

# US-USM-831-A / 833-A

Vandal resistant wallmount substation



## The Intercom solution for security-critical applications

Tamper/Weather resistant security substation connects to Commend servers via 1 twisted pair of wire. It is used for either stanchion or security wall housing mounts, when both attractive appearance and extreme durability are important.

### US-USM831A

- Digital / DSP Substation
- Full open duplex communications
- Connects using 1 twisted cable pair
- Rugged 11 gauge stainless steel faceplate
- True tamper resistant construction
- Rugged call button
- Weather resistant
- Sensitive electret microphone
- Mounts in most major stanchions and security wall housings
- Mic Open LED
- Full Supervision (speaker, microphone, station electronics, cable, network)
- Red Piezo button

### US-USM831A-2T

- Digital / DSP Substation
- Full open duplex communications
- Connects using 1 twisted cable pair
- Rugged 11 gauge stainless steel faceplate
- True tamper resistant construction
- 2 Rugged call buttons
- Weather resistant
- Sensitive electret microphone
- Mounts in most major stanchions and security wall housings
- Mic Open LED
- Full Supervision (speaker, microphone, station electronics, cable, network)
- Red Piezo Button
- Second Black Piezo button

# US-USM-831-A / 833-A

## Technical specifications

### Technical Data US-USM-831-A / 833-A

<b>Operating temperature range:</b>	-20 °C to +70 °C (-4 °F to +158 °F) <sup>1)</sup>
<b>Storage temperature range:</b>	-20 °C to +70 °C (-4 °F to +158 °F) <sup>1)</sup>
<b>Relative Humidity:</b>	up to 95% not condensing
<b>Microphone:</b>	Omnidirectional electret microphone for max. 7 m (23 ft) speaking distance)
<b>Loudspeaker:</b>	Special membrane type for optimal sound quality, sound pressure: 85 dB/1 W/1 m (3.28 ft), 8 Ohm
<b>Input:</b>	1 input for floating contacts, max. 1 kOhm (detection of 5 input states)
<b>Output:</b>	1 relay output 30V / 1 A
<b>Call indication:</b>	Multifunctional LED (colors: red, green, blue)
<b>Frequency range:</b>	200 - 16,000 Hz
<b>Plug:</b>	Pluggable screw terminals - expansion plug for e.g. EB 2E2A
<b>Cabling</b>	Star feed, 2-wire, twisted
<b>Power supply</b>	From Intercom Server Option: external power supply for greater line length (12-24 VAC or 15-35 VDC, 500 mA)
<b>Signalling:</b>	2B + D (2 x 64 kBit/s speech, 16 kBit/s data)
<b>Measurements:</b>	9.56 x 11.81 see drawing page 4
<b>Weight:</b>	about 220 g (0.5 lbs)

<sup>1)</sup> Temperature range for MIC 480: -20 °C to +70 °C (-4 °F to +158 °F)

### Line Length

Cable Type	Power Supply Intercom Server		
	24 V AC	30 V DC	26 V DC
<b>Ethernet cable e.g. Cat. 5</b>	1500 m	1500 m	900 m
<b>Loop resistance: 190 Ω/km</b>	4922 ft	4922 ft	2953 ft
<b>Capacity: 48 nF/km (14.4 nf/1000 ft)</b>			
<b>Telecommunication cable e.g. F-YAY; ø 0.6/0.8 mm; AWG: 22/20</b>	1500 m	1500 m	800 m
<b>Loop resistance &gt;135 / &gt;73 Ω/km</b>	4922 ft	4922 ft	2625 ft
<b>Capacity: 100nF/km (30.5 nf/1000 ft)</b>			

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

### Product variations US-USM-831-A

<b>US-USM-831A-1</b>	Red piezo call button, with Emergency in red
<b>US-USM-831A-2</b>	Red piezo call button, with Assistance in black
<b>US-USM-831A-3</b>	Red piezo call button, with Help in black
<b>US-USM-831A-4</b>	Black piezo call button, with Assistance in blue
<b>US-USM-831A-5</b>	Black piezo call button, with Assistance in black
<b>US-USM-831A-2T-1</b>	1 red piezo call button, with Help in red, and 1 black piezo call button with Call in black
<b>US-USM-831A-2T-2</b>	1 red piezo call button, with 911 in red, and 1 black piezo call button with Help in black
<b>US-USM-831A-2T-3</b>	1 red piezo call button, with Emergency in red, and 1 black piezo call button with Information in black
<b>US-USM-831A-2T-4</b>	1 red piezo call button, with Emergency in red, and 1 black piezo call button with Assistance in black
<b>US-USM-831A-2T-5</b>	1 red piezo call button, with 911 in red, and 1 black piezo call button with Security Information in black
<b>US-USM-831A-ST-1</b>	1 red piezo call button, with Emergency in red and square self testing call button,

Other buttons and text available. Please contact Commend for a custom quote.

### Product variations US-USM-833-A

<b>US-USM-833A-1</b>	Red mushroom call button, with Emergency in red
<b>US-USM-833A-2</b>	Red mushroom call button, with Assistance in black
<b>US-USM-833A-3</b>	Red mushroom call button, with Help in black
<b>US-USM-833A-4</b>	Red mushroom call button, with Assistance in blue
<b>US-USM-833A-5</b>	Red mushroom call button, with Assistance in black

### Benefits

- GE200 (min. PRO 5.0) with G2-GED-4 (all software versions)
- GE200 (min. PRO 5.0) with G2-DSP-IP-4 and ET901-D
- GE700 (min. PRO 5.0) with G7-GED-4 (all software versions)
- GE700 (min. PRO 5.0) with G7-DSP-IP-4 and ET901D
- GE300 (min. PRO 800 1.0) with G3-GED-4 (all software versions)
- GE300 (min. PRO 800 1.0) with G3-IP-4 and ET901D
- GE800 (min. PRO 800 1.0) with G8-GED-4 (all software versions)
- GE800 (min. PRO 800 1.0) with G8-IP-4 and ET901D

\*Intercom station will detect as ET862 in programming software

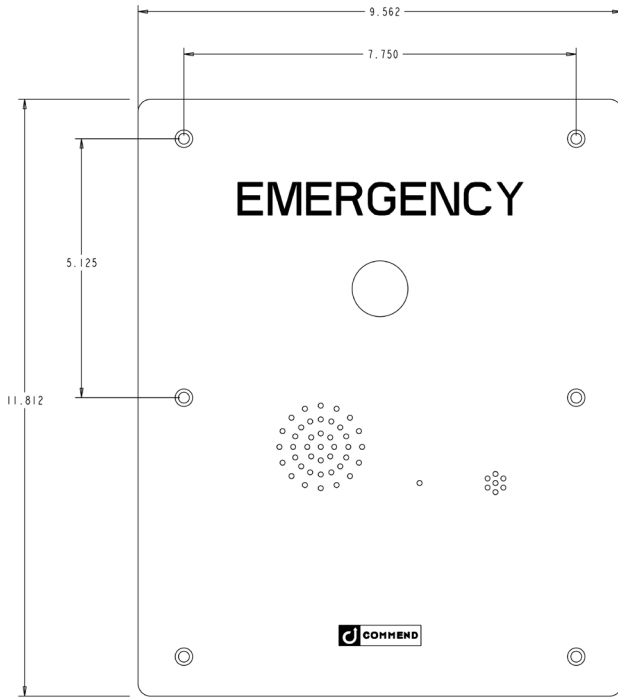
# US-USM-831-A / 833-A

## Installation instructions

### Precautions / Mounting Info

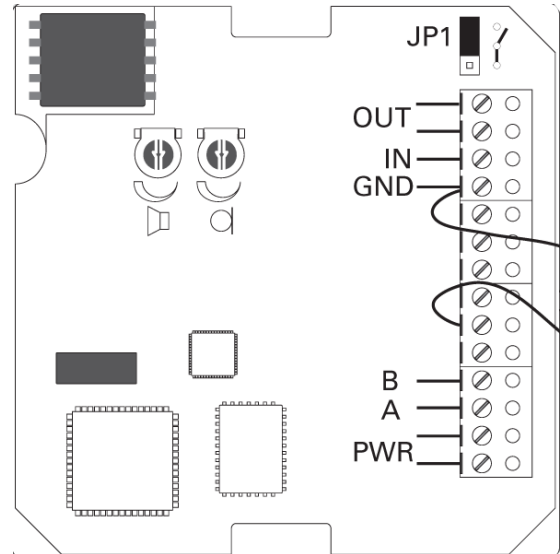
- When opening the stations ESD precautions must be observed.
- The stations may only be opened by authorized service engineers.
- Do not expose the station to extreme temperature (below -40 °C or above +70 °C / -40 °F to +158 °F)
- For stations to be mounted in outdoor areas, the screws must be closed with a sealing compound.

### Connection Diagram US-USM831A



**Note:**

On two-button models, buttons connect with 0 and T.



### Connection Diagram US-USM831A-2T

