## **DDMF StereooeretS manual**

The DDMF StereooeretS audio effect is a two-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, VST3 and AAX plugin for Windows and as a Universal Binary VST, VST3, AU 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 selfexplaining, please be sure to read this manual at least once to avoid unnecessary confusion.

Installation: Simply run the installer you've been provided. On Mac, it will only ask you to select which formats you want to install. On Windows, if you select to install the VST version, you will need to provide your VST plugin folder(s) where you want StereooeretS to end up in.

Usage: StereooeretS 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). Let's have a quick walking tour through the user interface:



The signal chain in StereooeretS 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 StereooeretS: the three-band widening/narrowing algorithm. The audio data is split into a low-frequency, a midfrequency and a high-frequency part using a 12 dB/octave crossover filter with the two splitting frequencies set by the "Crossover" slider. After that, the stereo width, the gain and the pan position of each of the bands can be adjusted separately. You can listen to the mid or the side part of each of the three 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. The signal is mixed back together again after this stage. If no adjustments are being made in this section, the total frequency 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 XP or newer, VST-compatible host or Protools, or an Intel Mac with MacOSX10.7 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*