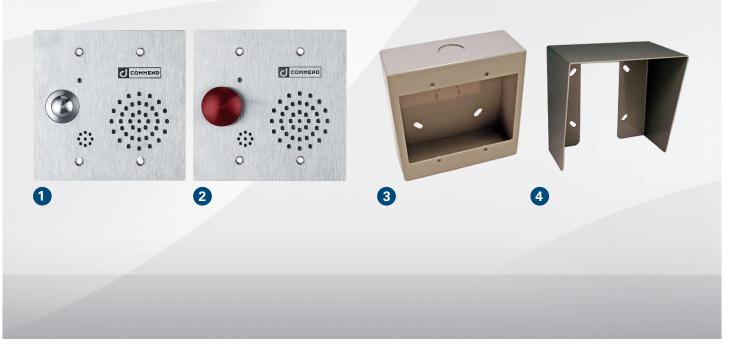
## DATASHEET

## **ES** series



## 2-Wire 2-gang Substations

The digital flushmount substations ES831A and ES833A are designed especially for building into American "2-gang" boxes. The intercom stations are manufactured in the new DSP-technology, which enables functions such as Audio-Monitoring or Loudspeaker/Microphone Monitoring. The stations are prepared for future download of new functions (updates to new versions) and can utilize the Open Duplex capability of the GE300 and GE800 intercom servers.

#### 1. ES831A

Silver button tamper resistant 2-wire substation with new DSP-technology. Integrated digital duplex controller for optimal speech quality at the door, even from a distance or with high ambient noise levels. A protective plate in front of loudspeaker prevents possible damage.

#### 2. **ES833A**

Red mushroom button tamper resistant 2-wire substation with new DSP-technology. Integrated digital duplex controller for optimal speech quality at the door, even from a distance or with high ambient noise levels. A protective plate in front of loudspeaker prevents possible damage.

#### 3. **ES2GBB**

- 2-gang backbox
- powder coated gray
- 4. ES2GRH
- 2-gang rain hood
- powder coated gray



# **Technical Data – Benefits**

### **TECHNICAL DATA**

Keyboard:	Possibility of connecting 12 buttons, with plug for row/column matrix				
Microphone: Omnidirectional electret microphone max. 7 m (23 ft) speaking dista					
Loudspeaker: Special membrane type for optimal so quality, sound pressure: 85 dB/1 W/1 m (3.28 ft), 8 (					
Amplifier:	output power with	built-in amplifier 2.5 W utput power with built-in loudspeaker: 1.5 W			
Input:	1 input for floating contacts, max. 1 kOhm (detection of 5 input states)				
Output:	Output: 1 relay output 30 V / 1				
Call indication:		multifunctional LED (colours: red, green, blue)			
Frequency range	ə:	200 – 16,000 Hz			
Operating temp	erature range:	–20° C to +70° C (–4° F to 158° F)			
Storage tempera	ature range:	–20° C to +70° C (–4° F to 158° F)			
Relative humidity: up to 95					
Plug:	Plug: pluggable screw terminals - expansion plug for e.g. EB 2E2A				
Cabling:		star feed, 2-wire, twisted			
Power supply: from Intercom Server Option: external power supply for greater line length (12–24 VAC or 15–35 VDC, 500 mA)					
Signalling:	2B + D (2 × 64 kBit/s speech, 16 kBit/s data)				
Measurements:	Measurements: 87.5 x 109 x 40 mm (3.45 x 4.29 x 1.58 ir				
Weight incl. pac	kage:	195 g (0.4 lbs)			

### **BENEFITS**

- Excellent 16 kHz speech quality, even from a distance (up to 7 m / 23 ft)
- · Cabling with 2 wires, star feed, fully digital transmission of speech and data
- DSP-technology, prepared for software download of future functions
- Audio-Monitoring, adjustable integration time and noise level
- Loudspeaker-/Microphone Surveillance
- Built-in loudspeaker and microphone
- Integrated amplifier with 2.5 W output
- Output contact for direct connection of e.g. doors or gates
- · Connection of 12 buttons with row/column matrix
- Expansion via optional expansion boards (e.g. EB 2E2A)

### **EXTENT OF SUPPLY**

1 Intercom module including:

- · Light pipe and plexiglass LED cover, optionally as light guide for the multifunction-LED.
- Short reference

#### SYSTEM REQUIREMENTS

#### FULL SCOPE OF OPERATION only with GE 800/GE 300:

- GE 800 (min. PRO 800 1.2) with G8-GED (G3-8-SUB min. 3.2)
- GE 300 (min. PRO 800 1.2) with G3-GED (G3-8-SUB min. 3.2)

#### BACKWARDS COMPATIBILITY to GE 700/GE 200:

Is recognized as ET 862 and therefore can only be used with the feature scope of the ET 862.

- GE 700 (min. Pro 05.0) with G7-GED-4 (min. Software V02.2)
- GE 200 (min. Pro 05.0) with G2-GED-4 (all software versions)

#### See also page 4.

## LINE LENGTH

	Power Supply Intercom Server		
Cable type	24 V AC		26 V DC
Ethernet cable e.g. Cat. 5 Loop resistance: 190 Ω/km Capacity: 48 nF/km	1500 m 4921 ft	1700 m 5577 ft	1400 m 4593 ft
Telecommunication cable e.g. F-YAY; ø 0,6/0,8mm Loop resistance: >135 / >73 Ω/km Capacity: 100 nF/km	1500 m 4921 ft	2100 m 6889 ft	1500 m 4921 ft
External power supply	max. 2800 m / 9186 ft		

External power supply

All values for connected loudspeaker  $\geq 8 \Omega$  and Volume level 9. Voltage Monitoring see page 4.

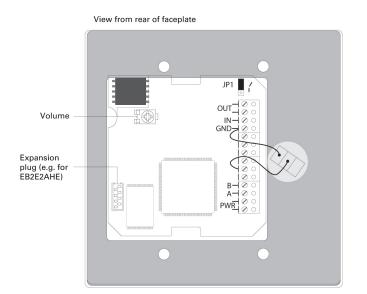


# Installation

## PRECAUTIONS

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

## **CONNECTION DIAGRAM**





# **COMMEND** A strong Partner Network | Worldwide

Europ	е		America	
SWITZERLAND	Te	ommend AG el. +41-44-955 02 22 ww.commend.ch	USA CANADA LATIN AMERICA	Commend Inc. Tel. +1-201-529-2425 www.commendusa.com
FRANCE	T	ommend France S.A.S. el. +33-149 18 16 40 ww.commend.fr	Asia	
CDAIN		ommend Iberica S.L.	Asia	
SPAIN PORTUGAL	Te	el. +34-91-395 24 98 www.commend.es	CHINA	Commend Business Hub China Isolectra China Tel. +86-21-52 13 19 28
ITALY	Te	ommend Italia s.r.l. el. +39-035-95 39 63 ww.commend.it	: MALAYSIA :	www.isolectra.com.cn Commend Business Hub Malaysia
			MALATSIA	Isolectra (M) Sdn Bhd
NETHERLANDS BELGIUM	T	ommend Nederland B.V. el. +31-76-200 01 00 vww.commend.nl		Tel. +603-7846-9988 www.isolectra.com.my
AUSTRIA CROATIA SERBIA SLOVENIA RUSSIA	Te W	ommend Österreich GmbH el. +43-1-715 30 79 www.commend.at	SINGAPORE	Commend Business Hub Asia Isolectra Far East Pte. Ltd Tel. +65-6272-2371 www.commend.com.sg
SLOVAKIA CZECHIA	C T	ommend Slovakia spol. s r.o. el. +421-2-58 10 10 40 vvvv.commend.sk	Middle East	Sberlophone Ltd
UNITED KINGDOM IRELAND	C To	ommend UK Ltd el. +44-1279-45 75 10 www.commend.co.uk		Tel. + 972-4-834 10 32 www.sberlophone.co.il
POLAND	Te	&C Partners Telecom Sp.z o.o. el. +48-65-525 55 55 www.ccpartners.pl	Oceania AUSTRALIA :	Commend Australia
SWEDEN NORWAY FINLAND	JI To	NT Sound System AB el. +46-8-99 30 60 ww.jnt.se	NEW ZEALAND	Tel. +61-3-9755-3947 www.commend.com.au
DENMARK ISLAND			Other countries	
GERMANY LUXEMBOURG RUSSIA	T	chneider Intercom GmbH el. +49-211-88285-333 ww.schneider-intercom.de		Commend International GmbH Tel. +43-662-85 62 25 www.commend.com



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