

EE 311A



2-wire DSP Intercom stations series EE 311A

The Intercom station series EE 311A distinguishes itself with its ergonomic design and outstanding operating convenience. On the alphanumeric display, the calling number and name of the conversation partner is visible and operating states, e.g. alarms, can be indicated. To the three function buttons, variable functions can be assigned, e.g. scrolling of messages and calls or volume control. A multi-function LED clearly indicates, if the station is active. An integrated output amplifier allows different volume levels

to be set for conversations, sounds, reception of music etc. The index field is ideal for listing of call numbers and other important information. The Intercom station series EE 311A is manufactured in the new DSP technology, which enables functions such as Audio Monitoring or Loudspeaker/Microphone Surveillance. The stations are also prepared for future download of new functions and can utilise the OpenDuplex® capability of the Intercom Servers.

1. EE 311A

Desktop master station with reinforced silicone keypad (standard keypad with three additional function keys), 6-character (16-segment) alphanumeric display, electret microphone, loudspeaker, multifunction LED, 3 m (9.8 ft) connection cable. Handset function with automatic switching (on the desk as a desktop station with excellent handsfree speech quality, when picked up as handset with reduced volume). The 3D gravitation sensor can also be used for other functions, e.g. call forwarding. Optional input or open-collector output (switchable via internal jumper, not with EE 320A, EF 320A). Prepared for soldering in an output relay. Connection of headset, headphones or gooseneck microphone (not with EE 301A). Version EF 311A with restricted dialling possibilities (T, O, X).

2. EE 372A

Desktop master station like EE 311A, but with noise cancelling gooseneck microphone and special anti-tilt stand. Without handset function. The DSP features Audio Monitoring or Loudspeaker/Microphone Surveillance are not available for this station type due to the gooseneck microphone.

3. EE 320A

Wall mount master station like EE 311A. Handset function with automatic switching (in the wall mount with hands-free speech with excellent speech quality, when lifted out of the wall bracket with reduced volume). Version EF 320A with restricted dialling possibilities (T, O, X).

Technical Data – Benefits

TECHNICAL DATA

IP rating:	IP50, resistant against dust, dirt, aggressive air
Keyboard:	silicon type with plastic layer activation force: 1.3 N, 1 x 10 ⁶ cycles
Housing:	shock proof ABS polycarbonate
Microphone:	EE 311A, EE 301A, EF 311A, EE 320A: omnidirectional electret microphone for max. 7 m (23 ft) speaking distance EE 372A: additional electret noise cancelling microphone with cardioid characteristic for 3–10 cm (1–4 in) speaking distance
Loudspeaker:	special membrane type for optimal sound quality, sound pressure level: 85 dB/1 W/1 m (3.28 ft), 8 Ω possibility for connection of an external loudspeaker ≥ 8 Ω
Amplifier:	built-in amplifier: 2.5 W output power with built-in loudspeaker: 1.5 W
Display:	6-character, alphanumeric (16-segment)
Call indication:	multifunction LED (colours: red, green, blue)
Input:	1 input for floating contacts, max. 1 kΩ
Output:	1 open collector output (30 VDC / 50 mA)
Transmission bandwidth:	16 kHz
Operating temperature range:	-10 °C to +60 °C (14 °F to 140 °F)
Storage temperature range:	-20 °C to +60 °C (-4 °F to 140 °F)
Relative Humidity:	up to 95%
Plug:	EE 311A, EE 301A, EF 311A, EE 372A: modular jack 6/6 for connection to Intercom Server modular jack 4/4 for connection of headset and headphones EE 320, EF 320A: pluggable screw terminals
Cabling:	star feed, 2-wires, twisted
Power supply:	from Intercom Server option: external supply for greater line length or external loudspeaker (20–24 VAC or 28–35 VDC, 100 mA)
Signalling:	2B + D (2 x 64 kBit/s speech, 16 kBit/s data)
Dimensions:	EE 311A, EE 301A, EF 311A: 66 x 230 x 55 mm (2.6 x 9.1 x 2.2 in) EE 320A, EF 320A: 73 x 232 x 57 mm (2.9 x 9.1 x 2.2 in) EE 372A: 179 x 230 x 57 mm (7.1 x 9.1 x 2.2 in) (gooseneck 400 mm / 15.7 in)
Weight incl. package:	EE 311, EE 301: 380 g (0.8 lbs) EF 311: 360 g (0.8 lbs) EE 320, EF 320: 460 g (1 lbs), EE 372: 715 g (1.6 lbs)
Colours:	all types available in black (like RAL 9011) EE 311A, EE 301A, EE 320A, EF 320A: additionally available in light-grey (like RAL 7035) EE 320A: additionally available in red (like RAL 3020)

EXTENT OF SUPPLY

- 1 Intercom station including:
- Connection cable 3 m (9.8 ft), pluggable at both sides (EE 320A, EF 320A with curly cord, pluggable at one side)
 - Short reference and operating instructions
 - EE 320A, EF 320A includes screws and dowels for wall mounting

BENEFITS

- High quality speech, even from a distance (up to 7 m/23 ft)
- DSP technology, prepared for software download of future functions
- Audio Monitoring, adjustable integration time and threshold level (except EE 372A)
- Microphone /Loudspeaker Surveillance (except EE 372A)
- Integrated amplifier with 2.5 W output power
- Modular jack 6/6 for connection cable (EE 320A, EF 320A: plug on one side, coiled connection cable)
- Connection of headset, headphones or gooseneck microphone (not at EE 301A)
- EE 311A, EF 311A and EE 320A, EF 320A available with hand-set function

LINE LENGTH

Cable type	Power supply Intercom Server		
	24 VAC	30 VDC	26 VDC
Ethernet cable e.g. Cat. 5 Loop resistance: 190 Ω/km Capacity: 48 nF/km (14.4 nf/1000 ft)	1,500 m (4,922 ft)	1,600 m (5,249 ft)	1,200 m (3,937 ft)
Telecommunication cable e.g. F-YAY; ø 0.6/0.8mm; AWG: 22/20 Loop resistance: >135 / >73 Ω/km Capacity: 100 nF/km (30.5 nf/1000 ft)	1,500 m (4,922 ft)	1,500 m (4,922 ft)	1,100 m (3,609 ft)

The indicated line length is valid for standard stations without additional external loudspeaker and max. volume level 9.

Cable type	External power supply		
	24 VAC	30 VDC	26 VDC
Ethernet cable e.g. Cat. 5 Loop resistance: 190 Ω/km Capacity: 48 nF/km (14.4 nf/1000 ft)	3,000 m (9,843 ft)	3,000 m (9,843 ft)	3,000 m (9,843 ft)
Telecommunication cable e.g. F-YAY; ø 0.6/0.8mm; AWG: 22/20 Loop resistance: >135 / >73 Ω/km Capacity: 100 nF/km (30.5 nf/1000 ft)	2,000 m (6,561 ft)	1,800 m (5,905 ft)	1,800 m (5,905 ft)

SYSTEM REQUIREMENTS

FULL SCOPE OF OPERATION only with Intercom Server generation GE 800 / GE 300:

- GE 800 (min. PRO 800 1.0) with G8-GED
- GE 300 (min. PRO 800 1.0) with G3-GED

BACKWARDS COMPATIBILITY to Intercom Server generation GE 700 / GE 200:

- GE 200 (as of Pro 05.4) with G2-GED-4
- GE 700 (as of Pro 05.4) with G7-GED-4 (min. software V02.2)

Note: This limited scope of function affects applications like volume control (only possible in a range from 0 to 9) or call indication (only red light indication).



Installation

PRECAUTIONS

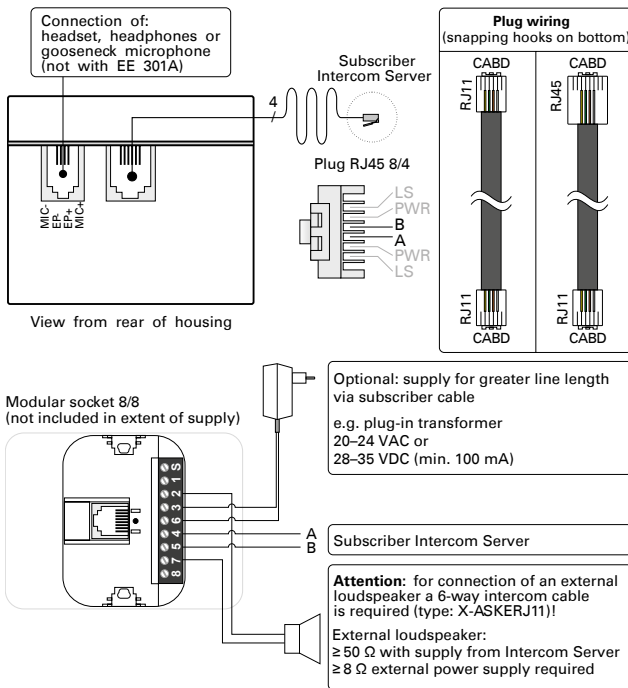
- When opening the stations, ESD precautions must be observed.
- The stations may only be opened by authorised service engineers.

POSITION AND MOUNTING INSTRUCTIONS

- Do not expose the station to extreme temperatures below $-10\text{ }^{\circ}\text{C}$ or above $+60\text{ }^{\circ}\text{C}$ ($14\text{ }^{\circ}\text{F}$ to $140\text{ }^{\circ}\text{F}$).
- The station must stand on its own, not e.g. in a shelf or under a filing tray.
- Do not position the stations besides the base station of a cordless phone.

CONNECTION DIAGRAMS

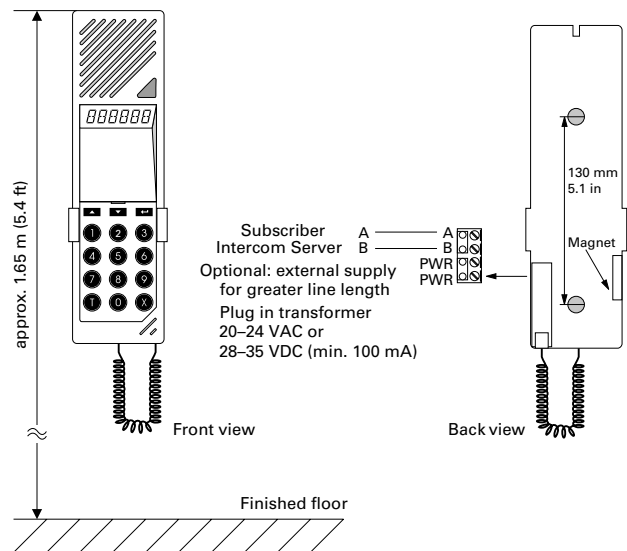
EE 311A, EE 301A, EE 372A, EF 311A



Note: The connection for an external loudspeaker can be switched to an input or open-collector output via internal jumper (output relay retrofittable).

Attention: The conversion may only be carried out by authorised sales partners!

EE 320A, EF 320A



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

QUALITY TESTED. RELIABLE. SMART.

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The development and manufacturing processes are certified in accordance with **EN ISO 9001:2008**.

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