

VocALL analogue range



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VoCALL analogue

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VoCALL compact 5 line EFVCC5

The VoCALL Compact 5 Line Unit is ideal for smaller installations which require just a limited number of outstations and Emergency Assist Alarms.

The EFVCC5 is a standalone unit containing the systems master handset, EN54-4 approved 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).



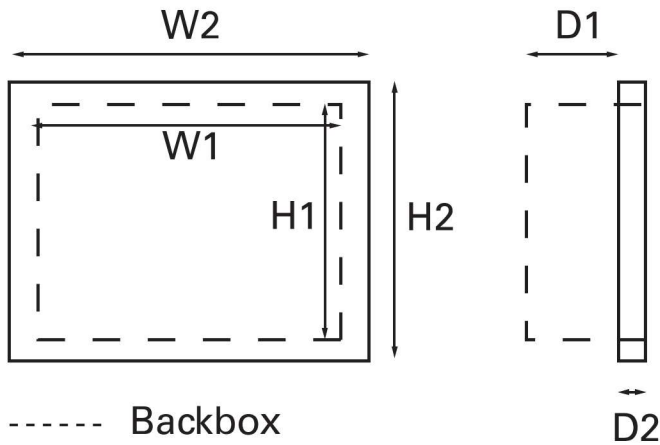
Features

EN54-18 Approved	✓
BS5839 part 9 compliant	✓
Monitored handset	✓
Monitored supply and charger	✓
Relay outputs	✓
No programming	✓
Functional with emergency assist alarms	✓

Product codes

Description	Code
VoCALL compact 5 line master exchange unit, non-network, surface mount, graphite	EFVCC5
VoCALL compact 5 line flushing bezel	EFVCC5-FB
VoCALL Compact 5 stainless steel front cover	EFVCC5-FC

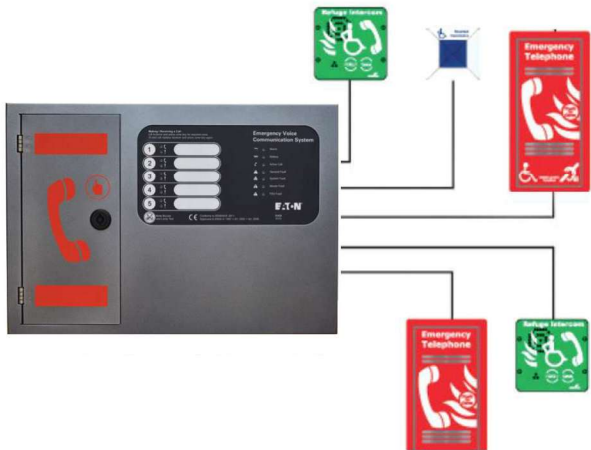
Dimensions



Description	H1 (mm)	W1 (mm)	D1 (mm)	D2 (mm)
Backbox	280	397	77	-

Description	H2 (mm)	W2 (mm)	D1 (mm)	D2 (mm)
Flush mounted	309	427	77	16

Typical application schematic



Standard	Certificate number
EMC	EN55103-1 & EN55103-2
LVD	EN60950
Local	BS5839 Pt9
PSU	EN54-4
Panels and devices	EN54-18

Technical specification

Code	EFVCC5
Product description	VoCALL Compact 5 Line Unit

Power supply	
Voltage	230V ac +/- 10% 50/60Hz
Internal power supply	24V dc
Supply and battery	Monitored, open, 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
End of line	10kΩ

Outputs	
Number	2 (fault & in-use)
Type	Volt free relay
Contact	30V dc 1A

Controls	
Buttons	5 zone keys, 1 acknowledge
Zone LEDs (x5)	1 line status, 1 fault status
Supply LED	AC & DC
Fault LEDs	3 (CPU, supply & general)

Outstation cables	
Type	Fire rated (some installations will require enhanced cabling, see local regulations for details).
Cores	2 Core (1mm or 1.5mm)
Distance (max)	300m

Physical	
Weight	6.5kg

Installation	
Mounting	Surface or semi-recessed
Cutout	330mm x 300mm (semi-recessed unit)
Cable Entries	Top: 7 x Cable knockouts (20mm)

VoCALL Type A outstation CFVCSHP

The VoCALL Type A Outstation is a compact unit which offers easy access via a magnetic push catch or lockable metal door. The Type A outstation is compatible with all VoCALL analogue systems for use as a standard fire telephone or disabled refuge call point.

The Type A outstation is available in surface mounted, flush mounted and IP65 lockable variants with the option of either red or stainless steel finished, providing a solution for all commercial buildings.



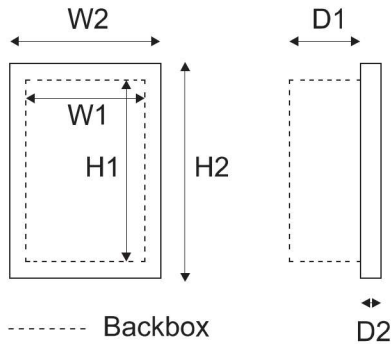
Features

Compact design	✓
High volume ringer	✓
Status LED	✓
Full duplex operation	✓
Stainless steel option	✓
Versatility, the unit can be used on VoCALL 5 and DAX8 systems	✓
Dual use, the Type A outstation can be used a fire telephone or a disabled refuge call point	✓
Magnetic push catch for quick and easy access	✓
Compatible with DAX8	

Product codes

Description	Code
VoCALL Type A outstation, surface mount, red	CFVCSHP
VoCALL Type A outstation, flush mount, red	CFVCFHP

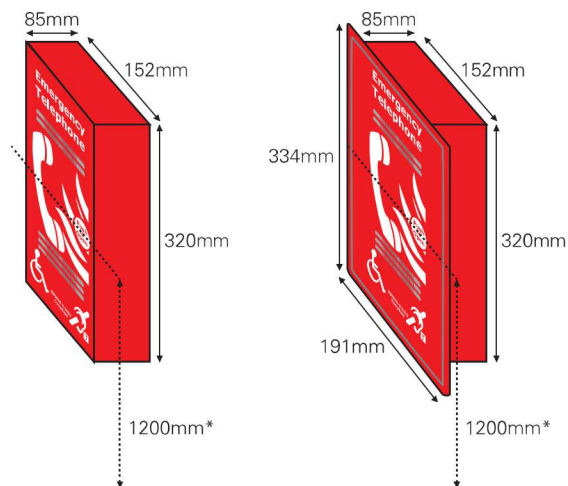
Dimensions



Description	H1 (mm)	W1 (mm)	D1 (mm)	D2 (mm)
Backbox	320	152	85	-

Description	H2 (mm)	W2 (mm)	D1 (mm)	D2 (mm)
Semi-recessed (Front)	334	191	85	2

Unit mounting



Technical specification

Code	CFVCSHP
Product description	VoCALL Type A outstation
Outstation cables	
Type	Enhanced
Cores	2 core 1mm or 1.5mm
Distance	500m

Physical	
Construction	Zintec, powder coated
Colour options	Red / stainless steel
Weight	1.4kg (IP65 lockable box 2.5kg)

Installation	
Mounting	Surface or flush
Mounting height	1200mm from the finished floor level to the centre point of the unit.
Cutout	325mm x157mm (flush mount units)
Clearance	When units are used as refuge call points suitable space for a wheelchair user must be allowed.

Unit wiring



Line - Connector on Network / Compact Unit to Black Phone Lead
Line + Connector on Network / Compact Unit to Yellow Phone Lead

When choosing the outstation type for use with an EVC System we recommend reading relevant country specific standards.

Type A outstations should be used for evacuation or fire fighting use and a Type B outstation should only be used where Type A outstations are impractical.

For disabled refuges Type A or Type B outstations can be used, however Type B outstations should only be used where the background noise is below 40dBA (therefore there should be no sounder or voice alarm coverage in the area).

VoCALL Type B outstation CFVCSHF

The VoCALL Type B Outstations are designed to be versatile, compact and easy to use.

These units can be both flush (via a separate bezel) or surface mounted, have a high volume ringer, status LED and tactile Braille signage.



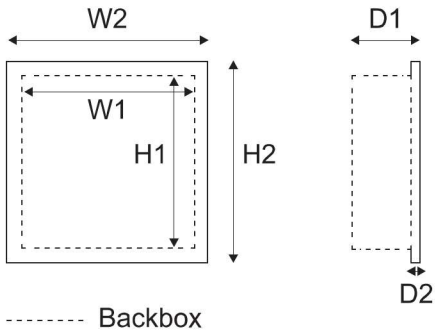
Features

Compact design	✓
High volume ringer	✓
Status LED	✓
20mm cable glands	✓
Loop output for hearing impaired users	✓
Tactile Braille signage	✓
Full duplex operation	✓
Flush bezel mounting available	✓
Stainless steel option	✓
Compatible with DAX8	

Product codes

Description	Code
VoCALL Type B outstation, surface mount, red	CFVCSHF
VoCALL Type B outstation, surface mount, green	CFVCSHFG
VoCALL Type B outstation, surface mount, stainless steel	CFVCSHFSS
VoCALL flush mounting bezel for use with any Type B outstation, stainless steel	CFVCFHB

Dimensions

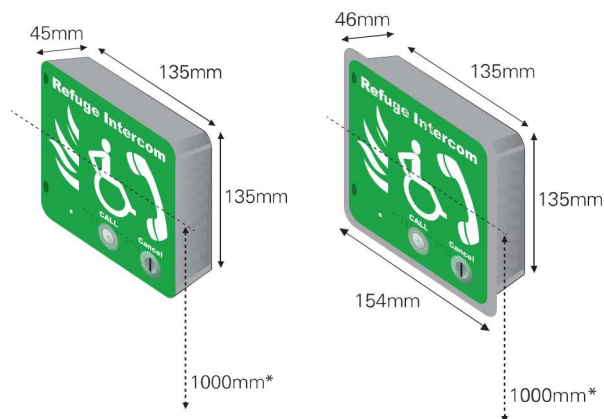


----- Backbox

Description	H1 (mm)	W1 (mm)	D1 (mm)	D2 (mm)
Backbox	135	135	42	-

Description	H2 (mm)	W2 (mm)	D1 (mm)	D2 (mm)
Flush (seperate bazel)	154	154	45	2

Unit mounting



Technical specification

Code	CFVCSHP
Product description	VoCALL Type B outstation
Outstation cables	
Type	Fire rated (some installations will require enhanced cabling, see local regulations for details).
Cores	2 core 1mm or 1.5mm
Distance	500m

Indications & controls

Status LEDs	2 off red (flashing for location lights, solid in use)
Call button	Press to call button
Cancel button	Press to cancel button

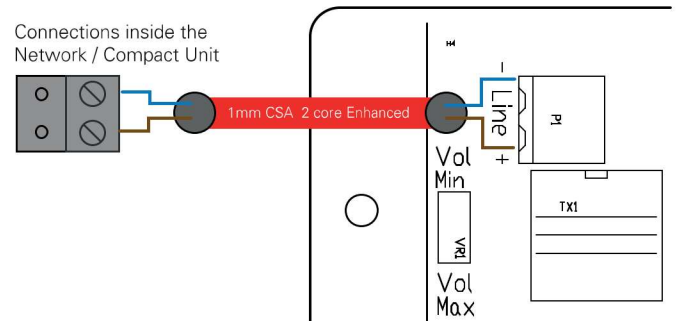
Physical

Construction	Zintec, powder coated
Colour options	Green / red / stainless steel
Weight	1.105kg

Installation

Mounting	Surface or flush
Mounting height	1000mm from the finished floor level to the centre point of the unit.
Cutout	140mm x 140mm (flush mount units)
Clearance	When units are used as refuge call points suitable space for a wheelchair user must be allowed.

Unit wiring



Line - connector on Network / Compact Unit to Type B Line -
Line + connector on Network / Compact Unit to Type B Line +

When choosing the outstation type for use with an EVC System we recommend reading relevant country specific standards.

Type A outstations should be used for evacuation or fire fighting use and a Type B outstation should only be used where Type A outstations are impractical.

For disabled refuges Type A or Type B outstations can be used, however Type B outstations should only be used where the background noise is below 40dBA (therefore there should be no sounder or voice alarm coverage in the area).

All VoCALL outstations are designed for use by multi-disability users, having high contrast signage in line with RNIB guidelines and an induction loop coil output in the outstation.

VoCALL roaming handset and jack plate CFVCRJP/CFVCRHS

The VoCALL CFVCRHS roaming handset is used along with the CFVCRJP jack plate, for emergency voice communication system installations in countries whose fire codes allow for roaming handsets (these units are not suitable for installation in the UK).

When used together, the roaming handset and jack plate form a Type A outstation which is compatible with all VoCALL analogue systems. Ideal for use in commercial buildings in the Far East and Middle East where standards allow.



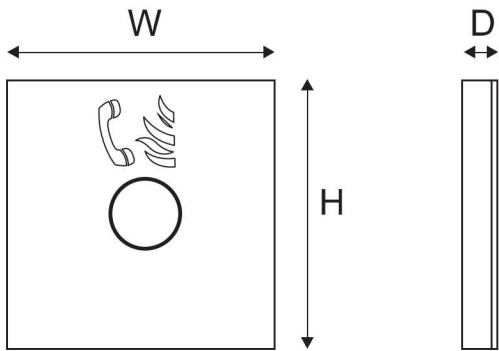
Features

Flexible roaming phone	✓
Low noise high quality telephone jack	✓
Telecoil for hearing impaired users	✓
Full duplex operation for 2-way voice communication	✓
Stainless steel jack plate	✓
Full duplex operation, allowing two way voice communication	✓
Compatible with DAX8	

Product codes

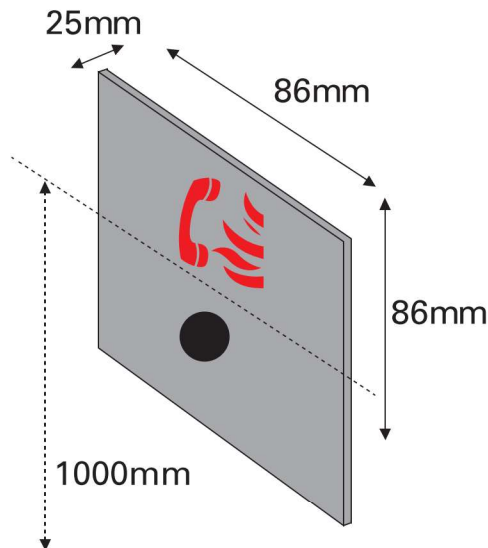
Description	Code
VoCALL roaming handset	CFVCRHS
VoCALL jack plate	CFVCRJP

Dimensions



Description	H (mm)	W (mm)	D (mm)
Jack plate	86	86	25

Unit mounting



Technical specification

Code	CFVCRHS
Product description	VoCALL roaming handset
Controls	
Call	Automatic "off hook" dialling
Connection	
Jack plate	1/4" mono neutrik heavy duty
Physical	
Construction	Acrylonitrile butadiene styrene (ABS) UL90V1
Colour	Red
Weight	0.7kg

Code	CFVCRJP
Product description	VoCALL jack plate
Outstation cables	
Type	Enhanced may be required (see local standards)
Cores	2 core 1mm or 1.5mm
Distance	500m
Monitoring	dc open, short and earth
End of line	10K 1/4 W
Physical	
Construction	Brushed stainless steel
Colour	Stainless Steel
Weight	0.14kg
Installation	
Mounting	Surface or flush
Mounting height	1000mm from the finished floor level to the centre point of the unit.
Cutout	86mm x 86mm (flush units)

Jack plate wiring

Connections inside the Network / Compact Unit



The jack plate and roaming handset are suitable for EVC System installations in countries whose fire codes allow for roaming handsets. Not suitable for installation in the UK.

Emergency assist alarm equipment

We offer either a stand-alone kit or a kit which integrates the Emergency Assist equipment with our VoCALL products.



Our emergency assist alarm kits supply everything you need to install a fully compliant system.

VoCALL kit (CFVCEA no PSU)

This Emergency Assist Alarm - VoCALL kit has been specifically designed to integrate disabled call functions into the VoCALL network or VoCALL compact ranges.

It is 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, use of the Type B outstations would allow this.

Stand alone kit (CFEAPULLKIT with PSU)

The Emergency Assist Alarm - stand alone kit comprises of all the components needed to install a fully compliant system, with additional parts available separately.

4 Way Splitter

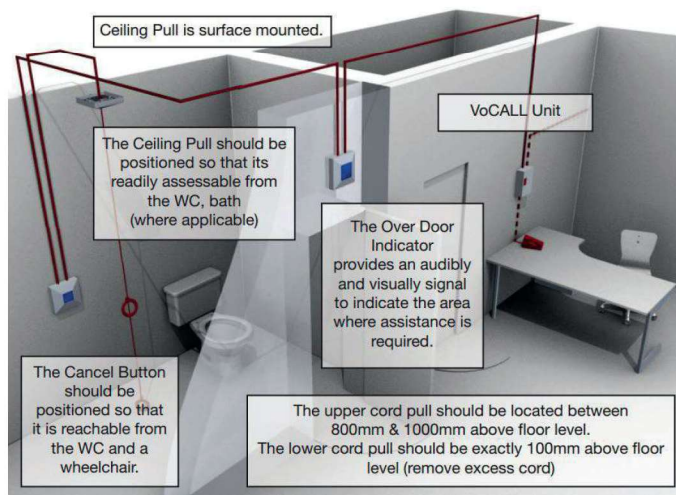
The 4 Way Splitter unit allows up to 4 stand alone disabled toilets to be monitored in one specific area. Staff can then, at the designated area such as a reception or security desk, react to an alarm swiftly and efficiently.

System installation

The Emergency Assist Alarm should be installed in accordance with local building regulations and country codes of practice. The diagram below demonstrates a typical layout for installation in a disabled persons toilet.

Note: Where pertinent other or alternative standards of design and installation should be adhered to.

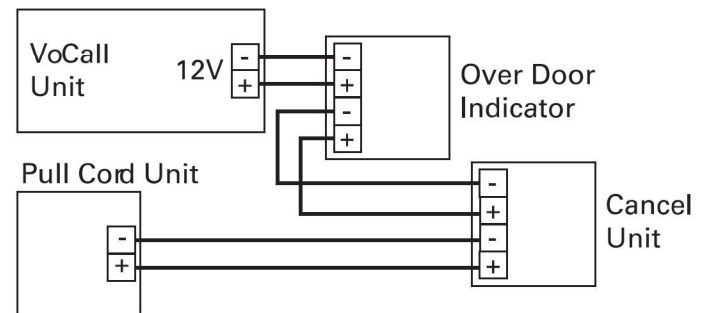
All system components are designed to be sited internally and positioned in locations where they are readily accessible by the user. The area should be clean and dry. Sound and light levels allow the status of all device indicators and sounders to be seen and heard.



Wiring

The wiring from the VoCALL master exchange, or from the VoCALL compact exchange consists of a single pair; this does not have to be fire rated, although this may be used, the link through to the pull cord is monitored and any open circuit or short will be recorded as a fault on the VoCALL system. A 10K resistor must be fitted in the pull cord unit for the monitoring to work. If this is not fitted then the exchange will show open circuit fault.

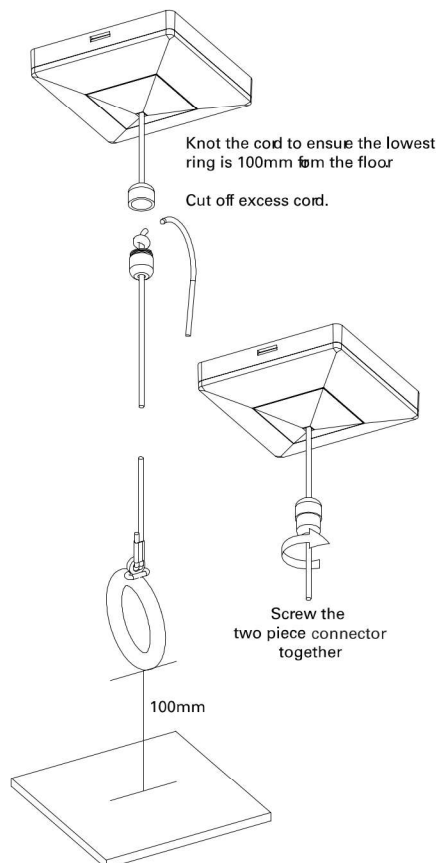
Always segregate Extra Low Voltage (ELV) wiring from the mains wiring. System requires minimum 2 core 0.4mm² cable. All wallmounting devices should be mounted onto a back box of the required depth.



Note:

- Installer must follow schematic above when connecting to VoCALL circuits.
- Circuit is limited to one each of the over door indicator, pull cord, and cancel units only.

Pull station installation



System operation

To place a call - operate the pull cord. LEDs will illuminate on pull cord unit, cancel unit and over door indicator. An internal buzzer will also sound in the over door indicator.

Vocall unit will indicate emergency assist alarm activations.

To reset call - press the cancel button on emergency assist alarm.

Emergency assist 4-way power supply splitter CFEASL4

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 staffed areas	✓
No mains or PSU required at each disabled toilet using the 4 way splitter	✓

Product codes

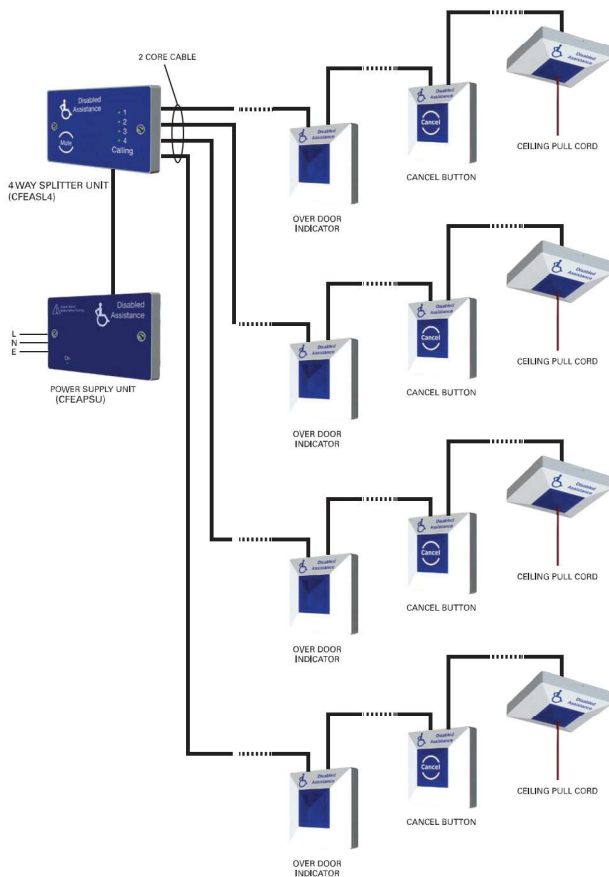
Description	Code
4 way splitter	CFEASL4
Over door indicator	CFEADDI
Cancel button	CFEARSPP
Pull cord accessory pack	CFEACORD
Emergency assist kit	CFVCEA

Wiring

The mains powered supply must be wired by a qualified person in accordance with the latest revision on the IEE wiring regulations (currently 17th Edition), and connected to the building mains supply using a fused spur (fitted with a 3A fuse).

All mains wiring should be provided in accordance with current wiring regulations and in accordance with relevant national wiring rules.

Always segregate Extra Low Voltage (ELV) wiring from the mains wiring. System requires minimum 2 core 0.4mm² cable. All wallmounting devices should be mounted onto a back box of the required depth.



Technical specification

Code	CFEASL4
Description	4 Way Splitter Unit

Specification	
Output	Volt free relay

Physical	
Construction	PC
Dimensions (mm)	H 86 x W 146 x D 39

Code	CFEAPSU
Description	Power Supply Unit

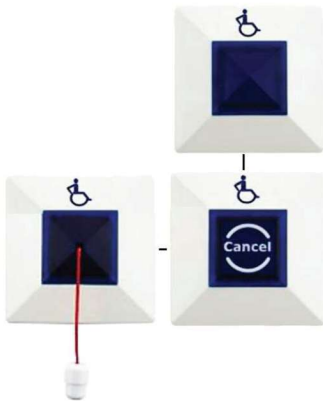
Specification	
Mains	230V ac +10% -15%
Output	12V dc (nominal)
Battery (optional)	YUASA NP 0.8Ah/12V

Physical	
Construction	PC
Dimensions (mm)	H 86 x W 146 x D 39

VoCALL analogue range

Emergency assist alarm equipment

EAA VoCALL kit CFVCEA



EAA standalone kit CFEAPULLKIT



Catalogue numbers

Description	Code
Stand alone	
Emergency assist alarm - stand alone kit	CFEAPULLKIT
For use with EVC panel or 4 way splitter	
Emergency assist alarm - kit without PSU	CFVCEA
Accessories	
4 way splitter	CFEASL4
Emergency assist pull cord unit	CFEAPULL
Pull cord accessory pack	CFEACORD

Typical applications:

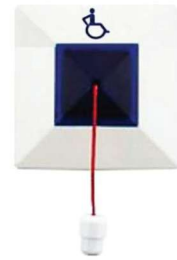
Disabled Toilets.

Includes:

- 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.

Accessories:



Pull cord unit

Typical applications:

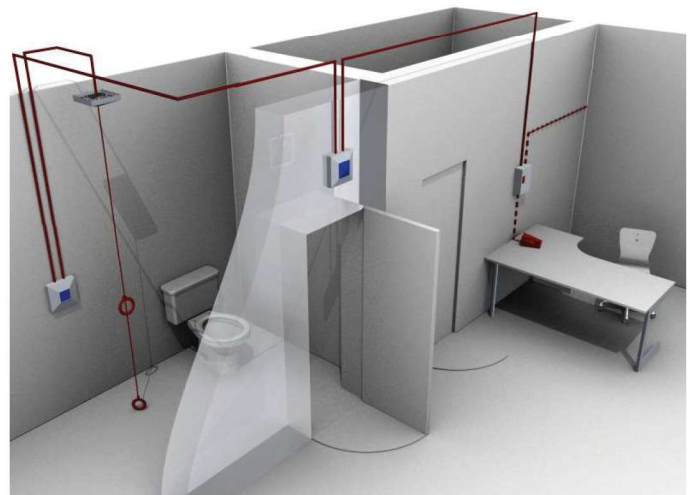
Disabled Toilets.

Includes:

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



4 way splitter



Emergency assist alarm stand alone kit, basic usage schematic



VocALL digital range



Contents

VoCALL digital range

Panels

VoCALL 16 digital master

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VoCALL 16 Network panel

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VoCALL 16 DAX8

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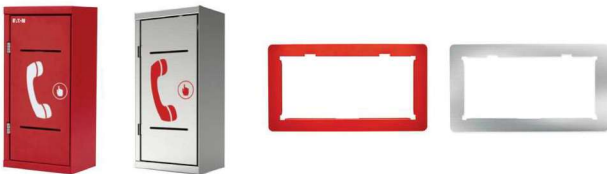
Outstations

VoCALL Type A digital outstation

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VoCALL Type B digital outstation

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Emergency alarm assist equipment

Kits and accessories

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VoCALL 16 accessories

Stainless flush mount panel front

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Semi flush bezel grey

41

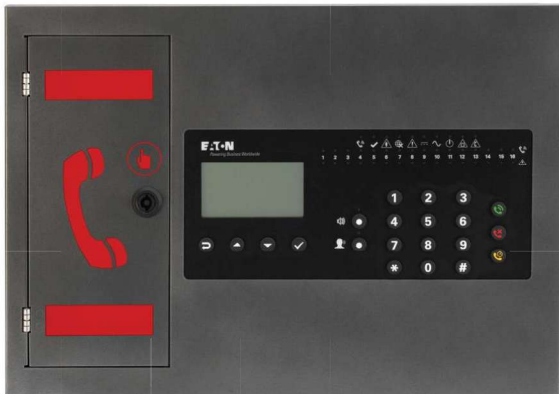


VoCALL 16 digital master MX16

The VoCALL 16 is a high specification loop driven intelligent emergency voice communication system offering sophisticated functionality along with simple end user operation. It has been designed to ensure simplicity of future expansion, a maximum of 16 outstations of various types can be controlled from one master panel.

Loop wiring ensures the system is fault tolerant through the use of short circuit isolators and continuous fault monitoring ensures high availability. The system uses digital audio transmission to maintain audio quality and intelligibility when it matters most.

The ease of operation and cabling, and competitive pricing make the system suitable for a wide range of applications. In combination with our range of soft addressed digital outstations this stand-alone system reduces the labour and materials cost along with the potential for wiring errors associated with traditional spur systems. Extensive time stamped logs and records are stored internally on the SD card.



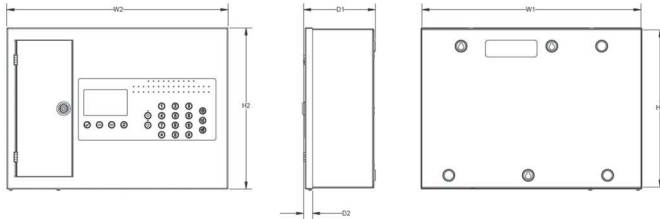
Features

Up to 16 digital outstations per panel	✓
4 core loop configuration	✓
Soft addressing of outstations	✓
SD card integration	✓
Stainless steel flush mounting option	✓
Ease of programming	✓
Large graphic user interface	✓
PIN protected user levels	✓

Product codes

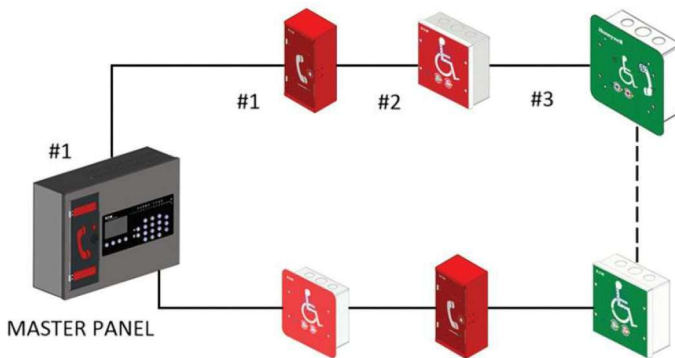
Description	Code
VoCALL 16 master panel	MX16
VoCALL 16 master panel stainless steel flush cover	MX16-SSC
VoCALL 16 master panel semi flush bezel	MX16-BEZ

Dimensions



VoCALL 16 dimensions	H1 (mm)	H2 (mm)	W1 (mm)	W2 (mm)	D1 (mm)	D2 (mm)
Backbox	346	-	483	-	158	20
Semi recessed (front)	-	355	-	487	-	-

Wiring and installation



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.
- 4 core or 2 x 2 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 16 outstations in total, non-networked system.
- All digital outstations Type A and Type B can be connected on the loop in any order.

Functionality

- Panel has facility for 10 users with access profiles set during commissioning for example user, supervisor and engineer.
- Supervisor and engineer modes can only be accessed via the relevant PIN codes.
- Users can be configured to receive, make and reset a call, view fault / event /

Technical specification

Code

Power supply

Input voltage 230V ± 10% RMS 50/60Hz AC - input to Power supply

Current consumption @ 24V:

VoCALL16 EVCS	2.7W
Type A outstation	0.65W
Type B outstation	0.65W

Mechanical

Dimensions (H x W x D mm)

VoCALL16 EVCS	488 x 355 x 155 mm
Type A outstation	320 x 152 x 114 mm
Type B outstation	132 x 132 x 57 mm
Weight (VoCALL16 EVCS)	6.7kg
Weight (Type A outstation)	2.2kg
Weight (Type B outstation)	0.6kg

Environmental

Temperature (Storage)	-5°C to +40°C
Temperature (Operation)	-5°C to +40°C
Humidity range	0% to 95% non-condensing

call log, functions, view panel version, accept system faults, set date/time etc.

- The unit has digital audio transmission and automatic volume control to optimize clarity of communication between outstation and master.
- Engineer mode allows alteration to the system configuration such as change all PINs, panel settings, site name, panel name relay settings, addition or removal of outstations.
- VoCALL16 is designed to ensure simplicity of future expansion up to 16 outstations.
- In the event of an external short circuit occurring the system will operate the integral short circuit isolators on the devices nearest to each side of the short. The panel will then drive communication from both sides of the loop thus maintaining full communication with all outstations.

User interface

- The main element of the user interface is a large 100mm x 40mm display that provides comprehensive user information which along with the large tactile standard mechanical keypad allows for ease of operation in an emergency situation even with gloved hands.
- In addition to the graphical user interface there are 16 numbered LEDs to provide instant clear indication as to which outstation is calling even to an untrained user unfamiliar with the operation of the unit.

VoCALL 16 digital network panel NX16

NX16 in conjunction with the MX16 enables a system installation of up to 32 panels of any variant, each with a maximum of 16 outstations, giving a total system size of up to 512 outstations, all connected and communicating via isolated fault tolerant loops.

The system uses digital audio communication around the network to achieve high audio quality and intelligibility when it matters the most. The use of isolators on the network cabling loops ensures high redundancy and also reduces labour and material cost along with potential for wiring errors associated with traditional spur systems.



Features

- Network capacity of 512 outstations
- Up to 32 panels (main/network) in a loop
- Up to 16 digital outstations per panel
- 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 main panel
- Easy to install and operate
- Automatic soft addressing of panels and outstations
- PC based application for configuration
- Complex call routing is possible
- Extensive time stamped logs on SD card
- Large graphical use interface
- PIN protected use access
- Fully compliant with BS5839-9

Note: Networking functionality should only be accessed by trained personnel

Benefits

- Fault tolerant loop wired design
- Simple drop-in replacement of device possible, if needed
- Simple configuration, faster commissioning
- Easy maintenance and extensive logging
- Superior audio quality
- Simple and intuitive operation
- Centrally controlled network architecture
- Full range of compatible outstations
- Appealing look with flush mount options
- Quick and simple identification of device in use
- Secure access for standard users

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 300m max between panels. Up to 9km total loop length.
- Up to 200m max between outstations. Up to 2000m total loop length.
- 4 core 1.5mm cable loop (check local standards for cable type and installation regulations).
- Panels are provided with keyhole type mounting points 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 main panel.
- Up to 16 outstations per panel, with any combination of Type A and Type B
- Network capacity of 512 outstations

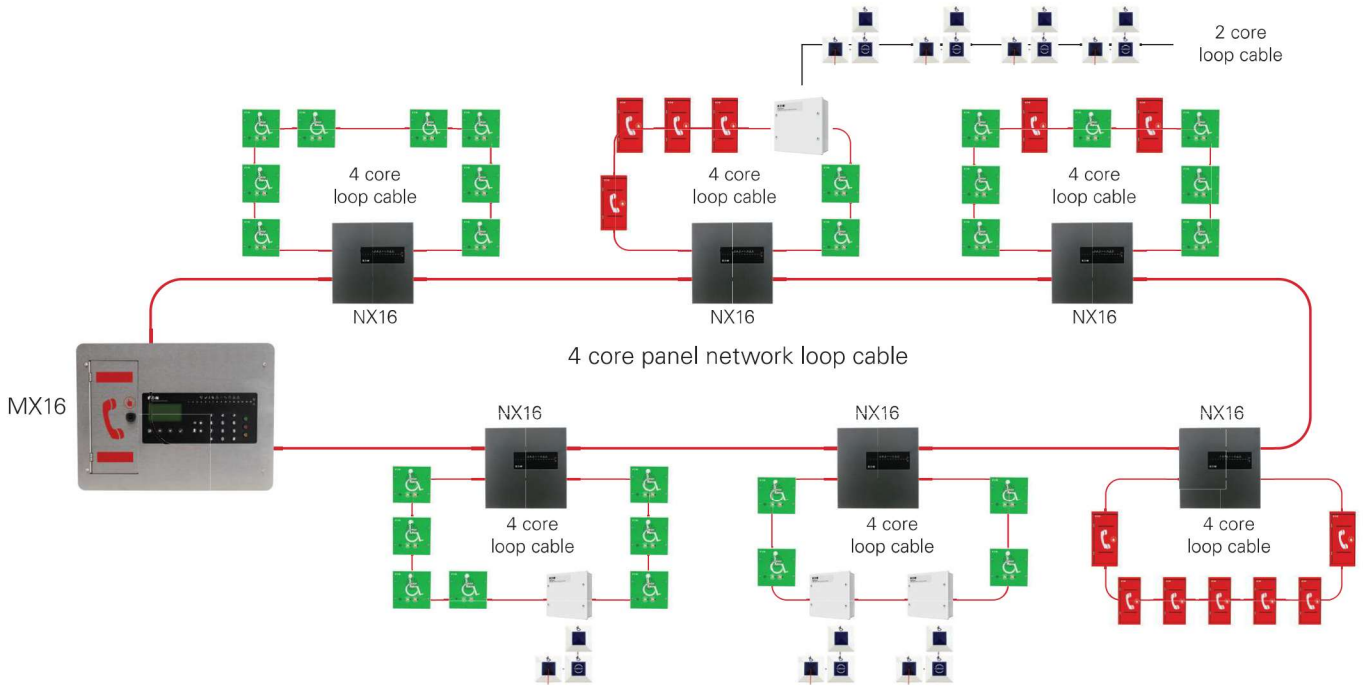
Functionality

- The system has the facility for 10 users with access profiles set during commissioning. For example: user, supervisor, engineer.
- Supervisor and engineer modes can only be accessed via the relevant PIN codes.
- Users can be configured to receive, make and reset a call, view fault/event/call log functions, view panel version, accept system faults, set date/time etc.
- The unit has digital audio transmission and automatic volume control to optimise clarity of communication between outstation and main panel.
- Engineer mode allows alteration to the system configuration, such as change all PINs, panel settings, site name, panel name, relay settings, addition or removal of outstations.
- VoCALL 16 is designed to ensure simplicity of future expansion up to 16 outstations.
- In the event of an external short circuit occurring the system will operate the integral short circuit isolators on the devices nearest to each side of the short. The panel will then drive communication from both sides of the loop thus maintaining full communication with all outstations.

User interface

- The main element of the user interface is a large 100mm x 40 mm display that provides comprehensive user information, which along with the large tactile standard mechanical keypad allows for ease of operation in an emergency situation, even with gloved hands.
- In addition to the graphical user interface, there are 16 numbered LEDs to provide an instant, clear indication as to which outstation is calling, even to an untrained user who may be unfamiliar with the operation of the unit.

VoCALL 16 network Panels

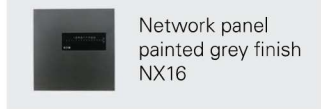


VoCALL 16 Compatible devices

Control panels



Main panel painted grey finish MX16



Network panel painted grey finish NX16

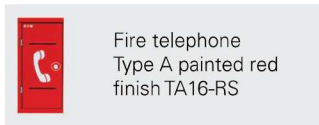


Stainless steel front cover MX16-SSC

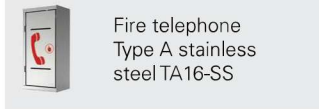


Semi flushing bezel MX16-BEZ

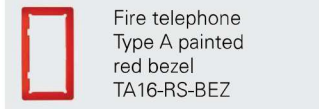
Fire telephones Type A



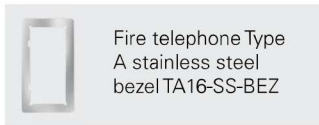
Fire telephone Type A painted red finish TA16-RS



Fire telephone Type A stainless steel TA16-SS

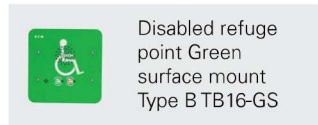


Fire telephone Type A painted red bezel TA16-RS-BEZ

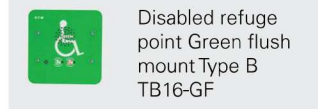


Fire telephone Type A stainless steel bezel TA16-SS-BEZ

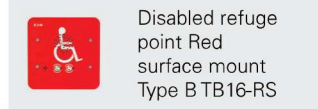
Refuge points Type B



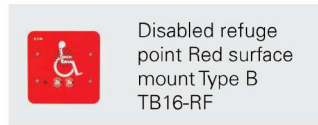
Disabled refuge point Green surface mount Type B TB16-GS



Disabled refuge point Green flush mount Type B TB16-GF



Disabled refuge point Red surface mount Type B TB16-RS



Disabled refuge point Red surface mount Type B TB16-RF

Emergency assist alarm



Emergency assist alarm digital interface EAA16-LS



Emergency assist alarm with PSU CFEAPULLKIT

VoCALL 16 Digital EVCS – 8 Line Digital to Analogue Exchange DAX8

DAX8 is a loop powered digital to analogue convertor, used in conjunction with VoCALL 16 to ensure simplicity of future legacy system upgrade or expansion.

This loop powered convertor allows the connection of existing analogue outstations to a digital system. A maximum of 8 analogue outstations of any combination can be connected to the DAX8 with a maximum of two DAX8 units per panel. The loop wired connection to the DAX8, along with short circuit insulators, ensures the network is robust and fault tolerant.

Compatible analogue outstations include the type A, type B, Jack point and emergency assist alarm (EAA).

Utilising a minimum of one MX panel and up to 31 additional lower cost NX network panels, the DAX8 enables system takeovers of up to 512 analogue outstations utilising existing Eaton loop and radial cable configurations.

The simplicity of operation, ease of cabling and competitive pricing makes the system suitable for a wide range of applications. The DAX8 can be wired in combination with our range of soft addressable digital outstations, ensuring the maximum flexibility in takeovers, upgrades and expansion of EVC systems.

The DAX8 also ensures compatibility with our low-cost jack point for regions where this system is allowed by building code, allowing up-to 512 individually addressed jack points per system, or 512 lines of jack points with potentially over 10,240 points available.



Features

- Fault tolerant loop wired design from panel to DAX8
- Simple radial connection of analogue devices
- Dip switch configuration of legacy outstation types, faster commissioning
- Easy maintenance and extensive logging
- Superior audio quality
- Simple and intuitive operation
- Centrally controlled network architecture
- Full range of compatible analogue and digital outstations
- Quick and simple identification of device in use
- Secure access for standard users

VoCALL 16 network Panels



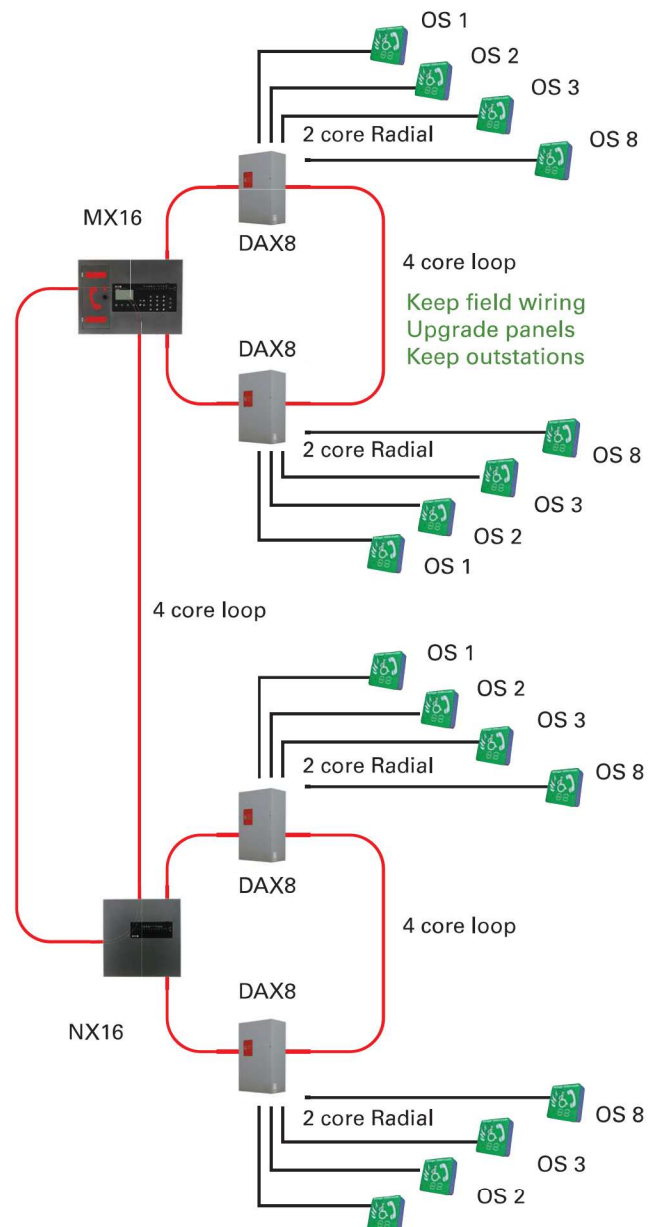
Features

- Up to 64 DAX8 units in a network
- Up to 8 analogue outstations per DAX8
- 4 core loop connection to host panel
- 8 x 2 core radial spurs for legacy outstations
- Upgrade existing systems to a digital isolated network
- Requires at-least 1 MX panel per system
- Any other combination of panels (MX/NX) possible
- Any combination of analogue outstations possible.
- Easy to install and commission
- Soft addressed panel, digital outstation and DAX8
- PC based application for configuration
- Loop isolators built into the DAX8
- Built in end of line monitoring of legacy outstations
- Dill switch identification for legacy outstations
- Uses existing CFVCX8 footprint
- Emergency assist toilet alarms are powered from the DAX8
- Fully compliant with BS5839-9
- Network capacity of 512 outstations

Installation

- The DAX8 panel is designed for ease of installation with a full range of knockouts
- Up to 200m max between DAX8 exchanges. Up to 2000m total loop length
- Up to 300m max between panels. Up to 9Km total loop length.
- 4 core cable loop between panels and DAX8 exchanges
- Existing Eaton cabling loops and spurs can be reused
- DAX8 Panels are provided with a keyhole type mounting on the rear for ease of installation and alignment.
- secured hinged 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

Wiring and installation



Technical specification

Power supply	
Input voltage	230V ± 10% RMS 50/60Hz AC - input to power supply
Current consumption @ 24V	Secondary source - Battery back-up. Batteries not supplied. 2 x Yuasa 12Ah 12V battery (required)
Mechanical	
DAX8 Dimensions (H x W x D mm)	212 x 341 x 119 mm
Weight DAX8	2.6kg
Environmental	
DAX8 temperature (Storage)	-5°C to +49°C
DAX8 temperature (Operation)	-5°C to +49°C
Humidity range	0% to 95% non-condensing

System Functionality

- Up to 64 DAX8 exchanges in total,
- Wired in conjunction with 32 main panels in any combination of MX or NX panels.
- At least one panel must be an MX to provide a handset
- Up to 16 outstations per panel, with any combination of Type A, Type B, Jack point or Emergency assist alarm
- Up to 20 Jack points per radial line
- Conference call between 3 jack points and the master on the same line
- Network capacity of 512 addressed outstations.
- Possible maximum of 10,000 radial spur addressed jack points (one address per radial spur)
- DAX8 units can be mixed on the same outstation loop with new digital outstations
- The VoCALL 16 Panel has facility for 10 users with access profiles set during commissioning for example user, supervisor, and engineer.
- Supervisor and engineer modes can only be accessed via the relevant PIN codes.
- Users can be configured to receive, make and reset a call, view fault / event / call log, functions, view panel version, accept system faults, set date/time etc.
- The unit has digital audio transmission and automatic volume control to optimize clarity of communication between outstation and master.
- Engineer mode allows alteration to the system configuration such as change all PINs, panel settings, site name, panel name relay settings, addition or removal of outstations.
- In the event of an external short circuit occurring the system will operate the integral short circuit isolators on the devices nearest to each side of the short. The panel will then drive communication from both sides of the loop thus maintaining full communication with all outstations.
- DAX8 has local LED indication of an incoming call, a fault on the line or outstation and in use
- DAX8 also has a local in use relay which can be used to silence local sounders or voice alarm speakers
- The DAX exchange also benefits from 2 programmable output relays

Product order codes

Order code	Description
DAX8	Digital to analogue exchange
MX16	VoCALL 16 Main Panel
NX16	VoCALL 16 Slave panel
CFVCFHP	VoCALL Analogue
CFVCSHP	VoCALL Analogue
CFVCFHPSS	VoCALL Analogue
CFVCSHPSS	VoCALL Analogue
CFVCFHPSS	VoCALL Analogue
CFVCSHF	VoCALL Analogue
CFVCSHFG	VoCALL Analogue
CFVCSHFSS	VoCALL Analogue
CFVCFHB	Flush mounting bezel stainless fits all type B
CFVCRJP	VoCALL analogue jack plate
CFVCRHS	VoCALL analogue roaming handset
CFVCEA	Pulkit without PSU

VoCALL type A digital outstation TA16-RS, TA16-SS

The VoCALL Type A Digital Outstation is a compact unit which offers easy access via a magnetic push catch door.

The outstation is compatible with VoCALL digital systems for use as a standard fire telephone or disabled refuge call point. It is compatible with all VoCALL digital systems.



Features

Compact design	✓
High volume ringer	✓
Status LED	✓
Telecoil for hearing impaired users	✓
Full duplex operation	✓
Magnetic push catch door for quick access	✓
Stainless steel option	✓

Product codes

Description	Code
Type A outstation (red, surface mount)	TA16-RS
Type A outstation (bezel, red, flush mount)	TA16-BEZ
Type A outstation (steel, surface mount)	TA16-SS
Type A outstation (bezel, steel, flush mount)	TA16-SS-BEZ



VoCALL Type B digital outstation TB16

The VoCALL Type B Outstations are designed to be versatile, compact and easy to use.

These units can be ordered as both flush or surface mounted, have a high volume ringer, status LED and tactile Braille signage. It is compatible with all VoCALL digital systems.



Features

Compact design	✓
High volume ringer	✓
Status LED	✓
20mm cable glands	✓
Loop output for hearing impaired users	✓
Tactile Braille signage	✓
Full duplex operation for 2-way voice communication	✓
Flush bezel mounting available	✓
Stainless steel option	✓

Product codes

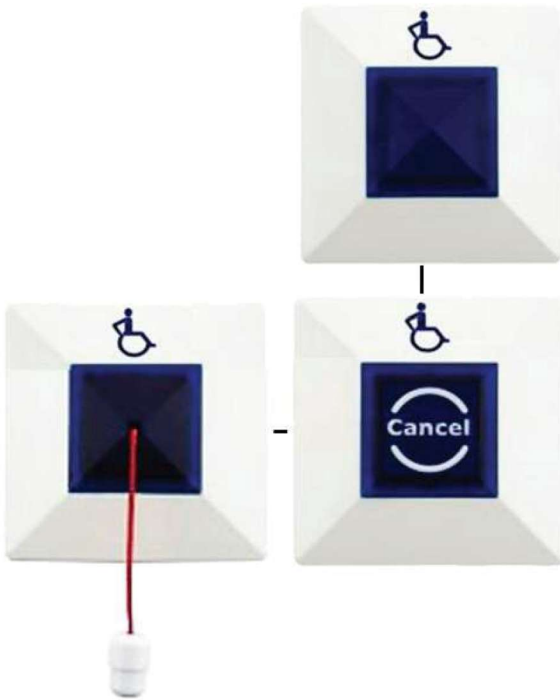
Description	Code
Type B outstation (green, surface mount)	TB16-GS
Type B outstation (green, flush mount)	TB16-GF
Type B outstation (red, flush mount)	TB16-RF
Type B outstation (red, surface mount)	TB16-RS
Type B outstation (stainless steel, surface mount)	TB16-SS
Type B outstation (stainless steel, flush mount)	TB16-SF

Emergency assist alarm kit digital outstation EAA16-LS

The Emergency Assist Alarm - VoCALL kit has been specifically designed to integrate disabled call functions into the VoCALL digital range, providing the perfect solution for conformity with local building regulations and country codes of practice.

By integrating the VoCALL kit with the Emergency Voice Communication System all calls relating to disabled communications can be monitored on the same VoCALL system.

This emergency assist solution is fully monitored and battery backed by the VoCALL system, saving local power supplies and giving confidence in the system integrity. The alarm shows up as a call on the VoCALL system, but has no speech path so a conversation cannot be had with the occupant, use of the Type B outstations will allow this.



Features

Remote powered from the VoCALL digital system	✓
No additional VoCALL system connection equipment required	✓
Dual loop pull cord	✓
High contrast labels	✓
Braille on cancel plate	✓
Blue indication	✓
No PSU required, remotely powered by VoCALL system	✓
Calls from disabled toilets and refuge points are monitored from one location	✓

Product codes

Description	Code
Emergency assist alarm - Loop interface	EAA16-LS
Emergency assist kit	CFEAPULLKIT
Over door indicator	CFEAODI
Cancel button	CFEARSF
Pull cord accessory pack	CFEACORD

Emergency assist alarm Digital interface EAA16-LS

System installation

The Emergency Assist Alarm should be installed in accordance with local building regulations and country codes of practice. The diagram below demonstrates a typical layout for installation in a disabled persons toilet.

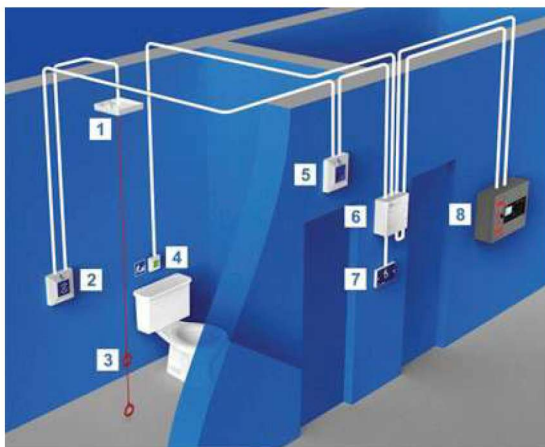
Note: Where pertinent other or alternative standards of design and installation should be adhered to.

All system components are designed to be sited internally and positioned in locations where they are readily accessible by the user. The area should be clean and dry. Sound and light levels allow the status of all device indicators and sounders to be seen and heard

The VoCALL Digital EAA interface enables you to easily connect your VoCALL 16 panel to your Emergency Alarm Assist (EAA) kit. Using Eaton's 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.



- The Ceiling Pull should be positioned so that its readily accessible from the WC or bath (where applicable).
- The cancel button should be positioned so that it is reachable from the WC and a wheelchair.
- The upper cord pull should be located between 800mm & 1000mm above floor level. The lower cord pull should be exactly 100mm above the floor level (remove excess cord).
- A reassurance sounder/indicator (not included) can be added along with visual notification sticker (included with the EAA interface)
- The over door indicator provides an audible and visual signal to indicate the area where assistance is required.
- The VoCALL 16 EAA interface (EAA16-LS) is connected to the VoCALL 16 panel and the power supply
- The power supply is situated in the corridor and supplied via a switched fuse spur.
- The VoCALL 16 digital emergency voice communication panel is available as flush or surface mount.



VoCALL digital range

Emergency alarm assist equipment

System installation

The Emergency Assist Alarm should be installed in accordance with local building regulations and country codes of practice. The diagram below demonstrates a typical layout for installation in a disabled persons toilet.

Note: Where pertinent other or alternative standards of design and installation should be adhered to.

All system components are designed to be sited internally and positioned in locations where they are readily accessible by the user. The area should be clean and dry. Sound and light levels allow the status of all device indicators and sounders to be seen and heard.

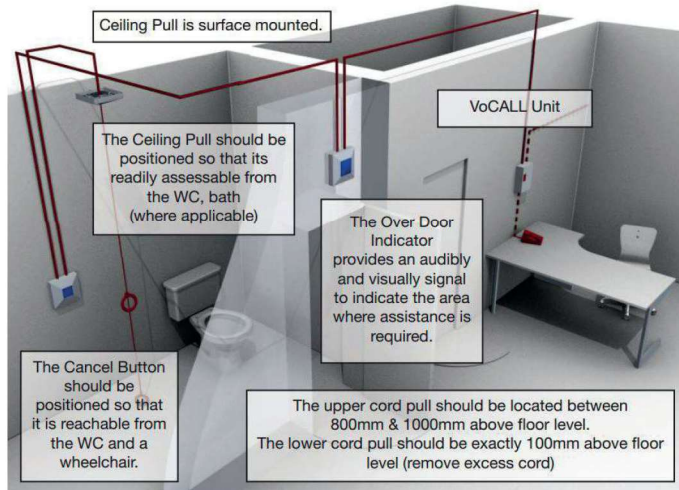
System operation

To place a call - operate the pull cord. Blue LEDs will illuminate on pull cord unit, cancel unit and over door indicator. An integrated buzzer will also sound in the external over door indicator.

The VoCALL panel will indicate emergency assist alarm activations. Once the call is accepted a signal will be sent to the EAA interface which will then power a reassurance beacon or sounder if required

To reset call - press the cancel button supplied with the emergency assist alarm kit

If a call is made and not accepted at the VoCALL panel, then a user variable timer function is activated which will activate a relay on the main panel once timed out this can be used to sound an alarm or trigger a dialler.



Reassurance

The VoCALL EAA interface has a powered output which changes state when the call from the EAA is acknowledged at the VoCALL Digital panel. This allows the installer to install a reassurance light or sounder as required (not supplied) along with a self-adhesive pictogram to identify the meaning of the light or sounder (supplied)

Wiring multiple alarm points from the EAA16-LS

Using the 12v PSU, which is included within the CFEAPULLKIT, allows the EAA16-LS to run single or multiple CFVCEA units in a local area such as a toilet cluster or corridor. The addressable nature of the EAA16-LS allows it to identify the locality of the alarm, (Corridor C for example) and the overdoor light which is part of the CFVCEA pinpoints the room or toilet in alarm. This configuration also allows multiple reset points and pull cords to be used.

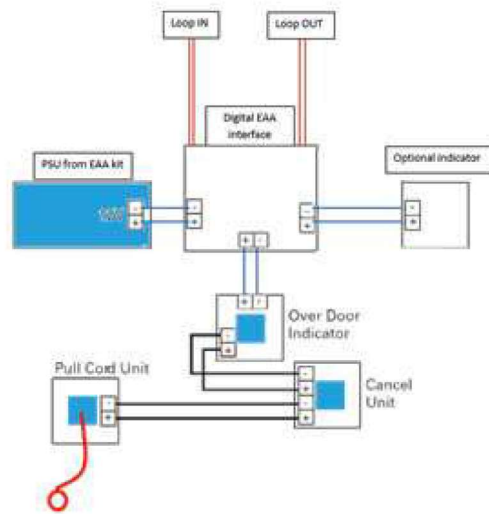
Wiring

The wiring from the VoCALL EAA interface consists of a single pair in for alarm and a single pair out for reassurance if required, this does not have to be fire rated cable, although this may be used,

The mains powered supply must be wired by a qualified person in accordance with the latest revision on the IEE wiring regulations (currently 17th Edition), and connected to the building mains supply using a fused spur (fitted with a 3A fuse).

All mains wiring should be provided in accordance with current wiring regulations and in accordance with relevant national wiring rules.

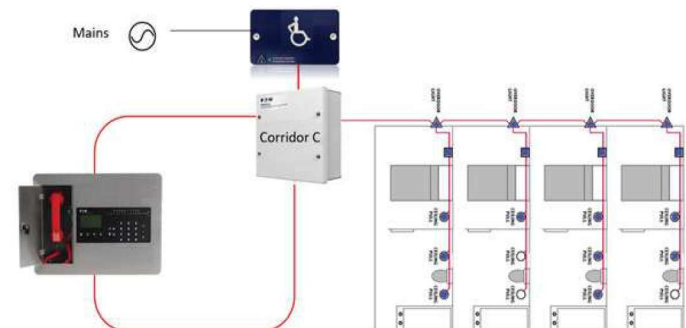
Always segregate Extra Low Voltage (ELV) wiring from the mains wiring. System requires minimum 2 core 0.4mm² cable. All wall mounting devices should be mounted onto a back box of the required depth



Panel Disablement

The VoCALL 16 Digital panel has a disablement function which disables the system from making or receiving calls until it has an external input such as a fire relay, this is often used to stop nuisance calls, it should only be used after discussion and documentation by all interested parties.

The EAA interface will override this panel disablement and allow calls from the EAA through to the VoCALL panel in the normal manner



Description	Code
Emergency assist alarm Digital interface	EAA16-LS
Emergency assist kit with PSU	CFEAPULLKIT
Emergency assist kit without PSU	CFVCEA

VoCALL 16 accessories

Stainless steel panel front

MX16-SSC



Semi-flush grey bezel

MX16-BEZ

