

## Series WS 200P D



## Digital 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. Permanent function monitoring ensures in-service status. Each button can be assigned to a call number. Label areas for individual labelling of the buttons.

### **WS 201P D (not pictured)**

Digital station with one programmable, back-lit direct dialling button, back-lit label area, electret condenser microphone with multifunction LED, loudspeakers 2 x 8 Ω, 3 inputs for floating contacts and 2 relay outputs, protection classification IP66, polycarbonate construction.

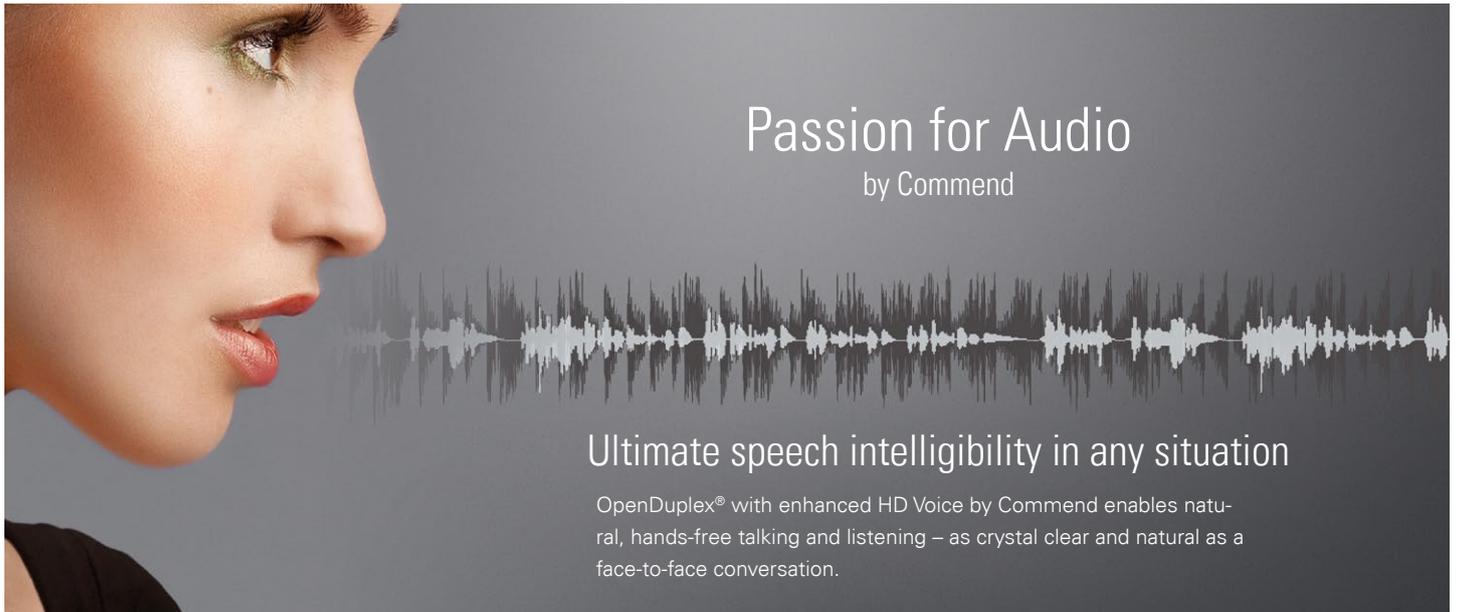
### **WS 203P D**

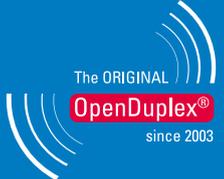
Digital station like WS 201P D but with 3 programmable, back-lit direct dialling buttons and label areas.

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

### **Typical applications:**

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



|  |  |  |  |  |
|--|--|--|--|--|
|  <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
- **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](http://audio.commend.com)



# Technical Data – Benefits

## TECHNICAL DATA

|                              |   |
|------------------------------|---|
| IP rating acc. EN 60529:     | IP66  |
| Front panel:                 | polycarbonate   |
| Microphone:                  | electret condenser microphone<br>polar pattern: omnidirectional<br>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), 2 x 8 Ω   |
| Amplifier:                   | integrated class-D amplifier with 2.5 W   |
| Sound pressure level:        | max. 99 dB  |
| Handset, headset:            | EM sensitivity: 14 mV <sub>eff</sub><br>EM impedance: 3.3 kΩ / EM supply: 2.5 V<br>EP level: 850 mV <sub>eff</sub> 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)<br>max. 60 VDC, 2 A, 60 W <sup>1)</sup><br>expected life: min. 5 x 10 <sup>4</sup> (2 A), 10 <sup>5</sup> (1 A)  |
| Line output:                 | for connection of 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<br>expansion plug for e.g. EB2E2AHE   |
| Power supply:                | from Intercom Server or external supply 12–24 VAC or 15–35 VDC<br>power consumption: max. 3.5 W   |
| <b>Attention:</b>            | <ul style="list-style-type: none"> <li>The operation of backlight for call buttons and label areas is available with external power supply only!</li> <li>For further information see "Line Length".</li> </ul> |
| Cabling:                     | star feed, 2-wired, twisted   |
| Signalling:                  | 2B + D (2 x 64 kBit/s speech, 16 kBit/s data)   |
| Mounting:                    | flush mount kit WSFB 50P<br>surface mount kit WSSH 50P  |
| Dimensions (W x H x D):      | with flush mount kit:<br>164 x 279 x 14 mm (6.46 x 10.98 x 0.55 in)<br>with surface mount kit:<br>164 x 279 x 50 mm (6.46 x 10.98 x 1.97 in)  |
| Weight incl. package:        | approx. 750 g (1.65 lbs)  |
| Colour:                      | front panel: light-grey (like RAL 7035)<br>front panel frame: graphite-grey (like RAL 7024)   |

<sup>1)</sup> 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<sub>peak</sub> (30 VAC<sub>eff</sub>)!

## EXTENT OF SUPPLY

Intercom station incl. short reference

## 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

The indicated line length is valid for standard stations without connected expansion modules.

### GE 800/GE 300

| Cable type   | Power Supply Server                 |                                 |                                 |
|--|-------------------------------------|---------------------------------|---------------------------------|
|  | 24 V AC                             | 30 V DC                         | 26 V DC                         |
| Ethernet cable e.g. Cat. 5<br>Loop resistance: 125 Ω/km<br>Capacity: 44 nF/km (13.4 nf/1,000 ft)                             | 900 m<br>2,953 ft <sup>*1</sup>     | 900 m<br>2,953 ft <sup>*1</sup> | 650 m<br>2,133 ft <sup>*1</sup> |
| Telecommunication cable e.g. F-YAY; ø 0.6 mm; AWG: 22<br>Loop resistance: 133 Ω/km<br>Capacity: 100 nF/km (30.5 nf/1,000 ft) | 900 m<br>2,953 ft <sup>*1</sup>     | 900 m<br>2,953 ft <sup>*1</sup> | 600 m<br>1,969 ft <sup>*1</sup> |
| External Power Supply:   | max. 2,800 m/9,186 ft <sup>*3</sup> |                                 |                                 |

### GE 700/GE 200

| Cable type   | Power Supply Server  |  |                                      |
|--|--|--|--------------------------------------|
|  | 24 V AC  | 30 V DC  | 26 V DC                              |
| Ethernet cable e.g. Cat. 5<br>Loop resistance: 125 Ω/km<br>Capacity: 44 nF/km (13.4 nf/1,000 ft)                             | 850 m<br>2,789 ft <sup>*1</sup><br>1,600 m<br>5,249 ft <sup>*2</sup> | 800 m<br>2,625 ft <sup>*1</sup><br>1,250 m<br>4,101 ft <sup>*2</sup> | –<br>850 m<br>2,789 ft <sup>*2</sup> |
| Telecommunication cable e.g. F-YAY; ø 0.6 mm; AWG: 22<br>Loop resistance: 133 Ω/km<br>Capacity: 100 nF/km (30.5 nf/1,000 ft) | 800 m<br>2,625 ft <sup>*1</sup><br>1,250 m<br>4,101 ft <sup>*2</sup> | 750 m<br>2,460 ft <sup>*1</sup><br>1,250 m<br>4,101 ft <sup>*2</sup> | –<br>800 m<br>2,625 ft <sup>*2</sup> |
| External Power Supply:   | max. 2,800 m/9,186 ft <sup>*3</sup>                                  |  |                                      |

<sup>\*1</sup>... with volume level 9

<sup>\*2</sup>... with volume level 8

<sup>\*3</sup>... with full scope of operation

## SYSTEM REQUIREMENTS

- GE 800 (min. PRO 800 1.1) with G8-GED (min. G3-8-SUB 3.2)
- GE 300 (min. PRO 800 1.1) with G3-GED (min. G3-8-SUB 3.2)
- VirtuoSIS/S3/S6 with ET 901-D (min. firmware version 3.0)
- Configuration software min. CCT 800 1.1



# Installation

## SAFETY INSTRUCTIONS

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

## CONFIGURATION CCT

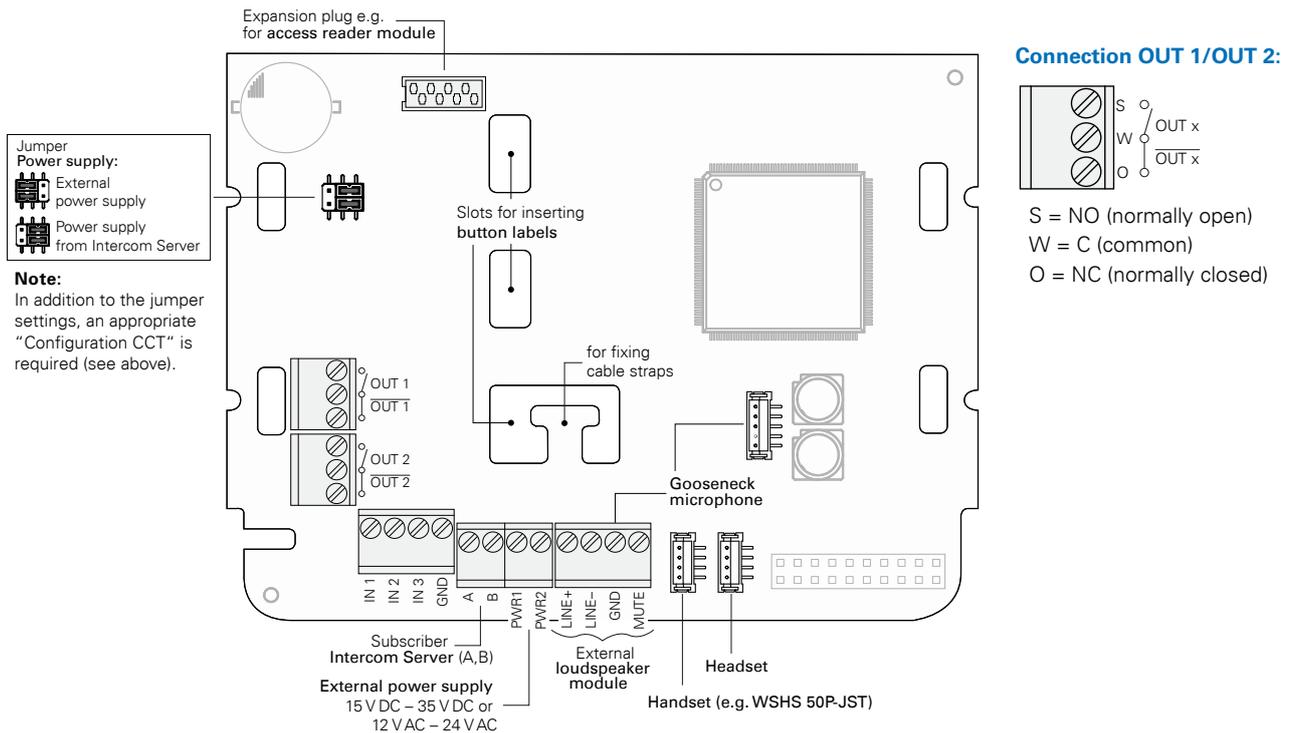
### Use of 2 relay outputs at GE 700/GE 200:

- To be able to use both relay outputs at a GE 700/GE 200 Intercom Server, the station type "EE342" or "EE342A" has to be configured for the WS station via the configuration software CCT at "Station properties".
- Thus, the relay outputs "OUT 1" and "OUT 2" can be activated at "Station properties" – "EE342".

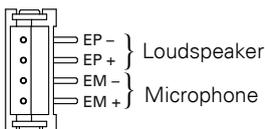
### External power supply / Keypad backlight:

- For an external power supply of the station, the checkbox "External power supply" has to be activated via the configuration software CCT 800 at "Subscriber" – "Station properties" – "WS series" – "WS 200"; tab "Display, Keypad, General" (in addition to the jumper settings described at "Connection").
- The configuration of the keypad backlight is only possible with external power supply. This means the checkbox "External power supply" must be activated!

## CONNECTION

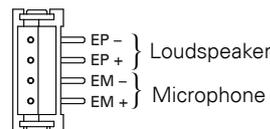


### Connection headset:



**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



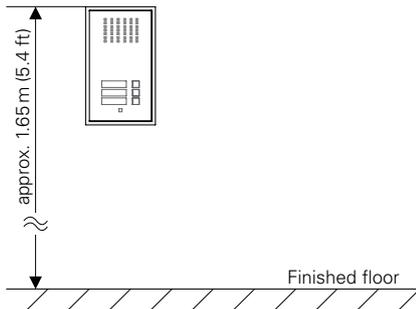
# Installation

## 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

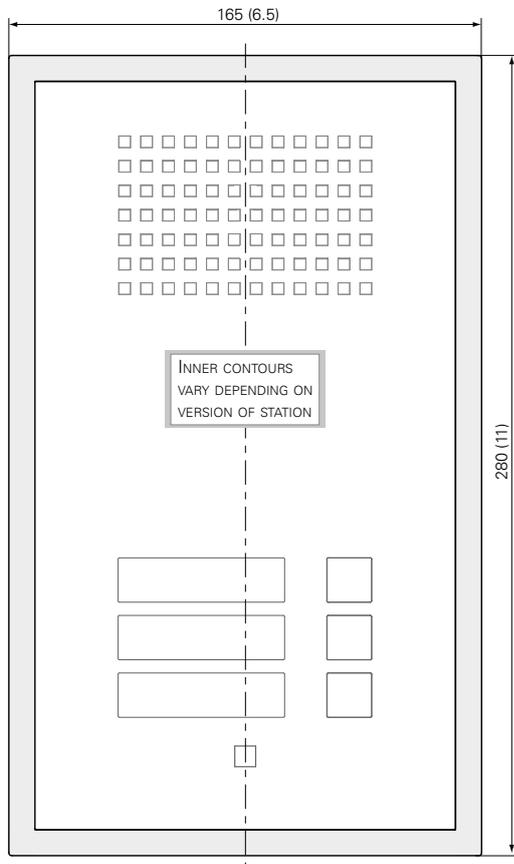
The upper edge of the station approx. 1.65 m (5.4 feet) from the finished floor. Please adapt the mounting height to the individual needs.



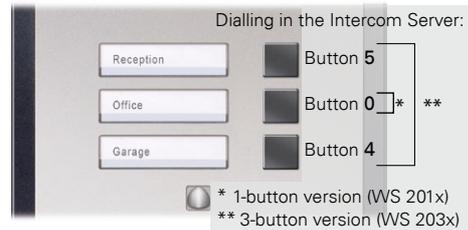
## DIMENSIONS FRONT PANEL

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

Depth: 13 (0.51)  
 cavity wall mounting: 15 (0.59) (*= shadow gap between front panel & wall*)



## 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**.

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