

# ZEQD-Pre

## A collaboration between EarthQuaker Devices and Dr. Z Amplification

Welcome to your new ZEQD-Pre! This all-analog tube preamplifier brings together EarthQuaker Devices' innovative pedal design and Dr. Z Amplification's decades of tube amp expertise. With a passive three-band EQ, professional headphone output, balanced XLR output, and onboard analog cabinet simulation, the ZEQD-Pre delivers authentic tube warmth and dynamic response in a complete analog amplifier system that fits right on your pedalboard.

## Your End-of-Chain Solution

The ZEQD-Pre is designed to live at the end of your signal chain, adding classic tube character to everything upstream. Its passive Three-Band EQ provides precise tonal control. Fine-tune your amp's voice, push its preamp into rich harmonic overdrive, or breathe dimension and life into a modeling setup.

Hit the Boost footswitch, and the three-band EQ drops out completely, delivering a full-range boost with its own dedicated level control. Two distinct tones at your feet: sculpted EQ tone or wide-open boosted voice. Simple, immediate, and musical.

## More Than a Preamp

The ZEQD-Pre adapts to multiple roles beyond end-of-chain tone shaping:

### Practice Amp with Headphones

The headphone output features built-in analog cabinet simulation for a realistic amp feel during quiet practice sessions. Enjoy the full EF86 tube character without disturbing your housemates.

### Direct Amplifier via XLR

Run the balanced XLR output straight into any console or interface and use the ZEQD-Pre as your main amp. The analog cabinet simulation is there when you need it, or flip the Cab Bypass switch to send a pure signal to your preferred IR loader or modeling software. Perfect for direct recording, backline-free gigs, or hybrid rigs with multiple signal paths.

### Flexible Routing

Here's the key: All outputs work simultaneously. Send your signal to an amp, route a direct feed to front-of-house, and monitor through headphones—all at once. This routing flexibility makes the ZEQD-Pre an invaluable studio tool.

## Why the EF86 Tube?

The ZEQD-Pre uses the EF86 pentode—the same tube that gives many Dr. Z amplifiers their pristine hi-fi tone and makes them such responsive pedal platforms.

### The Technical Side

Unlike the common 12AX7 triode (two elements plus cathode), the EF86 pentode has four internal elements plus cathode. This structure yields measurably superior performance:

- **Gain Factor of 185:** Significantly higher than comparable triodes
- **44V RMS Output:** Substantial voltage swing for enhanced dynamics
- **Extended Frequency Response:** Full-spectrum clarity from deep lows to detailed highs

### What This Means for You

These specifications translate directly to playing experience:

- **Touch Sensitivity:** The EF86 responds to every dynamic nuance in your playing. Play lighter and it cleans up; dig in and it blooms. Natural expression that follows your hands.
- **Full-Frequency Clarity:** Extended response means harmonic richness without sacrificing definition. Bass notes stay tight, highs remain bell-like and clear.
- **Responsive EQ:** Higher voltage and broader bandwidth let the passive Three-Band EQ shape your tone effectively with minimal signal loss. The interactive controls behave like classic tube amp tone stacks—predictable and musical across their entire sweep.

The EF86 brings hi-fi performance to tube preamplification while staying responsive and musical.

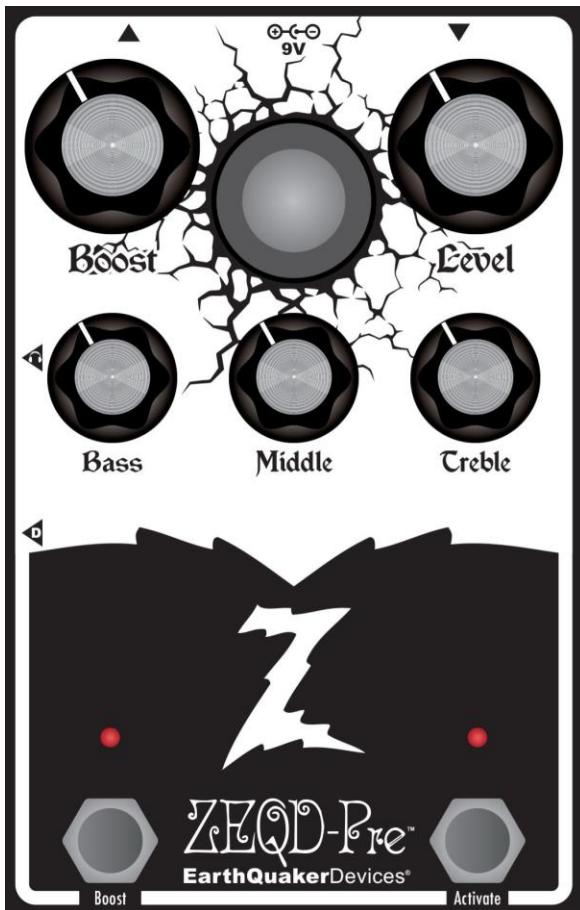
## Smart Power Design

The ZEQD-Pre runs on a standard 9V DC adapter (500 mA or higher, center-negative)—the same power supply feeding the rest of your board. Internally, the circuit converts 9 V to 200 V for proper tube operation, delivering high headroom and full-frequency response without requiring a special power supply.

# Built to Inspire

Whether you're enhancing your existing rig, recording direct with professional results, practicing silently without sacrificing feel, or exploring new routing possibilities, the ZEQD-Pre easily adapts to your workflow. It solves real problems while staying out of your way—letting you focus on making music. When EarthQuaker Devices and Dr. Z set out to create something together, this is exactly what they envisioned: gear that's as flexible as it is musical, as practical as it is inspiring.

## Controls



- **Activate** footswitch: Use this footswitch to activate or bypass the ZEQD-Pre.
- **Boost** footswitch: This footswitch defeats the tone controls and delivers a full-range boost without altering the frequency response. This switch is only active when the Activate footswitch is on.
- **Bass**: Use the Bass rotary knob to adjust the frequency range from 20 Hz to 400 Hz.

- **Middle:** Use the Middle rotary knob to adjust the frequency range from 400 Hz to 2 kHz.
- **Treble:** Use the Treble rotary knob to adjust the frequency range from 2 kHz to 20 kHz.
- **Level:** Use the Level rotary knob to adjust the output volume when the tone controls are active.
- **Boost:** Use the Boost rotary knob for volume control when the Boost is active and the tone controls are bypassed. Boost mode is very loud! Be careful when setting the Boost level, especially when using headphones or XLR out.
- **Ground Lift** switch: Press this switch on the left side of the pedal for ground lift on the XLR output.
- **Cab Sim Bypass** switch: Press this switch on the left side of the pedal to remove the analog cabinet simulation on the XLR output.
- **Headphone** output: A TRS (Stereo)  $\frac{1}{4}$ " headphone jack is located on the left side. Use the Level control to adjust headphone level when the pedal is active. The headphone output works as a unity gain amplifier with cabinet simulation even when the pedal is bypassed.
- **Direct** output: A balanced XLR output is located on the left side of the pedal.

## Tech Specs

- **Switching:** ZEQD-Pre uses mechanical true bypass switching.
- **Input Impedance:** 10 M $\Omega$
- **Output Impedance:** 100  $\Omega$
- **Headphone Output impedance:** 39  $\Omega$
- **Direct Output impedance:** 100  $\Omega$
- **Current Draw:** 500 mA

## Power

This device takes a standard 500 mA (or higher) 9-volt DC power supply with a 2.1 mm negative-center barrel. We always recommend pedal-specific, transformer-isolated wall-wart power supplies or multiple isolated-output supplies. Pedals will make extra noise if there is ripple or unclean power. Switching-type power supplies, daisy chains, and non-pedal specific power supplies do not filter dirty power as well and let through unwanted noise. **DO NOT RUN AT HIGHER VOLTAGES!**

## Warning!

**This device uses voltages that can seriously harm you (over 400 V DC). Do not open the device while it is powered on.**

**This device is designed for use with an EF86 tube ONLY. Do not replace with any other part number.**