

DATA SHEET

TESIRA® AMP-450BP

4-CHANNEL POE+ CONFERENCE AMPLIFIER



The AMP-450BP is a four-channel PoE+ (IEEE 802.3at Class 4, 30W) conferencing amplifier for use in Tesira® systems. Suitable for air handling spaces, the amplifier can even be mounted directly to the back of a desono™ C-IC6 loudspeaker, minimizing the cabling requirements. 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 output channels are software configurable, including selectable power versus channel count. 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)
- 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. 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 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

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

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