# DATA SHEET TESIRA® EX-LOGIC LOGIC CONTROL AND INTERFACE EXPANDER



The Tesira<sup>\*</sup> EX-LOGIC is a half-rack logic box for use with Tesira SERVER, SERVER-IO and TesiraFORTÉ devices. The EX-LOGIC provides both logic inputs and outputs and, through software, can be configured as a control interface. There are 16 total connections that can be used as inputs or outputs. 12 of the connections are designed as logic connections only and will accept contact closure or 5V TTL when used for logic or sink a maximum of 40V/300mA per output. The remaining four connections can also be used for logic connections or as variable voltage control inputs (e.g. interface to a potentiometer). Additionally, any of the 16 connections can be configured for direct LED driver capability. The EX-LOGIC also provides a serial port for the output of command strings that can be used to send action commands to other equipment in the system. The EX-LOGIC communicates over Ethernet with the Tesira control network for data transmission, configuration and control, and is powered by PoE (IEEE 802.3at Class 1, 4W).

### **BENEFITS**

- Logic interface allows Tesira to control or respond to commands from other equipment
- All connections can be configured as input or output
- Additional voltage control connections allow for control functions that are variable rather than simple on/off

### **FEATURES**

- 16 total logic connections can be used as inputs or outputs
- Four of the 16 connections can be used as voltage control inputs
- Inputs can control actions within the software including: presets, mutes, ducking, room combining, paging functions, and much more
- Outputs can trigger status relays, indicators or provide logic input to other controllable equipment

- Serial port for the output of command strings
- Connects to Tesira SERVER, SERVER-IO or TesiraFORTÉ
  over Ethernet
- Powered by PoE (IEEE 802.3at Class 1, 4W)
- Plug-in barrier strip connections
- Front panel LEDs for device status indications
- Half-rack chassis
- Covered by Biamp Systems' 5-year warranty



# **ARCHITECTS & ENGINEERS SPECIFICATION**

The logic expander shall be designed exclusively for use with Tesira® audio DSPs. The expander shall be built in a halfrack chassis and be powered by PoE (IEEE 802.3at Class 1). Connection to the server for software configuration and control shall be via Ethernet. The expander shall have 16 connections that may be configured as input or output logic controls. As inputs, the connections shall accept a contact closure or 5V TTL input signal. As outputs, the connections shall be open-collector and sink up to 40V/300mA. Additionally, four of the connections shall be configurable to operate as variable voltage control connections. These connections shall accept a variable input or provide a variable output from ground up to +5V. Additionally, any of the 16 connections shall be configurable for direct LED driver capability. The expanders shall be CE marked, UL listed and shall be compliant with the RoHS directive. Warranty shall be 5 years. The logic expander shall be Tesira EX-LOGIC.

## **TESIRA EX-LOGIC SPECIFICATIONS**

Logic Input Trigger:	Contact Closure or 5V TTL	<b>Overall Dimensions:</b>	
LED Driver:	5V/10mA per output	Height:	1.75 inches (44 mm)
System Network Connection:	Ethernet	Width: Depth:	8.5 inches (216 mm) 7.75 inches (197 mm)
Power:	PoE (IEEE 802.3at Class 1, 4W)	Weight:	2 lbs (1 kg)
Logic Output Type:	Open Collector;	Compliance:	
	Sink 40V/300mA per output		FCC Part 15B (USA)
			CE Marked* (Europe)
			RCM (Australia)
			EAC (Eurasian Customs Union)
			RoHS Directive (Europe)

\* Requires PoE insertion device to be CE marked

## **TESIRA EX-LOGIC BACK PANEL**



