BOSCH

PROSPERO

PRP-CST

en User manual

Table of contents

1   Safety

| | **Danger!**
High risk: Indicates a critically hazardous situation. Failure to take precautions will result in electric shock, serious bodily injury, or death. |

| | **Warning!**
Medium risk: Indicates a potentially hazardous situation. Failure to take precautions may result in minor or moderate bodily injury. |

| | **Caution!**
Low risk: Indicates a potentially hazardous situation. Failure to take precautions may result in risk of property loss or equipment damage. |

1. Read these instructions carefully. Read all safety and operating instructions before operating equipment or systems.
2. Keep these instructions in a safe place. Important safety instructions and operating instructions should be retained for future reference.
3. Pay attention to all warnings. All warnings on the equipment and in the operating instructions should be carefully observed.
4. Follow all instructions. All instructions for installation or use/operation should be followed.
5. Do not use this equipment near a water source. Do not use the device near water sources or in damp environments, e.g. near bathtubs, sinks, kitchen sinks or laundry tubs, wet basements, next to swimming pools, unprotected outdoor installation points, or anywhere designated as a damp area.

| | **Caution!**
Do not use alcohol, ammonia or petroleum solvents or abrasive cleaners to clean the devices. |

6. Disconnect the mains power supply from the devices, if you want to clean the devices.
7. Use a soft cloth that is not fully moist with a weak soap and water solution.
8. Let the device fully dry before you operate the device again.
9. Do not block any ventilation openings. Follow the manufacturer's instructions for installation. Openings in the housing, if present, are used for ventilation to ensure reliable operation of the device and prevent overheating. These openings should not be obstructed or covered. This device should not be flush mounted unless proper ventilation is provided or the manufacturer's instructions are followed.
10. Do not install near sources of heat, such as radiators, storage heaters, stoves or other heat-generating devices (including amplifiers), or in areas of direct sunlight.
11. Do not place naked ignition sources such as lit candles on the device.
12. Do not step on or pinch the power cord. Take special care to protect the plug, convenience outlets, and the device's connection points.
13. Use only the accessories/fittings specified by the manufacturer. Installation of any equipment should follow the manufacturer's instructions and should utilize the manufacturer's recommended mounting accessories.

14. Use only the carts, bays, tripods, stands, or tables specified by the manufacturer or supplied with the device. When using a cart, handle it carefully to avoid tipping over and causing personal injury. Sudden stops, excessive force, and uneven surfaces can all cause a cart carrying electrical equipment to tip over.
15. Unplug the device during thunderstorms or when not in use for long periods of time. Not applicable when special features, e.g. emergency evacuation systems, need to be maintained.
16. All maintenance matters should be referred to qualified maintenance personnel. Repairs are necessary if the device sustains any of the following issues: damage to the power cord or plug, liquid spillage or foreign objects entering the device, exposure to rain or moisture, abnormal operation, or if the device has fallen or been dropped.
17. Do not expose the equipment to dripping or splashing, and do not place objects containing liquids, e.g. vases, on this equipment.
18. Professional installation only - do not use the equipment in a residential environment.
19. To prevent condensation, wait a few hours before powering on the equipment after moving it from a cooler to a warmer location.
20. For devices with audio output, avoid listening to audio at high volume levels for extended periods of time in order to prevent possible hearing damage.
21. When replacement parts are required, service personnel should use replacement parts specified by the manufacturer, or parts with the same characteristics as the original. Unauthorized replacement with other parts may result in fire, electric shock, or other hazards.
22. After servicing this equipment, have service personnel perform a safety check to ensure that the equipment is working properly.
23. Use only the type of power supply indicated on the label to power the device. If you are unsure of the type of power supply used, consult your equipment dealer or local power company. For devices powered by batteries or other power sources, refer to the operating instructions.
    - Permanently connected equipment must have an accessible, external utility plug or all-pole utility switch and must comply with all applicable installation codes,
    - For removable equipment, socket outlets should be installed in an easily accessible location near the equipment.

Danger!
Do not insert any foreign objects through openings in the device. Foreign objects may come in contact with hazardous voltage points or short-circuit components, which in turn may cause fire or electric shock. Do not allow any liquid to spill into the unit.

Caution!
To avoid electric shock, do not open the housing. Consult only qualified service personnel regarding maintenance matters.

Warning!
To prevent fire or electric shock hazard, do not expose the device to rain or moisture.

Warning!
Installation should only be performed by qualified service personnel and in accordance with the National Electrician's Standards or applicable local standards.

Warning!
If the device is powered by an external power supply and a power cord unit is provided, disconnect the device from the power plug of the power cord. If an AC-DC adapter is supplied and the power plug is a direct plug-in type, use the AC-DC adapter to disconnect the device.
The electrical outlet should be installed close to the equipment and be easily accessible.

Warning!
To avoid the risk of electric shock, do not connect Safety Extra-Low Voltage (SELV) circuits to Telephone Network Voltage (TNV) circuits. The LAN port contains a SELV circuit and the WAN port contains a TNV circuit. Some LAN and WAN ports use RJ-45 connectors. Always be careful when connecting cables.

2   Short information

The PRP-CST is a desktop call station with a touch screen and gooseneck microphone. It connects to the PROSPERO public address system via a standard IP network for manual and pre-recorded announcements. The call station supports PoE, allowing connection to a standard Ethernet switch using a Cat5e cable.
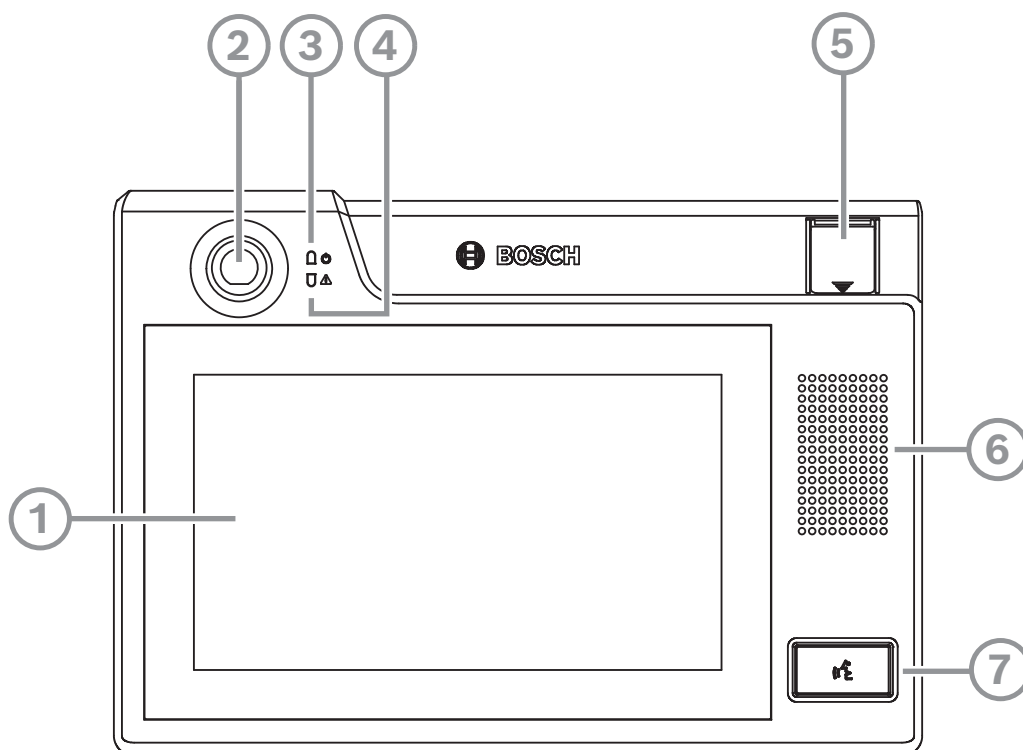
The front side offers a 7-inch full color touch screen with PIN code login authentication for access control, a PTT button and an emergency broadcast button with a protective cover to prevent accidental activation, used for daily broadcast operations. An audio input port is provided near the bottom of the device for connecting local audio sources. A built-in monitoring speaker allows for zone monitoring via the touch screen.

Other features:
–   Connecting to the PROSPERO public address system via an IP network.
–   Gooseneck microphone with flexible angle adjustment.
–   7-inch full-color capacitive touch screen with intuitive function menu.
–   PTT button and emergency broadcast button with protective cover.
–   Real-time manual broadcasting, pre-recorded broadcasting, emergency broadcasting.
–   Force-override emergency broadcast for manual announcements.
–   Real-time zone monitoring with volume control.
–   System equipment failure log view.
–   PIN code login authentication access control.
–   1 Line-in audio input for connecting audio sources.
–   Power supply status and fault status indicators.
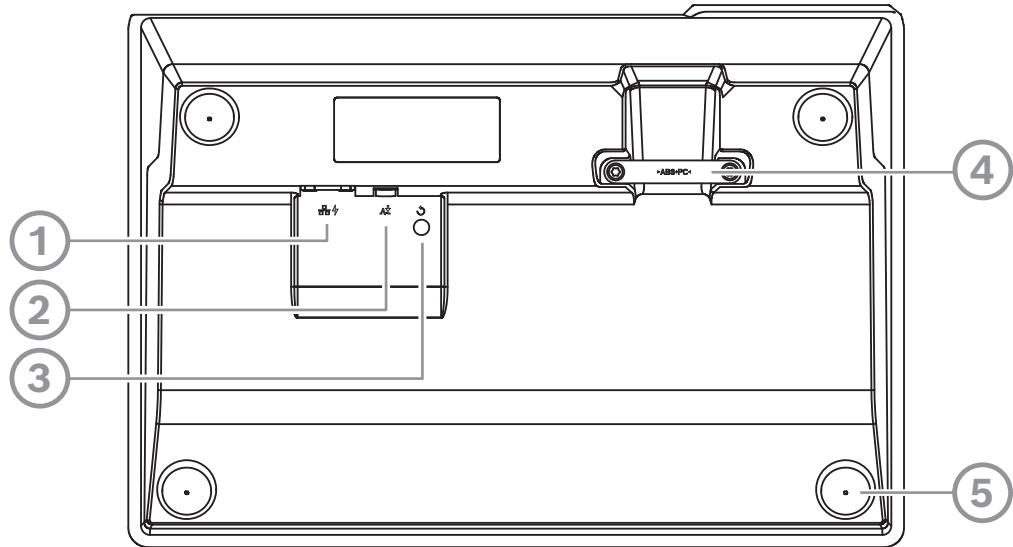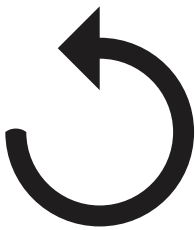
3 Equipment overview

3.1 Front view

Nr.	Icon	Indicator and control	Description
1		LCD screen	7-inch full-color capacitive touch screen
2		Microphone	Gooseneck microphone with flexible angle adjustment
3	⏻	Power indicator	Green: On
4	⚠	Fault warning indicator	Blinking yellow: unauthorized Solid yellow: device failure
5		Emergency broadcast button	For initiating emergency broadcasts

Nr.	Icon	Indicator and control	Description
6		Built-in speaker	For real-time zone monitoring
7	[image]	PTT call button	Used to initiate manual paging broadcasts

3.2 Rear view

Nr.	Icon	Indicator and control	Description
1	品 ⚡	Network interface	Connecting to a PoE network switch
2	∿↓	Analog audio input port	Local line-level audio input for connection to background music source devices
3	↺	Device reset button	Restore factory default settings
4		Strain relief bracket	Secure the alignment of the network cable so that it adheres to the bottom of the call station
5		Footrest	Non-slip foot pads

4   Accessories

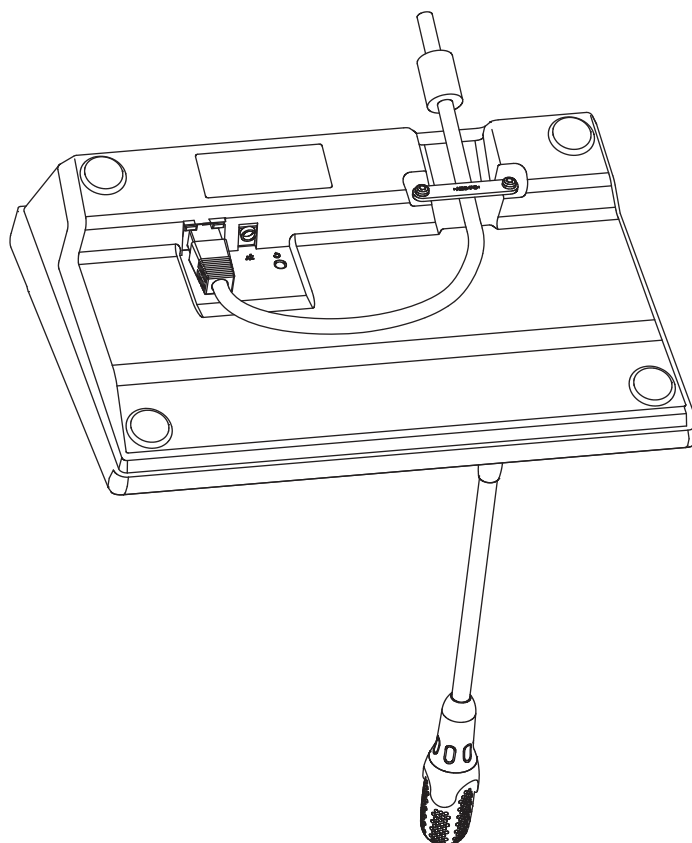| Quantity	Components
1	Call station
1	Safety and user information leaflet
1	Strain relief bracket and screws

5   Installation

5.1   Delivery conditions

The call station is shipped from the factory with the following default settings:

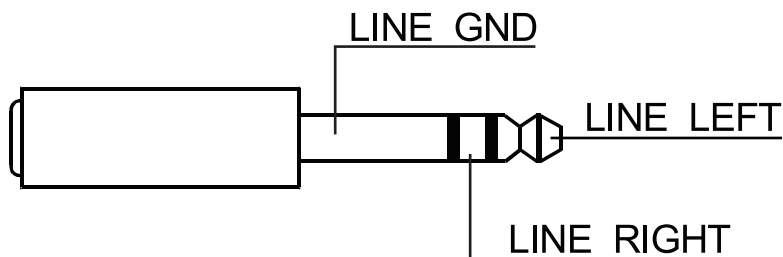| Parameters	Setup/Description
IP address	192.168.1.105
Subnet mask	255.255.255.0
Server IP	192.168.1.6
Name	PRP-CST

5.2   Installation method

Refer to the diagram below to connect the call station's network cable and secure it with the provided strain relief bracket and two screws.
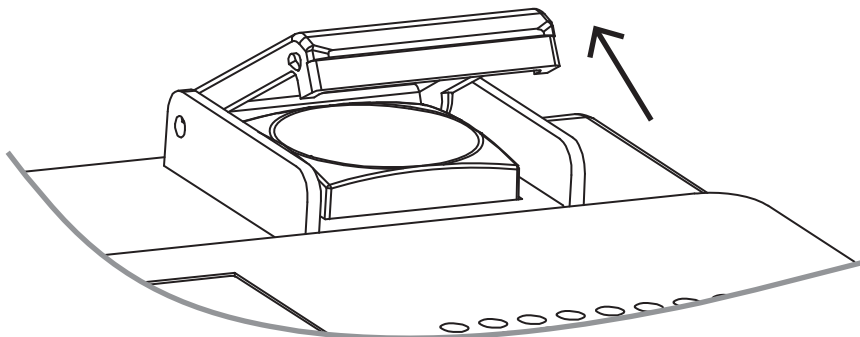
6 Wiring

Analog audio input port

Analog audio input port for connecting external audio devices (for example, background music sources, wireless microphone receivers, and so on.). The following figure shows the interface definition of the stereo plug (3.5 mm, "mini three-prong plug") used to connect to the analog audio input interface.
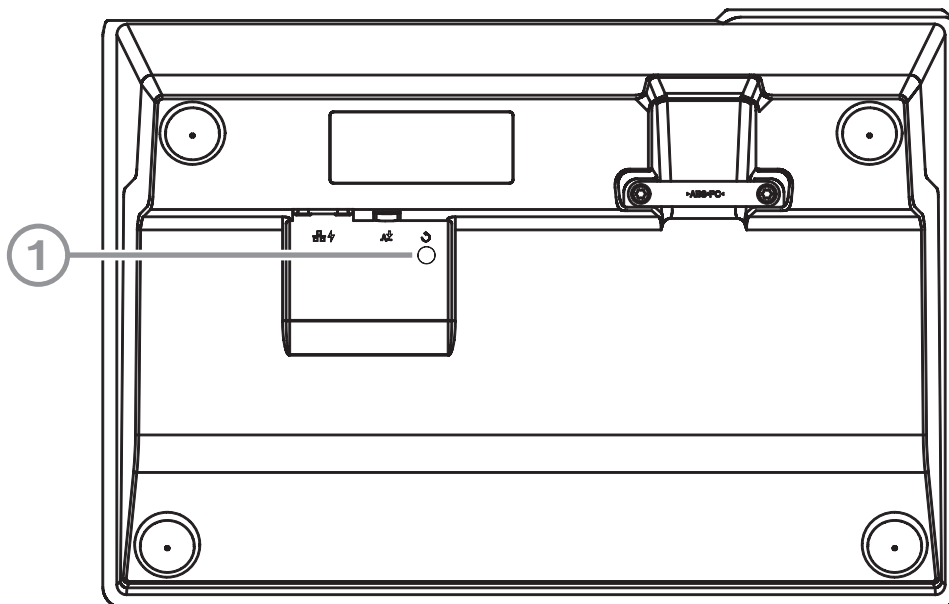
7   Operation
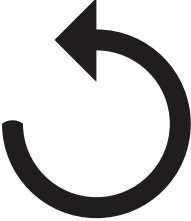
Emergency broadcast button

The Emergency Announcement Button is located in the upper right corner of the call station and is a red physical button with a transparent cover. The transparent cover prevents inadvertent activation of the button and needs to be opened before use, ensuring maximum operational reliability.

Device reset

Press and hold the device reset button for 5 seconds, then release it to reboot and restore to the factory default settings.

Nr.	Icon	Indicator and control	Description
1		Device reset button	Restore factory default settings

8   Maintenance

The call station does not require any special maintenance. To maintain cleanliness and a neat appearance, use a soft cloth to clean the call station.

9 Technical data

Electrical

PoE power supply	
Rated input voltage (VDC)	48 V
PoE input	PoE IEEE 802.3af Class 3
Power consumption	<7 W

Network interface	
Ethernet type	100 BASE-TX
Ethernet protocol	TCP/IP, UDP, RTP, TFTP, HTTP, HLS
Audio encoding	MP3, PCM
Interface	1x RJ45

Microphone	
Nominal acoustic input level (dB SPL)	80 dB SPL — 100 dB SPL
Maximum acoustic input level (dB SPL)	120 dB SPL
Signal-to-noise ratio (SNR)	>70 dBA
Polar pattern	Unidirectional
Frequency response (+3/-6 dB) (Hz)	100 Hz — 14 kHz

Display	
Display size (in)	7 in
Touchscreen	Capacitive
Color depth	24-bit
Display resolution (pixels)	800 x 480 px
Brightness	300 cd/m^2

Monitor loudspeaker	
Rated input level 500 Hz — 3 kHz (@1 m)	75 dB SPL +/- 6 dB
Frequency range (-10 dB) (Hz)	500 Hz — 3 kHz

Analog audio input	
Frequency response	100 Hz — 18 kHz
Sampling rate	44.1 kHz
Type	1x Line level input
Connector	1x 3.5 mm socket

Analog audio input	
Maximum input level	0 dBu
Input impedance	>22 kΩ

Mechanical

Material	PC, ABS
Dimensions (H x W x D)	370 mm x 238 mm x 158 mm
Weight	740 g
Color (RAL)	RAL 9017 Traffic black

Environmental

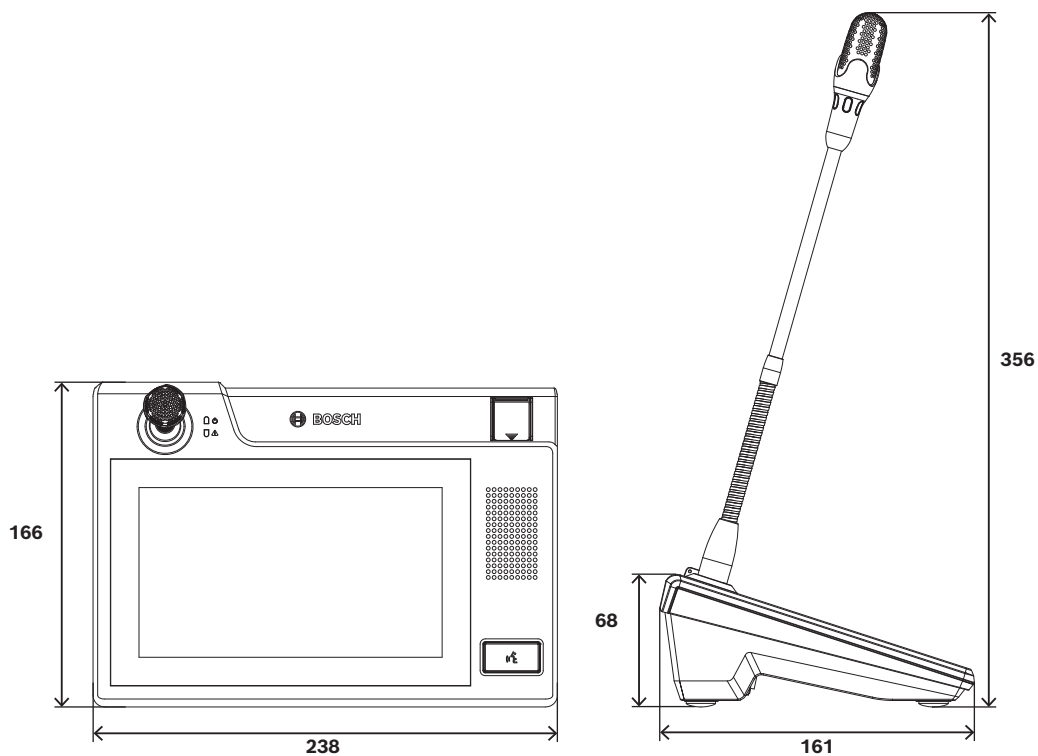| Operating temperature (°C)	-5°C — 45°C
Storage and transportation temperature (°C)	-40°C — 70 C
Operating relative humidity, non-condensing (%%)	<95%

10   Dimensions

Figure 10.1: Dimensions (mm)

Building solutions for a better life

202410241213