DATA SHEET
TESIRA® EX-IN, EX-AEC, EX-OUT, EX-IO 4-CHANNEL INPUT AND OUTPUT EXPANDERS



The Tesira® EX-IN, EX-AEC, EX-OUT, and EX-IO are half-rack expander units for use with Tesira SERVER, SERVER-IO, and TesiraFORTÉ AVB devices. Each expander provides a total of 4 channels of analog audio. The EX-IN is a 4-channel mic/line level input expander, and the EX-AEC is a 4-channel mic/line level input expander with AEC (acoustic echo cancellation). The EX-OUT is a 4-channel mic/line level output expander, and the EX-IO provides two channels of mic/line level input and two channels of mic/line level output. The expanders communicate with the Tesira AVB network for audio networking, configuration and control, and are powered by PoE+ (IEEE 802.3at Class 4, 30W).

BENEFITS

- Input and output expanders allow placement of audio I/O in remote locations
- Expanders can be added to existing Tesira and TesiraFORTÉ installations as the system's needs change and grow
- Half-rack chassis facilitates discreet and convenient installation without the need for an equipment rack
- Fully configurable and controllable via the software

FEATURES

- Audio and control networking over AVB
- Powered by PoE+ (IEEE 802.3at Class 4, 30W)
- Plug-in barrier strip connectors
- Front panel LEDs for device status indications
- Half-rack chassis
- RoHS compliant and AES grounded
- Covered by Biamp Systems' 5-year warranty

ARCHITECTS & ENGINEERS SPECIFICATION

The 4-channel expanders shall be designed exclusively for use with Tesira® devices. The expanders shall be built in a half-rack chassis and be powered by PoE+ (IEEE 802.3at Class 4). The expander shall utilize the AVB network for all audio networking as well as software configuration and control. The input, AEC, and input/output expander shall receive mic or line level analog input on plug-in barrier strip connectors. The output and input/output expander shall deliver mic or line level analog output on plug-in barrier strip connectors. Analog-to-Digital and Digital-to-Analog conversion shall be 24-bit with a sampling rate of 48kHz. The expanders shall be CE marked, UL listed and compliant with the RoHS directive. Warranty shall be 5 years. The input expander shall be Tesira EX-IN. The input expander with AEC shall be Tesira EX-AEC. The output expander shall be Tesira EX-OUT. The input/output expander shall be Tesira EX-IO.

biamp.

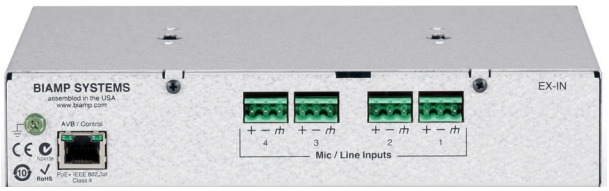
TESIRA EX-IN, EX-AEC, EX-OUT AND EX-IO SPECIFICATIONS

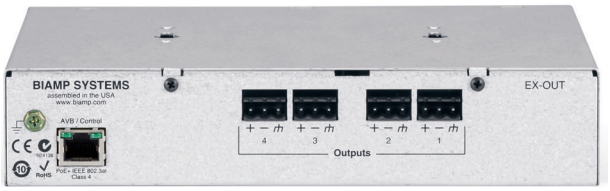
Frequency Response (20Hz~20kHz @ +4dBu):	+0/-0.25dB
THD+N (20Hz~20kHz):*	
@ 0dB Gain, +4dBu In:	< 0.006%
@ 54dB Gain, -50dBu In:	< 0.040%
EIN (20Hz~20kHz, 66dB Gain, 150Ω):*	< -125dBu
Dynamic Range (20Hz~20kHz, 0dB):*	> 108dB
Tail Length:**	up to 300ms
Convergence:**	up to 100dB/sec
Input Impedance (balanced):*	8kΩ
Maximum Input:*	+24dBu
Input Gain Range (6dB Steps):	0 - 66dB
Output Impedance (balanced):***	200Ω
Maximum Output:***	+24dBu
Power:	PoE+ (IEEE 802.3at Class 4, 30W)

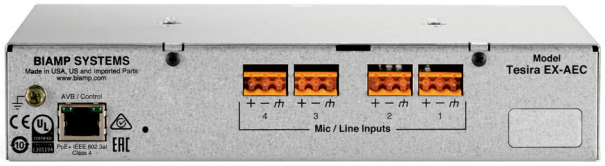
Phantom Power:*	+48 VDC (7mA/input)
Cross Talk (channel to channel @ 1kHz):*	
@ 0dB Gain, +4dBu In:	< -85dB
@ 54dB Gain, -50dBu In:	< -75dB
Overall Dimensions:	
Height:	1.75 inches (44 mm)
Width:	8.5 inches (216 mm)
Depth:	7.75 inches (197 mm)
Weight:	3 lbs (1.4 kg)
Sampling Rate:	48kHz
A/D - D/A Converters:	24-bit
Compliance:	
	FCC Part 15B (USA)
	CE marked**** (Europe)
	UL and C-UL listed (USA & Canada)
	RCM (Australia)
	EAC (Eurasian Customs Union)
	RoHS Directive (Europe)

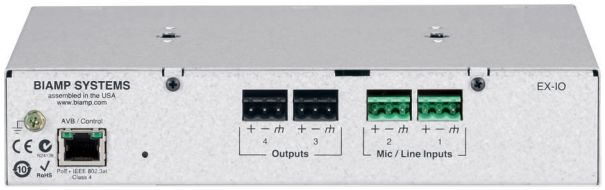
* Specification applies to EX-IN, EX-AEC, or input channels of EX-IO
** Specification applies to EX-AEC
*** Specification applies to EX-OUT or output channels of EX-IO
**** Requires PoE+ insertion device to be CE marked

TESIRA EX-IN, EX-AEC, EX-OUT AND EX-IO BACK PANELS





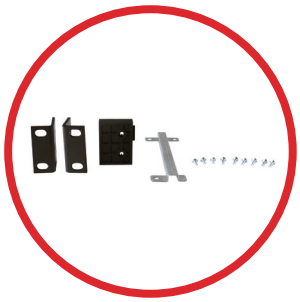




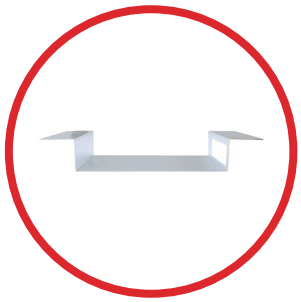
OPTIONAL ACCESSORIES



RMK-1
Single unit rack mount kit



RMK-2
Two-unit rack mount kit



UTMK-1
Under table mount kit

Biamp and Tesira are either trademarks or registered trademarks of Biamp Systems, LLC in the United States and other countries. Other product names referenced may be trademarks or registered marks of their respective owners and Biamp Systems is not affiliated with or sponsored by these companies.

biamp.