# KEYSCAPE

C O L L E C T O R K E Y B O A R D S





## Keyscape

1 — Last update: 2016/09/12

Spectrasonics

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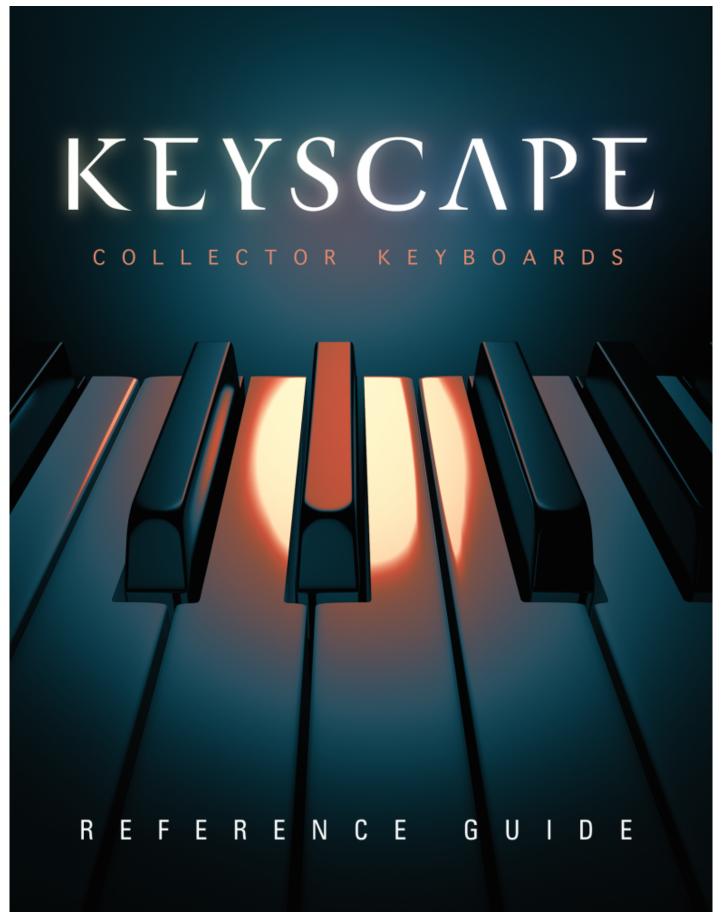
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## **Getting Started**



## Quickstart



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

- Keyscape is a software instrument plugin, and requires host software in order to run.
- Keyscape can be a memory-intensive instrument, as some of the models are highly-detailed and
  contain thousands of samples. A fast system with plenty of RAM will greatly enhance performance. Be
  sure and check out the System Optimization section.

#### 1. Install Keyscape

<u>Installation</u> time will vary depending on the installation type (Full or Lite). The "Lite" installation Keyscape will take about 30 GB of hard drive space and the "Full" will take about 77 GB.

#### 2. Authorize the Plugin

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

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

#### 4. Loading Sounds

Sounds are loaded by selecting them in the Browser displayed on the left.

#### 5. Explore and Learn

For more in-depth information, explore this Reference Guide – the primary manual for Keyscape. This guide can be viewed on any computer, mobile device, and can be searched, downloaded as a pdf, and printed for easy access to all the information you need.

#### 6. Support Resources

Online resources are available that can answer most technical questions. Please log in and visit our Knowledge Base at: <a href="http://support.spectrasonics.net">http://support.spectrasonics.net</a>

#### 7. Have Fun!

We hope you enjoy using Keyscape and make some great music with it!

-The Spectrasonics Team

## **System Recommendations**

#### System Requirements for All Users:

- 2.2 GHz Intel dual core processor or higher
- 8GB RAM minimum
- Solid State Drive recommended
- 80 GB of free hard drive space (30 GB for "Lite" install)

#### Mac Users:

- OS X 10.9 Mavericks or higher
- AU, VST 2.4 or AAX-capable host software
- Native 64-bit host\*

#### Windows Users:

- · Microsoft Windows 7 or higher
- VST 2.4 or AAX-capable host software
- Native 64-bit host\*

\*32-bit hosts are not supported for Keyscape. However, Keyscape sounds can be played within Omnisphere 2 which can operate in 32-bit hosts

### Installation

Your Keyscape installation can be done in one of two ways: "Full" (77GB), which installs the complete collection, or "Lite" (30GB), which installs a smaller selection of essential instruments for live performance.

The "Full" installation includes the complete collection of 36 models and uses 77 GB of drive space:

- · Celeste
- Chimeatron
- · Clavichord
- · Dolceola
- Dulcitone
- · Electric Harpsichord
- Harmochord
- · Hohner Clavinet C
- · Hohner Clavinet-Pianet DUO
- · Hohner Pianet M
- · Hohner Pianet N
- · Hohner Pianet T
- · JD-800 Crystal Rhodes
- LA Custom C7
- · Mini Student Butterfly
- MK-80 Digital Rhodes
- MKS-20 Digital Piano
- · Rhodes Classic Mark I
- Rhodes LA Custom "E"
- · Rhodes 1946 Pre-Piano
- · Rhodes Piano Bass
- · Toy Piano Classic
- Toy Piano Glock
- · Toy Piano Grand
- Toy Piano Saucer Bell
- · Vintage Vibe EP
- Vintage Vibe Tine Bass
- · Vintage Vibe Vibanet
- · Weltmeister Bassett I
- · Weltmeister Bassett II

- · Weltmeister Clavinet
- · Wing Tack Piano
- · Wing Upright Piano
- Wurlitzer 140B
- · Wurlitzer 200A
- · Yamaha CP-70

The "Lite" installation includes a smaller collection of 8 models that uses only 30 GB of drive space – perfect for live rigs:

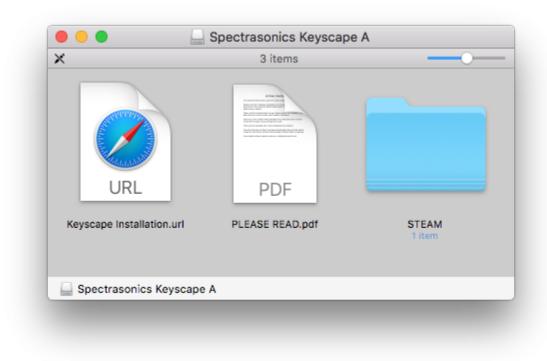
- · Hohner Clavinet C
- JD-800 Crystal Rhodes
- LA Custom C7
- MK-80 Digital Rhodes
- MKS-20 Digital Piano
- Rhodes Classic Mark I
- Rhodes LA Custom "E"
- Wurlitzer 140B

## Media Install (Mac)

1. Insert the Keyscape USB drive "A" into an available port on your Mac and open the drive image "Spectrasonics Keyscape A"

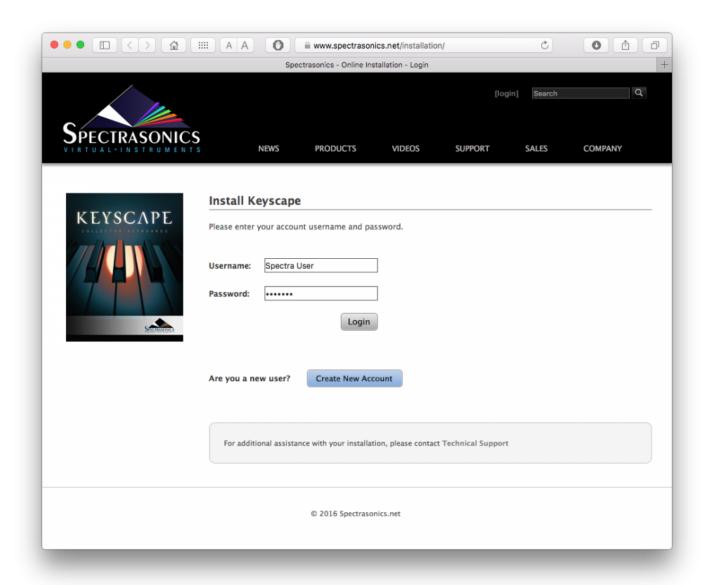


2. Open the PLEASE READ.pdf file first for information about the installation process. Then double-click the Keyscape Installation.url file.

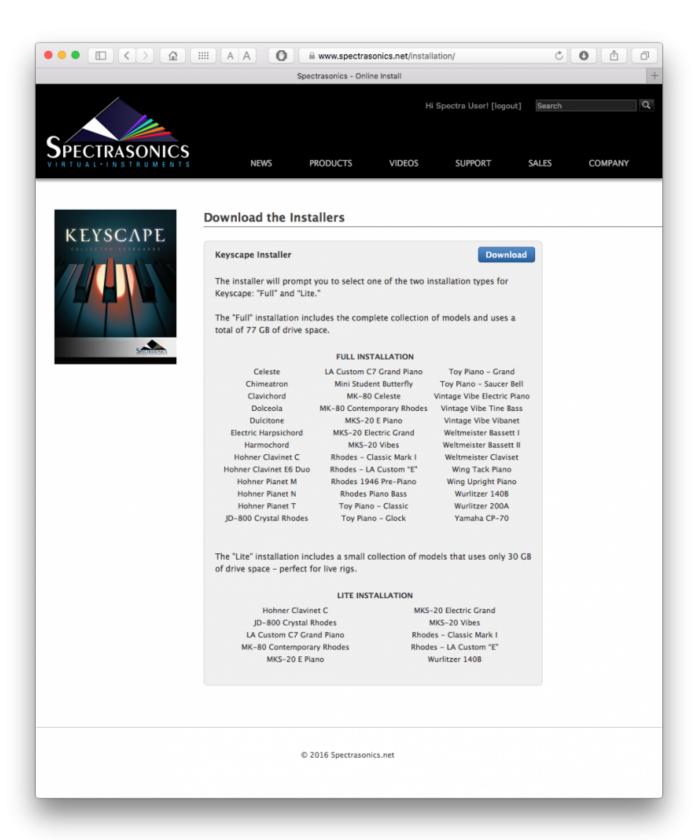


3. Once your web browser is launched, log in to your Spectrasonics user account.

OBJ

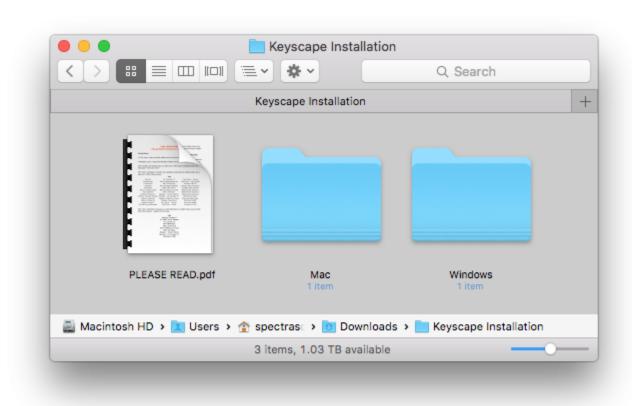


4. Select the "Download" button to download the current installers to your Mac.

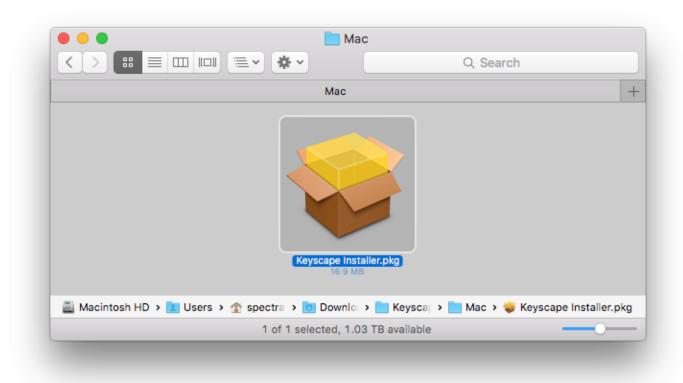


5. From your Downloads folder open the Keyscape Installation folder. Review the "PLEASE READ.pdf" for information about the installation options. Then open the "Mac" folder.

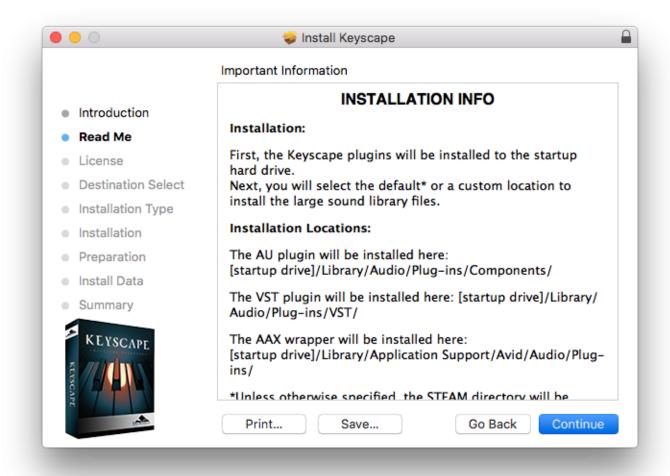
OBJ



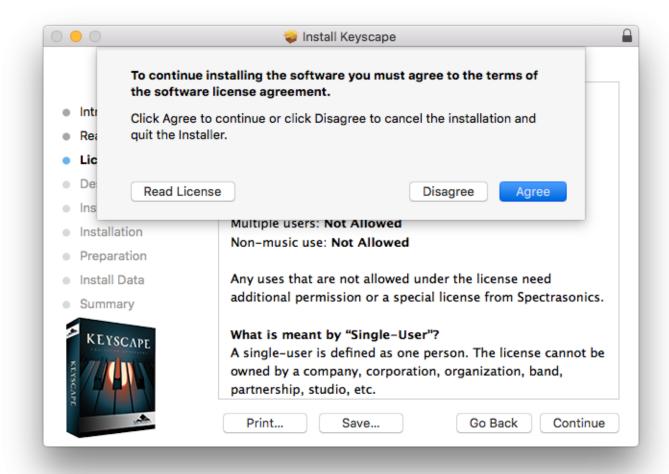
6. Double-click the "Keyscape Installer.pkg" file to launch the installer.



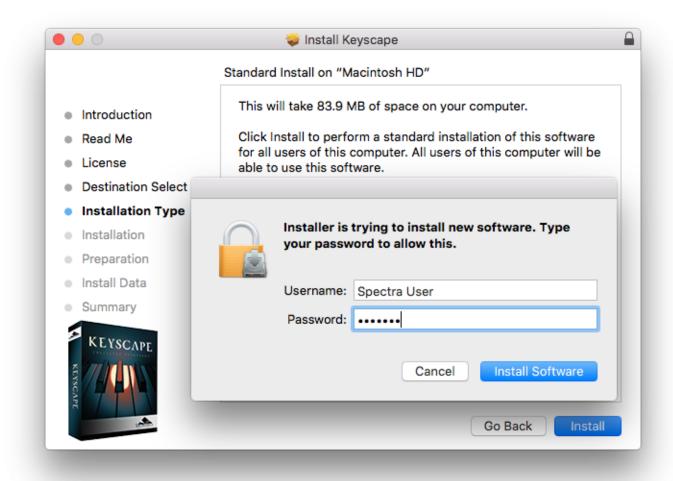
7. Select "Continue" button until you reach the "Read Me" step containing Installation Info.



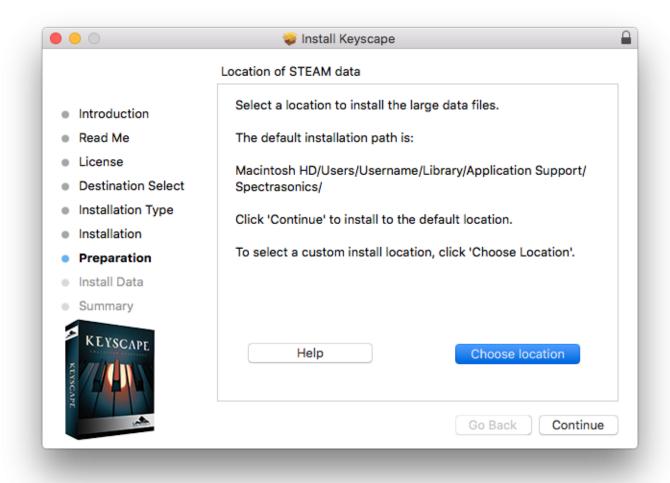
8. Review and "Agree" to the License terms to start the installation process.



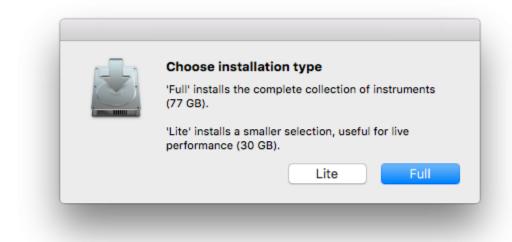
9. At the "Installation Type" step you'll need to enter your computer Username and Password to start the first stage of installation.



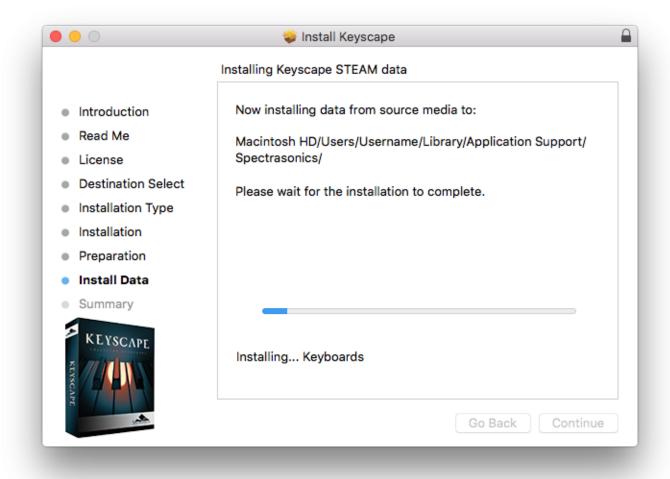
10. At the Preparation step you'll select where to install the Keyscape's core library files. By default they will be installed to your system drive or you can choose a secondary drive by selecting the button "Choose Location."



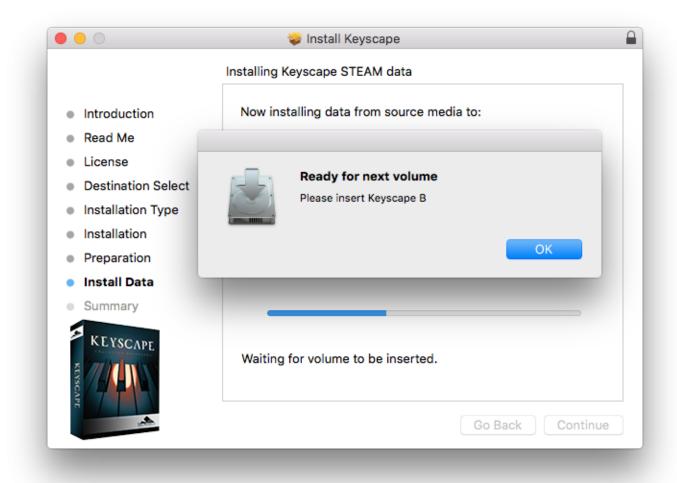
11. You'll then be prompted to choose an installation type, either the Full 77GB install or the 30GB Lite install. The Lite option will only install the files on drive A.



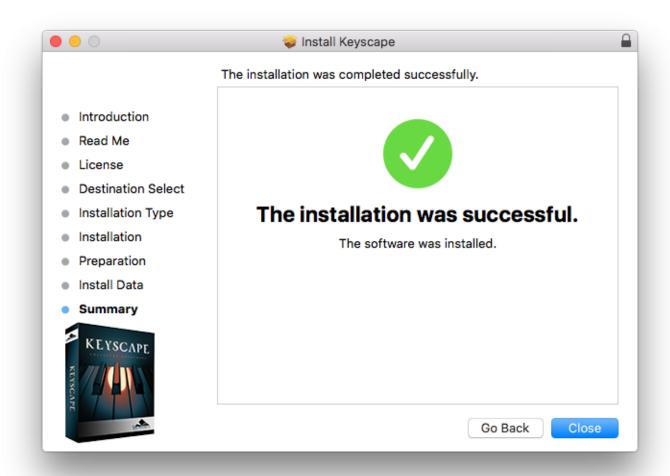
12. The library from Keyscape Drive A will now be written to your data drive.



13. If you'd selected the "Full" installation option, you'll be prompted to insert Keyscape B into your USB port. After inserting Keyscape B press "OK" in the installer.

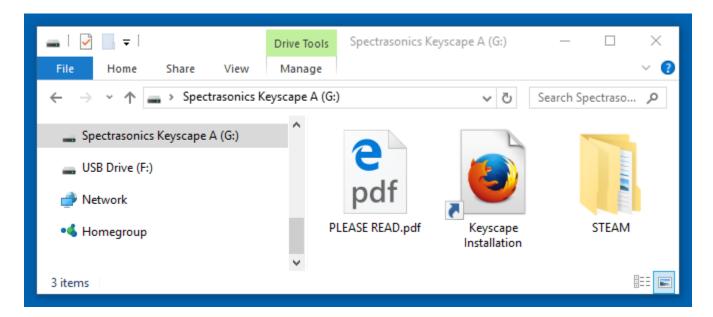


14. Let the installer copy the library files from Keyscape B until the installation is complete. Close the installer and refer to the Authorization section of the guide for authoring Keyscape.

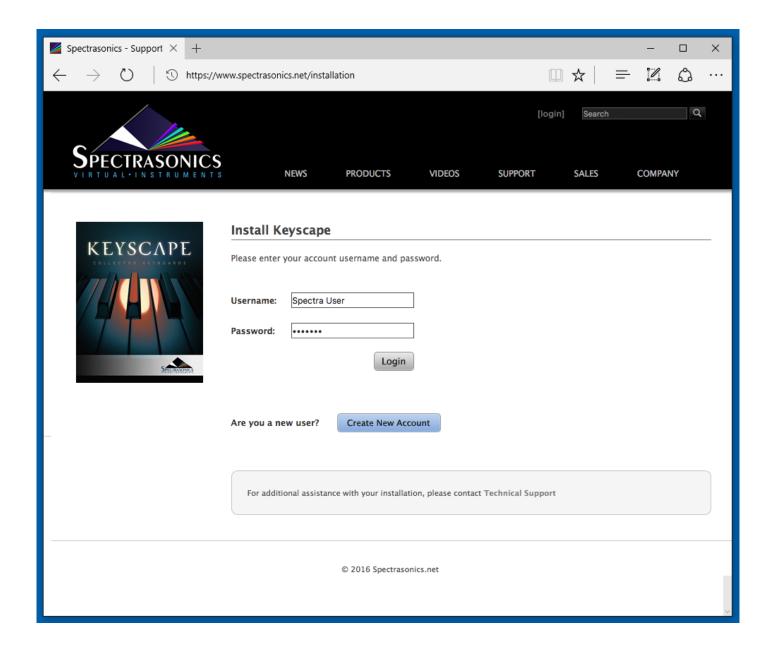


## Media Install (Win)

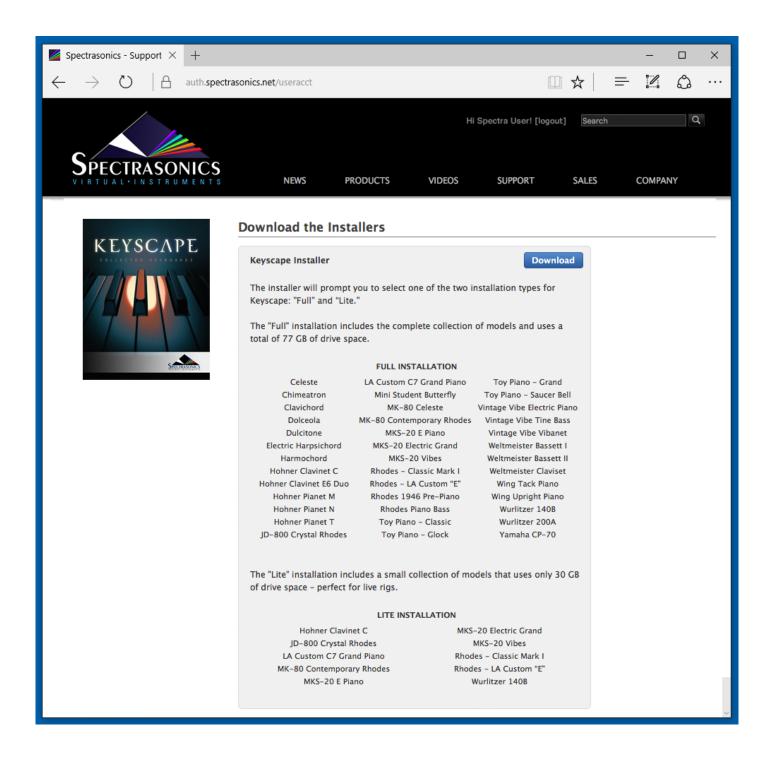
1. Insert the Keyscape USB drive "A" into an available port on your PC and open the drive image "Spectrasonics Keyscape A". Open the PLEASE READ.pdf file first for information about the installation process. Then double-click the Keyscape Installation.url file.



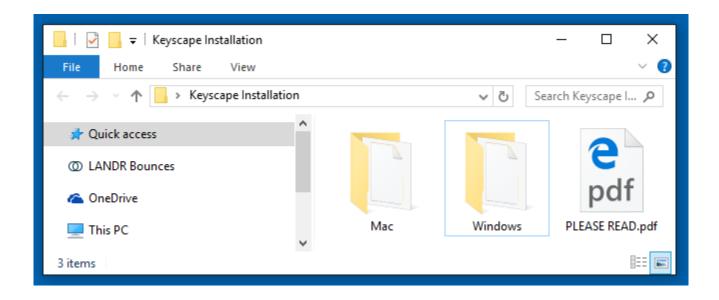
2. Once your web browser is launched, log in to your Spectrasonics user account.



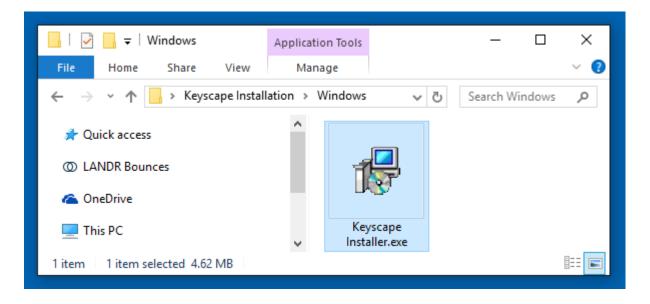
3. Select the "Download" button to download the current installers to your PC.



4. From your Downloads folder open the Keyscape Installation folder. Review the "PLEASE READ.pdf" for information about the installation options. Then open the "Windows" folder.



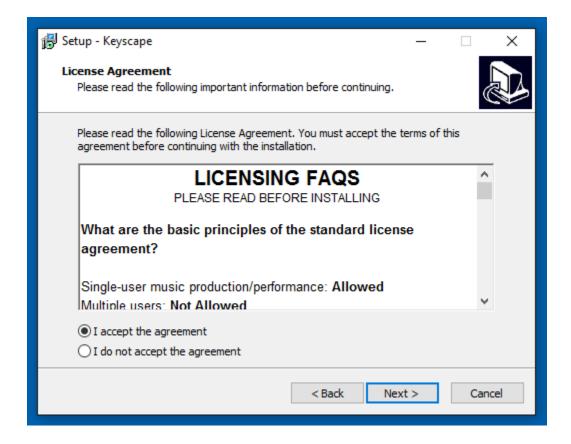
5. Double-click the "Keyscape Installer.exe" file to launch the installer.



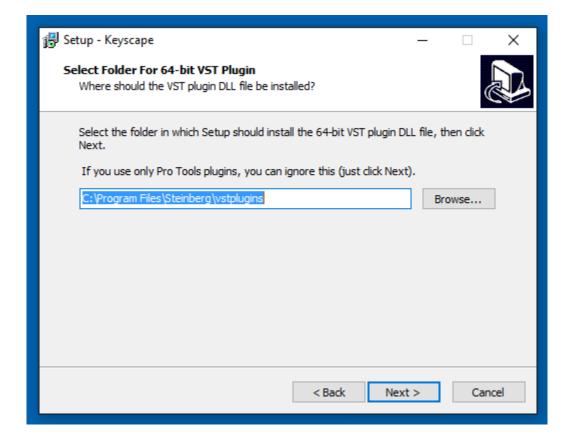
6. Begin the installation process by selecting "Next."



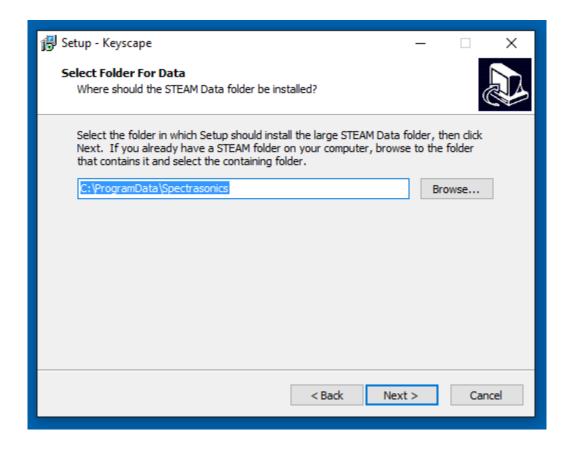
7. Review and "Accept" the License terms to start the installation process.



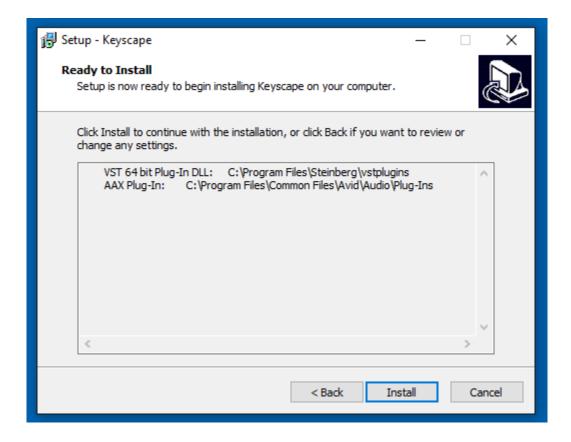
8. The installer will list the default installation path for the 64-bit version of the VST plugin (NOTE: Keyscape does not work as a 32-bit plugin.)



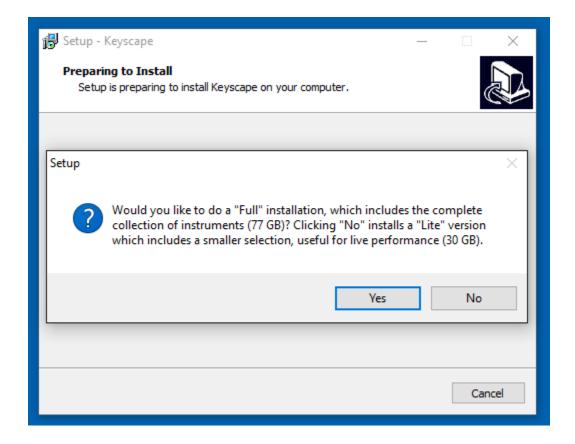
9. Then you'll see the default path for the large library files to be installed. If you wish to change the location to a secondary drive, select the "Browse..." button and choose that location.



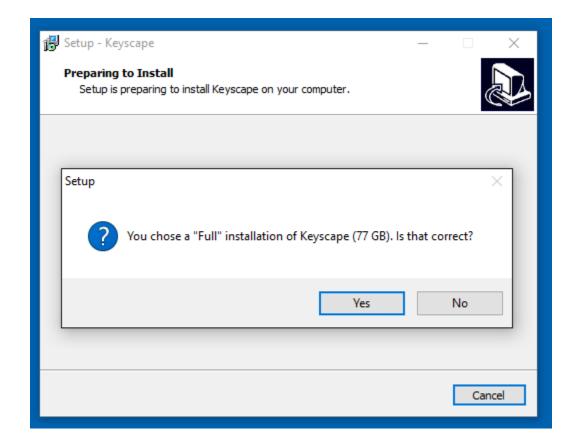
20. At the "Ready To Install" step your installation paths will be detailed. Select the "Install" button.



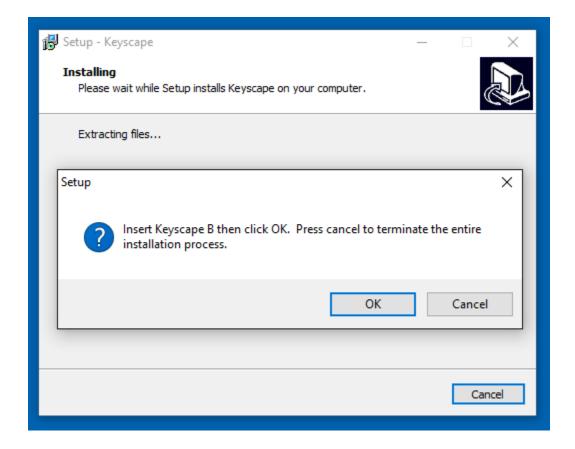
11. You'll then be prompted to choose an installation type, either the Full 77GB install or the 30GB Lite install. The Lite option will only install the files on drive A. Select "Yes" to install the "Full" option and "No" to install the "Lite" version.



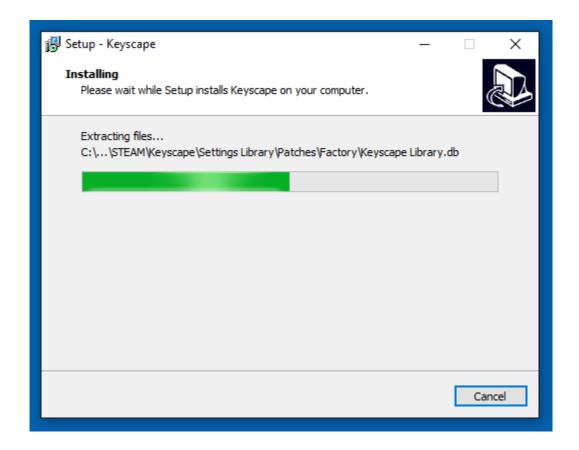
12. The installer will then verify which installation type you've selected.



13. If you selected the "Lite" option, the installation will be completed after the data from drive A is installed. If you selected the "Full" installation option, you'll be prompted to insert Keyscape B into your USB port. After inserting Keyscape B press "OK" to continue the installation.



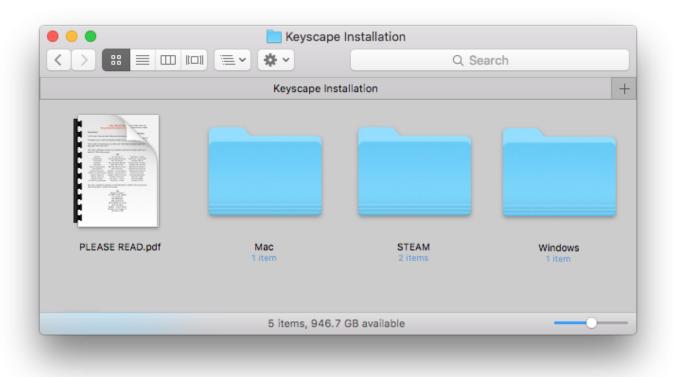
14. Let the installer copy the library files from Keyscape B until the installation is complete. Close the installer and refer to the Authorization section of the guide for authoring Keyscape.



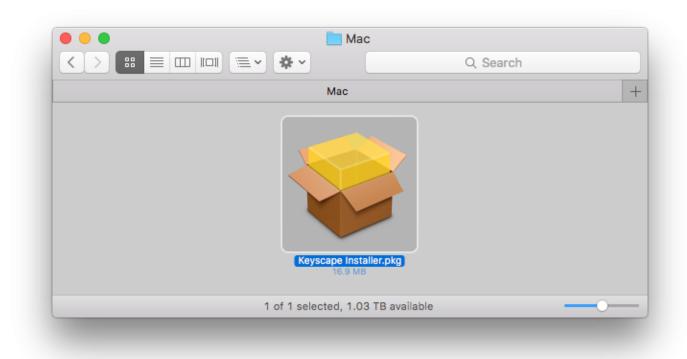
## **Download Install (Mac)**

Keyscape is available as a download as an installation option through our <u>Techshop</u>. Once you download Keyscape via the Download Manager, follow this set of instructions to install it on your Mac system. You'll need 77GB of free space available on your hard drive for the "Full" installation and 30GB if you choose the "Lite" installation.

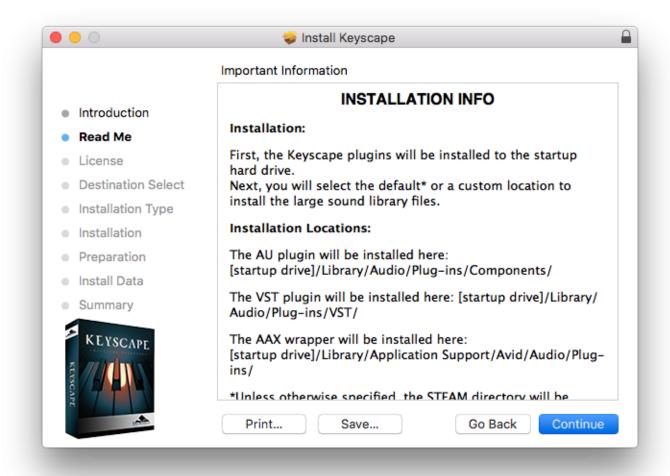
1. Open the folder Keyscape Installation. Refer to the PLEASE READ.pdf file first for information about the installation process.



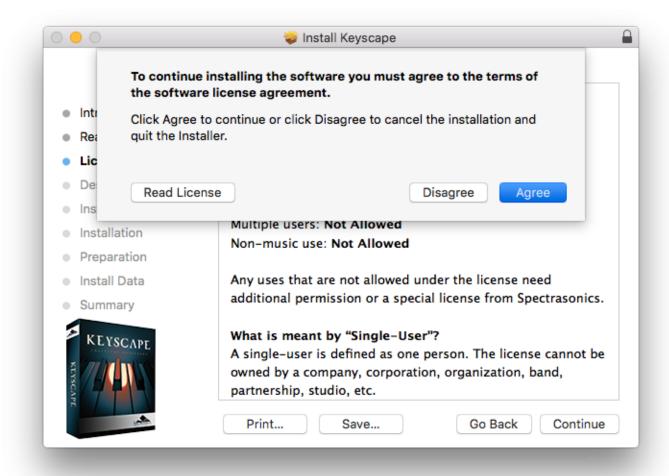
2. Open the Mac folder and double-click the "Keyscape Installer.pkg" file to launch the installer.



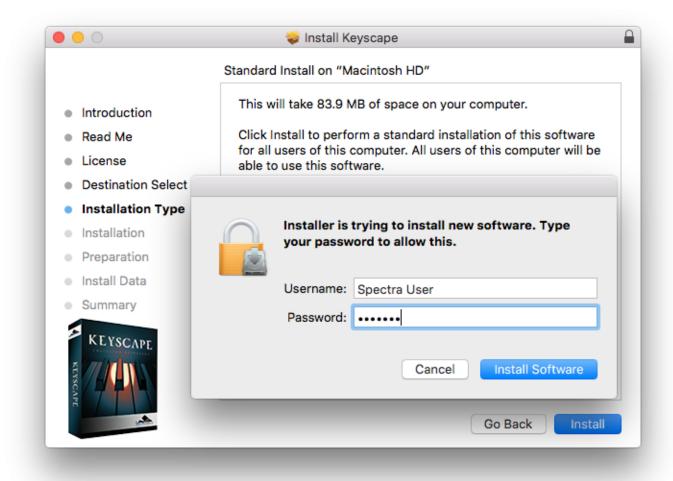
3. Select "Continue" button until you reach the "Read Me" step containing Installation Info.



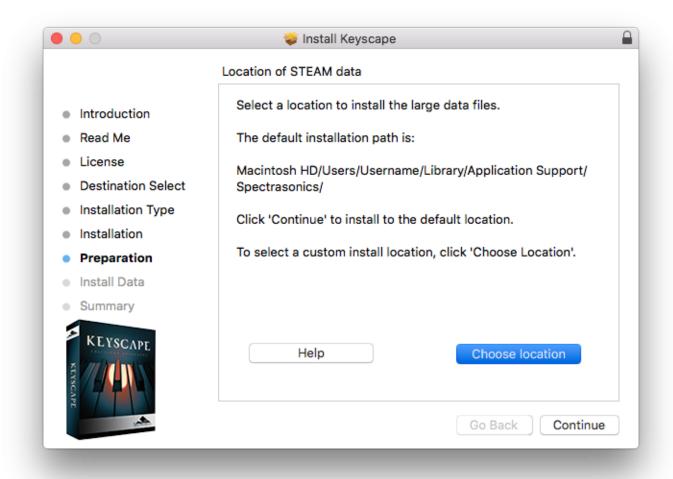
4. Review and "Agree" to the License terms to start the installation process.



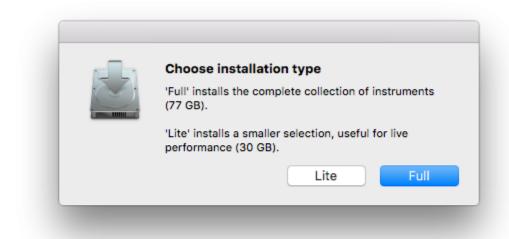
5. At the "Installation Type" step you'll need to enter your computer Username and Password to start the first stage of installation.



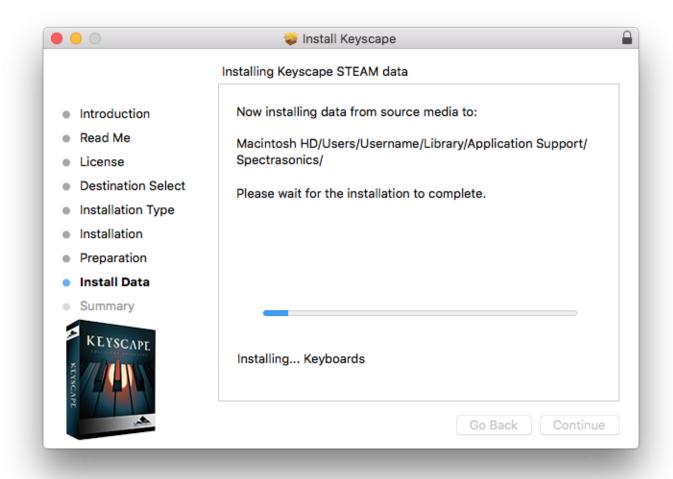
6. At the Preparation step you'll select where to install the Keyscape's core library files. By default they will be installed to your system drive or you can choose a secondary drive by selecting the button "Choose Location."



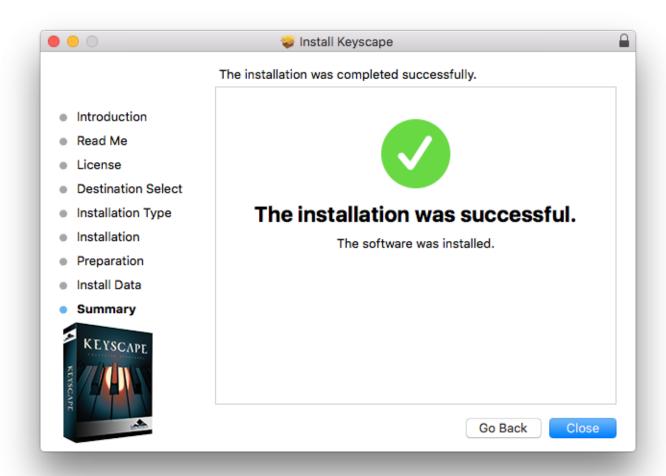
7. You'll then be prompted to choose an installation type, either the Full 77GB install or the 30GB Lite install.



8. The library from Keyscape will now be written to your data drive.



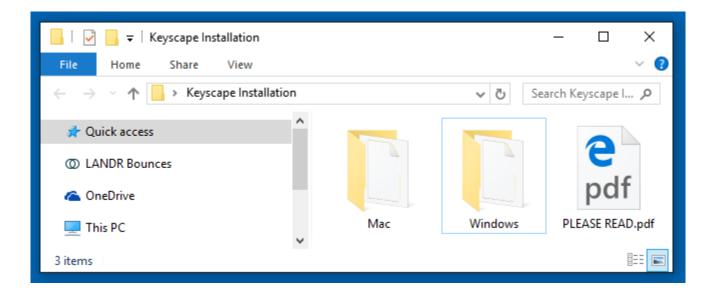
9.Close the installer and refer to the <u>Authorization</u> section of the guide for authorizing Keyscape.



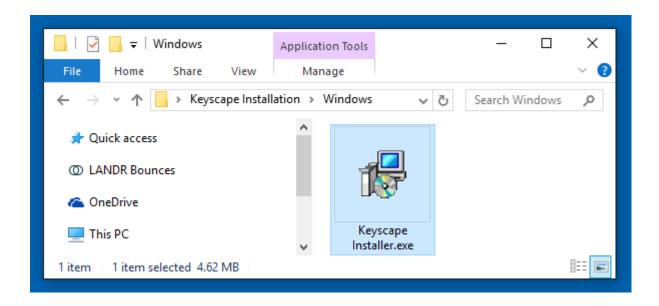
# **Download Install (Win)**

Keyscape is available as a download as an installation option through our <u>Techshop</u>. Once you download Keyscape via the Download Manager, follow this set of instructions to install it on your Windows system. You'll need 72GB of free space available on your hard drive for the "Full" installation and 28GB if you choose the "Lite" installation.

1. From your Downloads folder open the Keyscape Installation folder. Review the "PLEASE READ.pdf" for information about the installation options. Then open the "Windows" folder.



2. Double-click the "Keyscape Installer.exe" file to launch the installer.



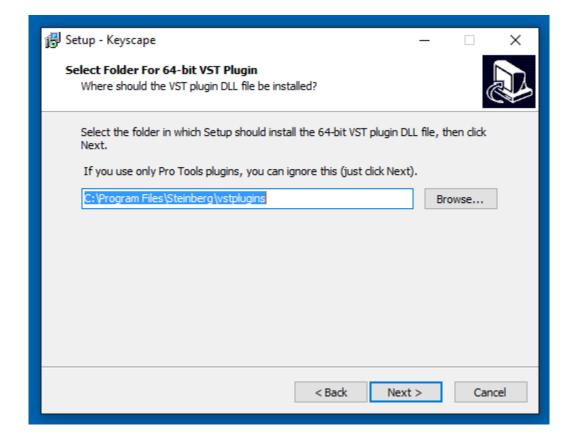
3. Begin the installation process by selecting "Next."



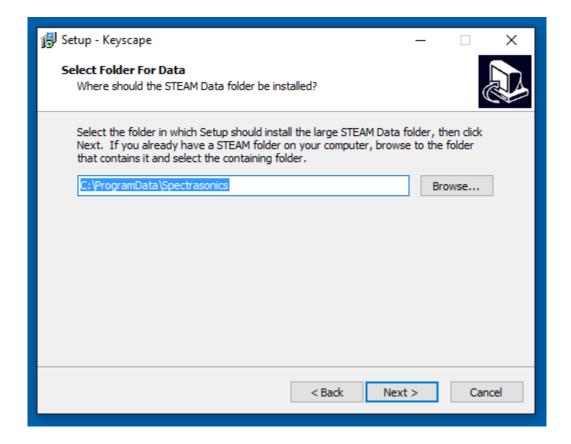
4. Review and "Accept" the License terms to start the installation process.



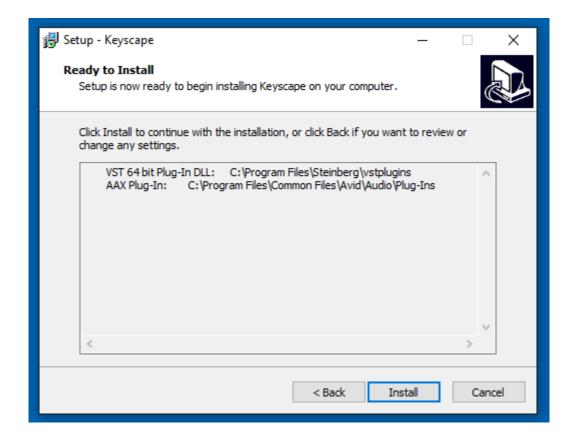
5. The installer will list the default installation path for the 64-bit version of the VST plugin (*NOTE: Keyscape does not work as a 32-bit plugin*.)



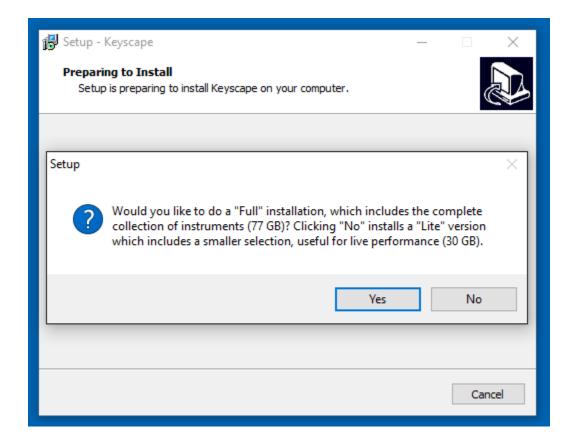
6. Then you'll see the default path for the large data files to be installed into.



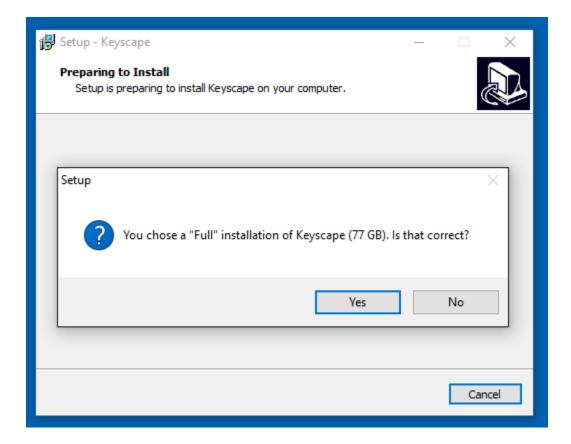
2017. At the "Ready To Install" step your installation paths will be detailed. Select the "Install" button.



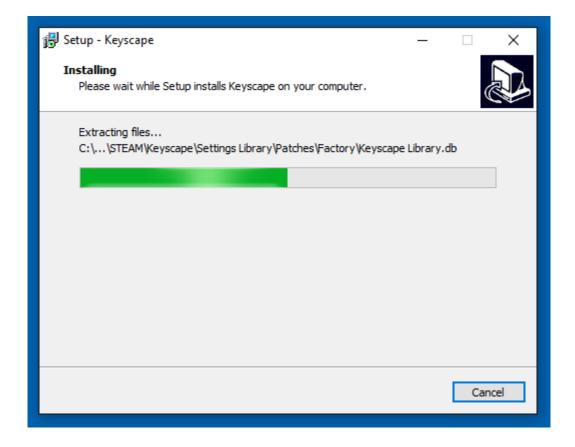
8. You'll then be prompted to choose an installation type, either the Full 77GB install or the 30GB Lite install.



9. The installer will then verify which installation type you've selected.



10. The library from Keyscape will now be written to your data drive. Then close the installer and refer to the Authorization section of the guide for authoring Keyscape.



11. Then close the installer and refer to the <u>Authorization</u> section of the guide for authoring Keyscape.



## **Authorization**

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

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

Your computer must be connected to the internet in order to authorize Keyscape.

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



You will now see the Keyscape Authorization System window:



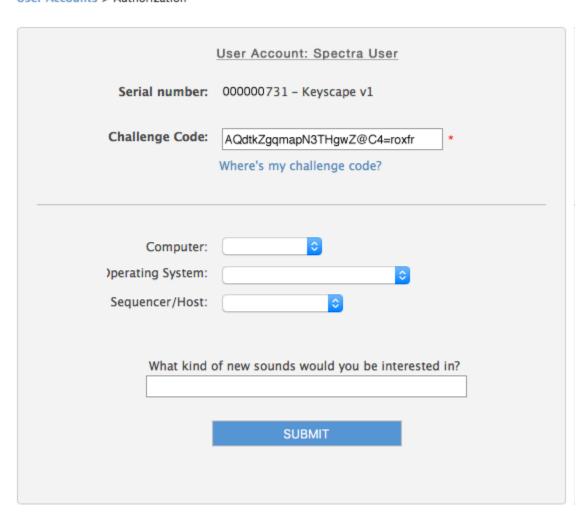
2. Click the COPY button to copy the challenge code. Log in to the Spectrasonics website with your User Account name and password:

### http://www.spectrasonics.net/authorization

3. Select the link next to your Keyscape serial "Keyscape Authorization". 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



4. 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

User Account: Spectra User

Authorization Successful!

Here is the Response code to authorize Omnisphere:

wFxSY@P6bEV8qBHRya@85C5DDVdAVo4A8VQ=yenCqQmT6BcKMGy+/hMR?i4+LVgmXD6Wg@AVEcpWqph:vSKj2Hfp9
PUcuLvY4k3HHd=yaKZC EJ7Bj6qfRdkQ%syjLsC@f/mNk5ABdwk 5An@H@y9399igTX2eQsFmpu Zdr:jXMA QdtkZ3THgwZ
@C4= roxfrmB3HgXGSHfFhwD?ydvzo2umdV:Gx9SJdRw k5TutDcTfzC:m+aqwwfF+LBF YiqgkZd+GGE:J@z4U9bMUQG=TggqmapN
py33VyArYaL@zh:LQEP452piMRm:Y:fCv7ZxnpxEHhS5 Cj6d/QLY9i/s6/w2Kgw

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!

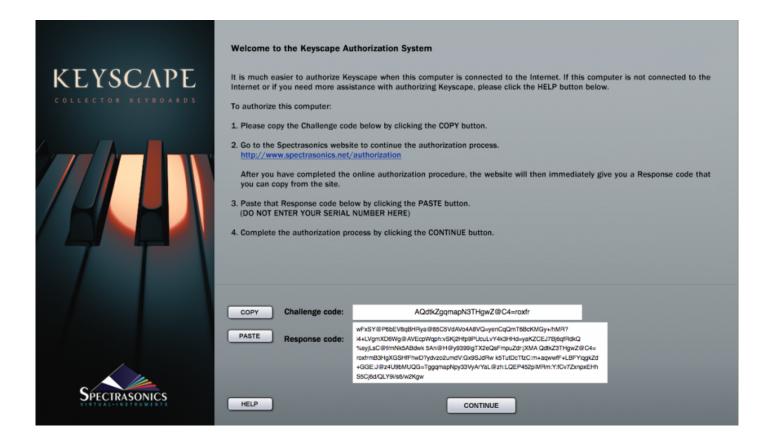
We'll send you a verification email with a copy of your response numbers and registration info.

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

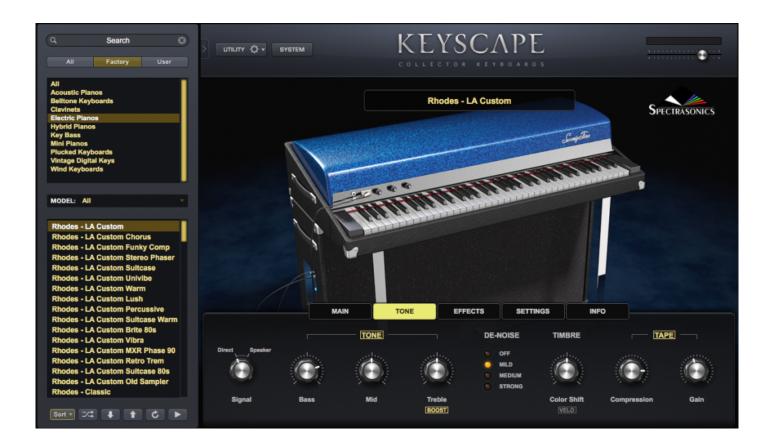
info@spectrasonics.net

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!

5. Return to Keyscape. Click the PASTE button and the Response Code will now be displayed.



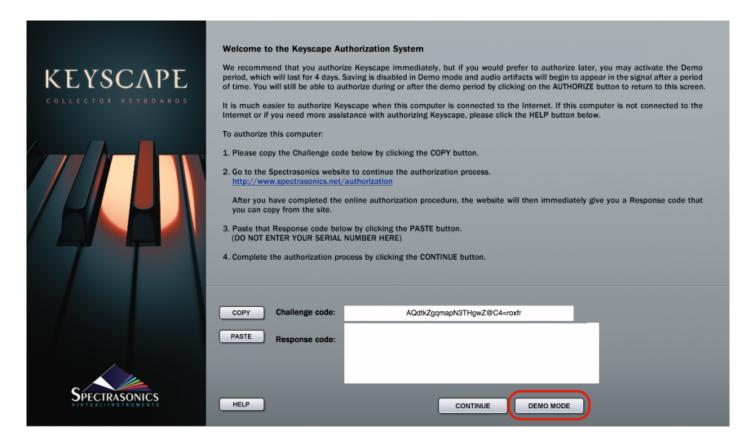
- 6. Click the CONTINUE button.
- 7. Remove Keyscape from your host sequencer.
- 8. Re-insert a new instance of Keyscape into your host. Keyscape will now be authorized and fully-functional.



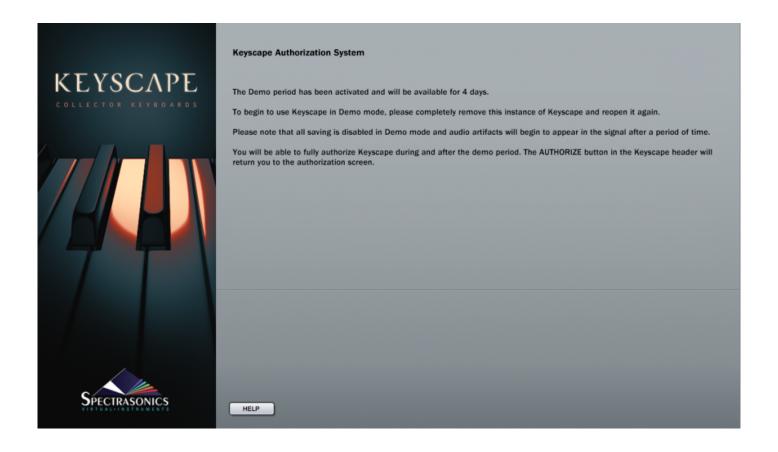
### **Demo Mode**

We recommend that you <u>authorize</u> 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 Keyscape 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:

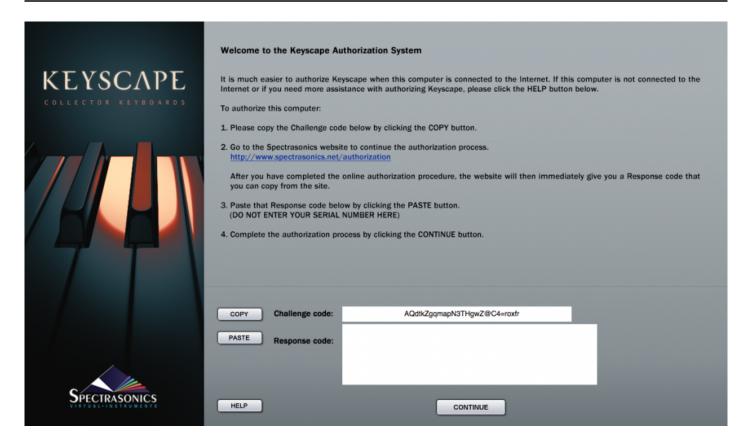


Go back to the host software and completely remove this instance of the Keyscape plug-in. Reopen it and you will be in Demo Mode. It will say Demo Mode at the top of the plug-in and there will be an Authorize button below the Utility Menu button.



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

## **Authorization Troubleshooting**



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

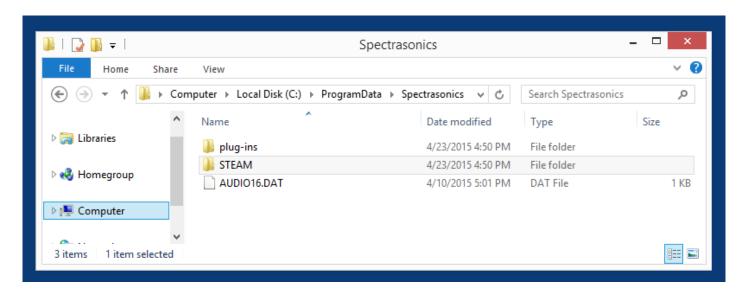
While in <u>Demo Mode</u>, if you accidentally press the Authorize button, simply close the interface window and reopen it.

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

## **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.

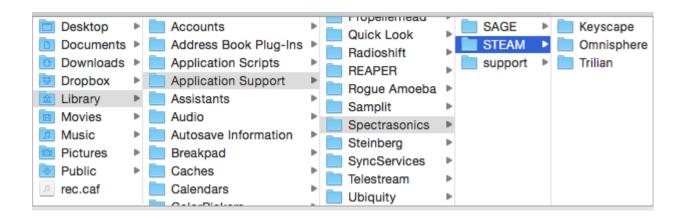
### Windows - Moving the STEAM directory after installation



OBJ

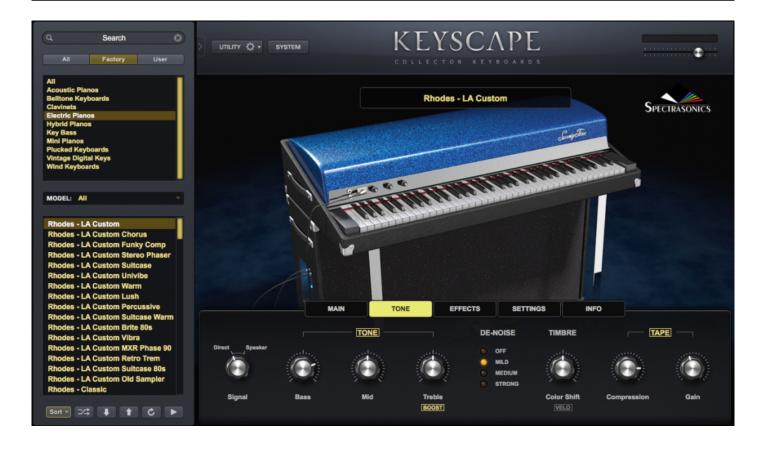
- Drag or copy the STEAM folder from your installation drive (C:\ProgramData\Spectrasonics) to the
  hard drive location of your choice. This can be another drive partition, a secondary internal drive or an
  external hard drive. Due to the streaming requirements of Keyscape, a Solid State Drive is
  recommended.
- Next, right-click the STEAM folder in the new location to create a "Shortcut To STEAM."
- Next, copy the shortcut to C:\ProgramData\Spectrasonics.
- Finally, make certain to remove the "Shortcut To" from the name (including removing the spaces), leaving the folder shortcut named STEAM.

### Mac OS X – Moving the STEAM directory after installation



- Drag or copy the STEAM folder from your installation drive (For Example: 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. Due to the streaming requirements of Keyscape, a Solid State Drive is recommended.
- Next, hold Command and Option on the keyboard, click and drag the STEAM folder to the desktop to create an alias of the folder named STEAM.
- Next, move the STEAM alias from the desktop to Macintosh HD/Users/Username/Library/Application Support/Spectrasonics.

## Standalone Use



Keyscape was designed to work as a plugin which closely integrates within your main sequencing application and computer.

Alternatively, Keyscape may also be used with a simple host application to work as a sound module for live performance.

You can also use Keyscape on dedicated hardware music computers like the Open Labs NEKO Keyboard, which is essentially a PC dedicated for music performance.

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

Keyscape is a plugin and does not function as a standalone application. It must function as a Virtual Instrument plugin within a host regardless of the computer on which it is installed. There are many free and inexpensive VST and Audio Unit host applications that will run Keyscape.

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

#### **Latency and Timing accuracy**

When operating on a slave computer, the latency between MIDI and Audio interfaces will cause Keyscape to play later than it would on the main sequencing computer, so you will need to compensate for the latency by lowering the hardware buffer size. Also, when Keyscape is used on the main computer, the timing of playback is extremely tight – sample-accurate in most cases. On a slave system, this type of accuracy is not currently possible.

# **Checking For Updates**

The latest versions of the software, Soundsource library, and Patch library for Keyscape can be found on our website at:

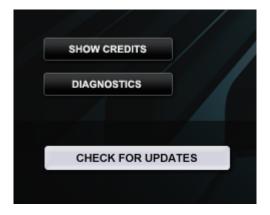
#### http://www.spectrasonics.net/updates

You can quickly check for updates directly from Keyscape.

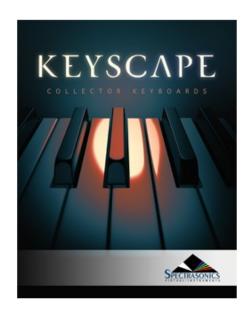
Simply click the Spectrasonics logo to reveal the Splash page.



In the middle left, select the button "Check For Updates."



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



# **System Status**

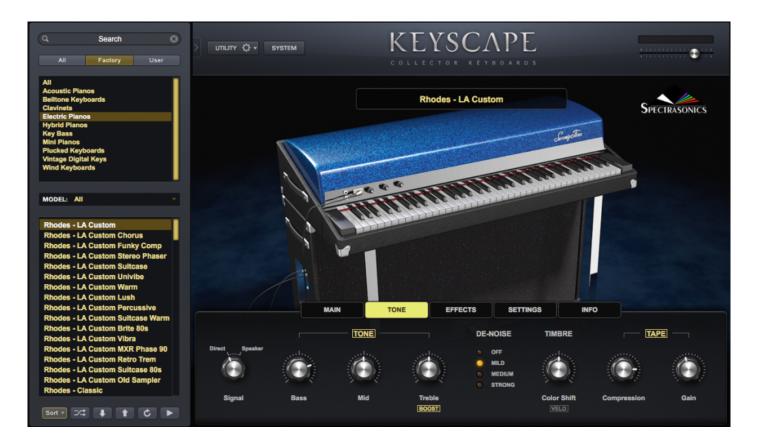
	Your System	Latest Version	Status
Software	1.0.0f	1.0.0f	•
Soundsources	1.0c	1.0d	•
Patches	1.0d	1.0d	•

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

**Get Updates** 

### Concepts

#### Introduction



Keyscape is an extraordinary virtual instrument that features the largest selection of collector keyboard instruments in the world. From "holy grail" pianos to stunning keyboards you didn't even know existed, this is a keyboardist's dream come true. Each of the 36 rare instruments has been carefully restored and then deeply multi-sampled for best-in-class sound. These sought-after and highly dynamic sounds will inspire you to PLAY!

Not only are the sounds extremely authentic, the Custom Controls presented for each patch allow you to go far beyond the original sound. Keyscape's intuitive interface showcases useful performance controls and high quality creative effects which have been specially crafted for each patch. The 450 included patches showcase the remarkable versatility and ability to dramatically customize these iconic sounds to your music.

Along with the hundreds of patches based on the 36 instrument models, Keyscape includes special hybrid "Duo" sounds which combine two of the instruments to create something entirely new. The unique timbre of these Duo patches make them some of the most creative and inspiring sounds in Keyscape!

While it's every performing keyboardist's dream to have the very best instruments instantly available anywhere, Keyscape is equally useful in the studio for producers and composers. Since these instruments can be easily transformed into amazing "unreal" sounds with the powerful STEAM Engine® under the hood, Keyscape easily turns these coveted instruments from History into innovative new sounds of the Future.

# **STEAM™** Engine



Keyscape uses the STEAM™ Engine – the core technology created by the Spectrasonics in-house development team, and is the basis for all Spectrasonics performance instruments.

Virtual instruments built with the multi-timbral STEAM<sup>™</sup> Engine offer a wide variety of development possibilities in hybrid synthesis and control capabilities. including high-resolution Streaming Sample Playback, Integrated FX, Variable Waveshaping synthesis, Granular synthesis, FM synthesis, polyphonic Ring Modulation, Timbre Shifting, and a comprehensive Flex-Mod<sup>™</sup> 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.

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.

All our 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.

Satellite instruments, such as Keyscape and Trilian, are powered by STEAM<sup>™</sup> and can be opened inside Omnisphere 2, our flagship synthesizer. When Keyscape is used inside Omnisphere 2, users can unleash the unlimited potential of the STEAM<sup>™</sup> Engine by applying Omnisphere's powerful features to explore endless new sonic possibilities and combinations!

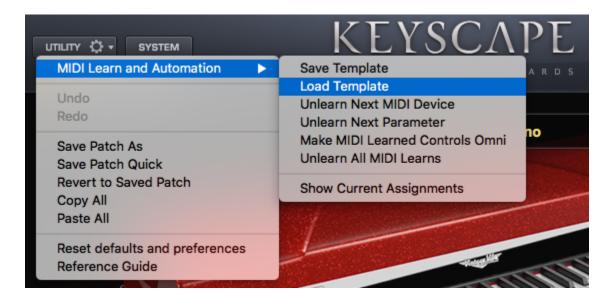
### **Utility Menu**



The Utility Menu is where you can save Patches, Reset Defaults, Copy and Paste Patches, as well as access the Reference Guide and Tutorial Videos and Undo / Redo changes.

The Utility Menu is divided into several sections.

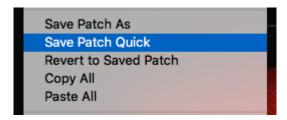
The first section contains a MIDI Learn and Automation sub-menu.



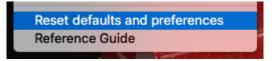
The second section provides Undo and Redo functions.



The third section provides various Save, Copy, & Paste functions for Patches.



The fourth section provides a "factory reset" option and gives you direct access to the Keyscape Reference Guide and Tutorials.



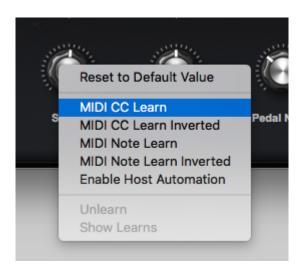
### **Automation & MIDI Learn**

#### **Understanding Parameter Control**

There are two ways to control parameters in Keyscape: 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 control and what type of physical controller (if any) you wish to use to control the parameters. Here are some guidelines:

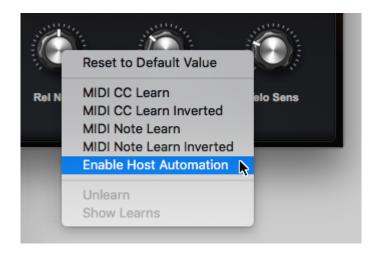
#### **MIDI Learn**



MIDI Learn enables full remote control of Keyscape's parameters from MIDI Devices. Almost any parameter in Keyscape can be MIDI-Learned. MIDI Learn assignments are saved 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 plugin can also be saved separately and loaded as template presets.

Right/Control-clicking a parameter in Keyscape opens a contextual menu that offers several MIDI Learn options. To learn more about MIDI Learn, please refer to the "MIDI Learn" section.

#### **Automation**



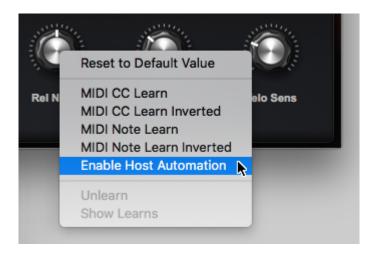
With Automation messages, changes made to parameters using the mouse can be recorded in the host software. Parameter adjustments are typically written to an automation track, and in some hosts, you can draw the automation curves directly into the track. This method is most useful for mixing and fine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

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

### **Host Automation**

All MIDI-learnable parameters in Keyscape 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 Keyscape.

#### **Enabling Host Automation**



To make a Host Automation assignment for a parameter in Keyscape, 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 Keyscape interface can be recorded in real time in the host software.

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



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

#### **Technical Considerations**

Each automated parameter in Keyscape is assigned a unique Automation ID. 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 Keyscape 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 plugins controlled by the surface.

### **MIDI Learn**

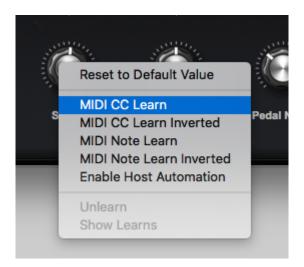


MIDI Learn is an immensely powerful feature that allows you to remote control virtually any on-screen parameter with a MIDI controller. It is a very flexible system that can adapt to the MIDI device you use and allows changes made to any learned parameter to be recorded by the host application.

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

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

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



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

#### **Key MIDI Learn Concepts**

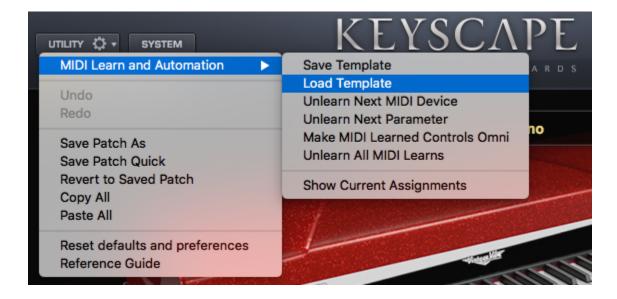
There are a few key MIDI Learn concepts that will help to understand the system's flexibility:

- All learnable parameters can be controlled using MIDI Learn, and are also available for use with Host Automation.
- A single physical control can be paired with multiple parameters in Keyscape. For example, a single physical knob could be setup to control both Reverb Amount and Reverb Time.
- Assignments can be made to receive in "Omni mode" so they respond to any incoming MIDI channel (e.g. MIDI Omni mode reception). This is useful when you want Keyscape to respond to an external control regardless of the current incoming MIDI channel.
- MIDI Control Change, Notes and Program Change messages are supported, but Pitch Bend and Aftertouch messages are not currently supported in the MIDI Learn system.

### **MIDI Learn Menus**

#### **UTILITY MENU**

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



#### **MIDI Learn Template**

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

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

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

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

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

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

Since more than one parameter can be assigned to a single controller, 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 Keyscape 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**

Keyscape 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 MIDI Learn settings to respond to any incoming MIDI channel (e.g. MIDI Omni mode reception). This is very useful when you want Keyscape to respond to an external control regardless of the current incoming MIDI channel.

#### **Unlearn All MIDI Learns**

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

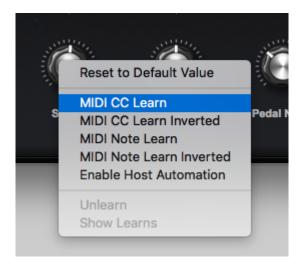
#### **Show Current Assignments**

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

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

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

#### **CONTEXTUAL MENU**



Contextual Menus provide parameter-specific MIDI Learn and Host Automation options.

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 Keyscape 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 Keyscape parameter. However, the values will be inverted. For example, as you increase the value of the physical control, the value of the Keyscape parameter will decrease.

#### **MIDI Note Learn**

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

NOTE: When you MIDI-Learn a variable range parameter (such as a knob or slider) using MIDI Note Learn,

the Note On/Off messages will toggle the parameter to its maximum and minimum positions respectively. When using MIDI Note Learn Inverted, the values are reversed, so Note On would toggle to the minimum value, Note Off would toggle to the maximum value.

#### Unlearn

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

#### **Show Learns**

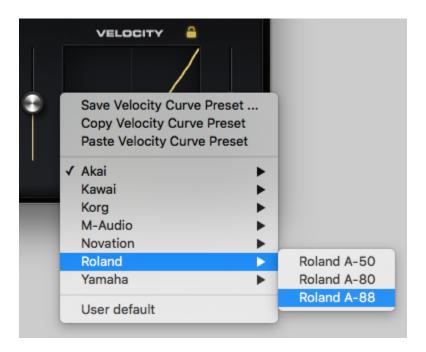
Use this option to show all MIDI Learn assignments for this parameter. A pop-up dialogue will open showing all CC and/or Note numbers assigned, or will notify you if there are no current assignments.

# **Controller Keyboard Setup**

The highly dynamic and expressive instruments in Keyscape have been recorded with incredible depth. To fully access the intricately detailed sounds you now have at your fingertips, it is important to set Keyscape to respond properly to your keyboard controller. This adjustment can make a dramatic difference in the playability and response of the instruments.



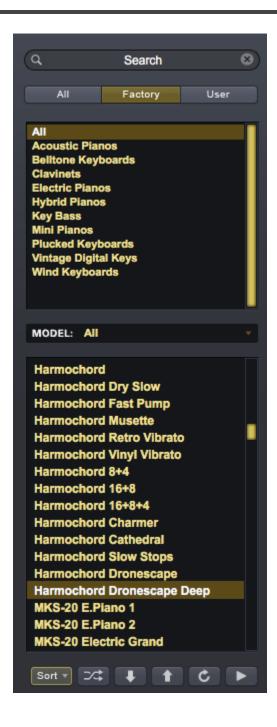
We have included a variety of velocity curves optimized specifically for the most popular keyboards and controllers. Select the curve that matches your keyboard from the VELOCITY section pull-down menu in the SETTINGS tab.



You can LOCK the preset to maintain that curve as you browse through Patches. It will then be automatically loaded every time you load Keyscape.



### The Browser



Keyscape's Browser is displayed in the left-most area of the interface for convenient Patch-browsing with the Custom Controls still easily accessible.

The Browser was designed to provide an intuitive and convenient way to quickly find exactly what you need from this large library of sounds. You can select to browse in Factory or User Patches, Search for a certain Patch or keyword, filter by Type or display only the Models you wish to browse. You can choose the way the results are sorted, shuffle and step through them. The Browser also has controls for refreshing the results after making changes to the Patch library and audition sounds when you don't have a MIDI controller available. Using these features, the Browser adds a powerful and important feature to the workflow in Keyscape.

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.



# **Browsing Sounds**

#### Header

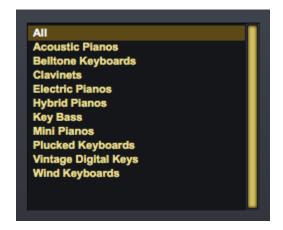


Keyscape's Browser Header contains the Search field and Directory tabs for selecting which sounds are displayed.

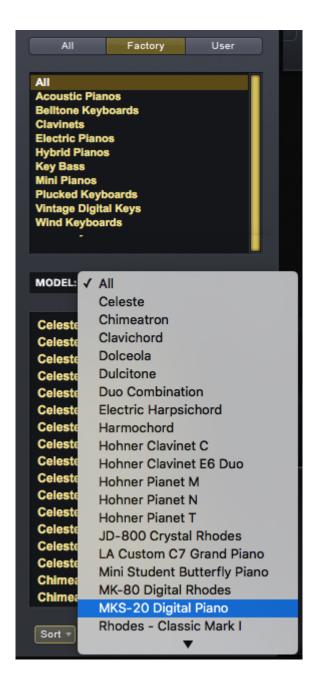
Select Factory to show only the Patches that come with Keyscape. Select User to show any Patches you have created and saved, or select All to display both Factory and User Patches.

#### Category, Model, and Results

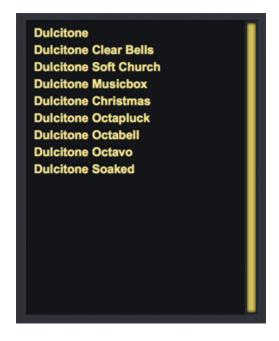
The top pane displays the Types.



The middle pane lets you choose the Model from a pull-down menu:



After filtering with Category and Model, the list of results is displayed in the lower area of the Browser.



#### **Footer**



Keyscape's Browser Footer provides additional sorting options, a Shuffle button, up and down stepper arrows, a "Refresh" button, and an Audition button.

Information about the loaded Patch is displayed by selecting the INFO tab. Here you will find performance tips and the history of the model.

# **Displaying & Navigating Results**



There are numerous options available for navigating sounds and to change how they are organized and displayed. These tools let you sort sounds in different ways, including by Ratings. Because there are so many sounds to explore, they will help you delve deeper into the Library.

#### **Sort Menu**



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

#### **Featured**



We're continually adding new sounds to Keyscape and to make it easier to find the best examples of the newest sounds in the 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, if you select Electric Pianos in the Category column with the Featured sort option selected, you'll see a specially selected list of Featured Electric Pianos sounds displayed at the top of the list.

#### **A-Z & Z-A**

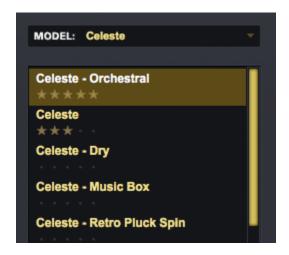


The A-Z & Z-A options provide a simple way to reverse the alphabetization of the sounds. Select Z-A to reverse the order, and A-Z to restore it.

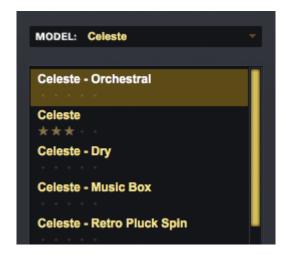
#### **Ratings**



Select "Ratings" from the Sort Menu to reveal the space between Patch names where you can rate Patches from 1-5 stars. When you later select Ratings, the rated Patches show up with the highest-rated Patches at the top.



You can UN-rate a Patch by Command / Control-clicking on the stars.



#### **Shuffle Button**



It's a common error to browse only the sounds near the beginning of the list. Every time the Shuffle button is selected, the order of the sounds will be randomized. This button is useful for keeping the list of sounds fresh and inspiring, instead of always showing the same sounds at the top of the list.

#### **Browser Stepper Buttons**



The Stepper buttons step through the sounds in the Browser one at a time. When you step to the next sound, it will be selected and loaded.

The Browser Stepper buttons are controlled from the up and down arrows of your keyboard. 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 System page.

TIP: You can MIDI Learn the Browser steppers to switches on your MIDI controller to speed up the auditioning process.

#### Refresh



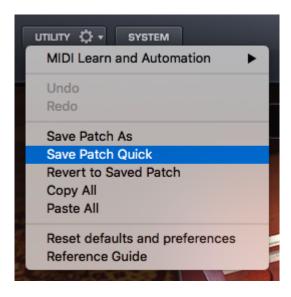
When changes are made to the library outside of the Browser (e.g. manually moving User Patches in the Mac Finder or Windows Explorer), use the Refresh Button to update the Browser display.

#### **Audition**



Press the Audition button to play Middle C in any Patch that is loaded.

# **Saving & Managing Sounds**



Keyscape offers a flexible way to manage custom Patches. You can create custom sounds that can be searched, filtered or selected using the Browser.

User Patches in Keyscape are saved in the following directory:

#### Spectrasonics/STEAM/Keyscape/Settings Library/Patches/User/

User Patches can be organized into subfolders to make management simpler.

#### **Saving Patches**



Selecting the Save Patch option from the Utility Menu will open a File Save dialogue. Give it a name, select or create a folder under "User" where you want to save it and click SAVE. You can cancel the save process by clicking CANCEL.

NOTE: Patches must be saved into a Category folder inside User Patch Library – you cannot save at the User folder level. There is no need to press the "Refresh" button in the Browser after saving a new Patch.

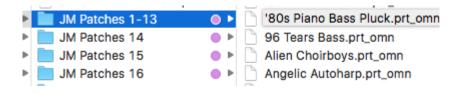
#### **Managing Patches**



The Browser is designed to handle all aspects of searching, browsing, and loading sounds. User-created Patches 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 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 at: Spectrasonics/STEAM/ Keyscape/Settings Library/Patches/User/

#### Renaming, Relocating and Deleting Patches



To rename, move, or delete a user-saved Patch, you must use the Mac Finder or Windows Explorer. Navigate to the User folder following this path:

#### Spectrasonics/STEAM/Keyscape/Settings Library/Patches/User/

Once you have located the desired files and renamed, moved, or deleted them, you can reflect the changes by clicking on the "Refresh" button (the circular arrow in the footer of the Browser).

## Keyboards

KEYSCAPE™ is an extraordinary new virtual instrument featuring the largest selection of collector keyboards in the world. From "holy grail" pianos to stunning keyboards you didn't even know existed, this is a keyboardist's dream come true. Based on the Spectrasonics STEAM™ Engine, Keyscape has been designed as a flexible and expressive collection of some of the most rare and desirable keyboard instruments ever made – some over a century old.

Ten years in the making, each of these sought-after keyboards was carefully restored and then deeply multisampled by the renowned Spectrasonics Sound Development Team. The process began by going to the ends of the earth to find these rare and incredibly special instruments and then to restore each one of them with the top technicians and expert craftsmen from each discipline. We spent years redoing them from scratch – again and again until they were totally "right."

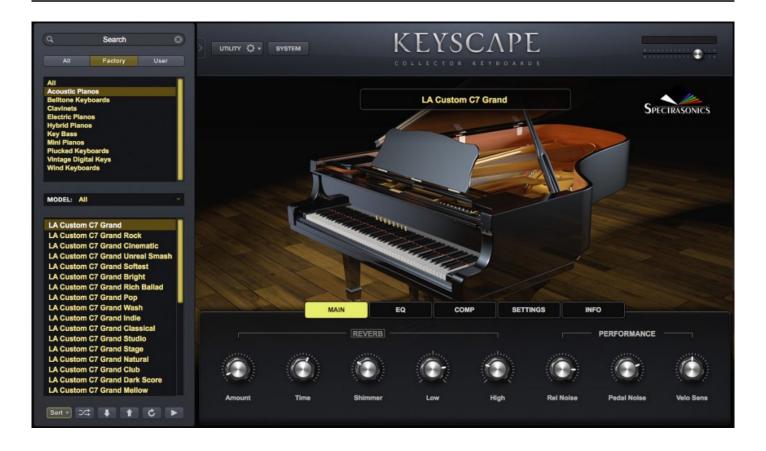
With many of these collector instruments, it's really the imperfections that make them so interesting. Instead of cleaning up all the quirks and noises they make, we made sure to closely capture them since they are a big part of their vibe. In addition, our software team closely modeled the authentic behavior and mojo of vintage amplifiers, classic effects units, and unique subtleties like mechanical noises, pedal noises, and release overtones to bring these sounds to an unprecedented level of authenticity and dynamic expression.

While it's every performing keyboardist's dream to have the very best instruments instantly available anywhere, Keyscape is equally useful in the studio for producers and composers. Since these instruments can be easily transformed into amazing "unreal" sounds with the powerful STEAM Engine® under the hood, Keyscape easily turns these coveted instruments from History into innovative new sounds of the Future.

Along with the hundreds of patches based on the 36 instrument models, Keyscape includes special hybrid "Duo" sounds which combine two of the instruments to create something entirely new. The unique timbre of these Duo patches make them some of the most creative and inspiring sounds in Keyscape!

These compelling and highly expressive sounds will inspire you to PLAY!

### **LA Custom C7 Grand Piano**



We are pleased to feature a very special instrument in Keyscape. The Yamaha® C7 Grand Piano is widely known as the most-favored piano for studio recording – however, this is no ordinary C7.

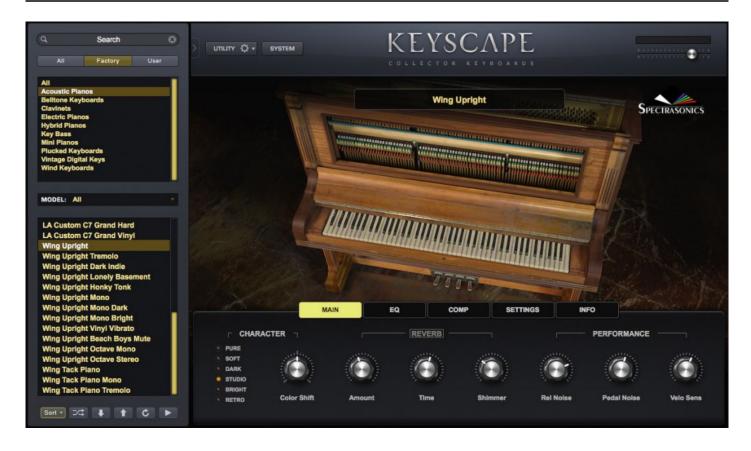
This outstanding, custom-modified instrument belongs to renowned Los Angeles piano technician, Jim Wilson. Part of what makes it unique is that this C7 is fitted with Renner® "Blue Point" hammers with Weickert® felt – a special piano hammer felt used during the pre-Cold War "golden age of Steinway®." This rare long-fiber virgin wool felt (which became available again after the reunification of Germany) contributes to the hammers producing a wider tonal spectrum. Jim spent many weeks manicuring the piano voicing for this project (which includes fine adjustment of the hammer felt density using special needles and a variety of techniques) to achieve the greatest possible dynamic range and color palette. The tone, dynamics, and sustain of this particular instrument are astounding.

Special care was taken to create gorgeous warmth at softer velocities and at the same time, more bite at higher velocities. Jim was closely involved with our sound designers throughout the entire year-long development process and gave his blessing to the finished product. Our software team closely modeled the

authentic behavior of subtleties like pedal noises and the intricate interaction of the release overtones. The user interface of each of the numerous patches was designed to offer useful new features like harmonic "Color Shift" adjustment, Velocity Curve matching to a wide range of keyboard controllers and our unique "Character" control – which allows for unprecedented versatility in creating different kinds of piano sounds for any genre.

Superior attention to detail in every aspect of recording, sound development, and software design has culminated in an extraordinarily expressive virtual piano. As a result, the range of piano tones in Keyscape allows for an incredibly versatile and inspiring playing experience.

# Wing Upright Piano



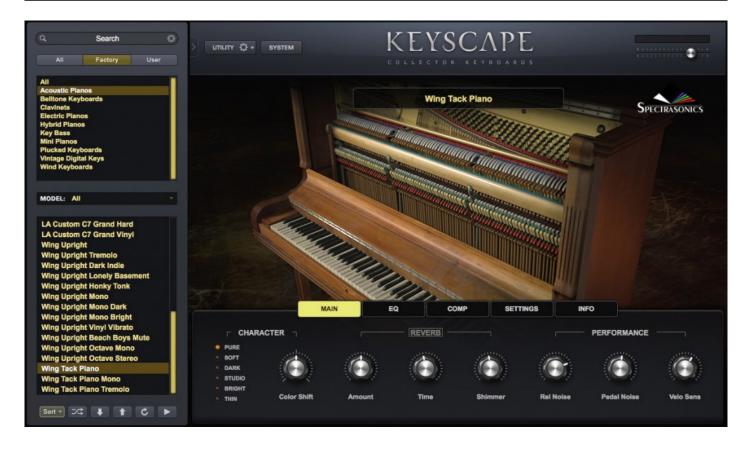
Far from the common specimen, this rare Wing Upright Piano from 1900 is one of the most beautiful and unusual vertical pianos ever made. This century-old upright grand has a strong, warm sound with gorgeous sustain – instantly reminiscent of the turn-of-the-20th Century. We meticulously captured all the quirks and unique nuances of this remarkable upright piano with multiple mics.

Looking downward, you immediately see something unusual – instead of the two or three pedals usually found on upright pianos, this one has four! The two pedals on the left control the "Instrumental Attachments," a mechanical factory option that permitted the player to, in the words of one of their print ads from 1903, "imitate perfectly the tones of the mandolin, guitar, zither, harp, and banjo."

The first pedal is labeled, "Tremelo." It brings a mechanism fitted with metal balls on springy blades into contact with the strings, so when the hammers strike the strings, their vibrations cause the balls to bounce – similar to a Marxophone – sounding like a hammer bouncing on a zither, or, if you use your imagination, a tremolo mandolin!

The second pedal is labeled, "Orchestra." It lowers a bar fitted with small metal rings suspended from felt strips, positioning the rings between the hammers and the strings. The hammers hit the rings, which then hit the strings, transforming it into a classic Tack Piano sound, without destroying the hammers. The incredibly inspiring sounds this instrument made for us are destined to be a favorite of our film composer users!

## Wing Tack Piano



Although the exact origin is unknown, Tack Pianos started showing up in the late 1800s and early 1900s. By inserting thumbtacks or small nails in the felt surface of the hammers (usually upright pianos), the sound of the hammers hitting the strings is transformed to a much brighter, brittle sound. The slightly out-of-tune, "Honky-tonk" sound is often part of the Tack Piano's charm – sounding like it came straight out of Vaudeville or an Old West saloon.

Far from the common specimen, this rare Wing Upright Piano from 1900 is one of the most beautiful and unusual vertical pianos ever made. Looking downward, you immediately see something unusual – instead of the two or three pedals usually found on upright pianos, this one has four! The two pedals on the left control the "Instrumental Attachments". The first pedal ibrings a mechanism fitted with metal balls on springy blades into contact with the strings, so when the hammers strike the strings, their vibrations cause the balls to bounce – similar to a Marxophone – sounding like a hammer bouncing on a zither. The second pedal brings in the "tacks," which in this case is the lowering of a bar fitted with small metal rings suspended from felt strips, positioning the rings between the hammers and the strings. The hammers hit the rings, which then hit the strings, transforming it into a classic Tack Piano sound, without destroying the hammers.

You've heard the unique sound of a Tack Piano played on numerous Pop and Rock hits, as well, including The Captain & Tennille's "Love Will Keep Us Together," Queen's "Killer Queen," The Rolling Stones' "Wild Horses," and The Beach Boys' hit, "Good Vibrations." Other notable Tack Piano users include Emerson, Lake and Palmer, Burt Bacharach, Fleetwood Mac, Elvis Costello, Neil Young, Ben Folds, Coldplay, Ray Manzarek of The Doors, and film composer/record producer Jon Brion. Perhaps the most famous use is by The Beatles in their song, "Rocky Raccoon."

## Rhodes – LA Custom "E"



After many years of searching, we are proud to present one of the rarest and most sought-after electric piano sounds in the world – what has become widely known as the "E" Rhodes® sound. While electric piano enthusiasts will be quick to note that there were no such "E" models produced by the Rhodes® company, this term "E Rhodes" amongst professional keyboardists is synonymous with describing that certain "LA" sound which were produced by some incredibly rare, highly-modified electric pianos that have an extraordinary tone due entirely to the wizardry of Eddy Reynolds – a brilliant keyboard tech who performed his magic on a select few mid-1970s Suitcase Rhodes® pianos in Los Angeles.

These special instruments are the original source of that incredible "L.A. Rhodes®" sound which appeared on hundreds of hit records\* – an elusive tone for standard Rhodes® instruments, since it cannot be achieved simply by the use of external effects. The extensive modifications Eddy made to the action, voicing and particularly his special pre-amp circuits yielded a fat, bright, and super-even sound, creating true sonic masterpieces that to this day have never been matched by any commercially produced electric pianos. We were fortunate enough to get our hands on one of these authentic, extremely rare and highly coveted

instruments and our award-winning sound development team at Spectrasonics took tremendous care to reproduce its gorgeous mojo in Keyscape.

The story of the "E" name comes from one of these instruments Eddy modified that was often rented from Leeds Musical Instrument Rentals during the heyday of record production in the 1980s. The top producers knew which one to rent because it was marked with a big "E" on the case. This is not the instrument we sampled for Keyscape, but ours was made at the same time and has the identical circuitry and voicing modifications that Eddy did to that specific Leeds instrument. As the "E" legend has grown on the Internet over the years, what's not widely known is that Eddy made several of these identically modified instruments after various L.A. session players requested the same modifications. Our instrument was a 1974 Suitcase that Eddy extensively modified and is serial # 54247-044074. These rare customized instruments each have that same sonic magic and were used on hundreds of hit records!

You can find out more about the Leeds instrument HERE...

NOTE – This particular L.A. Rhodes® sound is often mistakenly associated with the more well-known "Dyno-My"® modified Rhodes® instruments, since those were also popular and were more widely available. However, Dynos have a much edgier color than the instruments modified by Eddy Reynolds, which are widely considered by Rhodes connoisseurs as the most desirable blend of warmth, attack, and brilliance.

## Rhodes - Classic Mark I



Played by just about any keyboardist you can think of in R&B, jazz, hip-hop, and rock, the classic Fender Rhodes® Electric Piano is one of the foundational instruments of popular music. With over 250,000 instruments produced, a major culture has grown up around the instrument. The Rhodes® piano action causes its hammers to strike tines (tuned metal rods) which are attached to more substantial metal tonebars for sustain. The sound is amplified by electro-magnetic pickups routed to an active pre-amp in the Suitcase models.

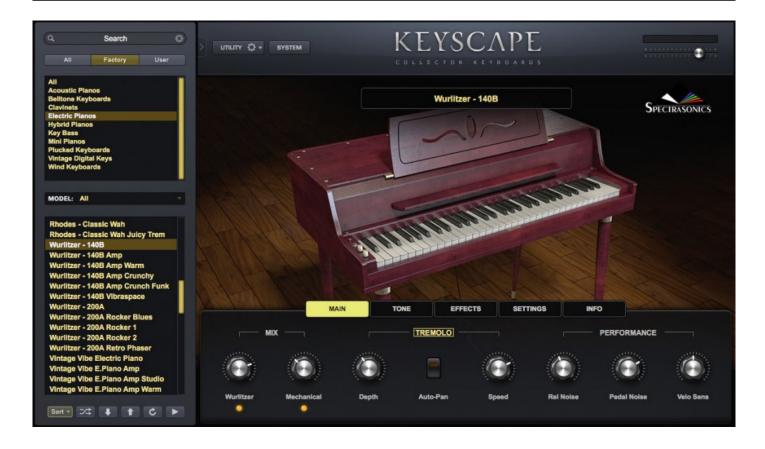
The Rhodes® sound is also one of the most frequently sampled and modeled instruments in electric keyboards. However, as many keyboardists will tell you...nobody seems to nail it! Because of this, we launched a major, decade-long research project to achieve the ultimate range of Rhodes® sounds for Keyscape.

Since the Rhodes® comes from the Southern California area – where Spectrasonics is also based – this gave us special access to the top experts in the world. This is critically important with electro-mechanical instruments, since every era and even each individual Rhodes® sounds markedly different. There are a few truly extraordinary sounding instruments out there and we set out to rebuild the ultimate version of the

classic '70s Fender Rhodes®. While numerous models were produced between 1965 and 1984, the consensus is that the early '70s Mark I Suitcase with wood keys and Peterson electronics is the ideal specimen.

Our amazing-sounding instrument was carefully restored and rebuilt by renowned Los Angeles keyboard tech, Ken Rich. Capturing that "holy grail" tone (along with all the funky releases and mechanical noises) became our passion. We also painstakingly circuit-modeled all the classic amps and effects used with these vintage instruments in the software. The end result is really something special and we are thrilled that this classic is featured in all its glory as part of Keyscape!

#### Wurlitzer 140B



Many players say the iconic sound of the Wurlitzer® 140B is absolutely the vibiest, the most soul-bending electric piano sound ever to rule the airwaves. The "Wurli" was made from 1954 to the early 1980s and used metal reeds – small blades that were struck by the hammers of a real piano action. The reeds tend to wear out with use and go out of tune. They are tuned by adding drops of solder to the tip and then filing it off until the pitch is right. In the quest to improve them, Wurlitzer went through four different reed styles. The 140B, released in 1962, was the first solid state model.

Pickups routed the sound to a self-contained amplifier and speaker. Sometimes the speakers were mic'ed, but most early models were modified with a 1/4" jack and resistor so you could plug them into a guitar amp. Later versions came with the 1/4" jack. In Keyscape we present the direct out and the internal speaker, as well as the mic'ed mechanical sound of the keys, which was a popular recording technique for this model.

The first musician to record with an early 100 series Wurlitzer was Sun Ra, for his 1956 "Angels and Demons at Play" and of course Ray Charles had a huge hit in 1959 with "What'd I Say," launching the electric piano into pop music history. The vintage 140Bs are rare and the most sought after models by musicians and collectors alike. Ours was lovingly restored by our good friends at Vintage Vibe®.

#### Wurlitzer 200A

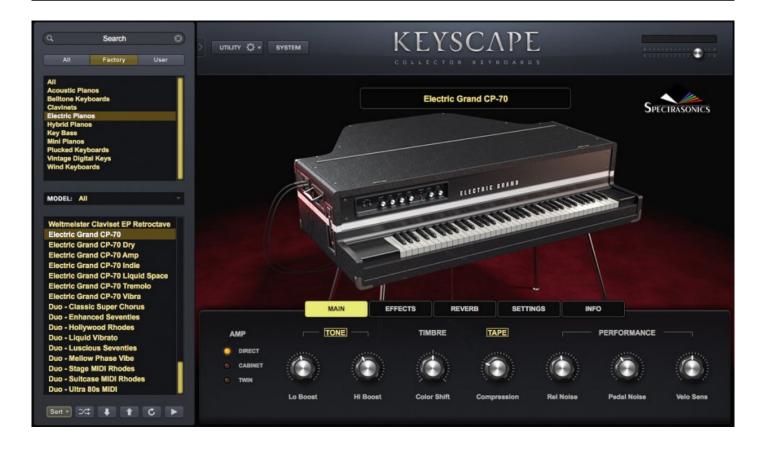


The iconic sound of the Wurlitzer® Electric Piano has ruled the airwaves for over half a century. The "Wurli" was made from 1954 to the early 1980s. Designed for gigging musicians, the 200A was released in 1974 and had an updated amp and speaker design over its predecessor, the model 200. The tone came from metal reeds – small blades that were struck by the hammers of a real piano action. The reeds are tuned by adding drops of solder to the tip and filing it off until the pitch is right.

Internal pickups route the sound to a self-contained amplifier and speaker. In Keyscape, we present the direct out and the internal speaker, as well as the mic'ed mechanical sound of the keys, which adds to the feeling of sitting in front of the real instrument. Combining these signals was a popular method of recording this model.

Among the many artists who have famously used the original 200A are Supertramp, Elton John, Pink Floyd, The Archies ("Sugar Sugar"), Joni Mitchell, each of the Beatles in their solo careers, and Steely Dan. Just like the 140Bs, vintage 200As are still sought after today by musicians and collectors alike.

## Yamaha CP-70



Considered by many to be the "gold standard" of hybrid electro-acoustic pianos, the Yamaha® CP-70 from the late 1970s has been heard on classic recordings for four decades. It has a powerful character that cuts through a mix. Noted users include Peter Gabriel, Genesis, Billy Joel, Stevie Wonder, UK, Kansas, Toto, and Led Zeppelin.

No need to set up microphones, the CP-70 uses a piezo-electric pickup system, which is fed to its internal pre-amp. With real piano action, hammers, strings, and a removable damper pedal, it was made to withstand the rigors of touring and although it weighs 300lbs, it can be separated into two pieces. Its tuning is remarkably stable, even when moved. Yamaha® also made two 88-key models – the CP-80 and the CP-60, a single-piece upright with MIDI.

## Vintage Vibe Electric Piano



We are pleased to present the official virtual instrument version of the Vintage Vibe® Electric Piano. Since the mid-1960s, the Rhodes® Electric Piano has been heard on practically every recording in almost every style of music, but these classic instruments were discontinued in the 1980s. Fast-forward to 2011 when Vintage Vibe released their new, hand-built "Tine Piano." A high-quality, modern take on a classic with a vibey, authentic sound – the first "real" electric piano made from scratch in decades.

It comes with American-made steel tines and rubber-tipped wooden hammers, along with either hand-wound passive pickups or Peterson-style preamps with stereo tremolo. The 44, 64, and 73-key versions have an amazing selection of cool fiberglass top colors and they are much lighter than their predecessors, due to a re-designed frame and the lighter, Wurlitzer®-like, Linden wood keybed. The super-consistent action lets you play softly for a warm tone or lay into it for a real growl.

Fans of the Vintage Vibe® Electric Piano include Stevie Wonder, Greg Phillinganes and Robert Glasper, amongst many others. We worked closely with Vintage Vibe to create the ultimate software version of this modern-day classic!

### **Hohner Pianet M**



The Pianet M was manufactured by Hohner from 1977 to the early 1980s. Originally intended for home use, the Pianet was created by Hohner's visionary designer, Ernst Zacharias, also the inventor of the Clavinet®. A series of different versions were in production from the early 1960s to the early 1980s. The Pianet M was essentially the Pianet T mechanism installed in a wooden console with speakers for home use. Unlike the Pianet T, the M had a built-in effects unit, called the "Modulator."

The Pianet employs foam and leather pads which stick to the tines. Depressing a key causes the sticky pad to pull on the tine, bending it upward – when it lets go, the tine vibrates. The Pianet M used a silicone activation pad, a variety of metal composition for the tines, and passive pickups. The Pianet M is enjoying a resurgence in popularity due to the availability of replacement parts.

#### **Hohner Pianet N**



Originally intended for home use, the Pianet was created by Hohner's visionary designer, Ernst Zacharias, also the inventor of the Clavinet®. Pianets were in production from the early 1960s to the early 1980s. The signature sound of the Hohner® Pianet N was heard in The Beatles' "I am the Walrus," "Summer in the City " by The Lovin' Spoonful, and in many other hits of the 1960s.

The Pianet employs foam and leather pads which stick to the tines. Depressing a key causes the sticky pad to pull on the tine, bending it upward and when it lets go, the tine vibrates. It uses powered pickups and a photo-sensitive amplitude circuit for the tremolo. With no sustain mechanism, the Pianet has a crisp staccato sound. The rare Pianet N is enjoying a resurgence in popularity due to the availability of replacement parts. This immaculate and pristine Pianet N is from the eclectic vintage keyboard collection of LA Session keyboardist, Zac Rae.

#### **Hohner Pianet T**



The Pianet T was manufactured by Hohner from 1977 to the early 1980s. Originally intended for home use, the Pianet was created by Hohner's visionary designer, Ernst Zacharias, also the inventor of the Clavinet®. A series of different versions were in production from the early 1960s to the early 1980s. Made with gigging musicians in mind, the compact and portable Pianet T was the simplest of any of the electro-magnetic keyboards at the time – no tremolo, no controls, not even a volume knob.

The Pianet employs foam and leather pads which stick to the tines. Depressing a key causes the sticky pad to pull on the tine, bending it upward – when it lets go, the tine vibrates. The Pianet T used a silicone activation pad, new metal composition for the tines, and passive pickups. It has a mellower sound than its predecessors. The Pianet T is enjoying a resurgence in popularity due to the availability of replacement parts.

## **Weltmeister Claviset**



This 1960s Cold War collector's item was made in East Germany by the accordion manufacturer, Weltmeister (which means "World Champion"), and is the only known Eastern European electric piano. Although the Claviset has a similar sound to the Hohner® Pianet, the metal reeds are plucked by rotating rubber discs with small lips rather than being pulled by a sticky pads.

The tines are amplified by electro-magnetic pickups routed to an internal battery-powered pre-amp. The instrument tone tabs on the front refer to the tonal qualities of the filters, rather than emulations of acoustic instruments. Difficult to get in the US until the Wall came down (and still rare to this date), the original Claviset was famously used by Joe Meek and OMD (Orchestral Manoeuvres in the Dark).

### **Hohner Clavinet C**



This actual Clavinet® is from legendary Philadelphia soul factory, Sigma Sound Studios and was used on tons of hits in the 1970s by producers Thom Bell, Gamble and Huff, and countless classic hits from artists including the Spinners and David Bowie.

The Hohner Clavinet® was originally designed by Hohner staff designer Ernst Zacharias as an electric clavichord for early European classical music and 1960s folk music. However, when Stevie Wonder used the Clavinet® C on his mega-hit "Superstition," it became an instant mainstay in 1970s Funk, Soul, R & B, and Rock. Unlike the more common D6, the Clavinet® C has fewer electronics and a punchier sound. We believe this is the first time this model has ever been sampled and modeled in software.

Essentially an electric guitar with keys, the Clavinet® is an electro-mechanical keyboard, with two single coil pickups. The keys cause polymer-tipped hammers to strike the electric guitar-like strings, pushing them abruptly into contact with a metal bar which serves as a fret, causing them to sound. We painstakingly recorded this famous Clavinet® C using the original strings through a customized pre-amp configuration. Keyscape's patches include fantastic Cry Baby® Wah emulation, extensive amp modeling, and extensive release noises that preserve all the grit and grease of the original unit.

### **Hohner Clavinet-Pianet DUO**



The Hohner Clavinet® E7 and the Pianet T were produced from the late 70s to early 80s. Both instruments were created by Hohner's visionary designer Ernst Zacharias, and each enjoyed its own season of popularity. However, after the Yamaha® DX-7 was released in 1983, limited electro-mechanical keyboards like these were no longer commercially viable to make.

At the end of their runs, from 1978 to 1982, Hohner got a crazy idea to make a hybrid version that included both mechanical instruments in the same enclosure. The keys simultaneously activated the Clavinet® hammers and the Pianet sticky pads. The Clavinet® action was underneath the Pianet, and this baby was heavy! It included the standard pickups for both.

It was best to tune the Clavinet® to the Pianet, as the Pianet rarely went out of tune. Both outputs were active at all times, and the fader controls adjusted the balance. The keyboard could be split between the two and the normal Clavinet® pickup selectors were available as well. These instruments are quite rare.

## Vintage Vibe Vibanet



We are pleased to present the official virtual instrument version of the Vintage Vibe Vibanet®. When Stevie Wonder plays "Superstition" today, it's probably not on a Clavinet® – it's most likely on one of these! Vintage Vibe started making their own electro-mechanical instruments in 2011 and released the Vibanet® in 2014. This high-quality, modern take on a classic sounds just like the original, but with a lot more "zing!"

Like the Clavinet®, the Vibanet® is an electro-mechanical keyboard, with two shock-resistant, single-coil pickups which are positioned above and below the strings. Its keys cause polymer-tipped hammers to strike the electric guitar-like strings, pushing them abruptly into contact with a metal "anvil" which serves as a fret, causing them to sound. Releasing the keys takes the strings off the fret and the sound is damped by their proprietary Clavi-gel® (instead of yarn), which covers the end of each string.

Its rugged build weighs half of what the original Clavinet® weighed. The custom-wound strings are easy to tune with the screws right on the front, below the keyboard, and are easily replaced. The internal pre-amp, which is also available as a replacement for original Clavinets®, is extremely quiet. There is an awesome built-in auto-wah filter with adjustable touch sensitivity and a mechanical mute switch on the right side of the

keyboard. In Keyscape, all of these performance details have been faithfully modeled in our software version of this modern classic!

### Celeste



Invented in 1886, the Celeste was named for its celestial, heavenly sound. This instrument was built by the Simone Brothers in the late 1940s in New York. Simone models were known for a mellower sound than their European counterparts, and pickups were available as a factory option to increase the volume via an amp. We recorded with stereo close mics, room mics, and its original, vintage pickup.

Descended from the Dulcitone, the Celeste design replaced the tuning forks with metal bars, much like a Glockenspiel. Each bar is suspended over its own wooden resonator, allowing more volume. Since the bars are struck with felted hammers, the sound is mellower than the Glock. Most notably used in Tchaikovsky's "The Nutcracker," and featured in the children's show, "Mr. Rogers' Neighborhood," you'll recognize it in a myriad of film scores and recordings by artists such as Art Tatum, the Beatles and Bjork.

### Chimeatron



A "modern" take on the Carillon, the tiny Chimeatron was invented in the 1930s by Schulmerich® Bells. The miniature keys activate solenoids, causing wood hammers to strike small, amplified bell rods. It stands 2 feet tall and has two manuals, a tube amplifier and speaker – all in one beautiful wood enclosure. Popular in both churches and theaters, later models came with separate one-manual keyboards and the chimes were installed remotely.

Just like the Leslie switch that became an expected option on later Hammond Organs, the remote Chimeatron was a common add-on to electronic organs in the mid-1900s. Only a few playable Chimeatrons have survived. We recorded serial number 208 through its original tube amp and speaker with close and room mics.

### **Dulcitone**



Predecessor to the Celeste (as well as the Rhodes®!) the Dulcitone was invented in Scotland in 1860. Named for its sweet sound, its felt-covered, wooden hammers strike an array of tuning forks, which resonate through a small, wooden sound chamber. We recorded its rare and beautiful tone with stereo close mics and room mics.

Popular for its portability and the fact that its tuning forks would not drift out of tune, the Dulcitone was a favorite aboard trains and ships. It was even carried on the backs of missionaries into remote jungles to accompany their church services. Around 6,000 were made, but only a few survive in playable condition. Featured in Vincent d'Indy's "Song of the Bells," the Dulcitone fell out of favor in the concert hall due to its limited volume and was replaced in most orchestras by the Celeste. The owner's manual says "The tone improves with use!"

## Clavichord



The Clavichord, developed in the 1400s, has been enjoying a renaissance in the past 30 years, due to a renewed interest in historical instruments. Originally a utility keyboard for practice and making music in the home, there was little music composed specifically for the Clavichord until the 18th century. We recorded this handcrafted instrument with stereo close mics and room mics.

Its keyboard action is a simple, pivoting wooden key that causes a small brass blade (tangent) to strike the string, defining the pitch by shortening its length, similar to a guitar fret. The note will sustain only while the tangent remains on the string and is muted by a fixed felt damper when the key is released. It is the only acoustic keyboard instrument with mechanical aftertouch. By holding down the keys and varying the pressure, the player can create vibrato.

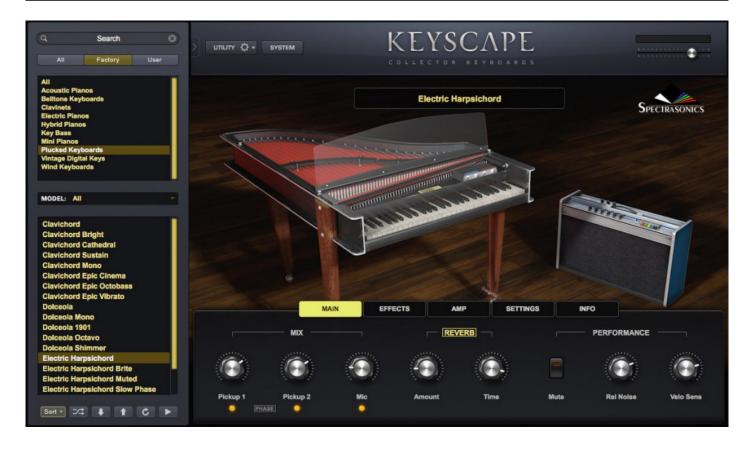
### Dolceola



Dolceolas were made from 1903 to 1907 and were sold for \$25 by traveling salesman. This short-lived curiosity looks sort of like a tiny piano but is from a family of early 20th Century instruments called "fretless zithers." It has a small piano-like keyboard with hammers that strike one string per note. Although the name implies a sweet tone, its brittle, honky-tonk quality is part of its charm. We recorded with stereo close mics and room mics.

There were as many as 5,000 Dolceolas made, but the number of playable survivors is said to be fewer than 50. The first commercial recording of the Dolceola was made in 1944 for Capitol Records' Southern Folklife Collection on which Paul Howard, a Disney songwriter, used one to accompany blues guitarist, Lead Belly. T-Bone Burnett has used one with Bonnie Raitt and Nashville musician Andy Cohen is one of the few virtuoso Dolceolists, today.

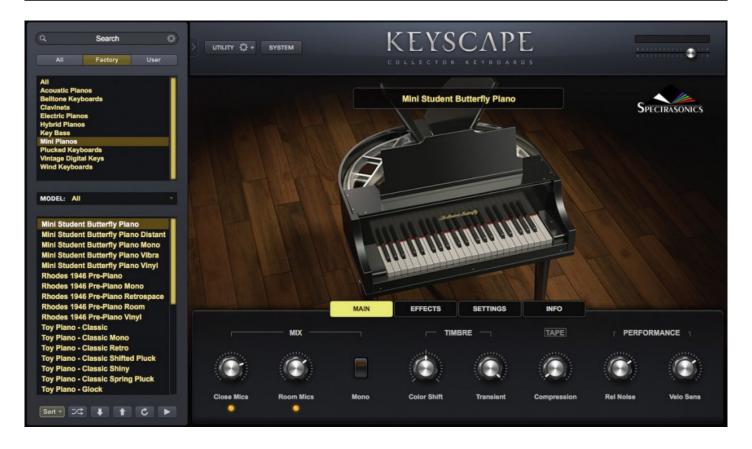
## **Electric Harpsichord**



Remember the haunting arpeggio in the Beatles' song, "Because," or that quirky keyboard in the theme from the "The Odd Couple?" It was the Baldwin® Solid Body Harpsichord – developed in the early 1960s by the Cannon Guild and marketed by Baldwin from 1966 into the early 1970s. In addition to its use in many '60s and '70s pop and rock recordings, it made regular television appearances on "The Monkees" and "The Partridge Family."

Each key causes a plectrum to pluck one string per note. Its sound is amplified by electric guitar-style pickups – one near the plectra and the other near the strings' halfway-point. The plexiglass cover allows you to see the inner works, showing off the characteristic, bright red Formica® "sounddeck" and it was made to be easy to break down and transport. We recorded using the two pickup signals and a mono mic which can be added in for a crisper, acoustic sound.

## Mini Student Butterfly Piano



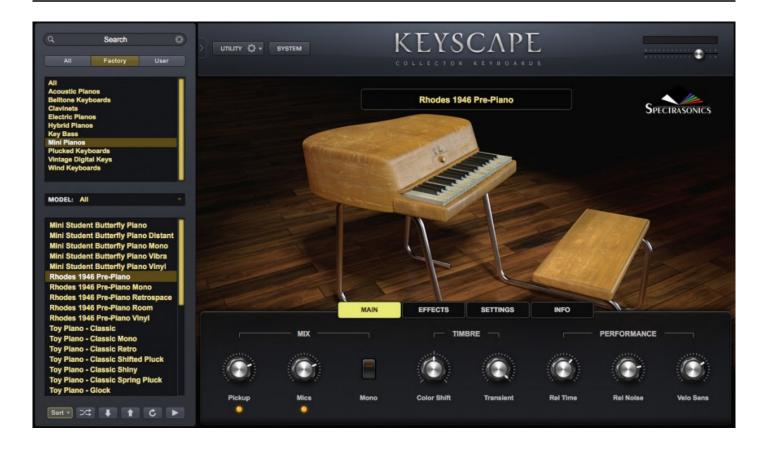
In the 1930s, the Rudolph Wurlitzer Piano & Organ Company created the space-saving "Butterfly" baby grand piano series, designed for smaller homes and apartments. They came in full-size models, as well as the 44-key "Student" Miniature Grand. This rare instrument produces a clear and lovely hi-range tone that could be compared to a Grand Piano in a similar way that the mandolin would compare tonally to a traditional acoustic guitar.

Called "Butterfly" because the lid was divided into two opposing "wings" which could be opened for more volume, the "Student Butterfly" has a cast iron harp, strung with real piano strings (only 2 per note, as opposed to three), and a real piano action and soundboard. They were made for children and marketed as a child's "first" piano. Ultimately considered more of a novelty, very little literature has been written for its limited range.

Few of these diminutive and distinctive gems are still in existence, and having one with an extended range in Keyscape is especially useful. These instruments are sought after by musicians and collectors alike – not only for their rarity and unusual appearance, but for their uniquely delicate sound. We preserved the special

tone of this petite piano with both stereo close and room mics which can be adjusted in the Custom Controls of Keyscape.

#### **Rhodes 1946 Pre-Piano**



It's a great privilege for us to present a truly historic instrument for the first time in software form – the world's very first Electric Piano! It took many years and multiple attempts to track down this incredibly rare instrument. It was handmade by the inventor himself and set the remarkable legacy of the Rhodes® Electric Piano in motion.

During World War II, Harold Rhodes was deeply moved by the suffering of wounded soldiers and wanted to design a compact musical instrument to aid in their rehabilitation. The first prototype instrument he developed was an acoustic, 2 1/2 octave keyboard he called the "Xylette." Small enough to fit on a hospital bed, the instrument was cleverly made with tines crafted from small aluminum tubes which Harold scavenged from the wings of a wrecked B-17 bomber. He instituted an accompanying music therapy program for which he was later awarded the Medal of Honor. The Xylette was used in Air Force hospitals by over 150,000 soldiers. After the war, Rhodes continued to ruminate on his idea and came up with the idea of a self-amplified version for students.

In 1946, the hand-built electric "Pre-Piano" was an instant success and his new Rhodes Piano Co. sold a batch to the Los Angeles School District's music program. The Pre-Piano even came with an attached seat,

like a student desk. Of course the original Pre-Piano sounds quite different than the iconic Rhodes® sound of the '70s that we've come to love. The grandfather clock-like tines were amplified with a piezo pickup routed to a small tube amp and speaker – the only Rhodes® instrument ever equipped with self-amplification.

After a few years, Harold grew frustrated with manufacturing problems. He shut down the company and, in a drastic career change, took up farming! Fortunately for us, Harold couldn't stay away from music and arrived back on the scene over a decade later with the Rhodes® Piano Bass and soon after, the full-sized Rhodes® Electric Piano. Only a small number of Pre-Pianos were ever produced, and far fewer survive, today. We've meticulously restored and preserved this rare slice of musical instrument history in Keyscape so you can make your own history!

## **Toy Piano – Classic**



This Classic Toy Piano dates from the 1930s. Originally made in the 1800s in Germany, they utilized a simple keyboard action with wooden hammers to strike tuned glass bars instead of strings. In 1872, Albert Schoenhut developed pianos with more durable metal glockenspiel bars. Then, in 1930, instrument designer Alice Bennett created one which used tuned metal rods (tines). The sound of these tines is what we recognize today as the iconic sound of a toy piano.

This diminutive keyboard has made regular appearances in popular music and American composers John Cage and George Crumb furthered its "serious" reputation by embracing the toy piano as a viable instrument in the concert hall. There is even an annual Toy Piano Festival at the University of California, San Diego. We recorded with stereo close mics and room mics.

## Toy Piano – Glock



Toy Pianos were originally made in the 1800s in Germany and utilized a simple keyboard action with wooden hammers to strike tuned glass bars instead of strings. In the early 18'70s, Albert Schoenhut developed durable metal bars, similar to a glockenspiel. This Schoenhut® Glockenspiel Toy Piano dates from the early 1900s. We recorded its beautiful tone with stereo close and room mics.

Toy Pianos were made in many forms – from those shaped like miniature grands with ivory keys, to replicas of upright pianos, with only white keys and the black keys painted on. This diminutive keyboard has made regular appearances in popular music and composers John Cage and George Crumb furthered its "serious" reputation by embracing the toy piano as a viable instrument in the concert hall. There is even an annual Toy Piano Festival at the University of California, San Diego. The Schoenhut Piano Company is still in business today.

## **Toy Piano – Grand**



Other than its unusually rich and bell-like tone, little is known about this beautiful Muse Toy Piano Grand from the 1930s. In fact, it may be the only one still in existence. Since the 1930s, toy pianos have used metal tines instead of strings or metal bars. The tines in this piano are of a heavier design and have a louder, richer sound than most. We recorded with stereo and room mics.

Toy pianos were originally made in Germany in the 1800s and have made regular appearances in popular music. American composers John Cage and George Crumb furthered its "serious" reputation by embracing the toy piano as a viable instrument in the concert hall. There is even an annual Toy Piano Festival at the University of California, San Diego.

## Toy Piano – Saucer Bell



When first built, the tone of this custom Jaymar® Upright Toy Piano from the 1930s came from metal rods (tines) that were struck with Bakelite® hammers, triggered by a simple keyboard action. It has been modified to use saucer bells as the tone source, giving the instrument a unique and haunting sound. We recorded with stereo close mics and room mics.

Toy pianos were originally made in Germany in the 1800s and have made regular appearances in popular music. American composers John Cage and George Crumb furthered its "serious" reputation by embracing the toy piano as a viable instrument in the concert hall. There is even an annual Toy Piano Festival at the University of California, San Diego.

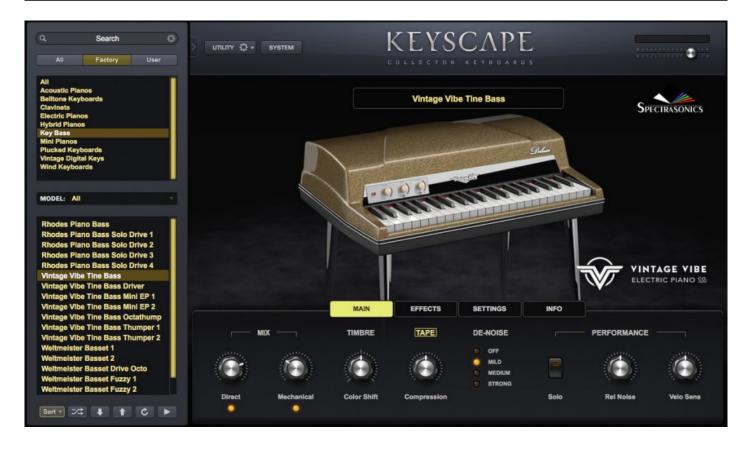
### **Rhodes Piano Bass**



Produced in the early 1960s, before the full-range Rhodes® Electric Piano, the Piano Bass was the only Rhodes® Piano (excluding the Pre-Piano) built before CBS bought both Fender and Rhodes in 1962. And, even though he helped develop the now-iconic, full-range Rhodes®, Leo Fender disliked their sound and thought only the Piano Bass was marketable!

Its piano action has rubber-tipped hammers that strike metal tines. The sound is sent to the passive output via electro-magnetic pickups. If you've ever watched a 1960s vintage video of the Doors playing "Light My Fire" or "Riders on the Storm," you probably noticed there was no bass player. Doors keyboardist Ray Manzarek played the original Piano Bass perched on top of his Vox® Continental organ.

# Vintage Vibe Tine Bass



We are pleased to present the official virtual instrument version of the Vintage Vibe® Tine Bass. The original electro-mechanical Rhodes® Piano Bass was produced from the early 1960s and it was famously played by the Doors' keyboardist, Ray Manzarek. Fast forward to 2011 when Vintage Vibe created the Tine Bass Piano – a quality, modern take on a classic.

The Vintage Vibe® Tine Bass is a 44-key, three and a half octave (C1 to A4), electro-mechanical tine piano that weighs 37 pounds (much less than its inspiration). The pickups are routed through Vintage Vibe's own tube preamp. There is a small push-button switch on the left underside which toggles between the tube preamp and a passive output.

The fact that it is a tine piano lets you play softly for a warm tone, hit the keys hard for a real growl, or anywhere in between. Played as a bass by itself or doubled with other instruments, this key bass adds a nice, fat low end to your track. We modeled it's mechanical noises and included special octave versions in Keyscape, which make for some of the most thunderously punchy bass sounds you've ever heard!

#### Weltmeister Basset I



The Weltmeister® Basset 1, sometimes referred to as the Weltmeister® Combo Bass, was the first keytar! This rare "Cold War" electro-mechanical keyboard instrument was made from 1963 to 1969 by accordion manufacturer, Weltmeister, in East Germany. It was practically impossible to get one in the US.

The battery-powered Basset 1 was popular in the 1960s and early 1970s with East German dance bands. Its mechanical piano action was derived from its big brother, the Weltmeister® Claviset. Pressing a key causes the lip of a rubber disc to pluck the tine. When the key is released, the sound is stopped by a foam damper. A warning label in German, Cyrillic Russian, and English warns of "danger of life" if you connect it to a radio or an amplifier with AC-DC!

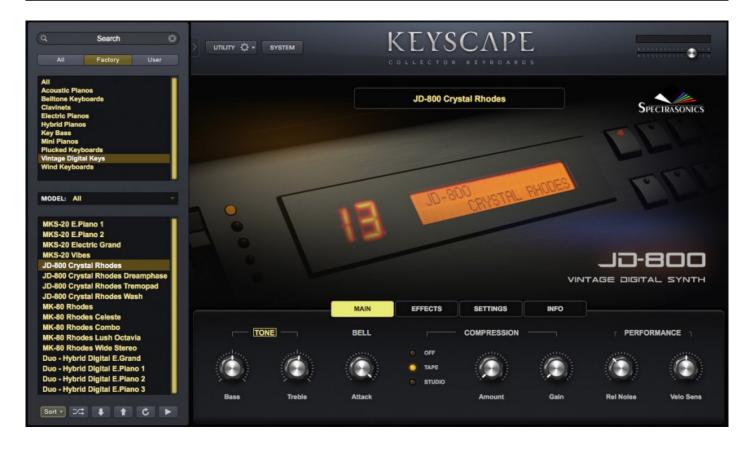
#### Weltmeister Basset II



There is little information available about this extremely rare tabletop version of the Weltmeister® Basset, but it is in many ways identical to its predecessor, the Basset 1. Difficult to acquire in the US, this rare "Cold War" electro-mechanical keyboard instrument was in production for a brief time in the late 1960s by accordion manufacturer, Weltmeister in East Germany.

The battery-powered Basset 2 was popular in the 1960s and early 1970s with East German dance bands. Its mechanical piano action was derived from its big brother, the Weltmeister® Claviset. Pressing a key causes the lip of a rubber disc to pluck the tine. When the key is released, the sound is stopped by a foam damper. A warning label in German, Cyrillic Russian, and English warns of "danger of life" if you connect it to a radio or an amplifier with AC-DC!

# **JD-800 Crystal Rhodes**



By the 1990s, the ubiquitous DX-7 E.Piano sound had run its course, but keyboard players still wanted an electric piano sound which had that modern, glossy sheen. At that time, Spectrasonics President Eric Persing was deeply involved in developing all the core waveforms and Factory preset sounds for the legendary JD-800 synthesizer.

One of Eric's JD-800 factory patches – called "Crystal Rhodes®" – became another instant classic digital sound and was used on nearly every pop record of that era. The sound worked perfectly when layered with other instruments and particularly when layered with a MIDI'ed Fender Rhodes®!

"Crystal Rhodes®" was also found on the rack-mounted JD-990, but it never quite matched the perfection of the JD-800 version. This "Vintage Digital" patch works incredibly well in our "Ultra 80s" Duo patch in Keyscape, which is combined with the incredible LA Custom "E" Rhodes®....it's just THAT sound!

# **MK-80 Digital Rhodes**

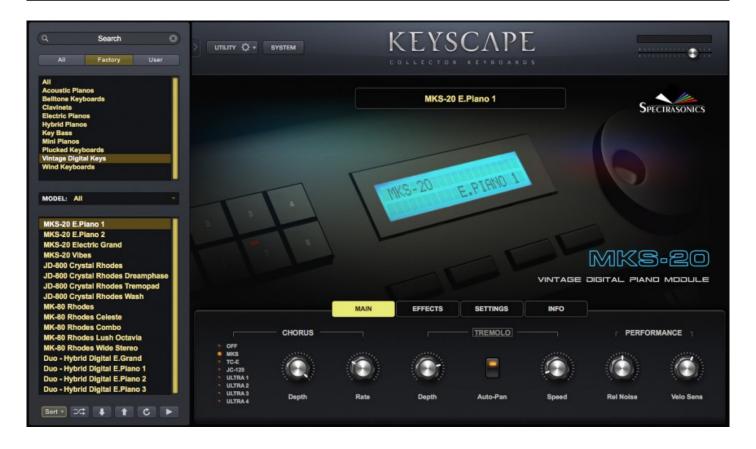


In 1987, shortly after they discontinued the Rhodes® product line, Fender sold the Rhodes® brand name to a well-known Japanese manufacturer where Spectrasonics President Eric Persing was Chief Sound Designer. Two years later, the Japanese company released the MK-80 – a digital "re-imagining" of the electro-mechanical Rhodes®. The MK-80 featured a solid, 88-key weighted-action that could also be used as a MIDI controller and came with a practical flat top for stacking other synths. It felt great to play and came with 4 separate electric piano sounds, along with a trio of high-end analog stereo effects: a built-in tremolo, phaser, and chorus.

Because of the reverence for which die-hard Rhodes® fans have always had for the original electromechanical instruments, it might have been a mistake to brand the MK-80 keyboard as an official, modern "Rhodes®" keyboard. On internet Electric Piano forums, the MK-80 has a poor reputation. This is especially interesting, because internally this digital instrument was that company's follow-up to the greatly revered MKS-20 and uses a more advanced version of the Structured Adaptive® synthesis technology. While it sounds nothing like a classic Rhodes®, it is a wonderful, brighter variation of the much-loved MKS-20 sound

– excellent for layering with other sounds! We are happy to revive this great 80s-style "Vintage Digital" sound in Keyscape!

# **MKS-20 Digital Piano**



In 1986, Spectrasonics President Eric Persing was Chief Sound Designer for a very well-known Japanese manufacturer of digital instruments. Eric was closely involved with their development of an innovative rack mounted digital piano module called the MKS-20, that was not based on samples, but rather on a type of early additive re-synthesis called "Structured Adaptive®" or "SA" synthesis. This ground-breaking technology provided an extremely expressive response, compared to the limited sampling technology of that era.

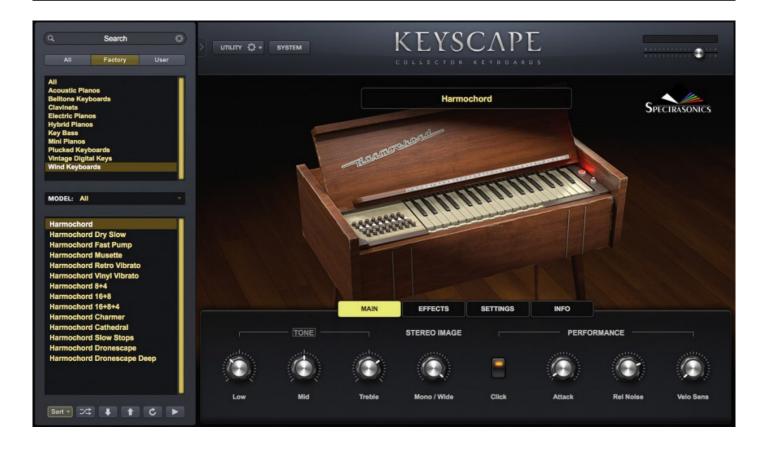
The MKS-20 design cleverly combined the digital side of the instrument with high-quality analog components and effects, resulting in a far warmer sound than most keyboards of the day. Velocity-triggered algorithms activated harmonic combinations which mimicked the naturally-occurring color changes of mechanical keyboards. Each of the 128 velocities had its own discrete color for each key, resulting in a highly expressive and organic sound.

While the MKS-20's Acoustic Piano simulations were soon eclipsed by rapidly improving sampling technology, there was always something very special about its unique sounding Electric Pianos, Electric Grand, and signature Vibes sounds. These sounds became an essential tool in the rack of every pro

keyboardist, and were featured on literally hundreds of hit records throughout the 80s and 90s. Because it was absolutely ideal for "MIDI'ing" with FM synths, and other keyboards, everyone who could afford an MKS-20 had to have one!

It's with great joy that we can present the best of this "Vintage Digital" sound module in Keyscape! We've closely modeled its Analog Chorus/Tremolo FX and even added expressive release noises and lush reverb effects to bring it up to date!

## Harmochord



Made in West Germany in the 1960s by the Koestler Company, the Harmochord Is an electrified harmonium. Unlike its cousins, the harmonium and the accordion, it uses a motorized blower in place of the bellows. The reeds are activated as you depress the keys and the sound emanates from two grilles on top of the instrument. We recorded with stereo close and room mics.

There were two models of this cool reed organ – the furniture cabinet and the space-age-looking, 49-key portable model, meant to sit on a table and fold up into its own suitcase. The sound of the two was virtually identical. The Harmochord is popular with Indie bands and its value has increased rapidly with the revived interest in unusual vintage instruments.

### **Custom Controls**

There are many elements that affect the tone and character of a sound. Keyscape's **Custom Controls** give you precise command of these elements and are presented in ways that are idiomatic and most applicable to each Patch. These controls allow you to go far beyond the original sound, showcasing specially crafted performance controls and high-quality creative effects.

The intuitive interface has been designed to allow a wide range of operation, from basic interaction with Factory Patches, to comprehensive and complex sound modification and performance tools. Overall, the Keyscape interface provides an accessible and intuitive workflow which offers the depth and flexibility for the needs of any User.

All Custom Controls pages are accessible via the Page Tabs.



The MAIN page contains Mix, Performance, Timbre, or FX controls that you reach for first. In addition to MAIN, each Patch is presented with up to 2 additional pages of specifically designed Custom Controls.

The controls vary with each Patch and include modeled FX typically paired with those models. Our software team closely modeled the authentic behavior and mojo of vintage amplifiers and classic effects units, as well as unique subtleties like mechanical noises, pedal noises, and release overtones to bring these sounds to an entirely new level of authenticity and dynamic expression. These FX include **Tremolo** and **Phasers** for electric pianos, **Wah-wah** for Clavinets, **Chorus** for vintage digital sounds, and many others. You will also find unique controls such as **Lo-Fi** (for a retro sound) and **Color Shift**, which affects an instrument's harmonic structure.

By presenting the most useful parameters for each Patch, Keyscape's **Custom Controls** allow you to take these instruments into unexpected sonic territories.

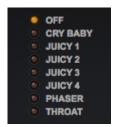
Every Patch contains the <u>SETTINGS</u> page, where you can fine-tune additional performance settings, and the <u>INFO</u> page, which includes performance tips and historical notes.

# **Conventions**

Selectors, Switches, and Numerical Indicators appear in several forms in the Custom Controls, but once you understand the simple conventions, using them is easy.

There are three types of **Selectors**:

Radio Button LEDs – click on either the LED or the name.



**Pull-Down Menus** – click on the selection to open a menu, or use the up/down arrows.



**Selector Knobs** – rotate the knob to the desired position.



There are three types of ON / OFF Switches:

Section Label Switches for entire sections, affecting all the bracketed controls.





Auxiliary Label Switches below the controls for additional features.



Highlighted in yellow is ON.

**LED** – Click on the LED under the knob to turn the model ON / OFF.



**Numerical Indicators** appear above the knobs as soon as you move them. Depending on their functionality, controls will show exact settings in percentages, ranges of dB, time, frequency, or a range between 0.000 and 1.000:

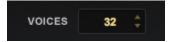


# **Settings**



On the **SETTINGS** page, you can fine-tune more performance settings. Any changes you make to the **SETTINGS** page will save with your session and with any saved User Patch.

### **Voices**

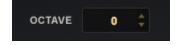


Capable of up to 64 voices of polyphony, the **VOICES** selector determines the maximum number of available simultaneous voices.

More CPU power is used with higher voice settings.

NOTE: The term, "VOICES" applies to all sounding notes, not just the ones currently being played. If a note is still sounding after you have released the key, it counts as a voice.

### Octave



**OCTAVE** lets you change the octave transposition / position on your keyboard. This function raises or lowers the overall pitch by transposing the Patch in 12-semitone (octave) increments.

Range -2 to +2 octaves.

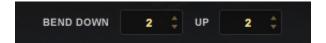
#### Gain



**GAIN** controls the overall output of the Patch. The level can be controlled in 1db increments and is set for each Patch.

Range -24db to +10db.

#### Bend Down/Up



**BEND DOWN / UP** sets the range for the Pitch Bend Wheel. The **BEND** range can be set independently for both up and down directions, e.g. 2 semitones down and 12 semitones up. Range DOWN or UP from 0 to 24 semitones.

#### Scale



**SCALE** lets you select a variety of tuning temperaments and scales. Although "**Equal Temperament**" is the default, there are 65 other tunings available, including historical temperaments and microtonal scales. 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.

Keyscape includes many tuning scales based on different mbiras and kalimbas. 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.

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: The common reference for each of the alternate tunings is that MIDI Note 60 / Middle C (C3 or C4 on your controller) will always be the same, no matter what Scale is loaded

#### **Thinning**



Select the **THINNING** button if you want to conserve memory by reducing the number of Round Robins and velocity-switched samples that are loaded with the Patch. %

### **Velocity**



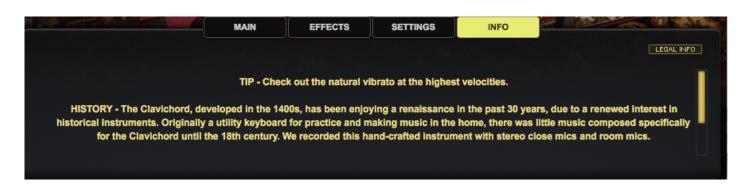
The highly dynamic and expressive instruments in Keyscape have been recorded with incredible depth. To fully access the intricately detailed sounds you now have at your fingertips, it is important to set Keyscape to respond properly to your keyboard controller. This adjustment can make a dramatic difference in your result.

We have included a variety of velocity curves optimized specifically for the most popular keyboard and controllers. Select the curve that matches your keyboard from the **VELOCITY** section pull-down menu in the **SETTINGS** tab.

You can **LOCK** the preset to maintain that curve as you browse through Patches. It will then be automatically loaded every time you load Keyscape.



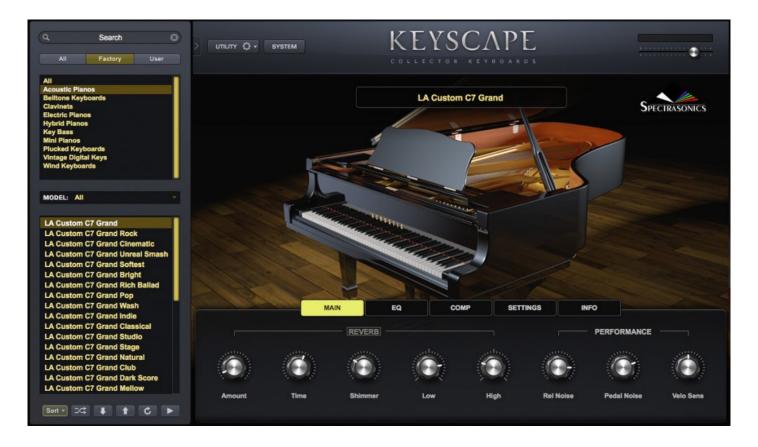
# Info



The **INFO** page provides performance tips, historical notes about the model (scroll down for more), as well as a link to our <u>Legal and Licensing FAQs</u>

# **Controls**

Each Patch has its own set of Custom Controls and the operation of each of the parameters is explained in detail in the following topics.



# **Amplifier**

Electronic and electro-mechanical instruments must be connected to an amplifier to be heard on stage and are often recorded by mic'ing the amp in the studio. Amplifiers have different sonic characters, based on their design, and different instruments benefit from different amp sounds. We have modeled a number of popular amps that have been historically used with the keyboards represented here.

The Patch, "Wurlitzer 200A – Rocker Blues," uses an emulation of the Vox AC-30 – a popular 1960s-era British guitar amp, which was often paired with this model.

**Cabinet** allows you to choose the type of speaker cabinet.  $1 \times 12$  is a smaller enclosure with one 12" speaker,  $2 \times 12$  is a medium enclosure with two 12" speakers, and  $4 \times 12$  is a larger cabinet with four 12" speakers.

The **Bass / Mid / Treble** controls let you cut or boost the tone at preset frequencies and **Presence** boosts very high frequencies for added clarity.

Master is the master volume control for the amp and BOOST adds volume (like a "high-gain" switch).

The AMPLIFIER section can be turned ON / OFF with the label switch above the controls.



In the Patch, "Wurlitzer 140B – Amp," you can select various presets from an emulation of a Vox AC-30.

The selectors let you choose from 8 preset EQ and drive combinations, ranging from clean to distorted tones.



In the "Pianet N – Crunch Vox" Patch, you can select between faithful emulations of both the Vox AC-30 and the Fender Twin Reverb.

**Crunch** overdrives the pre-amp stage and **BOOST** adds volume (like a "high-gain" switch).



The Patch, "Weltmeister Claviset EP – Retropluck," uses an emulation of the Twin Reverb.

**BOOST** increases very high frequencies for added clarity.



In the Patch, "Vibanet – Retro Vibrato Amp," you can select various presets from emulations of different amplifiers.

**Tone** boosts the high frequencies of the selected amp and **Gain** boosts overall amp level.



In the Patch, "Pianet M," we are using an emulation of the Fender Twin Reverb.

**Drive** overdrives the pre-amp section.



In the "Celeste – Vibra Retro" Patch, you have the option of running the Celeste through a lo-fi amplifier for a retro sound.

Speaker controls how much the sound of the amp's speaker cabinet is mixed in.



The switches in the Patch, "Electric Grand CP70 – Amp," let you choose between **DIRECT** (the signal from the instrument's 1/4" output), **CABINET** (the sound of a Twin Reverb amp's speakers being mic'ed), and **TWIN** (the direct out of the amp, with no speakers).



In the Patch, "Electric Harpsichord – Vibra," we use an emulation of the Baldwin C-1 Custom Guitar amp which was often paired with this model.

The **Selectors** allows you to choose from preset starting points.



NOTE: This amp is often referred to as the "Willie Nelson amp," as it has always been one of his favorites for his guitar.

## Character

**Character** selectors choose between overall tone choices preset for the particular model, which allows for unprecedented versatility

In the Patch, "LA Custom C7 – Ballad," the **Character** selectors are paired with a **Color Shift** control.

The Radio Button LEDs give you several tone choices:

**PURE** lets you hear the unchanged, natural tone of the model. **SOFT** gives you a mellower tone and **DARK** removes some of the high end sparkle. **STUDIO** gives you a clarity that cuts through a mix and **WARM** has a fuller tone. **CLEAR** and **STAGE** give you a brighter tone and **HARD** is great for Rock, Pop, and Country.

When using **Color Shift**, the samples are pitch-shifted up or down and then transposition-compensated, creating interesting harmonic changes.

Using **Color Shift** and **Character** together gives you considerable control over the model's tone. For example, selecting **DARK** and turning **Color Shift** to the left gives you a warm and lush sound, while selecting **HARD** and moving **Color Shift** to the right yields a super-bright tone with a crisp attack.



## Chorus

**Chorus** is an effect commonly used with electric pianos and electric guitars and was first introduced in the 1970s. It creates a doubling effect as an LFO shifts a duplicate signal subtly in and out of tune with itself – alternately sharp and flat.

In the Patch, "MKS-20 – E.Piano 1," you can choose between seven different chorus options.

- MKS Emulation of the Boss CE-2
- TC-E Emulation of the TC Electronic Chorus
- JC-120 Emulation of the analog vibrato from the Roland JC-120 amp
- Ultra 1, 2, 3, 4 Four settings from our Ultra Chorus, ranging from subtle to more dramatic

**Depth** controls how much detuning is applied to the sound and **Rate** controls the speed at which the modulation occurs.



In the Patch, "Electric Grand CP70 – Dry," the CP-70 can be processed with a software emulation of the **Boss CE-2 Chorus**.

**Mix** controls how much of the original signal is mixed with the effect. The **Mono** button switches between a monaural and stereo output. The **CHORUS** section can be turned ON / OFF with the label switch above the controls.



In the Patch, "Duo – Hollywood Rhodes," the **MKS-20** can be processed with your choice of three chorus options. **Amount** controls how much chorus is applied.



# Compression

A compressor reduces the dynamic range of a sound and can make it appear louder and more present. The gain of any peaks in a signal that exceed a set threshold is lowered and the overall volume (including the softer portions of the signal) can then be brought up, resulting in a fuller, more consistent sound. When applied to individual instruments, they can sometimes sit better in a mix.

In the Patch, "Clavichord," **Amount** controls how much compression is applied after the signal exceeds the threshold. It can be set from 1:1 (no compression) to 10:1.

**Gain** controls both the threshold and output gain of the compression effect – making up for any loss in volume caused by the compression. Higher settings lower the threshold and make up more gain, while slowing the attack.

The **COMPRESSION** section can be turned ON / OFF with the label switch above the controls.



In the Patch "LA Custom C7 Grand Piano," we use a hi-fi, transparent compressor.

**Input** sets the level that is sent to the compressor.

The compression **Ratio** controls how much compression is applied after the signal exceeds the threshold. It 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 the compressor takes to stop once the audio has gone under the threshold level.

**Level** adjusts the overall output volume to compensate for compression level reduction.



One of the great things about recording to analog tape is the way in which the sound is "warmed up" by the naturally-occurring tape saturation (a subtle, warm-sounding distortion) and compression. Certain **COMPRESSION** sections contain a **TAPE** selector.

In the Patch, "JD-800 – Crystal Rhodes," the **TAPE** switch inserts a modeled analog tape recorder to achieve a tape compression effect and the **STUDIO** switch inserts a hi-fi, transparent compressor.



### **De-Noise**

Any device in a recording chain comes with some inherent noise – from electro-mechanical instruments to amplifiers, microphones, and pre-amps – basically anything electronic. Electrons are always moving around and that movement creates noise. When sampling an instrument note by note, every note that is recorded contains the full noise floor of the recording chain. That natural electronic noise can build up when playing multiple notes and can also be emphasized by certain EQ or compression settings.

Although there are some amazing noise reduction technologies available, removing noise is never a perfect science. We found that processing the pristine recordings in Keyscape to remove noise caused them to lose a certain magic, even when treated with the finest NR tools available. Like many of the slight imperfections in any instrument, it is actually part of that instrument's character.

Therefore, we decided to leave some of the natural noise in the samples. However, in those models that have a bit more noise, we have included DE-NOISE controls, leaving the choice to the user. There are times when you might want a certain amount of noise for a natural sound and other times when it is preferable to have none at all.

The **DE-NOISE** selectors let you reduce the apparent noise by selecting the strength of the noise reduction.



## **Distortion**

Ever since the amplifier was invented, guitar players, keyboard players, and bass players alike discovered that the louder you turned up an amp, the more it would overload and introduce a pleasing, "fuzzy" sound. Soon, players sought out all sorts of ways to produce this "distortion." New preamp and gain staging design was added to amplifiers so they could distort at lower volumes and distortion "pedals" (small electronic devices operated with footswitches) began cropping up everywhere as the search for the perfect "fuzz" sound continued. Each of these "stompboxes" had a unique sound and we have modeled eight of the most popular vintage **Distortion** pedals for use with many of the keyboards in Keyscape.

BD-2 Classic, creamy, blues tones from one of the best overdrive pedals of its type.

**SCREAMER** Boosted midrange overdrive, loved by blues players. Think Stevie Ray Vaughn.

**SD-1** Provides a warm, tube-like distortion, while retaining clarity.

DOD 250 Smooth, Classic Rock tone.

**FUZZ FACE** Classic from the 1960s, used by the Beatles, The Who, Jimi Hendrix, Pink Floyd, to name a few.

**SOLA** A descendant of the Arbiter Fuzz-Face, this cool distortion pedal form the mid-sixties was a Classic Rock staple and made a comeback in 2012.

**MXR** Tons of sustain in this mustard-colored classic, often used in Classic Rock and Heavy Metal.

**BIG MUFF** Electro-Harmonix developed this from earlier models called Axis Fuzz and Foxey Lady, obvious nods to Hendrix.

In the Patch, "Rhodes Piano Bass – Drive 1," you can select any of the 8 distortion pedals.

**Drive** controls the amount of distortion and **Tone** brightens or darkens the post-distortion signal. The **DISTORTION** section can be turned ON / OFF with the label switch above the controls.



### **Echo**

Echoes are discrete reflections / repetitions of a sound – like yelling "Hello!" into a canyon and hearing it bounce back to you. In the mid-1900s, recording engineers devised a way to create an echo effect by using analog tape recorders to record and delay sound, then mixing the reproduced sound with the original. It was commonly used on electric guitars and vocals in the 1950s – think Elvis and Carl Perkins. By the early 1960s, commercial tape echo machines were commercially available and gained wide popularity. **ECHO** is a faithful emulation of this type of early tape echo unit.

The Patch, "Electric Grand CP70 – Amp" presents a number of controls in the **ECHO** section.



**Amount** controls how much of the effect is mixed with the original signal.

When the recording is "fed back" into the machine, more repeats are generated. **Feedback** controls how many times the echo repeats.

With the knob all the way to the left, there is only one repeat and turning it fully-clockwise produces an infinite repeat.

In the original units, varying the speed of the motor changed the delay time – affecting the time between each repetition. **Vari-Speed** controls the speed of the virtual "motor." With the knob turned all the way to the left, you'll get the shortest delay times and fully-clockwise produces the longest delays. You can vary this knob in real time for some interesting effects!

**Width** lets you dial in the stereo imaging of the echo and **Color** controls the fidelity of the delayed signal. Lower values have less fidelity than higher ones.

TIP: To create a 'slapback echo," use **Vari-Speed** to set a short delay time and **Feedback** all the way to the left. Experiment with **Amount** to control the mix.

## Equalizer

Equalization (or EQ) is the process of adjusting the balance of the various frequencies that comprise a sound. By boosting or cutting certain frequency bands, you can add fullness or brightness to a sound, or reduce frequencies that seem harsh or conflict with other instruments in the mix.

Depending on the needs of the particular instrument model, there are different types of equalizers presented in the **Custom Controls**. Certain models include very detailed equalization controls and in others, simple bass and treble controls are the perfect complement.

The Patch called "Dulcitone" uses "shelving" EQ, meaning that everything below the chosen low frequency and everything above the selected high frequency is either reduced or increased by the gain controls. **Lo Freq** and **Hi Freq** let you dial in the desired frequency while **Lo Gain** and **Hi Gain** cut or boost. The **EQUALIZER** section can be turned ON / OFF with the label switch above the controls.



The controls in the Patch called "Dolceola" allow you to cut or boost preset **Low**, **Mid**, and **High** frequencies and adjust the post-EQ Gain.



Sometimes simple **Bass** and **Treble** controls are all that is needed, such as in the Patch, "Toy Piano – Glock."



The highly detailed equalizer used in the "LA Custom C7 Grand Piano" and "Wing Upright" was modeled after 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.

The two bands (**Lo** and **Hi**), work separately as shelving EQs, allowing you to boost or cut all frequencies above or below the selectable cutoff frequency. You can cut and boost around the selected frequency at the same time, for a customizable curve. The high frequency section includes a "**Q**" control that allows you to set the bandwidth of the frequency you are modifying.



# **Filter**

Some Patches contain a **Filter** section for a different approach to sculpting the sound. The **Filter** is a key component of audio production and is designed to remove frequencies from a sound.

In the Patch, "Toy Piano – Classic Shiny," the **Lo Cut** knob controls the cutoff frequency of a high-pass filter, where frequencies below the cutoff are removed. When the knob is fully-clockwise, most of the bass response has been filtered out.

**Hi Cut** attenuates everything above a preset cutoff frequency. Turning the knob all the way to the left yields a darker sound.



## Lo-Fi

In the Patch "Wing Upright – Vinyl Vibrato", the **LO-FI** switch engages an effect that simulates the sound of an early recording played through an old, funky speaker.

The **Flutter** knob introduces slight pitch inconsistencies that simulate a worn-out tape machine and **Vinyl Noise** adds the sound of a vinyl recording.



The Patch, "Rhodes – LA Custom Old Sampler," has a **Flutter Depth** knob that controls the amount of pitch modulation and **Flutter Rate** controls its speed.



### Mix

The **MIX** controls let you balance the elements that comprise each model's sound. We used various techniques to record these instruments, depending on what sounded the absolute best. These techniques range from using combinations of close and room mics, to direct outputs and vintage internal pickups.

In the Patch, "Rhodes – Classic Ballad," the **MIX** section allows you balance the sound of the **Direct** output of the instrument with the noise made by the **Mechanical** action. The **LEDs** below each knob allow you to toggle those channels ON / OFF.



The **Celeste** was recorded using **Close Mics**, which make it sound as if you were playing the instrument, and **Room Mics**, which reproduce the sound from farther away like it would sound on an orchestral stage. The instrument also has a pickup to increase its volume via an amplifier. We've included the direct output from this model's original **Vintage Pickup**, which has an entirely different character and can be used by itself for a drier sound, or in conjunction with the mic controls for a more defined attack and fuller tone. The **Mono** button folds the stereo output into mono.



The **Clavinet-Pianet DUO** is presented with individual outs for both the **Clavinet** and the **Pianet**. In addition to the balance between the two, you can choose the pickup configuration for the **Clavinet**.

- A selects the pickup in the middle of the strings for a rounder tone.
- **B** selects the pickup next to the bridge for a brighter tone.
- A + B selects both pickups.
- A-B selects both pickups and places them out-of-phase with each other for a classic funk sound.



The **Electric Harpsichord** was recorded using each of the direct outputs from two sets of electric guitarstyle pickups.

**Pickup 1** is located near the plectra for brightness, **Pickup 2** is near the strings' halfway-point for a rounder tone, and we recorded the acoustic sound with a large-diaphragm room mic. The **Phase** button places the pickups out-of-phase for a different color.



In the case of Duo Patches, such as this Patch called "Duo – Liquid Vibrato," the **MIX** controls let you balance each model's output.



# Model

The Patches in the vintage digital **MK-80 Rhodes** include selectors for 5 combinations of sounds derived from the hardware version.



## **Modulation FX**

Certain Patches contain a **MODULATION FX**, section that allows you to select a variety of modulation effects (Chorus, Vibrato, Phaser, etc) that work great with that particular model.

In the Patch, "Wurlitzer 200A," you can choose from seven user-modifiable effect presets set up specifically for this model.

**Chorus 1 and 2** use an emulation of the Boss CE-2 chorus pedal and **Chorus 3** is a software replica of the TC Electronic Chorus pedal. **Phaser 1** uses a model of the MXR Phase 90 pedal and **Phaser 2** uses a custom analog chorus and phaser combo. **Univibe** uses a faithful emulation of the classic chorus/vibrato pedal and **Vibrato** is a software recreation of the classic vibrato from the Roland JC-120 amp.

**Amount** controls how much modulation is added, **Rate** controls the speed of the modulation, and the **Mono** button switches between a stereo or mono effect.



In the Patch, "Clavinet-Pianet DUO – Phaser," **OB PHASOR** uses a model of the Oberheim Phasor pedal. **Depth** controls the amount of modulation



In the Patch, "Planet T," **TREMOLO** emulates a classic amp tremolo effect and **ENSEMBLE** recreates the classic Solina Ensemble effect from the Arp Solina String Ensemble. The **STEREO** button switches between a stereo or mono effect.



# Output

In Patches such as, "Wurlitzer 140B," the **Tape** button adds tape compression and the **Gain** knob gives you control over the output level.



### **Performance**

The controls in the **PERFORMANCE** section add to the instrument's realism by controlling how each model reacts to your playing. These settings are presented on the right side of every **MAIN** tab and will change depending on the model or Patch.

In many of the models, we have included detailed samples of release noises – the noises the keys make when you lift your hands. The **Rel Noise** knob controls the volume of these noises. To have a better idea of their importance, turn the knob all the way down and play something. Then turn it half-way up and play it again. You'll see just how much of a difference they make! The "**T**" button under **Rel Noise** ("**T**" stands for "transition) increases the transition time from the sustain and release samples, making the key release feel a bit looser.

The **Velo Sens** knob controls how much your MIDI velocity affects the dynamic range of the model. Try turning the knob all the way down and playing a short passage at different dynamics. Now turn it all the way up and play again. You'll notice that when you increase the dynamic range by turning the knob all the way up, you can play much softer.

If you have a sustain pedal connected to your MIDI controller, engaging it will trigger the sound the pedal makes in models that have mechanical sustain pedals. In the Patch, "Wing Tack Piano," the **Pedal Noise** knob controls the level of that sound.



In the Patch, "Toy Piano – Saucer Bell," the **Rel Time** knob controls how long the samples ring after you release the keys. Use a high setting for playing bell-like parts.



The **PERFORMANCE** controls in the "Clavichord" Patch contain a **Velo Vibrato** button, which activates additional velocities that contain vibrato samples. The intensity of the vibrato varies from subtle at medium velocities, to more pronounced at the highest velocitiy.



In the Patch "Clavinet C," the **Damping** knob lets you dial in just the right amount of Clavinet C's mechanical damping lever, which mutes the strings.



The Harmochord keys produce a mechanical click when you play them. The **Click** button turns this mechanical noise ON / OFF. Attack controls the time of the attack phase of the model's envelope.



The Patch "Rhodes Piano Bass" has a **Solo** button, allowing the Patch to play monophonically – very effective when playing bass lines.



The Patch, "Electric Harpsichord," has a **Mute** button which engages the sound of the instrument's mechanical mute.



### **Phaser**

A Phaser is a common effect that moves a duplicate signal in and out of phase with itself, creating a swirling, sweeping sound. It was first introduced in the 1970s and is commonly used with electric pianos and electric guitars.

In the Patch, "Duo – Mellow Phase Vibe," we use a software emulation of the MXR Phase 90 pedal.

**Amount** controls how much of the effect is applied, **Rate** controls the speed at which the modulation occurs, and the **Mono** button switches between a monaural and stereo output.



In the Patch, "Electric Harpsichord – Slow Phase," we use software emulations of several 1970s-era analog phaser units.

Preset 1 uses a custom analog chorus and phaser combo, preset 2 uses a model of the Oberheim Phasor, and presets 3-6 use modeled variations of the MXR Phase 90 pedal.



# **Pickups**

The Hohner Clavinet has been described as "an electric guitar controlled by a piano keyboard."

Clavinets and Vibanets (Vintage Vibe's modern take on this classic) use guitar-gauge strings and the sound is captured by magnetic pickups and sent to an amp, just like electric guitars. When played idiomatically with the right effects, they are often mistaken for guitars!

Both the **Hohner Clavinet C** and the **Vintage Vibe Vibanet** models are presented with each of their pickup combinations. You can select the pickups individually, or combined, and they can be placed out of phase with each other (like a Fender electric guitar) for that instantly recognizable, funky sound.

The **Hohner Clavinet C** comes with two sets of electric guitar-style single coil pickups – one above the middle of the strings and one beneath the strings, close to the bridge. They are selected via switches to the left of the keyboard.

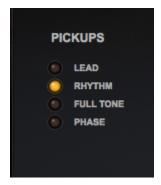
The **PICKUP** selectors found in the Clavinet C Patches emulate the controls on the real instrument.



- A selects the top pickup in the middle of the strings for a rounder tone.
- **B** selects the bottom pickup next to the bridge for a brighter tone.
- A + B selects both pickups.
- A B selects both pickups and places them out-of-phase with each other for a classic funk sound.

The Vintage Vibe Vibanet is equipped with two shock-resistant single coil pickup arrays – also located above and beneath the strings. They are selected via switches to the left of the keyboard.

The **PICKUP** selectors found in the Vibanet Patches emulate the controls on the real instrument.



- LEAD selects the top pickup in the middle of the strings for a rounder tone.
- RHYTHM selects the bottom pickup next to the bridge for a brighter tone.
- FULL-TONE selects both pickups.
- PHASE selects both pickups and places them out-of-phase with each other for a classic funk sound.

## **Preamp**

Preamps are electronic devices that capture a very low-level signal, such as that from a magnetic pickup or microphone, and are used for instruments such as electric guitars or electro-mechanical keyboards to increase their low level and prepare the signal for the main amplifier, improving the quality and decreasing noise in the recording chain.

All preamps add a certain color to the sound and some can be overdriven for a pleasing distortion. The Peterson preamp we used to record our Rhodes – Classic is highly desirable for its tone and warmth.

In some Rhodes Classic Mark I Patches, like "Rhodes – Classic Late 70s," where the Peterson Preamp is a large part of the sound, we have included a **PREAMP** section.

The selectors change the character of the preamp.

**CLEAN** - not effected

WARM - fuller tone

**SCOOP** – reduced midrange

MIDRANGE - boosted midrange

**CRUNCH** – slightly overdriven

BRITE 1, 2, and 3 – boosted high end

The Bass and Treble knobs control basic tone and the Presence knob boosts very high frequencies.



### Reverb

We hear reverberation when thousands of a sound's echoes blur together as they bounce off reflective surfaces and make their way back to our ears, following the initial sound.

Engineers have devised a myriad of ways to simulate natural reverberation and echo, giving the illusion that the source sound is produced in a variety of environments and spaces, including:

- a) Amplifying sounds into chambers with reflective walls
- b) Sending the amplified signal through metal springs and plates
- c) Recording onto tape loops
- d) A wide variety of hardware and software emulations

In the Patch, "Clavinet C Brite – Rhythm," you can choose from three types of ambience to enhance the sound.

**STUDIO** is a high-resolution digital reverb, **SPRING** is an authentic reproduction of a vintage spring reverb unit, and **ECHO** is modeled from a vintage tape echo machine.

**Amount** controls how much of the effect you hear. For **STUDIO** and **SPRING**, **Time** controls the overall length of the reverb. For **ECHO**, it controls the delay time. **Mono** toggles between a stereo or mono reverb signal.



In the Patch, "Duo – Dulcitonia," **Low** and **High** are shelving EQs which cut or boost the low and high frequencies of the reverb effect.



In the Patch, "Duo – Hybrid Electric E.Grand," **Shimmer** adds subtle animation to the reverb signal.



In the Patch, "Wurlitzer 200A – Rocker 1," **Tone** controls the brightness of the spring reverb effect.



# **Signal**

In Patches such as, "Wurlitzer 140 – Vibraspace," the **Signal** control lets you switch between the **Direct** signal (from the instrument's 1/4" output) and **Speaker** – the sound of the internal speakers being mic'ed.



# Stereo Image

In the Patch, "Harmochord – Dronescape," the **Mono / Wide** knob changes the output from mono to a wide stereo image – just as it was recorded with stereo mics.



## **Tape**

One of the great things about recording to analog tape is the way in which the sound is "warmed up" by the naturally-occurring tape saturation (a subtle, warm-sounding distortion) and compression.

In the **TAPE** sections the signal is sent to a modeled analog tape recorder to achieve these effects.

In the Patch, "Celeste Vibra Retro," **Saturation** controls the amount of signal that is sent to the modeled analog tape recorder and, as a result, how much tape saturation occurs.



In the Patch, "Classic Toy Piano," **Threshold** sets the audio level at which the unit starts to simulate the tape compression. If the input signal is below the threshold level, the unit does not apply any compression. Once the level crosses the threshold, the compression begins to affect the signal.

**Gain** controls the level of the output signal after it has been processed.



In the Patch, "LA Custom C7 Grand," the **Age** control emulates the way older tape stock loses high end over time. Turning the knob all the way to the left yields a brighter sound and fully-clockwise darkens the tone. The **PAD** button beneath **Gain** reduces the input to the compressor by 6dBs.



# **Timbre**

The **TIMBRE** controls in Keyscape affect the sound in a unique way by changing the harmonic structure, attack or overall tone.

In the Patch, "Toy Piano – Classic", when using **Color Shift**, the samples are pitch-shifted up or down and then transposition-compensated, creating interesting (and sometimes radical) changes in harmonics. The **Transient** knob controls the start time of the samples, creating a softer attack.



In the Patch "Chimeatron – Chimes," the **Bell Attack** knob controls the start time of the samples, controlling how much bell tone is present in the attack.



In the Patch, "Rhodes – Classic Amp Warm Blues," the **VELO** switch beneath the **Color Shift** knob causes the color-shifting to react to the velocity of your playing – the harder you play, the brighter the sound.



In the Patch, "Duo – Pianet Vibrabell," the **Tone Boost** increases the low frequencies for a fuller sound.



In the Patch, "Dulcitone," the **Low Cut** knob controls the cutoff frequency of a high-pass filter, where frequencies below the cutoff are removed. When the knob is fully-clockwise, most of the bass response has been filtered out.



In the Patch, "Duo – Tack Grand," there are Color Shift controls for each model, **Grand** and **Tack**.



NOTE: Due to the harmonic variance that occurs when using **Color Shift**, certain instruments will sound out of tune with other instruments that have not been modified in this way.

### **Tone**

**TONE** is a term used to describe the overall quality of a sound and often refers to the balance of low, mid, and high frequencies.

Depending on the instrument model, **TONE** controls operate in different ways, allowing the sculpting of a sound by adjusting the balance of specific frequencies. Certain models include more detailed controls and in others, simple bass and treble controls are the perfect complement. If a model is most often used with an amp, the tone will be presented as part of the <u>AMPLIFIER</u> controls.

In the Patch called "Harmochord – Dry Slow," the **Low**, **Mid**, and **Treble** knobs cut or boost preset frequency bands.



Simple Bass and Treble controls are all that is needed in the Patch, "Vibanet."



The **BOOST** switch below **Treble** in the "Wurlitzer 140B" Patch boosts very high frequencies.



When **TONE** is activated, the **Low Cut** knob in the Patch, "Chimeatron – Vibraharp Dreams," controls the cutoff frequency of a high-pass filter, removing low frequencies and letting high frequencies pass through. When the knob is fully-clockwise, much of the bass response has been filtered out.



In the "Electric Grand CP70" Patch, the controls give you up to a 20 dB boost at preset low and high frequencies.



### **Tremolo**

**Tremolo** is a classic effect commonly used in vintage electro-mechanical keyboards, guitar amplifiers, and available in effect pedals. It adds motion to the sound by quickly alternating the volume between loud and soft, or left and right, creating a pulsing effect.

In the Patch, "Celeste – Dry," **Depth** controls the amount of variation between loud and soft and **Speed** controls the rate of the pulse.

Enabling **Auto-Pan** alternates the sound from left to right in the stereo field (instead of affecting the amplitude) and **Depth** controls how far the sound moves from left to right: just a little, or alternately hard-panned each way.



In the Patch, "Electric Grand CP70," **Age** emulates what happens to an opto-circuit as it gets older and approaches the "vintage" stage – the separation between ON and OFF is not as crisp.



# **Tuning**

Part of the "vibe" of a Clavinet is that it is an imperfect and "human" instrument. If you play hard and really smack the keys, the strings stretch just a tiny bit sharp and then settle back.

The **Realism** control, found in the Clavinet and Vibanet Patches, emulates what occurs naturally when playing the real thing. The knob controls how much the tuning is affected by velocity. Small random pitch inconsistencies are introduced at lower values, while turning the knob further to the right makes the tuning sharper at higher velocities. With the knob all the way to the left, the instrument remains perfectly in tune.



### **Vibrato**

When a violinist quickly rocks his finger back and forth on a string, it adds motion to the tone by subtly varying the pitch up and down. Instrumentalists and vocalists of all kinds use vibrato to enhance their sound. This effect can also be achieved by using a low frequency oscillator (LFO) to modulate the pitch of electronic instruments, mimicking what happens acoustically. Certain amplifiers and effects pedals process sound in this way.

In the Patch, "Celeste – Vibra Retro," we use emulations of the classic electronic vibratos from the Roland JC-120 amp and the Univibe pedal.

Type 1 is JC-120 mono

Type 2 is JC-120 stereo

Type 3 is Univibe mono

Type 4 is Univibe stereo

Amount controls the amount of pitch modulation and **Speed** controls the rate.



In the Patch, "Duo – Liquid Vibrato" the Vintage Vibe Electric Piano can be processed with an emulation of the Roland JC-120 amp.

The **Mono** button switches between a monaural and stereo output.



### Wah-Wah

The wah-wah effect first appeared in the early 1900s when trumpet and trombone players found they could mimic the human voice by using the rubber part of a plunger to cover and uncover the bell of their horns (or their hand over the opening of a mute), effectively modulating the high end and resonant frequency of the horn's sound.

Prototype incarnations of electronic wah-wah pedals appeared in the 1950s and were developed and released commercially in the 1960s. Although initially marketed to horn players, early recordings by Eric Clapton and Jimi Hendrix established the wah-wah as a mainstay effect for electric guitars. Coming full-circle, Miles Davis famously used a wah-wah pedal with his trumpet on the seminal album, "Bitches Brew," and the funky rhythm guitar of Charles Pitts on "Shaft," by Isaac Hayes, popularized the "wacka-wacka" sound.

Not to be outdone, bass players and keyboard players started using wah-wah effects on their instruments, as well.

Stevie Wonder defined and established a classic auto-wah Clavinet sound on his seminal song, "Higher Ground," by using a Mu-Tron III Envelope Filter pedal. Rick Wright of Pink Floyd played a Wurlitzer through a wah-wah pedal in the song, "Money," and jazz greats Herbie Hancock, Chick Corea and Joe Zawinul, all used various wah-wah pedals on their Rhodes.

A standard wah-wah pedal (or software emulation) creates the effect by using a resonant filter that sweeps up and down in frequency. The frequency is usually controlled with a pedal or mod wheel, but it can also be controlled with an envelope follower that reacts to the volume of the input signal. The speed of the reaction can range from slow to very fast (faster than your foot!). Another method uses an LFO to modify the frequency of the filter's resonance – the depth and speed of which is controllable.

A WAH-WAH / ENVELOPE FILTER section is used in the Patch, "Clavinet C – Wah Crunch."

An envelope follower is used to create a wah effect that reacts dynamically to your playing.



**Pedal**, which is modulated by the Mod Wheel and Foot Controller, opens the filter in the same way a wahwah pedal does.

**Sensitivity** controls how much the cutoff frequency is triggered by velocity. If you want to control the cutoff with the Mod Wheel or a Foot Controller, it is recommended to turn this down.

**Shape** controls the envelope attack time. Use higher settings for a slower attack.

Sweep Depth and Sweep Rate control the depth and rate of the LFO that is modulating the filter.

**Gain** controls the output level of the wah-wah.

An AUTO-WAH is used in the Patch, "Clavinet Pianet Duo – Auto-Wah."



Here, an LFO is used to sweep the filter: **Sweep Depth** and **Sweep Rate** control the depth and rate of the LFO.

**Frequency** controls the cutoff frequency of the filter and **Q** controls the resonance or emphasis of that frequency.

The **Mono** button switches between a stereo or mono effect. When **Mono** is OFF, the left and right modulation is inverted for a stereo effect.

### Noise

Any device in a recording chain comes with some inherent noise – from electro-mechanical instruments to amplifiers, microphones, and pre-amps – basically anything electronic. Electrons are always moving around and that movement creates noise. When sampling an instrument note by note, every note that is recorded contains the full noise floor of the recording chain. That natural electronic noise can build up when playing multiple notes and can also be emphasized by certain EQ or compression settings.

Although there are some amazing noise reduction technologies available, removing noise is never a perfect science. We found that processing the pristine recordings in Keyscape to remove noise caused them to lose a certain magic, even when treated with the finest NR tools available. Like many of the slight imperfections in any instrument, it is actually part of that instrument's character.

Therefore, we decided to leave some of the natural noise in the samples. However, in those models that have a bit more noise, we have included DE-NOISE controls, leaving the choice to the user. There are times when you might want a certain amount of noise for a natural sound and other times when it is preferable to have none at all.

The DE-NOISE selectors let you reduce the apparent noise by selecting the strength of the noise reduction.



# **Optimization**

The models in Keyscape have been deeply multi-sampled and contain a large number of velocities and round robins. The samples are streamed from your drive while you play. If your system is not configured properly, streaming 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**

If you encounter audio glitches, the first step is to 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.

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#### **Limit Voices**

Keyscape allows up to 64 notes to be played simultaneously. You can adjust the maximum number of notes with the Voices menu on the Settings 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.

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#### **Terminate Other Applications**

When using Keyscape, 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 Keyscape instrument. Each host has a unique process for setting the buffer size, so consult your host reference guide 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:

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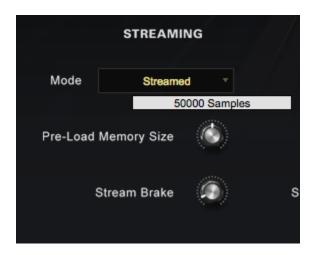


#### **Check Host Sample Rate**

Keyscape 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 Keyscape'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 Keyscape. Each host has a unique process for setting the sample rate, so consult your host reference guide for details – typically it is within he host's Preferences page.

#### **Check Streaming Settings**

View the System page and ensure that the Pre-Load Memory Size is around 50,000 and the Stream Brake is around 0.1.



#### **Disable Effects**

Disabling some effects – particularly Reverb – may greatly reduce CPU load. Effects are disabled in the Effects Page by clicking on the rectangular box that contains the effect name. In the example below, the Reverb effect is off, and the Echo and Vibrato effects are on.

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#### **Disable Streaming**

If you have 16 GB RAM or more and are encountering streaming issues, consider setting the Streaming Mode menu to "Not streamed" on the System Page. This will take significantly longer to load Patches (because it will load all the samples fully into memory) but it eliminates the need for streaming. The "Not streamed" mode should only be used when necessary.

#### Move STEAM data to a faster drive

The performance of Keyscape 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 for Keyscape 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 Keyscape, 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 Keyscape 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 reference guide for details. For example, the Logic host'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.

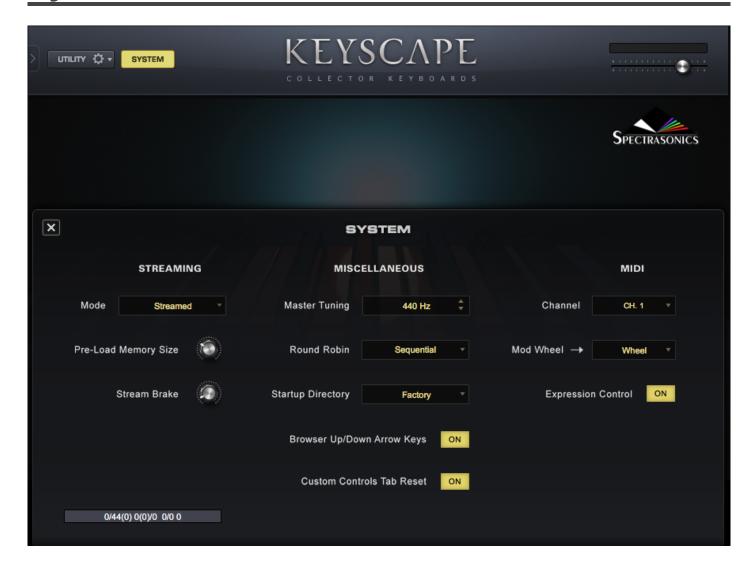
#### **Omnisphere considerations**

When loading Keyscape sounds into the Omnisphere instrument additional factors come into play because Omnisphere has eight parts (multitimbral), and therefore permits a huge number of samples to be loaded. The possibility of overloading the CPU or encountering streaming issues increases when using Omnisphere. All of the techniques described above apply to Omnisphere, and should be considered. In particular, Thinning may be required when using multiple large, sampled Patches within Omnisphere.

If you are using only a single Keyscape Patch and not employing any of Omnisphere's advanced editing features, then using the Keyscape plugin rather than the Omnisphere plugin will lighten the burden on the computer.

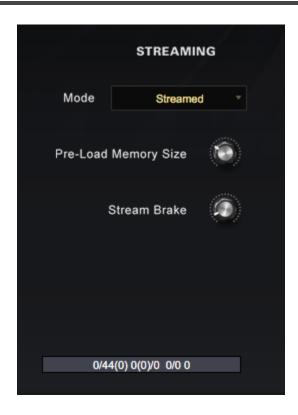
If you have multiple MIDI tracks each with a dedicated instance of Omnisphere or Keyscape, it may be more efficient to instead use a single instance of Omnisphere in multitimbral mode. Load the various Patches into Omnisphere's parts, and route the multiple MIDI tracks into the single Omnisphere instance using distinct Channels. This is an advanced technique, and instructions vary from host to host. Consult your host's reference guide for details.

# **System**



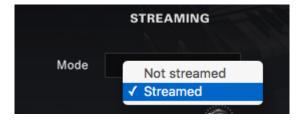
The System page in Keyscape is a universal control area that governs how Keyscape's sounds are streamed, sets certain user defaults, and configures global MIDI controls.

# **Streaming**



The first column contains controls for the streaming function in Keyscape. Streaming permits samples to reside largely on disk, rather than being loaded into RAM. In this way you can use large samples with a relatively small amount of memory.

#### **Streaming Mode**

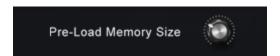


Streaming Mode engages or disengages disk streaming in Keyscape. If you disable disc streaming by selecting "Not Streamed" your sounds will take longer to load, take up more RAM, and Keyscape will warn you with a message:



When using Omnisphere on a PC it's recommended to leave STREAMING MODE set to "Streamed" unless for some reason you need to disable hard drive streaming and have lots of physical memory.

#### **Pre-Load Memory Size**



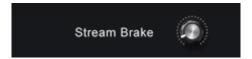
This control determines how much memory is devoted to sample pre-load. The higher the settings, the less likely that glitches will occur due to streaming problems. However, turning it up requires more memory and will increase the load time for Soundsources.

Recommended values are between 22,000 to 66,000, with 60,000 as the standard default value. If Patches use Timbre or Sample-Start, this parameter might need to be raised over 40,000.

NOTE – Soundsources must be reloaded when changing this parameter before the new value will take effect.

Range - 1000 samples to 100,000 samples

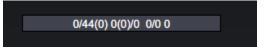
#### Stream Brake



The control balances system resources between streaming and other operations. This is the second most important streaming parameter, after the Pre-Load Memory Size. It should generally be set to a moderate value around 0.1. Values above 0.5 may lead to streaming glitches due to deferring streaming reads in order to give priority to other processing operations in the application. Turning it down to zero may cause glitches in other operations due to the streaming monopolizing the CPU. There is a relationship between this parameter and the Num Bytes Per Read parameter. When that parameter is turned up, this parameter should generally also be turned up.

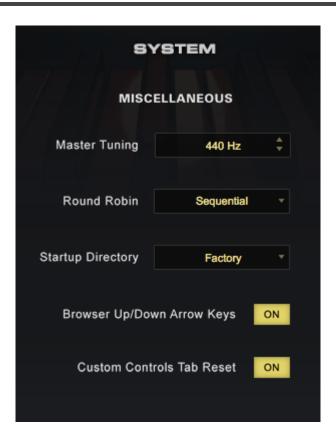
Range – 0.00 seconds to 1.00 seconds

#### **Stream Display**



This display shows diagnostic numbers that are used for Customer Support purposes.

# **Miscellaneous**

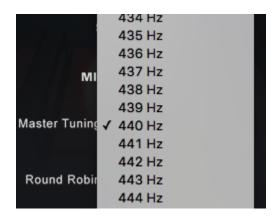


#### **Master Tuning**

This area determines the settings for Master Tuning, the instrument's startup page and preferences for how the Patches behave in the interface.



This is Keyscape's global tuning parameter. That means any tuning change you make on Master Tuning will affect any other tuning settings in the instrument. The default is 440Hz, which is the standard for most Western music. For other tuning standards, Keyscape's master pitch can be changed to accommodate any of them.



Range – 420Hz-460Hz

#### **Round Robin**

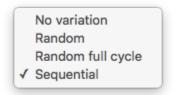


Repeated notes on a sample-based instrument can typically cause a "machine gun" effect, with notes repeating monotonously. Round Robin is a sampling technique that allows a repeated note to trigger a different sampled "take" each time it's played. This makes repeated notes sound very natural, and eliminates the machine gun effect.

Keyscape's 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! If you are loading Keyscape sounds into Omnisphere using Omnisphere Library Integration, this setting can be especially useful.

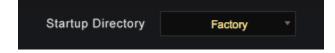
The Round Robin Menu lets you select how Round Robin samples will be ordered when two or more Round Robin samples are loaded into memory.

There are four playback options available on the drop-down menu: No Variation, Random, Random Full Cycle, and Sequential.

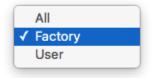


NOTE: The Sample Thinning settings located in the Settings tab determine how many Round Robin samples are loaded with the Patch.

#### **Startup Directory Preference**



Keyscape's default startup directory is the Factory Directory. This menu allows you to select from either All, Factory, or User Directories as the default.

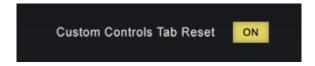


#### **Browser Up/Down Arrow Keys**



This setting allows you to use your computer keyboard's arrow keys to control the Stepper buttons. When you step to the next sound, it will be selected and loaded. The default is ON.

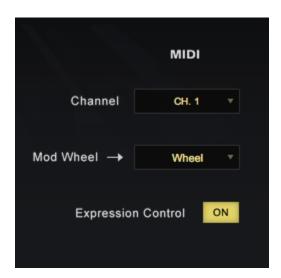
#### **Custom Controls Tab Reset**



When enabled, this function will ensure that when you change from one Patch to another, the Main Custom Control Tab is selected.

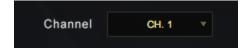
When disabled, if a Patch has a different Tab selected, Keyscape will continue to display that Tab when another Patch is selected.

### **MIDI**

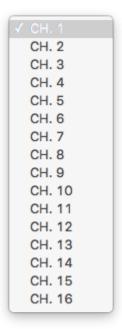


The MIDI section allows you to set the incoming MIDI channel, assign a different MIDI Controller to act as the Mod Wheel or allow Keyscape to respond Expression (MIDI CC #11).

#### Channel



Use the pull-down menu to choose any incoming MIDI channel from 1-16.



#### **Mod Wheel**



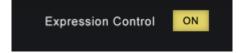
Some Patches in Keyscape have the Mod Wheel programmed to modulate specific parameters (e.g. Wah on several Clavinet C Patches). This menu allows you to override the Mod Wheel and remap a different MIDI Continuos Controller.

If you would like to use a pedal instead of the wheel, simply select the drop-down menu and a pop up will appear that says "Move MIDI Controller." Then press the pedal (or any other physical controller you would like to use) to remap it to the wheel.



Select "Reset to Wheel" to return to the default setting.

#### **Expression Control**



The default setting for Expression is ON. Expression (CC#11) is useful when you want to control a sound's volume without affecting the overall instrument output.

It is commonly used for "swells" and is a scaled version of the Master Volume. When you set the Master output (which is controlled by CC#7) any Expression volume will not exceed that level.

Try this pedal with the Harmochord!

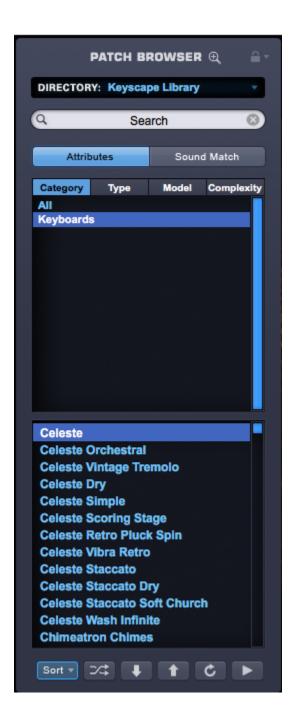
Set it to OFF if you want to use CC#11 for something else, such as MIDI Learn.

## **Omnisphere Integration**

As a bonus for Omnisphere 2 users, Keyscape also integrates fully as a satellite instrument within the Omnisphere® interface. Not only is it a significant expansion of new patches and soundsources, this capability really allows Keyscape/Omnisphere 2 users to harness the full synthesis power of the STEAM Engine® to explore endless new sonic possibilities and combinations!



If you have both Omnisphere and Keyscape installed, your Keyscape libraries will appear in the Omnisphere Browsers and Browser DIRECTORY menu along with your other Omnisphere libraries.



When Keyscape Patches are loaded in Omnisphere, Keyscape'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. Each Keyscape Patch contains its own Custom Controls layout that brings together all the most useful parameters of that Patch.



#### **Keyscape & Omnisphere Controls**

To switch to the Omnisphere interface, just click on the "X" in the top left of Keyscape's interface:



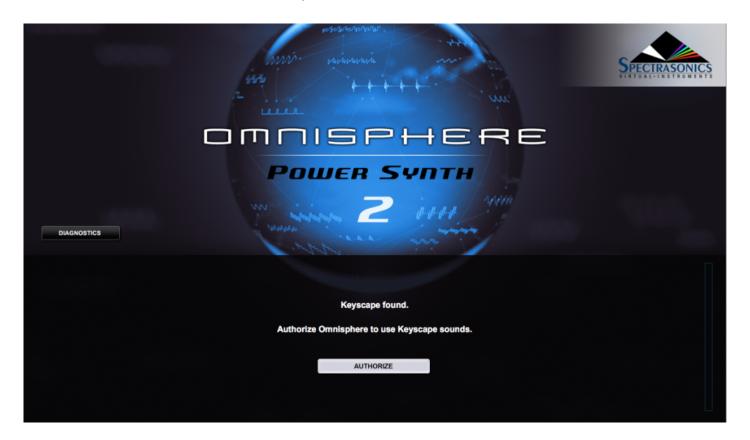
Conversely, selecting the KEYSCAPE button on the Omnisphere interface when a Keyscape patch is loaded will return you to the Keyscape Custom Controls page.



## Setup

In order to enable Omnisphere Library Integration, you must have Keyscape 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 Keyscape. When you launch Omnisphere, you will see the following splash screen. Click the Authorize button, and follow the normal steps for authorization.



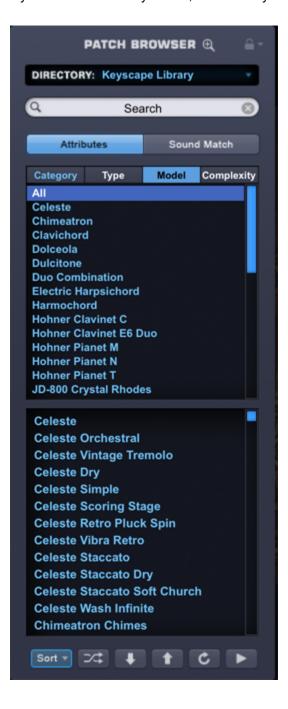
NOTE: You must generate a new Response Code via your user account at the Spectrasonics website.

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

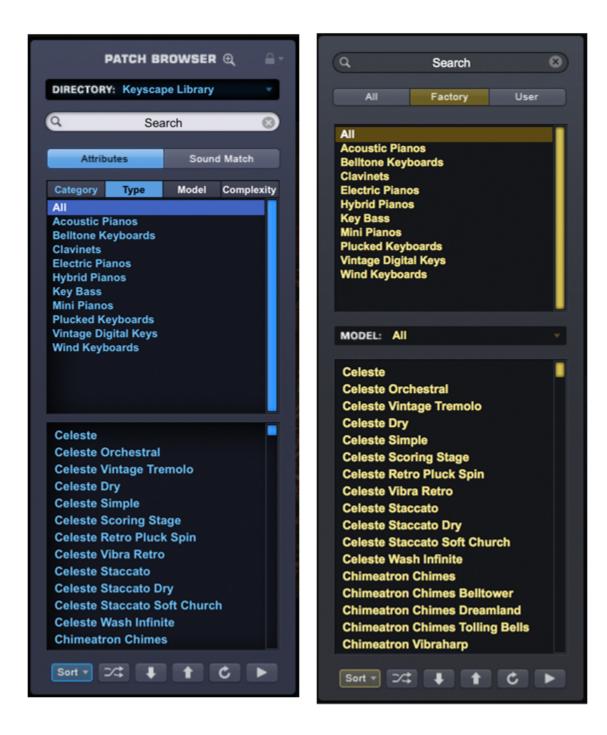
## **Browsing Sounds in Omnisphere**

In Omnisphere's Patch Browser, Keyscape sounds are presented in a manner that conforms to Omnisphere's Patch organization, which is slightly different than that in Keyscape.

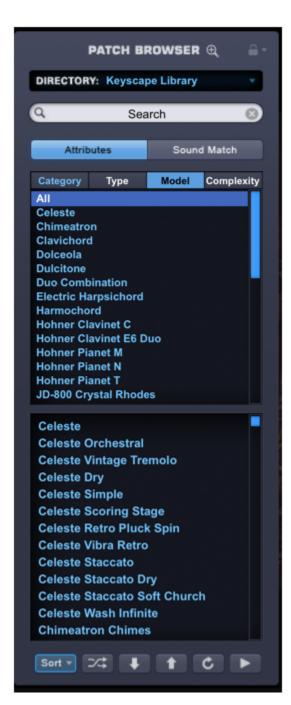
After selecting the Keyscape Library from the Directory menu, select "Keyboards" under Category.

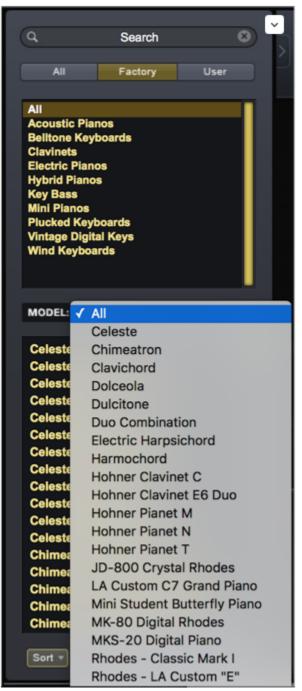


The second Browser filter is Type, under which you'll see the list of types originally displayed in Keyscape's top pane.



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





## **Using Keyscape Sounds**

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

#### **Combine Sounds**

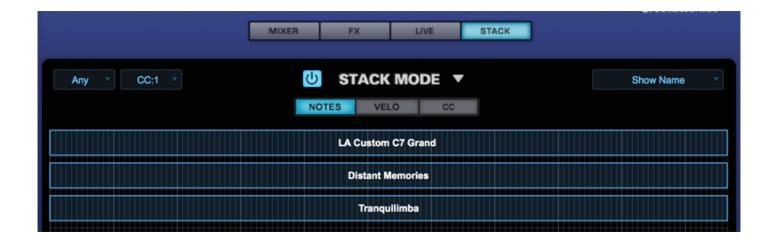
Using Omnisphere's multiple Parts, you can combine Keyscape and Omnisphere sounds. It is important to remember that many Keyscape and Omnisphere sounds contain thousands of samples and that certain synthesis tools and effects can be very CPU-intensive.

TIP: Often it can help to use the THINNING controls in the Soundsource Zoom to conserve CPU resources when combining Omnisphere and Keyscape sounds.

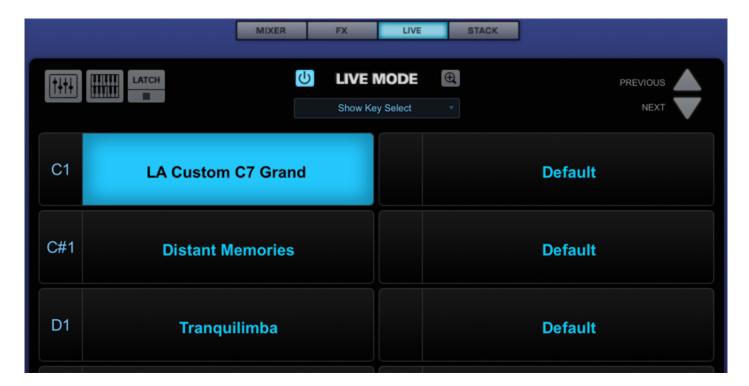
Of course you can also combine Keyscape sounds, but be mindful of the fact that in addition to the CPU requirements, different Keyscape models are tuned differently. Certain models utilize stretch tuning – a type of tuning that accommodates the inharmonicity of certain acoustic and electro-mechanical 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 Keyscape's "LA Custom C7 Grand" loaded in Part 1, Omnisphere's playable texture "Distant Memories" in Part 2, and Part 3 uses a rhythmic kalimba-based sound, also from Omnisphere. Using Stack Mode, the three parts play as one layered sound.



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



#### Use the Arpeggiator

You can apply Omnisphere's Arpeggiator to Keyscape sounds to create rhythmic patterns.



#### Use Omnisphere's FX Units to process sounds

You can use any of Omnisphere 2's great-sounding FX units to modify Keyscape sounds or get under the hood and tweak what is already in use. Keyscape already utilizes many of Omnisphere 2's FX Units, but there are many 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 Patch, "Rhodes 1946 Pre-Piano Retrospace" 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 Keyscape Patches or Soundscources to create unique sounds. In the example below, Granular is applied to a Classic Toy Piano sound to create a slowly evolving texture.



These are just a few of the things you can do with Keyscape inside Omnisphere 2. There are an infinite number of things to explore – the possibilities are truly endless!

## **Support**

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

NOTE: You will need to log into 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

#### SALES SUPPORT

For product orders or sales please contact your local Spectrasonics <u>distributor</u> or the Spectrasonics <u>Techshop</u>.

## **Updates**

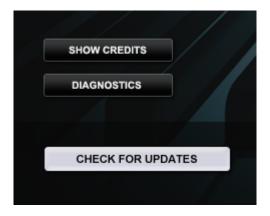
The latest versions of the software, Soundsource library, and Patch library for Keyscape can be found on our website at:

#### http://www.spectrasonics.net/updates

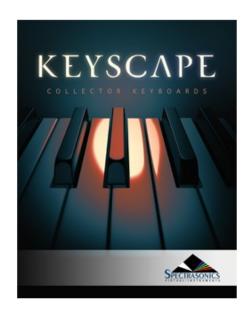
You can quickly check for updates directly from Keyscape. Simply click the Spectrasonics logo to reveal the Splash page.



In the middle left, select the button "Check For Updates."



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



## **System Status**

	Your System	Latest Version	Status
Software	1.0.0f	1.0.0f	•
Soundsources	1.0c	1.0d	•
Patches	1.0d	1.0d	•

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

**Get Updates** 

## **Glossary**

#### **AAX**

Avid Audio Extension – a Digidesign proprietary, cross-platform plugin format for Pro Tools.

#### **Audio Unit**

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

#### ΑU

Abbreviation for Audio Unit

#### **Automation**

As you manipulate controls on the Keyscape 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 Keyscape's parameters as well.

#### Bar

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

#### Bi-polar control

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

#### **Browser**

The dynamic, searchable area of Keyscape that offers access to the Factory and User Patch libraries.

#### **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.

#### 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. Keyscape's Columns can be changed to list a variety of Attributes.

#### Compressor/Limiter

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

#### Center detent

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

#### **Defaults**

These are predetermined settings that Keyscape 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 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 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 plugin. The engine developed by Spectrasonics that is responsible for running Keyscape is STEAM (Spectrasonics-Team), and Stylus RMXs' engine is S.A.G.E (Spectrasonics Advanced Groove Engine)

#### **Expander**

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

#### **Fader**

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

#### Folders/Sub-Folders

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

#### **Footer**

The section at the bottom of the Keyscape Browser.

#### Global

Anything that affects the status of the entire plugin.

#### GUI

Graphic User Interface – In Keyscape this is the plugin 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 plugins. 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 Keyscape. MUSE Receptor and Neko are examples of hardware hosts that work with Keyscape.

#### Instance

When you open a\*\* Keyscape plugin your host, there is one instance of it in your session. If your computer is powerful enough, you can run several instances of Keyscape at once.

#### Instantiation/De-Instantiation

The process of opening/closing plugins 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 Keyscape'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 parameters inside Keyscape for remote performance control and automation applications.

#### **LFO**

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

#### Limiter

See Compressor/Limiter.

#### List

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

#### Menu

Two different meanings:

- 1. Refers to a collection of sounds or grooves that are mapped on a single keyboard layout for easy access.
- 2. Refers to a user interface software pop-up/drop down list of options.

#### Menu Item

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

#### **MIDICC**

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

#### **Omni**

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

#### **Parameter**

A Keyscape control that can be manipulated to affect the audio.

#### **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.

#### **Peak**

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

#### **Pickup**

An electronic device that converts the acoustic vibrations of musical sound sources, such as a tine, reed, or string, into an electric signal that can be amplified.

#### Pitch Shift

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

#### Plugin

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. Keyscape has filters with 6db, 12db, 18db and 24db rolloff slopes.

#### Pop-up Menu

One of these 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.

#### **Preamp**

An electronic device that captures a very low-level signal, such as that from a pickup or microphone, and boosts the level it so it can be sent to an amplifier.

#### **Preset**

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

#### Reed

A small, tuned flat blade used for a sound source in certain electro-mechanical keyboards, such as Wurlitzer electric pianos, or Hohner Pianets. Reeds vibrate at tuned frequencies when they are either struck or plucked.

#### **Release Noise**

The sound made by the action of an acoustic keyboard instrument when you lift your hands from the keys.

#### **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 = <u>RMS RMS</u>

#### **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.

#### 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 plugins.

#### 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 Keyscape and many exciting future instruments.

#### Tine

A thin rod fixed at one end, used for a sound source in certain electro-mechanical keyboards, such as Rhodes electric pianos. Tines vibrate at tuned frequencies when they are struck with the keyboard's hammers.

#### 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 unattached via this feature of the MIDI Learn section.

#### **VST**

Virtual Studio Technology – a cross-platform plugin platform created by Steinberg.

### **Credits**

**Produced by Eric Persing** 

Sanity management: Lorey Persing

#### SOFTWARE DEVELOPMENT

Software Manager: Neal Olander

STEAM Engine design: Glenn Olander

Additional coding: Thomas Sera ni, Bernie Torelli, Magnus Jonsson, Jay Olson, Shirley Sloper, Jankoen de

Haan

#### SOUND DEVELOPMENT

Principle sound development: Eric Persing, Ignacio Longo, Scott Frankfurt, Jonathan Merrill, Mauricio Gasca, Nick Manson

Additional sound development: Seth Norman, Bob Daspit, Adam Hawk, Stéphane Pigeon Source Instrument Consultants/Technicians: Jim Wilson, LA Piano Services, Ken Rich, Zac Rae, Vintage Vibe, Chris Carroll, Jon Gusoff, James Theesfeld, Adam Haniper, Mitchell Manger, Mitch Robertson Recording Engineers: Eric Persing, Scott Frankfurt, Clark Germain, Moogie Canazio, Mauricio Gasca Clavichord Tangent Fabrication: Armand Hillside

#### **DESIGN**

Art Direction, Graphic Design, Cover Artwork, 3D modeling: Tolga Gurpinar

Principle Interface design: Tolga Gurpinar, Eric Persing Additional Interface design: Ignacio Longo, Neal Olander

Consumer Perspective Specialist: Les Correa

#### **DOCUMENTATION**

Managing Editor: Ignacio Longo Graphic Layout: Michael Flint

Contributors: Jonathan Merrill, Ignacio Longo, Eric Persing, Michael Flint

#### **PRODUCTION**

Production Manager: Michael Flint Production Coordinator: Lorey Persing Distribution Manager: Cesar Merino Warehouse Manager: Gabriel Muñoz

Mediamaster: Ignacio Longo

Betamaster: Bob Wilson Printing: Graphic Visions

#### **WEBSITE**

Webmaster: Chad Martin

Site development: Tolga Gurpinar, Chad Martin, Lee Samdahl, Ekim Yardimli Techshop: Chad Martin, Lorey Persing, Cesar Merino, Todd Lampe, John Martin

#### **ADDITIONAL TECHNOLOGY**

UVI Filters by Univers-Sons

Custom FX development partners: Overloud, Nomad Factory, Audionerdz FLAC Lossless Audio compression courtesy of Xiph.Org Foundation

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http://www.spectrasonics.net

## Legal

In this section you'll find all the Spectrasonics Software and Sounds License agreements as well as FAQ about how Keyscape can be used in your own projects.

## Licensing FAQ

#### What are the basic principles of the standard license agreement?

Single-user music production/performance: Allowed

Multiple users: Not AllowedNon-music use: Not Allowed

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

#### What is meant by "Single-User"?

A single-user is defined as one person. The license cannot be owned by a company, corporation, organization, band, partnership, studio, etc.

#### Are there any legal limitations to how I can use Spectrasonics Virtual Instruments?

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

#### Can I order Spectrasonics Virtual Instruments directly from Spectrasonics?

Yes, Spectrasonics Virtual Instruments can be purchased directly from our website as downloads. If you wish to purchase boxed versions you can do it through our dealer network.

#### Is there a educational license price for Spectrasonics Virtual Instruments?

Spectrasonics doesn't offer student discounts, however qualifying schools and institutions can participate in our EDU program.

## Do I need a special license to use Spectrasonics Instruments in music used on a commercial project?

No. The lifetime license fee to use the instruments and samples in any type of music 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!

Do I have to credit Spectrasonics if I use any Spectrasonics Virtual Instruments on a project? No, it isn't mandatory, but we certainly would appreciate it!

#### Can I use Spectrasonics Virtual Instruments in music library productions?

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

#### The music in the library must be mixed. You cannot provide separate tracks.

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

Please don't hesitate to contact us with any questions regarding your specific music library needs. info@spectrasonics.net

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

One of the only things that is NOT allowed is distributing your music in a multitrack format that completely exposes tracks that were 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 – someone who is not a licensed Spectrasonics user. This use becomes a type of redistribution of our copyrighted samples as a "derivative work" and is not allowed without special permission or a special license from Spectrasonics. Please contact us if you need further clarification: <a href="mailto:info@spectrasonics.net">info@spectrasonics.net</a> NOTE: "Multi-channel" mixed music (5.1, 7.1 mixes, etc.) is not a problem.

#### 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 a mixed format. Of course our sounds may sometimes appear in exposed passages like intros and breaks within a song's mix, but this is considered normal usage.

#### Can I use Spectrasonics Virtual Instruments in music for film trailers?

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

#### Can I use Spectrasonics Virtual Instruments in music for multimedia or game music projects?

Yes, with the exception of encoding samples created with Spectrasonics Virtual Instruments directly into the game. That requires a special license. Remember, music use is allowed, but non-music use (e.g. SFX) is not permitted without clearance. Please contact Spectrasonics if you wish to encode any of the samples into a game system.

#### Can I use the sounds from my Spectrasonics Virtual Instruments outside of music production?

If you are considering any non-musical use of the sounds from your Spectrasonics Virtual Instruments, it's very important that you contact us directly in advance to clear any special, non-musical usage: info@spectrasonics.net

## Can I use Spectrasonics Virtual 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?

Not without securing special permission or an additional license from Spectrasonics. Legally, it is considered a "derivative work" when our copyrighted sound recordings are involved in the creation of new samples or loops. Please see the Sampling FAQs section for more details.

#### 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 Virtual Instruments and libraries to create new audio samples and loops for your own use. The important thing is not to distribute them. Please see the Sampling FAQs section for more details.

#### Can I use the demo songs?

No. They are presented to give you an idea of what Spectrasonics Virtual Instruments can do. Demo songs cannot be sampled, remixed, or used in any other application without special permission from Spectrasonics. If you are interested in using any of the demo songs in some other application, please contact us and we'll connect you with the composer/publisher.

#### Can I resell Spectrasonics Virtual Instruments used to someone else?

Please see our License Transfer FAQs.

#### Can my writing partner use my Spectrasonics Virtual Instruments on their computer?

No. The license to use Spectrasonics Virtual Instruments is on a per-person (single-user) basis. They would need their own licenses for the Spectrasonics Virtual Instruments to use them legally on their computer.

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

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

## As a studio owner, am I allowed to include Spectrasonics Virtual Instruments on a rental or studio computer for studio clients to use on their projects?

No. The standard license to use Spectrasonics Virtual Instruments is only granted to the buyer. We have a "single-user/multiple-computer" lifetime license policy. If it is a recording project that you are musically involved in producing, engineering or arranging of course that isn't a problem. However, your studio clients aren't licensed to use them for their own projects and the use of Spectrasonics Virtual Instruments cannot be "rented." In the case where a client has his own license for a Spectrasonics Virtual Instrument, that client is welcome to use the studio's installed copy of the instrument.

## Does this mean that I can't use Spectrasonics Virtual Instruments when working on someone else's project?

Not a problem. This type of use is standard and perfectly allowable. The "single-user" is defined as the person who is licensed to use the software instrument for his/her lifetime. This means that the licensed user can use it on any musical projects he/she is involved in. This can be a person's own project, a project where they are acting as a producer for another artist, or as a session musician performing on someone else's project – live or in the studio. Most of our customers use their Spectrasonics Virtual Instruments on many different kinds of musical projects for different artists and collaborations.

The main point of our license agreement is the concept of a single, licensed user. A licensed Spectrasonics user must be musically involved in a project that is utilizing Spectrasonics Virtual Instruments – hence the restriction against simply renting the instruments or renting "time" to use the instruments as part of a studio's services.

Can I install my Spectrasonics Virtual Instruments on a client's computer for their use? Not unless they are a licensed user.

# 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 actually not unusual at all or even unique to Spectrasonics. In fact, this is the identical type of license agreement used for thousands of sample libraries, virtually all sample-based virtual instruments, and the vast majority of music software. Single-user license agreements have different restrictions than those for hardware devices, and many people are not aware of the distinctions. One of the purposes of this FAQ section is to serve as a clear explanation of our policies. "Single-user" license restrictions are standard for nearly all software/soundware companies – not only Spectrasonics.

#### Who can I talk to if I have more questions?

We're happy to talk to you! You can send us an email at info@spectrasonics.net or call us at 888-870-4223.

## Sampling FAQ

The purpose of this information is to clear up any confusion regarding the sampling of Keyscape<sup>™</sup>. We get a lot of questions about this topic from other sound designers, so we'd like to make sure our policies are clear and upfront.

The factory Sound Libraries within Keyscape are based on sound recordings which are copyrighted by Spectrasonics ©2016. The included Keyscape Sounds License Agreement grants the purchaser a license to utilize the copyrighted material in the sound libraries within a musical context (see the <u>Sounds License Agreement</u> and <u>Licensing FAQs</u> for more info).

However, please note that this included standard license does NOT grant the user any rights to copy any portion of the factory Sound Libraries for distribution or to use Keyscape's Soundsources to create new samples for distribution.

Please contact Spectrasonics directly if you have any further questions regarding the sampling or distribution of sounds from Spectrasonics Virtual Instruments. We are happy to talk to you, as other licensing options may be available. We handle requests outside of the standard licensing terms on a case-by-case basis. You can send us an email: <a href="mailto:info@spectrasonics.net">info@spectrasonics.net</a> or call us at 888-870-4223.

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

No. The factory core sound libraries of Keyscape 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 speci cally prohibited.

#### What if I extensively modify the Keyscape factory sounds?

All modi cation, 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 special clearance in advance.

#### Does this mean that I'm not allowed to distribute my own original Keyscape Patches?

That's not a problem. Any type of distribution of user Keyscape Patches (Keyscape .prt\_key) is not only allowed, it's encouraged! :-)

Am I allowed to distribute or sell samples I have created using my own original Keyscape Patches? Because Keyscape's library is based on our copyrighted recordings, the answer is NO. You can distribute Keyscape Patch les (.prt key) only. Please contact us if you have questions.

#### Can I sample Keyscape for my own private use?

Of course. Every licensed user is free to use Keyscape'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 Keyscape samples if it's non-commercial?

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

## But if Spectrasonics sampled other manufacturers' instruments to make Keyscape, then why can't I use Keyscape for my sampling project? This seems inconsistent.

For Keyscape'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 info@spectrasonics.net if you have any questions regarding sampling Keyscape™.

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provided herein, the terms of this Agreement shall survive termination. Termination is not an exclusive remedy and all other remedies will be available whether or not the license is terminated.

### **Sounds License Agreement**

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You cannot electronically transfer or post samples from Spectrasonics Virtual Instruments to another person or group of persons over the Internet, or place them in a computer/sampler network to be accessed by multiple users.

Use of these sounds in Multimedia/Game Music projects is limited to use within original musical compositions.

Spectrasonics constantly monitors other soundware and software releases to check for copyright infringements and will prosecute all piracy and copyright violations to the fullest extent of the law.

#### In Plain English:

Please be creative in your application of these sounds and instruments and respect the artists' hard work by keeping them for your use only.

DON'T COPY THEM.

THE SOUNDS IN SPECTRASONICS VIRTUAL INSTRUMENTS ARE GUARANTEED TO BE 100% COPYRIGHT CLEAN

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