TheBateleur
42hp System

014 Morphing Bass

Let's join the band shall we? Our weapon of choice – A nice vintage 60's MIA fretless JB, a Red Bandana and a catchy firstname, like "Jaco". Alternatively a TheBateleur 42hp System and some good 'ol patching voodoo.

We're gonna put the Pulse Waveform to work with some Triangle modulation targeting both VCF cutoff & PWM. Feeling extra fancy? Let's split the Envelope CV and stack it on top of the PWM modulation. Grrrroowl.

Suggested settings: we want a moderate to long "swell" in our attack phase, pronounced decay, a bit of sustain and a nice release tail to get close to playing the real, stringed thing.

We're mdulating the VCF's cutoff, using the Triangle + Noise mix. Additionally we're splitting the modulation signal as a thru to PWM modulation.

The VCO's range switch can be set to the 2nd or 1st range-position (lowest octave before lfo mode). In the 1st range position a detuning of approximately half-semitone from base-frequency is expected to occur due to the non-linearities of the VCO's core.

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

Set VCF cutoff modulation depth to taste. Due to normalization between the VCA and cutoff modulation inputs on the Expander, a single CV signal will affect both circuits unless bypassed manually.

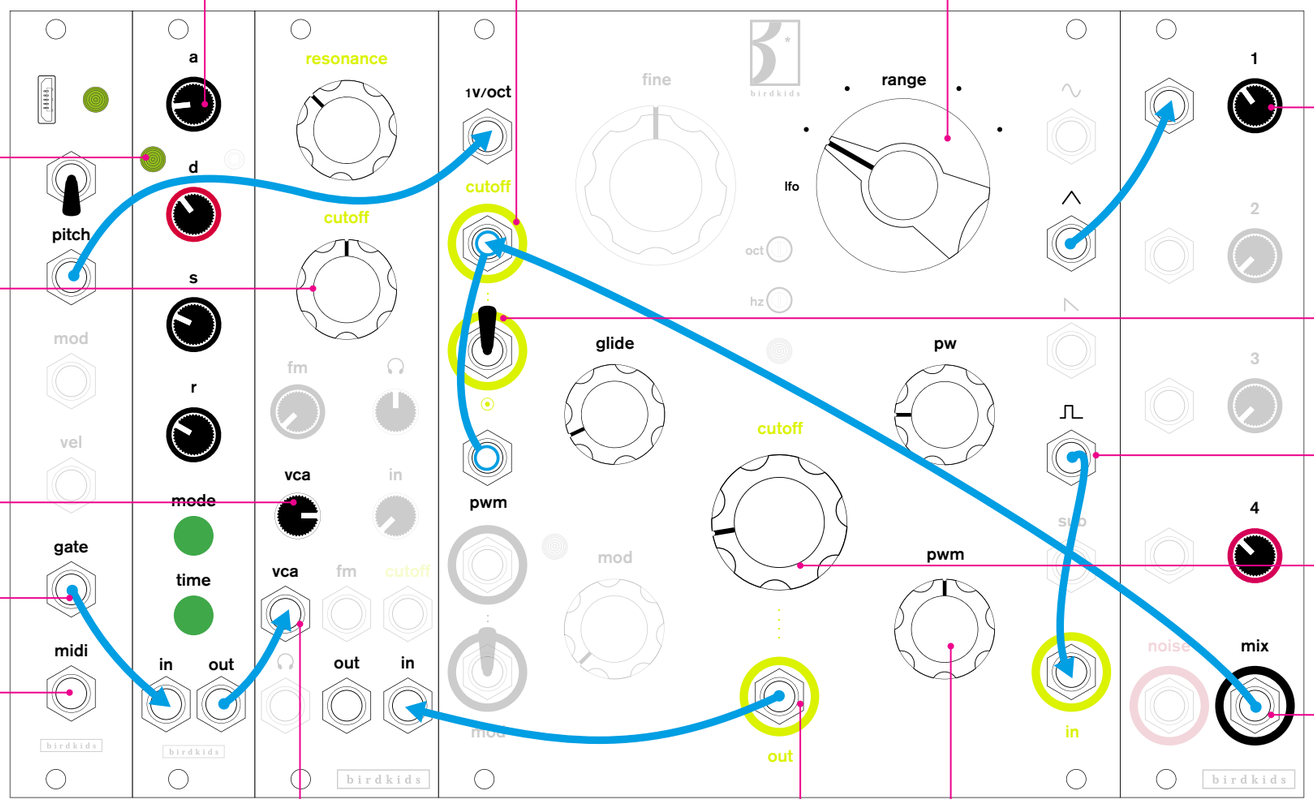
Set the VCA's modulation depth. Analog saturation will occur beyond certain values.

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.

*Green LED = Linear Characteristic (default).

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



Suggested patching:
Triangle as a modulation signal, add noise to taste. The gain control effectively becomes a modulation depth control.

Set the VCF mode switch to the UP position for classic LPF.

The pulse waveform is our main CARRIER. Set Pulse Width manually to taste, for a Fretless approximation a low PW value will sound most realistic.

Set cutoff frequency to a low setting, we want to filter out most of the high frequencies then modulate the cutoff using the Envelope and our MODULATOR.

Mixer / Noise mix to VCF cutoff modulation input & sent thru to PWM modulation input.

As usual, the VCA modulation input is normalized to the cutoff modulation input on the Expander module.
Pro tip: split the Envelope modulation signal and stack on top of the PWM modulation CV for an approximation of the Fretless "growl".

VCF output is patched to VCA input on the Expander.

Set PWM modulation depth to taste.

birdkids