Phoenix Scream

– 鳳 鳴 –

User manual

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Chapter 1. Introduction

"Phoenix Scream",   Suona is the Chinese variant of Surnay that originates from central Asia. It has a characteristic reed made of bulrush trunk, resulting in its featured metallic sound rich in high-frequency. Suona is highly expressive, especially for extreme delight or grief-stricken emotions. Thus, it is commonly used in both weddings and burials in Chinese tradition. Nowadays, it appears in maestoso or heroic topics in contemporary works more often. Also, Suona's expressiveness is reflected in its reproduction ability. It can mimic real-world sound with highly flexible performances, such as birds sing, monkey cry, and frog croak, and these are all included in our virtual instrument.

To ease creating harmonic parts, we make two virtual instruments for Suona, one with the most commonly-used pitch range (Phoenix Scream) and one with bass (Phoenix Growl).

Chapter 2. Installation

Minimum System Requirements

✓   Intel or AMD CPU supports SSE 3

✓   Mac OS X 10.9 or Windows 7

✓   4GB RAM

✓   6GB free hard disk space

Please note that Logic Pro 9 is NOT supported, please use Logic Pro X or higher.

Phoenix Scream has two installers. Program installer includes the independent program, plug-ins and patterns. Sample installer includes audio samples. Both installers need to be installed but not in that order.

● Mac:

Please find installation file "PhoenixScream-programs-1.x.x-retail-en_US-x86-osx.dmg" and " PhoenixScream-samples-1.x.x-osx.dmg", double click and follow the instructions.

● Windows:

Please find installation file "PhoenixScream-programs-1.x.x-retail-en_US-x86-win.exe", double click and follow the instructions.

Samples are provided as an ISO image. If you are using Windows 10, please right click on file "PhoenixScream-samples-1.x.x-win.iso" and select "Mount" on pop-up menu, or select "Windows Explorer" in "open with" sub-menu. Then run program "PhoenixScream-samples-1.x.x-win.exe" in mounted drive to run installer program. If you are using older systems, please use some third-party virtual drive applications. You could also unfold the ISO image using compressor applications (winzip, winrar, 7-zip, etc.) and run installer program.

Chapter 3. Registration

Serial Number Binding

To ease users managing purchased products, all products need to be bind into a ThreeBodyTech account. Please visit https://my.threebody.com/register and create account.

After account created, please login and visit bind serial number page, enter Phoenix Scream serial number and it will be bound under your account.

Activation

When you first run Phoenix Scream, following page will be shown:
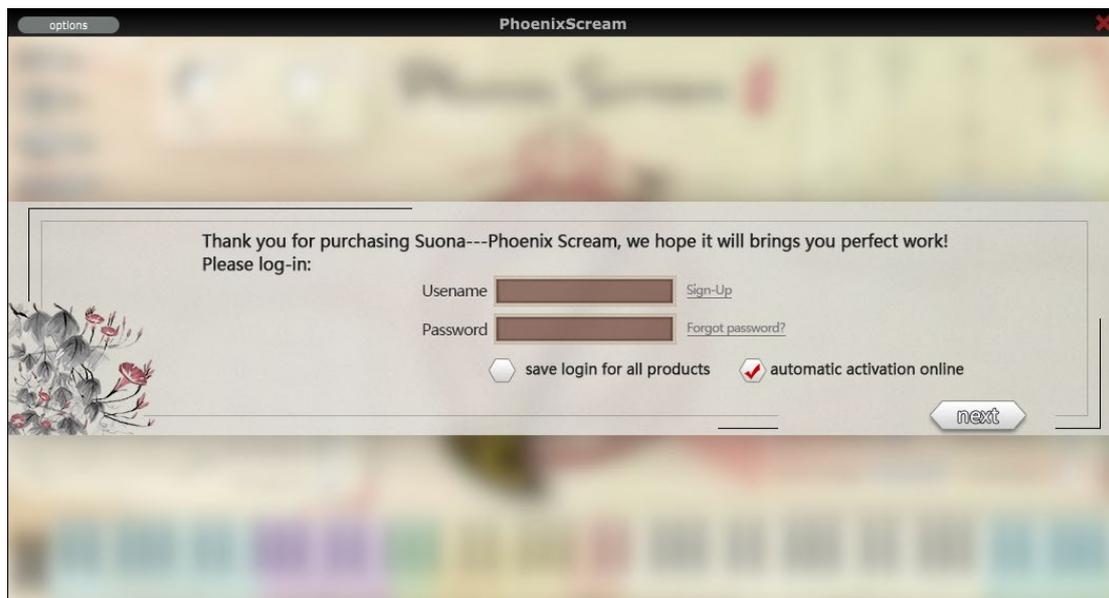
If you select "save login for all products", the user name and password entered here will be stored and can be used for activating other Three-Body Technology products.

Now you have two choices: automatic activation or manual activation.

Automatic Activation:

Please enter your account name and password, keep Automatic Activation checkbox selected, then click the next button. If you have Internet connection to your computer and your account have bind with corresponding serial number, your product should be activated automatically. We recommend to use the standalone application version of Phoenix Scream to perform automatic activation, as host DAWs sometimes block plugins' network connection.

Manual Activation:

If you don't have Internet connection to your computer installed with Phoenix Scream, you can activate it manually. Deselect "Automatic Activation" checkbox and click the next button, the page below would be shown:
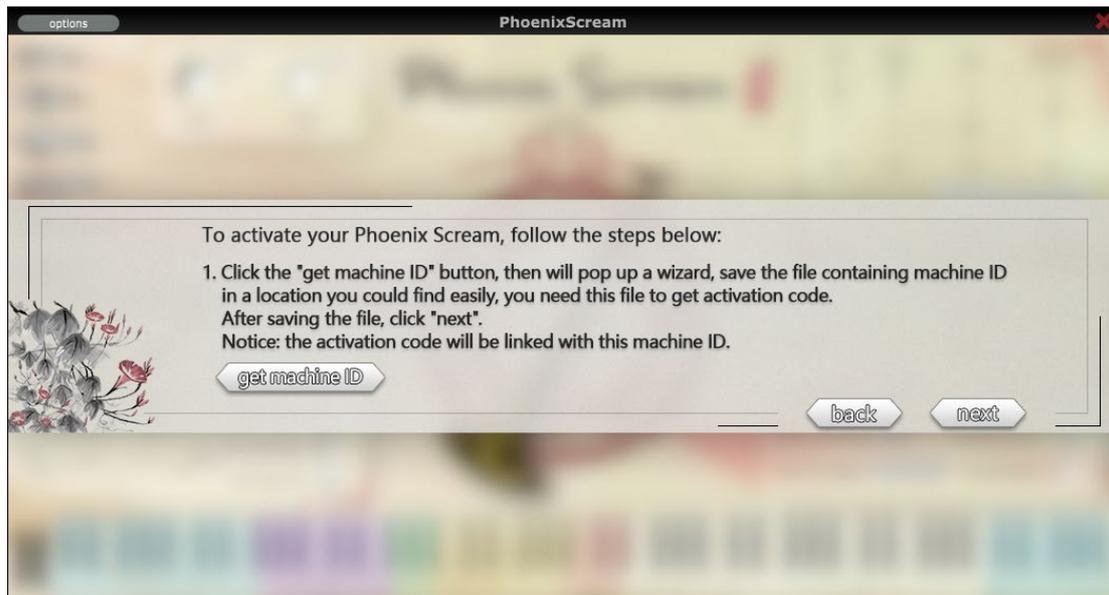
Now you need to perform a series of operations:

● First, click get machine ID button, your computer identification information will be stored to
   a file. click the next button and the page below would be shown:
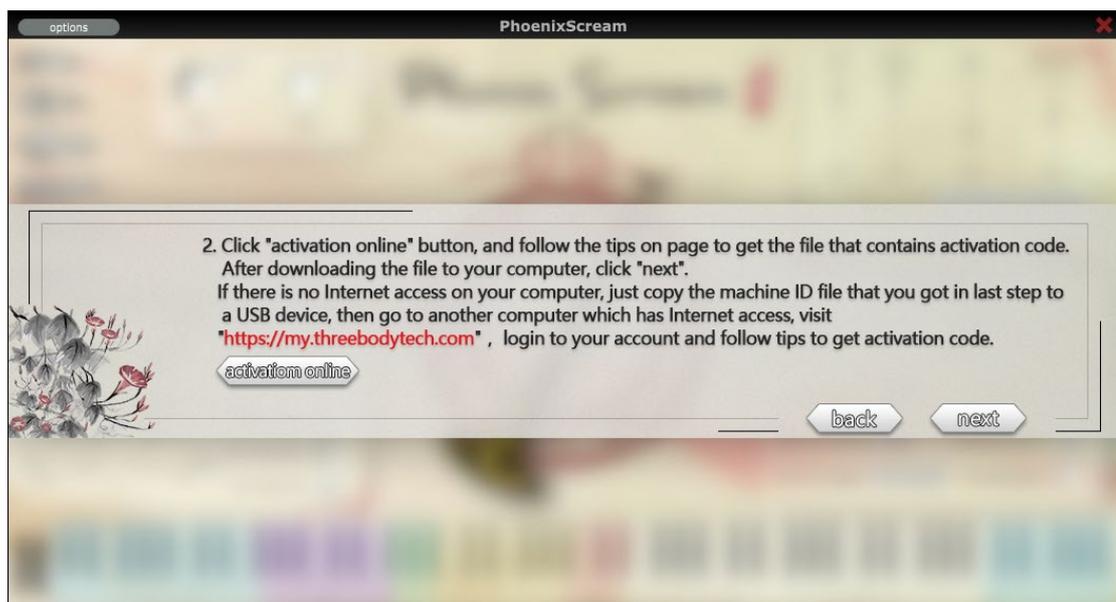
● Find another computer that is connected to the Internet, and use mobile storage to copy the
   machine ID file to that computer.

● Visit https://my.threebodytech.com, login to your account and switch to my product page.
   Select product Phoenix Scream that you need to activate, select an available serial number,
   and upload the machine ID file on manual activation frame.

● The website would hint you to download the activation file. You probably need to save it to a
   mobile storage to copy back to the computer that needs activation.

● Come back to the computer installed with Phoenix Scream, click the next button and the

page below would be shown:would be shown:
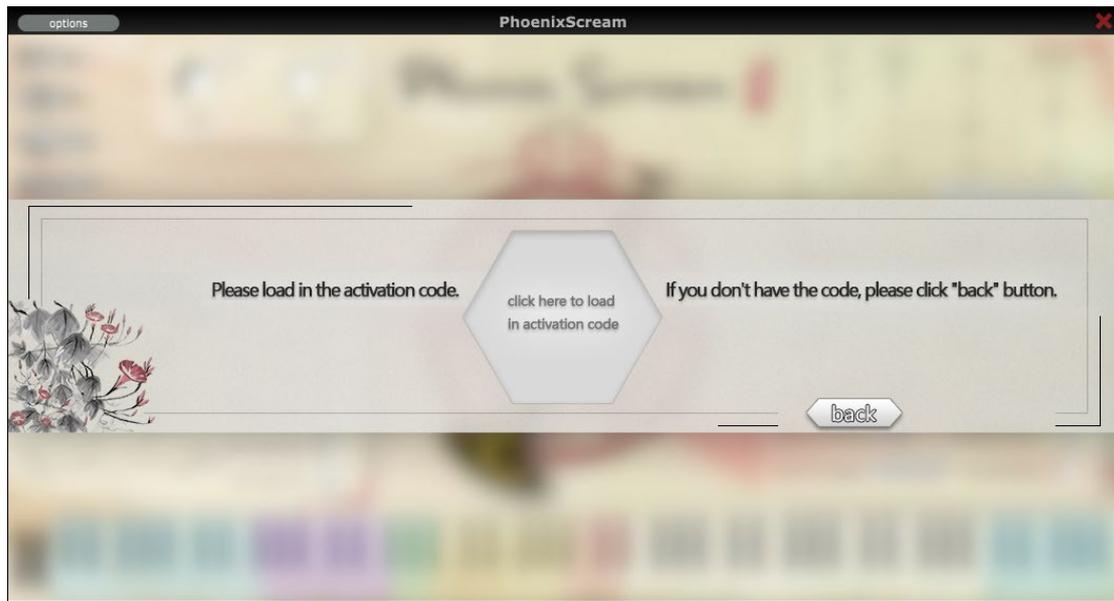
Copy the activation file to this computer and import it here, and it's done.

No matter you activate Phoenix Scream by automatic or manual method, if you see this page:
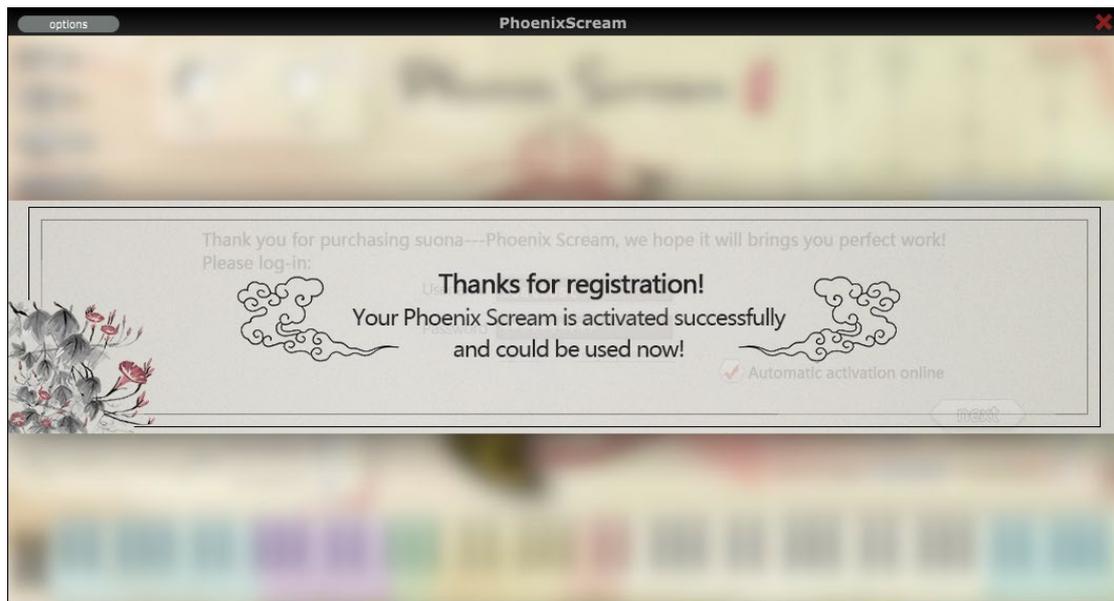
Congratulations! Your Phoenix Scream has been activated and you can use it now.

Chapter 4. Loading
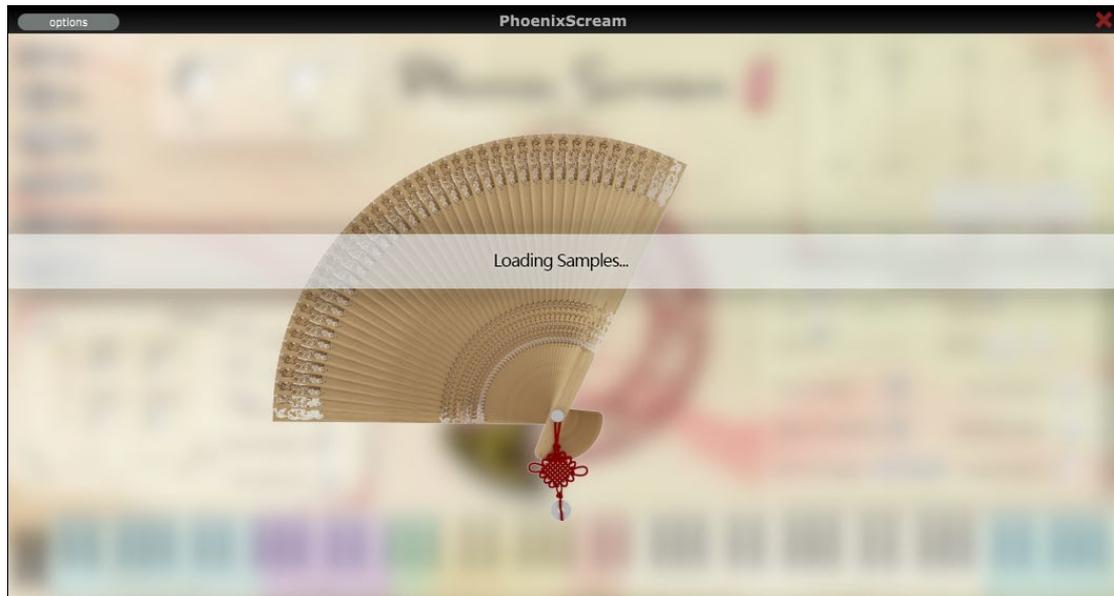
After successful registration, the loading page will be shown each time the first instance of Phoenix Scream is opened in your DAW. It will tell you the current loading progress of the disk-stream buffer.

As the amount of buffer data is large, all Phoenix Scream instances in one host DAW progress shares one same buffer. In result, adding additional instances will not lead to additional buffer loading time. The buffer will start loading when the first Phoenix Scream instance is created, and will be released when the last instance is released.

Chapter 5. User Interface

5.1. Mixer

Vol.

Adjust the total output master volume of close and mid field, and reverb.
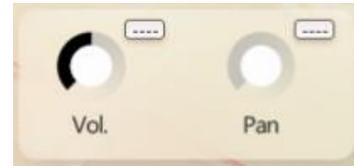
Pan

Adjust the overall stereo width of the close and mid field, and reverb.

5.2. Sound Field Controlling

In order to retain greater adjustability, we design three tones of Yin, Yang and stereo before the recording stage; in the recording stage, this design is achieved by choosing different microphones and positions; finally, we fully reserve these four channels (yin and yang are mono) to the sound source. Compared with simple EQ adjustment, this design brings more complex changes and adjustability.

Yang

Tone with more high frequencies details.

Yin

Tone with more mid to low frequencies details.

Far

Used to control the stereo sound.

Reverb

Reverberation convolution of unique scenes.

Pan

Adjust the position from left to right of the upper mono channel.

Width

Adjust the pan width of upper stereo channel.
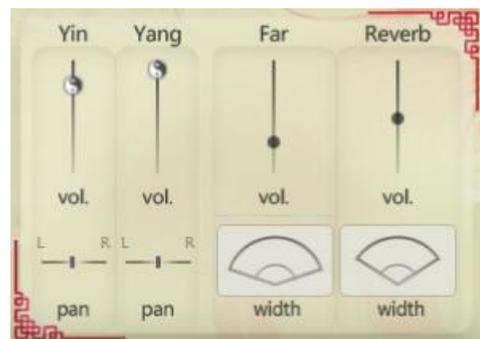
5.3. Vibrato Control

You can use the fader on the left side of this panel to control the amplitude of the vibrato. This fader can be set to a controller.

When the sub value is 0, there is no vibrato. When the fader reaches to one third, the amplitude and speed of the vibrato will be controlled by depth 1 and speed 1; when the fader reaches to two-thirds, the amplitude and speed of the vibrato will be controlled by depth 2 and speed 2.
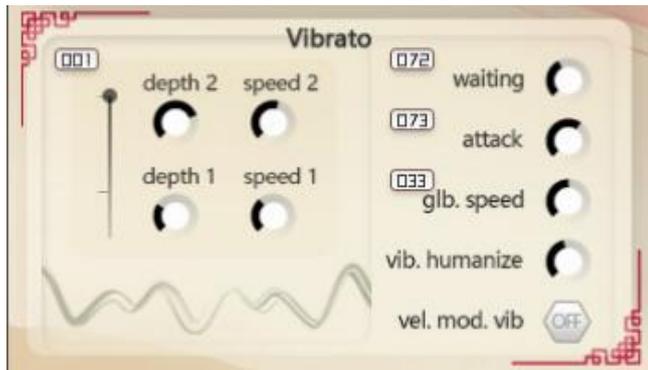
Depth

Set the pitch range/amplitude of vibrato.

Speed

Set the rate of vibrato.

Waiting

Set the waiting time for the triggered sampling to start vibrato.

Attack

The larger the value, the slower the vibrato starts, otherwise the vibrato will instantly reach the maximum amplitude.

Glb. Speed

The overall speed of vibrato.

Vel. mod. vib

When playing with high velocity, the amplitude of the vibrato will increase accordingly. If the switch is turned off, the velocity of the trigger key will not affect the vibrato.

Vib. humanization

Trigger some randomness of vibrato.

5.4. Performance Control

Exp.

Expression controls the playing dynamic of Suona.

Slide

When the fader is pushed up, the slide technique will be triggered, and when the fader is pushed great enough, it will trigger a slower slide technique. (Due to the fingering limitation of the Suona, the slide effect of some intervals is not obvious enough.)
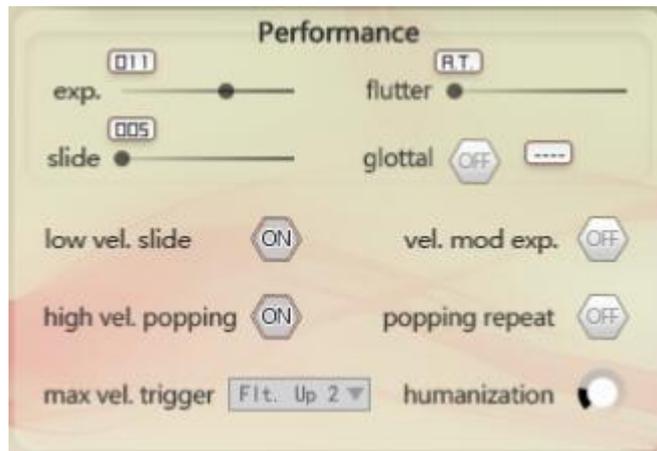
Flutter and Glottal

This button controls the switch between Flutter and Glottal techniques (special techniques of Suona)

Low vel. slide

Turning on this button, slide technique will be triggered if touching the notes softly.

Vel. mod exp.

When this feature is on, vibrato will be affected by velocity.

High vel. popping

Turing on this button, popping technique will be triggered if the target note is played very hard.

Popping repeat

With this button on, when playing a note with the same pitch as the previous one, the new note will use the popping technique instead of the usual Tonguing technique.

Max vel. trigger

Here, users can customize the samples that need to be triggered with the highest velocity.

Humanization

The larger the knob is pushed, the pitch, tone and volume will have a certain degree of randomness. Compared with other traditional Chinese instrument products, Phoenix Scream's humanization range is much larger. You can load multiple channels and set each one's "humanization" to a large degree to achieve the effect of the unison of Suona.

5.5. Preset Manager

The file name extension for Phoenix Scream preset file is ".phs". This file contains all the parameters, MIDI CC numbers and effect setting. Use "save", "load" botton on the upper left corner to save and load presets.

Settings

Click **settings**, you'll see advanced settings. Click **factory reset** to restore factory setting. Click **save as default** will save the current setting as the default setting and this setting will be applied for every newly opened instance.

Resampling Quality

The sample rate of Phoenix Scream and your project may be different, thus resampling is mandatory. This parameter adjusts resampling quality, whilst higher quality would consume more CPU power.

This option will take effect as soon as you change it.

Legato Thld

This technique is triggered when the distance between two notes is less than this value.

Gliss Vel. thld

Gliss technique will be triggered if the velocity of target note is played under the threshold.

Legato Offset

By adjusting this value, the offset position of the legato head can be changed.

GUI Zoom

Scale whole UI to fit screen of different sizes.

Please note: the new size will only be applied when you reopen the host. Simply shut down the Phoenix Scream without reopen the host may not make this setting work.

Disk Buffer Size

This parameter controls the amount of preload bytes for each sample. A larger amount of bytes would reduce potential sound break caused by slow hard disk, but would also significantly increase memory usage.

If you do not encounter problems such as excessive memory usage or sudden interruption of notes during use, this parameter does not need to be adjusted.

5.6. MIDI Keyboard Controlling

Red Keys

It is the stop key. When playing any note, triggering any one of the red keys will trigger a technique to end the current note. Different red keys use different techniques to end the current note.

Purple Keys

The purple keys are used to switch between the long note and the touguing decoration of Suona, as well as a variety of other special techniques of Suona.

Yellow Keys

When playing any note, triggering the yellow key will immediately bring a popping technique or other techniques on the current note being played. Different yellow keys represent different techniques.

Green Keys

Different kinds of trill techniques.

Left Blue Keys

More than ten different common Suona techniques. When you hold down a blue key, all notes played will be triggered according to the blue key technique.

When you press the blue button and let go, only the next note is triggered according to this technique. Flicking is triggering this specific technique, and playing in a larger force will trigger another technique which is slightly different than this one.

Right Blue Keys

When you press a key on the blue keyboard on the right, various sound effects are triggered

Chapter 6. Effect

6.1. Overview

The effect rack of Phoenix Scream origins from the famous HeavierFX.

Besides convolution reverb, we hand-picked some effects from H7S's effect rack that suitable for Phoenix Scream.

6.2. Compressor

Description

A compressor can be used on both clean sound and post-effects sound. It comes with side-chain low-pass, high-pass and peak-gain filters.

Controls

- **Lookahead:** delays the input signal but leaves detection signal non-delayed, and uses the non-delayed signal to drive the compression of the delayed signal. Applying this function could start to raise the extent of compression before a strong attack occurs, which could achieve optimum compressing effect and avoid unnatural sounds.

- **Thr.:** Sets the threshold of the signal at the input of compressor. Turn down for more compression.

- **Ratio:** controls the amount of signal that is attenuated when compressor is in action. The higher the ratio, the greater the amount of compression, and the more dynamics get evened out.

- **Attack**: sets the time need for compressor to engage. Longer attack time retains more original dynamics of a signal.

- **Release:** sets the time need for compressor to return to normal state after signal falls below the threshold. Short release times means compressor tracks slight level changes, thus may producing a choppy sound.

- **Level:** the master volume.

- **Low-Cut:** sets the cutoff point of the high-pass filter of detection chain, higher value will result in avoiding compress low frequency sound.

- **High-Cut**: sets the cutoff point of the low-pass filter of detection chain, lower value will result in avoiding compress high frequency sound.

- We also have an one band EQ which has **Freq.**, **Q** and **Gain** to process detection signal. You can set the freq. you love, compressor will focus on compress those signal first.

6.3. PEQ

Description

A 4-band parametric equalizer.

Controls

- **Freq:** knobs set the center frequencies for each EQ stage.

- **Gain:** knobs set the amount of boost or attenuation.

- **Q:** knobs control the filter sharpness.

- **Level:** the master volume.

6.4. Chorus

Description

A delay-based effect unit that generates chorus-like sound.

Controls

- **Speed**: controls the tempo of the LFO causing the phasor modulation, and **Sync** will synchronize the modulation speed with host tempo.

- **Stereo:** sets the width of sound. When turns on, the effect will produce a wider sound.

- **Depth:** controls the depth of modulation.

- **Delay:** sets the amount of delayed time between input and processed audio.

- **Mix:** sets the ratio of wet and dry sound. Turn it up for more processed sound.

- **Level:** the master volume.

6.5. Ping Pong Delay


About

Ping Pong delay provides a special delay effect. The first delay will be in the left channel, and the second in the right, then back to left, then back to right (or vice versa). The delays would sound like a ping pong match if you were watching from the side of the table, right in front of, and facing the net.

Controls

- **Sync:** matches the tempo with the speed of the host.

- **Time:** sets the time between delay taps.

- **Feedback:** sets the feedback level from the final repeat to the input of the delay line.

- **Low-Cut:** sets the cutoff point of the high-pass filter. Higher values produce a thinner sound.

- **High-Cut:** sets the cutoff point of the low-pass filter. Lower values produce a darker sound.

- **Depth:** knob allows you to detune the delayed sound. A LFO will be used for control the pitch of delayed sound, so that brings a sense of chorus for the current tone. The deeper the depth, the more the detuning. If it's too deep…Well, the tone may be off!

- **Rate:** sets the frequency of LFO.

- **Mix:** sets the ratio of wet and dry sound. Turn right for louder wet sound.

Chapter 7. Reverb
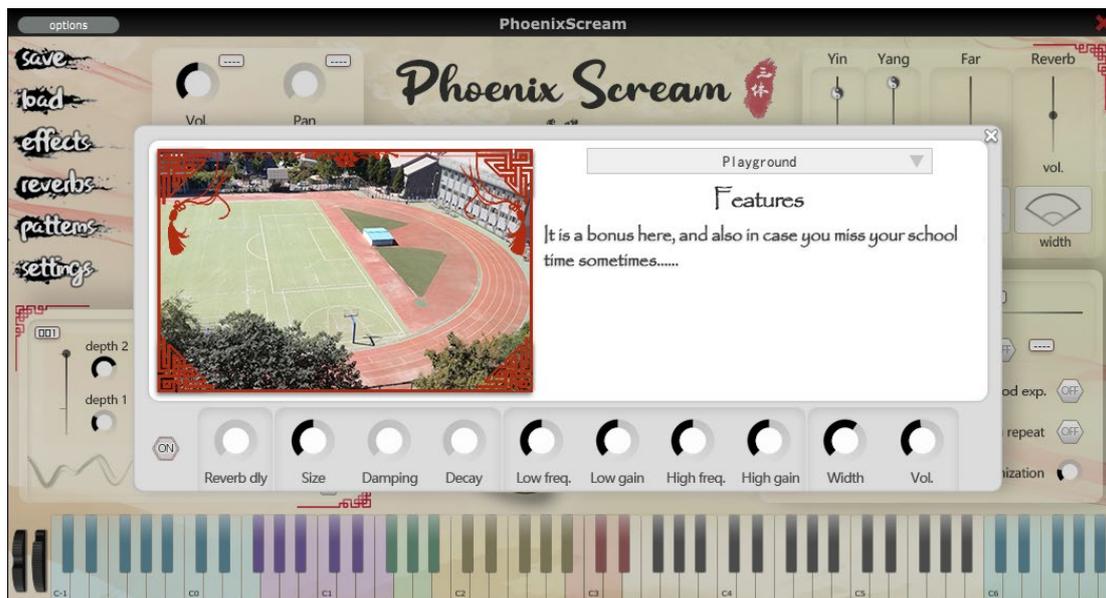
- **ON/OFF：** Switch of reverb. When turned off, no reverb will be applied.

- **Reverb:** Use the drop down window to select different type of reverb. Each reverb has a given "setting" in order to give you a basic understanding of what this reverb sounds like.

- **Reverb Dly:** delay the wet sound of reverb.

- **Size:** set the length of convolution.

- **Damping:** higher value for lower early reflection.

- **Decay:** higher value for quicker decay

- **Low freq.:** set the frequency of low frequency EQ.

- **Low gain:** set the low gain of low frequency EQ.

- **High freq.:** set the frequency of high frequency EQ.

- **High gain:** set the gain of high frequency EQ.

- **Width:** set the width of reverb. This is same with the Reverb Width slider in top right of main interface.

- **Vol:** set the volume of reverb. This is same with the Reverb Vol slider in top right of main interface.

- **You will find that the pictures of four scenes are different than our other traditional Chinese instrument products. These are the scenes we optimized for Suona.**

Chapter 8. Pattern Library

8.1. Overview

It feels frustrated when you run out of ideas. No worries! We prepared a pattern library with segments specially made for Phoenix Scream. Besides MIDI segments, each pattern comes with its own effect setting. It helps when you want to quickly search for tone and inspiration. You can also build your own pattern library.

Click on "patterns" in upper left corner, you'll see patterns manger.
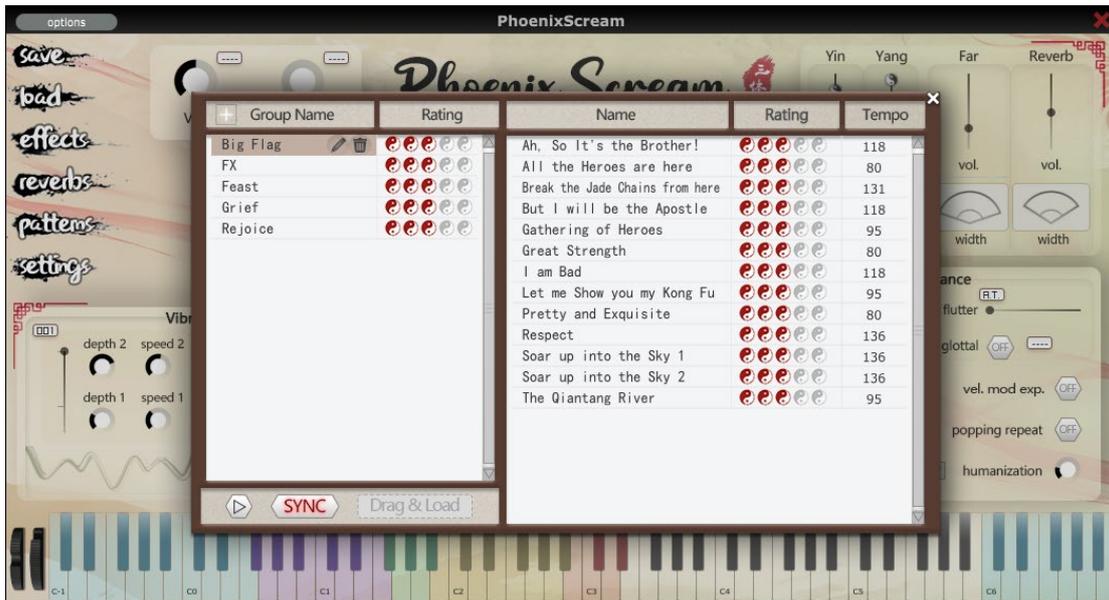
To the left is group manager, functions as folder just like in operation system. You can select the actual pattern you want on the right. At the bottom you can play the pattern selected.

Group Manger

Click on any group under group manager, you'll see all the patterns in this group on the right.

Click on the "pencil" icon to edit the name of group, click on the "trashcan" next to it to delete. Please note once the group is deleted, all patterns in this group will be deleted. You can rate the group by clicking on "Yinyang" icons.

Click on the "plus" icon in upper left corner to add a new group.

Patterns Manger

Click on the "pencil" icon to edit the name of pattern,

click on the "trash can" next to it to delete. You can rate the pattern by clicking on the "Yinyang" icons.
The numbers under "Tempo" is the default tempo for this pattern.

Users can make their own MIDI pattern by save a MIDI file, then drag the file into pattern library.
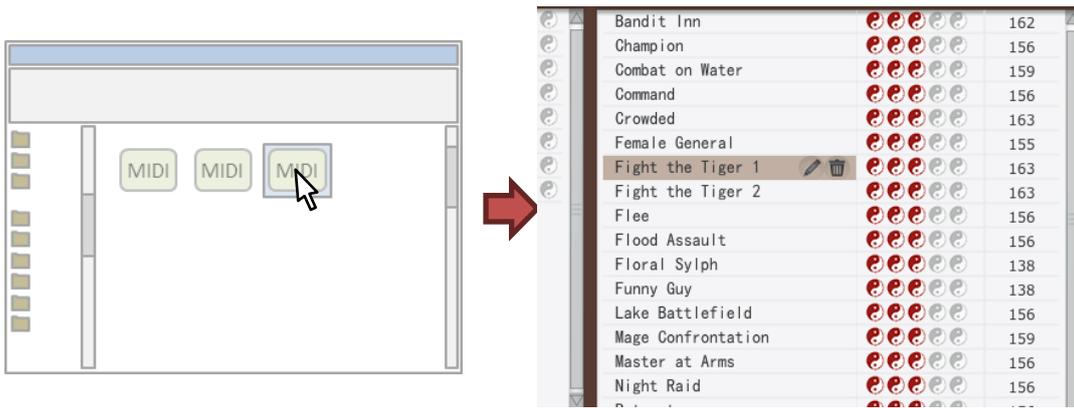
After dragging, the first track in the MIDI file will be used as pattern content. At the same time, the current setting of the plugin will be saved as the preset of this pattern.

Some Hosts provide an easier way to drag pattern, which is dragging direct from MIDI tracks. Please check your Host to see if it has this feature. Overall, dragging MIDI file is always supported forsystem file browsers.

8.2. Pattern preview

- The triangle at the bottom left is the **play** button. All patterns have corresponding settings. When you play a certain pattern, Phoenix Scream will temporarily adjust all the parameters stored inside it. Then if you drag the pattern being played and use it, all parameters will be applied permanently. If you don't and just stopped playing, then Phoenix Scream will resume to the previous setting.

- Turns on the **Sync** button next to play button will sync the tempo with the Host. When turned off, all patterns will be played at its default tempo (the number under Tempo).

8.3. Apply pattern
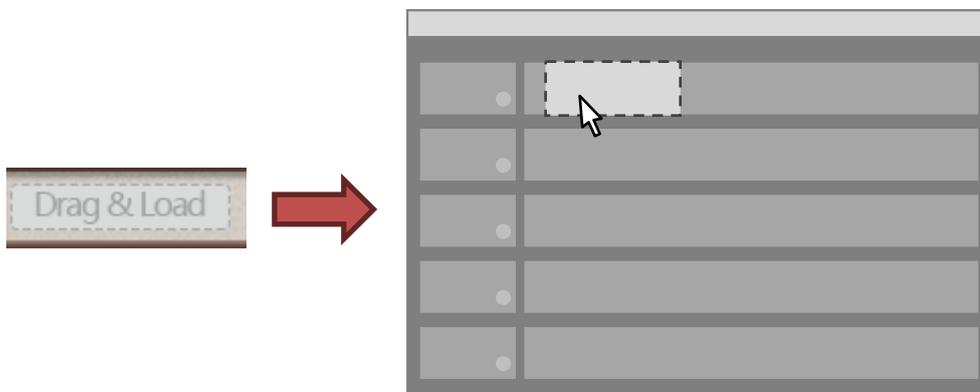
First, select the pattern you like, then drag the "Drag & load" button to a MIDI track in DAW, you'll get the MIDI pattern.

Chapter 9. Advanced settings

You'll find "ThreeBodyTech/PhoenixScream" folder from system application settings path. You can adjust advanced settings from this folder.

For Windows, it's located: C:\Users\[your_name]\AppData\Roaming

For Mac, it's located: ~/Library

Please note: If you haven't read this Chapter or not sure 100%, do not modify the content in this folder.

9.1. Sample Folder Location

Sometime you want to move the sample folder after successful installation. If you manually move the folder to a new place, Phoenix Scream won't detect it correctly. Then you can edit "SamplePath.txt" and change the path to the new place where you moved the folder.

If you don't want to or don't know how to edit "SamplePath.txt", no worries! Phoenix Scream will ask you to select new path for sample folder when not able to locate it.

9.2. UI Rendering Mode

Phoenix Scream has two UI rendering modes: CPU mode or GPU-accelerated mode. CPU is commonly used but will cost extra CPU usage, while GPU-accelerated mode won't cost much CPU

but may cause rendering glitch on some machines. By default, Phoenix Scream uses CPU

rendering on Windows and GPU-accelerated rendering on Mac. If you find glitches or delay, you can search for "GPUConfig.txt" in setting files and modify then restart. It's simple: type "0" for CPU and "1" for GPU.

Chapter 10. Q&A

How many computers could one serial number activate?

Each serial number could activate Phoenix Scream on two different computers.

Please visit https://my.threebodytech.com and manage your machines bound to serial numbers in your user account. There are limits on deactivation frequency, and if the system hints a failure, please contact us with email below and describe your situation: support@threebodytech.com.

What size should I set disk-stream preload?

If you can run Phoenix Scream without any problems, then just keep the default values. If you get broken sound like clicks, pops or very short notes, try to set it to a larger value to lower the load on your hard drive. If your disk is fast (such as SSD), you may try to lower this value to save memory.

Can Phoenix Scream instances from multiple hosts share sample usage?

Unfortunately, No. Only Phoenix Scream instances in the same host can share samples. That's because different host DAWs are in different processes, and sharing memories from multiple processes may cause problems like extra delay or CPU usage.

If you need to ReWire multiple DAWs together, we suggest loading Phoenix Scream into the master host DAW.

How many notes can I play simultaneously?

For Suona, only one note.

How do I report bugs?

If you find any bugs, please contact us at: support@threebodytech.com. we'll response as soon as possible.

Chapter 11. People

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Robert Leuthner

Users of Heavier7Strings

Our friends and family

Midifan, Audiobar, CNKeyboard, and all enthusiasts of music!

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