

ROM

A eurorack offshoot of the DRAUME reverb pedal. ROM/DRAUME is an exploration of artificial reverberation. Can a space sound dry, old, veiled or broken? Reverberation is typically associated with physical spaces or objects. A hall reverb conjures the mental image of a hall, but what ambiance comes to mind when presented with intentionally artificial reverberation? ROM combines post-reverb processing with decay and system clock control to break the spatial illusion!

PARAMETERS

MIX: Dry/wet mixer. Clean audio at min. Completely processed audio at max. This parameter affects all three outputs (left, right and sum).

DECAY: Sets the duration of the reverb decay. At max you have several minutes (or more) of decay time. If you continuously input audio while DECAY is at max you will eventually end up with a distorted signal as the incoming audio endlessly stacks on top of itself.

CLK: Digital signal processor system clock frequency. Sets the sample rate from 12kHz to 48kHz. This has the effect of affecting the reverbs character and decay time as well as the modulation speed of the AM function and the brightness of the TXT function. Adjusting the clock frequency also pitch shifts whatever audio is currently reverberated. Note that low CLK settings will decrease the signal-to-noise ratio.

FM: Random system clock modulation depth. This produces a random vibrato effect. The effect is similar to the old (mono) DRADD modulation but has more depth available. Note that CLK does not affect the speed of the FM function.

AM: Random amplitude modulation depth. Adds a kind of flickering uncertainty to the reverb dynamic. The tremolo is applied post-reverb.

TXT: Simultaneously adds low pass filtering and an oddly pleasant digital distortion post reverb.

Audio In/Out: IN L/R are the audio inputs. The inputs are linked such that a mono signal source can be sent to both channels by connecting to just one of the inputs. OUT L/R are the main audio output. Additionally there is a SUM (L+R) output that combines the processing of the two channels.

CV control: The parameters CLK, FM, AM, TXT and DECAY can be controlled through cv. When cv is applied the associated knobs act as parameter offsets. With a knob set to noon adding a $\pm 5\text{V}$ CV signal will access the parameters full range. Note that the AM, TXT and DECAY inputs are lowpass filtered meaning they won't respond to rapid LFOs or audio rate signals. The CLK and FM inputs are less filtered thus they somewhat respond to LFOs and sub/bass audio. MIX can not be controlled with cv.

Toggle switch: Algorithm selector. Chose between HALL, FRAME and GRAIN.

HALL algorithm: This is an artificial, thinly veiled "hall" reverb. Maximum decay is approximately 10 minutes with CLK at noon. This is the same base reverb as found in the DRAUME pedal.

FRAME algorithm: Origin as a truly sorry attempt at simulating a piano frame. A cold, lifeless decay almost devoid of character with absolutely no pre-delay (*at least not from the reverb, FM still applies some small latency depending on the CLK setting*). At higher DECAY settings it kinda gives spectral freeze-associations. Note that with DECAY set to minimum the reverb disappear completely giving you “clean” access to the FM, AM and TXT functions.

GRAIN algorithm: A granular synthesizer performing random grain shuffling in combination with regenerated all-pass filters. The system contains 2 simultaneous grains per channel. The all-pass filters have the effect of gradually smearing the reverberated audio over time making the reverb decay gradually less jumpy/restless.

Stereo processing: The two channels are tuned differently for improved stereo width. The base reverb algorithms have separate voicings but most noticeably the AM function and the GRAIN shuffling function have independent random generators, meaning the results from these functions will differ between the two channels.

TECHNICAL SPECIFICATIONS

Input Impedance	100k Ω
Output Impedance	1k Ω
Power supply	Eurorack \pm 12V DC (5x2 pin type)
Current Draw	200mA (+12V), 40mA (-12V)
Width	60.5mm : 12HP
Height	128mm : 3U
Interior depth	28 mm
Exterior depth	23 mm
Weight	150 g