Blue Cat's Re- Head User Manual

"Mixing room experience with headphone convenience"

Table Of Content

Note: An online version of this user manual is available *here*.

Introduction

Enjoy studio monitor sound in your headphones with Re- Head, a unique head- response plugin.

Re- Head uses a *head response* model to recreate the effect of your head and skull on the audio coming in from your speakers. Together with stereo processing, impulse response treatment, EQ and more, Re- Head takes care of the most common problems associated with headphone use in professional work: unnatural sound and ear fatigue.

For many audio professionals, listening on headphones is a necessary evil. Perhaps you need headphones when tracking? Perhaps you need to work away from your studio? Or perhaps your studio has that one neighbor that simply can't enjoy your creative output at 3 AM in the morning? Listening through headphones creates an unnatural sound that's quite different from how we hear music from speakers.

Re- Head will create a mixing room experience when using headphones, even when recording distorted guitars and other instruments that tend to sound unnaturally in- your- face in a headphone mix.

At the center is a head response model that mimics the effect of your own skull on your hearing when listening through loudspeakers. Add to that stereo processing to avoid the hard- panned sound so common in headphones, stereo field and spectrum analyzers and EQ. There is even an impulse response representation of your favored mixing room to let you feel right at home, even when you're not.

Re- Head won't replace your favorite studio monitors, for sure. But it will make the transition from speakers to headphones less dramatic.

Find a free equalization profile for your headphones, and use the built- in impulse response (IR) loader to flatten their frequency response easily.

System Requirements

MacOS

- An Intel or Apple Silicon processor.
- Mac OS 10.9 or newer.
- Any VST / Audio Unit / AAX compatible application (64- bit) .

Windows

- An SSE2- enabled processor (Pentium 4 or newer).
- Microsoft Windows Vista, Windows 7, 8 or 10.
- Any VST / AAX compatible host software (32 or 64 bit).

For more information about supported platforms, see our [Knowledge Base](#).

Demo Limitations:

- 5 instances of the plug- in allowed per session.
- The effect is bypassed for half a second every minute.

Installation

The plug- ins versions cannot be run standalone: they require a host application (see the System Requirements chapter for more information). Depending on which host application you use, you might need to install the plug- ins in different locations.

Before installing one of the plug- in versions, you should close all your host applications.

Windows

Install

All versions of the plug- in provide an installation program. Follow the steps of the wizard to install the software on your machine. During the installation you will be asked where you want the software to be installed. For the VST version, you should install the plug- in inside the VST plug- ins folder used by your host application(s). The default path set in the installer should work for most applications, but you should check your host software documentation to know where it looks for VST plug- ins. For other plug- in types, you should just use the standard path.

Some applications will not automatically rescan the new plug- ins, so you might have to force a refresh of the plug- ins list.

Upgrade

When a new version of the software is released, just launch the new installer: it will update the current installation.

Uninstall

To uninstall the software, simply launch the "Uninstall" program that is available in the start menu or in the configuration panel. It will take care of removing all files from your computer.

Mac

Install

On Mac the plug- ins are available as drive images with an installer. After download, double click on the dmg file to open it. You can then double click on the installer (.pkg file) to install the package.

Note for Mac OS 10.15 Catalina or newer: you may have to right click on the installer and select "Open" instead of double clicking on the file to launch the installation if your computer is not connected to the Internet.

Upgrade

When a new version of the software is released, just launch the new installer: it will update the current installation.

Uninstall

To uninstall the software, simply remove the component(s) from their install location (move them to the trash):

- AAX plug- ins are installed in the / Library/ Application Support/ Avid/ Audio/ Plug- Ins/ folder
- Audio Units (AU) are installed in the / Library/ Audio/ Plug- Ins/ Components/ folder
- RTAS Plug- ins are installed in the / Library/ Application Support/ Digidesign/ Plug- Ins/ folder
- VST plug- ins are installed in the / Library/ Audio/ Plug- Ins/ VST folder
- VST3 plug- ins are installed in the / Library/ Audio/ Plug- Ins/ VST3 folder

If you want to completely remove all settings and configuration files, you can also remove these additional directories that may have been created on your computer:

- ~/ Library/ Preferences/ Blue Cat Audio/ [Plug- in name and TYPE], where TYPE is VST, AU, RTAS or AAX: global preferences.
- ~/ Library/ Preferences/ Blue Cat Audio/ [Plug- in name]: license information
- ~/ Documents/ Blue Cat Audio/ [Plug- in name]: user data, such as presets, additional skins and user- created plug- in data.

Please be aware that these directories may contain user data that you have created. Remove these directories only if you do not want to reuse this data later.

First Launch

Blue Cat Audio plug- ins cannot be run standalone, they require a host application (see the System Requirements chapter for more information). Some host applications will require you to scan the plug- ins before they are available in the application.

If the plug- in is not available in the application, please check that it has been installed in the appropriate directory (with no host application running), and that the host application has scanned it.

The User Interface

Note: The main toolbar, menus and basic features available with all our plug- ins are detailed in the Blue Cat Audio Plug- ins Basics section.

Main Display

1. The main toolbar, for bypass, general plug- in functions and presets management (described later in the manual).
2. Main virtual speaker settings: adjust the stereo width and speaker position.
3. Brightness and gain adjustments.
4. EQ correction settings: load/ save EQ presets or open the EQ section.

EQ Correction
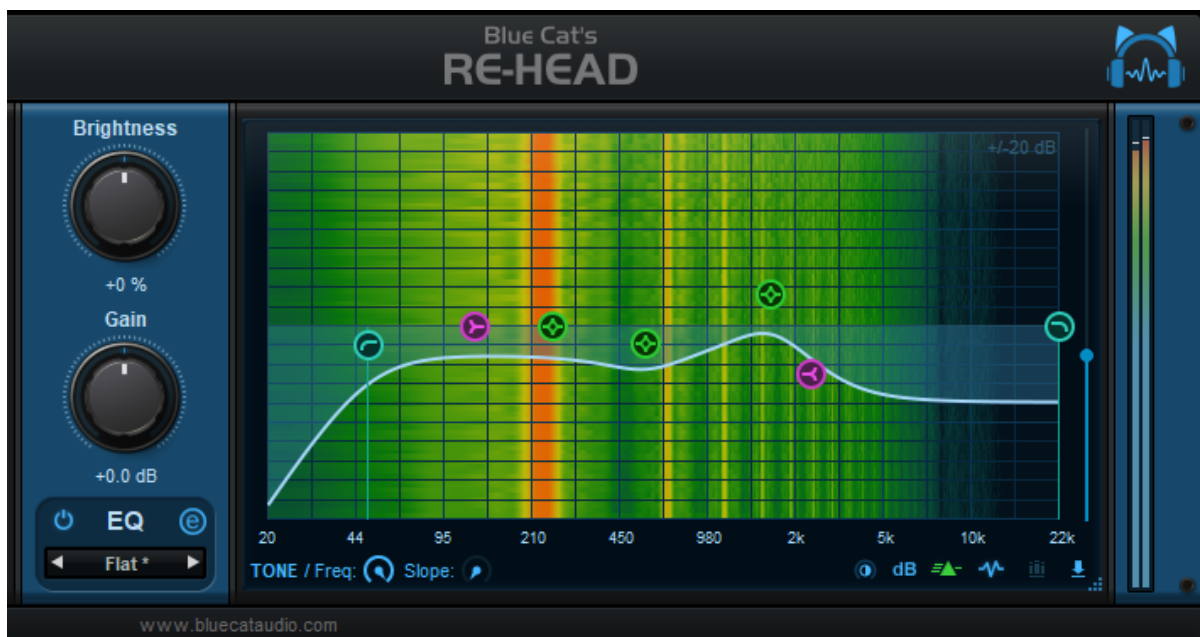
Clicking on the "e" button of the EQ section opens the EQ display, which lets you adjust the frequency response in details, with:

- A **low cut** filter with variable slope, to remove lower frequencies.
- A **low shelf** filter.
- Three **peak filters**.

- 🔵 A **high shelf** filter.
- 🟢 A **high cut** filter with variable slope, to remove the higher frequencies.

The additional slider on the right controls the gain of the EQ module.

When a filter is active, its characteristics are displayed in the main LCD screen at the top of the plug- in. Also. knobs will appear at the bottom of the EQ for fine tuning:
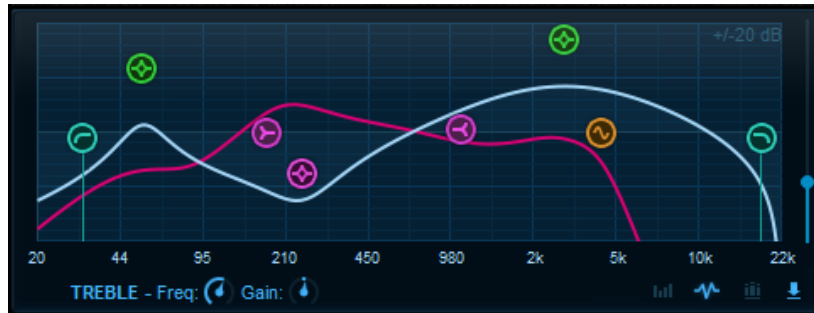
Additional controls at the bottom right give you access to the following features, from left to right:

- Activate **spectrum analysis** and select spectrum display type. When "spectrogram" is selected, an extra knob appears to let you adjust the contrast.
- Load **impulse responses (IR)** files that will be mixed with the filter. Extra controls appear at the bottom to manipulate impulse responses when loaded (you can also drag and drop files onto the EQ to load impulse responses).
- Show/ hide **the reference curve** (pink curve in the above screenshot). The reference curve can be used to match frequency responses measured with Blue Cat's FreqAnalyst Multi.
- Open the **reference curve menu** to load reference curves or paste them from the FreqAnalyst Multi plug- in. The current filter curve can also be copied or saved similarly:
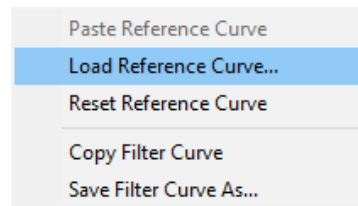
Once an impulse response (IR), has been loaded, you can further manipulate it using the shift and mix controls, so that it mixes properly with other filters and perfectly matches the tone you are looking for:

The shift control lets you shift the spectrum of the IR to the left or right, and "mix" sets the amount of filtered vs dry signal (for the impulse response).

Using the Controls

The various elements of the user interface (knobs, sliders, buttons...) are simple and intuitive to operate, but more information about how to interact with them is available in the "Plug- ins Basics" chapter of this manual.

Operation

Getting Started: Where Does My Head Go?

Re- Head is a tone correction tool to enhance the monitoring experience on headphones. So it should be placed at the very end of the signal chain, right before the headphones: it should be the last plug- in in the chain.

If you are monitoring a mix with headphones, just insert Re- Head on the master bus, as the last plug- in. If you need to fix a headphones mix for tracking, place the plug- in at the very end of the chain on the phones mix bus.

In all cases, do not use the plug- in when listening on speakers, as it will completely screw up the frequency response and stereo balance. **The plug- in will only work with headphones**.

Warning: when the plug- in is placed on the master bus, do not forget do disable it when exporting a mix!

Choosing the Right Position

The plug- in lets you choose the vertical position (elevation angle) of the virtual speaker you are listening to. It can be placed in the front or in the back, or below the head:
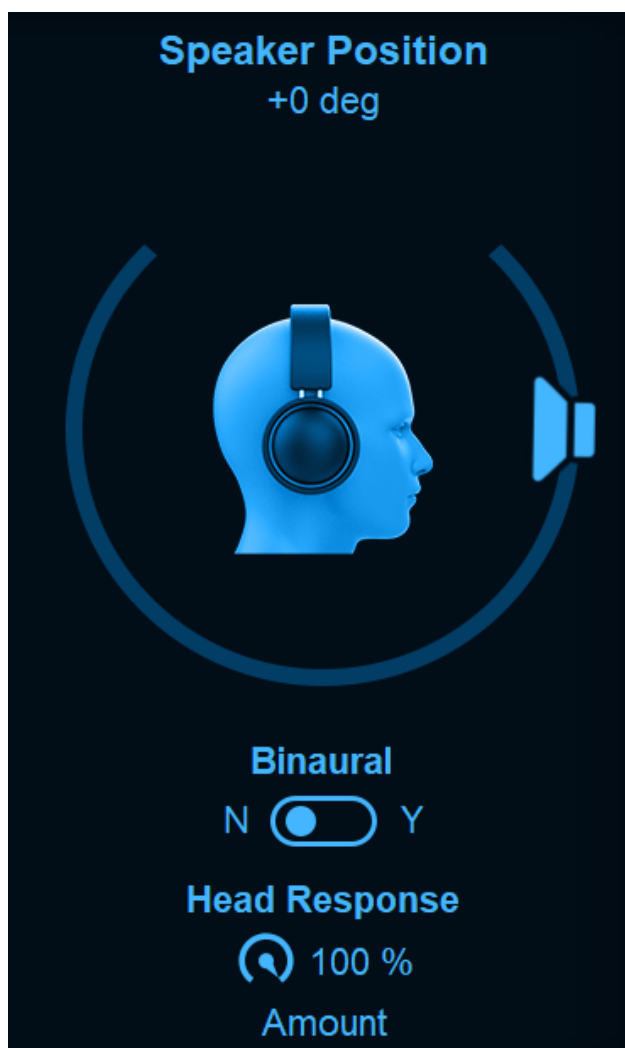
While some people may be able to perceive some changes in the location, *the main goal of the plug- in is **not** to fool the brain and make it feel like the sound comes from the back or front of your head, but to apply the right frequency correction depending on the virtual position of the speaker.*

For example, in a real room, studio monitors won't sound the same if they are right in front of you or a bit above the head. And a guitar cabinet won't sound the same to your ears if it is placed in your back (like on stage) or if you sit on in (like at home).

Note that you can switch "binaural" off if you want to ensure that the plug- in does not affect the stereo balance. It will sound a bit less realistic, but the same correction will be applied to both ears.

It is also possible to adjust the amount of head response applied to the signal. You can reduce it if you want less of the head effect, and even completely disable it (set the amount to 0). It can be useful for example to use the other features of the plug- in on different setups (even on speakers).

Fixing Stereo

When listening to speakers, both speakers feed both ears (your left ear can hear the right speaker and vice versa). It is not the case with headphones, where each ear is isolated and receives only the left or right signal.
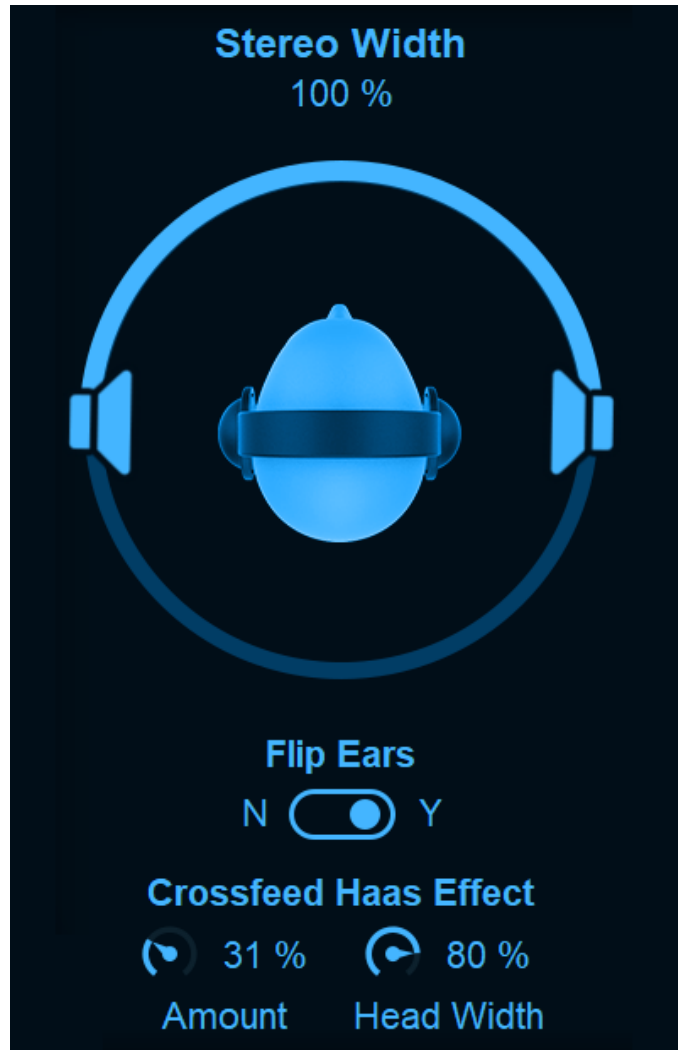
The plug-in lets you manage the crossfeed between ears with the width control. 100% means fully isolated ears (no crossfeed), and 0% means mono (both ears receive the same signal). In the real world with speakers, the actual value depends on many factors, such as the location of the speakers, but also the shape of your head.

For stereo monitoring, 70% width is usually a good setting, but you should adjust it to your taste. If you are tracking a guitar player used to playing on a guitar amp with a single speaker, you may want to send him a mono version of the signal with width set to 0%.

The left and right channels can also be flipped with the "flip ears" control (sometimes it's easier than flipping headphones).

With version 1.3 it is also possible to apply **interaural time delay** (ITD) while reducing the stereo width (a.k.a **"Haas Effect"**). This makes the unspreading more natural and gives hints to the brain to localize the signal in the stereo field. It however impacts the frequency resposne (comb filtering), so you may want to adjust the amount to your liking (tradeoff between localization and frequency response). The width of the head can be adjusted (80% is the average human head width, larger above and smaller below).

Stereo Field Visualization

Borrowed from the StereoScope Pro plug-in, Re-Head 1.3 features a stereo field visualizer to help you see how the signal is spread across the stereo field in the headphones:
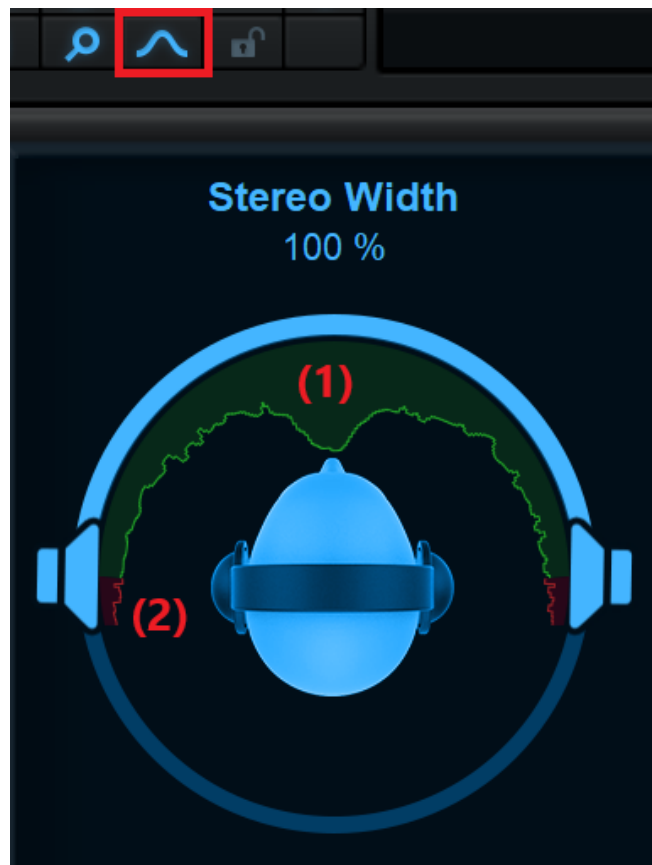
The green curve (1) represents the amount of energy of the audio signal in the stereo field, from left to right. The red curves (2) on the left and right display the amount of energy of the signal that is out of phase (and may sound way outside speakers or inside your head).

If the greeen area is almost empty while the red areas are showing large peaks, you probably need to flip the polarity of one of the left/ right signals.

Note: the analyzer displays the signal at the output of the plug- in. It shows the impact of all Re- Head settings on the audio signal (including the EQ).
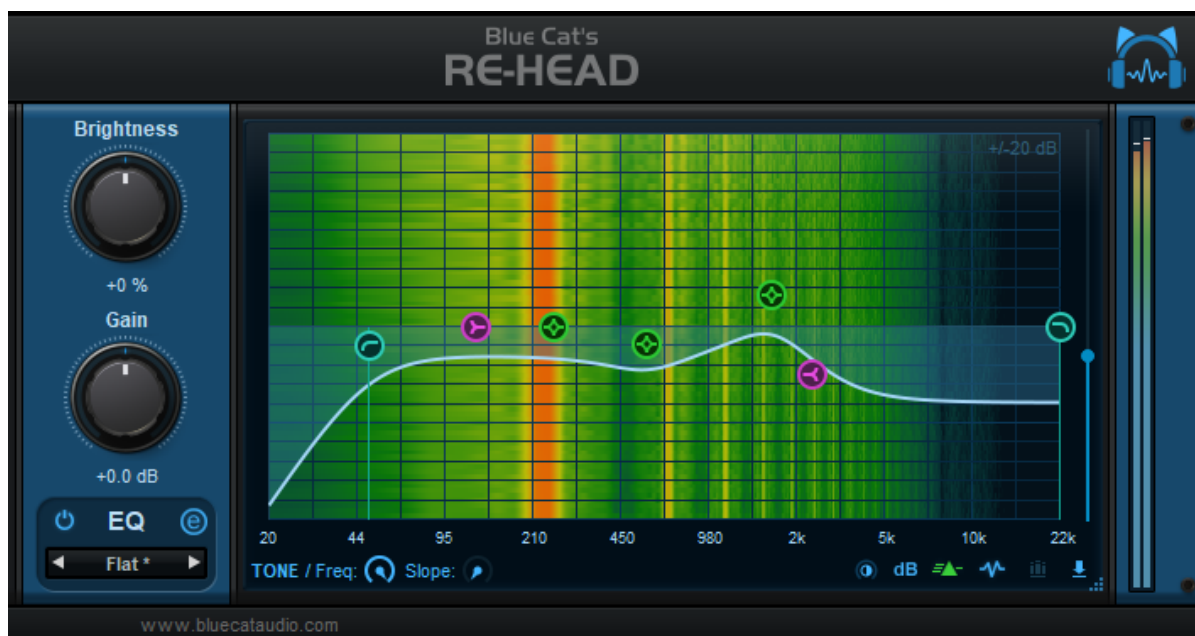
Quick Tone Correction

Because all headphones do not sound exactly the same, you may want to adjust the tone to the listener's liking. The brightness control and EQ presets can help you do that quickly:
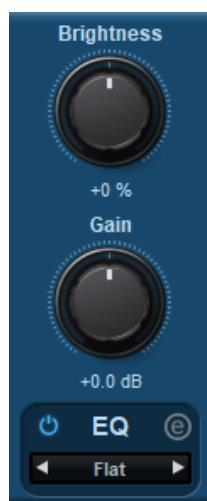
Advanced Correction With The Built- In EQ

Want more corrections? No problem: just open the built- in EQ to make corrections and get full control over the tone:

The EQ can be used to achieve a flat response curve, if you know the corrections to apply to compensate for your headphones frequency response (a few example presets are provided to give you an idea - you may want to use them as starting point). You can also load headphones compensation impulse responses for your particular model for more precise correction.

Simulate Your Favorite Speakers and Room with Impulse Responses

Impulse responses can aslo be used to simulate your favorite studio setup (with the monitors and the mixing room), or the response of your favorite guitar cabinet in the guitar room. Recording an impulse response of your favorite configuration is quite simple, and it is a good way to "feel at home" on the go, inside your headphones!

Try The Presets

All in all Re- Head is straighforward to use. It also comes with a few presets that whould give you a good idea of its capabilities, so check them out!

Blue Cat Audio Plug- Ins Basics

This chapter describes the basic features that are common to all our plug- ins. If you are already familiar with our products, you can skip this part.

User Interface Basics

About Skins

Like all Blue Cat Audio plug- ins, Blue Cat's Re- Head uses a skinnable user interface. It means that the appearance and behavior of the user interface can be entirely customized.

Especially with third party skins, the experience may be quite different from the one offered by the default skins that we provide. However, our plug- ins and our skinning engine have several standard features that will be available whatever your favorite skin.

More information about custom skins can be found in the skins section.

The Main Toolbar

In most skins, an optional toolbar at the top of the user interface gives you access to the main options and settings of the plug- in:
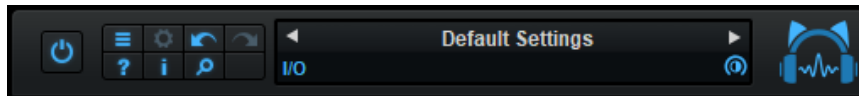
Smooth Bypass

On the left, the power button can be used to smoothly bypass the plug- in.

Presets Area

At the center of the toolbar, you can see the current preset area (the "Default Settings" box). It displays the name of the current preset, with a "*" at the end if it has been modified since loaded.

The arrows on the left and right let you navigate thru the (factory and user) presets available for the plug- in.

Clicking on the preset name opens the presets menu which lets you manage the presets of the plug- in.

Using the knob on the bottom right of this area, you can reduce the **opacity** of the window, and make it transparent (the actual result may depend on the host application). Additional messages may appear in the area next to this knob, depending on the plug- in.

Some plug- ins may also propose you to **manually select the audio I/ O** inside the plug- in (bottom left of the presets area), regardless of the host configuration. It can be useful for example to save CPU by selecting mono to stereo configurations (instead of full stereo sometimes chosen by default by the host), or add extra channels to manage side chain internally, when the host does not provides any side chain input. Please note that this does not change the number of I/ O seen by the host application.

Commands

The icons in the toolbar give you access the to the following commands that are detailed in the next paragraph:

Icon	Name	Function
≡	Menu	Open the main menu
⚙	Control Settings	Display the controls settings menu (to manage automation and MIDI control, as described here).
↺	Undo	Undo
↻	Redo	Redo
?	Manual	User Manual
i	About	About
🔍	Zoom	Scale the user interface (from 70% to 200%).

The Main Menu

The main menu is available from the main toolbar, or if you right click anywhere on the background of the plug- in:
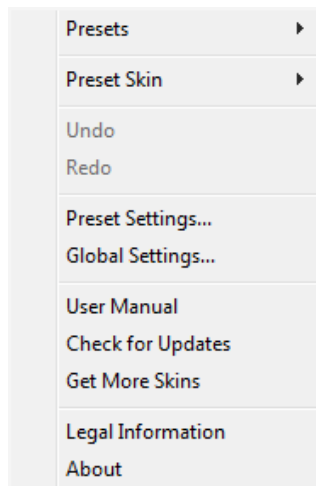
- **Presets**: opens the presets menu to manage presets.
- **Preset Skin**: opens the skins menu to choose the skin for the current preset and manage alternative skins for the software.
- **Undo/ Redo:** undo or redo the latest modifications. This includes all changes made to the current preset settings such as MIDI or automation preferences.
- **Presets Settings:** open the presets settings window. It lets you change the skin, MIDI and automation settings for the current preset.
- **Global Settings:** open the global settings window. It lets you change the skin, MIDI and automation settings that are used by default in all instances of the plug- in (if not overridden by the current preset).
- **User Manual:** open this user manual.
- **Check for Updates:** opens up our website to let you check if any update for this software is available.
- **Get More Skins:** get more skins for this software.
- **Legal Information**: browse licensing and misc legal documents.
- **About:** displays the "about" dialog box.

Controls

Examples

Here are a few examples of typical controls you will encounter in the user interface of our plug- ins:
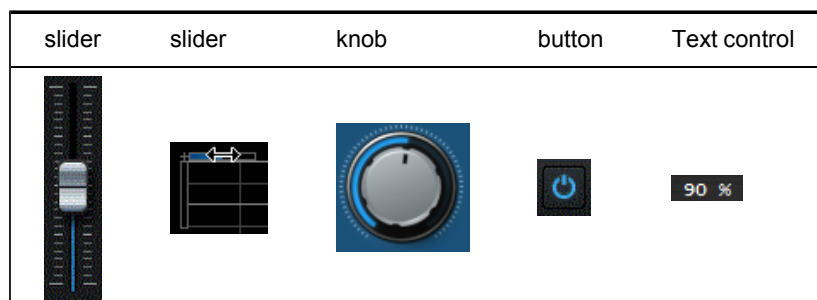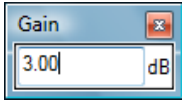
Interacting with Controls

You can interact with the controls of the plug- in interface either with the mouse or the keyboard.

Setting the keyboard focus on a control (so that it responds to key strokes) may be automatic (when you pass the mouse over it it gets focus) or manual (you have to click on the control to set the focus on it). Note that all host applications behave differently regarding keyboard handling. In some applications you may not be able to use all keys described later in this manual to interact with our plug- ins. It is usually made obvious to you to know the active surfaces of the skin (the places where you can click with the mouse): the mouse cursor usually changes when you can do something on a control. In the default skins delivered with the plug- in, the cursor changes to a small hand or an arrow to tell you when your mouse is over an active control.

Mouse

Various mouse movements will let you interact with the controls:
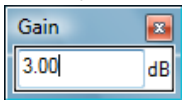
Mouse Interaction	Action
Left Click	Acquire focus and start dragging or push (button)
Left Click + Alt Key	Set the value to default
Left Double Click	Acquire focus and launch the "fine tuning" edit box (except button):
Right Click	Set the value to default
Mouse Wheel	Increment or decrement the position (focus required)
Mouse Drag	Change the control position depending on mouse movement (except button)

Keyboard

All control widgets support the following keys (note that some of them are caught by the host and thus never forwarded to the control. For example in Steinberg Cubase SX you cannot use the arrow keys to control the plug- in):

Keys Common to All Controls

Key	Action
Up Arrow	Small increment of the position (up or right)
Down Arrow	Small increment of the position (down or left)
Left Arrow	Same as Down Arrow
Right Arrow	Same as Up Arrow
Page Up	Large increment of the position (up or right)
Page Down	Large decrement of the position (down or left)
+	Small increment of the value of the control
-	Small decrement of the value of the control
d	Set to default value (same as mouse right click)
e	Opens the 'fine tuning' window to precisely set the parameter:
SHIFT	When the key is down, the fine tuning mode is on, and you can modify the value with better precision when moving the mouse, the mouse wheel or using the keyboard. Just release the key to get back to the normal mode.

Keys Specific to Buttons

Key	Action
Enter	Pushes the button

Presets

To get started with the plug- in and discover its capabilities, a couple of factory presets are provided. You can also save your own presets and recall them later for other projects. Our plug- ins propose a full- featured preset manager to let you save, browse, organize and recall its presets.

The Presets Menu

The presets menu can be opened from the main menu or the main toolbar. It displays the list of presets available for the plug- in as well as commands to load, save or organize presets:
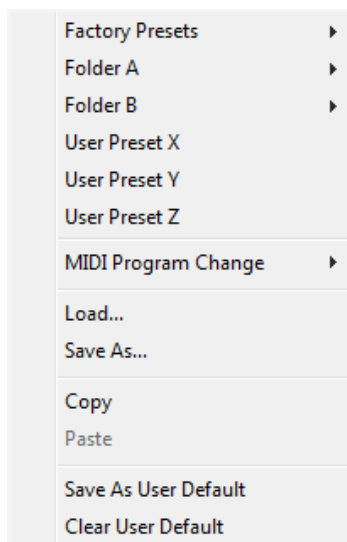

- **Factory Presets:** shows the list of factory presets delivered with the plug- in.
- **"Folder A" to "User Preset Z":** user presets and categories.
- **MIDI Program Change:** activate MIDI Program Change support (see below).
- **Load:** load preset from file.
- **Save:** save current state to last loaded user preset.
- **Save As:** save current preset to a file.
- **Copy** copy preset to the system clipboard.
- **Paste** paste preset from the system clipboard, if available.
- **Save As User Default:** save the current state as the default preset. This preset is used every time a new instance of the plug-in is created.
- **Clear User Default:** reset the default preset to its factory state: this makes the plug- in forgets the custom settings you might have saved as a default preset.

More about Presets

There are two types of presets: factory presets (read only) that are provided with the plug- in, and user presets that can be created and stored by the user.

The user presets are stored in a subdirectory of the documents folders of your profile ("Documents" on Mac, and "My Documents" on Windows): Blue Cat Audio/ [Plug- in Name]/ Presets. Each preset is stored as an individual file. You can create folders and subfolders in the Presets directory to classify your presets, as shown in the example below:
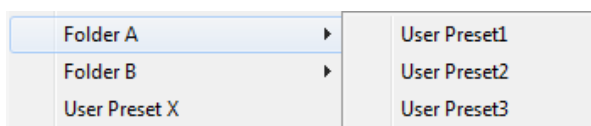
If you save a preset named "Default" in the root Presets directory, it will override the factory default preset (that's what "Save As Default" does). To restore the factory default preset, you can just remove this file or use the "Reset Default" command.

MIDI Program Change

It is possible to load presets remotely using MIDI "Bank Select" and "Program Change" messages. To enable this feature, select a MIDI channel to receive the events from in the MIDI Program Change menu item from the presets menu:
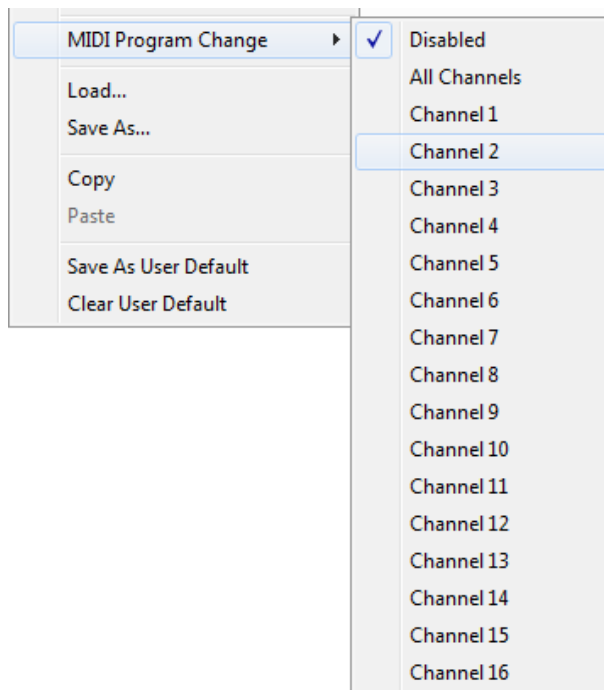
This setting is saved for each plug- in istance with your session but not in presets (except for the default preset, using the "Save as User Default command"). Once activated, the plug- in menu will display the bank number followed by the preset number for each preset:

Every root folder is considered as a new bank, starting with the factory presets (bank 0). Program and bank numbers may change while you add folders and presets, so you should be careful when naming them if bank and program numbers matter to you. It is recommended to use folders to make this task simpler. As a side note, sub folders do not define additional banks (all presets contained in sub folders are associated with the current bank.

As specified by MIDI, bank select messages are not used until a program is actually selected.

MIDI Implementation note: the software supports all types of Bank Select methods. You can use either MIDI CC 0 or MIDI CC 32 to select banks. If both are used simultaneously, they are combined together so that you can use more banks (in this case CC0 is LSB and CC32 is MSB, and actual bank number is 128*CC0+CC32).

MIDI and Automation Control

Blue Cat's Re- Head can also be remotely controlled via MIDI using MIDI CC ("Control Change") messages or automation curves, if your host application supports it. It is possible to customize the channel, control numbers, range and response curve used for each parameter in the settings panel available from the main menu (see the Plug- in Settings chapter for more details).

MIDI and Automation Settings Menu

The main menu

Most skins also provide the ability to change MIDI and automation settings directly in the main user interface. Clicking on the control settings icon in the main toolbar opens the following menu:
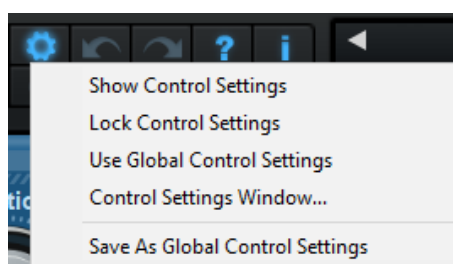
- **Show Control Settings:** show direct access to individual control settings for each parameter in the user interface (see next paragraph).
- **Lock Control Settings:** lock the current controls settings for MIDI and automation so that they remain unchanged when loading presets.
- **Use Global Control Settings:** ignore the current MIDI/ automation settings and use the global settings instead.
- **Control Settings Window:** display the control settings window, to change control settings for all parameters.
- **Save As Global Control Settings:** save the current settings as global settings (used by default, when no specific MIDI/ Automation setting has been set for the cuirrent preset).

Individual Control Settings

When this feature is activated using the "Show Control Settings" item in the MIDI and Automation Settings menu, dropdown menu buttons appears next to the main controls displayed by the plug- in:
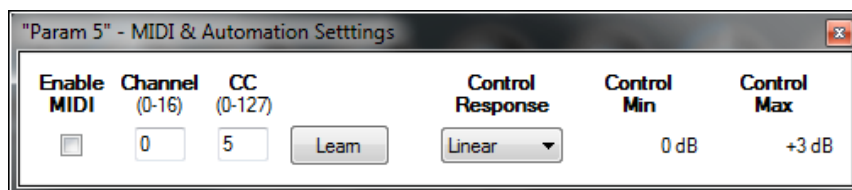

Clicking on this button shows the MIDI/ Automation settings menu:
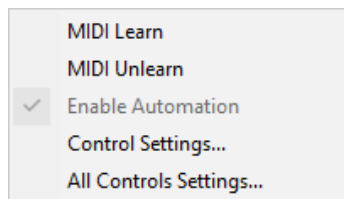
- **MIDI Learn:** launches MIDI learn mode for the control: touch your MIDI controller and the control will learn from it the MIDI channel and CC number. To end the learn mode, reopen this menu and deselect the option.
- **MIDI Unlearn:** deactivates MIDI control for this parameter.
- **Control Settings:** launches the advanced settings panel described below. This controls the settings for the current preset.
- **All Control Settings:** display the control settings window, with access to all parameters.

Advanced MIDI and Automation Settings

You can completely customize the way the plug- in is controlled by automation and MIDI. For a global view of all parameters at a time, you can use the Plug- in Settings window for the current preset which is available from the main menu.


MIDI Settings:

- **Enable MIDI**: enable/ disable the MIDI control of the parameter.
- **Channel**: MIDI Channel for the parameter control. If set to 0, the plug- ins will accept Control Change Messages from all MIDI Channels (MIDI Omni mode).
- **CC**: Control Change Number.
- **Learn**: click on this button to activate the MIDI learn functionality. When it is activated, you can move your MIDI controller, and the plug- in will automatically set the MIDI Channel and CC Number.

MIDI and automation settings:

- **Response**: response curve of the MIDI or automation control: from very fast to slow control.
- **Min**: minimal value of the parameter when MIDI controlled or automated.
- **Max**: Maximum value of the parameter when MIDI controlled or automated.

Note: if the Min value is higher than the Max value, the response curve will be reversed: increasing the control value will decrease the parameter value.

Note: if you double click on the parameter text control boxes for the max and min values, a "fine tuning" edit box will appear and let you change the min and max values with more precision:
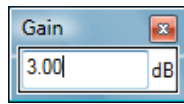
More

Check our online tutorial for more screenshots and more examples of our plug- ins user interfaces.

Blue Cat's Re- Head Parameters

All parameters described below can be automated and controlled via MIDI if your host application supports it. You can precisely define this behavior in the settings panels described later in this manual.

The parameters of this plug- in exposed for automation and MIDI control are described below:

Name	Unit	Description
General		
Bypass		Bypass the effect.
Main Controls		
Spread	%	Stereo width control. 0% for full mono, 100% for full stereo.
Flip Ears		Flip the left and right channels.
Speaker Pos.	degrees	Position (elevation angle) of the speakers.
Binaural		Enable or disable binaural processing. When off, stereo balance is preserved.
Quick Adjust		
Brightness	%	Adjust the brightness.
Gain (Main)	dB	Adjust main gain before the EQ corrections.
EQ		
Enable EQ	On/ Off	Enable of disable (bypass) the EQ module.
LC Frequency	Hz	Cutoff Frequency of the low cut filter.
LC Slope	dB/ Oct	Slope of the low cut filter. When set to 0 dB/ Octave, the filter is not active
LS Frequency	Hz	Cutoff Frequency of the low shelf filter.
LS Gain	dB	Gain of the low shelf filter (BASS control). When set to 0 dB, the filter is not active.
P1 Frequency	Hz	Center Frequency of the first peak filter.
P1 Bandwidth	Octaves	Bandwidth of the first peak filter.
P1 Gain	dB	Gain of the first peak filter.
P2 Frequency	Hz	Center Frequency of the second peak filter.
P2 Bandwidth	Octaves	Bandwidth of the second peak filter.
P2 Gain	dB	Gain of the second peak filter (MID control).
P3 Frequency	Hz	Center Frequency of the third peak filter.
P3 Bandwidth	Octaves	Bandwidth of the third peak filter.
P3 Gain	dB	Gain of the third peak filter.
HS Frequency	Hz	Cutoff Frequency of the high shelf filter.
HS Gain	dB	Gain of the high shelf filter (TREBLE control). When set to 0 dB, the filter is not active
HC Frequency	Hz	Cutoff Frequency of the high cut filter.
HC Slope	dB/ Oct	Slope of the high cut filter. When set to 0 dB/ Octave, the filter is not active
Gain	dB	Gain at the output of the EQ module.

|		
Analysis	On/ Off	Enable or disable the spectrum analyzer at the output of the EQ module.
IR Mix	%	Amount of signal processed by the impulse response vs dry signal.
IR Shift	Octaves	Shifts the impulse response in the frequency domain.

Plug- in Settings

In addition to the controls offered in the main user interface, Blue Cat's Re- Head has various settings that let you fine tune the behavior of the plug- in. You can choose to change these settings either for the current preset or globally for all instances of the plug- in.

The Global Settings Window

The settings available in this window **apply to all instances of the plug- in, for all presets**, if not overridden in the presets settings . Consider these settings as "default" settings.

General

You can change the default skin for all instances of the plug- in: write the skin file path in the text edit box or click on the button to open a file chooser dialog. If you have several instances of the plug- in opened in your session, you will have to re- open the user interfaces of these plug- ins to see the skin change.
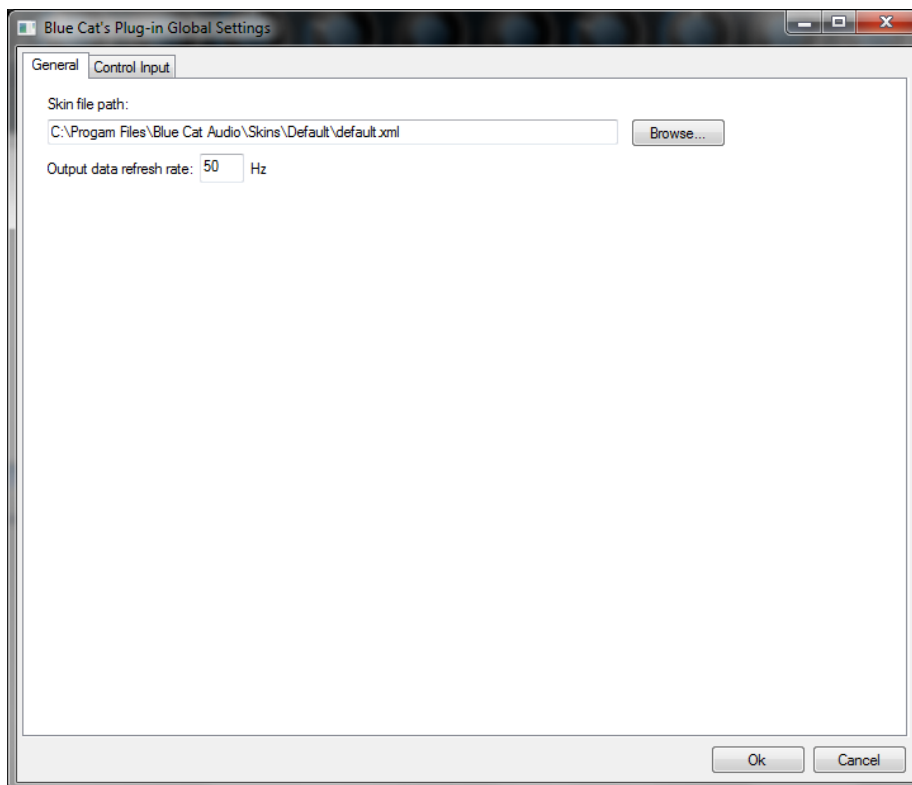
The output data refresh rate can also be customized for all instances of the plug- in. It controls the refresh rate of non- audio data produced by the plug- in (parameters, curves...). It also controls the refresh rate of output MIDI CC messages or output automation data. The higher the refresh rate, the better precision, but also the higher cpu usage (some host applications may also have trouble recording MIDI data at high refresh rates). The default value is 50 Hz.

Global Control Input Settings (MIDI and Automation)

The plug- in offers a couple of settings that affect the way it is controlled by MIDI messages or automation. While the first settings only apply to MIDI control, the "Control Response", "Min" and "Max" settings apply to **both automation and MIDI control**.

For each parameter you can define a default MIDI channel and CC number. You can then control the plug- in with an external MIDI controller or one of our plug- ins that generate MIDI messages.

The settings below are available for each plug- in parameter.
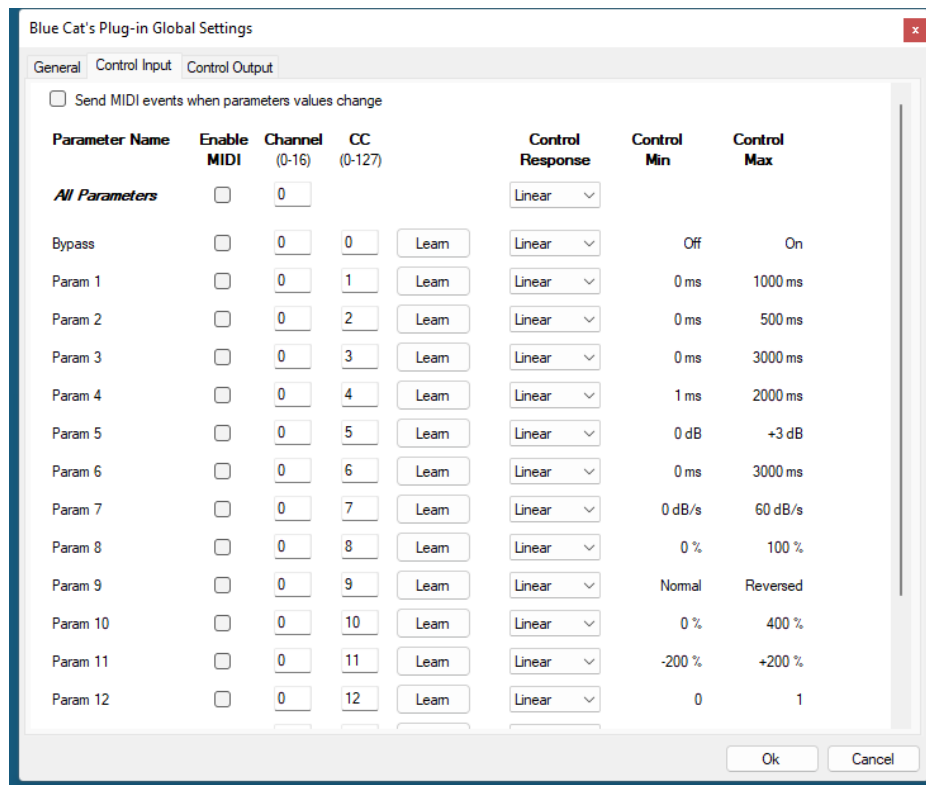
MIDI Settings:

- **Enable MIDI**: enable/ disable the MIDI control of the parameter.
- **Channel**: MIDI Channel for the parameter control. If set to 0, the plug- ins will accept Control Change Messages from all MIDI Channels (MIDI Omni mode).
- **CC**: Control Change Number.

- **Learn**: click on this button to activate the MIDI learn functionality. When it is activated, you can move your MIDI controller, and the plug- in will automatically set the MIDI Channel and CC Number.

MIDI and automation settings:

- **Response**: response curve of the MIDI or automation control: from very fast to slow control.
- **Min**: minimal value of the parameter when MIDI controlled or automated.
- **Max**: Maximum value of the parameter when MIDI controlled or automated.

(generic screen shot, does not correspond to the actual plug- in parameters)

Note: if the Min value is higher than the Max value, the response curve will be reversed: increasing the control value will decrease the parameter value.

Note: if you double click on the parameter text control boxes for the max and min values, a "fine tuning" edit box will appear and let you change the min and max values with more precision:
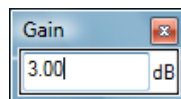

"Send MIDI events when parameters values change": activate this option when using a control surface that accepts MIDI events as input. MIDI messages will be sent to the output of the plug- in when the user change the parameters values in the user interface, to keep the software and the controller in sync. MIDI is only sent for parameters that are activated for MIDI control.

The Current Preset Settings Window

In this window you can change the settings *for the current preset of the current instance of the plug- in only*.

Preset Skin

You can choose to use the global skin setting or to change the skin for the current preset. This way you can have different skins for different instances of the plug- in in the same session in order to differentiate them.
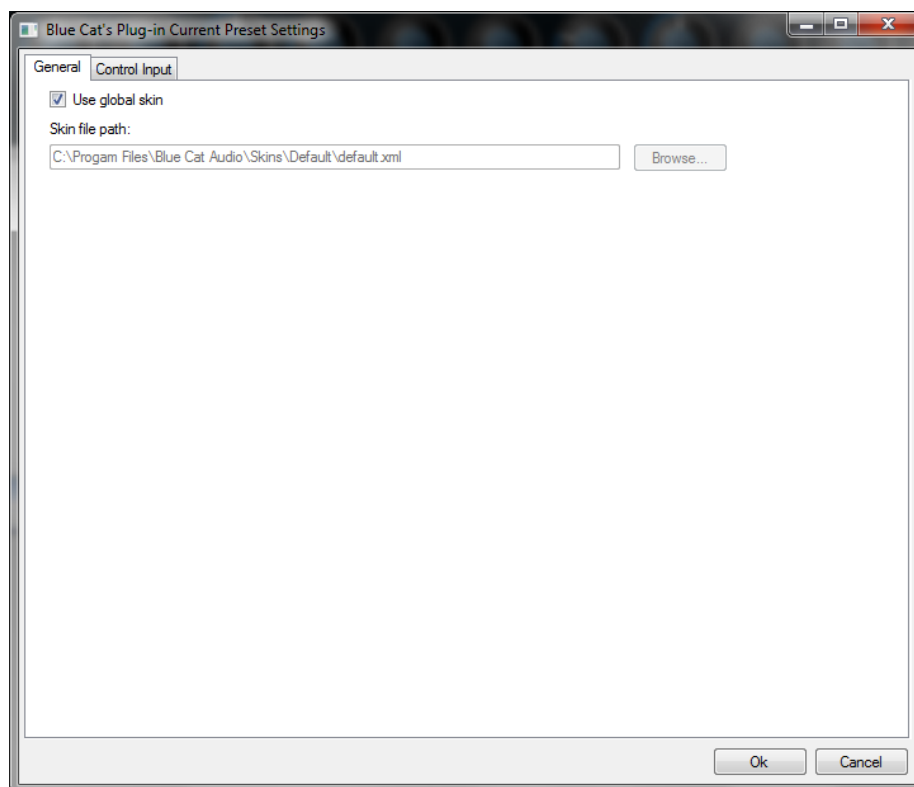
Preset Control Input Settings (MIDI and Automation)

Use the global settings or override them for the current preset. The parameters are the same as for the global input settings.
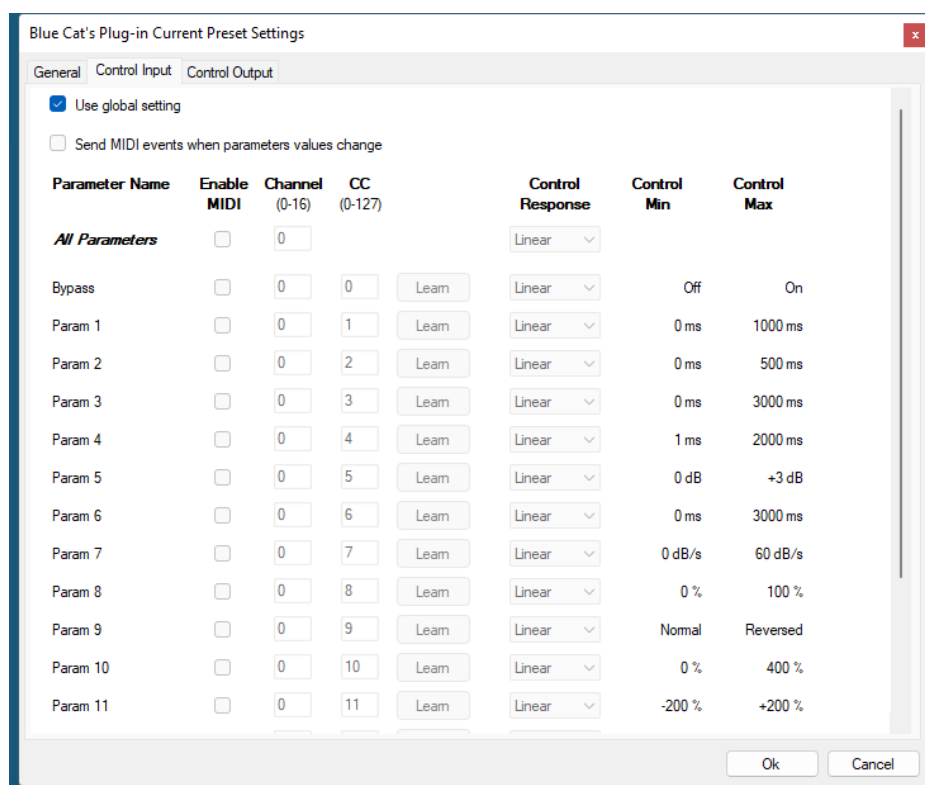
(generic screen shot, does not correspond to the actual plug- in parameters)

Blue Cat's Re- Head User Manual
Copyright (c) 2020-2024 Blue Cat Audio

About Skins

Blue Cat's Re-Head integrates Blue Cat's skinning engine that allows you to customize the user interface. You can download alternate skins for your plug-in at the following address:

http://www.bluecataudio.com/Skins/Product_ReHead

If you don't find a skin that fits your need or if you want a custom one, you can choose to create your own skin.

Choosing the Skin

There are two ways to select the skin of your plug-in: you can change the default (or 'global') skin, or change the skin for the current preset only (either in the preset settings page or from the main menu). The global skin applies to all plug-in instances (choose this one if you want to use the skin used by default, regardless of the session or preset), whereas the current preset skin only applies to the current preset of the current plug-in instance (use this one if you want to change only the skin for the current session/preset).

Note: in some host applications, the plug-in window won't resize automatically when you choose a skin with a different size. In this case, just close the window and re-open it: it will be displayed with the right size.

The Skins Menu

The skins menu can be opened from the main menu. It displays the list of skins available for the plug-in as well as commands to manage the skin used by default when no preset skin has been selected:
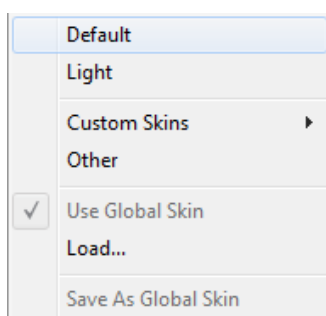
- **First Section - Factory Skins:** shows the list of factory skins delivered with the plug-in ("Default" and "Light" in this example).
- **Second Section - User Skins:** shows the list of user skins that have been installed in the Documents Skins folder for the plug-in (see below).
- **Use Global Skin:** use the global skin for the current preset/session (unloads any custom skin previously selected for the current preset).
- **Load:** opens a file browser dialog to manually select the skin from the file system.
- **Save As Global Skin:** use the current preset skin as the global skin (loaded by default if no preset skin has been defined).

Installing User Skins

To select user skins directly from the skins menu, install them in the "Skins" directory available in the plug-in's documents folder:

[Your Documents Folder]/ Blue Cat Audio/ [Plugin Name]/ Skins/

The skin engine will scan this folder for new skins (xml files) and display them in the menu. *The skin files should be in the root skins folder or in a subdirectory inside this folder: subdirectories are not scanned recursively.*

Other Methods to Select Skins

You can also select the skins in the settings panels available from the main menu:

The global skin (used by default if no preset skin has been selected) can be changed in the global settings pane. The current preset skin can be changed in the preset settings page.

Create a Custom Skin

You can create custom skins for your plug-in in order to adapt it to your exact needs. You can change its look and feel and make it completely integrated in your virtual studio!

Just read the Blue Cat's Skinning Language manual and download the samples for the tutorial on http:// www.bluecataudio.com/ Skins. You can get ready to create your own skins in a few minutes. You can then share your skins on our website.

More...

This manual only covers the main aspects of Blue Cat's Re- Head. Our website offers many additional resources for your Blue Cat's Re- Head plug- in. It is constantly updated, so keep an eye on it!

Updates

As you can see in the history log below, we care about constantly updating our products in order to give you the latest technology available. Please visit our website often to check if Blue Cat's Re- Head has been updated, or subscribe to our Newsletter to be informed of the latest news about our products.

Note: minor version updates are available from the same location as the original full version download (**link received by email upon purchase**). The demo version publicly available on our website will not let you register.

You can also follow us on twitter, facebook and instagram for almost real time updates notification, and subscribe to our YouTube channel to watch the latest videos about our software.

Versions History

V1.3 (2024/12/12)
- New built- in stereo field visualizer.
- Adjust the amount of head response correction with a single knob.
- Disable the head response to use the other features of the plug- in independently, even on speakers.
- Adjustable Haas effect for stereo width control, enhancing stereo spread reduction with inter- aural time delay (ITD).
- Misc presets management and MIDI control improvements.
- Head response is now fully phase- aligned with dry signal, and the plug- in reports the associated latency to host.
- Fixed head response gain increasing with sample rate.

V1.22 (2024/09/09)
- Windows: Multi monitor High DPI scaling support for high resolution displays (4K monitors, hi- res laptops...) for Windows 10 version 1607 (Anniversary Edition) and newer.
- Mac: Improved Retina display support, with crispier graphics at all resolutions and zoom levels.
- Mac: fixed random GUI refresh issues in Reaper on Retina displays.

V1.21 (2022/12/12)
- Added Apple Silicon support for AAX Plug- in Format.
- Fixed VST3 version not always loading properly in Ableton Live 11.
- Improved VST parameter value display in some host applications.
- Added an option in global & preset input settings to send MIDI events when MIDI- enabled parameters are modified in the plug- in (to update control surfaces accordingly).
- Improved undo management and automation when using the mouse wheel to move knobs.
- AAX: Fixed erratic mouse behavior in Pro Tools on Mac.
- Mac: installers and plug- ins have been notarized to avoid security warnings on Mac OS Catalina and newer.

V1.2 (2021/11/18)
- Apple Silicon (M1 processor) support.
- Dropped 32- bit support on Mac.
- Now requires MacOS 10.9 and newer.
- Arrow keys can now be used to navigate presets.
- Added MIDI control support (MIDI CC messages) for Next and Previous Preset commands, with MIDI learn.
- Improved MIDI & automation control settings with lock, reset and "save as global setting" capabilities.
- Improved smooth plug- in bypass (faster and smoother transition).
- Unicode support.
- Windows: improved GUI loading performance.
- Improved DSP performance.
- VST3: fixed random crash in Ableton Live 11 upon load.
- VST3: fixed parameters update issues in Studio One when bouncing tracks.
- Mac Audio Unit: fixed plug- in listing in some host applications (Plogue Bidule).
- Mac: fixed GUI performance issues on native P3 displays and improved performance on other displays.
- Mac: fixed mouse wheel that required large movements to change parameter values.
- Mac: fixed mouse cursor flickering issues.
- Mac: fixed Esc key not closing fine edit parameter dialog.

V1.1 (2020/09/07)

- Added new headphone compensation profiles.
- Arrow keys can now be used to navigate presets.
- Improved smooth plug- in bypass.
- Mac: fixed GUI performance issues on native P3 displays and improved performance on other displays.
- Mac: fixed mouse wheel that required large movements to change parameter values.
- Mac: fixed mouse cursor flickering issues.
- Mac: fixed Esc key not closing fine edit parameter dialog.

V1.0 (2020/05/12)

First release.

Thanks again for choosing our software!

See you soon on www.bluecataudio.com!