

Series WS 200P I



IP Wallmount Stations Series WS 200P

The stations of this series are used as sub stations in interior and outdoor areas. The technology allows excellent speech quality and comprehensibility independent of background noise. Each button can be assigned to a call number. Label areas for individual labelling of the buttons.

WS 201P I (not pictured)

IP station with one programmable, back-lit direct dialling button, back-lit label area, electret microphone with multifunction LED, loudspeakers $2 \times 8 \Omega$, 3 inputs for floating contacts and 2 relay outputs, protection classification IP66, polycarbonate construction.

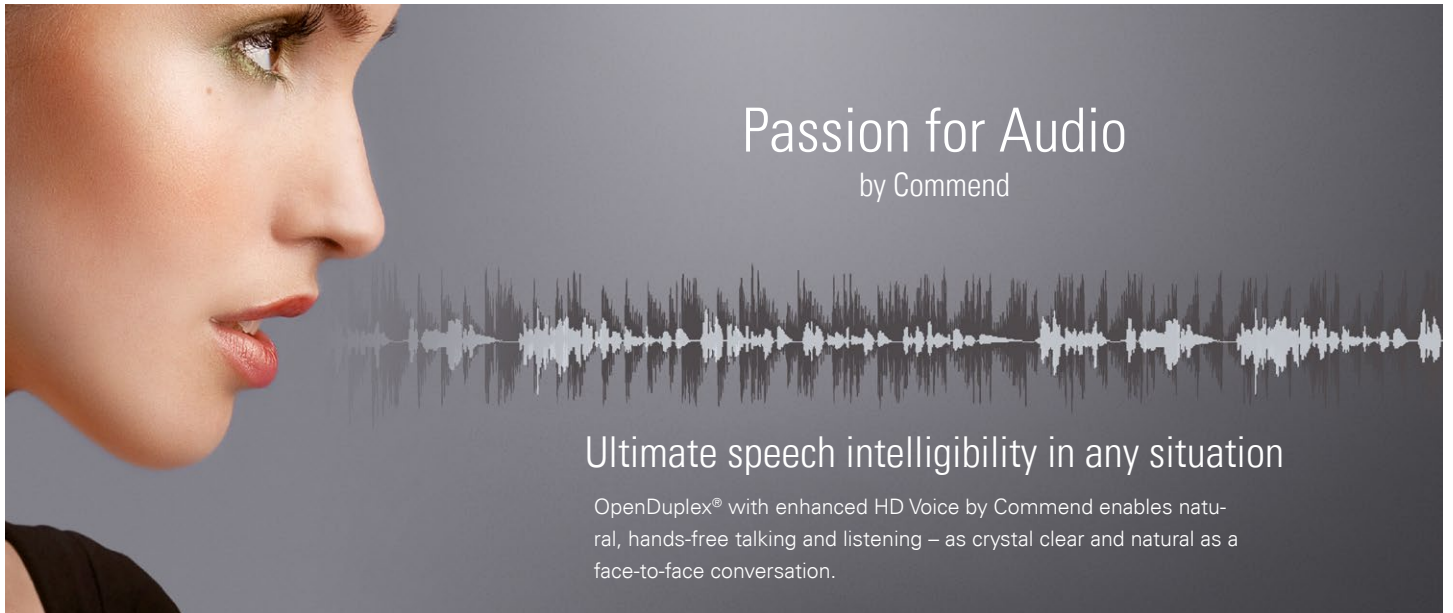
WS 203P I

Digital station like WS 201P I but with 3 programmable, back-lit direct dialling buttons and label areas.

The robust construction provides full protection against water, dirt and dust.

Typical applications:

Ancillary entrances, stores, corridors, parking areas, etc.

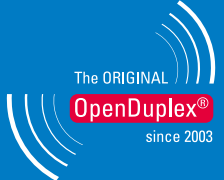





Passion for Audio

by Commend

Ultimate speech intelligibility in any situation

OpenDuplex® with enhanced HD Voice by Commend enables natural, hands-free talking and listening – as crystal clear and natural as a face-to-face conversation.

 <p>Natural communication</p>	 <p>enhanced HD Voice</p>	 <p>High volume</p>	<p>IVC</p> <p>Intelligent Volume Control</p>	 <p>Loudspeaker / microphone surveillance</p>
--	--	--	--	--

AUDIO FACTS

- **eHD Voice** – enhanced HD Voice by Commend transfers the audio signal at a bandwidth of **16 kHz**, thus capturing the entire frequency spectrum of the human voice
- **STI** (Speech Transmission Index) **0.96** – measured under acoustic laboratory conditions (STI is a standard measure for speech intelligibility. It has a possible maximum value of 1.00, which corresponds to perfect intelligibility)
- **Loudspeaker/microphone monitoring** – ensures the availability of the Intercom station while reducing the need for manual verification of its functionality
- **Audio monitoring** – fully automated emergency calls triggered by shouting/screaming or pre-defined distress sounds – i.e., more security for users
- **Peer2Peer audio** – reduces network and server load to ensure efficient use of resources
- **Audio recording** and lip synchronous audio/video recording of conversations for documentation and evidence keeping purposes
- **Conference call function** for simultaneous talking with multiple conversation partners
- **Speech activity detection** senses when calls are finished (no microphone signal) and terminates the connection automatically
- **Simplex mode** for applications requiring controlled communication – e.g., security solutions based on the ‘push-to-talk/release-to-listen’ method
- **OpenDuplex®** for natural for natural, hands-free communication
- **IVC** (Intelligent Volume Control) automatically adjusts the device’s volume setting to the ambient noise level
- **Public Address functions**

Learn more

audio.commend.com



Technical Data – Benefits

TECHNICAL DATA

IP rating acc. EN 60529:	IP66
Front panel:	polycarbonate
Microphone:	electret condenser microphone polar pattern: omnidirectional speaking distance: max. 7 m (23 ft)
Loudspeaker:	special membrane type for optimal sound quality, sound pressure level: 85 dB/1 W/1 m (3.28 ft), 2x8 Ω
Amplifier:	integrated class D amplifier with 2.5 W
Sound pressure level:	max. 99 dB
Handset, headset:	EM sensitivity: 14 mV _{eff} EM impedance: 3.3 kΩ / EM supply: 2.5 V EP level: 850 mV _{eff} at 0 dBm0 / EP impedance: 200 Ω
Input:	3 inputs for floating contacts (detection of 5 input states)
Output:	2 relay outputs (switch-over contacts) max. 60 VDC, 2 A, 60 W ¹⁾ expected life: min. 5 x 10 ⁴ (2 A), 10 ⁵ (1 A)
Line output:	for connection loudspeaker module
Call indication:	multifunction LED (colours: red, green, blue)
Call button:	back-lit direct dialling buttons with label areas
Transmission bandwidth:	16 kHz
Operating temperature range:	-20 °C to 70 °C (-4 °F to 158 °F)
Storage temperature range:	-20 °C to 70 °C (-4 °F to 158 °F)
Relative humidity:	up to 95% not condensing
Connection:	pluggable screw terminals expansion plug for e.g. EB2E2AHE IP Uplink: shielded RJ45 modular jacks
Power supply:	PoE or external supply 12–24 VAC or 15–35 VDC power consumption: max. 4 W
Cabling:	min. Cat. 5
PoE (Power over Ethernet):	IEEE 802.3af standard Power consumption of the terminal device: Class 0 (0.44 W to 12.95 W)
Protocol:	VoIP-Protocol based on UDP/IP
Data rate:	10/100 MBit/s (Full/Half Duplex)
Mounting:	flush mount kit WSFB 50P surface mount kit WSSH 50P
Dimensions (W x H x D):	with flush mount kit: 165 x 280 x 13 mm (6.49 x 11.02 x 0.51 in) with surface mount kit: 165 x 280 x 51 mm (6.49 x 11.02 x 2 in)
Weight incl. package:	approx. 750 g (1.65 lbs)
Colour:	front panel: light-grey (like RAL 7035) front panel frame: graphite-grey (like RAL 7024)

¹⁾ The relay output may only be connected to a SELV circuit! A SELV circuit as per IEC/EN 60950-1 must be separated safely from a dangerous electrical circuit (e.g. 230 V or 110 V mains power), e.g. by means of double insulation. The SELV circuit must not exceed 60 VDC or 42.4 VAC_{peak} (30 VAC_{eff})!

BENEFITS

- Polycarbonate construction
- Back-lit direct dialling buttons and label areas
- Protection classification IP66
- Supports DSP-Features such as OpenDuplex®, Audio Monitoring, loudspeaker/microphone monitoring, etc.

LINE LENGTH IN LAN

The maximum line length of Cat. 5 cabling in a LAN is 100 m (328 ft) – e.g. from switch to Intercom station.

EXTENT OF SUPPLY

- Intercom station
- Short reference

System/Network Requirements

SYSTEM REQUIREMENTS

- GE 800 (min. PRO 800 1.2) with G8-IP (min. G3-8-IP 4.0b01) or
- GE 300 (min. PRO 800 1.2) with G3-IP (min. G3-8-IP 4.0b01) or
- VirtuoSIS/S3/S6
- Configuration software min. CCT 800 1.2
- Configuration software IP Station Config (included in setup of CCT 800 1.2)

REQUIREMENTS TO THE NETWORK

IP Addresses and Ports

- For the WS 200 I the DHCP functionality is available. If DHCP is not used, the WS 200 I must have a fixed IP address.
- In case of a changing public IP address, dynamic registration of a WS 200 I is possible.
- Communication from the program IP Station Config is done via Port 16399 (can not be configured).
- Communication from the WS 200 I to the Intercom Server (UDP protocol) is done via port 16400 (configurable).

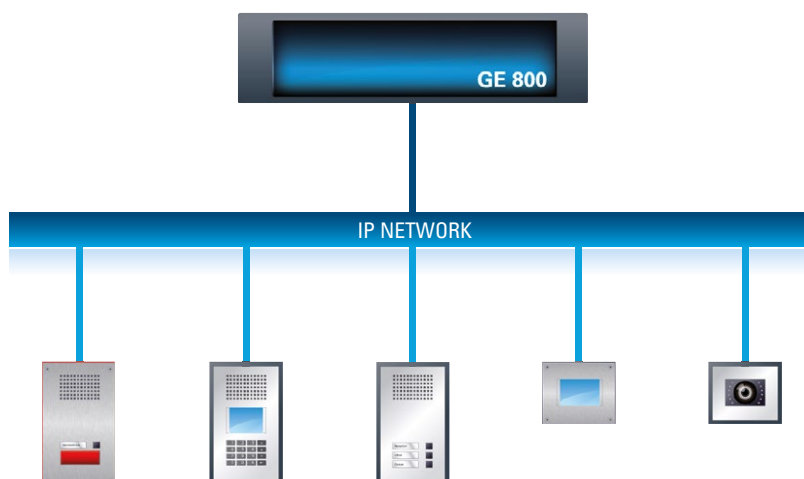
QoS Requirements

- Maximum One-Way-Delay 100ms
- Delay-Jitter not above 50ms
- 0% packet loss for perfect audio quality

Bandwidth

- Required Bandwidth incl. protocol overhead per WS 200 I, for upload/download each: speech and data 96 kBit/s
- Speech is compressed according to G.722 standard

SYSTEM OVERVIEW

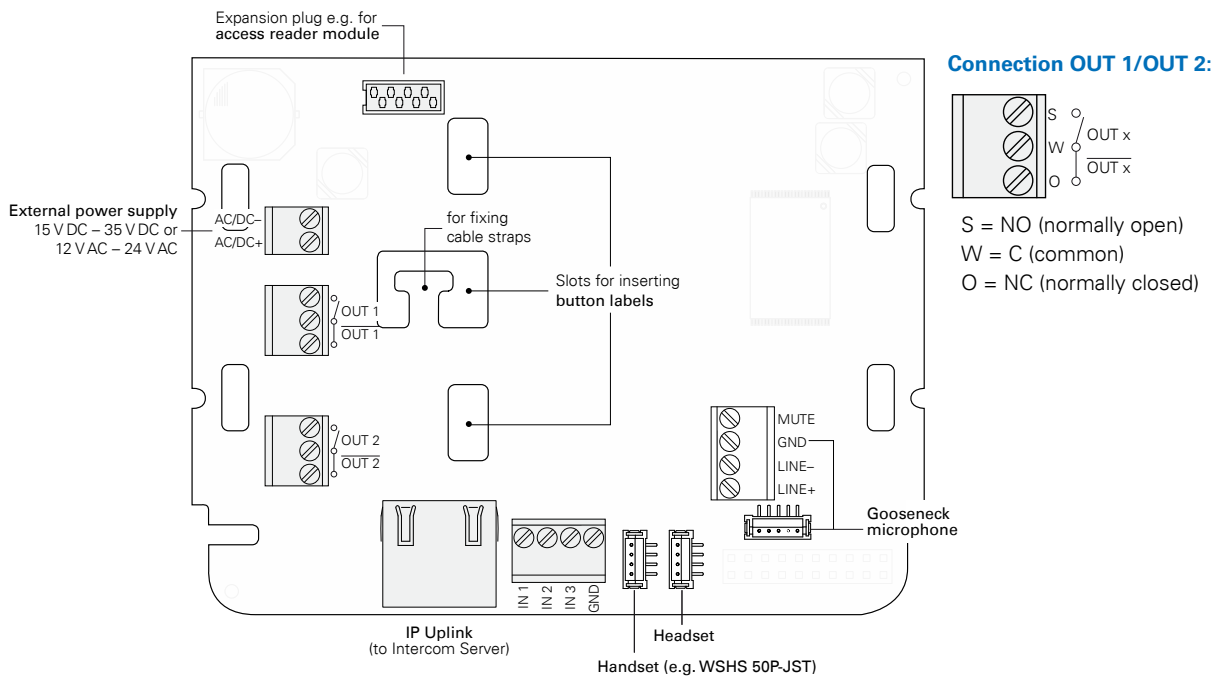


Installation

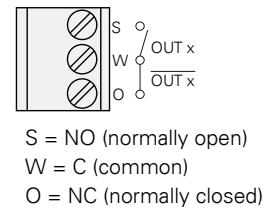
SAFETY INSTRUCTIONS

- When opening the stations ESD precautions must be observed.
- The stations may only be opened by authorised service engineers.

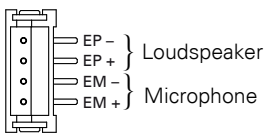
CONNECTION



Connection OUT 1/OUT 2:

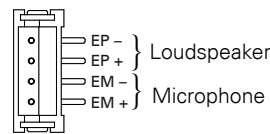


Connection headset:



Note: The headset socket has to be activated via an ICX message (see below).

Connection headset:



ICX message for connection headset:

Microphone / loudspeaker	Task	Type	Data (variable length)	Server-SW
Switchover microphone / loudspeaker (subscriber)	40	92	TTTT 050Z	Pro 800 2.1

Variable TTTT → 4-digit call number of the subscriber
 Variable Z → 0 = deactivate; 1 = activate; 2 = toggle

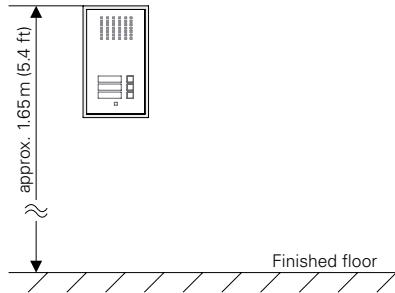
Installation

MOUNTING INSTRUCTIONS

- Do not expose the station to extreme temperature (see "Technical Data").
- For flush mounting a flush mount kit WSFB 50P (available separately) is required.
- For surface mounting a surface mount kit WSSH 50P (available separately) is required.

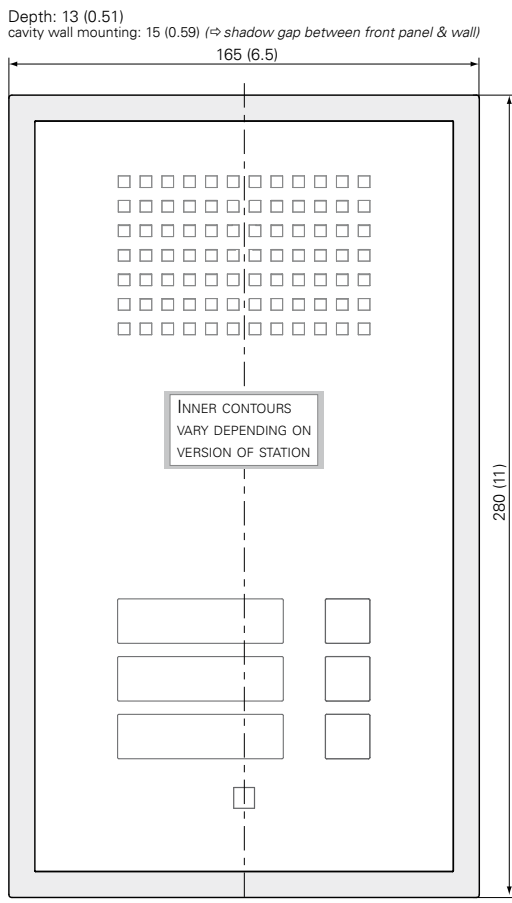
Recommended mounting height

The upper edge of the station approx. 1.65 m (5.4 feet) from the finished floor. Please adapt the mounting height to the individual needs.

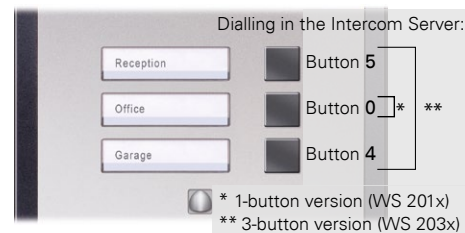


DIMENSIONS FRONT PANEL

Measuring units in mm (inch), not to scale!



BUTTON CONFIGURATION



QUALITY TESTED. RELIABLE. SMART.

COMMEND products are developed and manufactured by Commend International in Salzburg, Austria.

The development and manufacturing processes are certified in accordance with **EN ISO 9001:2015**.

The technical data contained herein has been provided solely for informational purposes and is not legally binding. Subject to change, technical or otherwise. IoT[®], OpenDuplex[®] and Commend[®] are trademarks registered by Commend International GmbH. All other brands or product names are trademarks or registered trademarks of the respective owner and have not been specifically earmarked.

A STRONG WORLDWIDE NETWORK

COMMEND is represented the world over by local Commend Partners and helps to improve security and communication with tailored solutions.

www.commend.com

