

In this series of patches we will be covering classic Drummachine sound-synthesis using the extensive timbral palette of theBateleaur 42hp System for a unique approach and fresh results. "I want a rimshot, hey, diggy diggy.."

We're going to set the narrowest pulse mixed with noise as our CARRIER signal, and SYNC it with the VCF in self-resonance, in turn being modulated by the Envelope Generator's spike. Short burst with some Ring.

Suggested settings: shortest possible attack, just a hint of decay and release for reverberation.

Fine-tune the MODULATOR and CARRIER timbre to sit in the mix with your composition.

The VCO's pulse is our main CARRIER signal. Set Pulse Width manually to a narrow pulse.

Orange LED = Mixed Characteristic 1 for an extra snappy attack-phase. 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.

Using the VCF in self-oscillation as a MODULATOR signal yields very unusual and unique sounds when syncing the VCO core\*\*.

The modulation depth control will set the sensitivity of the SYNC circuit for incoming MODULATOR vs. CARRIER relationship, experiment by feel.

\*Red LED = SYNC mode.  
\*\*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 modulate the VCF in self-resonance's pitch using the same envelope CV and setting the depth to taste. This will give us a ringing effect when modulating the VCO.

Set the modulation mode switch to the UP position for SYNC mode. The modulation status LED\* will give us an indication on the type of modulation we're applying.

Noise + pulse waveform to VCA audio in.

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 MODULATOR's pitch.

Add Noise to taste :)

VCF in self-oscillation output (Sinusoid waveform) as our MODULATION signal.

