ERS DimD Chorus Plugin by DDMF

Manual

Thank you for using this fine piece of digital audio equipment! To get the most out of it, we recommend to quickly have a look at this manual.

This plug-in has been developed to sound like the Roland Dimension D Chorus with enhanced controls. This chorus has been used on thousands of recordings worldwide. In this manual you will find information on the history of the Dimension D, the history of this plug-in and information how to install it on your DAW.

Installation: simply run the installer and select the plugin format(s) you want to use. If you are on Windows, and have chosen to install the plugin in VST(2) format, you will need to specify your VST plugin directory (twice, even, if you are using both the 32 and the 64 bit version). All other formats will be automatically installed in the correct, system-wide default directories.

Usage: The plugin has a five button mode control and three knobs as additional controls. From the left to the right, the big handles with the round knobs control the following parameters:

Mode selector: Mode 0 is bypass and mode 1-4 are different chorus modes. The intensity of the chorus increases with the mode number.

Freq (0.1..1 Hz): After the selection of the mode the speed of the oscillators can be changed using this knob. The way the knob behaves can be selected by right clicking on the knob. There you will find a menu with velocity sensitivity and the direction of the controls.

Depth (2..6 ms): After the selection of the mode the modulation depth of the delay lines can be changed using this knob. The way the knob behaves can be selected by right clicking the knob as with the Freq knob.

<u>Mix (0..100%):</u> This knob is to control the amount of direct and modulated sound on the output of the chorus. The way the knob behaves can be selected by right clicking the knob as with the Freq knob.

The "LED bar" meter on the right monitors the input signals provided to the plug-in. When the +6 dB lights up, the level of the input signal is too high and nasty-sounding digital clipping may occur in the plug-in. It is best to set the send levels in your DAW so that the levels on the left side are around 0dB.

Details about the underlying audio algorithm

Chorus is a very commonly used effect in recording and mixing that places instruments, vocals or sounds in a wider sound stage. The first chorusses where developped in the 70-ties and used extensively in the years after that. Most obvious are the examples on guitar. A lot of specialist chorus-units have been build, like the Roland SDD-320 Dimension D, TC 2290, Dyno my Piano - Tri stereo chorus and Eventide H3000. The original Dimension D has got a bucket brigade device to build the needed delay effects.

An oscillator controls the speed on which the audio samples are put through with the buckets, and that creates the chorus effect. Like in the original, there is a lot of (phase)filtering. This is carefully replicated. These are available with the four different modes. These modes select the structure, the delay length, the depth and the oscillator speed.
The original only has these 4 controls and the mono/stereo in control. As an additional control we made the delay depth, oscillator speed and mix control available. It is best to start with one mode and then tweak further to your wishes with the additional control. The difference in sound with mono /stereo in knob can only be heared with sources that contains stereo information. When pressing the ERS button, you can choose different oversampling modes. Higher ones increase the CPU-load but also lower anti-aliasing distortion. The 2x oversampling sounds the most identical to the original when using 44.1 or 48 kHz samplerates.

System requirements

The DimD plugin is available in VST, VST3, AAX and AU (Mac only) format. It needs a host/DAW that supports at least one of those formats to be operated. DimD comes as a 32 and a 64 bit Intel binary on both Mac and Windows, and as a 64 bit Apple Silicon binary for compatible Apple computers. DimD should work with Windows 7 and higher, and with OSX >= 10.7.

For support/questions/remarks please contact support@ddmf.eu!