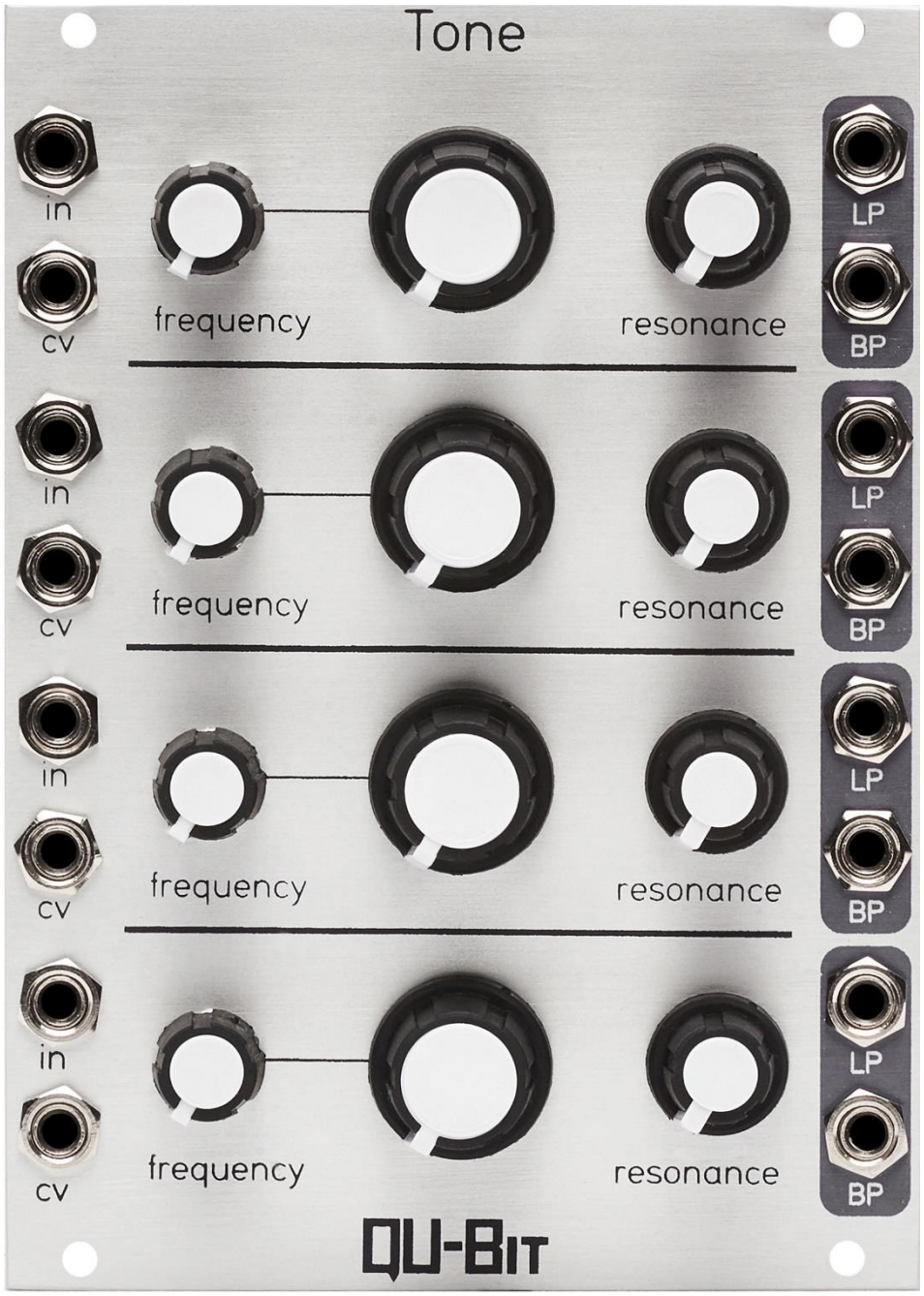
Tone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Description

Tone is a quad, voltage controlled filter with low pass and band pass outputs. Its four channel architecture enables the intuitive patching of shimmering, polyphonic textures. The 24dB slope provides a warm, buttery character. Self oscillation allows each channel to double as a sine wave oscillator with v/oct tracking across four octaves. Cascade OTA topology. A perfect match for the Chord.

- Quad voltage controlled filter

- 24 dB slope

- Simultaneous low pass and band pass outputs

- Self oscillation with v/oct tracking across four octaves

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Installation

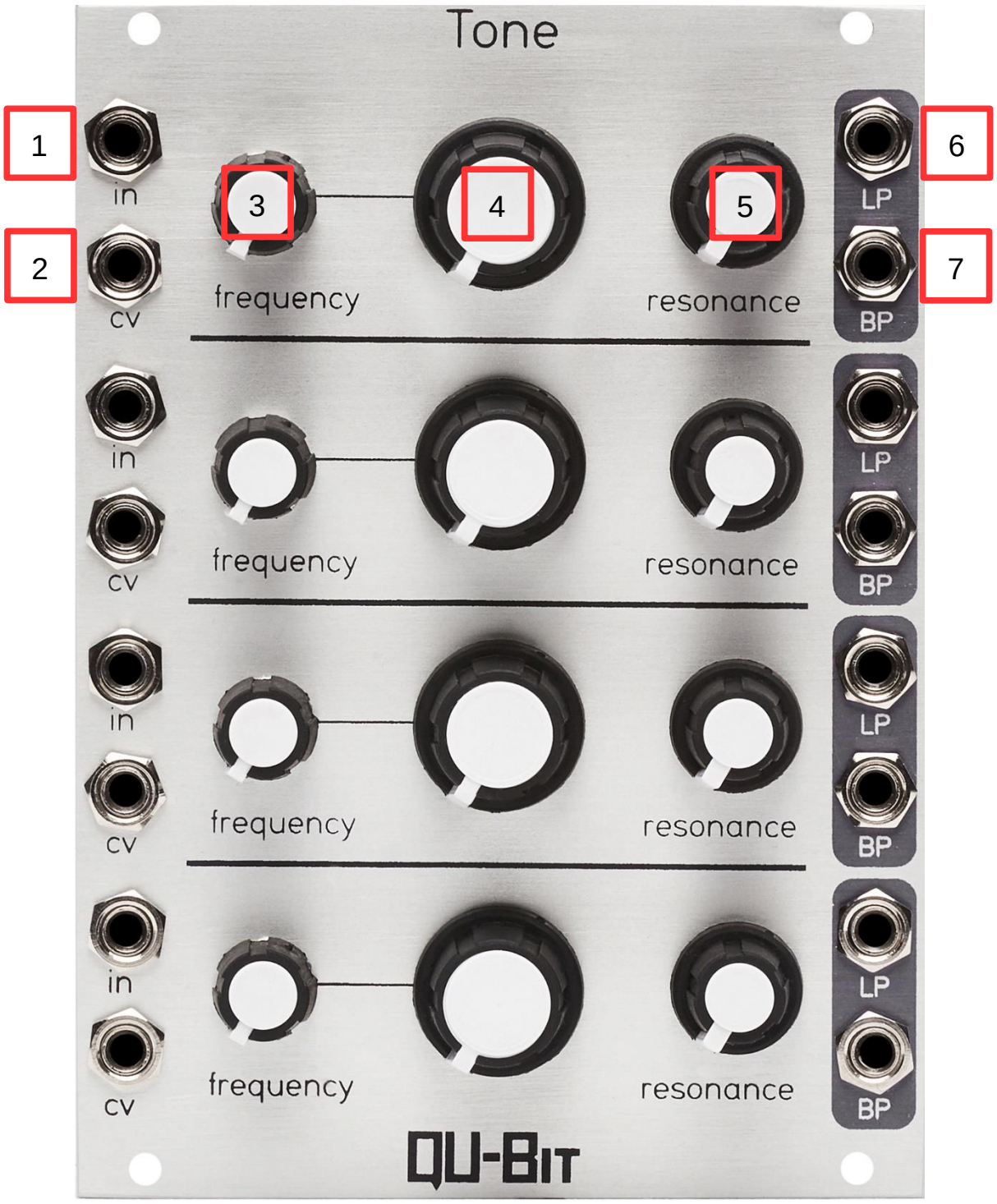
To install, locate 18 HP of space in your Eurorack case and confirm the positive 12 volts and negative 12 volts sides of the power distribution lines. Plug the connector into the power distribution board of your case, keeping in mind that the red band corresponds to negative 12 volts. In most systems, the negative 12 volt supply line is at the bottom. The power cable should be connected to the Tone with the red band facing the bottom of the module.

Specifications

Format: 18 HP Eurorack module

Depth: 23mm (Skiff Friendly)

Max Current: +12V = 91mA
-12V = 87mA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General Functions Overview

1. In:
Audio input

Range: 10Vpp

2. CV:
Control voltage input for Frequency

Control voltage is added to the knob position and scaled by the Frequency Attenuverter knob

Tone will track 1V/oct for up to four octaves

Range: ±10V

3. Frequency Attenuverter:
Attenuverter that sets the attenuation and inversion of the signal present at the CV input

If the knob is clockwise, positive voltage will add to the knob position and negative voltage will subtract from the knob position.
If the knob is far counterclockwise, positive voltage will subtract from the knob position and negative voltage will add to the knob position

4. Frequency:
Sets the cutoff frequency of the filter

Also known as the corner frequency, or -3dB down point

5. Resonance:
Sets the resonance, or “Q” of the filter

When fully clockwise, the Tone will self-oscillate and output a very pure sine tone whose pitch is determined by the Frequency knob

6. LP:
Lowpass filter output

7. BP:
Bandpass filter output

Controls 1-7 are replicated on channels 2-4

Calibration

There is one V/oct trimmer per channel on the back side of the module that is used for calibrating the CV tracking of the cutoff frequency.

A small flathead screwdriver is needed for calibration.

Turning the trimmer clockwise will truncate the range.
Turning the trimmer counter-clockwise will expand the range.