BOBPERRY AUDIO

Crossfader Manual

Preface

Thank you for purchasing the Bob Perry Crossfader. To be able to get the best out of this product, we recommend you carefully read these instructions.

Firstly we will describe the user interface and will give a brief introduction to the control elements. After that we will provide a quick guide to show some typical use cases for the plug-in.

System Requirements

To use the Bob Perry Crossfader, a Digital Audio Workstation (DAW) with support for AU (Mac) or VST3 (PC, Mac) is required. We thoroughly tested the plug-in with various versions of the following DAWs:

Steinberg Cubase (Mac, PC)
Steinberg Nuendo (Mac, PC)
PreSonus Studio One (Mac, PC)
Image-Line FL Studio (PC)
Adobe Audition (Mac, PC)
Logic Pro (Mac)

To use the plug-in in beautiful high resolution (HiDPI), you need a Mac with Retina Display. High resolution is currently only supported for Mac OS X systems.

Technical Notes

Signal processing	floating point
Headroom	theoretically over 1500dB, depending on your DAW. But more than enough.
EQ Type	High- and Low-Shelv (+- 12dB, Slope 0.5)
Fade behavior	Equal volume (the resulting mix volume is the same in every slider position). Having the same signal as Main and Side Chain, you can't hear a difference in every slider position

More Headroom tips:

In floating point DAWs, you can "overdrive" your signal up to more than +30dBFS without clipping. There are only two things to remember:
1) Apart from very few special situations, you should always make sure not to overdrive your master bus

2) Some older plug-ins or plug-ins emulating analog clipping or saturation behavior typically rely on proper gain staging. That means feeding them with levels close to or higher than 0 dBFS might result in clipping, or worse, digital clipping. So have a look into the manual of your plug-ins to know their behavior before increasing levels above 0dBFS.

Installation: Mac / OS X

For Mac OS X systems: Most users should be fine just following the instructions after opening the .dmg file.

For Windows systems: Simply copy the file `BPACrossfader_x86.vst3` (for 32-bit environments) or `BPACrossfader_x64.vst3` (for 64-bit environments) into the corresponding VST3 folder of your DAW. Please refer to your DAW's manual concerning the correct location. Common VST3/AU paths are:

For a 32-bit VST3 DAW in a 32-bit environment (Windows PC):
`C:/Program Files/Common Files/VST3`

For a 32-bit VST3 DAW in a 64-bit environment (Windows PC):
`C:/Program Files (x86)/Common Files/VST3`

For a 64-bit VST3 DAW in a 64-bit environment (Windows PC):
`C:/Program Files/Common Files/VST3`

For Mac OS X systems, VST3 32-bit as well as VST3 64-bit:
`/Library/Audio/Plug-Ins/VST3/`

For Mac OS X systems, Audio Unit (AU):
`/Library/Audio/Plug-Ins/Components/`

You cannot use the Windows 64-bit version in a Windows 32-bit environment / DAW!
The Mac versions are universal binaries and work in either 32 and 64 bit environments.

What does a Crossfader do?

Since you already purchased the Bob Perry Crossfader, you probably already know what it's good for. Nevertheless, here is a quick summary:

A Crossfader mixes one signal with another, similar to a DJ Mixer.

Sounds legit. But why should I not use the channel faders of my DAW for that job?

The reason is that you would have to control two faders in your DAW simultaneously. With our Crossfader you only have to use one fader. The main benefit: you can find the best blend between two signals without a volume difference. Especially when you want to find the best balance between two microphones recording the same instrument. This is nearly impossible with two normal faders.

User Interface
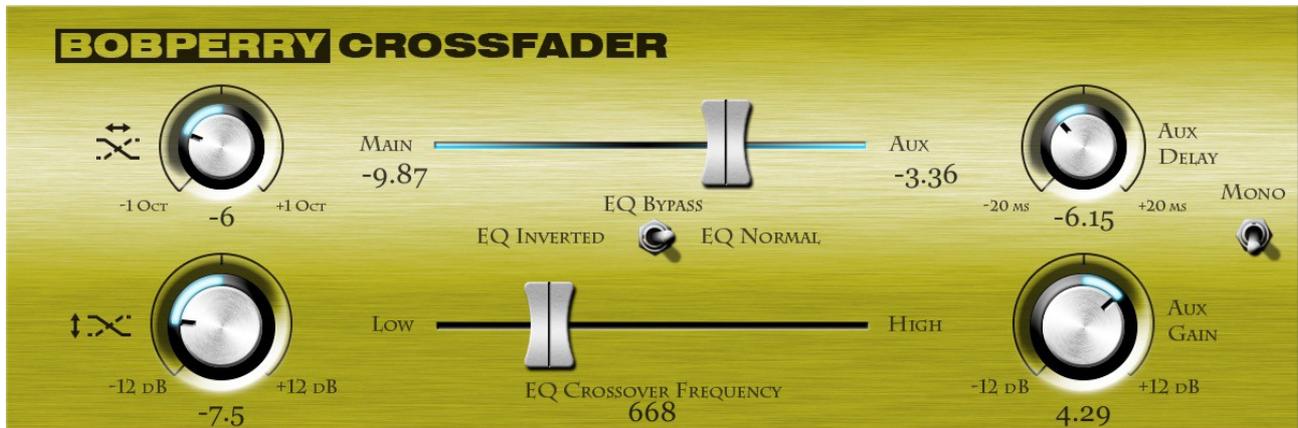
Crossfader (top center)

Adjusts the mix between the main and the side chain signal.

Hard left = 100% main (signal in current track remains unaltered)
Hard right = 100% side chain
Center = 50% main and 50% side chain

The background illumination of the crossfader indicates the main and side chain signals' input level. Left side lit: Main input signal present; Right side lit: Side chain signal present.

Crossfader dB values

Shows you the gains in dB of the main (left) and the side chain (right) signal. It is useful to know if you want to create the same balance with your DAW faders.

Switch EQ Inverted – EQ Bypass – EQ Normal

Enables a simple Low Shelve EQ for the main and a Hi Shelve EQ for the side chain signal. EQ Inverted routes the Low Shelve to the side chain and the Hi Shelve to the main signal.

The EQ is made for small sound adjustments. For example:
When you have two snare drum mics and you want to have less bass frequencies in the main mic and less high frequencies in the side chain mic, you can find best sound using the Frequency Slider.

Tip: The shelving EQ has a fixed slope of 0.5. If you want to achieve more or less steep filter curves you can access the parameter "EQ Slope" via the automation functions of your DAW.

Crossover Frequency (bottom center)

Adjusts the frequencies of the Hi and Lo Shelve EQ. The text field underneath displays the exact frequency. It is not possible to change the frequency numerically.

EQ Offset (top left)

Sets an offset to the Hi/Lo Shelv EQ. That means, that there are more (positive offset) frequencies without equalization or less (negative offset).

The offset scale is based on semitones. So you can have the maximum of one octave (12 semitones) offset or less.
If you set the Offset to negative values your EQ Frequencies will overlap. You can use this for experimental sound design.

For Example:
Crossover Frequency: 100 Hz
Frequency Offset: 12 semitones (1 Octave)
Result: The Low Shelve works with 75 Hz and the Hi Shelve with 150Hz

EQ Gain (bottom left)

Sets the gain of the EQs. When using positive values, be sure to have an eye on the rest of your signal flow – we can't promise the next plug-in in your channel won't distort when receiving a signal above 0dBFS.

Side chain button (window of the DAW)

Activates the side chain. This is mandatory as the Crossfader won't work without a side chain signal (VST3). Please refer to your DAW's manual for details.

Aux Gain (bottom right)

Allows you to adjust the Volume of the Aux Signal.
The Mono switch compensates the level, if you combine a Mono with a Stereo Signal.

Aux Delay (top right)

Lets you delay or advance the Aux Signal to compensate phase and/or timing issues. When using negative values your DAW sets a latency for the whole project. (You might encounter high input latency when recording.) Using only positive values is recommended.

Mono Switch

Compensates for level loss when using a mono side chain signal. Effectively adds 3 dB to the aux signal.

How do I work with the Crossfader?

First you have to set up your signal flow:

1) go to your main signal track in your DAW

2) create a new Crossfader instance in a free insert effect slot

3) enable the side chain input (VST3) or multichannel input (VST2) for the plug-in

4) go to your "side chain" track and send the signal to the Crossfader side chain (VST3) or to the multichannel inputs (3/4) of the Crossfader

That's it. You have to know that in this case you can hear only the mix of both signal on your main track.

Adjust the Mix:

1) Move the Crossfader Slide till you reached the best mix.

2) If you need to shape the sound a little bit use the EQ.

Typical Use Cases

We will now provide some examples for typical use cases of our Crossfader.

1) DJ Mix

This is the a very basic and mostly self explaining way of using our plug-in. Set one song as your main and another as the side chain signal. Then you can mix them together.
You can record the movement of the Crossfader slider with you DAW's automation functions.

2) Mixing signals from different Microphones

The main application for us is to use the Crossfader as a tool for finding the best mix between two signals, I.e. two different snare/bass drum sounds or two different guitar sounds.

In every position of the Crossfader Slider you will have the same output volume assuming that your main and side chain signal have the same volume prior to entering the plug-in.

We hope this manual leaves no questions unanswered.
If you still have questions, feel free to contact us:

support@bobperry-audio.com