

# Praesideo Audio Expander

www.boschsecurity.com



**BOSCH**  
Invented for life



- ▶ Four audio inputs – two selectable mic/line and two line inputs
- ▶ Four line audio outputs
- ▶ Eight supervised control inputs and five control outputs
- ▶ Audio processing functions
- ▶ Redundant network connection

The audio expander inserts external audio into the system and extracts audio from the system. This unit has control inputs and outputs for external interfacing. It can route its audio inputs permanently or conditionally to any of the zones or to other audio outputs. The routing conditions are configured using the configuration software. The audio output can be programmed to get its signal from any of the audio inputs. The equipment can be used freestanding (tabletop) or in a 19" rack.

## Functions

The audio expander has four transformer isolated analog audio inputs. Two of these are selectable between microphone and line. The other two inputs are fixed line inputs. The expander has four transformer isolated analog audio line outputs. It has built-in digital audio processing capable of three parametric and two shelving equalizer sections for all audio in and outputs. They also have a selectable 20 kHz monitoring signal. The 2 x 16-character display and the rotary control enable local status enquiries. The display shows the VU-meter reading when audio monitoring mode is active. Audio can also be monitored by using a headphone. The eight control inputs are freely programmable for system actions, and priorities can be assigned to these inputs. Each control input has the ability to monitor

the attached line for open and short-circuits. Five control outputs are freely programmable for faults and call-related actions.

The audio expander supports redundant network cabling. The network can be either single branch or redundant loop. The unit is powered from the network controller via the network cable. The expander is self-monitoring and continuously reports its status to the network controller.

## Controls and Indicators

- 2 x 16-character LCD status display
- Rotary/push control for menu control and headphone volume

## Interconnections

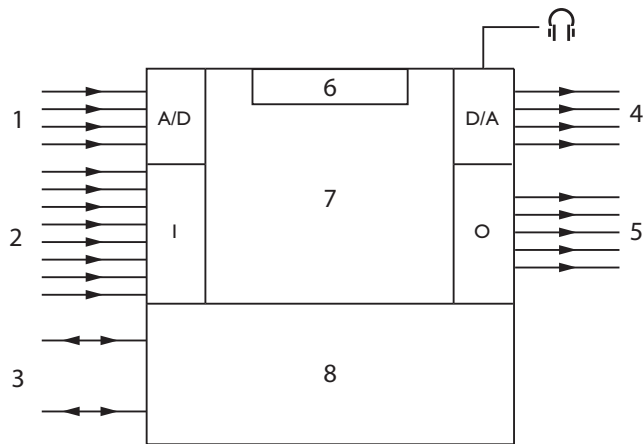
- Two system network connections
- Eight control inputs
- Two mic/line inputs
- Two line inputs
- Four line outputs
- Five control outputs
- Headphone output

## Certifications and approvals

Safety	acc. to IEC 60065 / EN 60065
Immunity	acc. to EN 55103-2

Emissions	acc. to EN 55103-1 / FCC-47 part 15B	
Emergency	acc. to EN 54-16 / ISO 7240-16	
<b>Region</b>	<b>Certification</b>	
Europe	CPR	EU CPR Telefication
	CE	

**Installation/configuration notes**



- 1 Audio inputs
- 2 Control inputs
- 3 Plastic optical fiber network
- 4 Audio outputs
- 5 Control outputs
- 6 Display and control
- 7 Network processor and DSP
- 8 Network redundancy switching

**Parts included**

Quantity	Component
1	PRS-4AEX4 Audio Expander
1	Set of mounting brackets for 19" rack
1	Set of feet
1	Set of connectors

**Technical specifications**

**Electrical**

Power consumption	9 W (DC)
<b>Performance</b>	
Frequency response	20 Hz to 20 kHz (-3 dB)

<b>Line inputs</b>	2 x
Connectors	3-pin XLR and 2 cinch (for each line)
S/N	>87 dBA at maximum level
CMRR	>40 dB
Input range	+6 dBV to +18 dBV (XLR) -6 dBV to +6 dBV (cinch)
<b>Mic / line inputs</b>	2 x
Connector	3-pin XLR and 2 cinch (for each line)
Nominal Input Level	-57 dBV
S/N	>62 dBA with 25 dB headroom
CMRR	>55 dB at 100 Hz
Input Impedance	1360 ohm
Phantom supply	12 V ±1 V at 15 mA
Input range	-7 dB to 8 dB ref nominal input level
<b>Line outputs</b>	4 x
Connectors	XLR and 2 cinch (for each line)
Output Impedance	<100 ohm
S/N	>89 dBA at maximum level
Crosstalk	<-85 dB
Signal range	-12 dBV to +18 dBV (XLR) -24 dBV to +6 dBV (cinch)
Distortion at 1 kHz	<0.05%
<b>Control inputs</b>	8 x
Connectors	Removable screw terminals
Operation	Closing contact (with supervision)
<b>Control outputs</b>	5 x
Connectors	Removable screw terminals

**Mechanical**

<b>Dimensions (H x W x D)</b>	
for tabletop, with feet	92 x 440 x 400 mm (3.6 x 17.3 x 15.7 in)
for 19" rack, with brackets	88 x 483 x 400 mm (3.5 x 19 x 15.7 in)
in front of brackets	40 mm (1.6 in)
behind brackets	360 mm (14.2 in)
<b>Weight</b>	6.2 kg (13.7 lbs)
<b>Mounting</b>	Tabletop, 19"-rack
<b>Color</b>	Charcoal (PH 10736) with silver

#### Environmental

Operating temperature	-5 °C to +55 °C (23 °F to 131 °F)
Storage temperature	-20 °C to +70 °C (-4 °F to 158 °F)
Humidity	15% to 90%
Air pressure	600 to 1100 hPa

#### Ordering information

##### **Praesideo Audio Expander**

Adds four analog audio inputs and four analog audio outputs to the system.

Order number **PRS-4AEX4**

#### Represented by:

##### **Americas:**

Bosch Security Systems, Inc.  
12000 Portland Avenue South  
Burnsville MN 55337, USA  
Phone: +1-800-392-3497  
Fax: +1-800-955-6831  
audiosupport@us.bosch.com  
www.boschsecurity.com

##### **Europe, Middle East, Africa:**

Bosch Security Systems B.V.  
P.O. Box 80002  
5617 BA Eindhoven, The Netherlands  
Phone: + 31 40 2577 284  
Fax: +31 40 2577 330  
emea.securitysystems@bosch.com  
www.boschsecurity.com

##### **Asia-Pacific:**

Robert Bosch (SEA) Pte Ltd, Security  
Systems  
11 Bishan Street 21  
Singapore 573943  
Phone: +65 6571 2808  
Fax: +65 6571 2699  
apr.securitysystems@bosch.com  
www.boschsecurity.asia

##### **China:**

Bosch (Shanghai) Security Systems Ltd.  
201 Building, No. 333 Fuquan Road  
North IBP  
Changning District, Shanghai  
200335 China  
Phone +86 21 22181111  
Fax: +86 21 22182398  
www.boschsecurity.com.cn

##### **America Latina:**

Robert Bosch Ltda Security Systems Division  
Via Anhanguera, Km 98  
CEP 13065-900  
Campinas, Sao Paulo, Brazil  
Phone: +55 19 2103 2860  
Fax: +55 19 2103 2862  
latam.boschsecurity@bosch.com  
www.boschsecurity.com