



Emergency Voice Communication Systems



We supply sound, not equipment

VoCALL 16 EVCS

EMERGENCY VOICE COMMUNICATION SYSTEMS

The VoCALL 16 is a high specification, digital, loop driven, intelligent Emergency Voice Communication System, offering sophisticated functionality along with a simple and intuitive end user interface.

VoCALL16 is designed to ensure the simplicity of future system expansion without additional accessories. A maximum of 16 outstations of any combination can be connected to a main panel on the loop. Loop wired configuration along with short circuit isolators ensures the network is fault tolerant.

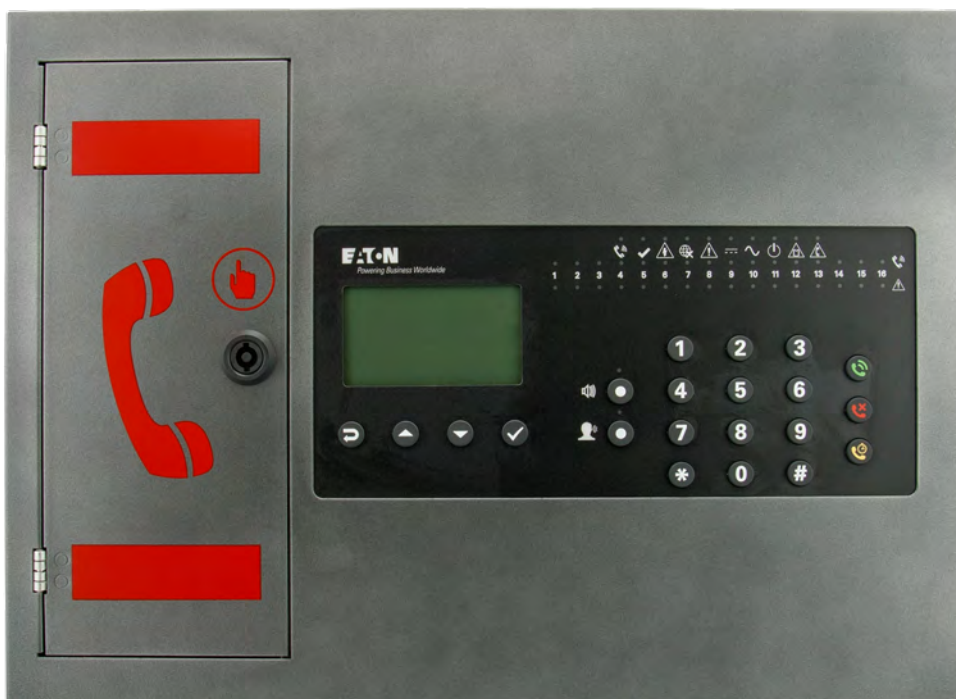
A network version enables a system installation of up to 32 main panels (MX) and network panels (NX) in any combination (a minimum of 1 MX is required). With a maximum of 16 outstations per panel, a total system size of 512 outstations is possible, all connected and communicating via isolated fault tolerant loops.

The system uses digital audio communication to achieve high audio quality and intelligibility when it matters the most.

Continuous fault monitoring ensures high availability. Extensive time stamped logs, also available on SD cards, ensures ease of debugging.

The simplicity of operation, ease of cabling and competitive pricing make the system suitable for a wide range of applications.

In combination with our range of soft addressable digital outstations, stand-alone system reduces labour and material cost along with potential for wiring errors associated with traditional spur systems.



FEATURES

- ▶ Up to 16 digital outstations per panel
- ▶ 4 core loop configuration
- ▶ Network capacity of 512 outstations
 - ▶ Up to 32 panels (main/network) in a loop
 - ▶ Up to 16 digital outstations per panel
 - ▶ 4 core loop configuration (two for power, two for data)
- ▶ Simple to design network
 - ▶ At least one main panel is required
 - ▶ Any combination of panels (MX/NX) possible
 - ▶ Any combination of outstations possible
 - ▶ Centrally controlled by a main panel
- ▶ Soft addressing of outstations
- ▶ Extensive time stamped logs on SD card
- ▶ Large graphical user interface
- ▶ PIN protected user access
- ▶ Flush mount options
- ▶ Fully compliant with BS5839-9

BENEFITS

- ▶ Fault tolerant loop wired design
- ▶ Simple configuration
- ▶ Fast commissioning
- ▶ Easy maintenance and extensive logging
- ▶ Superior audio quality
- ▶ Simple and intuitive operation
- ▶ End user graphical interface
- ▶ Full range of compatible outstations
- ▶ Quick and simple identification of outstation in use
- ▶ Secure access for standard users

VoCALL 16 EVCS

INSTALLATION

- ▶ The panel is designed for ease of installation with a full range of knockouts on all surfaces along with a substantial rear entry cut-out.
- ▶ Up to 200m max between outstations.
- ▶ Up to 2000m total loop length.
- ▶ Up to 300m max between panels. Up to 9km total loop length.
- ▶ 4 core 1.5mm cable loop (check local standards for cable type and installation regulations).
- ▶ Panels are provided with a keyhole type mounting on the rear for ease of installation and alignment.
- ▶ Key operated hinged lockable door.
- ▶ Mains input protection is provided via a resettable fuse.
- ▶ Comprehensive installation and operation manual is provided on the SD card in each panel and online.

CAPACITY

- ▶ Up to 32 panels in total, with any combination of main/network panel.
- ▶ Master panel has to be a main panel.
- ▶ Up to 16 outstations per panel, with any combination of Type A, Type B and Emergency Assist Alarm (EAA)
- ▶ Network capacity of 512 outstations.



FUNCTIONALITY

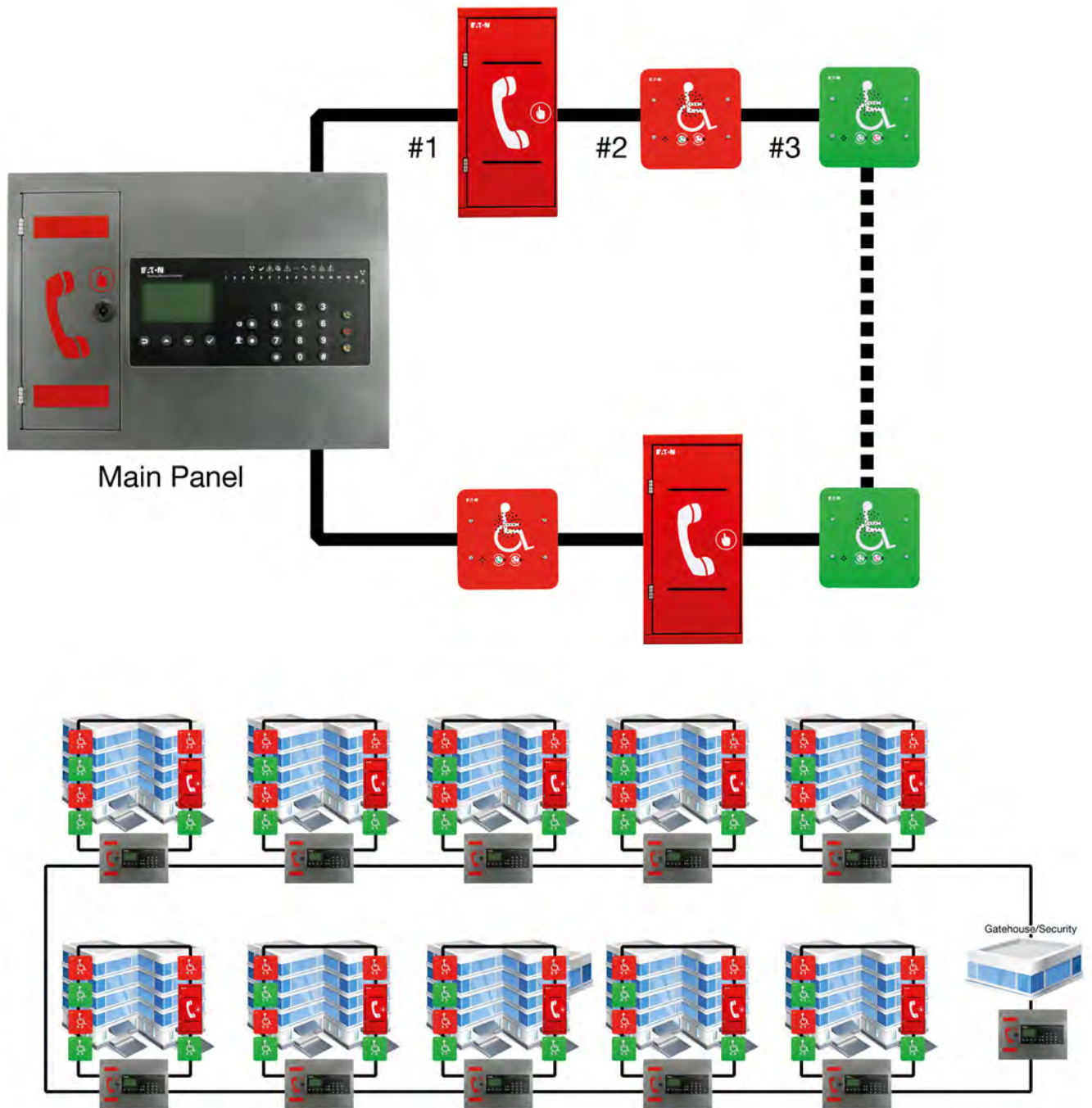
- ▶ Bi-directional calls facility. Lift the handset (Type A)
- ▶ Push the button (Type B) to make a call to panel. Dial the outstation number from panel to call the outstation.
- ▶ Loud-speak and listen in facility available with type B outstations.
- ▶ Three access levels defined - User, Manager, Engineer. Upto 10 personnel accounts with facility to configure access level permissions.
- ▶ Emergency Assist interface for disabled toilet alarms with reassurance function.
- ▶ All personnel accounts are accessed with relevant 4 digit PIN codes enabling security.
- ▶ PIN access required for view panel information, set panel configuration, logs viewing and management, fault management. No PIN access needed to make or receive calls.
- ▶ Intuitive configuration steps made possible with graphical user interface , well structured menu options, soft addressing of outstations on the loop.
- ▶ Indications (LED and buzzer), operation (calls, faults types) and logging in full compliance with BS5839-9:2011. Extensive time stamped logging of all call operations, faults and system events.
- ▶ Digital audio transmission and automatic volume control to maximize clarity of communication between panel and outstation.
- ▶ In event of occurrence of external short circuit, system will operate integral short circuit isolators on the devices nearest to each side of the short isolating the fault. Panel then drive the communication in both directions maintaining rest of the network functional.
- ▶ Adherence to EN 55103:2 2009, EN 55032: 2015 (Emission) EN 55035: 2017 (Immunity), EN 54-4 (Power supply).

USER INTERFACE

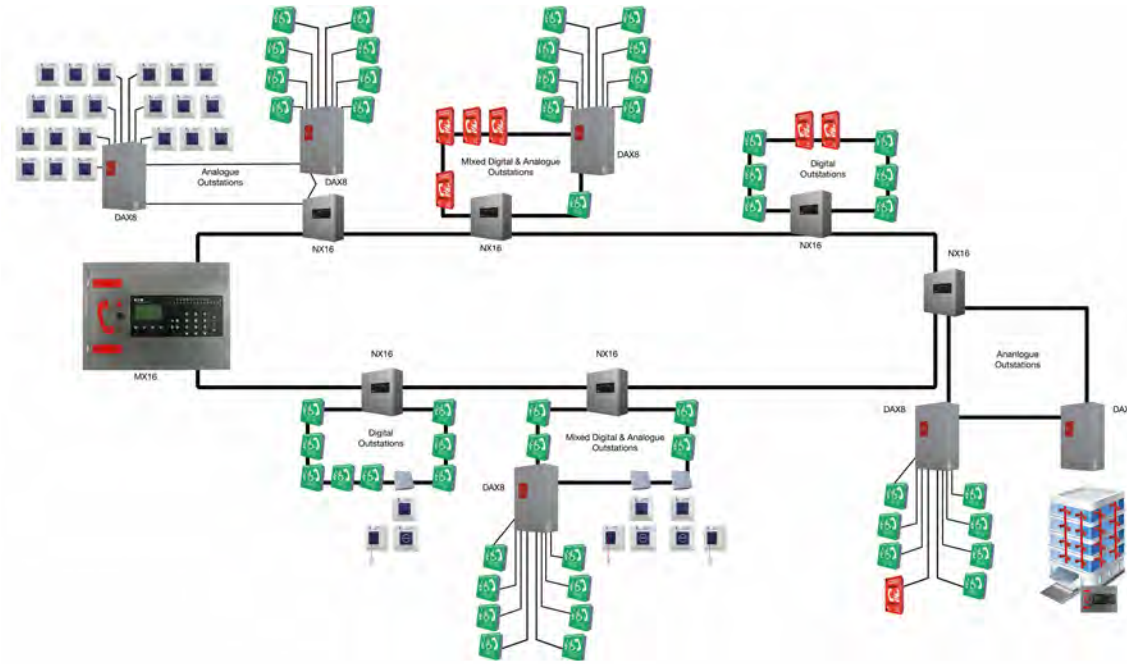
- ▶ Large user interface display (100mm x 40mm) with adjustable brightness provides comprehensive information. This along with large tactile standard mechanical keypad with acoustic feedback allows for ease of operation in an emergency situation even with gloved hands.
- ▶ Clear indication with universal symbols, bright LEDs for depicting system health and operation in a glance. Individual LEDs (16 in #) to indicate call and fault state of each outstation provides comprehensive information even to an untrained user unfamiliar with the operation of the unit.

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WIRING AND INSTALLATION



DAX8 SYSTEM ARCHITECTURE



TECHNICAL SPECIFICATIONS

Power Supply	
Input Voltage	230V ± 10% RMS/60Hz AC – input to power supply
Current Consumption @24V:	Secondary source – Battery back-up Batteries not supplied 2 x Yuasa 12Ah 12V battery (recommended)
VoCALL 16 Main Panel	2.7W
VoCALL 16 Network Panel	2.7W
Type A outstation	0.65W
Type B outstation	0.65W
EAA Outstation	0.65W
Mechanical	
Dimensions (H x W x D mm)	
VoCALL 16 Main Panel	355 x 487 x 158 mm
VoCALL 16 Network Panel	355 x 355 x 145 mm
Type A outstation	320 x 152 x 114 mm
Type B outstation	132 x 132 x 57 mm
EAA Outstation	132 x 132 x 57 mm
Weight (VoCALL 16 Main Panel)	6.7kg (without batteries)
Weight (VoCALL 16 Network Panel)	5kg (without batteries)
Weight (Type A outstation)	2.2kg
Weight (Type B outstation)	0.6kg
Weight (EAA Outstation)	0.6kg
Environmental	
Temperature (Storage)	-5° to +40°C
Temperature (Operational)	-5° to +40°C
Humidity range	0% to 95% non-condensing

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PRODUCT RANGE

Product Code	Description
MX16	16 Line Master Panel
MX16-SSC	16 Line Master Panel (Stainless Steel)
MX16-BEZ	16 Line Master Panel (Flush Bezel)
TA16-RS	Type A Outstation (Red, Surface Mount)
TA16-BEZ	Red, Flush Mount Bezel for Type A Outstation
TA16-SS	Type A Outstation (Stainless Steel, Surface Mount)
TA16-SS-BEZ	Stainless Steel, Flush Mount Bezel for Type A Outstation
TB16-GS	Type B Outstation (Green, Surface Mount)
TB16-GF	Type B Outstation (Green, Flush Mount)
TB16-RF	Type B Outstation (Red, Flush Mount)
TB16-RS	Type B Outstation (Red, Surface Mount)
EAA16-LS	Toilet Alarm Outstation Master (Light Grey, Surface Mount) (required to connect the below Emergency Alarm System Kit to the panel)
CFEAPULLKIT	Emergency Assist Alarm Kit c/w PSU
CFVCEA	Emergency Assist Alarm Kit no PSU
BP-24/17Ah	VoCALL 16 Batteries 17Ah
CFEASL4	Emergency Assist Alarm Indicator Panel
CFVCRHS	Remote Jack Handset
CFVCRJP	Remote Jack Plate Socket
NX16	VoCALL 16 Extension Unit
EVCS-DAXC	DAX8



VoCALL 5 EVCS



EMERGENCY VOICE COMMUNICATION SYSTEMS

The VoCALL 5 (EFVCC5) is ideal for smaller installations which require up to 5 outstations or Emergency Assist Alarms.

The system comprises the Compact 5 line unit which controls up to 5 outstations (Type A, Type B, Emergency Assist Alarms or in Far and Middle East applications jack plates).

The EFVCC5 is a standalone unit containing the systems master handset, power supply and connectivity for the 5 outstations. 20mm knockouts are provided for all system cabling and the housing is of ample size to support 2x 5Ah backup batteries (not supplied).

The unit is microprocessor controlled but requires no on site programming; it is fitted with end of line resistors which are simply discarded when an outstation is connected making installation quick and simple.

FEATURES AND BENEFITS

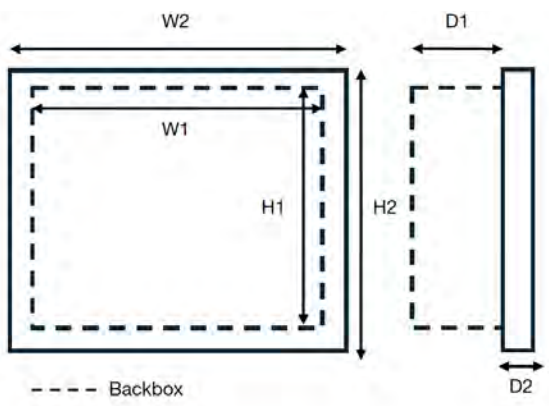
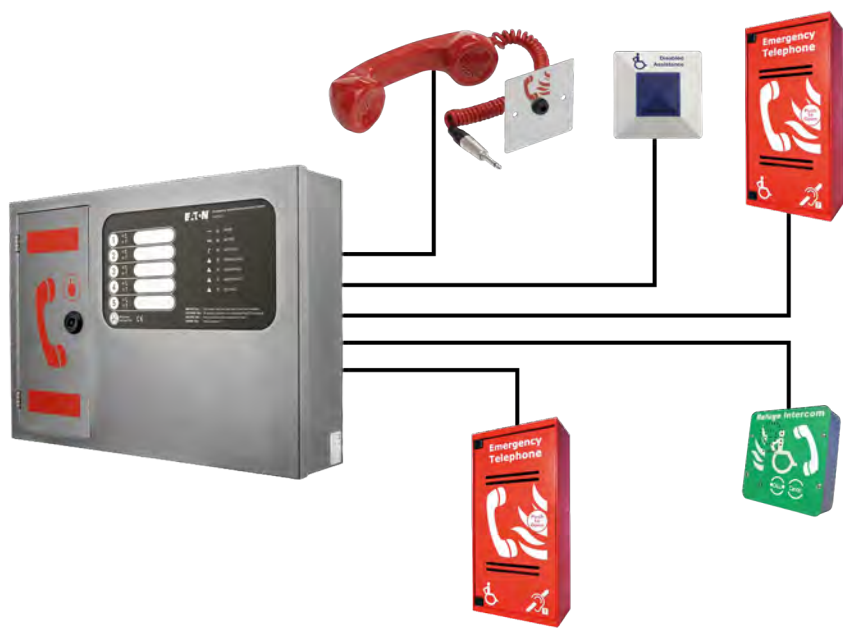
- ▶ BS5839 part 9 compliant
- ▶ Monitored handset
- ▶ Controls up to 5 outstations
- ▶ 5 line keys, 1 fault accept
- ▶ 17 status LEDs
- ▶ Surface mount panel or optional stainless steel flush mount cover
- ▶ Relay outputs
- ▶ Simple cabling, outstations connect directly into the master using 2 core radial fire rated cables
- ▶ In addition to Type A and Type B outstations the VoCALL 5 can also monitor Emergency Assist Alarms, and Jack type outstations for relevant regions.
- ▶ No programming required. The panel is fitted with end of line resistors which are discarded when an outstation or Emergency Assist Alarm is connected.

VoCALL 5 EVCS

TECHNICAL SPECIFICATIONS

Power Supply	
Voltage	230V ac +/- 10% 50/60Hz
Internal power supply	24V dc
Supply and battery	Monitored, open and short, fuses
Protection	Deep discharge, short, thermal
Battery size and type	2 x 12V VRSLA 5Ah
Mains fuse	240V 2A HRC
Battery fuse	1A PTC
Charge current	250mA (max)
Inputs	
Number of lines	5
Remote enable	Short to use
Outputs	
Number	2 (fault & in-use)
Type	Volt free relay
Contact	30V dc 1A
Controls	
Buttons	5 zone keys, 1 mute buzzer
Zone LEDS (x5)	1 line status, 1 fault status per zone
Supply LED	AC & DC
Fault LEDS	4 (General System, Master, PSU)
Outstation Cables	
Type	Fire rated (some installations will require enhanced cabling, see local regulations for guidance)
Cores	2 Core (1mm or 1,5mm)
Distance (max)	30m
Physical	
Weight	6.5kg
Installation	
Mounting	Surface or optional stainless steel flush mount
Cutout	330mm x 300mm (semi-recessed unit)
Cable Entries	Top: 7 x Cable knockouts (20mm)
Standard	
LVD	Certificate Number
Local	EN60950
	BS5839: Part 9

TYPICAL APPLICATION SCHEMATIC



DIMENSIONS

Description	H1 (mm)	W1 (mm)	D1 (mm)	D2 (mm)
Back Box	280	397	77	-
	H2 (mm)	W2 (mm)	D1 (mm)	D2 (mm)
Flush Mounted	309	427	77	16

PRODUCT RANGE

Product Code	Description
EFVCC5	Compact 5 Line Unit (Surface Mount)
EFVCC5-FC	Compact 5 Line Unit (Stainless Steel, Flush Mount Cover)
EFVCC5-FB	Compact 5 Line Unit (Semi Flushing Bezel)
CFVCFHP	Type A Outstation (Red, Flush Mount)
CFVCSHP	Type A Outstation (Red, Surface Mount)
CFVCSHF	Type B Outstation (Red, Surface Mount)
CFVCSHFG	Type B Outstation (Green, Surface Mount)
CFVCFHB	Flush Mounting Stainless Steel Bezel (for use with any Type B Outstation)
CFVCSHFSS	Type B Outstation (Stainless Steel, Surface Mount)
CFEAPULLKIT	Emergency Assit Alarm Kit c/w PSU
CFVCEA	Emergency Assit Alarm Kit no PSU
BP-24/7Ah	VoCALL 5 Batteries 7Ah
CFEASL4	Emergency Assit Alarm Indicator Panel
CFVCRHS	Remote Jack Handset
CFVCRJP	Remote Jack Plate Socket

Emergency Assist Kits

These Emergency Assist Alarm - VoCALL kits have been specifically designed to integrate disabled call functions into the VoCALL network or VoCALL compact ranges.

They are fully monitored and battery backed by the VoCALL system. The Emergency Assist Alarm shows up as a call on the VoCALL system, but has no speech path so a conversation cannot be had with the occupant, the use of the Type B outstations would allow for this.

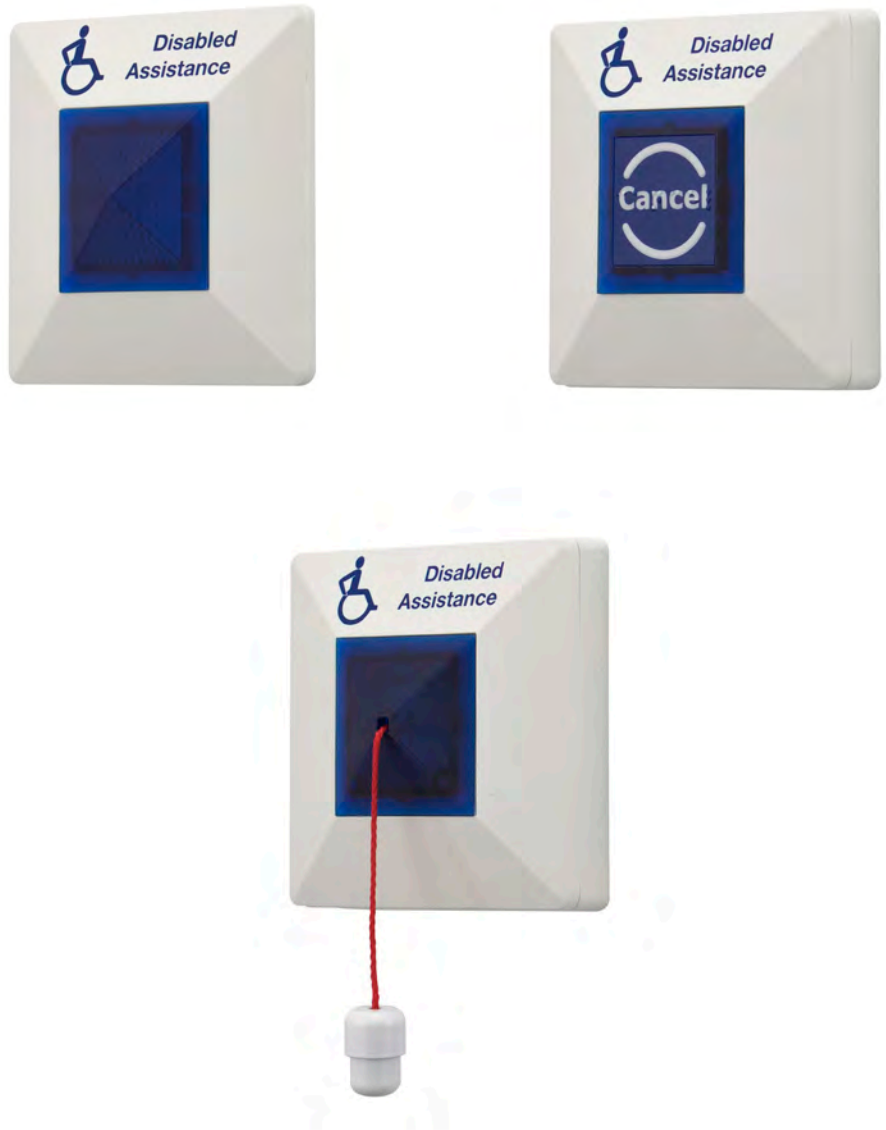
CFEAPULLKIT EMERGENCY ASSIST ALARM KIT C/W PSU



Features

- | |
|-----------------------|
| Power supply unit |
| Over door indicator |
| Cancel button |
| Pull cord unit |
| Disabled sticker pack |

CFVCEA EMERGENCY ASSIST ALARM KIT (no PSU)



Features
Over door indicator
Cancel button
Pull cord unit
Disabled sticker pack

Does not include PSU as the kit is powered by a VoCALL system or 4 way splitter in conjunction with a CFEAPULLKIT which provides the PSU.

Emergency Assist Kits

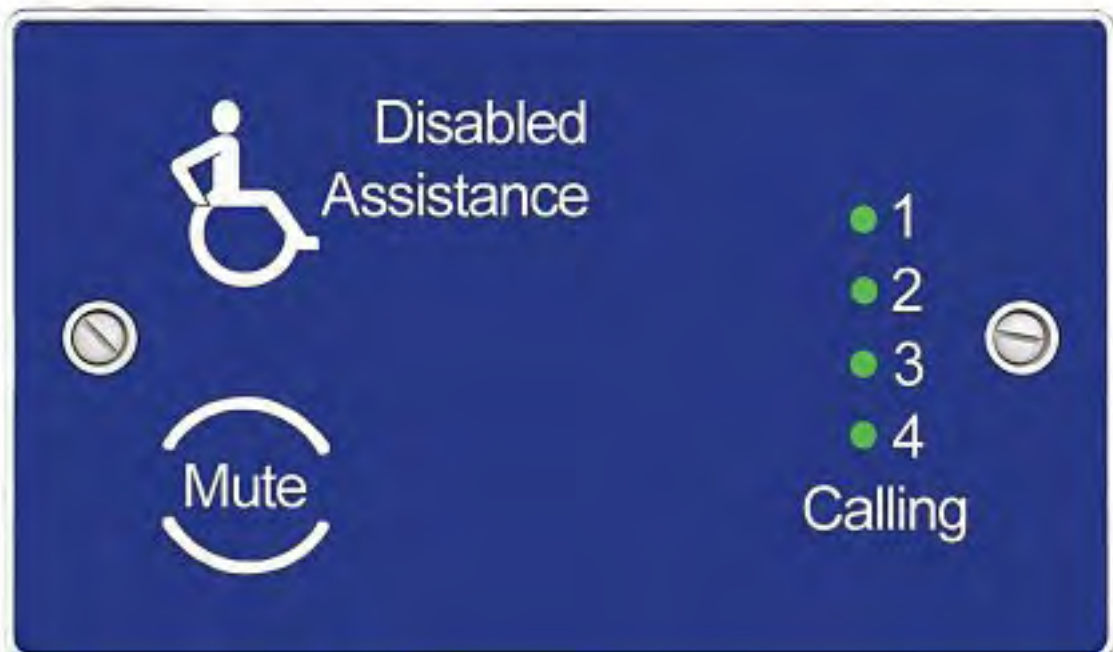
CFEASL4

EMERGENCY ASSIST 4-WAY SPLITTER

The CFEASL4 4-way splitter unit allows up to four stand alone, disabled toilets to be monitored in one specific area. Staff can react to an alarm swiftly and efficiently at the designated area, such as a reception or security desk.

When using the 4 way splitter, each disabled toilet does not need its own PSU as each toilet is powered by the 4 way splitter.

Note: one standard CFEAPULLKIT must be used to supply the necessary PSU for the system, the other units may be CFVCEA.



Features
Designed to comply with all regulations and recommendations
High visibility
Small compact design
Local panel acknowledge call button
Up to four disabled toilets monitored in one area
Uses blue LEDs to avoid confusion
Visibility to remote staff areas
No mains or PSU required at each disabled toilet using the 4 way splitter

EAA16-LS

EMERGENCY ASSIST ALARM DIGITAL INTERFACE

The VoCALL Digital EAA interface enables you to easily connect your VoCALL 16 panel to your Emergency Alarm Assist (EAA) kit. Using the popular CFEAPULLKIT, the system is powered locally and is easily extendable with it being possible to add up to 16 EAA units to the loop.



Features

Dimensions: 137 x 137 x 56 mm (H x Wx D)

Weight: 0.8kg

Knockouts: 3 x 20mm, 3 x 25mm at side walks, 6 X 20mm at rear

Power Supply: 21v to 27.6 V (Nominal 24 V) DC - Loop driven



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