

EE 811A / EE 872A

2-wire DSP Intercom stations



Backwards
compatibility

OpenDuplex®
technology

Audio +
functionality

Proven 2-wire technology

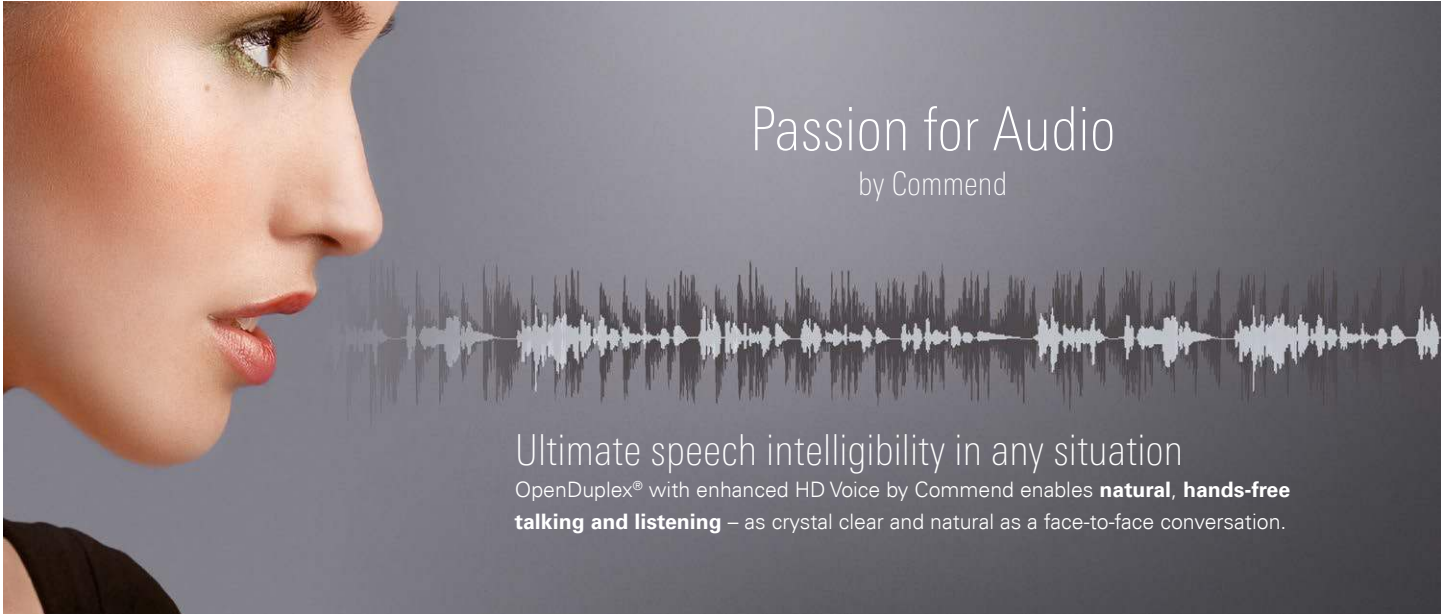
The dynamic design of the station series EE 811A fits perfectly into any modern office environment.

The large, illuminated graphic display shows a multitude of functions from every point of view. The great variety of functions together with the extreme ease and convenience of use make it a perfect choice for high-performing, multi-functional Intercom stations.

A bright multifunction LED clearly indicates different conditions of the station's operation. An integrated output amplifier allows different volume levels to be set for conversations, sounds, reception of music etc. The proven DSP-technology enables functions such as OpenDuplex®, audio monitoring or microphone/loudspeaker surveillance.

Features and highlights

- White illuminated graphic display with on-screen menu, brightness and contrast adjustable.
- Excellent 16 kHz speech quality, for optimum intelligibility.
- OpenDuplex® with powerful Blackfin DSP.
- EE 811A: Audio Monitoring, adjustable integration time and noise level.
- EE 811A: microphone/loudspeaker surveillance.
- Voltage monitoring, i.e. when in use of greater line length, the volume will be reduced automatically.
- High volume levels due to digital class-D amplifier.
- Bright multifunction LED indicates the station's operation status (e.g. call indication).
- Connection of headset or headphones.
- EE 811A: Easy to handle switch-over functions by use of a 3D gravitation sensor, e.g. for handset function.

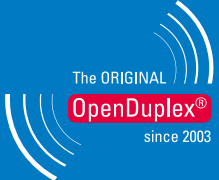


Passion for Audio

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.

 Natural communication	 Enhanced HD Voice	 High volume	IVC Intelligent Volume Control	 Loudspeaker/microphone surveillance
--	--	--	--	--

Audio // Basics

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)
Sound pressure level	High volume up to 99 dB
Amplifier	High efficient class-D amplifier with 2.5 W
Microphone	Omnidirectional resp. cardoid electret condenser microphone
Loudspeaker	8 Ω loudspeaker with humidity-resistant special membrane type for optimum sound quality

Audio // Functions

- Loudspeaker/microphone surveillance** – 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 defined noise levels for more security
- 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. for security solutions based on the “push-to-talk/release-to-listen” method
- OpenDuplex®** for natural, hands-free communication
- IVC** (Intelligent Volume Control) automatically adjusts the device's volume setting to the ambient noise level

EE 811A / EE 872A

Technical specifications

Technical data

IP rating:	IP50 (acc. EN 60529)
Keypad:	silicon type, activation force: 2.2 N, 1 x 10 ⁶ cycles
Housing:	shock proof ABS polycarbonate
Microphone:	EE 811A: electret condenser microphone polar pattern: omnidirectional speaking distance: max 7 m (23 ft) EE 872A: electret condenser microphone polar pattern: cardioid speaking distance: 3–10 cm (1–4 in)
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 additional external loudspeaker: ≥ 8 Ω ¹⁾
Amplifier:	built-in amplifier: 2.5 W output power with built-in loudspeaker: 1.5 W
Display:	white illuminated, full graphic 64 x 84 DOT, 8 lines x 14 characters, temperature compensated
Status indicator:	multifunction LED (colours: red, green, blue)
Position switch:	3D gravitation sensor
Input:	1 input for floating contacts, max. 1 kΩ
Output:	1 open collector output (30 VDC / 50 mA)
Transmission bandwidth:	16 kHz
Relative humidity:	up to 95%
Operating temperature range:	0 °C to +50 °C (+32 °F to +122 °F)
Storage temperature range:	–20 °C to +50 °C (–4 °F to +122 °F)
Connection:	modular jack 6/6 for connection to Intercom Server modular jack 4/4 for connection of headset, headphones
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 (W x H x D):	EE 811A: 66 x 240 x 58 mm (2.6 x 9.46 x 2.29 in) EE 872A: 179 x 240 x 58 mm (7.05 x 9.46 x 2.29 in) (gooseneck 400 mm / 15.7 in)
Weight incl. package:	EE 811A: approx. 500 g (1.1 lbs) EE 872A: approx. 800 g (1.8 lbs)
Colours:	all types available in black (like RAL 9011)

¹⁾ Observe line length (voltage monitoring)!



Line length

The indicated line length is valid for standard stations without additional external loudspeaker. With these line lengths, max. the volume level 9 and display backlight intensity 9 are possible.

Card type	Power supply Server			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)	1,500 m (4,922 ft)	1,500 m (4,922 ft)	900 m (2,953 ft)	3,000 m (9,843 ft)
Telecommunication cable e.g. F-YAY; ø 0.6 / 0.8 mm; AWG: 22 / 20 Loop resistance: >135 / >73 Ω/km Capacity: 100 nF / km (30.5 nF / 1000 ft)	1,500 m (4,922 ft)	1,400 m (4,593 ft)	800 m (2,625 ft)	

System requirements

- GE 800 (min. PRO 800 1.0) with G8-GED)
- GE 300 (min. PRO 800 1.0) with G3-GED)
- 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 – limited scope of functions with GE 700/GE 200:

When operating the module in combination with the server generation GE 700/GE 200, 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).

Extent of supply

- 1 Intercom module including:
 - Connection cable (3 m / 9.8 ft), pluggable at both sides
 - Short reference and operating instructions

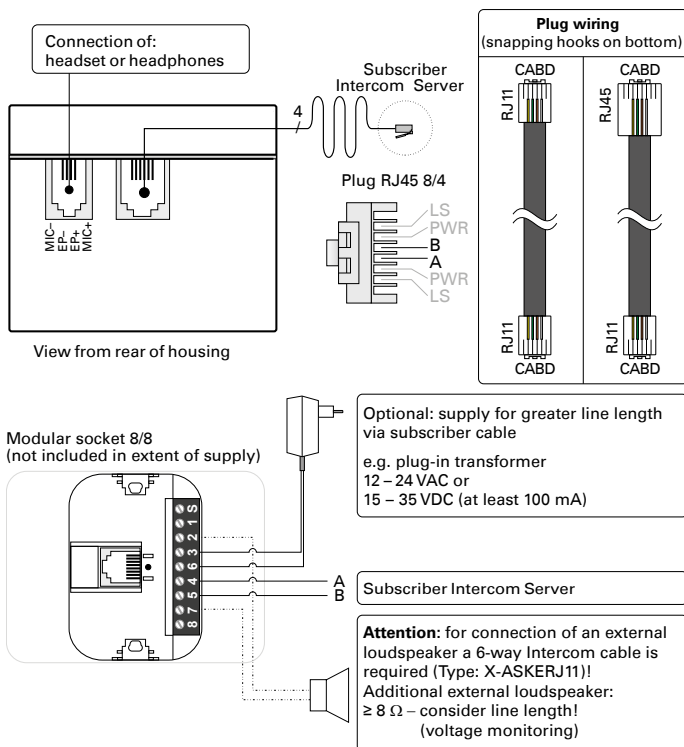
EE 811A / EE 872A

Installation instructions

Precautions and mounting instructions

- For conversations in OpenDuplex®, max. the volume level 9 may be set for the station.
- When opening the stations, ESD precautions must be observed.
- Do not expose the station to extreme temperature (see technical data).
- The stations may only be opened by authorised service engineers.
- The Intercom station EE 811A may only be positioned on level surfaces because of the handset function.
The angle of inclination may not be more than 30 degrees.
- 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



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 be carried out by authorised sales partners only!

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. lolP®, 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 all over the world by local Commend Partners and helps to improve security and communication with tailored Intercom solutions.