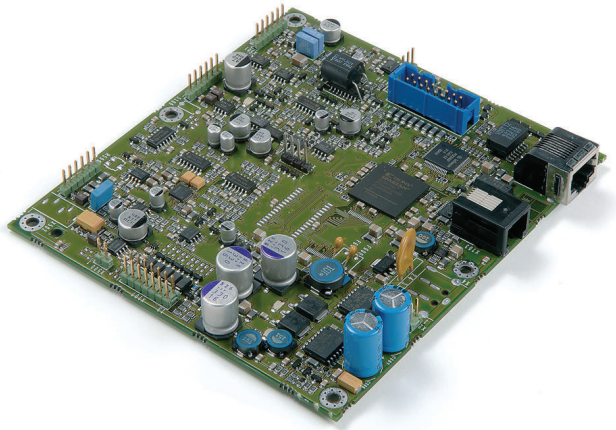**BOSCH**

Invented for life

PRS-CSRK Call Station Remote Kit

▶ **Connects to call station interface via CAT-5 cable**

▶ **Up to 1 km from Praesideo optical network**

▶ **Uses standard Praesideo keypads for extension**

▶ **Built-in limiter**

▶ **Powered via CAT-5 and/or local power supply**

▶ **Complete supervision**

The PRS-CSRK is a PCB with the same functionality as the remote call station, PRS-CSR, but without its housing and other components. It is for the construction of custom applications. It connects via a CAT-5 cable, one-to-one, to the call station interface, PRS-CSI, which is part of the Praesideo optical network. The CAT-5 cable, carrying digital audio and control data, can be as long as 1 km. The length of the CAT-5 cable is not a part of the Praesideo optical network length. This considerably increases the overall possible length of the optical network.

The PRS-CSR can be extended with up to 16 keypads (LBB 4432/00 or LBB 4434/00), each with eight configurable keys. Extension with a numeric keypad (PRS-CSNKP) is also possible.

Functions

The call station has a connection for a supervised microphone. A limiter and a speech filter improve intelligibility and prevent clipping of the audio. It has a volume control for the monitoring speaker and the headset. When it plays a chime or a pre-recorded message, the call station activates its speaker. When a headset is connected, it replaces the microphone and speaker. The call station has its own DSP, and converts

between analog and digital audio. The audio processing can include sensitivity adjustment, limiting, and parametric equalization.

The kit connects via a CAT-5 cable to an PRS-CSI unit, which interfaces it to the Praesideo optical network. The cable can be up to 1 kilometer long. The station gets its power from the interface unit via the CAT-5 cable, but is also equipped with a local power supply connection for extreme cases with a very long cable and many keypads.

Up to 16 call station keypads can connect to the station via a serial communication link. The call station provides the power for the keypads. Up to 224 priorities can be assigned to the call station. All configuration can be done via the Praesideo network controller.

The remote call station is fully supervised and supports fail-safe operation. Even if the Praesideo network controller fails, the call station is still able to put through emergency calls.
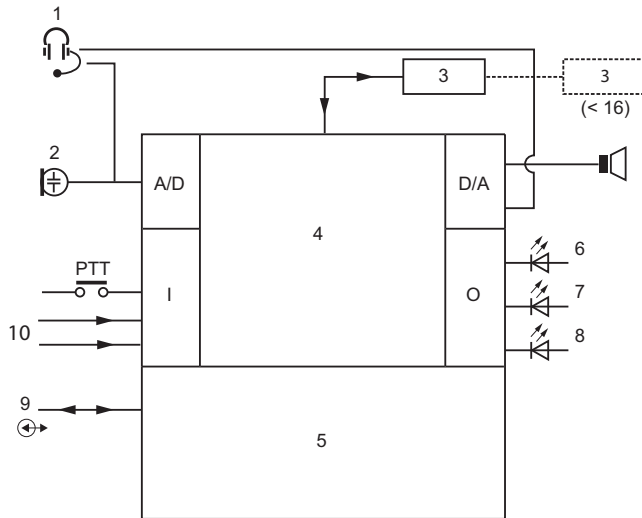
Interconnections

- External power supply input and 2 control inputs
- Serial data and power supply interface for call station keypads
- Microphone
- Loudspeaker
- Headset
- Volume control for loudspeaker/headset
- Control input (for PTT)

- Three control outputs (for status LEDs)

Certifications and Approvals

Region	Certification	
Europe	CE	
	TUEV-SUED	TUV Certificate IEC60849
	GL	GL-SOLAS
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 60849 / EN 54-16 / ISO 7240-16	
Maritime	acc. to IEC 60945	

Installation/Configuration Notes

1	Headset
2	Microphone
3	Keypad(s)
4	Network processor and DSP
5	Network redundancy switching
6	Power/error
7	Call station status (two-color)
8	Network status
9	Data connection (CAT-5)
10	Control input

Parts Included

Quantity	Component
1	PRS-CSRK Call Station Remote Kit
1	Set of connectors

Technical Specifications

Electrical

Power consumption	4 W at 48 V without keypads
External power supply	18 to 56 VDC

Microphone

Nominal acoustic input level	75 to 90 dB SPL
SNR	> 60 dB at 85 dB SPL
Frequency response	340 Hz to 14 kHz (-3 dB)

Loudspeaker

SNR	80 dB at max.
Sound pressure level	85 dB (SPL) at 0.5 m and 1 kHz

Headset

Impedance	0.5 to 5 kohm
Input sensitivity	-57 to -42 dBV/Pa (±3 dB)
Earphone impedance	>16 ohm

Status outputs | 5 x open collector / drain

Max. current (internal)	10 mA per pin; 30 mA total
Max. voltage	56 V per pin
Max sink current	100 mA per output pin

Control inputs | 2 x

Operation	Closing contact (with supervision)

Mechanical

Dimensions (H x W x D)	20 x 130 x 118 mm (0.8 x 5.1 x 4.6 in)
Weight	120 g (0.26 lb)
Mounting	PCB 6 holes

Environmental

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

Ordering Information

PRS-CSRK Call Station Remote Kit
same functionality as the remote call station, PRS-CSR, but without its housing and other components

PRS-CSRK

Accessories

LBB 4434/00 Call Station Keypad Kit
used in combination with a call station kit or call station basic to make manual or pre-recorded announcements to any assigned zones, or to execute pre-defined actions.

LBB4434/00

PRS-CSI Call Station Interface
an interface between a single remote call station, PRS-CSR, or a remote call station kit, PRS-CSRK, and the fiber optical Praesideo network.

PRS-CSI

LBB 4432/00 Call Station Keypad
has eight programmable buttons, each with a two-color status LED.

LBB4432/00

PRS-CSNKP Numeric Keypad
can be used for user access, zone and zone group selection. LCD for user feedback.

PRS-CSNKP