

In this series of patches we will be covering classic Drummachine sound-synthesis using the extensive timbral palette of theBateleur 42hp System for a unique approach and fresh results. Making a Splazsh - The Cymbal! This

one's quite advanced, we're gonna use two signals tuned inharmonically to each other (your ears will guide you!) and (self-)modulate the Pulse waveforms for a dynamic displacement to simulate vibration when struck.

Suggested settings: Fast attack phase, decay for fall-off and a bit of sustain and nice release for reverberation tail.

Fine-tune the Cymbal pitch to taste.

Balance pulse to VCF self-oscillation signal gains to taste. The key to a good Cymbal/Ride sound is separate oscillators, detuned to each other inharmonically.

Green LED = Linear Curvature (default). Toggle through the Envelope Generator's Curvature characteristics by pressing **mode + time** toggles simultaneously.

Optionally we can add (stackable cables or summing circuits) the velocity information we're extracting from our incoming MIDI data on top of the Envelope CV for a more humanized feel.

Suggested patching: Power / MIDI gate output to Envelope Generator trigger/gate input. Envelope output to Expander VCA modulation input.

Use supplied MIDI-to-3.5mm Adapter to convert external MIDI data** to analog Control Voltages.

*LED Off = Linear FM mode (default).
**Consult VCO technical specifications on modulation modes and switch positions as well as input ranges.

As usual, the VCA modulation input is **normalized** to the cutoff modulation input on the Expander module. For this patch, we want to avoid the Envelope CV affecting our VCF's cutoff frequency, we can either set the cutoff control to 0 or use a dummy cable to break normalization.

We're going to modulate the Pulse by using the sub-octave square output and setting modulation depth to taste. This will create an interesting displacement of the pulse relative to the VCF in self-oscillation Sinusoid wave.

Pulse and VCF in self-oscillation output MIX to VCA audio input.

VCO range switch in the 5th position.

Set the VCF mode switch to the MID or DOWN position for self-oscillation.

Cutoff Frequency control will determine the VCF in self-oscillation, Sinusoid output pitch.

Add Noise to taste :)

