

ED1 Electrostatic Speaker Driver

Hardware Reference



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ED1 Electrostatic Speaker Driver



Overview

The ED1 is a broadband electrostatic driver that produces incredibly flat frequency responses reaching far into the ultrasonic range. The ED1 is designed to drive TDT's ES1 and EC1 electrostatic speakers only.

The ED1 is a TDT System 3 device, and receives power from the zBus. It's two input BNCs accept input signals up to 10 V, though using 4 V maximum is recommended for longest speaker life. The front panel gain control controls overall signal level of both channels from 0 to -27 dB attenuation in 3 dB steps. ED1 output is via two 4-pin, mini-DIN connectors, which carry both bias and signal voltages.

While the ED1 will accept a 10 V input, it is possible to overdrive an ES1 when the ED1 is on the maximum gain setting. Always check that the output signal is not distorted. If the signal is distorted, turn down the gain on the ED1 until the distortion disappears. Both SigCalRP and [BioSigRZ software](#) measure the frequency response and Total Harmonic Distortion (THD) of the ES1/EC1 speaker. They also generate a normalization curve that can be used to flatten the frequency response of the ES1.

Power

The ED1 Electrostatic Speaker Driver is powered via the System 3 zBus (**ZB1PS**). No PC interface is required.

ED1 Technical Specifications

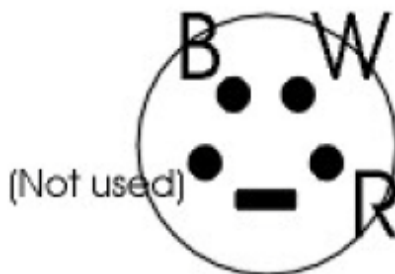
| | |
|--------------------|---|
| Input Signal Range | ± 10 V peak into ED1, ± 4 V recommended |
| Gain | 0 dB to -27 dB on both channels, in 3 dB steps |
| Input Impedance | 10 kOhm |
| Output Impedance | 1 kOhm |

Note

For further information, see [EC1/ES1 Electrostatic Speaker](#).

ED1 Pinouts

Connections on ED1 (front view)



B= Black: signal voltage
W= White: opposite signal voltage
R= Red: Bias voltage

Connections on cable

