Audio Damage ADM21 Aeverb Mk2

Aeverb Mk2 is just like Aeverb Mk1 only moreso.

FDN (or "feedback delay network") reverb has long been a staple of electronic music, desirable for its thick, heavily diffused nature that responds well to synthesizer sounds. Aeverb takes this long history and wraps it in a 6HP stereo module.

We started with the algorithm from our original Aeverb module (originally created by Sean Costello of Valhalla DSP for CSound) and experimented heavily with the diffusors from our popular ADverb plugin (itself a model of the famous 224 digital reverb), made it stereo, and poked and prodded until we came up with something that works very well in the Eurorack modular synth context.

Aeverb Mk2 has two algorithms, selected by the ALGO switch. The first is an extended version of the original algorithm, with much longer decay time (or "RT60 time," in reverb vernacular) and heavier diffusion, for a major improvement in both sound and capabilities. The second algorithm removes the diffusors, changes the internal EQ and feedback routing somewhat, and shortens the delay times for a "room" simulation that is perfect for percussion sounds.

We then added control over the high-pass filter on the input to the delay network for much more tonal control, and the result is a reverb that will perform workhorse duties, yet still has an extensive palette of experimental sounds perfect for the more adventurous musician. All of this in 6HP, too!

Features

- DECAY - This controls the RT60 (or decay time) of the reverb algorithm. Algorithm 2 has a maximum RT60 of about 4 seconds. Algorithm 1 has a maximum RT60 of over a minute.
- DAMPING - This controls the corner frequency of the lowpass filters in the feedback network, and has the effect of darkening the sound of the reverb, in addition to controlling the decay time.
- HPF - This controls the corner frequency of the highpass filter on the input. This has the effect of "thinning" the reverb's decay and making it less muddy. Especially useful with percussion material.
- MIX - This controls the wet-dry mix of the unit.
- ALGO - This controls whether the unit is operating with Algorithm 1 (diffusion, long decay) or Algorithm 2 (no diffusion, short decay.)
- Aeverb Mk2 is a stereo module. The input to the reverb algorithm is mono, however. (True stereo reverb sounds like, to quote our head designer, "a can of ass.") So the left and right signals are mixed for the input to the reverb algorithm, and also passed through to the outputs according to the mix knob. The unit can be used in mono->mono, mono->stereo, or stereo->stereo formats, and auto-senses the I/O configuration and adjusts the algorithm accordingly.
- Aeverb Mk2 is 6HP in width, 25mm in depth, and draws 60mA off the +12V buss and 12mA off the -12V buss. The CV inputs accept control voltages of -5V to +5V, and modulate the value set by the knob position. This module's audio I/O operates at modular synth levels.