

Series WS 200V D / WS 210V D



Digital Wallmount Stations Series WS 200V / WS 210V

Vandal-resistant sub stations (series WS 200V) and emergency stations (series WS 210V) designed for areas with high requirements on safety. The technology allows excellent speech quality and comprehensibility independent of background noise. Permanent function monitoring ensures in-service status and the 3 mm stainless steel front panel with poke protection and special screws protects against

vandalism. No water spray, dirt or dust can penetrate the compact construction – protection class IP66. Each button can be allocated to a call number and the relevant label area can be filled in individually. The red emergency call button of series WS 210V is easily visible from a considerable distance and can be activated quickly in emergency situations.

1. **WS 201V 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 (connection as normally open or normally closed contact), protection classification IP66 and IK09, material stainless steel.

WS 203V D

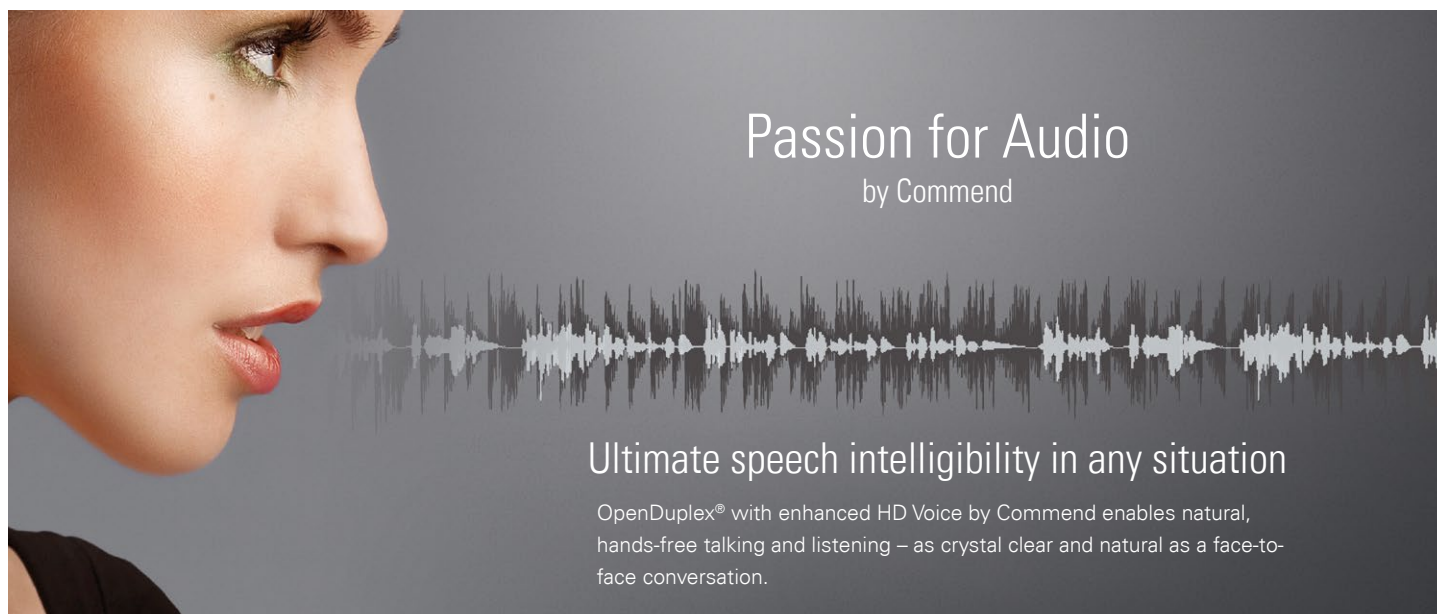
Digital station like WS 201V D but with 3 programmable, back-lit direct dialling buttons and label areas.

2. **WS 211V D (not pictured)**

Digital station with one programmable, back-lit emergency call button, electret condenser microphone with multifunction LED, loudspeakers 2 x 8 Ω, 3 inputs for floating contacts and 2 relay outputs (connection as normally open or normally closed contact), protection classification IP66 and IK09, material stainless steel.

WS 212V D

Digital station like WS 211V D but with an additional programmable, back-lit direct dialling button with label area.

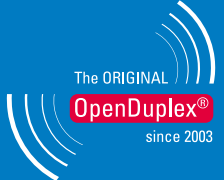





Passion for Audio

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 monitoring</p>
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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

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Technical Data – Benefits

TECHNICAL DATA

IP rating acc. EN 60529:	IP66
Mechanical impact resistance acc. EN 62262:	IK09
Front panel:	1.4301/AISI 304, 3 mm (0.12 in)
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), 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 _{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 each)
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 <i>only series WS 210V</i> : large red emergency call button
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
Power supply:	from Intercom Server or external supply 12–24 VAC or 15–35 VDC power consumption: max. 3.5 W
Attention:	
<ul style="list-style-type: none"> The operation of backlight for call buttons and label areas is available with external power supply only! For further information see "Line Length". 	
Cabling:	star feed, 2-wired, twisted
Signalling:	2B + D (2 x 64 kBit/s speech, 16 kBit/s data)
Mounting:	flush mount kit WSFB 50V surface mount kit WSSH 50V
Dimensions (W x H x D):	with flush mount kit: 164 x 279 x 14 mm (6.46 x 10.98 x 0.55 in) with surface mount kit: 164 x 279 x 50 mm (6.46 x 10.98 x 1.97 in)
Weight incl. package:	approx. 1,500 g (3.3 lbs)

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})!

EXTENT OF SUPPLY

- Intercom station, screws for mounting, short reference
- Series WS 210V*:
3 x paste-on label ("SOS" / "EMERGENCY" / "HELP") for emergency call button

BENEFITS

- Vandal-resistant
- Back-lit direct dialling buttons and label areas
- IP rating IP66 and mechanical impact resistance IK09
- Supports DSP-Features such as OpenDuplex®, Audio Monitoring and 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 VAC	30 VDC	26 VDC
Ethernet cable e.g. Cat. 5 Loop resistance: 125 Ω/km Capacity: 44 nF/km (13.4 nF/1,000 ft)	900 m 2,953 ft ^{*1}	900 m 2,953 ft ^{*1}	650 m 2,133 ft ^{*1}
Telecommunication cable e.g. F-YAY; ø 0.6 mm; AWG: 22 Loop resistance: 133 Ω/km Capacity: 100 nF/km (30.5 nF/1,000 ft)	900 m 2,953 ft ^{*1}	900 m 2,953 ft ^{*1}	600 m 1,969 ft ^{*1}
External Power Supply:	max. 2,800 m/9,186 ft ^{*3}		

GE 700/GE 200

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

^{*1}... with volume level 9

^{*2}... with volume level 8

^{*3}... 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

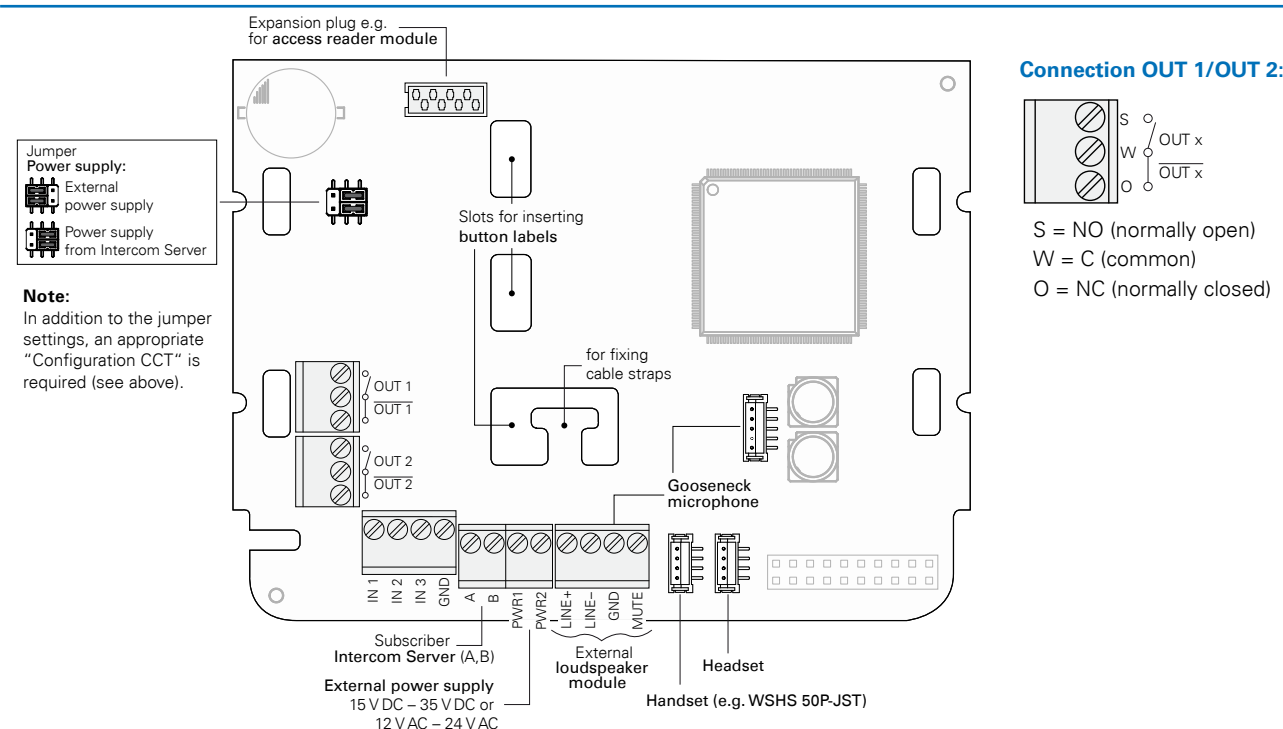
Use of 2 relay outputs at GE 700/GE 200:

- 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".

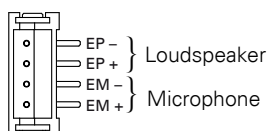
External power supply / Keypad backlight:

- 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

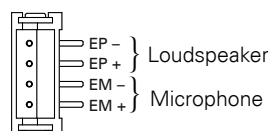


Connection headset:



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

Connection handset:



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

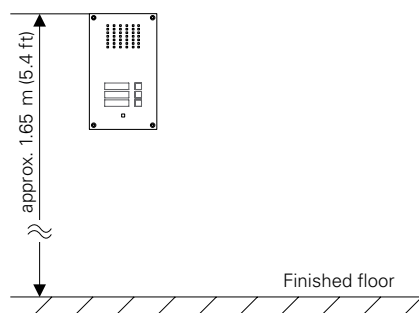
Installation

MOUNTING INSTRUCTIONS

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

Recommended Mounting height

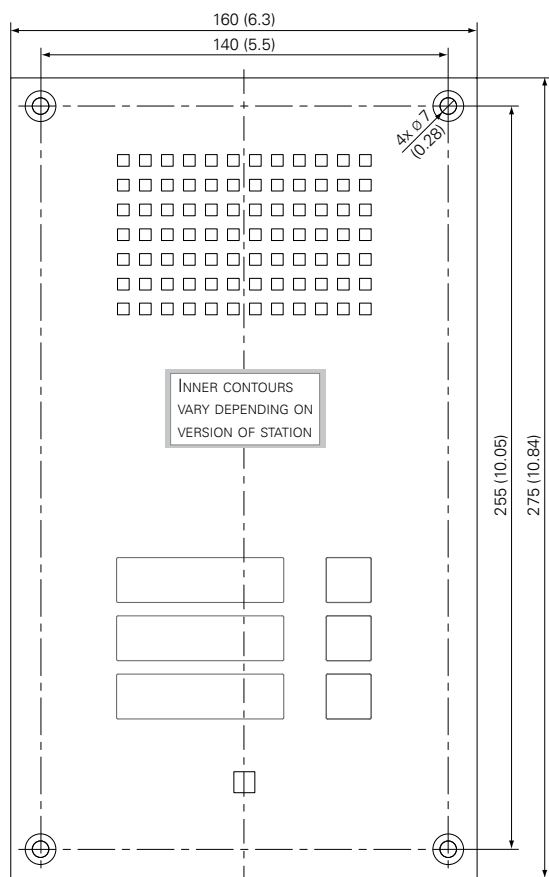
The upper edge of the station approx. 1.65 m (5.4 feet) from the finished floor. Please adapt the mounting height to the individual needs.



DIMENSIONS FRONT PANEL

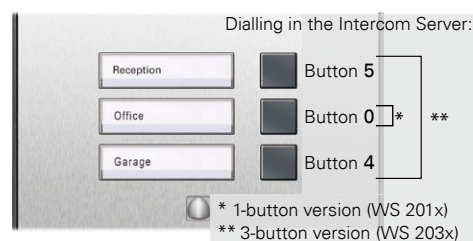
Front panel thickness: 3 mm (0.12")

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

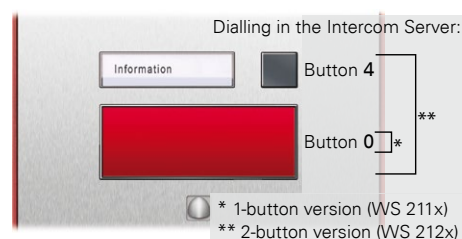


BUTTON CONFIGURATION

Series WS 200V:



Series WS 210V:



SERIES WS 210V LABELLING OF THE EMERGENCY BUTTON

To paste one of the labels (in the extent of supply) onto the large red emergency call button of a station of series WS 210V, consider the following steps:

- Align** the label to the emergency button (paste-on label = same size as the button)
- Paste** the label evenly from one side to the other (right-to-left or left-to-right) onto the emergency button
- Peel-off** the protective film from the label

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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