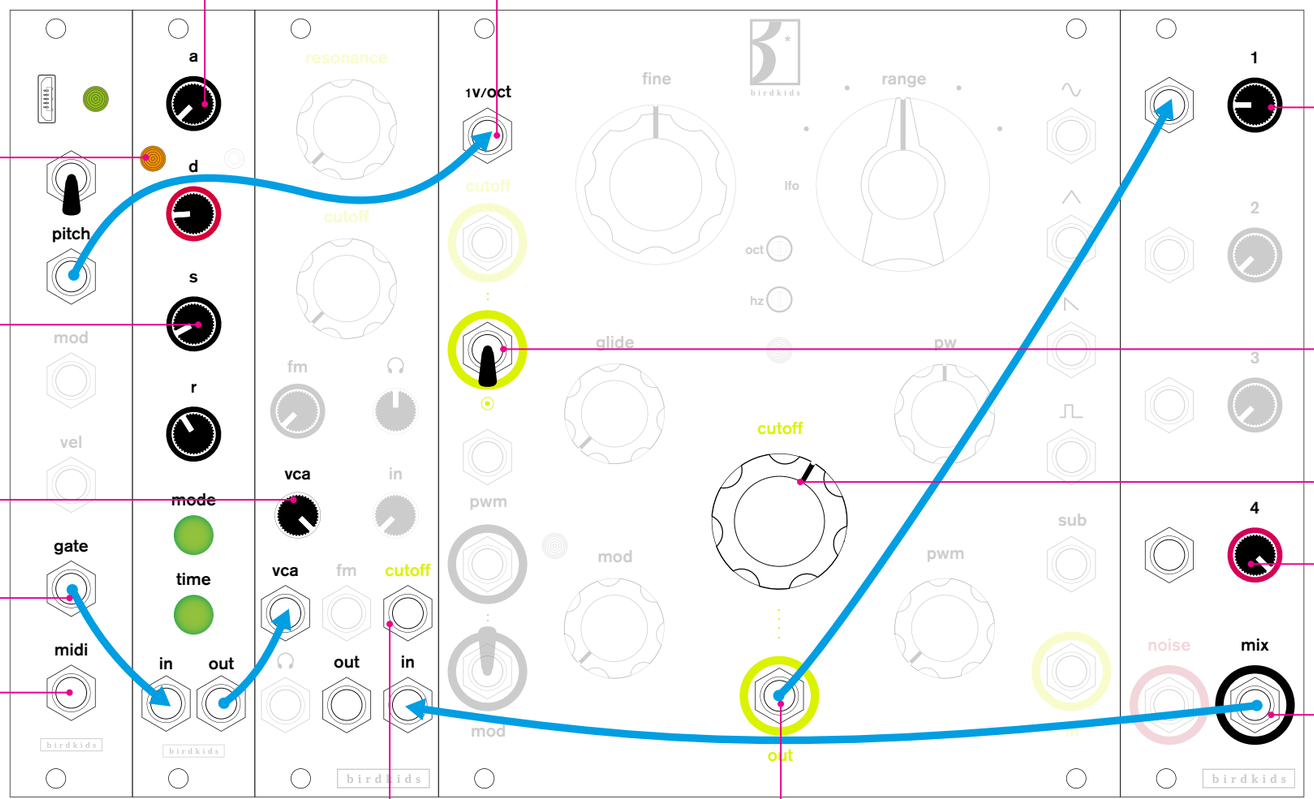
The Bateleur
42hp System

003 Rezzy Hats

Sizzling, post-punk'ey HiHats anyone? The analog, white noise source within the Mixer / Noise module is going to be our main, atonal, sound source to emulate the chaotic, behaviour of the harmonics when striking a metallic body. To make things extra interesting we'll be adding an overtone using the VCF in self-resonance mode.
The transient's snappiness will be determined by the Envelope Generator settings.

Suggested settings: snappy attack-phase, fast decay-phase to sit in the mix, sustain determines the duration of perceivable HiHat, release-phase helps bringing out the "sizzle".

Optionally set the VCF mode switch to the MID position and use incoming MIDI-note pitch data, converted to CV, to modulate the pitch of the VCF's sinusoidal output.



Toggle through the Envelope Generator's Curvature characteristics* by pressing mode + time toggles simultaneously. Experiment and listen. :)

Consult the Envelope Generator's tech specs for more info on variable stage parameters, operation modes, mixed curvature characteristics and variable time domains.

Set the VCA's modulation depth.

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.

*Yellow LED = Mixed Characteristic 1 (Exp. Attack, Log. Decay)

**Power / MIDI is set to receive MIDI via CH1 by default.

Suggested patching:
VCF in self-oscillation mode(=Sine) as a resonant, high-pitched tone to sit in the mix with the analog noise source. Start low, dial-in to taste. Optionally modulate the pitch.

Set the VCF mode switch to the DOWN position for self-oscillation without tracking. We will be using the sinusoidal output to add a high-pitched overtone to the HiHat sound.

The cutoff frequency control determines the pitch of the sinusoidal output in self-oscillation ◉ mode.

We're using the analog, White Noise generator's output, normalized to the Audio input 4, to dial in our primary sound source for this patch.

The mixed (audio) signal VCF in self-oscillation (=Sine) + Noise, post individual gain-staging, is output here.

Remember, the VCA modulation input is normalized to cutoff modulation input on the Expander module. In VCF self-oscillation mode we might want to choose to have the VCF's cutoff frequency be unaffected by incoming CV. The solution is to use a "dummy cable" (plugged only on one side) to break normalization between the jacks.

VCF in self-oscillation mode, output.

birdkids