



QUICK START INSTRUCTIONS

Firmware Version 1.0

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

Connect triode

triode 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 must use a stereo cable connected to a stereo input jack.**

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

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

Set the MIDI Channel

Set the MIDI channel using the MIDI SET button on the back panel. Press it until the LED blinks, then release. Move one of the control knobs corresponding to channels 1 to 8. The LED will blink quickly to confirm that the MIDI channel has been changed.

Turn it on

Flip the power switch on the back panel right to turn triode on. The power LED blinks when receiving MIDI notes.

Adjust the controls

triode'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).

AMPLITUDE & FILTER ENVELOPES: With SUSTAIN switched to off, triode uses single stage decay envelopes for amplitude and filter cutoff. With SUSTAIN on, they become two-stage envelopes (Sustain/Decay) where DECAY controls both sustain and release times. ATTACK can be adjusted for both envelopes using MIDI CC.

OSCILLATORS: triode is a three-oscillator synth. Two oscillators can be switched between Pulse, Pulse with PWM, and Sawtooth waveforms. The third is a square wave sub-oscillator which plays an octave lower.

GLIDE adjusts the speed with which notes slide from one to another. Turn the knob fully to the left to disable.

DETUNE adjusts the pitch of the second oscillator up or down an augmented fifth (eight semitones). The oscillators can be precisely tuned to each other at the 12 O'clock position of the knob.

SUB OSC activates the square wave sub-oscillator, which plays an octave lower than the primary oscillators.

LFO RATE determines the speed of the Low Frequency Oscillator (LFO). Disable by turning the knob fully to the left.

LFO DEPTH is the modulation amount of the LFO. Disable by turning knob fully to the left.

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

FILTER: triode has a unique-sounding low pass Twin-T 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

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

How triode responds to MIDI

In addition to pitch (MIDI notes) and velocity (mapped to the filter envelope, so triode responds to how forcibly you play notes), triode 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

- 48** LFO Depth
- 49** LFO Rate
- 50** Oscillator Detune
- 51** Note Glide (Portamento)
- 52** Filter Resonance
- 53** Filter Cutoff
- 54** Filter Decay
- 55** Amplitude Decay

Knobs only accessible via MIDI:

- 56** Filter Accent
- 57** Filter Envelope Modulation
- 58** Oscillator Pulse Width
- 59** Filter Attack
- 60** Amplitude Attack

Switches

- 64** Envelope Sustain
- 65** Sub-oscillator
- 66** PWM Sweep
- 67** LFO Destination (osc/filter)
- 68** Oscillator Wave (pulse/sawtooth)

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:

- 69** LFO Randomize
- 70** LFO Note Retrigger (default ON)

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 WAVEFORM switch selects Wavetable Bank A / B / C and the GLIDE knob selects one of the 8 waveforms in each bank.

Wave Bank A: Sawtooth, Blended Sawtooth, 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.

Wave Bank C: Chip Osc 1, Chip Osc 2, Video Game 1, Video Game 2, Bit Reduced 4, Bit Reduced 5, Raw 1, Raw 2

What's next?

Have fun! You can find advanced documentation including schematic diagrams and source code, at our site: meeblip.com. You can also email us at meeblip@reflexaudio.com

Assembled in Canada by Blipsonic Inc. MeeBlip is a project of Blipsonic and CDM (cdm.iink)