DATA SHEET
TESIRA® AMP-450P
4-CHANNEL POE+ CONFERENCING AMPLIFIER

The AMP-450P is a four-channel PoE+ (IEEE 802.3at Class 4, 30W) conferencing amplifier for use in Tesira® systems. The output channels are software configurable, including selectable power versus channel count. PoE+ power allows the AMP-450P to be placed wherever you need it. Suitable for air handling spaces, the amplifier can be located close to ceiling speakers if desired. The AMP-450P includes an internal limiter, and is capable of providing 3 watts of continuous power to all four channels. The Tesira AMP-450P is also capable of operating in a burst mode to handle peak signals, providing up to 50 watts (4Ω load) or 30 watts (8Ω load) per channel. The amplifier serves as a dedicated endpoint in a Tesira system, making installations easier to design, support, and maintain. The AMP-450P is ideal for TesiraFORTE®-equipped conference rooms or other applications where sound reinforcement is needed.

FEATURES

• Four channels; 3 watts of continuous power per channel
• Burst mode to handle peak signals in accordance with ANSI/CTA-2006-B; supports up to 50 watts (4Ω load) or 30 watts (8Ω load) per channel
• Powered by PoE+ (IEEE 802.3at Class 4, 30W)
• Class D amplifier topology
• Fanless operation
• Includes internal limiter function
• Software-selectable power versus channel count
• Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces
• LED indicators for power and amplifier status
• Configurable via Tesira software
• CE marked, UL listed, and RoHS compliant
• Covered by Biamp Systems’ five-year warranty

ARCHITECTS & ENGINEERS SPECIFICATION

The PoE+ conferencing amplifier shall be designed exclusively for use with Biamp® Tesira® systems. The PoE+ conferencing amplifier shall provide control data and digital audio over AVB via an RJ-45 connector. The PoE+ conferencing amplifier shall provide four software-configurable output channels of 3 watts of continuous power per channel into a 4-ohm load and an 8-ohm load. The PoE+ conferencing amplifier shall also provide burst power of 50 watts per channel into a 4-ohm load, and 30 watts per channel into an 8-ohm load in accordance with ANSI/CTA-2006-B. Burst mode will operate in accordance with U.S. Patent 10404218. The PoE+ conferencing amplifier shall be powered by PoE+ (IEEE 802.3at Class 4) and shall be suitable for use in air handling spaces in accordance with UL 2043. The signal processing of the PoE+ conferencing amplifier shall be configurable via the Tesira design software including, but not limited to: volume control, filters, compressor/limiting, delay, speaker equalization and output sensitivity. The PoE+ conferencing amplifier shall be CE marked, UL listed, and shall be compliant with the RoHS directive. Warranty shall be five years. The PoE+ conferencing amplifier shall be Tesira AMP-450P.
### TESIRA AMP-450P SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Network Connection:</strong></td>
<td>RJ-45 with Ethernet cable (Cat 5e and above)</td>
</tr>
<tr>
<td><strong>Number of Channels:</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Connectors:</strong></td>
<td>4-pin 5.08 mm Phoenix connectors</td>
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<tr>
<td><strong>Amplifier Topology:</strong></td>
<td>Class D</td>
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<tr>
<td><strong>Burst Power Output (per ANSI/CTA-2006-B @ 1kHz):</strong></td>
<td></td>
</tr>
<tr>
<td>4Ω (per channel):</td>
<td>50W</td>
</tr>
<tr>
<td>8Ω (per channel):</td>
<td>30W</td>
</tr>
<tr>
<td><strong>Continuous Power Output:</strong></td>
<td></td>
</tr>
<tr>
<td>Single Channel Driven (4Ω, 8Ω):</td>
<td>15W</td>
</tr>
<tr>
<td>Dual Channel Driven, (4Ω, 8Ω):</td>
<td>7W</td>
</tr>
<tr>
<td>Four Channel Driven, (4Ω, 8Ω):</td>
<td>3W</td>
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<tr>
<td><strong>THD+N (20Hz-20kHz, at continuous power):</strong></td>
<td>&lt; 0.3%</td>
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<tr>
<td><strong>Frequency Response (20Hz-20kHz):</strong></td>
<td>± 1dB</td>
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<tr>
<td><strong>Dynamic Range (20Hz-20kHz BW):</strong></td>
<td>&gt; 90dB</td>
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<tr>
<td><strong>Minimum Operational Load:</strong></td>
<td>4Ω</td>
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<tr>
<td><strong>Intermodulation distortion (SMPTE):</strong></td>
<td>&lt; 0.3%</td>
</tr>
<tr>
<td><strong>Cross Talk (channel to channel @ 1kHz):</strong></td>
<td>&lt; -90dB</td>
</tr>
<tr>
<td><strong>Cooling:</strong></td>
<td>Convection</td>
</tr>
</tbody>
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### Power:
- **PoE+ (IEEE 802.3at Class 4, 30W)**
- **Indicators:**
  - Power Indicator (Green/Yellow/Red LED)
  - Amp Status Indicator (Green/Yellow/Red LED)

### Overall Dimensions:
- **Height:** 1.2 inches (30mm)
- **Width:** 7.7 inches (195mm)
- **Depth:** 4.7 inches (120mm)
- **Weight:** 1.5 lbs (0.7 kg)

### Environmental:
- **Ambient Operating Temperature Range:** 32 - 104° F (0 - 40° C)
- **Humidity:** 0-95% relative humidity (non-condensing)
- **Altitude:** 0-10,000 ft (0-3000m) MSL

### Compliance:
- **FCC Part 15B (USA)**
- **UL and C-UL listed (USA and Canada)**
- **CE Marked (Europe)**
- **KCC (Korea)**
- **RoHS Directive (Europe)**
- Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces

### TESIRA AMP-450P BACK PANEL

![Tesira Amp-450P Back Panel Diagram]

### OPTIONAL ACCESSORIES

- **BPAK**: Backpack adapter kit
- **Seismic Cable Adapter**: Cable adapter for PoE amp plenum boxes
- **TB-1**: Tile bridge for PoE amp plenum boxes

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