PRS-4OMI4 OMNEO Interface

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BOSCH

Invented for life

▶ Four OMNEO or Dante™ audio inputs and outputs

▶ Eight supervised control inputs and five control outputs

▶ Redundant optical 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.
- Both OMNEO's media transport and system control can run in encrypted mode for secure applications.

Praesideo

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.

DCN Next Generation

OMNEO or Dante™ audio channels can be configured as inputs and outputs to a DCN Next Generation system (DCN NG), where they can be used for interpretation purposes. The control inputs and outputs are used to enable and disable the audio inputs and outputs and report channel status. In combination with DICENTIS Conference System it can be used to receive the floor audio from DICENTIS Conference System and supplying the interpretations from DCN NG to the DICENTIS Conference System.

ℹ **Notice**

Dante™ is a trademark of Audinate Pty Ltd, Audinate® is a registered trademark of Audinate Pty Ltd.

Functions

The OMNEO Interface can simultaneously interface up to four digital audio channels from an OMNEO / Dante™ system into a Praesideo / DCN NG system and up to four audio channels from a Praesideo / DCN NG system into an OMNEO / Dante™ system. This includes converting between the 44.1 kHz sample rate used by Praesideo / DCN NG, 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 / DCN NG CCUs through their Open interfaces / APIs for control purposes.

Praesideo
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.

DCN Next Generation
The eight control inputs are used to enable or disable the 4 inputs and outputs. The first four control outputs are used to indicate the engaged state of the channel assigned to the output. The fifth output indicates the status of the optical network.

Controls and indicators
- 2 x 16 character LCD status display shows the VU meter reading when the audio monitoring mode is active. Audio can be monitored by headphone.
- Rotary/push control for menu control and headphone volume.

Interconnections
The interface supports redundant network cabling of both an audio system and OMNEO networks. It gets its power from the Praesideo network controller / DCN NG CCU via the network cable. The unit is self-monitoring and continually reports its status to the network controller / CCU.
- 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
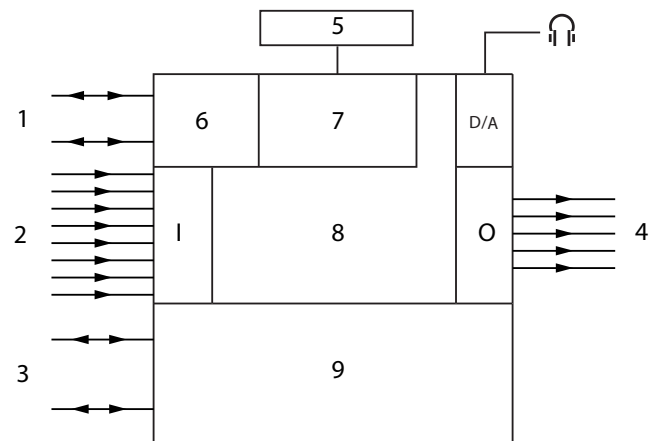- One headphone output 3.5 mm (0.14 in) stereo

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 ℃ to +55 ℃ (23 ℉ to +55 ℉)
Storage and transport temperature	-20 ℃ to +70 ° C (-4 ℉ to +158 ℉)
Humidity	15% to 90%
Air pressure	600 to 1100 hPa

Ordering information

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