

Audio Damage Æverb is a digital reverb running a feedback delay network algorithm (commonly called “FDN”). The algorithm consists of eight short delays running through eight low-pass filters, with the feedback paths summed in to a single source that provides both the output

to the mix and the input to the delays themselves. This type of reverb algorithm is generally considered “vintage” sounding, and is useful in electronic music for its thick, non-realistic behavior.

Control-Voltage Jacks

Control voltages present at the jacks are added to the values set with the knobs.

Positive voltages at the **DECAY** jack increase the decay time. Negative voltages decrease it.

Positive voltages at the **DAMP** jack decrease the damping and brighten the reverb, while negative voltages increase the damping and make the reverb duller.

Positive voltages at the **MIX** jack increase the reverb-to-dry signal ratio, while negative voltages decrease that ratio.

The useful range of voltage for the CV jacks is $\pm 5V$.

Audio Input Jack

The audio input signal goes in here. The hardware will be happiest if the signal level is within $\pm 7V$.



Knobs

DECAY controls the overall gain of the feedback loop of the delay network. More gain results in longer decay times.

DAMP controls the corner frequency of the filters on the individual delays, and works in an inverse manner to a normal filter frequency control. At full anti-clockwise, the sound is very dull, while at full clockwise, it is bright. Note that we have allowed a full-on value, even though this will result in a fairly noisy signal due to the nature of FDN reverbs. (All the noise in the single path gets amplified and repeated ad nauseum.) The “sweet spot” is at about 3 o’clock, resulting in a signal that is bright but not too noisy.

The **MIX** knob controls, as the name implies, the relative levels of the wet and dry signal. At full anti-clockwise, the output is 100% dry, and at full clockwise, it is 100% reverb.

Audio Output Jack

The processed signal comes out here. It may or may not bear much resemblance to the input signal.

This reverb is not intended to be a studio-quality all-around hall simulation; rather, it is a fun and musical addition to an electronic musician’s toolset, with an eye to creating the dense reverbs commonly used on Warp Records releases in the mid 90s. (The name is a clue.)

The reverb algorithm doesn’t respond well to a driven input; if you find the reverb to sound too distorted for your liking, try attenuating the input signal a bit. Lower inputs produce cleaner results.