PRA-CSLD Desktop LCD call station
PRAESENSA

This call station for use in PRAESENSA Public Address and Voice Alarm systems is easy to install and intuitive to operate because of its touch screen LCD, providing clear user feedback about setting up a call and monitoring its progress, or controlling back ground music.

The call station allows for positioning without much effort, because it only requires a connection to an OMNEO IP-network with Power over Ethernet (PoE) for communication and power supply combined. The housing is fit for surface mounting and flush mounting.

It can be configured for use as business call station, but also as emergency call station. The stylish design incorporates a supervised microphone, an internal monitor loudspeaker and a socket to insert a local audio source for background music.

The 4.3” high-resolution full-color capacitive touch screen gives the operator optimum control and feedback at all times.

Add up to four PRA-CSE call station extensions for zone selection and other functions. Without extensions the call station can only be used with a pre-configured zone selection.

### Functions

#### IP-network connection
- Direct connection to the IP-network. One shielded CAT5e cable is sufficient for Power over Ethernet, audio and control.
- For dual redundancy of network and power connection, a second shielded CAT5e cable can be connected.

- Integrated network switch with two OMNEO ports allows for loop-through connections to adjacent devices (at least one must provide PoE). Rapid Spanning Tree Protocol (RSTP) is supported to enable recovery from failing network links.

#### Business operation
- Full color 4.3” capacitive touch screen with intuitive function menu navigation provides guidance and feedback during the process of live announcements, pre-recorded messages and music control. Successful broadcast of announcements/messages and changes to the background music settings are clearly indicated.
- Press-to-talk button gives tactile feedback and is recessed to prevent accidental use.
- Built-in monitor loudspeaker with volume control.
- Local audio line input (with stereo to mono conversion) for connecting an external audio source. The audio channel will be available on the network and can be played in any loudspeaker zone.
- Connection of up to four PRA-CSE extensions, each with twelve buttons. The buttons can be configured for various functions, but they are especially useful for zone selection, giving a clear overview of accessible zones and the LED indicators for each button show the status of the respective zone (like being selected, occupied or at fault).
- A User number and PIN code can protect the device in public places against unauthorized access.
- If the call station is not used for a while, it will switch to sleep mode to save energy. It will immediately wake up when the screen, or a button, is touched.
Emergency operation
- The call station fully complies to the standards for voice alarm applications when the firemen’s user interface is configured and at least one PRA-CSE is connected to it.
- All critical alarm functions are accessible via buttons for operators wearing gloves. The 4.3” screen gives feedback on the system status.
- Each of the two RJ45 network connectors accept PoE to power the call station. This provides fail-safe network connection redundancy, as one connection is sufficient for full operation.
- Supervision of all critical elements; the audio path is supervised, as well as the communication to the network.

Connection and functional diagram

<table>
<thead>
<tr>
<th>Connection and functional diagram</th>
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</thead>
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<tr>
<td><img src="image" alt="Connection and functional diagram" /></td>
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Top side

<table>
<thead>
<tr>
<th>Top-side indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power on</td>
</tr>
<tr>
<td>Device in identification mode</td>
</tr>
<tr>
<td>System fault present</td>
</tr>
<tr>
<td>Status business call</td>
</tr>
<tr>
<td>Microphone active</td>
</tr>
<tr>
<td>Chime/message active</td>
</tr>
<tr>
<td>Status emergency call</td>
</tr>
<tr>
<td>Microphone active</td>
</tr>
<tr>
<td>Alarm tone/message active</td>
</tr>
<tr>
<td>4.3” full-color capacitive touch screen</td>
</tr>
<tr>
<td>Identification mode / Indicator test</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Top-side controls</th>
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</thead>
<tbody>
<tr>
<td>Press-To-Talk</td>
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<tr>
<td>4.3” full-color capacitive touch screen</td>
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</table>
Bottom side indicators

<table>
<thead>
<tr>
<th>100 Mbps network 1-2</th>
<th>Yellow</th>
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<tbody>
<tr>
<td>1 Gbps network 1-2</td>
<td>Green</td>
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</table>

Bottom side controls

- Device reset (to factory default) Button

Bottom-side and side interconnections

- Network port 1-2 (PoE PD)
- Local source audio line input
- PRA-CSE interconnection (RJ12)

Architects’ and engineers’ specifications

The IP-networked desktop call station shall be designed exclusively for use with Bosch PRAESENSA systems. The desktop call station shall provide an interface for control data and multi-channel digital audio over OMNEO using dual Ethernet ports for redundant network connection, supporting RSTP and loop-through cabling. It shall receive Power over Ethernet (PoE) via either one or both network connections. The desktop call station shall provide a backlit full-color capacitive touch panel LCD as user interface for business and evacuation purposes. The desktop call station shall accept up to four optional extensions, each offering 12 configurable buttons for zone selection and other purposes. It shall provide control and routing of live speech calls, stored messages and music with volume control per zone. Authentication on the LCD with user number and PIN code shall protect the device against unauthorized access. The desktop call station shall have a gooseneck cardioid microphone for live calls and a 3.5 mm jack line level input for background music, and provide software-configurable signal processing including sensitivity control, parametric equalization and limiting. The desktop call station shall be certified for EN 54-16 / ISO 7240-16, marked for CE and be compliant with the RoHS directive. Warranty shall be three years minimum. The desktop call station shall be a Bosch PRA-CSLD.

Regulatory information

Emergency standard certifications

Europe | EN 54-16 (0560-CPR-182190000)
International | ISO 7240-16
Maritime applications | DNV GL Type Approval

Emergency standard compliance

Europe | EN 50849
UK | BS 5839-8

Regulatory areas

Safety | EN/IEC/CSA/UL 62368-1
Immunity | EN 55024
| EN 55035
| EN 50130-4

Emissions | EN 55032
| EN 61000-6-3
| ICES-003
| FCC-47 part 15B class A

Environment | EN/IEC 63000
Railway applications | EN 50121-4
Maritime applications | EN 60945

Parts included

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<thead>
<tr>
<th>Quantity</th>
<th>Component</th>
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<tbody>
<tr>
<td>1</td>
<td>Desktop LCD call station</td>
</tr>
<tr>
<td>1</td>
<td>Bracket (attached to bottom)</td>
</tr>
<tr>
<td>1</td>
<td>Connector cover (attached to bottom)</td>
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<tr>
<td>Quantity</td>
<td>Component</td>
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<tr>
<td>1</td>
<td>Quick Installation Guide</td>
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<tr>
<td>1</td>
<td>Safety information</td>
</tr>
</tbody>
</table>

### Technical specifications

#### Electrical

**Microphone**
- Nominal acoustic input level (dB SPL) (configurable): 80 dB SPL – 100 dB SPL
- Maximum acoustic input level (dB SPL): 120 dB SPL
- Minimum signal-to-noise ratio (dBA): 70 dBA
- Polar pattern: Unidirectional
- Frequency range (-10 dB) (Hz): 100 Hz – 14000 Hz

**Display**
- Display size (in): 4.30 in
- Touchscreen: Capacitive
- Color depth: 24-bit
- Display resolution (pixels): 480 x 272 px
- Brightness: 300 cd/m²

**Monitor loudspeaker**
- Maximum sound pressure level, at 1 m: 75 dB SPL
- Volume control: Mute, -40 dB – 0 dB
- Frequency range (-10 dB) (Hz): 100 Hz – 14000 Hz

**Line input**
- Minimum signal-to-noise ratio (dBA): 96 dBA
- Total harmonic distortion + noise (%): 0.10%

**Power transfer**
- PoE input: IEEE 802.3af, Class 2
- Nominal voltage (VDC) (input): 48 VDC
- Input voltage (VDC) (tolerance): 37 VDC – 57 VDC

### Supervision
- Microphone: Current
- Audio path: Pilot tone
- Protection (controller continuity): Watchdog
- PoE (1-2): Voltage

### Network interface
- Ethernet type: 100BASE-TX; 1000BASE-T
- Ethernet protocol: TCP/IP
- Redundancy: RSTP
- Audio/control protocols: OMNEO
- Latency (ms): 10 ms
- Audio encryption: AES 128
- Security: TLS
- Number of Ethernet ports: 2

### Reliability
- Mean time between failures (MTBF) (h) (Telcordia SR-332 Issue 3): 1000000 h

### Environmental
- Operating temperature (°C): -5°C – 50°C
- Operating temperature (°F): 23°F – 122°F
- Storage temperature (°C): -30°C – 70°C
- Storage temperature (°F): -22°F – 158°F
- Operating relative humidity, non-condensing (%): 5% – 95%
- Air pressure (hPa): 560 hPa – 1070 hPa
- Installation altitude (m): -500 m – 5000 m
<table>
<thead>
<tr>
<th><strong>Communications Systems</strong> - PRA-CSLD Desktop LCD call station</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Installation altitude (ft)</strong></td>
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<tr>
<td><strong>Vibration (operating)</strong></td>
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<tr>
<td><strong>Amplitude</strong></td>
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<tr>
<td><strong>Acceleration</strong></td>
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<td><strong>Bump (transport)</strong></td>
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<tr>
<td><strong>Mechanical</strong></td>
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<tr>
<td><strong>Dimensions (H x W x D) (mm) (excluding microphone)</strong></td>
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<tr>
<td><strong>Dimensions (H x W x D) (in)</strong></td>
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<tr>
<td><strong>IP rating</strong></td>
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<tr>
<td><strong>Material</strong></td>
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<tr>
<td><strong>Color in RAL</strong></td>
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<tr>
<td><strong>Weight (kg)</strong></td>
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<td><strong>Weight (lb)</strong></td>
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**Ordering information**

**PRA-CSLD Desktop LCD call station**
Network-connected, PoE powered, touch screen call station with gooseneck microphone.
Order number **PRA-CSLD | F.01U.325.048**

**Services**

**EWE-PRALCD-IW 12 mths wrty ext Prae. LCD Call station**
12 months warranty extension
Order number **EWE-PRALCD-IW | F.01U.387.318**