

STEREO CHANNEL

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MANUAL

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Instructions:

Insert StereoChannel on your stereo tracks to monitor the left, right, middle and side levels as well as phase correlation. This tool also gives you the ability to adjust the L/R and M/S balance.

Please Note: StereoChannel is NOT a distortion/saturation/console emulation plugin. StereoChannel is designed only to encourage the use of proper gain staging and balance workflows in digital audio.

Usage Tips:

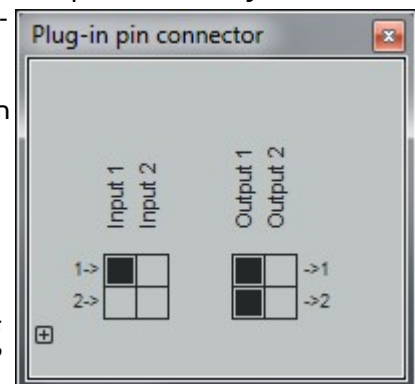
- **Click and drag the 'Nominal Level' knob to set your 0VU reference level.**
This setting is useful when tracking by matching this number with your AD/DA converter's nominal level and also when mixing to ensure appropriate levels are going into nonlinear effects (ie: distortion/saturation effects).
This calibration setting is essentially the amount of headroom you will have before reaching 0dBFS.
- **Adjust your audio by using the Input Volume knob and Balance sliders.**
Clean and simple volume and balance control. Two balance sliders included in StereoChannel; one for Left/Right and one for Mid/Side. The 'Volume Level' knob has a range of -24 to +24dB.
NOTE: Remember to watch your peak meters to ensure you're not clipping.
- **Use the Center X-Over to maintain a solid low-end.**
This control will cause any audio below the set frequency to move to the center while leaving the audio above the set frequency untouched. This is great for keeping tight, mono-compatible drums and bass sounds while allowing the higher frequencies to maintain their stereo spread.
- **Use the Polarity buttons to find the best sound**
This setting will rotate the polarity (or phase) of your signal 180 degrees. This can be used to enhance sounds recorded with multiple microphones.
- **Mute those sounds!**
Quickly mute the left and right as well as the middle and side channels of your audio signal.
- **In/Out/LR/MS/Phase Correlation – Many ways to monitor your signal**
Left/Right and Mid/Side metering modes are provided for monitoring your stereo signals. A phase correlation meter is located at the bottom of StereoChannel for monitoring mono-compatibility. Input and Output metering is also available, and a VU-Peak needle will appear when clicking on the VU meters.
- **Stereo Swap**
Swap the position of the left and right channels with the click of a button!
- **Fine-Tuning the Settings**
By pressing the small "cog" labeled button, you'll gain access to fade laws and gain compensation, LED levels and hold time, and phase correlation timing settings.

Notes:

Double-clicking any parameter's knob will reset that parameter to it's default value. Double-clicking the "Center X-Over" knob will also disable that feature. The center crossover is set up so that it only becomes enabled when it is adjusted to any value other than 10.0Hz. This is a CPU-saving feature.

Despite its name, StereoChannel may also be used on mono tracks. You can force StereoChannel to run in mono-mode by disabling input pin #2 if you need additional CPU power. Please note that many features will be disabled when running in this mode.

Configuration for forcing StereoChannel's mono-mode in Cockos REAPER



Platform:

- Microsoft Windows 32-bit and 64-bit.
- DAW or VST hosting software with VST2.4 or VST3 support.

Specifications:

VU Needle Calibration:	Nominal Level: 0 dBVU = -18 dBFS Adjustable setting between -24 and -6 dBFS
	Ballistics: Classic VU Simulation 300ms rise and fall time with ~1% overshoot
VU Meter Range:	-20 dB to +3 dB
Yellow LED Calibration:	Level: -6.0 dBFS User adjustable between -40dB and 0dB
	Hold Time: 1000ms User adjustable between 1ms and 10000ms
Red LED Calibration:	Level: -0.3 dBFS User adjustable between -40dB and 0dB
	Hold Time: 5000ms User adjustable between 1ms and 10000ms
Phase Correlation Timing:	1250ms User adjustable between 1ms and 5000ms
Phase Detection Level:	-140dB User adjustable between -140dB and -60dB
VU Operation Mode:	Left/Right User adjustable between L/R and M/S
Input Volume:	-24dB to +24dB
Left/Right Balance Law:	-3dB w/ Gain Compensation User adjustable between -6dB and -2.5dB Gain compensation can be turned on or off.
Mid/Side Balance Law:	-3dB w/ Gain Compensation User adjustable between -6dB and -2.5dB Gain compensation can be turned on or off.
Center X-Over:	User adjustable between 10 Hz and 1000 Hz.

Thank you for using StereoChannel!

StereoChannel Changelog:

August 5, 2012

- VST3 support is back!
- Added phase meter "Detection Level" threshold control to the settings panel.
 - Signal above this level will be detected by the phase meter.
Useful when using emulation effects that generate low-level noise.
- Minor graphic tweaks

July 27, 2012

- VST3 support has been temporarily suspended.
- More phase meter fixes
- Other small tweaks

July 21, 2012

- Tweaked VU needle graphic and animation smoothness
- Added "Mini-View" mode
- Increased Volume range from -20/+20dB to -24/+24dB
- Added Volume level readout
- Added VU Peak-Hold needle
- All user control readouts now have clickable edit boxes
- Lower CPU-usage (especially when using filters)
- Smoother transition on some controls (where needed)
- VST3 Support
- Increased Center X-Over range from 0-500Hz to 10-1000Hz
- Fixed Fade Law adjustment controls
- Fixed phase meter readout error with low center crossover settings

Disclaimer: The author of StereoChannel assumes no responsibility for any damage that may occur on the end-user's computer or other equipment while running this software.

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Special thanks to:

MusicDSP.org, g200kg, Microsoft, Steinberg Media Technologies, olilarkin, Cockos, Inc., RedBlack Productions

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StereoChannel

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