

DDMF StereoeretS manual

The ddmf StereoeretS audio effect is a three-band stereo width processor which allows you to shape the stereo image of a mix in a very flexible way. It is available as a VST, RTAS and AAX plugin for Windows and as a Universal Binary Audio Unit, VST, RTAS and AAX plugin for the Mac platform. Although the user interface has been designed in a way that should make the operation of the plugin almost self-explaining, please be sure to read this manual at least once to avoid unnecessary confusion.

Installation: just run the installer that you've found in the zip file next to this manual. Deselect any plugin formats you do not wish to install. On Mac, the plugin will be installed into the default plugin folders in the global library. On Windows, you'll be asked to specify your VST plugin directory if you chose to install the VST format.

Usage: StereoeretS should be used on a stereo track only, as it will have no effect on a mono track (it can be used for frequency-dependent panning on mono material loaded onto a stereo track, though). You can change the parameters of the effect by moving the knobs or by clicking onto the parameter values, which will enable you to enter values by hand (automatically truncated to the permitted parameter range). An overview over the function of the knobs, button and sliders is shown in the figure on the next page.

The signal chain in StereoeretS corresponds to the layout of the graphical user interface (GUI): first, the input format is specified (Left-Right or Mid-Side), which influences how the plugin interpretes the incoming audio data. Then the phases of the stereo channels can be inverted. The two channels can also be flipped. After that, the gains and stereo image positions of the left and the right channel can be adjusted independently.

Then the signal enters the core of StereoeretS: the three-band widening/narrowing algorithm. The audio data is split into a low-, mid- and high-frequency part using either a 12 dB/octave or a 24 db/octave crossover filter with two splitting frequencies that can be set by the "X-over" slider. After that, the stereo width, the gain and the pan position of each of the three bands can be adjusted separately. You can listen to the mid or the side part of each of the bands in isolation using the respective "M-Solo" and "S-Solo" buttons. By toggling between PRE and POST, you specify whether the soloing is done before or after the widening stage.

Switch between L/R and M/S input

Change phase of input channels

Switch L/R channel

Adjust gain and pan of left/right channels

Adjust width, gain and pan for the three frequency bands (low, mid and high)

In:

LR
☒

MS
☐

L-Φ
☐

R-Φ
☐

L ↔ R
☐

Left

Gain

0.0 dB

Pan

-90

Right

Gain

0.0 dB

Pan

90

L R

DDMF

Width

1.283344

Gain

0.0 dB

Pan

0

High

1.476344

Mid

0.02253125

Low

0.0 dB

M-Solo

☐

S-Solo

☐

PRE

☐

☐

X-Over

1st/2nd

MonoOut

☐

Bypass

☐

Phase meter (signal should be in upper/ lower quadrant for mono compatibility)

Solo mid or side content of any of the three frequency bands (pre or post processing)

Bypass the whole plugin

Adjust the lower and upper crossover frequency

Change crossover steepness

Well, mono out ;-)

The signal is mixed back together again after this stage. If no adjustments are being made in this section, the total frequency (and phase) response is completely flat. The whole effect can also be bypassed using the "Bypass" button.

Finally, a stereo meter allows you to visually judge the stereo image of your music. If there is only signal in the left channel, you will see straight lines at a -45 degree angle. Same goes for the right channel, only that then the line will be tilted by +45 degrees. For a pure mono signal (equal left and right signals) you will get a vertical line. Complete out-of-phase signals, where the left signal is always the opposite of the right signal, will lead to a horizontal line. For optimal mono compatibility, you should always try to keep the signal in the upper and lower quadrant of the stereo meter, as out-of-phase signals will add up to zero when monoed.

Demo restrictions: Noise bursts will be added every now and then.

System requirements: Windows 98 or newer, VST-compatible host or Protools, or an Intel Mac with Mac OSX10.5 with a VST or AU compatible host, or Protools. CPU requirements are not high, so any reasonably modern setup will be sufficient. Questions/Feedback: support@ddmf.eu