

EVX-228N - 2 to 8 Line Master Station

- Repeater compatible
- Fully compliant to BS 5839-9:2021
- Integrated Assist Call and acknowledge meeting BS 8300
- 1.2A Integral PSU
- Full duplex operation
- Wall mount enclosure
- Lockable handset cover
- Expandable from 2 to 8 lines
- Inbuilt networking



An EVCS is a fixed, secure, bi-directional, full duplex voice communication system to assist fire fighters during emergencies in high rise buildings or large sites where radio communication cannot be guaranteed to work due to interference from the fire plasma.

The EVX-228N range of master stations is specifically designed where a repeater or 2nd master station is specified. They provide a simple solution with integral networking capability. They can provide a small network of 2 panels with lines split as 8-0, 6-2, or 4-4 ratio. Note maximum of 8 lines total.

The full range of EVX outstations are compatible and include Type A outstations, Type B Outstations, Type C outstations and jack points for use in far and middle east applications.

Lines auto identify by flashing Red for EVCS calls, Blue for assist calls or flashing Green for connected calls as detailed in BS 5839-9:2021.

The Assist Call range of emergency assistance alarms is fully compatible. It

has become very popular to add these devices as an integrated system. This has several benefits namely:- fault monitored wiring, fully line powered (No mains supply), battery back-up via the master station.

BS 8300 requires that audible and visual feedback should be provided to indicate that, when the alarm has been operated, the emergency assistance call has been acknowledged and actioned. Assist Call meets this requirement and will return to alarm if not reset within two minutes.

The EVX-228N range has built in networking, so can form part of EVX network on campus style sites. A Touchscreen Master Station (EVX-TMS-W-8) is required as the site master. Note the EVX-228N master can only answer local calls and cannot be used as a site master.

Order codes	Description
EVX-228N-0	0 Line Master Station
EVX-228N-2	2 Line Master Station
EVX-228N-4	4 Line Master Station
EVX-228N-8	8 Line Master Station

Technical Specification

Power Supply and Charger

AC input	230VAC +/- 10% 50/60Hz
Internal supply	5V, 16V, 27V DC
Supply	Monitored Open, Short, Fuses, High Impedance
Protection	Deep discharge, Short, Thermal
Battery type	1 x 12V 7AH VRSLA
Mains fuse	240V 1A HRC
Battery fuse	750mA PTC
Charge current	400mA

Inputs

Lines	2-8 in 2 line blocks
Remote enable	Short to use
End of line	10KΩ

Outstation Cables

Type	Standard*/Enhanced
Cores	1 x 2 core radial 1mm or 1.5mm
Distance	500m from master station

Outputs

Number	2, Fault & In use
Fault relay	1 x Volt free NC, Com 30V DC 1A
In use relay	1 x Volt free NO, Com 30V DC 1A

Controls

Buttons	8 Zone keys
Zone LEDs (x8)	RGB Status LEDs
Fault LEDs	3, PSU, System, General
Supply LEDs	2, AC, DC present

Network Cables

Type	Standard*/Enhanced
Cores	2 x 2 core 1mm or 1.5mm (2c data, 2c audio)
Distance	500m max between panels

Standards Compliance

EMC	EN 55035:2017+A11:2020, EN 55032:2015+A1:2020
LVD	EN IEC62368-1:2020+A11:2020
Product Family	BS 5839-9:2021, BS 9999:2017, BS 8300-2:2018

Dimensions	Panel	Bezel	Cutout
Height	300mm	350mm	305mm
Width	350mm	400mm	355mm
Depth	95mm	1mm	85mm
Weight	4.2Kg		

*Refer to BS 5839-9:2021 for exceptions

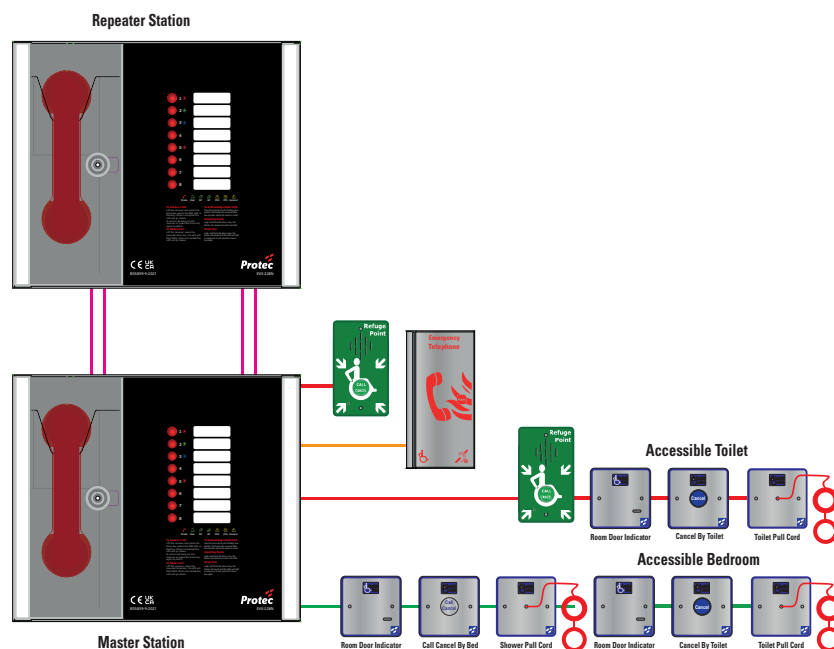
The Protec EVX-228 is a self contained enclosure housing a master handset, one to four dual line cards, power supply & battery charger and can be surface or flush mounted (using the EVX-CBZ Bezel).

The case is made from powder coated zintec, with a smoked perspex door covering the handset. 20mm cable knock-outs are provided for all necessary cables as well as space for the backup 12V VRSLA battery.

The master station is microprocessor controlled, but requires no programming on site; the panel is fitted with end of line resistors which are simply moved to the end of line when an outstation is connected.

Lines can have an accessible toilet and Type B refuge point on the same line, as the front panel RGB indicators identify which is calling, with refuge overriding emergency assist calls as required by BS 5839-9:2021.

Typical Schematic



Cable Key

- 1 off 2 Core 1.5mm CSA Standard Rated Fire Cable
- 1 off 2 Core 1.5mm CSA Enhanced Rated Fire Cable
- 1 off 2 Core 0.2mm Standard LSF (alarm Cable) Minimum

Network 2 off 2 core 1.5mm CSA Standard fire rated unless Type A or type C outstations are used, then it must be enhanced