

## DATA SHEET

### TESIRA® AMP-450BP

### 4-CHANNEL PoE+ CONFERENCING AMPLIFIER



The Tesira® AMP-450BP is a four-channel PoE+ (IEEE 802.3at Class 4, 30W) conferencing amplifier. The output channels are software configurable, including selectable power versus channel count. Suitable for air handling spaces, the amplifier can be located close to ceiling speakers if desired, and can even be mounted directly to the back can of a Desono™ C-IC6 loudspeaker. Each AMP-450BP comes with an optional mechanical enclosure to protect electrical connections and comply with typical code requirements for above-ceiling installations. The AMP-450BP includes an internal limiter, and is capable of providing 3 watts of continuous power to all four channels. The Tesira AMP-450BP 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-450BP is ideal for TesiraFORTÉ®-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)
- RJ-45 connectors enable termination-free connections to compatible speakers like the Desono C-IC6
- Class D amplifier topology
- Fanless operation
- **BPAK accessory included**
- Audible locate function available on the front panel
- 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
- 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 provide connections to loudspeakers via RJ-45 connectors. 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 PoE+ conferencing amplifier shall be capable of being attached directly to the back can of a Desono™ C-IC6 ceiling speaker. 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-450BP.

## TESIRA AMP-450BP SPECIFICATIONS

<b>Network Connection:</b>	Gigabit Ethernet, RJ-45 (Cat 5e and above)	<b>Power:</b>	PoE+ (IEEE 802.3at Class 4 , 30W)
<b>Number of Output Channels:</b>	4	<b>Indicators:</b>	Power Indicator (Green/Yellow/Red LED) Amp Status Indicator (Green/Yellow/Red LED)
<b>Connectors:</b>	RJ-45	<b>Overall Dimensions:</b>	
<b>Amplifier Topology:</b>	Class D	<b>Height:</b>	1.2 inches (30mm)
<b>Burst Power Output (per ANSI/CTA-2006-B @ 1kHz):</b>		<b>Width:</b>	7.7 inches (195mm)
4Ω (per channel):	50W	<b>Depth:</b>	4.7 inches (120mm)
8Ω (per channel):	30W	<b>Weight:</b>	1.5 lbs (0.7 kg)
<b>Continuous Power Output:</b>		<b>Environmental:</b>	
Single Channel Driven (4Ω, 8Ω):	15W	<b>Ambient Operating</b>	
Dual Channel Driven, (4Ω, 8Ω):	7W	<b>Temperature Range:</b>	32 - 104° F (0 - 40° C)
Four Channel Driven, (4Ω, 8Ω):	3W	<b>Humidity:</b>	0-95% relative humidity (non-condensing)
<b>THD+N (20Hz-20kHz, at continuous power):</b>	< 0.3%	<b>Altitude:</b>	0-10,000 ft (0-3000m) MSL
<b>Frequency Response (20Hz-20kHz):</b>	± 1dB	<b>Compliance:</b>	
<b>Dynamic Range (20Hz-20kHz BW):</b>	> 90dB		FCC Part 15B (USA) UL and C-UL listed (USA and Canada) CE Marked (Europe) RoHS Directive (Europe)
<b>Minimum Operational Load:</b>	4Ω		Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces
<b>Intermodulation distortion (SMPTE):</b>	<0.3%		
<b>Crosstalk (channel to channel @ 1kHz):</b>	< -90dB		
<b>Cooling:</b>	Convection		

## TESIRA AMP-450BP BACK PANEL



## OPTIONAL ACCESSORIES



**CCA**  
Euroblock to category  
cable adapter



**Seismic Cable Adapter**  
Cable adapter for  
PoE amp plenum boxes



**TB-1**  
Tile bridge for  
PoE amp plenum boxes



**Plenum Box 12x12**  
Chicago compliant plenum box



**C5E-10-P, C5E-25-P**  
10ft and 25ft pre-terminated  
plenum rated Cat 5e cables

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