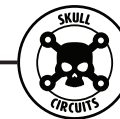


# The METAL-O-TRON II user manual



**1-DECAY:** Sets the decay time.

**2-TRIGGER LED:** Lights up when the module receives a trigger.

**3-DECAY CV:** Attenuator for CV input (16). Determines the amount of CV control over the decay time.

**4-DECAY SHORT/LONG:** Changes decay time behaviour, from short decays to long decays.

**5-VCA ON/OFF:** Allows you to bypass the VCA. When set to the 'off' position the sound will pass through the VCA unaffected. The Decay settings (1),(3),(16),(4) and Velocity input (15) have no longer any influence on the loudness.

**6-CUTOFF FREQUENCY:** Sets the cutoff point for the filter section

**7-DECAY MOD:** Fixed modulation source derived from the decay settings. The center position has no modulation, left has negative modulation, right positive. Often when using the HPF for hihats a bit of negative decay modulation can work well. Other kinds of sounds can benefit from a bit of positive modulation. But who am I to tell you what to do.

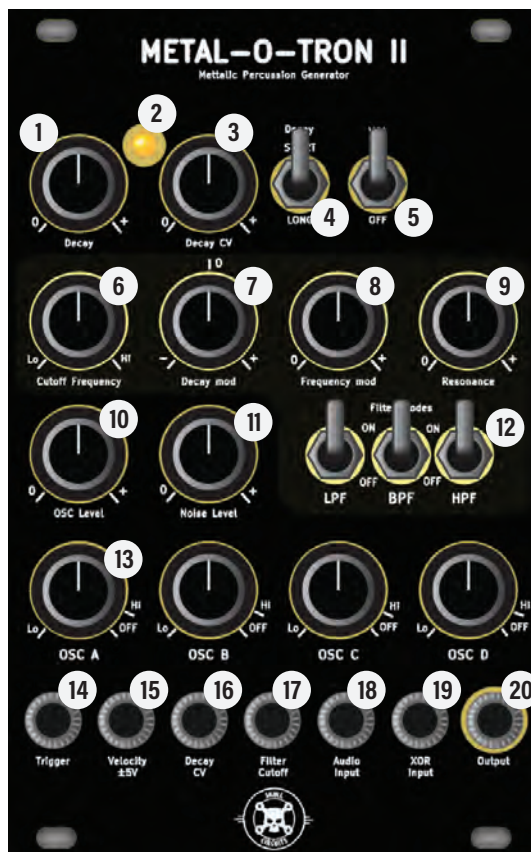
**8-FREQUENCY MOD:** An attenuator for the signal present at the Filter Cutoff CV input jack (17).

**9-RESONANCE:** The amount of accentuation of the selected cutoff frequency.

**10-OSC LEVEL:** The audio level of the oscillator bank.

**11-NOISE LEVEL:** The audio level of the noise oscillator.

**12-LPF/BPF/HPF:** Each filter type can be chosen or combined with these switches. If they're all 'off' no sound will pass through. A notch filter can be emulated by using HPF and LPF simultaneously for example.



**13-OSC A/B/C/B:** Pitch control of the 4 identical square wave oscillators. Turning the knob all the way to the right will turn the oscillator off. All 4 oscillators are, together with the external XOR input mixed through a logical XOR gate.

**14-TRIGGER:** The module's trigger input. A steep rise in voltage (from a gate, LFO, Trigger, oscillator, ... ) will trigger a sound.

**15-VELOCITY IN:** This input allows you to modulate the volume of the 'hit'. A negative voltage will make the next note sound quieter, while a positive voltage will make it louder. Signals between -5/+5V give the best results.

**16-DECAY CV:** An external CV input to control decay times.

**17-FILTER CUTOFF CV:** An external CV input to control the Filter frequency

**18-AUDIO INPUT:** An external audio input which will be mixed with the oscillator bank and noise generator.

**19-XOR INPUT:** An external audio input into the XOR logic gate which combines the 4 oscillators and this input.

**20-OUTPUT:** This is where the sounds comes out. Route this into your output mixer or something.

## BLOCK DIAGRAM OF THE SIGNAL CHAIN

