

Addressable control panels

xDetect - product datasheet
Menvier



An Eaton secure-by-design solution
Complies with rigorous cybersecurity, process, requirements and testing standards

Small enclosures



xDetect is a 1 to 4 loop addressable fire alarm control panel featuring an instantly familiar, tablet-like user interface. Its adaptive touchscreen automatically changes colour in line with the fire system's status. The panel protects data and assets from hackers, ensuring secure communications, and has been designed with industry-leading levels of cybersecurity, making it future-ready for BMS and IoT connectivity.

Its end-to-end design concept minimises time on-site, simplifying selection, installation, commissioning and service thanks to features such as error-proof colour coding and modular architecture. Installation and maintenance times and costs are reduced further by xDetect's ring design. This makes the use of a redundant network unnecessary, significantly reducing cabling and associated costs.

A scalable solution, xDetect is easy to expand and adapt in line with building owners' changing needs thanks to its modular system architecture. It can be upgraded effortlessly in line with changing standards and regulations through an intuitive, colour-coded scalable loop configuration with easy-to-swap system cards.

Large enclosures

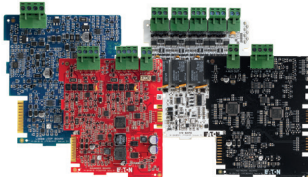


Key features

- Flexible modular card based system with redundancy
- Fault tolerant ring network design with built in isolators
- Cybersecure – An Eaton secure-by-design solution
- 600mA Maximum current per loop
- Multi-language selection capability
- Powerful matrix based cause & effect programming with xDetectWorks programming software
- "Tablet like" 7" colour touchscreen
- Instantly familiar interface with high contrast colour coding that is simple to operate and learn
- Available in two sizes: Small (7 card frame) and large (12 card frame) enclosure options
- EN54-2, EN54-4 certified
- LPCB approved

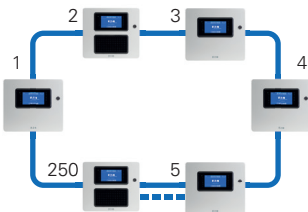
Order codes

Modular cards



- Colour coded cards
- Easy identification in the field
- Local status LEDs for each card
- Simple maintenance

Networked systems



A fault tolerant loop network means no loss of communication during a single fault, reducing cable costs across a maximum of 250 panels per network.

Control panels

Enclosure	Description	Model reference	Order code
Small	xDetect Addressable CIE Panel 2 Loop Enclosure	MXD01020	MXD01020
Large	xDetect Addressable CIE Panel 4 Loop Enclosure	MXD01040	MXD01040

Cards & backplane options/spares

Description	Model reference	Order code
xDetect Loop Card 1L Protocol 800	EFXD05001	EFXD05001
xDetect Sounder Circuit Card 2 Outputs	EFXD05020	EFXD05020
xDetect Programmable I/O card	EFXD05030	EFXD05030
xDetect Network Card	EFXD05040	EFXD05040
xDetect CIE Int. Power Supply 150W	EFXD05051	EFXD05051
xDetect CIE Int. Dual PSE Backplane	EFXD05052	EFXD05052
xDetect CIE Int. Single PSE Backplane	EFXD05053	EFXD05053
xDetect Zonal Indicator Board – 128 Zonal Indicator	EFXD05060	EFXD05060
xDetect CIE Backplane Large Enclosure	EFXD05081	EFXD05081
xDetect CIE Backplane Small Enclosure	EFXD05082	EFXD05082

Panel door options

Description	Model reference	Order code
xDetect CIE Door Small HMI only	EFXD05091	EFXD05091
xDetect CIE Door Large HMI only	EFXD05092	EFXD05092
xDetect CIE Door Small 128 Zonal Indicator	EFXD05093	EFXD05093
xDetect CIE Door Large 128 Zonal Indicator	EFXD05094	EFXD05094
xDetect CIE Door Large 256 Zonal Indicator	EFXD05095	EFXD05095

Note: In the first release (MR1.0), the system will support a maximum network size of 20 panels. please contact Eaton technical support for further guidance.

Addressable control panels

xDetect – Technical specifications



MXD01020

MXD01040

Brand	Eaton Menvier	Eaton Menvier
Enclosure	Small	Large
HMI	7" Colour touchscreen	7" Colour touch screen
Zonal Indicator	None	None
Approval	EN54-2, EN54-4	EN54-2, EN54-4
Accreditation	LPCB 378q/01	LPCB 378q/02
Max. Zones (per CIE)	256	256
Number of Loops	1-2	1-4
Max. Length of Loops	2km	2km
Max. Load per Loop (Inputs & Outputs)	600mA	600mA
Max. No. of Addressable Points per Loop	200	200
Max. No. of Addressable Points per C.I.E	400	800
Max. No. of Alarming Devices per Loop Card (based upon beacon with 4.1mA current)	Up to 131	Up to 131
Max. No. of Alarming Devices per Sounder Card (based upon lowest operating current of RoLP)	Up to 106	Up to 106
Max. No. of Fire Alarm Devices per C.I.E	Up to 262 (requires 1 additional Loop card from standard)	Up to 262 (with 1 PSU - requires 1 additional Loop card from standard) Up to 524 (with 2 PSUs - requires 1 additional PSU & 3 loop cards from standard)
Pre-Fitted Cards	1x Gateway 1x Loop 1L Protocol 800	1x Gateway 1x Loop 1L Protocol 800
System Operating Voltage	20.4-28V (VBUS)	20.4-28V (VBUS)
Mains Input Supply	230Vac +10%, -15% 50/60Hz	230Vac +10%, -15% 50/60Hz
Standby Duration	Up to 24Hrs (Dependant on loop loading and battery configuration)	Up to 24Hrs (Dependant on loop loading and battery configuration)
Maximum Battery	2 x 12V dc (12Ah) (Batteries not included)	4 x 12V dc (12Ah) (Batteries not included)
Weight (without batteries)	8.4kg	11kg
Ingress Protection	IP30	IP30
Dimensions H x W x D - Product (mm)	374 x 426 x 148	527 x 433 x 148
Dimensions H x W x D - Packaged (mm)	630 x 500 x 310	630 x 500 x 310
Construction	1.5mm Mild Steel	1.5mm Mild Steel
Cable Entry	23x 20mm diameter at top 2x 20mm diameter on each side 2x 20mm diameter on bottom 1x Rectangular knockout at rear-W 284 X H 35 mm	23 x 20mm diameter at top 4 x 20mm diameter on each side 2 x 20mm diameter on bottom 1x Rectangular knockout at rear-W 284 X H 35 mm
Operating Temperature	-5C to +50°C	-5C to +50°C
Humidity (non condensing)	95%	95%
Compatible with	Visit www.Eaton.com/xDetectCompatibleDevices to see the latest list of compatible peripherals	

Addressable control panels

xDetect Mini - product data sheet

Menvier



An Eaton secure-by-design solution
Complies with rigorous cybersecurity, process, requirements and testing standards



The xDetect Mini is a futureproof fire alarm control panel that combines powerful performance with a compact, discreet and aesthetically pleasing design. Fitting into the wider xDetect family, the Mini ensures compliance with the latest fire detection standards while noticeably reducing space and complexity, making it ideal for quick installation anywhere in a building. Backed by Eaton's secure-by-design credentials, xDetect Mini delivers reliable performance and scalability without compromising on security.

Every xDetect panel is carefully designed to minimise the time installers spend on-site, simplifying their selection, fitting, commissioning and service requirements through features such as errorproof colour coding and modular architecture. Errorproofing continues with support for loop networking; even without redundant lines, a single fault is stopped from disrupting system communication, thereby reducing cabling costs.

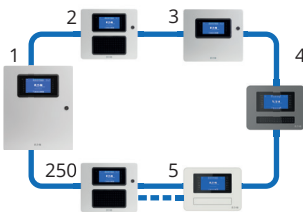
A scalable solution, each xDetect panel can easily expand and adapt in line with new legislation and building owners' changing needs. Color-coded modular cards quickly swap into the panel to enable fluid and intuitive upgrades.

Modular cards



- Colour coded cards
- Easy identification in the field
- Local status LEDs for each card
- Simple maintenance

Networked systems



A fault tolerant loop network means no loss of communication during a single fault, reducing cable costs across a maximum of 250 panels per network.

Key features

- Compact and scalable safety solution
- Flexible modular card based system with redundancy
- Fault tolerant ring network design with built in isolators
- Cybersecure – An Eaton secure-by-design solution
- 600mA Maximum current per loop
- Multi-language selection capability
- Innovative technology designed to work with familiar tools and peripherals
- Powerful matrix based cause & effect programming with xDetectWorks programming software
- "Tablet like" 7" colour touchscreen
- Instantly familiar interface with high contrast colour coding that is simple to operate and learn
- Natural upgrade for legacy CF2000 panels

Order codes

Control panels

Description	Colour	Order code
xDetect Addressable CIE Mini Enclosure (1-2 Loops)	Grey	MXD02002-G
xDetect Addressable CIE Mini Enclosure (1-2 Loops)	White	MXD02002-W

Cards & backplane options/spares

Description	Colour	Order code
xDetect Mini Zonal Indicator Board – 32 Zonal Indicator	EFXD02051	EFXD02051
xDetect Mini CIE Int. Backplane	EFXD02052	EFXD02052
xDetect Mini CIE Int. Power Supply 75W	EFXD02053	EFXD02053
xDetect Loop Card 1L Protocol 800	EFXD05001	EFXD05001
xDetect Programmable I/O card	EFXD05030	EFXD05030
xDetect Network Card	EFXD05040	EFXD05040

Addressable control panels

xDetect Mini – Technical specifications

MXD02002

Brand	Eaton
HMI	7" Colour touchscreen
Zonal Indicator	32 (optional add-on)
Approval	EN54-2, EN54-4
Max. Zones (per CIE)	256
Number of Loops	1-2
Max. Length of Loops	2km
Max. Load per Loop (Inputs & Outputs)	600mA
Max. No. of Addressable Points per Loop	200
Max. No. of Addressable Points per C.I.E	400
Max. No. of Alarming Devices per Loop Card (based upon beacon with 4.1mA current)	Up to 131
Max. No. of Fire Alarm Devices per C.I.E	Up to 262 (requires 1 additional Loop card from standard)
Pre-Fitted Cards	1x Gateway 1x Loop 1L Protocol 800
System Operating Voltage	20.4-28V
Mains Input Supply	230V AC +10%, -15%, 60Hz
Standby Duration	Up to 24Hrs (Dependant on loop loading and battery configuration)
Maximum Battery	2 x 12V (9Ah) (Batteries not included)
Weight (without batteries)	2600g
Ingress Protection	IP30
Dimensions H x W x D - Product (mm)	270 x 360 x 116
Dimensions H x W x D - Packaged (mm)	325 x 385 x 200
Construction	Plastic
Cable Entry	12
Operating Temperature	-5°C to +40°C
Humidity (non condensing)	20-95%
Compatible with	Visit www.Eaton.com/xDetectCompatibleDevices to see the latest list of compatible peripherals



MXD02002-W



MXD02002-W with optional EFXD02051



MXD02002-G



MXD02002-G with optional EFXD02051

MAP820, MAOH850, MAH830

Intelligent addressable sensors



This range of intelligent addressable sensors have been specifically designed to operate with Eaton's intelligent addressable fire systems.

All sensors are third party approved to the relevant section of EN54 (part 7 for smoke detectors, part 5 for heat detectors and part 17 for short circuit isolators).

The optical sensor (MAP820) is suitable for most applications giving the fastest response to slow burning or smouldering fires which give rise to large visible smoke particles.

The photo-thermal sensor (MAOH850) will respond quickly to fast clean burning fires yet maintain the advantage of optical sensors when detecting smouldering fires. The thermal enhancement of this sensor allows a higher alarm threshold which provides a greater rejection of false alarms. The sensor will also raise an alarm at temperatures exceeding 60°C.

The MAOH850 has day/night modes available, programmeable from the site installer software. The day mode uses the heat aspect of the sensor for areas which may have smoky environments during, for example working hours. The night mode uses a combination of A2S and smoke detection. If not programmed, the sensor defaults to dual mode.

The heat sensor (MAH830) can be set to one of 3 modes 77°C / 92°C and rate of rise. These sensors are designed to be used in environments where the ambient conditions might cause false alarms if smoke detection were to be used, for example where there is a high level of dust, fumes, steam or smoke under normal conditions.

Features

- Soft addressed
- Integral short circuit isolator
- Single address
- Wide range of sensor types
- 360° visibility LED using lightpipe technology
- Drift compensation
- Aesthetically pleasing

Benefits

- Quick and simple to install
- Single "multi-mode" heat sensor
- Wide viewing angle for increased LED visibility
- Common mounting base
- Positive "lock" indication
- Discreet design for incorporation into any decor
- Easy to maintain/service



Powering Business Worldwide



Technical specification

Code	MAP820	MAOH850	MAH830
Description	Optical smoke sensor	Photo-Thermal sensor	Multi-Mode heat sensor
Standards	EN54 Pt7 2000 + A1:2002, EN54 Pt17	EN54 Pt5 2000 + A1:2002, EN54 Pt7 2000 + A1:2002, EN54 Pt 17	EN54 Pt5 2000 + A1:2002, EN54 Pt17
Operating volatage	18V dc to 30V dc	18V dc to 30V dc	18V dc to 30V dc
Standby current	220µA (max)	220µA (max)	220µA (max)
Alarm current	5mA (max)	5mA (max)	5mA (max)
Addressing mode	Auto address	Auto address	Auto address

Specification

Mounting position	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas
Mounting options	Surface mount with MAB800 base	Surface mount with MAB800 base	Surface mount with MAB800 base
Area coverage	100m ² (subject to local standard)	100m ² (subject to local standard)	100m ² (subject to local standard)
System wiring	Min. 1.5mm, 2 core loop or spur	Min. 1.5mm, 2 core loop or spur	Min. 1.5mm, 2 core loop or spur

Heat class

Rate of rise	N/A	A1S	A1R
Fixed heat 77°C	N/A	N/A	BS
Fixed heat 90°C	N/A	N/A	CS
Alarm temperature (static)			
AIR	N/A	60°C	60°C
BS	N/A	N/A	77°C
CS	N/A	N/A	90°C
Indication	360° visibility light pipe	360° visibility light pipe	360° visibility light pipe

Environmental

Operating temperature	-10°C to +60°C	-10°C to +50°C	-10°C to +60°C
Humidity (non condensing)	0 to 95% RH	0 to 95% RH	0 to 95% RH

Physical

Construction	PC/ABS	PC/ABS	PC/ABS
Colour - Ral No.	White - 9003	White - 9003	White - 9003
Dimensions Excel Base (Dia x D)	101mm x 33mm	101mm x 43mm	101mm x 43mm
Dimensions Incl Base (Dia x D)	104mm x 45mm	104mm x 55mm	104mm x 55mm
Weight (without base)	76g	76g	76g
IP Rating	IP30	IP30	IP30

Compatibility

Suitable for use with	Eaton: Menvier addressable fire systems	Eaton: Menvier addressable fire systems	Eaton: Menvier addressable fire systems
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LEDs

LED state	LED state behaviour	System event
Off	LED is not illuminated.	Global flash is disabled**.
Slow flash	Momentary flash approximately once every 30 seconds*.	Global flash enabled. Detector is in quiescent state.
Fast flash	Momentary flash approximately 25 times per minute*.	>24 detectors are in fire state.
On	LED is constantly illuminated.	Detector is in fire state.

*Timing can vary depending on loop address quantities.

**Detector flash in quiescent state can be disabled via control panel menu (DF6000, DF6100, DF2000).

Catalogue numbers

Description	Code
MAP820 Optical smoke sensor	400002FIRE-0008X
MAOH850 Photo/Thermal sensor	400004FIRE-0010X
MAH830 Multi-Mode heat sensor	400003FIRE-0009X
Standard base	MAB800
Conventional remote indicator	DIR301
Duct probe (requires detector & base)	MDP201
Loop connected remote indicator	MRIAD



Powering Business Worldwide

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MDP201 - Intelligent addressable duct mounting probe



The duct mounting probe unit is designed for use with Eaton's range of addressable and conventional optical smoke sensors / detectors.

The presence of smoke in a ventilation duct is detected by sampling the airflow through the duct via two sampling tubes. A detector and base are mounted within the sampling chamber, which is located on the external skin of the duct, with sample and exhaust probes passing into the duct in an area of low turbulence. The unit requires an analogue optical sensor or conventional optical detector and corresponding base and is supplied with full fixing instructions.

Features

MDP201	
Duct width range	300mm to 1500mm 5 to 50 metres
Duct air speed range	1m/s to 20m/s Detector $\pm 0.8^\circ$ Prism $\pm 5.0^\circ$
Temperature range	-20°C or +60°C
Ingress protection	IP67



Duct probe unit shown with optical detector - **detector and base must be ordered separately.**

Specifier's guide

2.4 Accessories

Selecting location

To avoid excessive turbulence, the duct probe should be placed in a straight section of duct at a distance from any bends of least three duct widths. If the duct has several extraction points that combine into one duct the duct probe sensitivity will be reduced, it is recommended therefore, that each duct is fitted with its own duct probe.

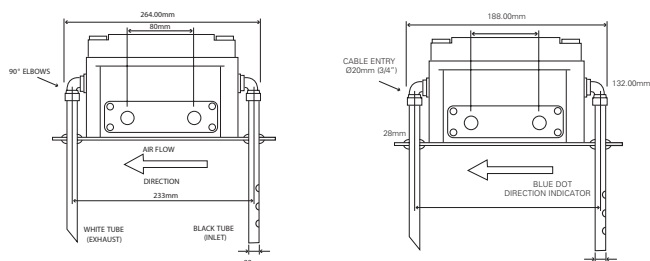
Testing

A small hole fitted with a plug is on the exhaust side of the duct probe so that smoke can be used to check the detector is operational without removing the lid. ENSURE THE PLUG IS REFITTED AFTER TESTING.

Servicing

The duct probe should be checked regularly to ensure there is no build-up of dirt. If dirt etc has accumulated in the sampling unit then the detector should be removed from the duct probe and the tubes, elbows etc, cleaned.

Installation diagrams



Catalogue numbers

Description	Code
Duct mounting probe	MDP201
Addressable optical smoke sensor	CAP320
Addressable standard base	CAB300
Conventional multimode detector	FXN922
Conventional optical smoke sensor	CPD324
Conventional standard base	CPD300



Standard Base MAB800

Suitable sensors for use with the
MAB800 standard base



MAP820 optical sensor



MAOH850 photo-thermal sensor



MAH830 multi-mode heat sensor



MAB800 standard base

Overview

The MAB800 Menvier intelligent addressable standard base has been specifically designed to be compatible with Menvier intelligent addressable sensors.

This standard base has been designed for flexibility, simplicity and speed of installation. It incorporates a purpose designed shorting link to ensure wiring continuity if a sensor is removed.

The standard base incorporates a retaining clip to provide positive feedback when sensor is correctly fitted and a retaining clip that can be replaced with locking device (supplied with base) to prevent unauthorised sensor removal.

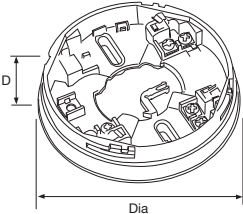
Features

- Sensor shorting link
- Separate loop in and loop out terminals
- Stand off fixing feature
- Accepts side entry cables
- Selectable sensor locking feature

Benefits

- Quick and simple to install
- Accepts side entry surface cables
- Common base for Menvier intelligent addressable sensors

Dimensions



Dia (mm)	D (mm)
104	22

Technical Specification

Code	MAB800
Description	Standard base
Physical	
Construction	PC/ABS
Colour	White
Dimensions (Dia x D)	104mm x 22mm
Compatibility	
Suitable for use with	Menvier intelligent addressable sensors

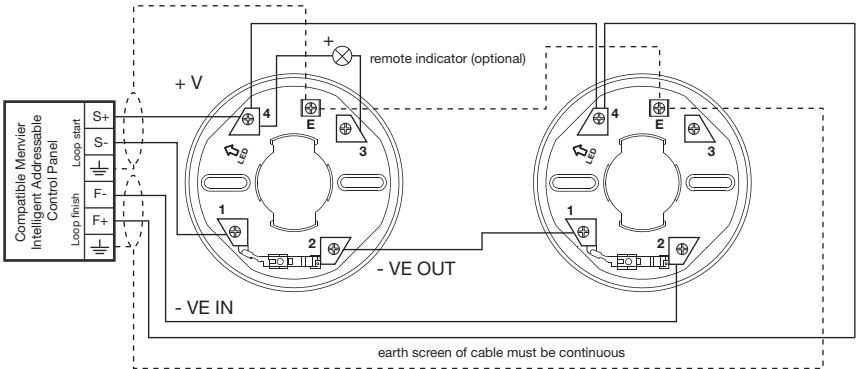
Installation

- 1. Separate terminals are provided for loop in and loop out connections.
- 2. Each terminal can accept up to 2 x 2.5mm cables.
- 3. Base incorporates a substantial cable entry aperture in the rear of the base.
- 4. Breakouts are provided to enable the sensor base to sit neatly over surface cables and then enter via the rear entry aperture.
- 5. Base mounting incorporates a stand off feature to help prevent distortion when mounted on an uneven surface.
- 6. Fixings are suitable for standard BESA box or direct fixing to suitable surface.

User Interface

- 1. Heavy duty terminals are provided for each connection, each terminal can accept 2 x 2.5mm cables.
- 2. Separate loop in and loop out terminals are provided for each connection.

Standard Connection



WARNING:
If using the outer connection on terminal 2, ensure the operation of the switch is not impeded and that there are no shorts between terminal 2 and the switch contact

Ensure that cable or end of line resistor leg does not short onto the contact.

Product Codes

Code	Description
MAB800	Intelligent addressable standard base



MAS850 - Intelligent addressable sounder base



The intelligent addressable sounder base (MAS850) can be used both with a sensor or as a stand alone device.

The MAS850 is compatible with Eaton's range of intelligent addressable sensors and fire systems.

This device incorporates a sensor mounting base, a sensor can be fitted to the sounder base or alternatively an optional cover plate (CASC) can be used to enable the sounder to operate as a dedicated discreet stand alone sounder.

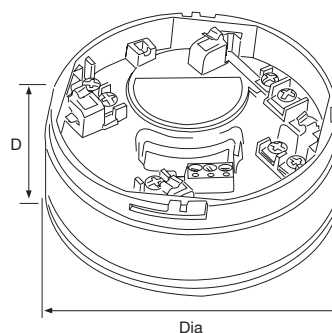
Features and benefits

- Integral short circuit isolator
- Integral sensor mounting base
- Can be used with a sensor as a sounder base or stand alone as a sounder
- Cover plate (optional)
- Quick and simple to install
- First fix base
- Selectable tones controlled by the panel
- Adjustable volume controlled by the panel
- Single point connection for sensor and sounder (saving on both time and installation costs)
- Can be used with a sensor or stand alone
- Easy to maintain/service

Technical specification

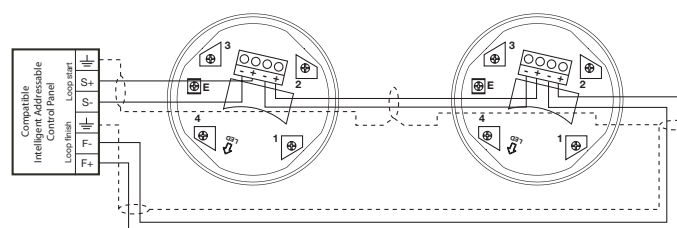
Code	MAS850
Description	Sounder base
Standards	EN54 Pt3
Specification	
Operating voltage	17V dc to 32V dc
Standby current	< 320µA
Tones (set by panel)	Continuous: 910Hz Pulsed: 910Hz / 0Hz pulse 1Hz Two tone: 610 / 910Hz at 1Hz cycle Slow whoop
Sound output at +/-3dB at 1 meter (set by panel)	Low volume : 84dB at < 4mA Medium volume : 92dB at < 8mA High volume : 95dB at < 12mA
Environmental	
Operating temperature	-10 to +55°C
Humidity (non condensing)	0 to 95% RH
Physical	
Construction	PC/ABS
Colour	White
Dimensions (Dia x D)	102mm x 40mm
Weight	0.2kg
Ingress protection	IP40
Compatibility	
Suitable for use with	Eaton intelligent addressable fire systems

Dimensions



Dia (mm)	D (mm)
102	40

Standard connections



WARNING:
Do NOT use high voltage testers if ANY equipment is connected to the system.
Earth screen must be continuous along entire length of loop.

NOTE:
Base terminal 1, 2, 3 and 4 not used. All wiring terminates as shown above.

Installation

1. Installation is simple using first fix base.
2. First fix base is fixed to mounting surface via 2 fixings holes.
3. Cables enter through aperture in base (rear entry only)
4. Main body is then clipped into place on base, main body locks into place when pressed into position.
5. Cables pass through aperture in sounder body and terminate at the front.
6. Connections are to connector block on front of main sounder body.
7. Sensor or cover plate is then fixed to sounder.
8. Sensor or cover plate can be locked in place if required.

System functionality

1. Volume and tone are set by control panel, no need to access sounder to alter setting.
2. Soft addressed.

Catalogue numbers

Description	Code
Sounder base	MAS850
Optical smoke sensor	MAP820
Photo/thermal sensor	MAOH850
Multi-mode heat sensor	MAH830
Cover plates (pack of 5)	CASC

Eaton MASB860WP

Catalog Number: MASB860WP

Eaton Addressable wall sounder beacon: Menvier, Addressable, Alarms and Beacons, Sounder Beacon, EN54 Systems, Wall Mounted, Red Plastic, Red Flash, Weatherproof

General specifications



Product Name	Catalog Number
Eaton Addressable wall sounder beacon	MASB860WP
EAN	Product Length/Depth
5018986704213	105 mm
Product Height	Product Width
108 mm	108 mm
Product Weight	Compliances
0.32 kg	Contact Manufacturer

Appearance

Lens color

Red

Color housing

Red

Light color

Red

Product branding

Eaton Menvier

Conformance / Certification

EN Certification Standards

EN54 Pt3 (Fire Alarm Sounders)

EN54 Pt17 (Short Circuit Isolator)

Environmental

Degree of protection

IP66

Installation

Construction material

ABS

Mounting Method

Surface mounting

Cable entry

Rear

Suitable for

Wall Mounting

Operating Conditions

System typology

Addressable

Addressing mode

Soft addressing

Type of current

DC

Performance

Lamp type

LED

Type of acoustic signal device

Sound generator

Type of acoustic signal

Programmable

Type of optical signal

Flash light

Tones

4

Voice tones

No

Resources



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MBG813/817

Eaton callpoints



Two versions of intelligent addressable callpoints are available in this range, the (MBG813) which can be either surface or flush mounted and the (MBG817) which is a weatherproof version.

Both the (MBG813) and the (MBG817) are compatible with the Eaton range of intelligent addressable fire systems.

These intelligent addressable callpoints are attractively designed, simple to install and are supplied as standard with a frangible glass element and a test key for ease of maintenance.

A comprehensive range of accessories are available to maximise the functionality of the callpoint for particular applications.

Features

- Soft addressed
- Integral short circuit isolator
- Single address
- Fast fit clip on front cover
- High visibility status LED
- Wide range of accessories
- Heavy duty terminals
- Two models available:
 - Internal
 - Weatherproof

Benefits

- Quick and simple to install
- Single tool for test and access
- Robust construction
- IP65 version available
- Easy to maintain/service

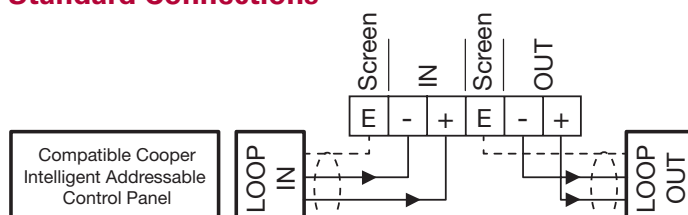
Technical Specification

Code	MGB813	MGB817
Description	Surface / Flush Mounting Callpoint	Weatherproof Callpoint
Standards	EN54 Pt11	EN54 Pt11
Specification		
Operating Voltage	17V dc to 32V dc	17V dc to 32V dc
Quiescent Current	< 250µA	< 250µA
Environmental		
Operating Temperature	-10°C to +55°C	-10°C to +55°C
Humidity (Non Condensing)	0 to 93% RH	0 to 93% RH
Physical		
Construction	PC/ABS	PC/ABS
Colour	Red	Red
Dimensions (H x W x D)	87mm x 87mm x 57mm (36mm flush)	87mm x 87mm x 59mm
Weight	0.2kg	0.2kg
Ingress Protection	IP42	IP65
Compatibility		
Suitable for use with	Eaton Intelligent Addressable Fire Systems	Eaton Intelligent Addressable Fire Systems

Installation

1. Surface callpoint has standard rear BESA fixing facilities. In addition, back box can accept top or bottom surface entry cables. Surface callpoint can also be flush mounted.
2. Callpoint has test facility via special test key to prevent unauthorised operation.
3. Insertion of test key for test purposes and for cover removal is at bottom of callpoint to facilitate ease of access when mounted next to door architrave.
4. Test key is dual function, used to test callpoint operation by simulating activation and also to allow removal of clip on cover to gain access to element.
5. Element is held in place by clip on self locking cover which can only be removed by use of a special tool (callpoint test key).
6. Separate loop in and loop out terminals are provided for all connections including screen continuity on intelligent addressable callpoints.
7. Surface/flush callpoints are IP42, weatherproof is IP65.

Standard Connections

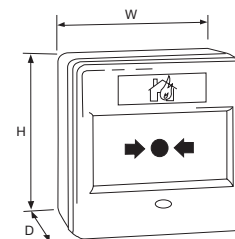


WARNING:

Do NOT use high voltage testers if ANY equipment is connected to the system.

Screen (Earth) must be continuous along entire length of loop.

Dimensions



Description	H (mm)	W (mm)	D (mm)
Flush Mounted	87	87	36
Surface Mounted	87	87	57
Weatherproof	87	87	59

User Interface

1. To enable quick and simple installation, callpoints use a fast fit self locking clip on front cover which is very simple to fit, but once in place, can only be removed by use of a special key (supplied).
2. Callpoint is triggered by pressing against the element.

Catalogue numbers

Description	Code
Surface/Flush Callpoint	MBG813
Waterproof Callpoint	MBG817
Protective Hinged Cover	CXPC
Spacer Plates (pack of 10)	MBGSP
Recessing Bezels (pack of 10)	4990005FUL-0194
Resettable Element Kit (pack of 10)	MBGREKIT
Spare Break Glasses (pack of 5)	516200FULL-5017
Callpoint keys (pack of 10)	MFBGKEY3

MMIM

Micro Single Channel Input Units



An extensive range of micro interfaces are available to support the Eaton range of control panels, providing solutions for most design requirements.

The MMIM is a single input, soft addressed micro interface, incorporating integral short circuit isolators. It is extremely compact and therefore ideal for incorporation into other equipment.

The MMIM is fully compatible with the current range of Eaton intelligent addressable fire control panels. It is suitable for monitoring a set of normally open, volt free contacts such as sprinkler system flow switches, auxiliary panel fire/fault signals as well as non fire input signals such as flow valve open contacts, generator start up, fire door closed etc.

Features

- Soft Addressed
- Integral short circuit isolater
- Single address
- Suitable for monitoring:
 - Flow switches
 - Non fire inputs
 - Auxillary panels
- Up to 200 units per loop

Benefits

- Quick and simple to install
- No hard addressing required (Plug and play)
- Compact size
- Programmable by Eaton site installer software as technical input/non fire input

Technical Specification

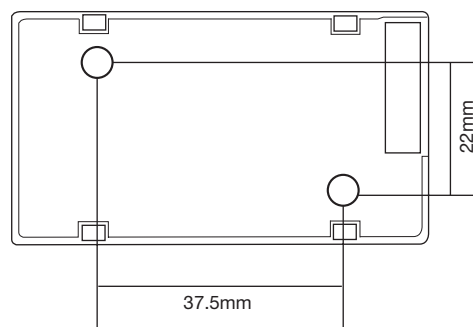
Code	MMIM
Description	Micro Single Channel Input Unit
Standards	EN54 Pt17 & Pt18
Specification	
Operating Voltage	18V dc to 30V dc
Quiescent Current	310µA
Inputs	
Trigger Resistance	5K6Ω
End of Line Resistor	22KΩ
Short Circuit Fault Threshold Resistance	1KΩ
Open Circuit Fault Threshold Resistance	33KΩ
Environmental	
Operating temperature	-10°C to +60°C
Humidity (non condensing)	0 to 95% RH
Physical	
Construction	PC/ABS
Dimensions (H x W x D)	63mm x 35mm x 18.5mm
Weight	0.078kg
Ingress protection	IP40
Compatibility	
Suitable for use with	Eaton Intelligent Addressable Fire Systems
Recommended loop/cable type	Fire Tuff, FP200, MICC type

Installation

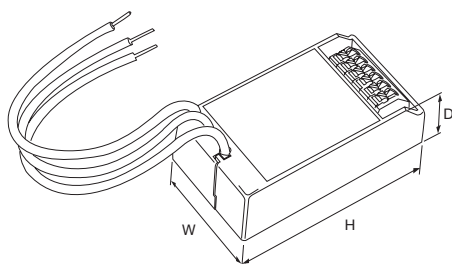
1. Inputs monitored for open and short circuit fault conditions.
2. Suitable for monitoring normally open volt free contacts (flow switches etc).
3. Connections suitable for single strand fireproof cable up to 2.5mm².
4. Loop and input cable screen must be connected to interface earth terminals.
5. The end of line monitoring resistor, must always be fitted at the end of the input wiring, if the input is unused the end of line resistor must be fitted at the interface input terminals.

Note: No addressing of the interface is required (see control panel operation for details)

Mounting Details

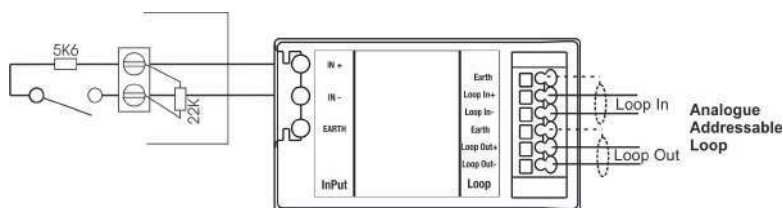


Dimensions



H (mm)	W (mm)	D (mm)
63	35	18.5

Standard Connections



Catalogue numbers

Description	Code
Micro single channel Input unit	MMIM

Eaton
Electrical Sector EMEA Route de la
Longeraie 7
1110 Morges, Switzerland

Eaton
Fire Systems Business
Eaton Electrical Systems Ltd
Wheatley Hall Road Doncaster
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MMOM

Micro Single Channel Output Units



An extensive range of micro interfaces are available to support our range of control panels, providing solutions for most design requirements.

The MMOM is a single output, soft addressed, micro interface, incorporating integral short circuit isolators. It is extremely compact and therefore ideal for incorporation into other equipment.

The MMOM is fully compatible with the current range of Eaton intelligent addressable fire control panels.

It is suitable for switching low voltage (24V dc at 1A maximum), via a set of non latching relay contacts.

It is suitable for switching HVAC control circuits, plant shutdown control circuits, fire door closure etc.

Optional Variants

The (MMOM-R) gives a 5 second pulse on reset, and is used for connecting/resetting beam detectors.

The (MMOM-S) is identified by the panel as a sounder and does not reset when put into 'silence' mode, only resets once panel has been reset.

The (MMOM-FC) is identified by the panel as sounder and will activate from its associate cause and effect programming. It will reset from a global reset not a global silence command. Suitable for use with fan controller devices for smoke management.

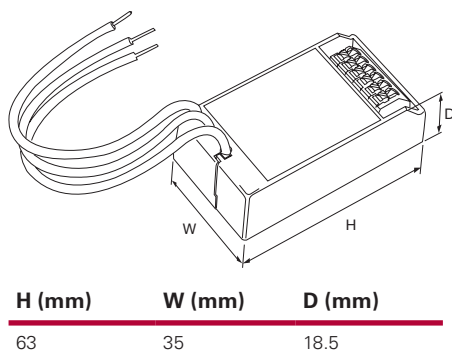
Benefits

- Quick and simple to install
- Compact size
- Soft Addressed
- Integral short circuit isolator
- Plug and play, no hard addressing required
- No external short circuit isolator required

Technical Specification

Code	MMOM, MMOM-S, MMOM-R, MMOM-FC
Description	Micro single channel output unit
Standards	EN54 Pt17 & Pt18
Specification	
Operating Voltage	18.5V dc to 30V dc
Quiescent Current	310µA
Output Relay	
Switching Voltage	24V dc to 30V dc
Contact Rating	1A
Switching Power	30 Watts
Environmental	
Operating temperature	-10°C to +60°C
Humidity (non condensing)	0 to 95% RH
Physical	
Construction	PC/ABS
Dimensions (H x W x D)	63mm x 35mm x 18.5mm
Weight	0.078kg
Compatibility	
Suitable for use with	Eaton Intelligent addressable fire systems
Recommended loop/cable type	Fire Tuff, FP200, MICC

Dimensions

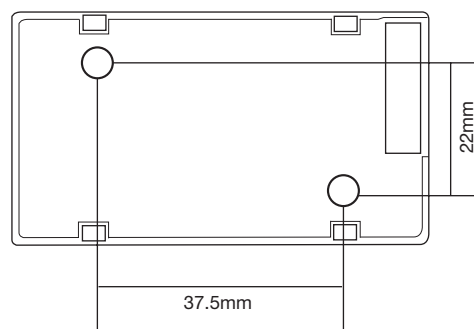


Installation

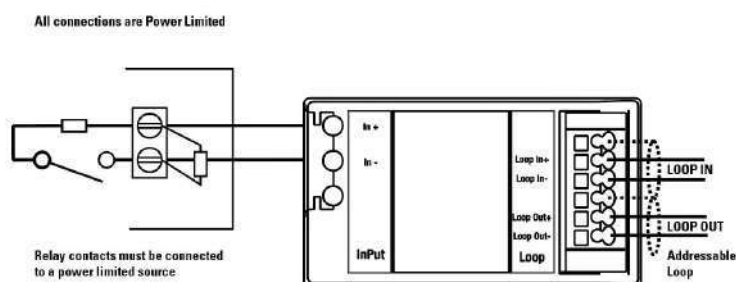
1. Suitable for switching 24V dc control circuits (fire door retainers etc).
2. Connections suitable for single strand fireproof cable up to 2.5mm².
3. Loop and output cable screen must be connected to interface earth terminals.
4. The relay output is a set of change over, non-latching, volt free contacts which are non monitored.

Note: No addressing of the interface is required (see control panel operation for details)

Mounting Details



Standard Connections



Catalogue numbers

Description	Code
Micro single channel output unit (recognised as output unit)	MMOM
Micro single channel output unit (recognised as sounder)	MMOM-S
Micro single channel output unit (5 second reset pulse)	MMOM-R
Micro single channel output unit (fan controller output unit)	MMOM-FC
Mini module box unit (empty box)	ULBU

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VoCALL 5

Emergency voice communication system



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



Powering Business Worldwide

Technical specification

Code	EFVCC5
Product description	VoCALL 5, 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

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)	300m

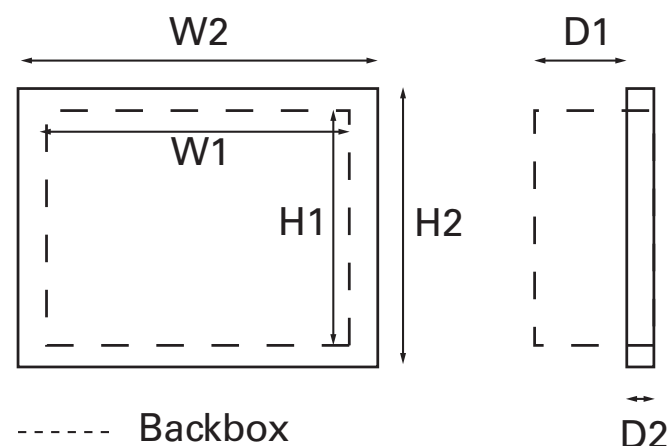
Physical

Weight	6.5kg
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Installation

Mounting	Surface or optional stainless steel flush mount
Cutout	330mm x 300mm (semi-recessed unit)
Cable Entries	Top: 7 x Cable knockouts (20mm)

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
LVD	EN60950
Local	BS5839 Pt9

Catalogue numbers

Description	Code
VoCALL 5, compact 5 line unit - surface mount	EFVCC5
VoCALL 5, compact 5 line unit - stainless steel flush mount cover	EFVCC5-FC
VoCALL 5, compact 5 line unit - semi flushing bezel	EFVCC5-FB

CFVCRHS, CFVCRJP - VoCALL roaming handset and jack plate



The VoCALL roaming handset is used along with the 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 under BS5839 Pt9).

When used together the roaming handset and jack plate form a Type A outstation which is compatible with all VoCALL systems.

Features and benefits

- Flexible roaming phone
- Low noise high quality telephone jack
- Telecoil for hearing impaired users
- Full duplex operation
- Stainless steel jack plate
- The jack plate can be surface or flush mounted
- Full duplex operation, allowing 2 way voice communication

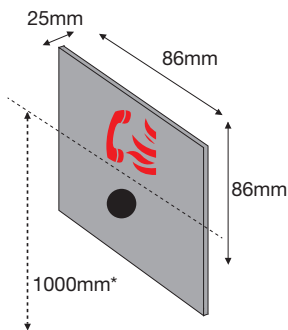
Specifier's guide

5.2 Outstations

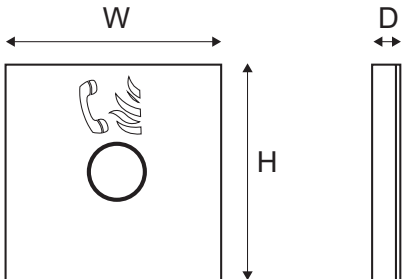
Technical specification

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

Unit mounting



Dimensions

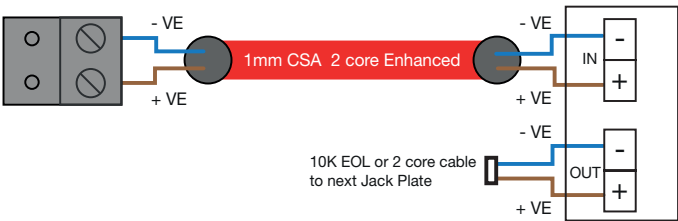


Description	H (mm)	W (mm)	D (mm)
Jack Plate	86	86	25

Code	CFVCRJP
Product description	VoCALL jack plate
Outstation cables	
Type	Enhanced
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 under BS5839 Pt9.

Catalogue numbers

Description	Code
VoCALL roaming handset	CFVCRHS
VoCALL jack plate	CFVCRJP

CFEAPULLKIT

Emergency assist alarm stand alone kit



The Emergency Assist Alarm stand alone kit provides the perfect solution for signaling the requirement for assistance in toilet areas, bathrooms or hotel rooms.

This is a simple 2 wire system that has been specifically designed to meet the needs of disabled service users and conforms to all the relevant requirements.

The use of combined high output blue LED indication and buzzer ensures a response to the call.

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

Features and benefits

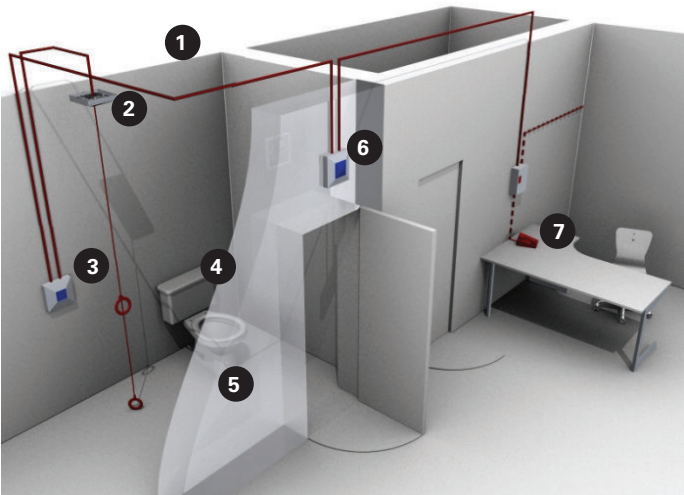
- Complies with regulations and recommendations
- Dual loop pull cord
- High contrast labels
- Blue indication
- Quick and simple installation, with limited cabling requirements
- High contrast printing for increased visibility
- Tactile braille signage to assist partially sighted people to easily operate the cancel plate

System installation

The Emergency Assist Alarm should be installed in accordance with the local standards and regulations. The diagram below demonstrates a typical layout for installation in a disabled person 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 installation

1.

Ceiling pull is surface mounted
2.

The Ceiling Pull should be positioned so that its readily accessible from the WC or bath (where applicable).
3.

The Cancel Button should be positioned so that it is reachable from the WC and a wheelchair.
4.

The upper cord pull should be located between 800mm & 1000mm above floor level.
5.

The lower cord pull should be exactly 100mm above floor level (remove excess cord).
6.

The Over Door Indicator provides an audible and visual signal to indicate the area where assistance is required.
7.

The Power Supply is situated in corridor and supplied via switched fuse spur.

Mains wiring

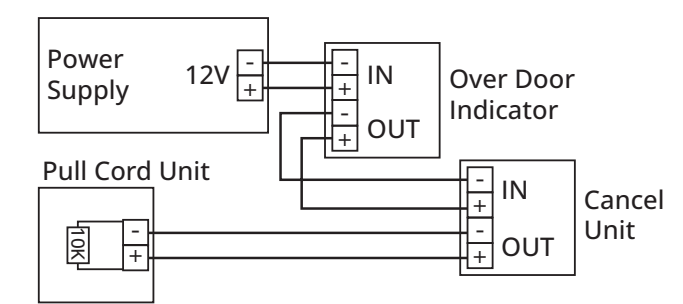
The general requirement for the mains supply to the call controller is fixed wiring, using three core cable of no less than 1mm². This should be fed from an isolating switched fused spur, fused at 3A, which is marked appropriately and secure from unauthorised operation.

All mains wiring should be provided in accordance with local and relevant national wiring regulations and standards.

Extra low voltage (ELV) wiring

Always segregate low voltage 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.

Wiring the unit



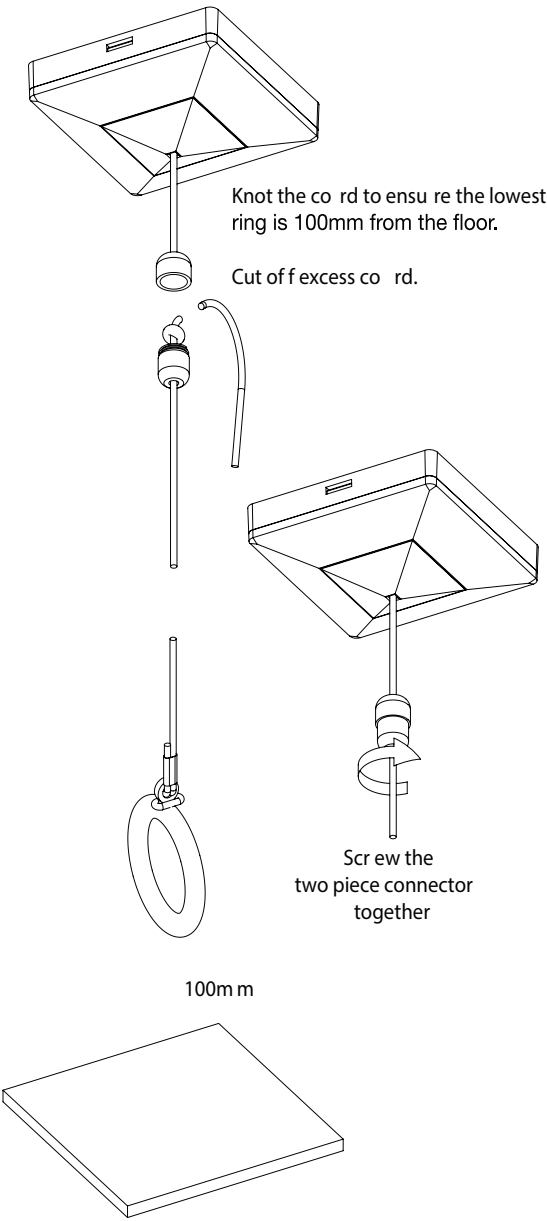
OUT	IN
PSU	Over door indicator
Over door indicator	Cancel unit
Cancel unit	Pull cord unit

System operation

Normal state	Power supply unit power LED is lit.
To place a call	Operate the pull cord. LEDs will illuminate pull cord unit, cancel unit and over door indicator. An internal buzzer will also sound in the over door indicator.
To reset call	Press the cancel button.

Note: when used in conjunction with the 4 way indicator panel CFEASL4, one CFEAPULLKIT is used to provide the power supply and one set of devices to the system. The other sets of devices are ordered as the kit CFVCEA.

Pull station installation



Catalogue numbers

Description	Code
Emergency assist alarm - stand alone kit	CFEAPULLKIT
Individual emergency assist alarm components	
Emergency assist pull cord	CFEAPULL
Emergency Assist Alarm Kit no PSU	CFVCEA
Over door indicator	CFEAODI
Cancel button	CFEARSP
Pull cord accessory pack	CFEACORD