

Audio Damage ADM23 Eos



A long-time favorite of our plug-in users, the Eos reverb is now available in Eurorack! This module is code-identical to the Eos plug-in, with the Superhall and Plate algorithms made famous in the original. With an easy-to-understand interface, and a 48k/24 bit true stereo audio path, Eos is a top-of-the-line commercial studio quality reverb for your Eurorack system.

The Plate algorithm in Eos is a unique implementation of the traditional digital plate: rich and full, perfect for drum and vocal simulation. The Superhall algorithm is designed to emulate the incredibly long, chorusy reverb tails heard on Harold Budd/Brian Eno records, and is what makes Eos amazing on synth sounds. Hear it in action in [these audio demos!](#)

Features

- MIX controls the wet/dry mix. At full anti-clockwise, only the dry signal appears at the outputs. At full clockwise, only the wet signal appears. An equal-power crossfade mixes between the two.
- ATTACK controls the presence of the initial early reflections. At full anti-clockwise, the reflections are more or less equal. At full clockwise, an exponential decay occurs, with the initial reflection being much louder. This results in a more percussive and rich reverb tail.
- DIFFUSION controls the amount of diffusion applied to the early reflections. At full anti-clockwise, no diffusion is applied, and the early reflections are very clear. At full clockwise, the early reflections are entirely "smeared." Essentially,

- it controls the smoothness of the reverb.
- COLOR controls the algorithms' several EQ parameters. At full anti-clockwise, the reverb tail will be very dark, and have no high end, and at full clockwise, it will be very bright, and have no low end. In the middle, no EQ is applied.
 - DECAY controls the decay time of the reverb tail (called "RT60" in the 'verb business.) At full anti-clockwise, you will hear almost no tail, and at full clockwise, the RT60 (or time to -60dB) will be over a minute long in Superhall mode, and about 45 seconds in Plate mode with Size at maximum.
 - SIZE controls the physical size of the simulated hall or plate. Together with the Decay control, this describes the personality of the reverb. Note that this control has no modulation input, and you will experience some noise bursts if you adjust it while there is audio circulating in the reverb tank. This is unavoidable, as the control changes the times of over a dozen delays.
 - MODULATION controls the amount of modulation applied to the delays in the reverb tank. In effect, it is a chorus control. It is a subtle control, and only really apparent with a long decay. At full anti-clockwise, the reverb tail will be icy and clean, while at full clockwise, it will be rich and full.
 - PRE-DELAY sets the time between when the dry signal is heard, and when it enters the reverb tank. The response is somewhat different depending on the mode; in Plate mode, the first early reflection will occur at the set time. In Superhall mode, this effectively controls the "spread" of the early reflections.
 - LOCK & INFINITE control the Infinite mode (or "freeze effect.") When LOCK is illuminated, INFINITE is a toggle switch, and when LOCK is not illuminated, INFINITE is a momentary switch. The Infinite jack responds to a +1V trigger when locked (which turns Infinite on and off) and a +1V gate in unlocked, where the Infinite will be activated for the duration of the gate. The effect itself basically gives the reverb an infinite decay. Note that the inputs are still active, so further input after the Infinite mode is activated will accumulate.
 - ALGORITHM switches between Superhall and Plate mode.
 - The ALGORITHM and LOCK buttons remember their state. Once you make a selection, the value is written to EEPROM memory after 30 seconds. If the module loses power before then, it will not remember the selection, and will revert to the previously saved state.
 - Eos has a 48kHz sample rate at 24 bits, with 32-bit floating point internal operation. The I/O is true stereo, and changes internal routing based on what is plugged in. For mono use, just use the left side I/O. For mono to stereo (the normal configuration as a send effect), use the left input and both outputs. The internal DSP will route itself accordingly.
 - Eos has a 125mA current draw at +12V, approximately 10mA at -12V. It has an on-board regulator, and does not require +5V. It is 14HP in width, and 25mm deep. It has a USB port on the backplane for firmware updates.