



QUICK START INSTRUCTIONS

Firmware Version 2.0

Thanks for buying MeeBlip, and welcome to anode! Let's get started.

Connect anode

anode requires three connections: **MIDI, 9V DC power and Audio**

For audio, connect any stereo mini jack (3.5 mm) cable to an external output, or plug in stereo headphones. **IMPORTANT: you need a stereo cable, not a mono cable.** (If you must use a mono cable, try pulling it out halfway.)

MIDI input is available from any standard MIDI DIN connection. (That's the round connector with the five pins in it.)

Set the MIDI Channel

Set the MIDI channel by pressing and releasing the MIDI SET button on the back panel. The LED will start to blink. Move one of the four knobs on the bottom row (Pulse Width, Detune, LFO Rate or LFO Depth), corresponding to channels 1 to 4. The LED will blink quickly to confirm that the MIDI channel has been changed.

Power is 9V DC, 300 mA, 2.1mm-barrel, center positive.

How anode responds to MIDI

In addition to pitch (MIDI notes) and velocity (mapped to the filter envelope, so anode responds to how forcibly you play notes), anode responds to MIDI messages from external controllers and sequencers. MIDI numbers these messages via standard Control Change numbers, or CC:

01 MIDI MOD wheel (mapped to LFO Depth)

Knobs:

- 54** Envelope Attack
- 53** Envelope Decay
- 52** Filter Cutoff
- 51** Pulse Width
- 50** Oscillator Detune
- 49** LFO Rate
- 48** LFO Depth

There's no MIDI CC message corresponding to filter resonance (REZ) because it is an entirely analog control.

Knobs only accessible via MIDI:

- 55** Portamento ("glide")
- 56** VCF Envelope Amount

Switches:

- 64** Sustain
- 65** Oscillator B Octave
- 66** PWM Sweep
- 67** LFO Destination

Since switches are either in one position or another, any CC with a value from 0-63 will correspond to "off"; any value from 64-127 will result in "on."

Switches only accessible via MIDI:

- 68** LFO Random
- 69** LFO Note Retrigger (default ON)
- 70** Oscillator B Wave (pulse/sawtooth)

Turn it on

Flip the power switch on the back panel to the right to turn anode on. The LED by the VOLUME control will light and blinks off when receiving MIDI data.

Adjust the controls

anode's controls are divided into sections that control the sound of each note over time (envelope), shape its timbre (filter), control its sound source (oscillators), and add modulation (LFO).

ENVELOPE: With SUSTAIN switched to off, anode uses a two-stage amplitude envelope - attack and decay. With SUSTAIN on, it becomes a three-stage envelope (Attack/Sustain/Decay), and the DECAY controls both sustain and release times

OSCILLATORS: anode is a two-oscillator synth. Both oscillators are pulse waves. Adjust WIDTH to change the duty cycle of those waveforms - all the way to the left is a thinner-sounding pulse wave, all the way to the right is a square wave.

DETUNE adjusts the pitch of the second oscillator up or down an augmented fifth (eight semitones).

OCTAVE transposes the second oscillator down an additional octave (set to the left, DOWN position) or to unison (set to the right, UP position).

SWEEP creates Pulse Width Modulation, shifting the width of the first oscillator. (This means the WIDTH control impacts only the second oscillator.)

To activate Wavetable Mode

Hold the MIDI Set button for a moment while turning the instrument on. The LED will flash quickly to indicate that it has switched firmware. The Pulse Sweep switch selects Wavetable Bank A / Bank B and the Pulse Width knob selects one of 8 waveforms in each bank.

Wave Bank A: Sawtooth, blended sawtooth, square wave, FM 1, distorted 1, granular 1, voice 1, voice 2

Wave Bank B: Bit reduced 1, bit reduced 2, bit reduced 3, distorted 2, distorted 3, FM 2, FM 3, more granular.

What's next?

Have fun! Read the full manual for more detail and background information, and the hacking guide to learn more about modifying the anode for advanced users.

You can find out more about MeeBlip and join other users, plus check out advanced documentation, at our site: <http://meeblip.com>

Or reach us directly at meeblip@reflexaudio.com

Assembled in Canada by Blipsonic Inc. MeeBlip is a project of Blipsonic and CDM (<http://createdigitalmusic.com>)

LFO RATE determines the speed of the Low Frequency Oscillator (LFO). Turned all the way down, the LFO is off.

DEPTH is the modulation amount of the LFO. Turned all the way down, the LFO will not have an audible impact.

LFO DEST sets the LFO Destination to modulate either the pitch of the two oscillators, or the cutoff of the analog filter.

FILTER: anode has a unique-sounding Twin-T filter that behaves like a low-pass filter, with controls for **CUTOFF** and **REZ** (resonance). Turn REZ all the way up for squelchy self-resonance. Try turning CUTOFF up and REZ down when experimenting with other values.

Play some notes

anode responds to notes, pitch bend, mod wheel, velocity (mapped to filter cutoff), and CC messages (see table).