

# **BLACKHOLE**

## User Guide

**Eventide<sup>®</sup>**

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# Chapter 1

## Introduction

### 1.1 About This Product

Thank you for your purchase of the Eventide Blackhole plug-in. Eventide Blackhole is a classic Eventide reverb effect capable of producing huge spaces and out-of-this-world soundscapes. For over 40 years, innovative effects like these have made Eventide an industry leader, and we are proud that they continue to be in demand today.

This package includes a plug-in version of the Eventide Blackhole reverb algorithm in Avid AAX, Apple Audio Unit, and Steinberg VST formats.

We'll get into more depth on the product soon but, before you forget, please take a few minutes to register online. This helps us keep you informed of any important software updates, and any special offers that may only be available to registered users.

### 1.2 About This Manual

While we're very confident you'll be able to use your new plug-in without reading this manual, we urge you to have a quick look. There are several unique features and interesting options presented in Blackhole and a cursory glance will illuminate any features you may overlook. We'll try to keep it all relevant and highlight any tips or cool tricks for you. We also won't cover much at all about the operation of your plug-in host or the Macintosh or Windows environments, as their owner's manuals or online help should provide you with the answers you need. We've made every attempt to integrate the standard controls and features from the major plug-in hosts into our Blackhole plug-in so that you don't have to learn anything new.

If you find the need to get more information from us than this manual can provide, please visit our support forum available via our website (<http://www.eventideaudio.com>).

## Chapter 2

# Registration, Activation, and Installation

Eventide uses PACE's ilok.com licensing system, with or without an iLok hardware dongle, to license our plug-in products. Each license provides two activations which can reside on either your computer or on an iLok license dongle. Once you've purchased your plug-in, you'll need to register it on Eventide's website, activate your license, and install the plug-in on to your computer.

### 2.1 Registering Your Plug-in

When you purchase an Eventide Native plug-in, you'll receive a Serial Number and License Key. The Serial Number will be two letters followed by 6 numbers. If you have an individual Blackhole license, the Serial Number will start with BH (i.e. BH-#####). The License Key will be 3 sets of 4 characters, a letter or a number, each; like XXXX-XXXX-XXXX.

Once you've received these codes, you can register your plug-in on the Eventide website. To do so, please log in to <http://www.eventideaudio.com>, navigate to My Account in the top right corner, and select Register a New Product. Then, fill out the form by selecting Native Plug-in (VST, AU, AAX) in the Product Category field, select Blackhole in the Product list, and enter your Serial Number, License Key, and iLok.com account name. If you don't yet have an ilok.com account, you can create one for free at <http://www.ilok.com>. Once you've done so, press Register.

Once you've entered this information and pressed the Register button, Eventide will send the applicable plug-in license to your ilok.com account, which you will need to activate to your computer or iLok dongle.

### 2.2 Activating Your License

To activate and manage your plug-in licenses you'll need to install PACE's iLok License Manager software which you can download from <http://www.ilok.com>. If you don't have this software installed, please download and install it now.

Once you have installed and launched iLok License Manager you should be able to log in to your account by clicking the large Sign In button in the upper left hand corner of the application. Once you have, you should be able to see available licenses by choosing the Available tab at the top of the iLok License Manager application. If you have successfully registered your plugin, your Blackhole Native license will be available in this list. Please activate this license by dragging it to either your computer or iLok dongle listed on the left. When you do so, you will be asked to confirm the activation, and you will be able to see it by clicking on the location you have chosen. At this point your license is activated.

### 2.3 Installing Your Plug-In

You should have been given a link to the Eventide Native plug-in installer when you purchased your plug-in, but if you haven't, you can find downloads for all of Eventide's Native Plug-Ins at <http://https://www.eventideaudio.com>

[//www.eventideaudio.com/products/plugins](http://www.eventideaudio.com/products/plugins). Please download and launch the correct installer for your system.

Once you've launched the plug-in installer, it will take you through several pages of options. We have tried to choose defaults for these options which will best serve the majority of users, but it is worth a minute to make sure you understand these options before clicking through to the next page. Once you have followed through the installer, your plug-ins and presets should be in your chosen locations, and you can hit finish to end the installer application.

At this point, you should be ready to use your Blackhole Plug-In.

## **2.4 Moving or Removing an Activation**

If at any point, you decide to move your plug-in activation, you can do so in iLok license manager. To move an activation between an iLok dongle and your computer, simply plug in the iLok, locate the license in its current location, and drag it to its new location. To deactivate a license, find it in its location, right click on it, and choose deactivate.

Remember that each Eventide Native Plug-In License comes with two activations, which can be used on either a computer or iLok dongle, meaning you can use Blackhole in two locations at the same time.

## Chapter 3

# Blackhole



Blackhole is a reverb algorithm on a truly galactic scale. Beginning life as a preset in the DSP4000, then later in the H8000, its lush sound and popularity encouraged us to feature it as one of the premier algorithms in Eventide's Space guitar pedal. Its soft attack and lingering, harmonic tail cause it to really shine on guitars, strings, and pads, but those same qualities also allow it to transform a drum track into something other-worldly. Enjoy, and don't be afraid to turn the knobs. Blackhole can be used as Mono-In Mono-Out, Mono-In Stereo-Out, or Stereo-In Stereo-Out.

### 3.1 Navigating the Plug-In

The Blackhole user interface is designed with an emphasis on user control and playability. Specifically, the large knobs are easily adjusted with an up-and-down motion of the mouse/finger, and all controls produce a smooth change in the audio, allowing you to glitchlessly shape the effect as you desire. Furthermore,

the Ribbon allows you to program two settings for any combination of the controls and seamlessly morph to any sound between them. Finally, a programmable Hotswitch allows you to instantly jump to an alternate sound at the push of a button. This combination of controls is intended to bring you as close to the experience of manipulating real hardware as is possible in a virtual environment.

## **3.2 Levels and Monitoring**

### **3.2.1 In**

Controls the input level to the plug-in, the range is between -60 dBfs and +12 dBfs. This parameter sets the input level for both the wet and dry signals.

### **3.2.2 Out**

Controls the output level of the plug-in, the range is also between -60 dBfs and +12 dBfs. This parameter sets the signal level after the mix control.

### **3.2.3 Meters**

Indicate the audio level before and after the reverb algorithm. These meters are after the input level control and after the output level control, respectively, to aid in level adjustment.

### **3.2.4 Overload**

Indicates an overload somewhere in the reverb's signal chain and indicates that you may want to reduce the input audio. This is a sticky indicator, so once it fires it will stay lit until cleared. To clear the overload indicator, simply click on it.

## **3.3 Blackhole Parameters**

### **3.3.1 Mix**

Determines the relative level of the wet and dry signals in the plug-in. It has a special nonlinear taper which puts most of the knob travel in the most usable range.

### **3.3.2 Gravity**

The Blackhole's equivalent of decay time. On the right-hand side, the Gravity control sweeps through its forward reverb range from a very dense decay to a very long and smooth decay. On the left hand side, the Gravity control is in its inverse mode and sweeps through a range of reverse reverb-like settings.

### **3.3.3 Size**

Determines the size of the reverb. This can range from cartoonishly small to cosmically epic.

### **3.3.4 Predelay**

Sets the amount of delay before the reverb section. When tempo mode is off, this ranges from 0 to 2000 mS. When Tempo Sync is set to either Sync or Manual, it is set in beat divisions of the tempo.

### **3.3.5 Low**

Controls the level of low frequencies in the reverb tail using a shelving filter with a corner frequency of 350 Hz.

### **3.3.6 High**

Controls the level of high frequencies in the reverb tail using a shelving filter with a corner frequency of 2000 Hz.



### 3.3.7 Tempo Sync

Controls the Tempo Mode of the plug-in. When Off, the Predelay amount is in mS. When in Sync mode, the Predelay amount will sync to the tempo set in the DAW session. When in Manual mode, the Predelay amount will sync to a tempo which can be set manually.

### 3.3.8 Mod Depth

Sets the modulation depth in the reverb tail. This can be a subtle control, which nevertheless can reduce ringing in the reverb tail and add some motion to the sound.

### 3.3.9 Mod Rate

Sets the relative speed of the modulation in the reverb tail. Subtle but useful.

### 3.3.10 Feedback

Controls the feedback around the entire reverberation structure, for even larger sounds. Turning clockwise to Infinite will allow for infinite reverberation time, while still letting incoming signal into the reverberation structure. Turning further clockwise to Freeze sets the reverberation time to infinite, and does not allow incoming signal into the reverberation structure. Note that either Mod Depth or Mod Rate must be turned down to 0 in order for infinite reverberation time to be achieved.

### 3.3.11 Resonance

Controls the resonance of the Low and High filters. When the filters are set to 0, this does nothing, but when they are active, it can create a much more filtered sound. But be careful, extreme settings will increase the chances of overloads.

## 3.4 Performance Controls

### 3.4.1 Using the Ribbon

The Ribbon allows the dynamic modification of several knobs at once, emulating what you would be able to do with real hardware in front of you. By programming left and right ranges for any knob, the Ribbon lets you morph between settings by clicking anywhere on the Ribbon and moving the electric arc back and forth.

To program the settings for the Ribbon, click on the white dot at the tip of any knob and drag it to the desired setting for the left hand side of the Ribbon. This will program the knob and draw a blue arc from the initial knob position to the new, programmed knob position. Now to adjust the knob position for the right side of the Ribbon, click on the blue dot at the opposite side of the arc and adjust it to the desired position for the right side of the Ribbon. If you wish to adjust the Ribbon programming for any knob, simply grab the dots at either end of the mark and adjust them to the desired position. To clear the Ribbon programming for any knob, simply right click on the dot at either end of its arc, or move the dots to be on top of each other.

Alternatively, the Ribbon can be programmed by pressing the button on the left or right side of the Ribbon, and then moving any knob to its desired Ribbon position for that side. The Ribbon programming can be cleared for all knobs by right clicking the button on either side of the Ribbon.

Additionally, the Ribbon is programmed to follow MIDI Continuous Control (CC) #1 messages (a.k.a. Modulation Wheel). This enables you to use the Modulation Wheel on a MIDI device to move many knobs at once.

### 3.4.2 Kill

Kills the input to the reverb section allowing you to hear the reverb tail fade out. This can be useful to help dial in the sound, or it can be automated for a more tremolo-like effect.

Kill can be toggled via MIDI Continuous Control (CC) #2 messages. It will toggle when the CC goes from low (value < 64) to high (value >= 64).

### 3.4.3 Hotswitch

Allows you to instantaneously toggle between two settings for any combination of knobs and gain controls, allowing you to quickly jump between two different sounds.

To program settings for the Hotswitch, click and hold the Hotswitch until the light ring around it begins to blink. While the light ring is blinking, set the controls to the desired setting. When you are done, press the Hotswitch button again to exit programming mode. Now, pressing the Hotswitch toggles between the off-state and programmed values. To clear the programmed settings, simply right-click the Hotswitch. The light ring around it will quickly blink to confirm that the settings have been cleared.

The Hotswitch can be toggled via MIDI Continuous Control (CC) #3 messages. The Hotswitch will toggle when the CC goes from low (value < 64) to high (value >= 64).

### 3.4.4 Freeze

Sets the reverb time to infinite, sets Mod Depth to "Freeze" (equivalent to Mod Depth at "0"), and mutes the input, effectively freezing the audio in the reverb buffer. Making changes to some controls when Freeze is active can allow for interesting sound design.

Freeze can be controlled via MIDI Continuous Control (CC) #4 messages. It will toggle when the CC goes from low (value < 64) to high (value >= 64).

## 3.5 Preset Bar

Located at the top of the Blackhole Plug-In, the Preset Bar lets you load and save presets, along with several other features.

### 3.5.1 Preset Dropdown

Located on the left side of the Preset Bar, this dropdown menu allows you to browse presets that are organized in a tree structure. The presets that are shown are stored in your <user>/Music/Eventide/Blackhole/Presets folder (Mac) or your <user>/Documents/Eventide/Blackhole/Presets folder (Windows), should you need to access them on your computer.

Next to the Preset Dropdown there are left and right arrows, which allow you to quickly scroll through presets.

### 3.5.2 Load and Save

The Load button allows you to load a *.tide* preset that is stored anywhere on your computer. Save allows you to save a new preset to anywhere on your computer, but it is recommended that you place it somewhere in the <user>/Music/Eventide/Blackhole/Presets folder (Mac) or the <user>/Documents/Eventide/Blackhole/Presets folder (Windows), so that it is accessible from the Preset Dropdown. Note that you can create subfolders for your presets, for easier navigation and organization.

### 3.5.3 Compare

The Compare button allows you to toggle between the current settings and the last saved or loaded preset. This allows you to save or load settings that you like, tweak as you please, and return to the original settings for comparison.

### 3.5.4 Mix Lock

Located at the top next to the preset save/load buttons is a button called "Mixlock". Pressing this will enable a global mix value that will be the same on every preset that is loaded. This is especially useful on an effect return track where the mix should always be set to 100.

### 3.5.5 Info

Opens this User Guide, for quick access from the Blackhole plug-in.

## Chapter 4

# Conclusion

We hope you enjoy the Eventide Blackhole plug-in and put it to good use in all of your mixes. Please be sure to check over Eventide's other Native Plug-In offerings for more unique and interesting effects.