OMNEO Interface

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BOSCH
Invented for life

- Four OMNEO audio inputs and outputs
- Eight supervised control inputs and five control outputs
- Redundant Praesideo network connection
- Redundant OMNEO network connection
- Headphone connection and VU-meter for audio monitoring

OMNEO, developed by Bosch, is a network protocol for real-time uncompressed digital audio distribution and control over industry standard IP networks.

- OMNEO's media transport technology is Audinate's Dante™, a high-performance, standards-based, routable IP media transport system.
- OMNEO's system control technology is Open Control Architecture, or OCA. OCA is an open public standard for the control and monitoring of professional media networks.

OMNEO or Dante™ audio channels can be configured as inputs to a Praesideo system, where they can be routed permanently or conditionally to any of the zones or audio outputs. The routing conditions are configured using the configuration software. Calls and background music (BGM) sources can be routed to OMNEO or Dante™ channels. Digital audio data is directly converted between an audio system and OMNEO, with no other audio processing than sample rate conversion. Control inputs and outputs are provided for external interfacing. The equipment can be used free-standing (tabletop) or in a 19" rack.

Functions

The Praesideo OMNEO Interface can simultaneously interface up to four digital audio channels from OMNEO into an audio system and up to four audio channels from an audio system into an OMNEO network. This includes converting between the 44.1 kHz sample rate used by Praesideo, and the 48 kHz sample rate that OMNEO uses, as well as conserving volume levels. It can also route audio channels between itself and other OMNEO Interfaces, in the same or in other audio system networks, or to third party Dante™ units. Only audio channels are routed via the interface, not control data. This means that if units are used to link multiple systems, a PC master must always access the Praesideo network controllers through their Open interfaces for control purposes.

The eight control inputs are freely programmable for system actions, and priorities can be assigned to these inputs. Five control outputs are freely programmable for faults and call-related actions. Control inputs can also be programmed for momentary or toggle operation using the configuration software. Each control input has the ability to monitor the attached line for open and short-circuits.

The 2 x 16-character display and the rotary control enable local status enquiries. The display shows the VU-meter reading when the audio monitoring mode is active. Audio can be monitored by headphone.

The interface supports redundant network cabling of both an audio system and OMNEO networks. It gets its power from the network controller via the network cable. The unit is self-monitoring and continually 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 optical network connections
- Two RJ45 Ethernet connectors for OMNEO
- Eight control inputs to enable audio inputs and audio outputs
- Five control outputs to indicate channel engaged state
- One headphone output 3.5 mm (0.14 in) stereo

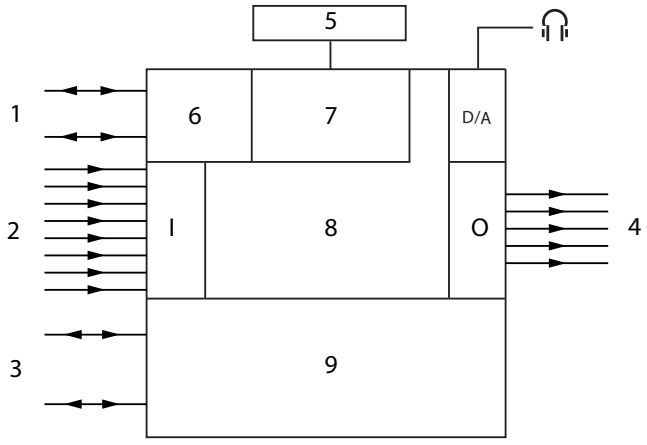
Rear view

Certifications and approvals

Safety	acc. to IEC 60065 / EN 60065
Immunity	acc. to EN 55103-2 / EN 50130-4 / EN 50121-4
Emissions	acc. to EN 55103-1 / FCC-47 part 15B
Emergency	acc. to EN 54-16

Region	Certification	
Europe	CPR	EU CPR Telefication
	CE	

Installation/configuration notes



1	Ethernet network
2	Control inputs
3	Plastic optical fiber network
4	Control outputs
5	Display and control
6	OMNEO interface
7	Sample rate conversion
8	Network processor and DSP
9	Network redundancy switching

Parts included

Quantity	Component
1	PRS-4OMI4 OMNEO Interface
1	Set of mounting brackets for 19” rack
1	Set of feet
1	Set of connectors

Technical specifications

Electrical

Supply voltage	24 to 48 VDC
Power consumption	10 W (DC)
Audio Transport	Ethernet (100/1000Base-T)
Channels	4 in / 4 out per interface on OMNEO
Compliance	IEEE 802.3
Audio Transport	24-bit
Sample Rate	48 kHz
Latency	<1 ms

Integrity assurance	Watchdog
Control inputs	8 x
Connectors	Removable screw terminals
Operation	Closing contact (with supervision)
Control outputs	5 x
Connectors	Removable screw terminals

Mechanical

Dimensions (H x W x D)	
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)
Weight	6 kg (13.2 lbs)
Mounting	Tabletop, 19"-rack
Color	Charcoal (PH 10736) with silver

Environmental

Operating temperature	-5 °C to +55 °C (23 °F to +55 °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

OMNEO Interface
OMNEO network interface for real-time uncompressed digital audio distribution over industry standard IP networks.
Order number **PRS-4OMI4**

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16707827979 | en, V3, 01. Oct 2015