Blue Cat's Gain Suite User Manual

Blue Cat's Gain Suite User Manual
Copyright (c) 2005-2007 Blue Cat Audio

Table of Contents

Blue Cat's Gain Suite User Manual
Copyright (c) 2005-2007 Blue Cat Audio

About the Gain Plug-ins

Description

This plug-in suite is a simple series of gain utilities which lets you control the volume of an audio track. The interest of these plug-ins resides in their particular features:

First, their automation and advanced MIDI control capabilities (the response curve of the MIDI controllers can be fully customized). Used together with one of our analysis tools or a MIDI controller, these plug-ins let you to remotely control and automate the gain of each channel of the audio signal.

Another interesting and exclusive feature is the ability to link several instances of the same plug-in: thanks to our unique data sharing technology, you can control the gain of several tracks at the same time, with advanced response curve capabilities.

The plug-in bundle contains a Stereo and Mid/Side version for independent control of the left and right or Mid and Side channels. For more information about Mid/Side Processing, please read this article from our website.

The skinning capabilities of this plug-in allow you to customize the way you interact with it.

Parameters

The parameters of the plug-in are the following:

Param id	Name	Unit	Description
dsp.input0	Bypass		Bypass the effect.
model.gain	Gain	dB	Gain.
model.groupA.enabled	Link Group A		Link the plugin to group A.
model.groupB.enabled	Link Group B		Link the plugin to group B.
model.groupC.enabled	Link Group C		Link the plugin to group C.
model.groupD.enabled	Link Group D		Link the plugin to group D.
model.link_relative	Relative		Set the link of the plugin in "relative" or "absolute" mode.
model.link_reverse	Reverse		Reverse the plugin link.

The parameters of the stereo version of the plug-in ('Stereo Gain') are the following:

Param id	Name	Unit	Description
dsp.input0	Bypass		Bypass the effect.
model.gain1	Gain (L)	dB	Gain for the left channel.
model.gain2	Gain (R)	dB	Gain for the right channel.
model.groupA.enabled	Link Group A		Link the plugin to group A.
model.groupB.enabled	Link Group B		Link the plugin to group B.
model.groupC.enabled	Link Group C		Link the plugin to group C.
model.groupD.enabled	Link Group D		Link the plugin to group D.
model.link_relative	Relative		Set the link of the plugin in "relative" or "absolute" mode.

Param id	Name	Unit	Description
model.link_reverse	Reverse		Reverse the plugin link.

The parameters of the mid / side version of the plug-in ('Widening Gain') are the following:

Param id	Name	Unit	Description
dsp.input0	Bypass		Bypass the effect.
model.center	Center	%	Position of the 'virtual center' (position of the mid channel) in the stereo field. -100% is left and 100% is right.
model.gain1	Gain (M)	dB	Gain for the mid channel.
model.gain2	Gain (S)	dB	Gain for the side channel. Increase the value to increase the stereo perception of the track.
model.groupA.enabled	Link Group A		Link the plugin to group A.
model.groupB.enabled	Link Group B		Link the plugin to group B.
model.groupC.enabled	Link Group C		Link the plugin to group C.
model.groupD.enabled	Link Group D		Link the plugin to group D.
model.link_relative	Relative		Set the link of the plugin in "relative" or "absolute" mode.
model.link_reverse	Reverse		Reverse the plugin link.

The param id field is used when designing a new skin. See the Skins section for more information.

Included Skins

The included skins offer a special linking capability which lets you link several instances of the same plug-in on four channels. Only several instances of the same plugins can be linked together. You won't be able to link Blue Cat's Widening Gain with Blue Cat's Stereo Gain for example.

To link the current instance with a particular channel, just select the channel (A, B, C or D) you want to be linked to. The "X" button can be used to unlink the plugin so that it works in standalone mode.

There are several options for the link with other instances on a given channel:

● Absolute/Relative: in absolute mode the values of the controls for the current instance and the selected channel are kept identical, whereas in relative mode only controls variations are

reported on the linked channel (letting you setup a different gains on each instance and then apply linked modifications for example).

- Normal/Reverse:in reverse mode, the gain value for both the current instance and the linked channel are reversed. It is very handy when you want to use the plugin as a balance between tracks.

The "Opacity" slider lets you make the window of the plugin transparent. The support of this feature depends on your host application.

Controls

Blue Cat's Gain plug-ins use a skinnable user interface. The appearance and behavior of the user interface can thus change a lot depending on the chosen skin. This section will expose you the different controls you may encounter in these skins and the way they can behave. A well designed skin should be easy to use anyway.

You can control the plug-in via MIDI Control Change messages as well and customize the way you interact with MIDI messages. See the main menu section for more information.

Controls examples

Here are a few examples of possibles controls you may encounter in the user interface:

fader	slider	knob	button	Text control

General Behavior

Setting the keyboard focus on a control (so that it receives key events) 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).

It is usually made obvious to you to know the active surfaces of the skin (the places where you can click): 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 to tell you when your mouse is over an active control.

Keys

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 us the arrow keys):

Common behavior

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

Key	Action
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.

Button specific behavior

Key	Action
Space Bar	Pushes the button
Enter	Pushes the button

Mouse

You can change the value of the parameter with the mouse:

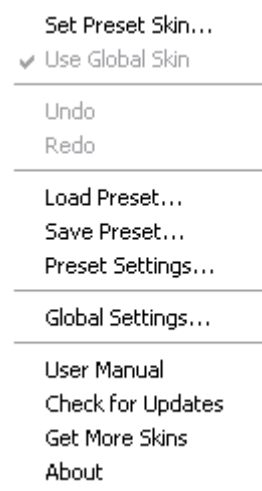| Mouse Event	Action
Left Click	Acquire focus and start dragging or push (button)
Left Double Click	Acquire focus and launch the "fine tuning" edit box (except button):
Right Click	Set the value to default
Mouse Wheel	Increment or decrement the position (focus required)
Mouse Drag	Change the control position depending on mouse movement (except button)

Main Menu & Settings

The Main Menu and Toolbar

Menu

If you right click on the background of the plug-in, the following pop-up menu appears:

```
Set Preset Skin...
✓ Use Global Skin

  Undo
  Redo

  Load Preset...
  Save Preset...
  Preset Settings...

  Global Settings...

  User Manual
  Check for Updates
  Get More Skins
  About
```

The commands descriptions are available below.

Toolbar

In some skins an optional toolbar gives you access to the some of the functionalities of the main menu.

Icon	Name	Function
	Menu	Open the main menu
	Undo	Undo
	Redo	Redo
	Load	Load Preset
	Save	Save Preset
	Manual	User Manual
	About	About
	Visit www.bluecataudio.com	Opens our website

Commands

The Commands available from the main menu or the toolbar are the following:

- Set Preset Skin: change the skin for the current preset.

- Use Global Skin: use the skin defined in the global settings for the current preset. This item is enabled only if a skin has been defined for the current preset.

Blue Cat's Gain Suite User Manual
Copyright (c) 2005-2007 Blue Cat Audio

- Undo/Redo: undo or redo the latest modifications. This includes all changes made to the current preset settings.

- Load Preset: load preset from file.

- Save Preset: save current preset to file.

- Presets Settings: open the presets settings window. It enables you to change the skin and MIDI settings for the current preset.

- Global Settings:

- User Manual: open this user manual.

- Check Updates: check the updates for this software on our website.

- Get More Skins: get more skins for this software.

- About: displays the "about" dialog box.

The Global Settings Window

The settings you change in this window apply to all instances of the plug-in, for all presets. Consider these settings as "default" settings.

Global Skin
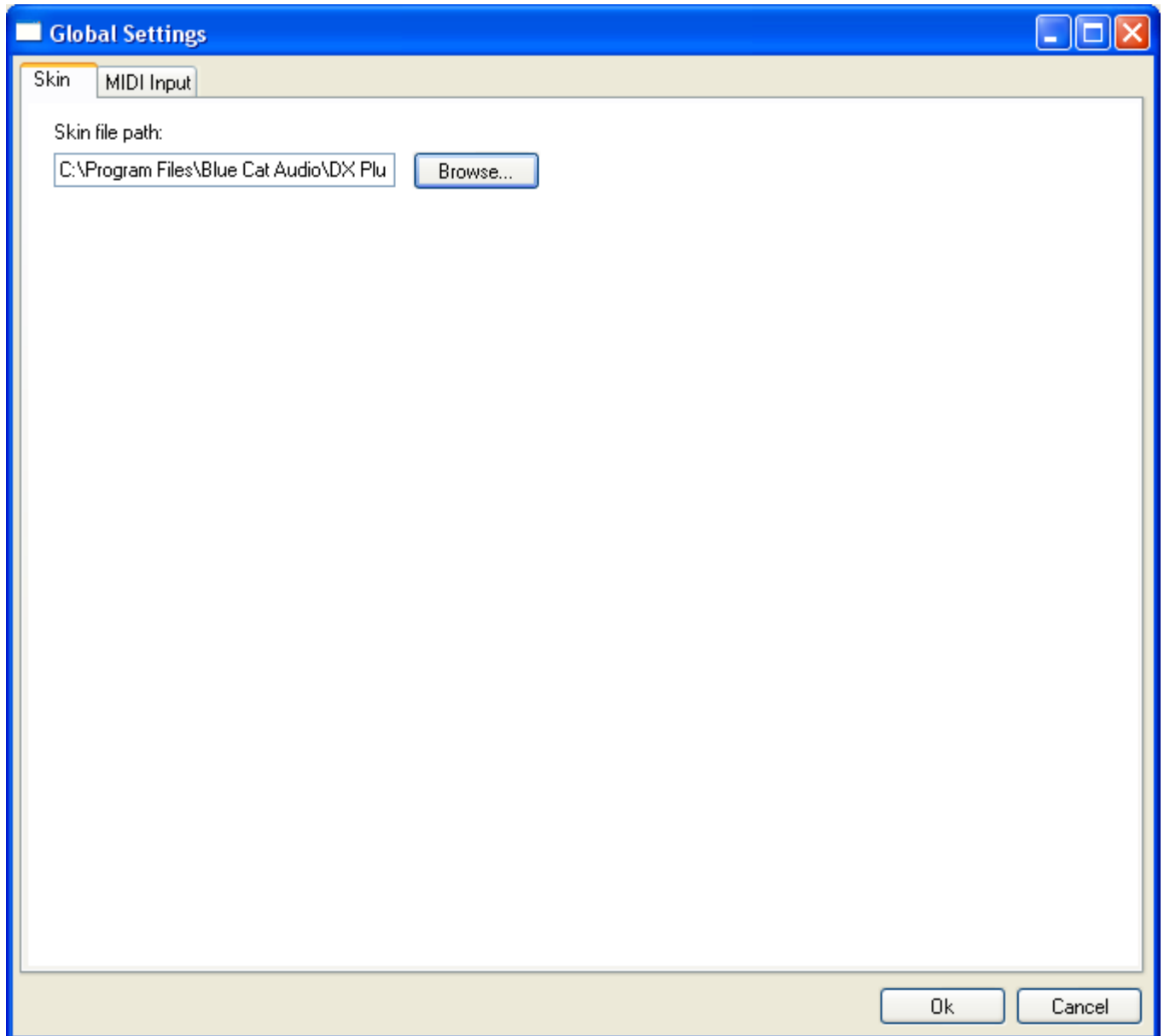
You can change the default skin for all instances of the plug-in:write the skin file path in the text edit box or click on the button to open a file chooser dialog. If you have several instances of the plug-in opened in your session, you will have to re-open the user interfaces of these plug-ins to see the skin change.

Global MIDI Input Settings

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 following settings are available for each plug-in 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

Blue Cat's Gain Suite User Manual
Copyright (c) 2005-2007 Blue Cat Audio

Number.

- Enabled: enable/disable the MIDI control of the parameter.

- Response: response curve of the MIDI control: from very fast to slow control.

- Min: minimal value of the parameter when MIDI controlled.

- Max: Maximum value of the parameter when MIDI controlled.
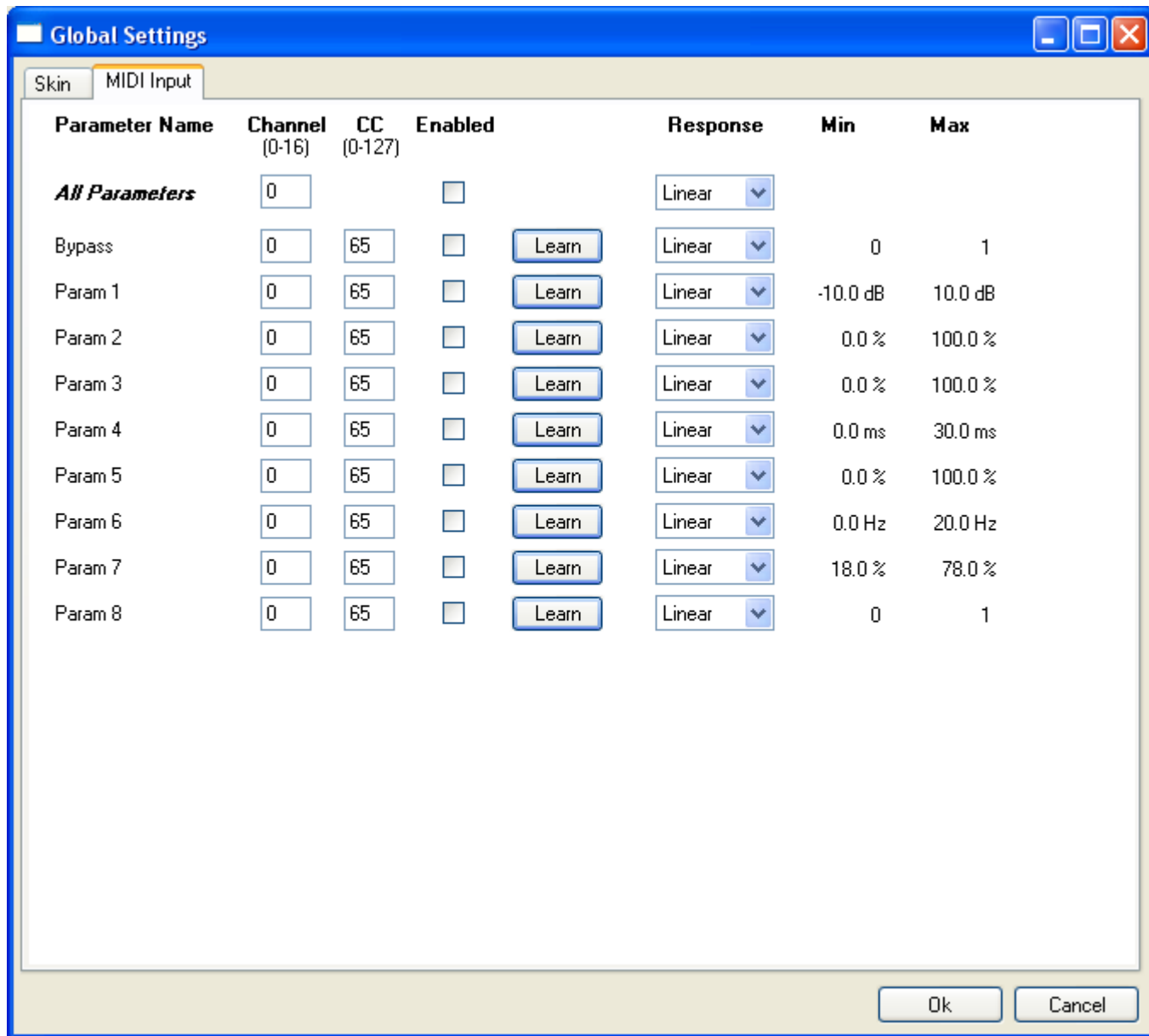
(generic screen shot, does not correspond to the actual plug-in parameters)

Note: if the Min value is higher than the Max value, the response curve will be reversed: increasing the MIDI controller 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:

Blue Cat's Gain Suite User Manual
Copyright (c) 2005-2007 Blue Cat Audio
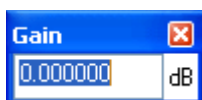
The Current Preset Settings Window

This window lets you change the settings for the current preset of the current plug-in only.

Skin
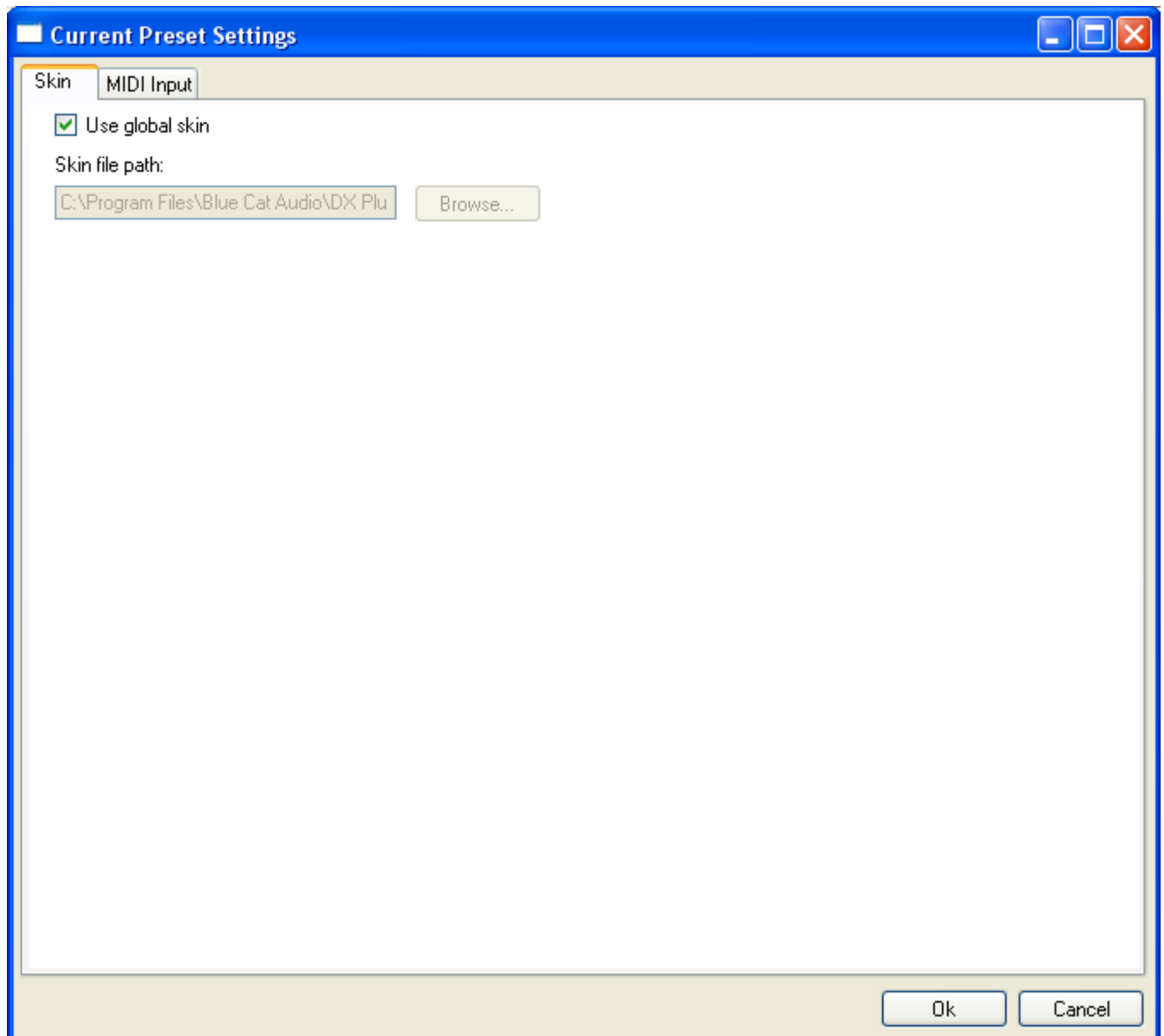
You can choose to use the global skin setting or to change the skin for the current preset. This way you can have different skins for different instances of the plug-in in the same session in order to differentiate them.

Preset MIDI Input Settings

Use the global settings or override them for the current preset. The parameters are the same as for the global MIDI input settings.

Current Preset Settings

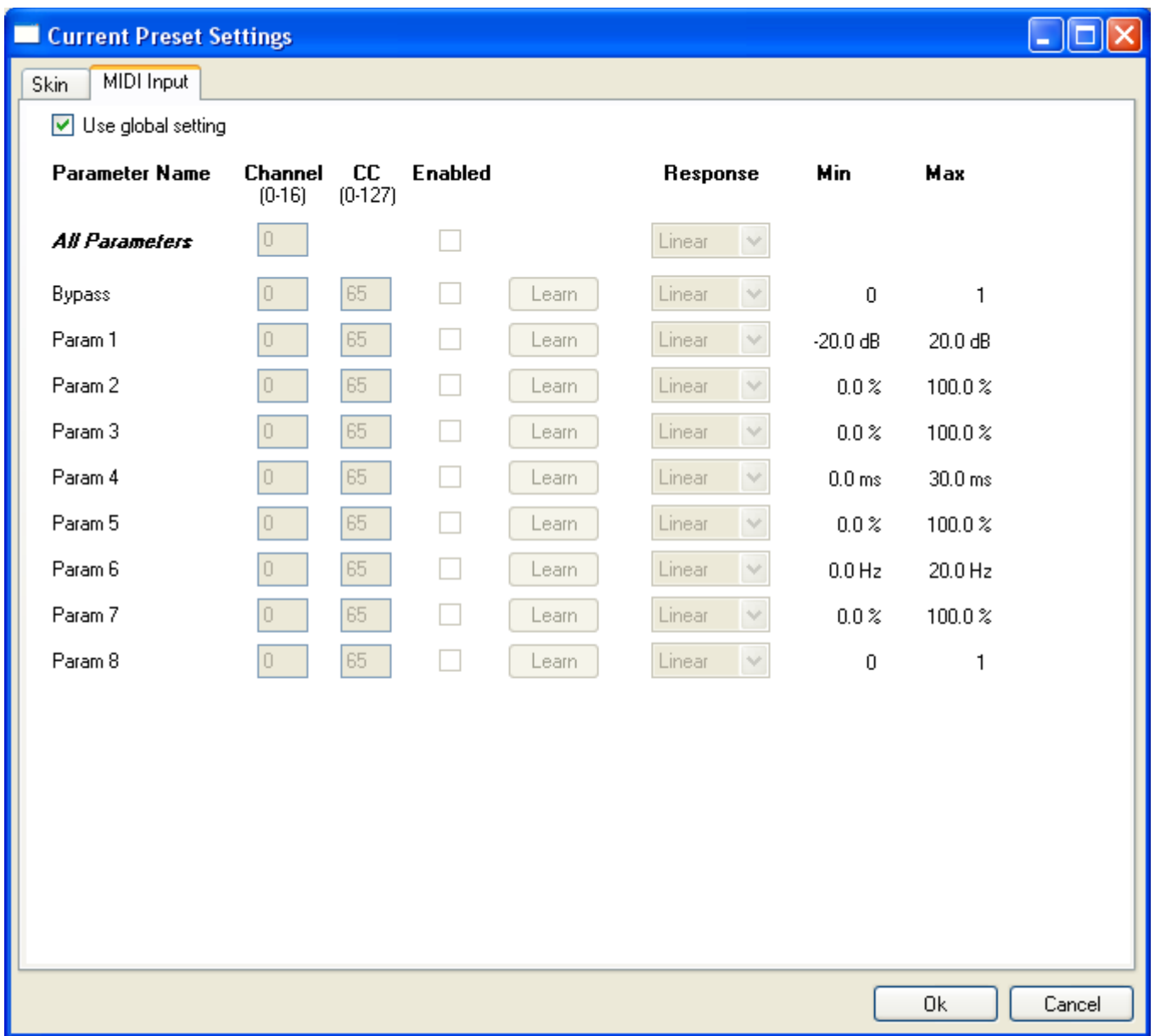Skin | **MIDI Input**

☑ Use global setting

Parameter Name	Channel (0-16)	CC (0-127)	Enabled		Response		Min	Max
All Parameters	0		☐		Linear ⌄			
Bypass	0	65	☐	Learn	Linear ⌄		0	1
Param 1	0	65	☐	Learn	Linear ⌄		-20.0 dB	20.0 dB
Param 2	0	65	☐	Learn	Linear ⌄		0.0 %	100.0 %
Param 3	0	65	☐	Learn	Linear ⌄		0.0 %	100.0 %
Param 4	0	65	☐	Learn	Linear ⌄		0.0 ms	30.0 ms
Param 5	0	65	☐	Learn	Linear ⌄		0.0 %	100.0 %
Param 6	0	65	☐	Learn	Linear ⌄		0.0 Hz	20.0 Hz
Param 7	0	65	☐	Learn	Linear ⌄		0.0 %	100.0 %
Param 8	0	65	☐	Learn	Linear ⌄		0	1

Ok | Cancel

Blue Cat's Gain Suite User Manual
Copyright (c) 2005-2007 Blue Cat Audio

Skins

About Skins

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

http://www.bluecataudio.com/Skins

If you don't find a skin that you like or if you want to use your graphic skills, you can choose to create your own skin.

Changing the Skin

You have two ways to change the skin of your plug-in: you can change the default (or 'global') skin in the global settings, or change the skin for the current preset only. The global skin applies to all plug-in instances, whereas the current preset skin only applies to the current preset of the current plug-in instance.

See the main menu to see how to access these options.

On some hosts the plug-in window won't resize automatically. In this case, just close the window and re-open it, it will be displayed with the right size.

Create a Custom Skin

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

Just read the Blue Cat's Skinning Language user 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. Show your talent and share your knowledge with the users community!

Troubleshooting

Installation

I have installed my plug-in and it does not show up in my host application

First check that you application supports Direct X or VST plug-ins.

If you are using the Direct X version, check that your host application supports DXi plug-ins (MIDI-enabled Direct X plug-ins). If it does not, it may remove it from the Direct X plug-ins list (some applications such as Sony Vegas 5 and Cool Edit Pro are known to do this). In this case, use our freeware DXi Manager and disable the MIDI capabilities of the plug-in. You may need to reinstall the software again before it shows up into your host application.

If you are using the Direct X version and your host application supports DXi, check that the plug-in does not appear in the 'virtual synth' or 'synthesizers' category. If you wish not to use the MIDI capabilities of the plug-in and use it as a regular Direct X plug-in, you can download the freeware DXi Manager and disable the MIDI capabilities of the plug-in.

More

Upgrades, tutorials, more skins and plug-ins are available on our website:

www.bluecataudio.com