

# Bored Brain — EQx5

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- [Manual PDF](#)

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 [eqx5 Manual PDF](#)

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## eqx5 (boredbrain) - Cheat Sheet

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### Quick Overview

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**eqx5** is a 5-band voltage-controlled equalizer (Eurorack format), providing CV control and manual adjustment over each band and overall output level. Ideal for dynamic spectral shaping, filter sweeps, coloring, and stereo or feedback applications.

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### Controls Reference

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**Sliders: Frequency Band GAIN (per band: BASS, LOW-MID, MID, HI-MID, TREBLE)**

- **Range:** -10 dB to +10 dB (center is flat)
- **Function:** Adjusts boost/cut for each band.

**Sliders: CV Amount (per band: blue slider)**

- **Range:** -10 dB to +10 dB control via external CV.
- **Function:** Sets sensitivity of CV input.
- **Sum:** Manual slider + CV+slider.

## SLIDER: LEVEL

- **Range:**  $-\infty$  (full down/off) to +6 dB (full up)
  - **Function:** Output volume.
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## Inputs & Outputs

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### Audio

- **IN L / IN R:**
- **Type:** Mono (left) or Stereo (both)
- **Impedance:** 100k ohms
- **OUT L / OUT R:**
- **Type:** Stereo output
- **Level:** Eurorack standard

### CV Inputs (per band)

- **CV1 (BASS), CV2 (LOW-MID), CV3 (MID), CV4 (HI-MID), CV5 (TREBLE)**
  - **Voltage Range:** -5V to +5V = -10dB to +10dB boost/cut
  - **Recommended Range:**  $\pm 5V$  (higher voltages will be clipped internally)
  - **Function:** Modulates band gain, scaled by blue CV slider.
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## Internal Signal Path

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- **All bands** are fully parametric and analog, offering up to  $\pm 10\text{dB}$  cut/boost.
- **Bands:**
  1. **BASS** (75Hz, 1.2 Q)
  2. **LOW-MID** (350Hz, 1 Q)

3. **MID** (1100Hz, 1 Q)
4. **HI-MID** (3500Hz, 1 Q)
5. **TREBLE** (9000Hz, 1 Q)

- **CV IN** modulates band in addition to the manual slider.
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## Usage Basics

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1. **Patch audio** into IN L (mono) or IN L+R (stereo).
  2. **Adjust each frequency band** using the main sliders.
  3. **Patch modulation (LFOs, Envelopes, etc.)** into any CV IN jack to control boost/cut for that band.
  4. **Set CV amount** with blue CV slider: zero = no CV, up/down matches manual slider scale.
  5. **Set output level** with LEVEL slider.
  6. **Patch OUT L/R** to next module or main output.
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## Voltage Reference Table

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Input/Output	Range	Purpose
IN L / R	Audio (modular)	Signal input
OUT L / R	Audio (modular)	Equalized output
CV1–CV5 (per band)	-5V to +5V	Band boost/cut

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## Notes

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- **No other controls:** This module uses only sliders.
- **Stereo/dual mono:** Can use with mono or stereo, or process two mono signals in parallel (no cross-talk).
- **CV Summing:** CV is added to manual; use both for maximum effect.

