Model 2239

Fiber Optic Two Way Audio Link

Models 2239 provides two-way stereo audio over fiber. Typical applications include paging systems, music distribution, and control with audio tones, two way audio communication.

The 2239 has 1/8" (3.5mm) microphone input and stereo line level phono jack inputs. The 2239 digitizes the audio input into 16-bit samples at 48KHz rate. The microphone input is copied to both channels, the two line inputs remain in respective channels. The digitized stereo audio is transmitted across fiber and received at the 2239. The 2239 converts the digitized audio back to analog. The 2239 has 1/8" headphone jack, line level phono jacks, and speaker phono jacks.

The 2239 has line input volume adjustment to maximize the use of the digitized channel and speaker/headphone volume adjustment. The 2239 has optical signal loss LED. Local and remote 2239 have mute buttons.

### Specifications

- **Audio Bandwidth:** 10 Hz to 20 KHz
- **THD:** Better than 1%
- **MIC Input:** 350mV rms max into 6 Kohms
- **Line Input:** 2V rms max into 10 Kohms
- **Headphone Output:** 1V rms max
- **Line Outputs:** 1.8V rms into 600 ohms
- **Speaker Outputs:** 1.8V rms into 600 ohms
- **Optical Power Budget:** 10 dB
- **Operating Wavelength:** 820 nanometers (1300nm optional)
- **Optical Interface:** ST (SMA optional)
- **Operating Temperature:** 0°C to 50°C
- **Input Power:** 110 VAC 50/60 Hz, Optional 230 VAC Optional 12-24 VDC 8 W Max.
- **Metal Enclosure:** 7.375" X 7.625" X 1.875" (18.7 X 19.4 X 4.8 cm)
- **Weight:** 2lbs. (1 kg)


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**Operating Distance for Fiber Optic Cable**

<table>
<thead>
<tr>
<th>Fiber Size (Microns)</th>
<th>Attenuation (dB/Km)</th>
<th>Distance (Meters)</th>
<th>Distance (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>850</td>
<td>1300</td>
<td>1550</td>
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<td>850</td>
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<tr>
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<td>1.0</td>
<td>-</td>
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<tr>
<td>62.5</td>
<td>4.0</td>
<td>1.0</td>
<td>-</td>
</tr>
<tr>
<td>10 SM</td>
<td>-</td>
<td>0.35</td>
<td>0.25</td>
</tr>
</tbody>
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SM - Single mode option - 1300nm

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**APPLICATION EXAMPLES**