

RIEMANN'S GRAVE



Overview:

What have we got here? Riemann's Grave is a curated trio of filters paired with a sample rate reducer. So you can filter your freqs and crush your bits in some very unique, interesting, and uncomfortable ways.

Controls:

Mix: This knob controls the wet/dry mix. By law, there has to be a mix knob. Without a mix knob, we all go to jail.

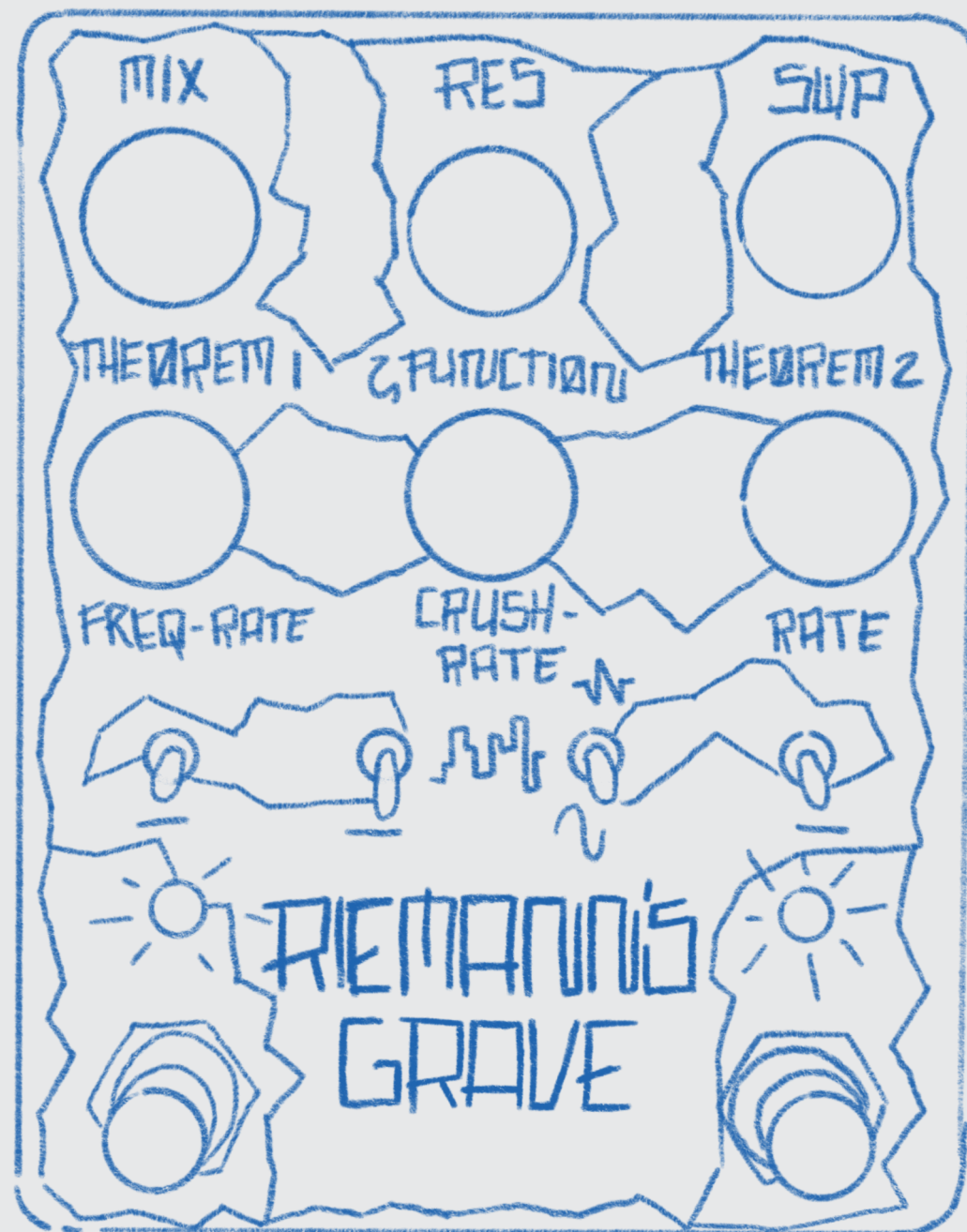
Resonance: (RES) This is a universal parameter that adds emphasis to the cutoff frequency of all three filters. High levels of resonance will get extreme results! One way to use resonance is with a fixed filter to really push a specific frequency range. Another way is to use with a modulated filter to get flubby-whubbly sounds. There are probably other uses, but no one knows about them anymore.

Sweep Filter: (SWP) This bounceable LPF is controlled by the footswitch on the right. Pressing the foot switch will momentarily close the filter (set the cut off frequency to zero) and it will gradually return to an open position, according to the setting of the sweep knob. Turn CW for slower and longer sweeps.

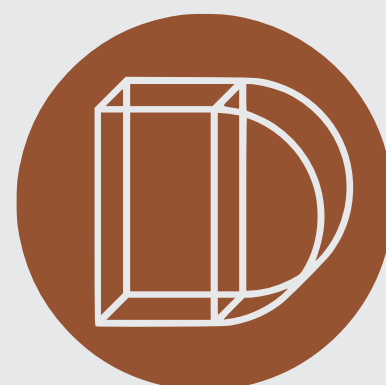
Theorem 1: The first filter, a resonant 24 dB per octave low pass filter. With toggle 1 pointing down, the cutoff frequency is fixed. Turn CW to close the filter, CCW to open. With toggle 1 pointing up, random modulation is applied to the cutoff frequency. Turning CW now controls how rapidly a new cutoff frequency is selected.

Zeta Function: This controls the sample rate reduction/bit crushing. Higher settings will mangle and crush, and create some wonderfully ugly atonal messy sounds. Drums love that kind of thing. In fixed mode (Toggle 2 down) the knob controls the amount of reduction, turn CW for lower sample rates. In random mode (Toggle 2 pointing up) the knob controls how often a new rate of crushing is selected.

Theorem 2: The second filter, also a resonant LPF. The cutoff frequency of this filter is modulated either by a curvy (sine wave) or pointy (ramp wave) shaped LFO. The speed of LFO is controlled by the rate knob. Toggle 3 will select the LFO wave shape. Toggle 4 will choose a constant (down) or random (up) modulated LFO.



RANDOM
MODULATED
ALLFILTER



Discomfort Designs