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 especially for TDT’s ES series electrostatic speakers. The ED1 Electrostatic speaker driver can drive two ES series speakers and is powered off the zBus.

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 Vpeak. The front panel gain control can be used to control overall signal level of both channels from 0 to -27 dB in 3 dB steps. ED1 output is via two 4-pin, mini-DIN connectors, which carry both bias and signal voltages. The ED1 is designed to work exclusively with TDT ES series electrostatic speakers.

While the ED1 will accept a 10V input, it is possible to overdrive and 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. The SigCalRP software that is distributed with SigGenRP is useful for measuring the frequency response of the ES1 and to measure the Total Harmonic Distortion (THD) of the speaker. SigCalRP also generates normalization curves 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

<table>
<thead>
<tr>
<th>Input Signal Range</th>
<th>+/- 10 V peak into ED1</th>
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</thead>
<tbody>
<tr>
<td>Gain</td>
<td>0 dB to -27 dB on both channels, in 3 dB steps</td>
</tr>
<tr>
<td>Input Impedance</td>
<td>10 kOhm</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>1 kOhm</td>
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</tbody>
</table>

**Note:** For further information, see “EC1/ES1 Electrostatic Speaker” on page 16-9.

**ED1 Pinouts**

Connections on ED1 (front view)

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

Connections on cable

(W Shield B  R  Silver dot)