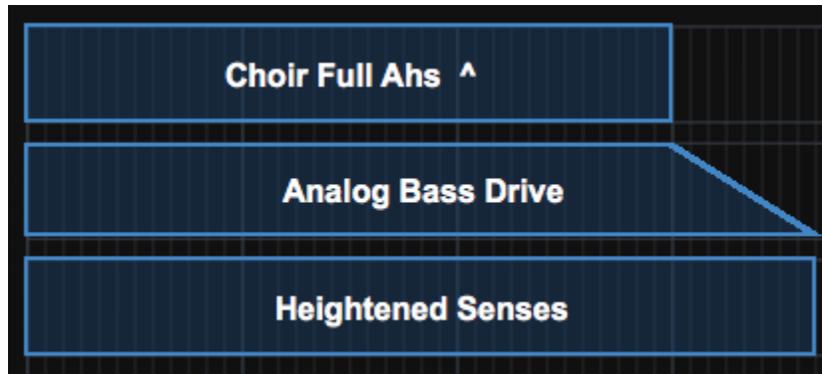
Latch Mode causes notes to be held when played (or toggled off when played again), allowing quick triggering of repeating arpeggiated phrases or sustained sounds, while freeing the hands to play additional notes for layering, or for switching to other Parts to play new phrases on top.

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 ideas quickly!

Used together, they enable a wide range of creative performance, live remixing, and composition techniques.

## 14.9.1. Latch Mode

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When Latch Mode is enabled for a Part, repeatedly playing a note will toggle the note on and off. When it is toggled ON, the note will continue to sustain, even if the note is released. Playing the same note again will toggle it OFF.

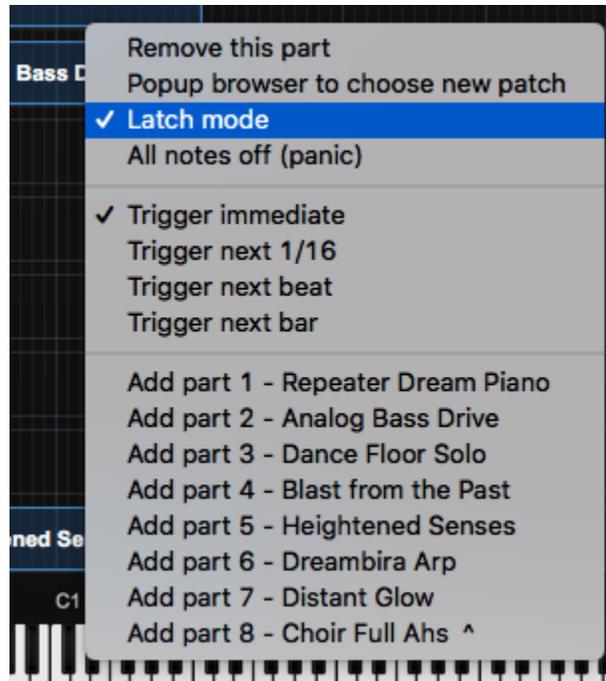
When the STACK MODE page is open, you can access the Latch Mode setting for a Part by Right/Control-clicking on the Part Region. Select “Latch Mode” from the context menu to toggle it ON/OFF for the Part.

***NOTE:** A Part’s Latch Mode status can also be viewed and changed from the EDIT Page using the controls in the Footer 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 extremely useful when working with rhythmic sounds, and used together with Trigger Modes allows one-shot triggering of sounds quantized in real-time.

Latch Mode is set independently for each of the eight Parts. It is also independent from STACK MODE, so STACK MODE does not need to be enabled for Latch Mode to be active.

### Viewing & Enabling Latch Mode



To enable Latch Mode for a Part, Control/Right-click its Part Region, and select the “Latch Mode” option from the context menu.

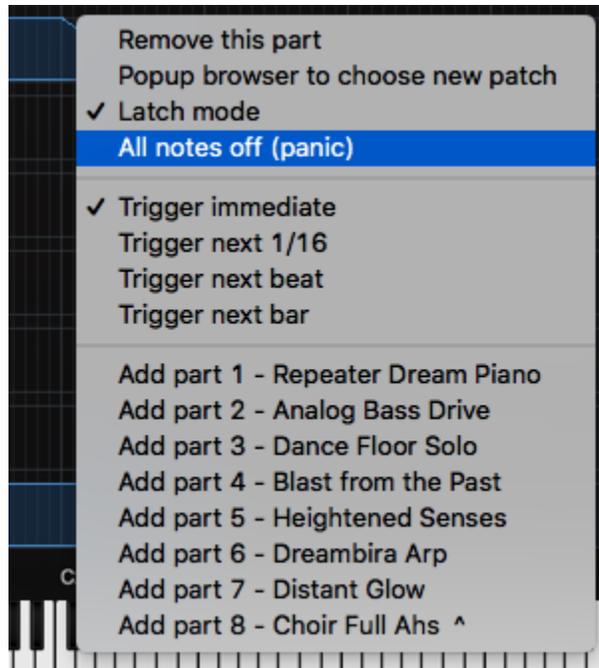
When Latch Mode is enabled for a Part, a checkmark will appear next to the Latch Mode menu option.

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.

***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)**



Sometimes when using Latch Mode, it's possible to lose track of which notes are latched, or you might have multiple Parts playing 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" from the context menu.

**NOTE:** You can also access the All Notes Off command by using the All Notes Off button on the LIVE MODE page. The All Notes Off button is MIDI-learnable, which allows you to trigger it using a hardware controller. This is especially useful when using Latch Mode together with STACK MODE.

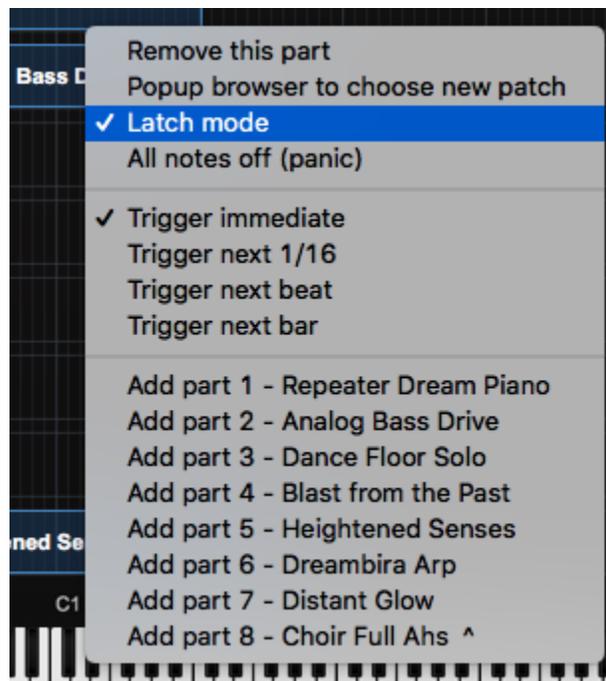
**NOTE:** If you have multiple Parts playing using Latch Mode and only want to stop one Part, disable Latch Mode only for that Part.

## 14.9.2. 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 EDIT Page using the controls in the "Footer."

When playing complex phrases or rhythmic sounds along with other sequences, it can be difficult to sync those performances. Trigger Mode solves these problems by quantizing live MIDI input. With Trigger Modes other than Immediate selected, the playback from each incoming MIDI note is delayed until the the next point on the bar/beat grid is reached. This makes it much easier to play in a live performance setting with complete synchronization.

Trigger 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.

Trigger Modes are set independently for each of the eight Parts. They are also independent from STACK MODE, so STACK MODE does not need to be enabled for Trigger Modes to be active.

### Using Trigger Modes in STACK MODE

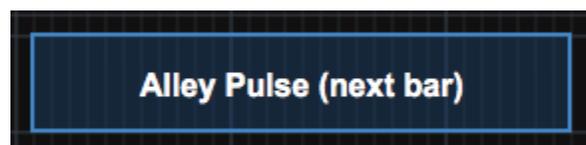
Using the splits, layers and crossfades in STACK MODE together with Trigger Mode-quantizing allows for very complex and interesting performance possibilities.

One simple example is to 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 would quantize them in real time as you played, so your arpeggiated phrases will always sync perfectly.

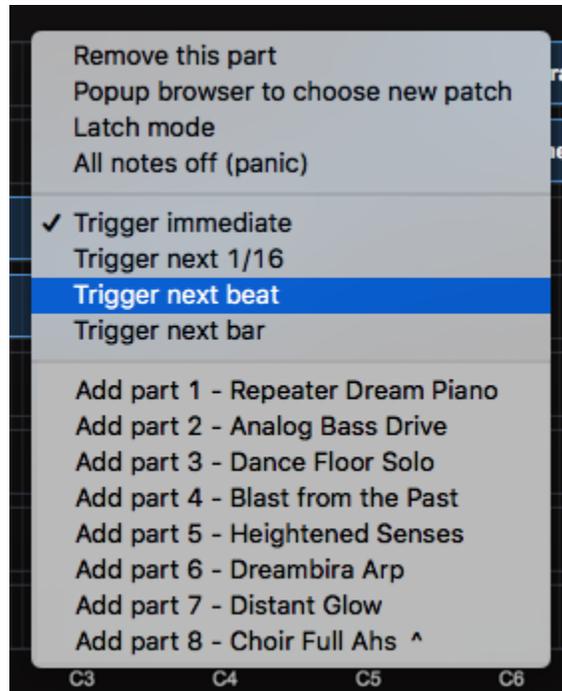
Trigger Modes can also be used while browsing and auditioning sounds. If you have selected a Trigger Mode other than Immediate for the Part, the sounds will be real-time quantized and will play in sync with the host or other clocked source as you audition them.

### Viewing & Selecting Trigger Modes

When a Trigger Mode other than Immediate is selected for a Part, the name of the selected Trigger Mode will be appended to the Part Region name.



To select or change the Trigger Mode for a Part, control/right-click its Part Region, and select the desired Trigger Mode from the context menu. A checkmark will appear next to the selected mode.



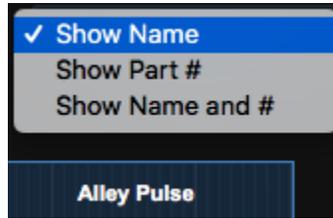
## Trigger Modes

- 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.***

## 14.10. Display Menu

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The Display Menu allows you to choose which information is displayed with each Region in the STACK MODE Grid.

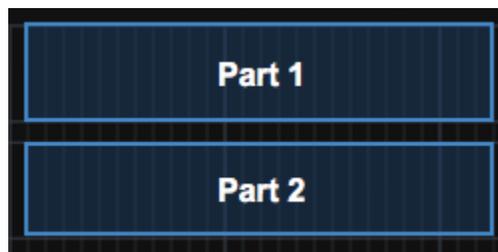
### Show Name

Displays only the Part Name.



### Show Part #

Displays only the Part Number. This corresponds to the Part Number on the MIXER Page.

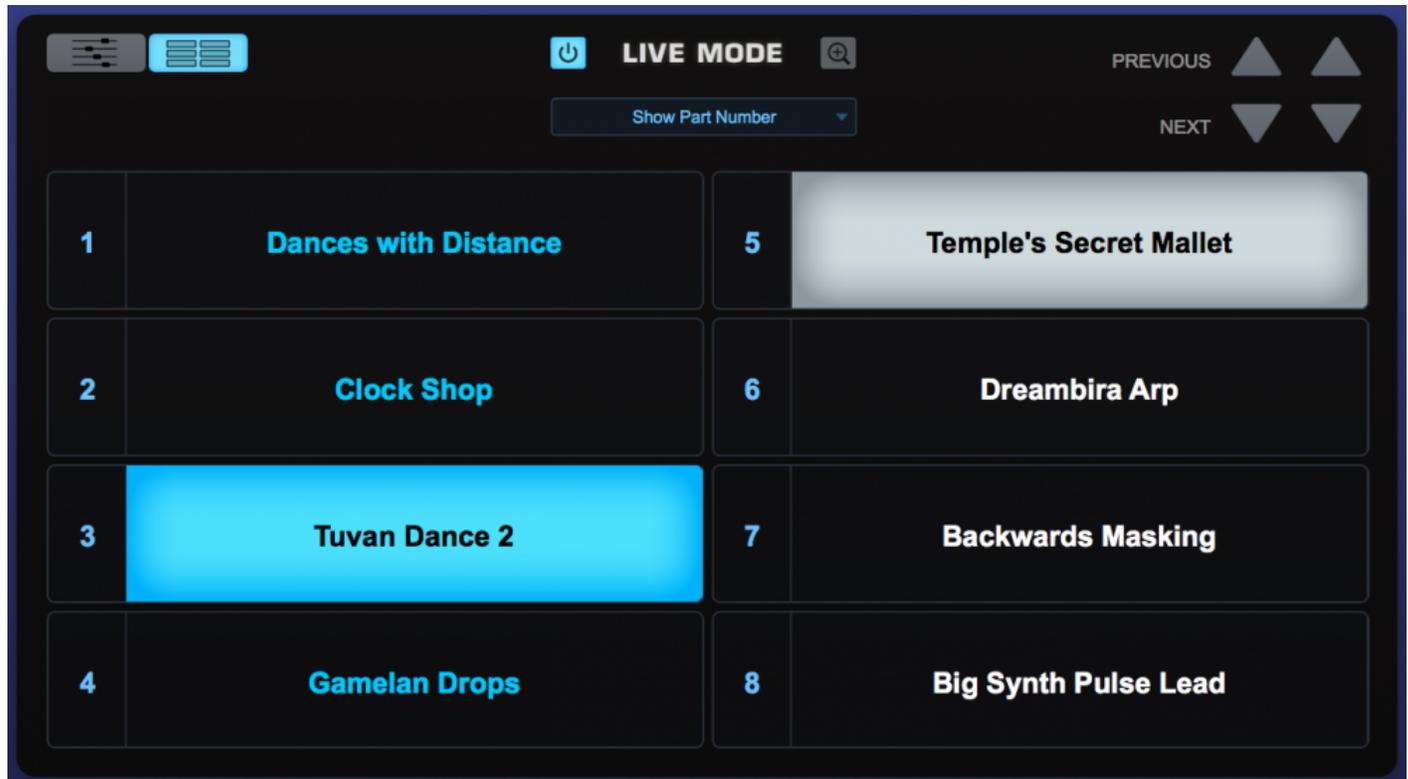


### SHOW Name and #

Displays both the Part Name and the Part Number.



# 15. 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.

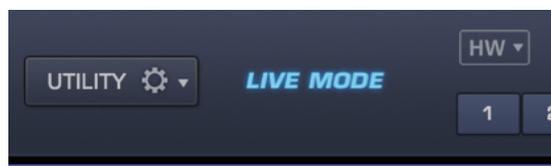
You can also use your [STACK MODE](#) regions in LIVE MODE, by turning ON "Stack Mode Note Regions" in the LIVE MODE zoom. This gives you the flexibility to combine the instant Part selection from LIVE MODE with STACK MODE's splits and layering capabilities.

## Power Button



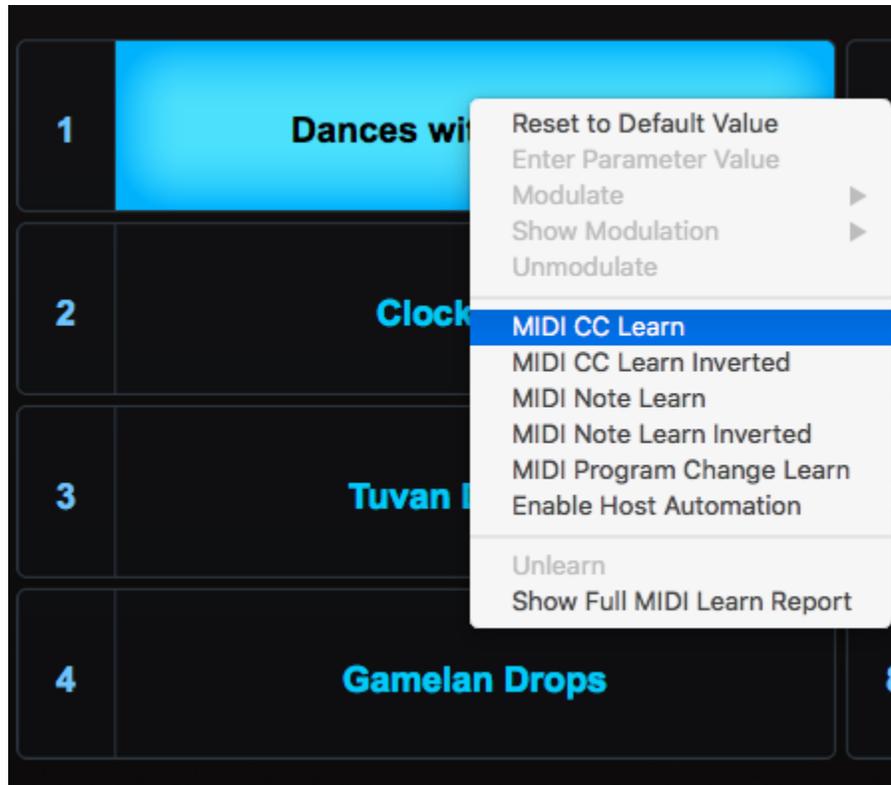
To enable LIVE MODE, select the Power Button to the left of the LIVE MODE label.

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 remotely-controlled from Windows Multitouch or an iPad using the [Omni TR app](#).*

## 15.1. Selecting Parts



To get the most out of LIVE MODE, it can often be more convenient to switch Parts remotely (rather than by using 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**

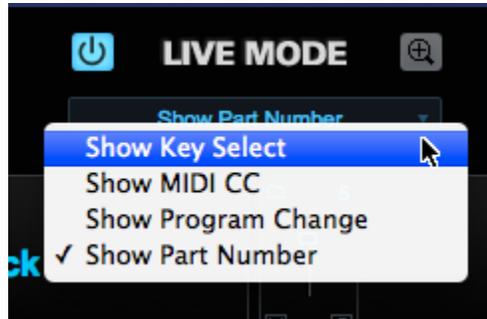
Select MIDI Program Change Learn from the menu, and then press a Program Change button on your MIDI device. This Program Change button will now select the Part.

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.

## 15.2. Show Menu

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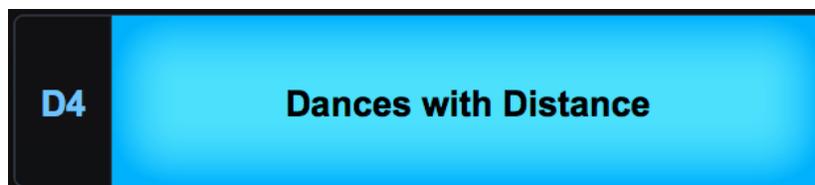
LIVE MODE offers five ways to switch or layer the eight Parts; via MIDI Notes, MIDI CC messages, MIDI Program Change, with the mouse (or Windows Multitouch), or with [Omni TR](#). The first three methods use MIDI Learn to set up how the Parts will respond. Although all methods can be active at the same 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 or MIDI Learn assignments are displayed in the boxes to the left of the Part names, either individually or grouped with the optional Mixer Controls. When the Mixer Controls are enabled, this information is displayed in the upper-right corner of the Mixer Controls box.

In the examples below, the Parts are illustrated with and without the Mixer Controls enabled.

### SHOW: Key Select

Displays the MIDI Note assigned to select the Part.



### SHOW: MIDI CC

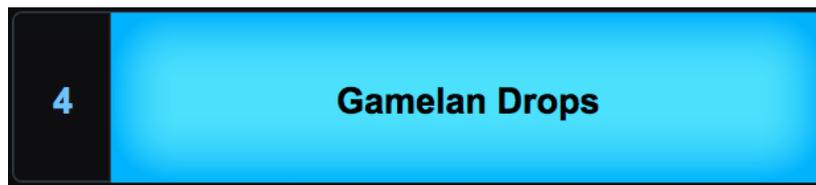
Displays the MIDI Continuous Controller number assigned to select the Part.

**SHOW: Program Change**

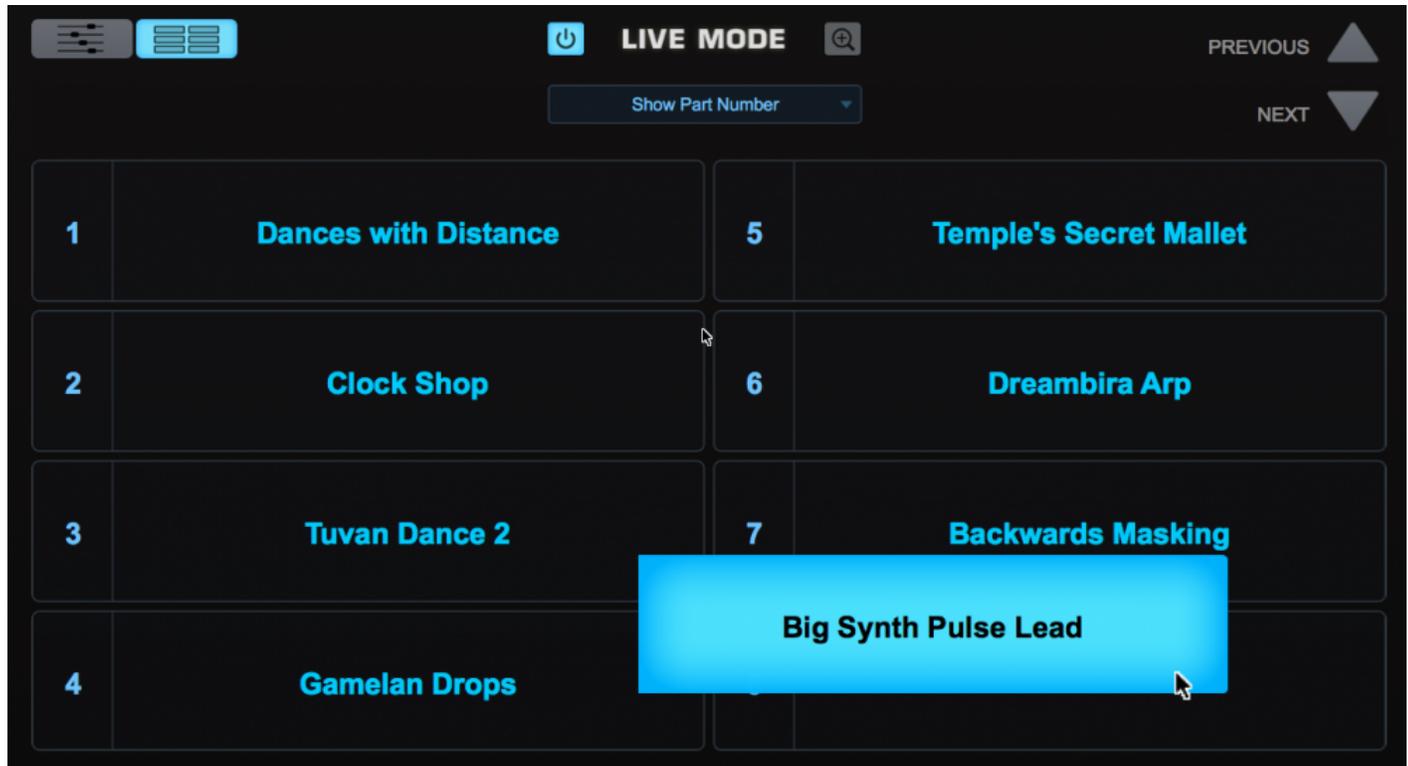
Displays the MIDI Program Change number assigned to select the Part.

**SHOW: Part Number**

This is the default display, which corresponds to the actual Part Number.



## 15.3. 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.

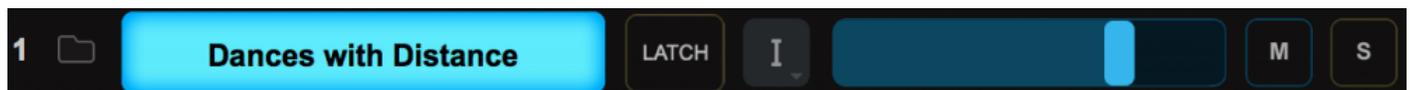
**NOTE:** Re-ordering Parts in the LIVE MODE display will not change their positions in the MIXER. For example, a Patch loaded into Part 3 of the [MIXER](#) will remain as Part 3, regardless of which Part Slot it occupies on the LIVE MODE page.

**NOTE:** [MIDI Learn](#) assignments are specific to the Slot, not to the Part. When re-ordering Parts, MIDI Learn assignments do not move with them, but remain with the Slot.

## 15.4. Mixer Controls



Displays the basic mix controls for each of the eight Parts, and includes a Mute button, Solo button, a Level slider, and a Folder icon to access the Patch Browser. Any changes made using the Mixer Controls on the LIVE MODE page will be reflected on the [MIXER](#) page, since they are the same parameters.



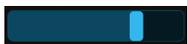
**Mute** – Mutes the Part. Multiple Parts can be muted. This is a duplicate of the Mute button from the MIXER page, and can be MIDI-Learned.



**Solo** – 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.

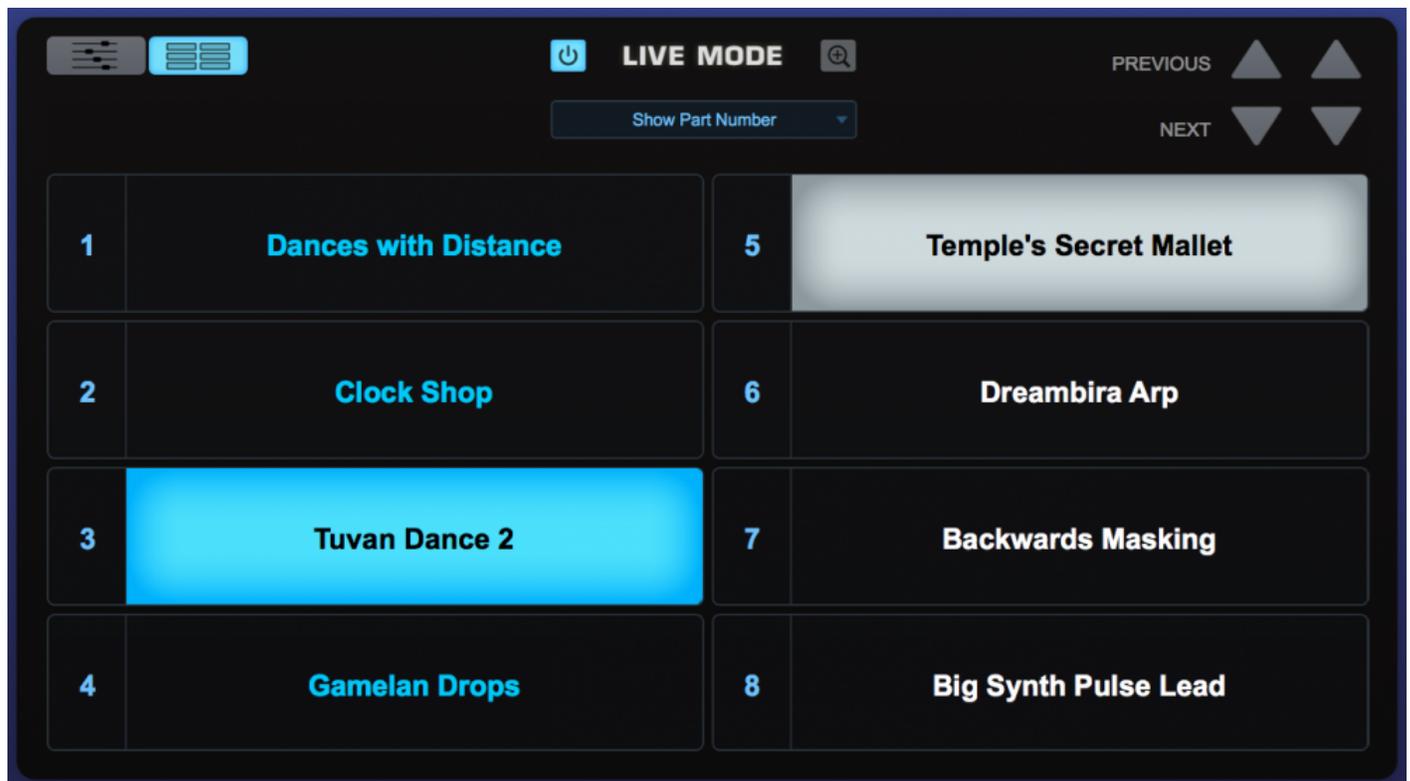


**Level** – Controls the output level of the Part. This is a duplicate of the LEVEL slider from the MIXER page, and can be MIDI-Learned.

## 15.5. Dual Live Mode



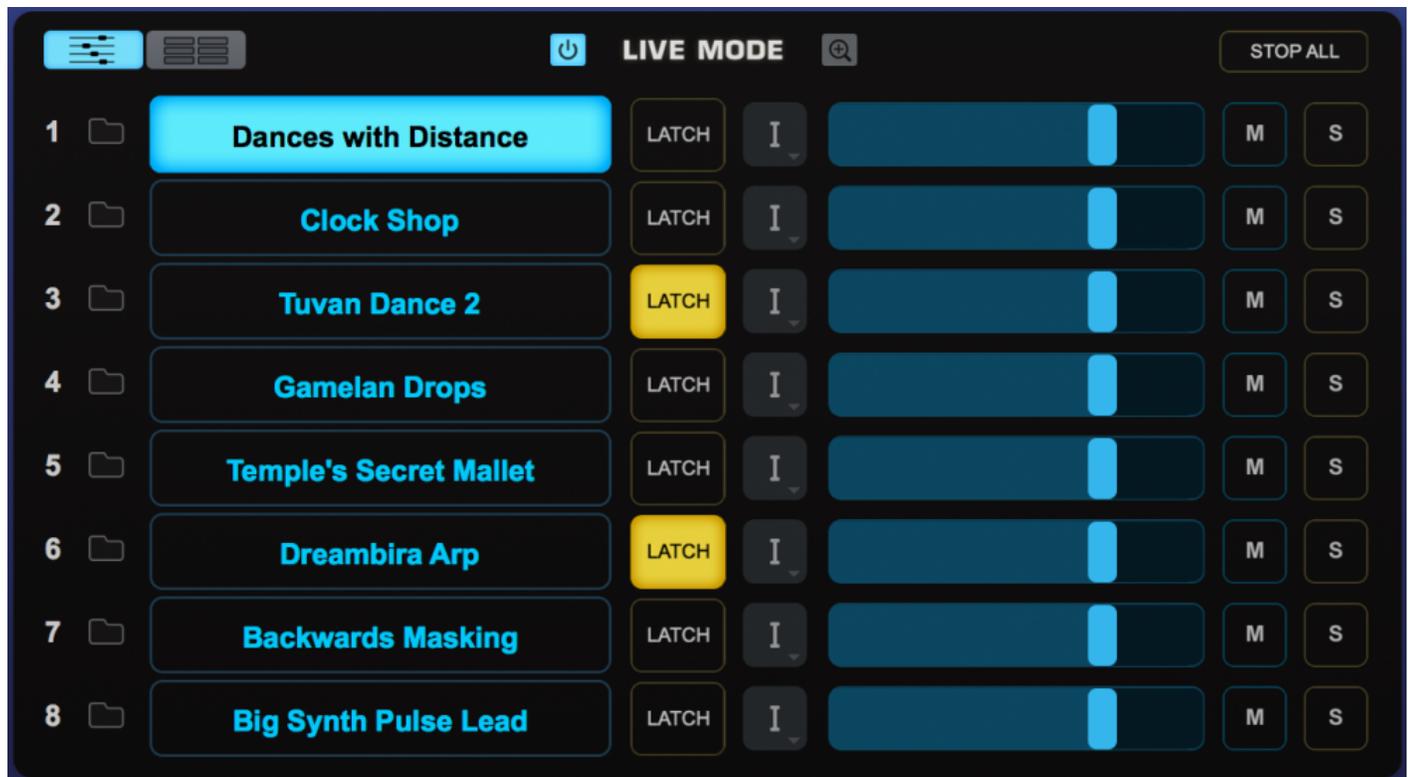
DUAL LIVE MODE adds a second MIDI channel to LIVE MODE, and is designed for use with two MIDI controllers. It divides the eight Parts into two columns of four Parts each (Parts 1–4, and Parts 5–8). Each column can receive MIDI messages on its own MIDI channel. The color scheme is changed so that the second column is highlighted in white instead of blue.



**NOTE:** Parts can still be reordered in DUAL LIVE MODE. Parts can also be moved between the two columns (and therefore switched between MIDI channels), simply by dragging them from one column to the other.

**TIP:** Using DUAL LIVE MODE with two MIDI controllers, you can set up one MIDI controller to be used exclusively for playing the eight Parts, while the other MIDI controller is dedicated to Part selection.

## 15.6. Latch & 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.

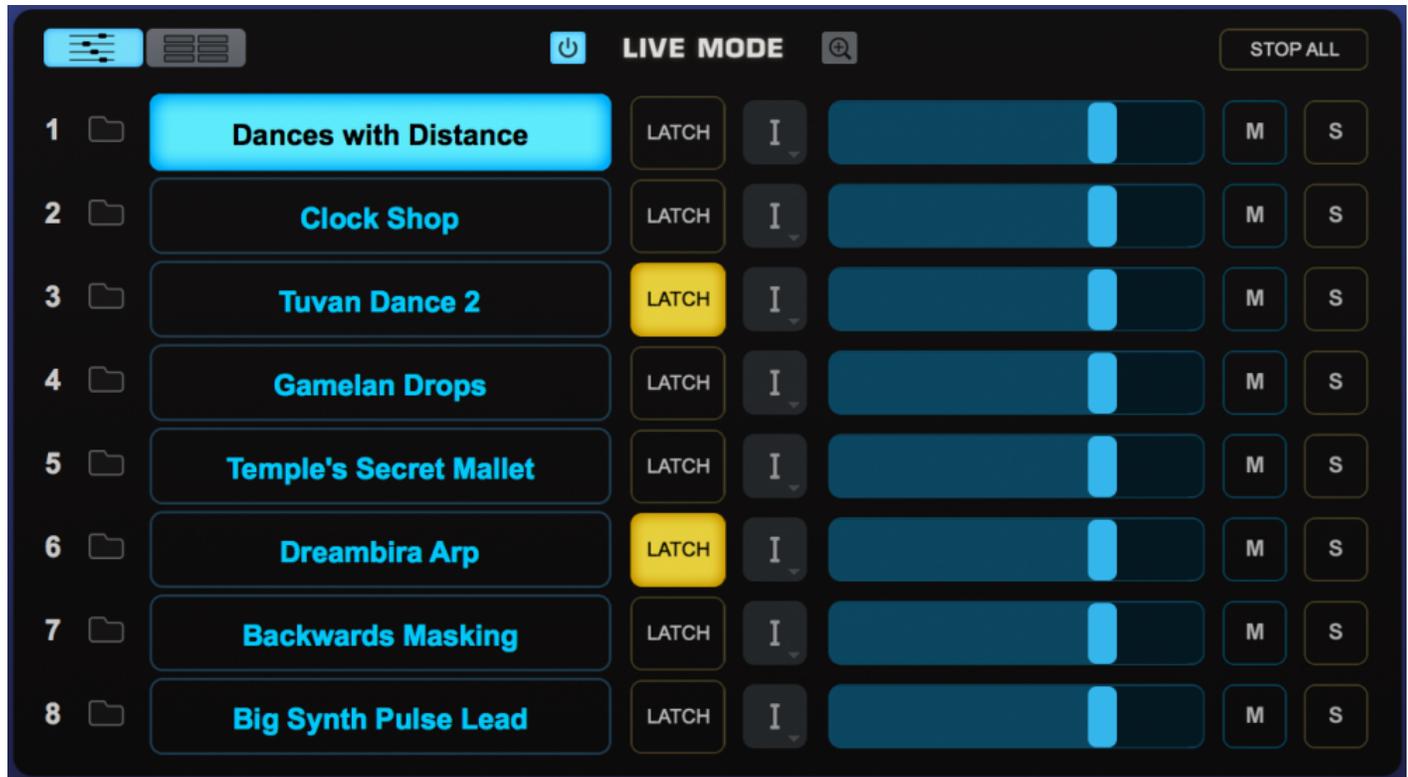
They enable real-time creation of complex, multi-Part performances with full synchronization between Parts, and across multiple Omnisphere, Trilian, and Stylus RMX instances, without the need for traditional sequencing techniques.

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.

## 15.6.1. 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 & 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 & 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.

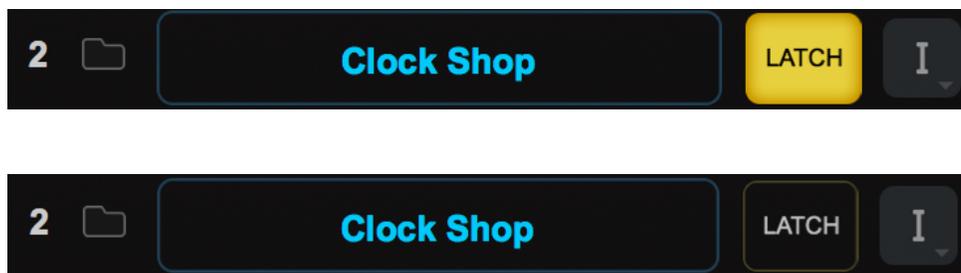


When the LATCH View is open, you will see the Latch & Trigger Mode Part controls.

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.

### All Notes Off



Sometimes when using Latch Mode, it's possible to lose track of which notes are latched, or you might have multiple Parts playing in Latch Mode that you want to stop simultaneously.

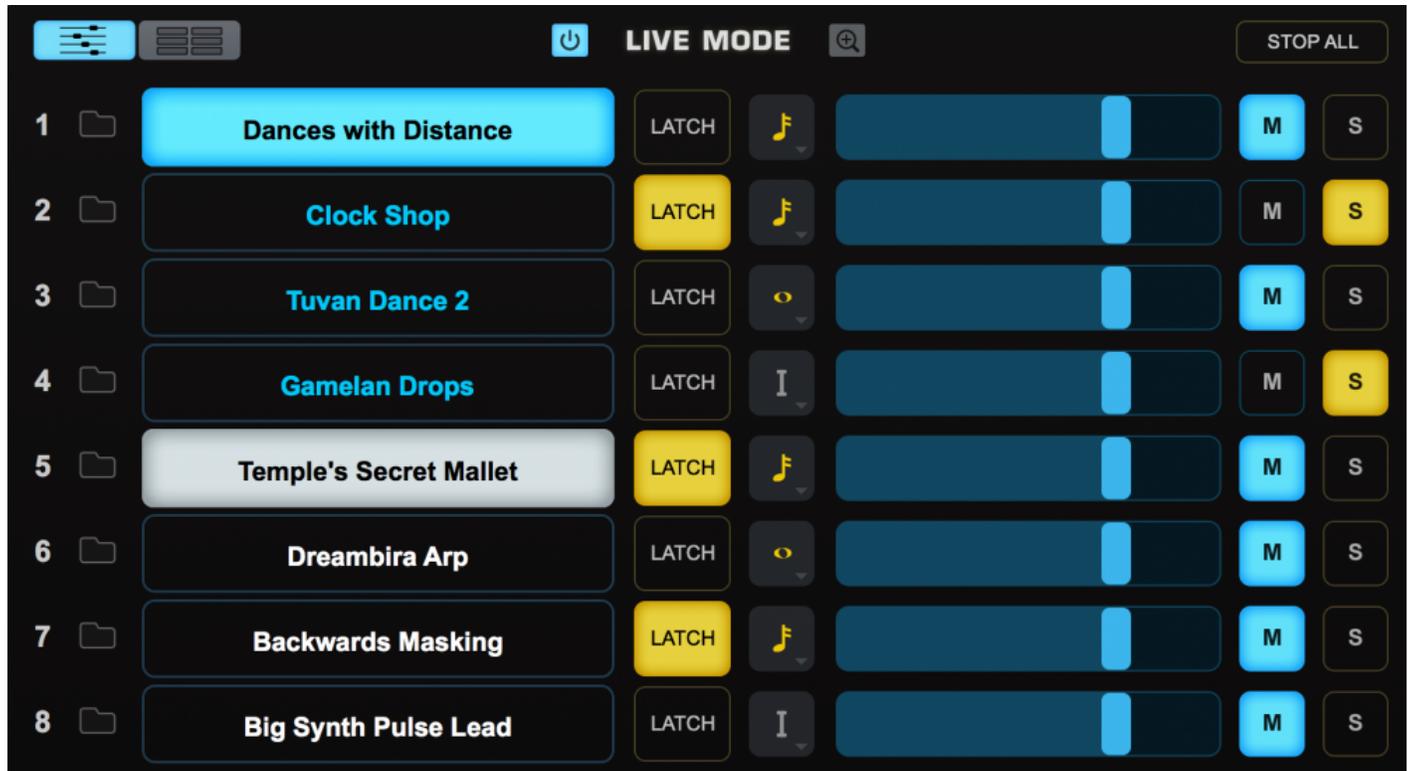
The All Notes Off button will send an "All Notes Off" message to all 8 Parts at once. FX tails and release stages from envelopes will continue to decay, so the cut off is not unnaturally abrupt. Notes being played on all Parts will be stopped, regardless of their Latch status.

The All Notes Off button is MIDI-Learnable, which allows you to trigger it using a hardware controller.

You can also stop all latched notes by starting or stopping your hosts' 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.***

## 15.6.2. 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 EDIT Page using the controls in the Footer.

When playing complex phrases or rhythmic sounds along with other sequences, it can be difficult to sync those performances. Trigger Mode solves this by quantizing live MIDI input. With Trigger Modes other than Immediate selected, the playback from each incoming MIDI note is delayed until the the next point on the

bar/beat grid is reached. This makes it much easier to play in a live performance setting with complete synchronization.

Trigger Mode controls the playback start time of MIDI notes played live via a MIDI controller or from MIDI notes sent from a MIDI track in the host sequencer.

Trigger Modes are set independently for each of the eight Parts, and Trigger Modes are independent from LIVE MODE, so LIVE MODE does not need to be enabled for Trigger Modes to be active.

### Using Trigger 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 will play in sync with the host or other clocked source as you audition them.

### Viewing & Selecting Trigger Modes

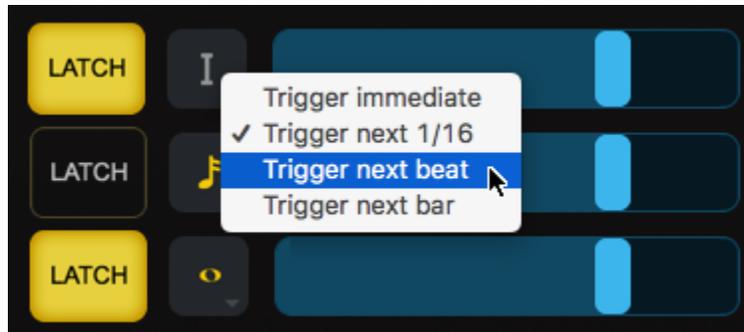
When a Trigger Mode other than Immediate is selected for a Part, the name of the selected Trigger Mode will be appended to the Part Region name.

To view and select the Trigger Mode 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 the Latch Mode and LIVE MODE views. Closing the LATCH View does not change or disable Latch Mode or Trigger Mode settings.*

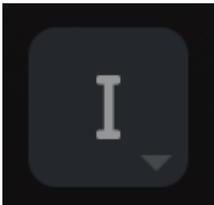


When the LATCH View is enabled, you will see the Latch and Trigger Mode Part Controls. The Trigger Mode Icon will display the currently selected Trigger Mode for the Part, and allows you to access the Trigger Mode menu for that Part.

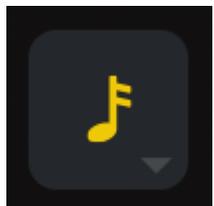


Select the Trigger Mode icon, and choose the desired Trigger Mode from drop-down menu. A checkmark will appear next to the selected option, and the Trigger Mode icon will change to reflect the selected Trigger Mode.

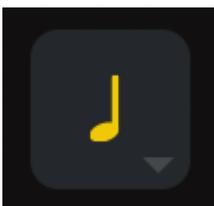
### Trigger Modes



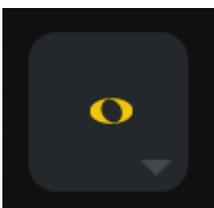
**Immediate:** This is the default Trigger Mode. MIDI input is not quantized, and playback of MIDI notes is immediate.



**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.***

## 15.7. Previous/Next Arrows

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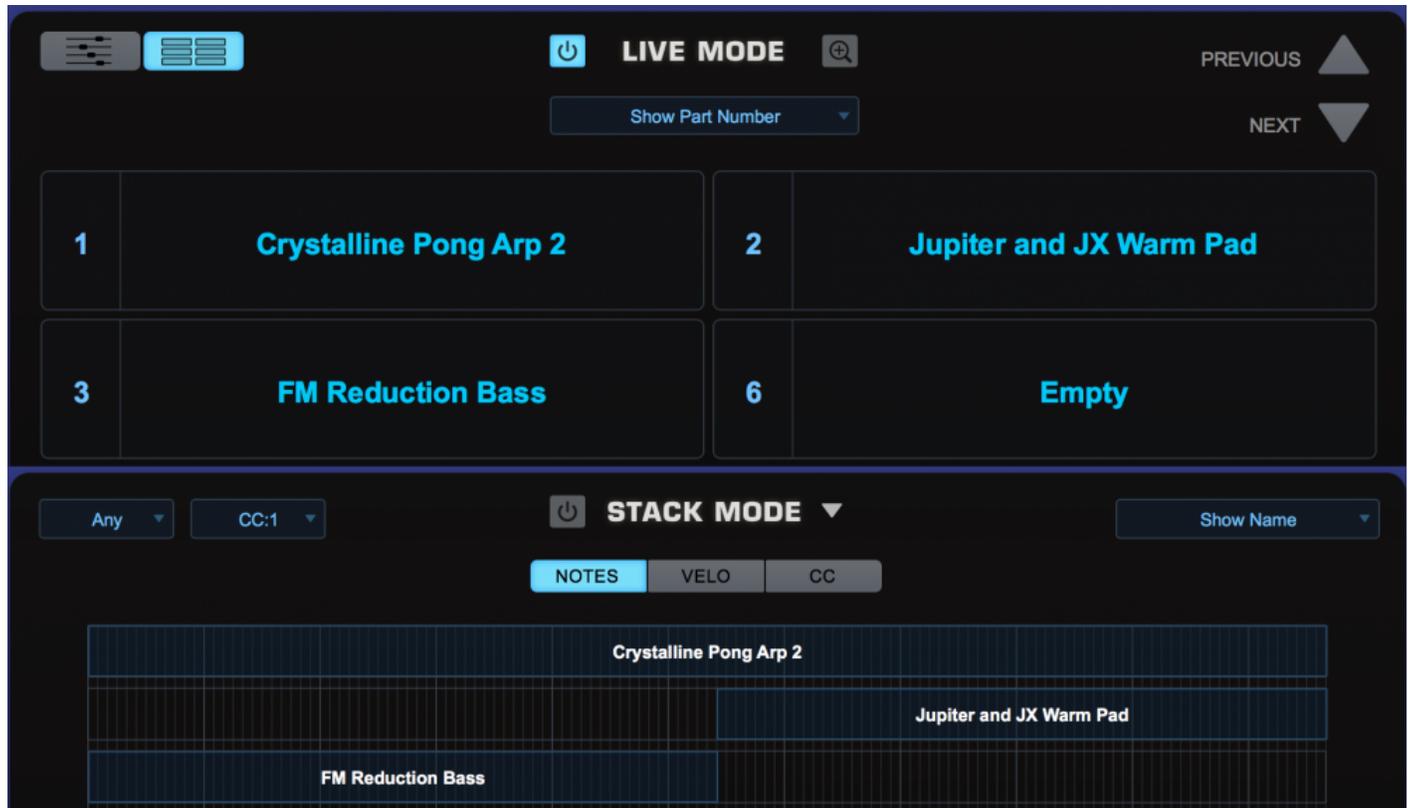


The Previous/Next arrows step through the eight Slots one at a time, changing the selected Part without stopping any notes currently being played. The Previous/Next arrows can be MIDI-Learned, so they can be triggered via MIDI messages.



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.

## 15.8. 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 when, at the same time, 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.

Stack Mode Note Regions 

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.

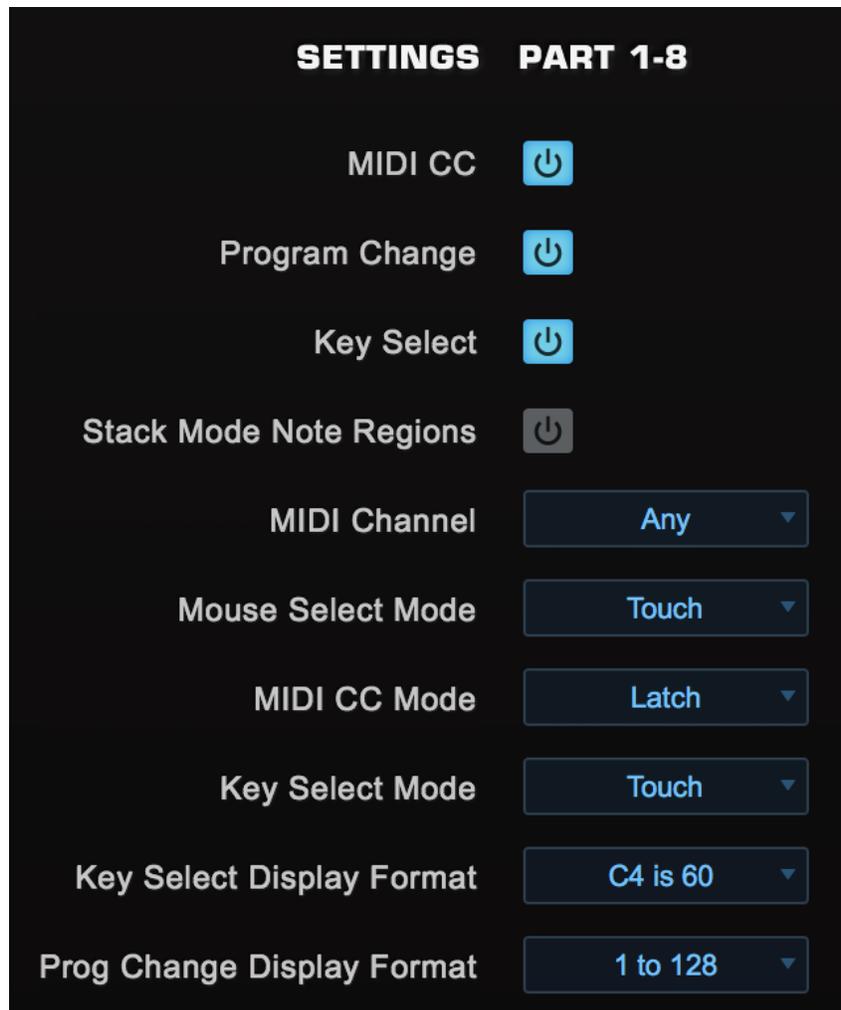
In STACK MODE, the region for Part 1 covers the entire keyboard range, Part 2 is set to play on the left side of the keyboard, and Part 3 to play on the right.

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.

***NOTE: Turning the STACK MODE power button ON engages STACK MODE and turns LIVE MODE OFF. The STACK MODE regions turn blue and "STACK MODE" will be displayed in the header.***

## 15.9. Settings (Zoom)

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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 for both channels and grouped as Parts 1–4 and Parts 5–8 (corresponding to the two columns in DUAL LIVE MODE). This allows settings to be individually customized for each MIDI device.

SETTINGS	PART 1-4	PART 5-8
MIDI CC		
Program Change		
Key Select		
Stack Mode Note Regions		
MIDI Channel	Any ▾	Any ▾
Mouse Select Mode	Touch ▾	Touch ▾
MIDI CC Mode	Latch ▾	Latch ▾
Key Select Mode	Touch ▾	Touch ▾
Key Select Display Format	C4 is 60 ▾	C4 is 60 ▾
Prog Change Display Format	1 to 128 ▾	1 to 128 ▾

*NOTE: LIVE MODE Settings are saved with the MULTI.*

### Key Select



When enabled, Parts can be selected using learned MIDI Program Change messages. When disabled, Parts will not respond to Program Change messages.

### Program Change

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

Key Select 

When enabled, Parts can be selected using learned MIDI Note messages. When disabled, Parts will not respond to MIDI Note messages.

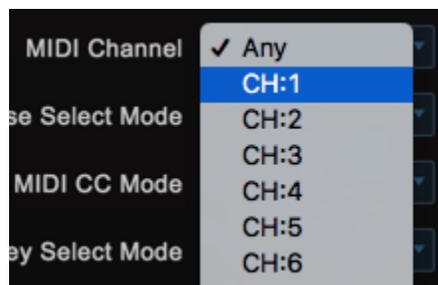
*NOTE: Even when the MIDI CC, PROGRAM CHANGE, or KEY SELECT buttons are disabled, you can still add new [MIDI Learn](#) assignments. LIVE MODE will make the new assignments, but will not respond to those MIDI messages until the respective Power Button is enabled.*

### Stack Mode Note Regions

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

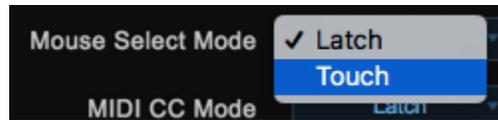


Determines which MIDI Channel LIVE MODE will respond to.

- **Any** – Will respond to MIDI messages sent from any MIDI channel.

- **CH:XX** Will respond to MIDI messages sent from the specified MIDI channel.

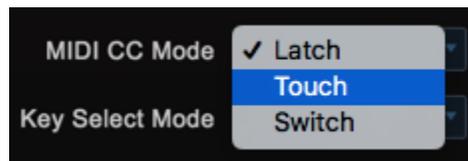
### Mouse Select Mode



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

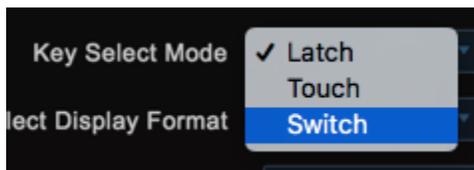


Parts can be selected or deselected using MIDI Continuous Controller messages.

- **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. %

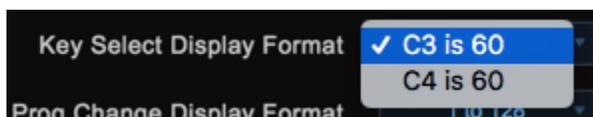
### Key Select Mode



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.

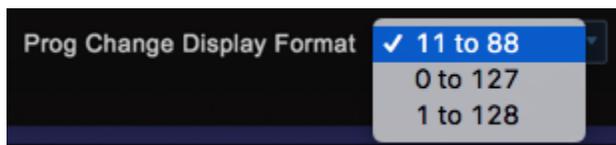
- **Latch** – Latch mode acts as an ON/OFF' toggle. Sending a learned MIDI Note message to a Part will select it. Sending the note again will deselect the Part.
- **Touch** – Sending a learned MIDI Note to a Part will select it, and all other Parts will be deselected. If multiple MIDI Note messages are 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.

### Key Select Display Format



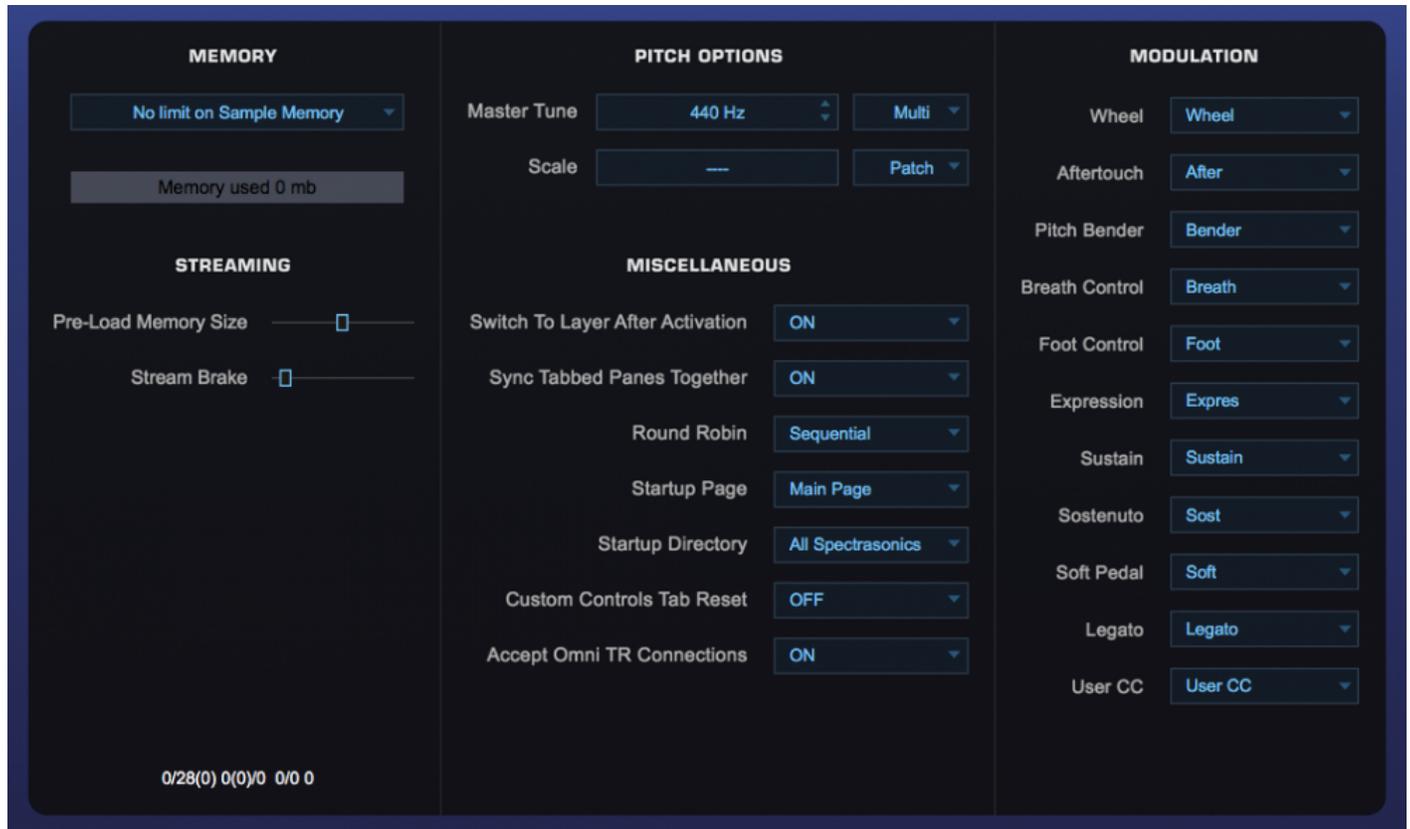
Middle-C (note number 60) is referred to in two different ways—as either C3 or C4—depending on the MIDI device manufacturer. You can choose either numbering convention, based on your keyboard or your host software. Please refer to your device or host's owner's manual to determine which is the correct 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.

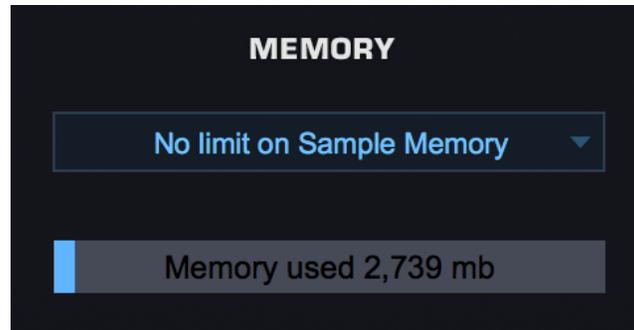
# 16. System



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

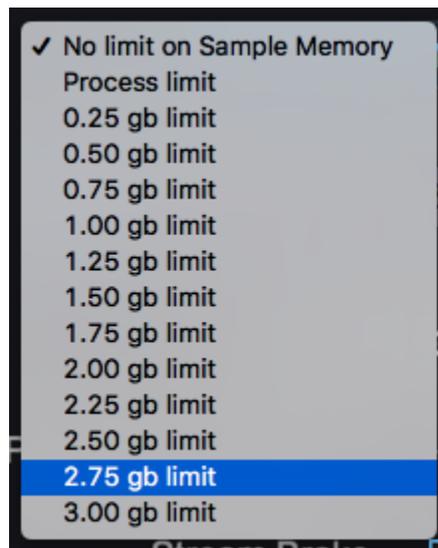
## 16.1. Memory Management

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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.



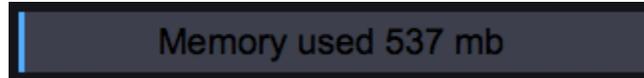
Selecting a value from the drop-down menu sets the maximum amount of virtual memory available for Omnisphere to use.

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.*

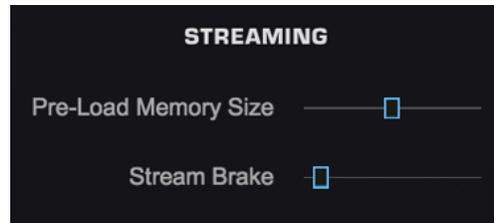
### **Memory Meter**

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.



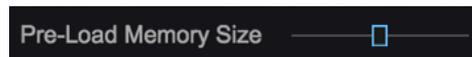
## 16.2. Streaming

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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.

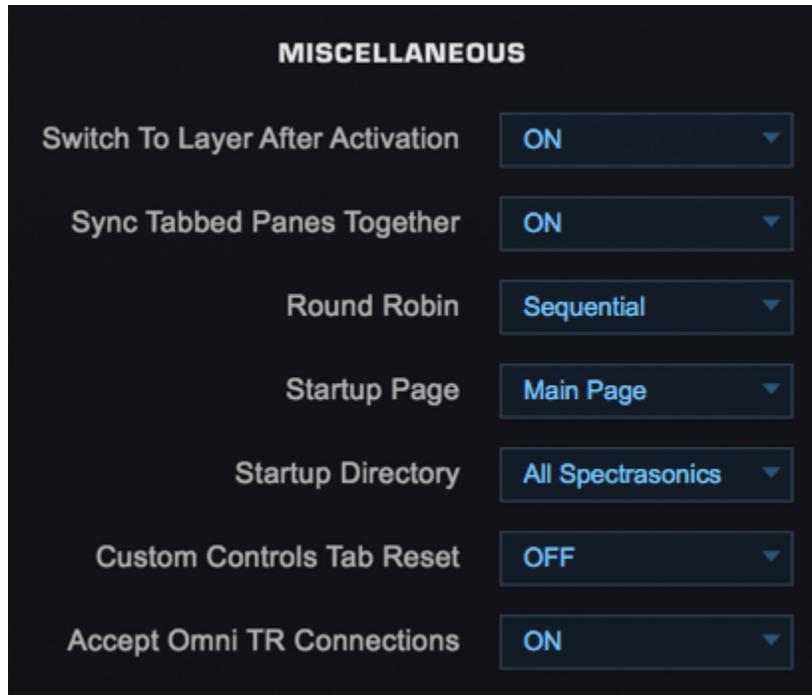
*Range – 0.00 seconds to 1.00 seconds.*

**STREAM DISPLAY**

0/44(0) 0(0)/1,174 0/401 0

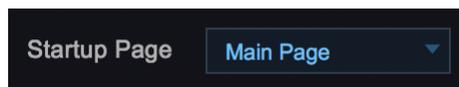
Diagnostic numbers that are used for Customer Support purposes.

## 16.3. Miscellaneous

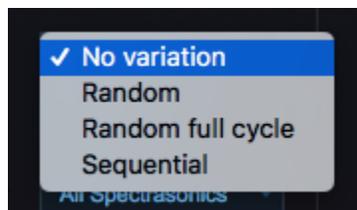


This area determines the settings for MASTER TUNING, the instrument's STARTUP PAGE and preferences for how the Layers behave in the interface.

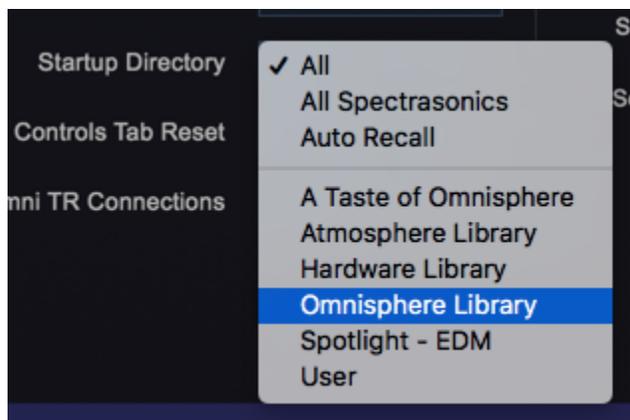
### STARTUP PAGE Preference



Omnisphere's default startup page is the Main Page. This menu allows you to select from either the Orb, Main, or Edit page as the default.



### STARTUP DIRECTORY Preference



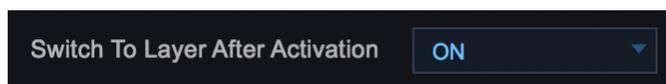
From this menu you can select the Patch directory that will be selected on startup. You may specify Spectrasonics, User, or third-party libraries.

From this menu it is possible to select the Patch directory that is loaded at startup. Here you can specify and limit the startup directory to choices such as “All,” “All Spectrasonics,” “Projects,” “User,” any of the Satellite Instruments and Legacy Libraries, as well as any of your third-party libraries.

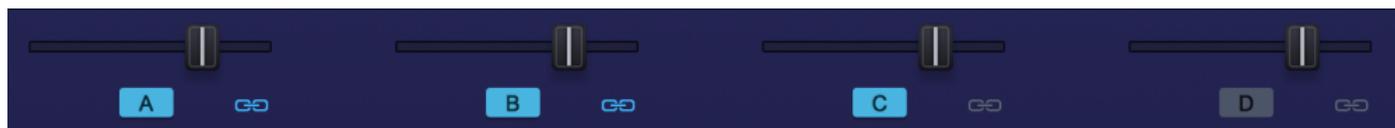
For example, the “All Spectrasonics” option allows you to browse only Spectrasonics Patches, including those from a Satellite Instrument like Keyscape or Trilian, and omits any User and third-party sounds.

The “Auto Recall” option is designed for live use, loading a set of preselected Patches and Browser filters at startup. Having the Browser Filters loaded on startup is particularly useful when browsing from Omni TR, as each part will display a list of pre-filtered sounds—ready for immediate remote browsing.

### SWITCH TO LAYER UPON ACTIVATION Preference



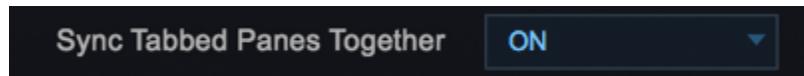
The four Layer MIX sliders on the footer of the [LAYER PAGES](#) have activation buttons. If SWITCH TO LAYER UPON ACTIVATION is set to “ON,” whenever you turn ON a Layer, it will automatically switch the EDIT page’s view to that Layer.



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

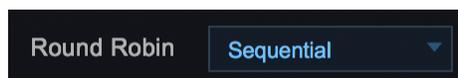


This is the default setting, but you may set your preference here.

When enabled, this function will ensure that when you change from one Part to another, the view will remain the same.

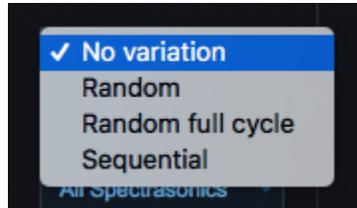
For example, if Part 1 has the FX page selected, and then Part 2 is selected, it will also display the FX page. If SYNC TABBED PANES TOGETHER is disabled, then the views will not synchronize – they'll change depending what Part you are on.

### 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 very natural, and eliminates the machine gun effect.

Some Soundsources include multi-sampled Round Robin samples, which means we recorded multiple takes for each note and velocity. In fact, a single Soundsource can contain a huge number of Round Robin samples! This is particularly true for 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.

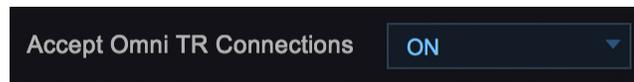


The ROUND ROBIN Menu lets you select how Round Robin samples will be ordered when two or more Round Robin samples are loaded into memory.

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.*

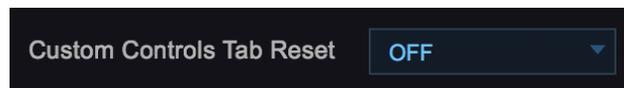
### ACCEPT OMNI TR CONNECTIONS



Enabling this option allows Omnisphere to communicate with the Omni TR iPad app. When ACCEPT OMNI TR CONNECTIONS is enabled, Omni TR will be able to 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/](http://www.spectrasonics.net/omni_tr_app/)

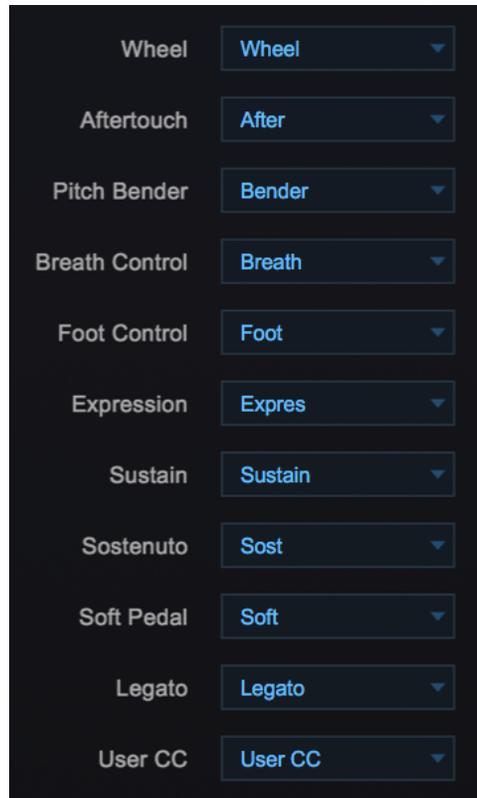
### CUSTOM CONTROLS TAB RESET



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.

## 16.4. Modulation

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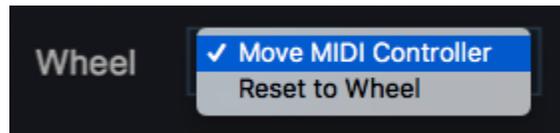
The MODULATION assignments section allows you to override and remap the standard MIDI messages used by the [Modulation Matrix](#) sources in Omnisphere. Simply select the drop-down menu next to one of the 14 modulation types and a pop-up will appear that says “Move MIDI Controller.” Then on your MIDI 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.

## 16.4.1. MIDI Controller

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The choices for MIDI Modulation Sources in Omnisphere include a variety of standard MIDI controllers such as Wheel, Expression, Soft Pedal, etc. You can use these options on the SYSTEM Page to map those sources to other MIDI controls. This can be useful if you don't have a particular physical controller such as an Expression Pedal. For example, if you map Wheel to Breath Control, you can use a Breath Controller in any patches that use the Wheel as a Modulation Source.



To re-map any of these controllers, select a menu in the MODULATION column and move the controller that you want to assign to Modulation Type.

**NOTE:** *The remapped control will only be visible on the SYSTEM Page. In the Modulation Matrix and Modulation Source menu of the Edit Page the original Modulation Source name will be shown. For this reason, it's recommended to use the "User CC" source, since that's not used in any Factory Patches.*

## 16.5. Tuning

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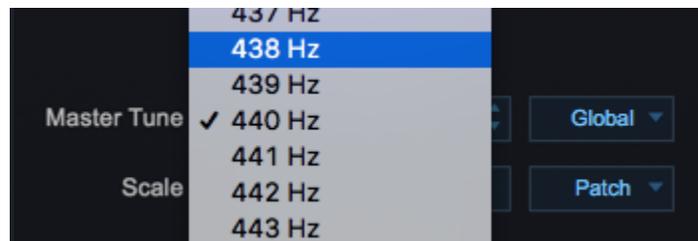


### Master Tune

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.

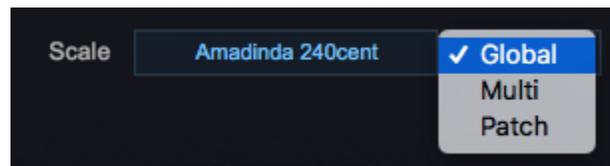
- **Global** sets the master frequency for all Patches, Multis, and songs.
- **Multi** allows you to save a unique master pitch for each Multi or song.

The default is 440Hz—the standard for most Western music. For other tuning standards, Omnisphere's pitch can be changed to accommodate any of them.



*Range – 420Hz-460Hz.*

### Scale Modes



- **Global** allows you to set the scale or temperament for all Patches, Multis, and songs. You can select the scale from the menu and the name will be displayed in the Scale pane. The value is used across all tracks, all projects, all patches and is a universal user preference.
- **Multi** allows you to set a unique scale for each Multi or song. 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/song/project. All patches within a multi/song/project 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.

**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, remaining the same, no matter what scale is loaded.

# 17. Support

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Many common technical support questions can be answered by checking the [Spectrasonics Support Knowledge Base](#)

*NOTE: You will need to log in to your [User Account](#) to access the Spectrasonics Support Knowledge Base.*

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

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

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

**Monday-Friday 10AM-5PM Pacific Time**

If you are calling outside North America, please note the time difference in California.

email: [info@spectrasonics.net](mailto:info@spectrasonics.net)

**SALES SUPPORT**

For product orders or sales, please contact your local Spectrasonics [distributor](#). All Spectrasonics instruments, Xpanders and libraries are sold through our international distributor and authorized dealer network.

## 17.1. Updates

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It's important to download and install the latest version of Omnisphere, since we are continuing to add new features and improve their performance and capabilities.

<http://www.spectrasonics.net/updates>

# 18. Glossary

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**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 position 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 (1 $\mu$ s to 1ms) than the compressor alone (1ms to 10ms). A compressor/limiter is traditionally inserted between the outputs of a device and the inputs of the mixer or mastering recorder. More...

**Center detent**

This is the neutral position of a parameter's knob or slider, especially in reference to 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, Traktion, 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. Synonymous 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 =  $\frac{RMS}{\sqrt{2}}$

**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.

# 19. Credits

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## 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

# 19.1. Special Thanks

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## Special Thanks to:

Ignacio Longo, Tolga Gurpinar, Michael Flint, Scott Frankfurt, Les Correa, Bob Wilson, Diego Stocco, Bob Daspit, Neal Olander, Glenn Olander, Gulli Briem, Stéphane Pigeon, John Martin, Chad Martin, Jonathan Merrill, Cesar Moreno, Gabriel Muñoz, Maria Arellano, Paul de Benedictis, Andy Gradl, Susan DiGiulio, Mike Babbitt, Mark and Shelly Hiskey and all at ILIO, Satoshi Yamaguchi and all at Media Integration Japan, Sue Meaney and all @ Sonic Virtual Media, Patrik, Mattias and all at Luthman Scandinavia, Bev and all at Sample Division South Africa, Lluís and all at Mas Acoustics, Lubo and Neviana Christov, Larry Iser for all the help on copyright clearance, Jesse at Greenberg-Glusker, Randy Avazian, Richard and Cyndi Souther, Ruth Calvert, Patricia Machado, Jaz, Soren and Sage Persing, Sharon Frankfurt, Mercedes Longo, Laurie Wilson, David Klinger, Pastor Mark Pickerill and all at CA Eagle Rock, Bob Moog for the inspiration of his legacy, Iketaro Kakehashi, Ace Yukawa and all at Roland Japan, all our beta testers and all of our fantastic users, who constantly blow us away with their amazing creativity!

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**

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## 20. Legal

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### **What's the principle of the standard license agreement?**

Single-user music production/performance: Allowed

Multiple users: Not Allowed.

Non-music use: Not Allowed.

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

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

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

### **Does Omnisphere use copy protection?**

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

### **What type of Copy Protection method does Omnisphere use?**

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

### **Does Omnisphere use a dongle?**

No.

### **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?**

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.

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

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

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

No. The standard license to use Omnisphere is only granted to the buyer. We have a “Single User/Multiple Computer” lifetime license policy. If it is your own recording project that you are producing, of course that isn’t a problem. However, your studio clients aren’t licensed to use it for their own projects, and Omnisphere use can’t be “rented.” Multiple license packages are available by contacting your Spectrasonics distributor. If you have questions regarding multi-license packages contact [info@spectrasonics.net](mailto: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 my writing partner use a copy of my instrument on their computer?**

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

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

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

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

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

**Can I resell Omnisphere used to someone else?**

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

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

The vast majority of sample libraries and sample-based virtual instruments on the market do not allow license transfers of any kind. However, at Spectrasonics we realize that there are certain circumstances

where it can be a legitimate transaction. Because circumstances can vary so much, we only grant license transfers on a case-by-case basis.

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

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

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

**Can a license transferred (used) version be resold and transferred again?**

No. This can only be done once by the original purchaser.

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

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

Free phone, email and online Technical Support.

Free software maintenance updates.

Special upgrade pricing on major new versions.

**LEGAL/SAMPLING FAQs**

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

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

**What if I extensively modify the Omnisphere factory sounds?**

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

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

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

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

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

**Can I sample Omnisphere for my own private use?**

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

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

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

**But if Spectrasonics sampled other manufacturers' instruments to make Omnisphere, then why can't I use Omnisphere for my sampling project? This seems inconsistent.**

For Omnisphere's Core Library, Spectrasonics researched and obtained all necessary legal clearance to use all the original samples we created that incorporate other manufacturers' instruments.

Please contact Spectrasonics directly if you have any questions regarding sampling Omnisphere®:

[info@spectrasonics.net](mailto:info@spectrasonics.net)

## 20.1. Software License Agreement

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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.

ALL USE OF THE SOFTWARE IS SUBJECT TO THIS LICENSE AGREEMENT. YOU ARE AGREEING TO ALL THE TERMS AND CONDITIONS OF THIS AGREEMENT, AND CONSENT TO BE BOUND BY AND BECOME A PARTY TO THIS AGREEMENT. SPECTRASONICS’ ACCEPTANCE IS EXPRESSLY CONDITIONED UPON YOUR ASSENT TO ALL THE TERMS AND CONDITIONS OF THIS AGREEMENT TO THE EXCLUSION OF ALL OTHER TERMS; IF THESE TERMS ARE CONSIDERED AN OFFER BY SPECTRASONICS, ACCEPTANCE IS EXPRESSLY LIMITED TO THESE TERMS.

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