**Fire systems and devices**
Product catalogue

JSB

# Complete fire systems for the protection of life and property

Powering Business Worldwide


* Every day, people depend on things like technology, transportation, energy and infrastructure to keep their daily lives on track. But without power, none of it would be possible. That's why companies around the world turn to Eaton. We're dedicated to improving people's lives and the environment with innovative technologies that help manage power more safely, reliably and sustainably. To meet today's challenges, and tomorrow's. Because this is what really matters. And we're here to make sure it works.

**To learn more go to: Eaton.com/whatmatters**

EATON
*Powering Business Worldwide*

We make what matters work.

**Leadenhall Building**
London, UK

# Excellence and innovation in fire safety solutions.

When it comes to protecting life and property there's no room to compromise. You need a partner that can support you with tried and tested products, global capabilities and local delivery.

Eaton is a leading manufacturer and global supplier of high quality fire systems. With our ability to provide complete systems, not just components, you can be confident in the knowledge that all of our products have been specifically designed and tested to ensure that they are all fully compatible to form a reliable and compliant fire detection and alarm system.

Our large multi-disciplined research and development team is responsible for the integration of the latest technology into the full range of fire products, ensuring that our products are designed to the latest fire industry standards and manufactured to the highest levels of quality. The many innovative, new and improved products featured in this catalogue demonstrate our commitment to staying at the leading edge of technological development for fire detection and alarm equipment.

Our core values and aims are:

- Investment in people
- To partner with our customers to develop open, long term relationships
- To have an unpretentious, straightforward and honest approach to business
- The continued investment in research and development
- Investment in manufacturing facilities to ensure they remain world class
- To produce products that are in full compliance with standards
- To operate in an environmentally friendly way - in the products we design and the facilities in which we make them
- To have high ethical standards

Our solutions and services are recognised by a wide range of accreditation bodies, so you can count on products that comply with national and industry standards, while receiving full support, from initial system design to monitoring and service.

# Introduction
## Distinctive capabilities

**Ankara Esenboğa International Airport**
Ankara, Turkey


**St Pancras Station**
London, UK

**Doncaster Cultural and Civic Quarter**
Doncaster, UK

# Manufacturing fire solutions is just one small element of what we do.

## Services

We believe that ownership of fire detection systems extends beyond the initial purchase of the products themselves. We therefore offer customers a wide range of services to ensure that their installations not only meet basic operational and safety requirements on day one, but will continue to do so throughout their lifetime.

From training and support on how to select products for a specific application through to the provision of routine on-site testing and maintenance. You can be sure that Eaton is ready to support you, whatever your needs.

## Major projects

Design and installation of a fire detection system can often be a complex process, with each project often bringing its own challenges in making sure the system is compliant, reliable and easy to operate. Our team of engineers will partner with your project management team using our expertise to meet the specific requirements of your project.

Eaton has a great deal of experience handling major projects across the globe. We can help not just with the product and technical support but also by providing guidance and advice to specifiers and project management teams on topics such as standards and regulations.

We are BAFE SP203 certified for design, commissioning and maintenance of fire detection systems, giving our customers the peace of mind they need that our systems conform with all necessary safety requirements.

## Technical support

Our dedicated technical support team are able to offer customers around the world advice and guidance on a wide variety of technical matters via telephone or email. In the vast majority of cases, a process of systematic questioning enables the team to diagnose the challenge and advise the customer on the appropriate solution.

Sometimes more detailed troubleshooting and analysis methods may be used to determine the actual requirements and the best way of resolving it. If necessary, the technical support team will also call on the knowledge and expertise of Eaton's product management, R&D and design departments to help resolve the customer's issue.

In addition, the technical support team can provide customers with assistance on product information, installation and operating instructions, and the legislative requirements of your fire detection systems.

**Mariner's Quay Apartment Complex**
Newport



# Contents

# An introduction to fire systems

Eaton manufacture and supply a range of different types of fire systems, meaning we can provide a high quality fire solution whatever your need is.

There are a vast array of fire detection systems and devices on the market today, ranging from the relatively simple to the most technically sophisticated. Modern automatic fire detection systems are available in two types, conventional and addressable - which, broadly speaking, tend to be used in smaller and larger installations respectively. For more detail you can read our fire systems guide over the next few pages.

## The basics of fire detection

A control panel is the hub of the detection system. All the devices which are part of the fire detection system are connected to this central panel which processes the signals received from the input devices and gives out signals to the output devices. Input devices such as detectors measure signals of combustion and communicate with panels, which in turn trigger output devices such as an audible or visual alarm device. Fire alarm panels can be further sub segmented into addressable or conventional panels.

There are various types of fire detection systems each suited to different applications or building types. A fire detection system can vary significantly in both complexity and price, from a single panel with a detector and sounder in a small commercial property to a complex intelligent addressable system in a multi-occupancy building.

A fire detection system can comprise of detection devices, notification devices and manual callpoints. The size of the building determines the number of detectors that would be required. The system works via the control panel receiving signals from the detection devices and then sending transmitting signals to the notification devices.


Fire
Zone Fault
Zone Disabled
Conventional Fire Alarm Panel


FIRE

## Conventional systems (p61-85)

The philosophy of a conventional system revolves around dividing the building into a number of areas called zones. The detectors and call points within each zone are then wired on a dedicated separate circuit.

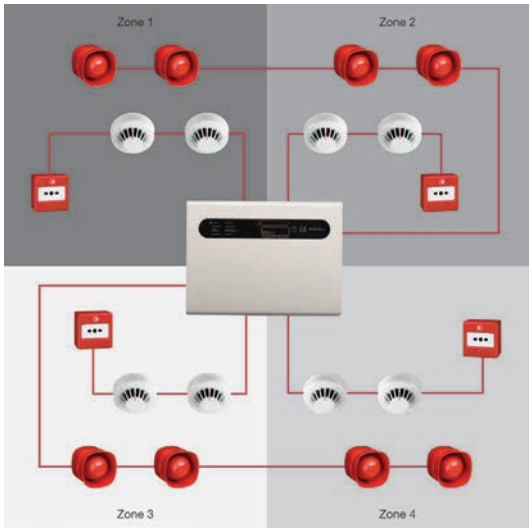
In the event of a detector or call point being triggered, the panel is able to identify which circuit contains the triggered device and thereby indicate which zone the fire alarm has come from. The indicated zone can then be manually searched to locate the triggered device.

With this type of functionality a conventional system is best used in smaller builds where it wouldn't be difficult to locate the triggered device in a given zone.

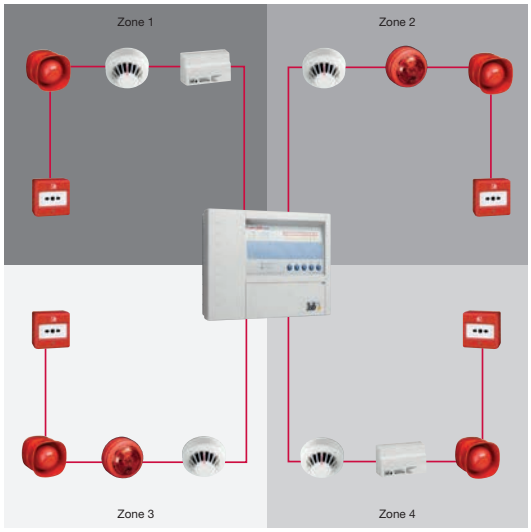
## Two-wire systems

Two-wire systems are based on standard conventional system technology, but it also incorporates additional functionality to enable the callpoints, detectors and sounders for each separate zone to be wired on a single common circuit.

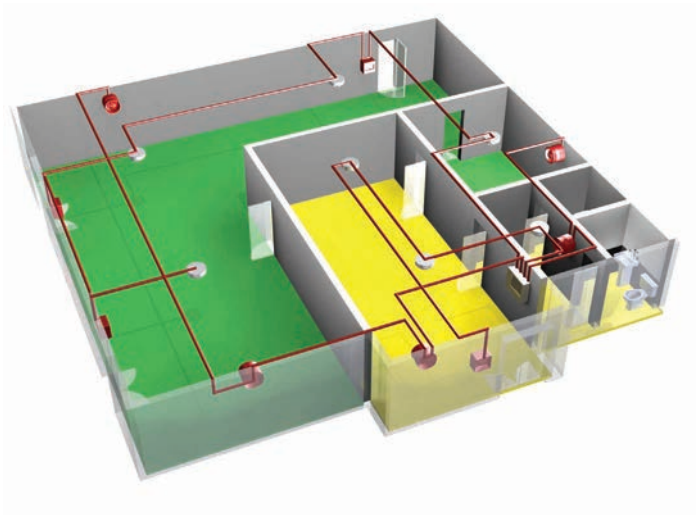
By combining both the detection and the alarm annunciation wiring into a single circuit, considerable savings in installation time and cabling can be achieved.



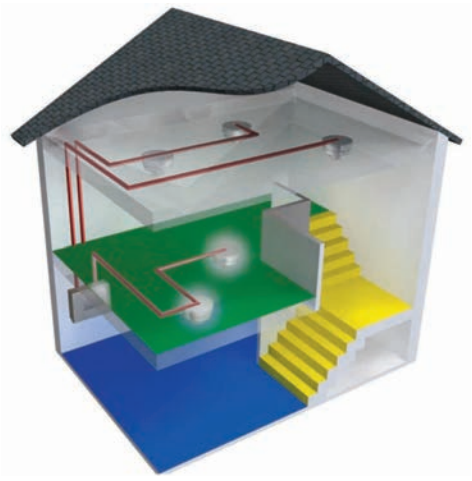

Typical conventional system architecture




Typical two-wire system architecture



Example conventional system layout



Example two-wire system layout

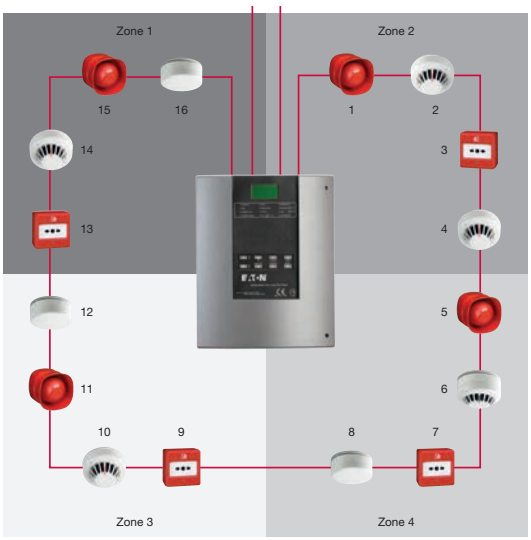
## Addressable systems (p17-44)

Intelligent addressable systems overcome the limitations of conventional systems as each fire detecting sensor or call point is electronically coded with a unique identification or 'address' which is programmed into the device during installation.

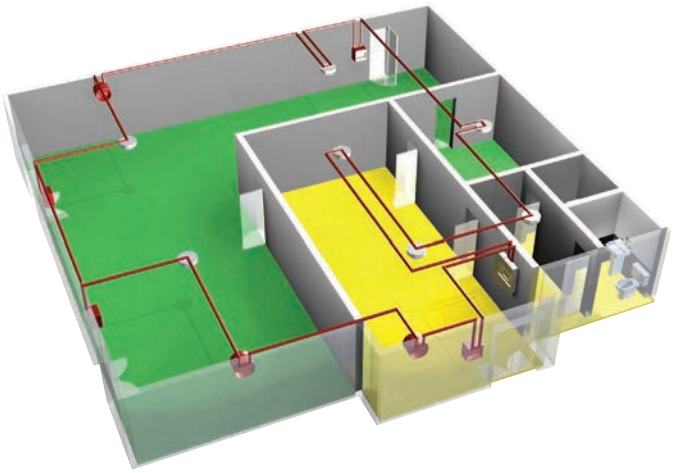
By using each devices' unique address, the control panel is able to conduct two way communication with any of the addressable devices connected to the system.

Under normal conditions the control panel continuously interrogates each device in sequence and analyses the reply to determine the status of each sensor or call point. The panel checks whether each device is functioning correctly and also the amount of smoke or heat that the device is currently sensing.

With the functionality of being able to pinpoint exactly which device is being triggered in an alarm or for a fault, addressable systems are perfect for mid to large size builds with multiple rooms and floors.




Typical addressable system architecture



Example addressable system layout

## UL listed fire systems (p46-59)

Underwriters Laboratories Inc. (UL) is an independent product safety certification organisation, established in 1894, to develop standards and test procedures for products, materials, components, assemblies, tools and equipment. Chiefly dealing with product safety it also evaluates and certifies the efficiency of a company's business processes through its magnificent system registration programs.

Since the launch of our UL Listed fire product range, several prestigious projects worldwide have been supplied including Hyatt Resort and Spa, Shangri-la at the Fort and Times Square projects in South East Asia and several major projects in the Middle East including the prestigious Riyadh Financial District in the Kingdom of Saudi Arabia.

The Eaton UL range is designed to provide a solution for all sizes of project, from the simple small stand alone system to the large multi panel networked system with PA/VA and BMS integration.

SIGNALING
UL
LISTED
4AC5
FIRE ALARM
EQUIPMENT

# Notes

# Contents

## Intelligent addressable systems

### Panels

# FX2000
## Intelligent addressable control panel


"The FX2000 serves as the optimum solution for buildings requiring smaller addressable systems."

The Eaton FX2000 is an entry level intelligent addressable control panel which can be configured for either 1 or 2 loop operation, and is certified to EN54 parts 2 & 4.

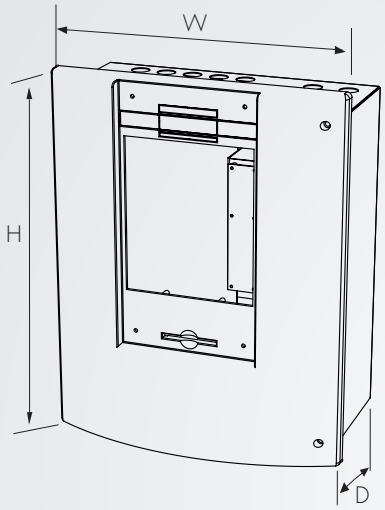
The panel has a graphic display, providing a simple menu driven end user interface. With the FX2000's ability to support Eaton cause and effect programming and a range of user controllable functions it makes the panel suitable for a varied range of projects from small warehouses to small/ medium office developments as well as many small industrial applications.

As with all Eaton intelligent addressable panels, the FX2000 uses "spur tolerant" soft addressing to minimise installation time and remove the potential for errors often associated with many forms of manual addressing.

### Benefits

- Configurable as a 1 or 2 loop panel
- Up to 200 addresses per loop (up to 60 sounders/beacons and up to 20 I/Os, subject to loop loading calculations)
- Soft addressing
- Menu-driven graphic screen
- Multi-language selection capability
- Integral battery and power supply
- 2x7Ah batteries included
- Easy to operate end user controls
- Full system integrity with Eaton developed protocol
- Core range of compatible devices
- 4 sounder circuits
- Monitored for open and short circuit (max 3.0A combined)

## Dimensions




| H (mm) | W (mm) | D (mm) |
|---|---|---|
| 400 | 320 | 170 |

| Features | FX2000 |
|---|---|
| Ingress protection | IP30 |

## Catalogue numbers

| Description | Code |
|---|---|
| Addressable 2 loop control panel, standalone (FX2000) | 910188FULL-0199 |
| Addressable passive repeater | FX6000PR |
| Fire alarm system log book | MFALOG |

## Compatible repeater panels

The FX2000 has a standard repeater panel available. Ideal for larger sites, the repeater allows you to display the system information from multiple locations.

| Features | FX6000PR |
|---|---|
| Active or passive option | ✓ |
| Integral battery and power supply | ✓ |
| Supervisor and engineer modes through code access | ✓ |
| Ingress protection | IP30 |

# FX6100
## Intelligent addressable control panel


"The simplicity of operation, powerful cause and effect programming capability and competitive pricing make the system suitable for a wide range of small to medium sized projects."

The FX6100 is a high specification addressable panel for medium sized builds that is equipped with a versatile touch screen user interface. It is available as a 1 (FX6100) or 2 (FX61002) loop panel.

The powerful cause and effect programming capability and competitive pricing make the system suitable for a wide range of small to medium sized projects. The panels can operate as standalone or as part of a network with our other addressable panels (additional network card required).

| | FX6100 | FX61002* |
|---|---|---|
| No. of loops | 1* | 2* |
| Addresses per loop | 200** | 200** |
| No. of conventional sounder circuits | 2*** | 2*** |
| Ingress protection | IP30 | IP30 |

* No zonal LEDs
** Up to 60 sounders/beacons and up to 20 I/Os
***Monitored for open and short circuit (max 1.5A combined)

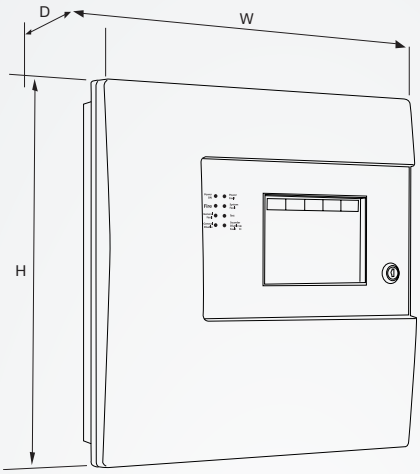
### Benefits

- Soft addressing
- Large versatile touch screen user interface
- Multi-language selection capability
- Integral battery and power supply
- 2x7Ah batteries included
- Flexible distributed network capability
- Full range of compatible devices
- Flexible and easy to design, system cause and effect using site installer software
- Compatible with our addressable repeaters (see p21)



Approved product

## Dimensions




| | H (mm) | W (mm) | D1 (mm) |
|---|---|---|---|
| Panel | 375 | 357 | 95 |
| Cutout | 345 | 325 | 50 |


FX6100 pictured with a range of compatible devices

## Catalogue numbers

| Description | Code |
|---|---|
| 1 Loop Control Panel, VDS | FX6100 |
| 2 Loop Control Panel, VDS | FX61002 |
| Add to end of product code if network card required | NC |
| Dual redundancy network card | NCDR |
| Network Kit for DF6100/2 and CF11/CF12 | DF61NETKIT |
| Passive repeater panel | FX6000PR |
| Touch-screen repeater panel | FTPR6000 |
| Fire routing equipment PCB | ZPCB2187FRE |
| Fire alarm system log book | MFALOG |

# FX6000
## Intelligent addressable control panel


"The large capacity, ability to support complex cause and effect programming and wide range of user controllable functions make the system suitable for a diverse range of projects"

The FX6000 series are high specification intelligent addressable control panels, which are fully certified to EN54 parts 2 and 4.

Each panel is networkable with up to 126 other Eaton addressable control panels, only requiring the addition of one of our network cards for this functionality. Using our latest software, the panels can be set up for smoke management protocols, when used in conjunction with FC6 or FC18 fan controller units, and the new MCOM-FC interface module.

| | FX60002 | FX60004 |
|---|---|---|
| No. of Loops | 2 | 4 |
| Addresses per Loop | 200* | 200* |
| No. of Conventional Sounder Circuits | 4** | 4** |
| Ingress protection | IP30 | IP30 |

* Up to 60 sounders/beacons and up to 20 I/Os
**Monitored for open and short circuit (max 1.5A combined)

### Benefits

- Soft addressing
- Large versatile touch screen user interface
- Multi-language selection capability
- Integral printer (optional)
- Integral battery and power supply
- 2x 12Ah batteries included
- Extended battery option allows for 72 hours standby (subject to loop loading calculations)
- Flexible distributed network capability
- Full range of compatible devices
- Easy to design system cause and effect using site installer software
- Additional functionality through FRE & FPE (Fire Routing Equipment & Fire Protection Equipment) which are both monitored outputs

## Class change functionality

Our FX6000 panel has a variety of easy to use additional software options on top of the standard class change facility; this provides benefits for a number of regions.

Class change input on the FX6000 can be used for functions such as Australian Fire Brigade, HMO operation, Swedish mode, Australian tone sounders for class change and different tones.

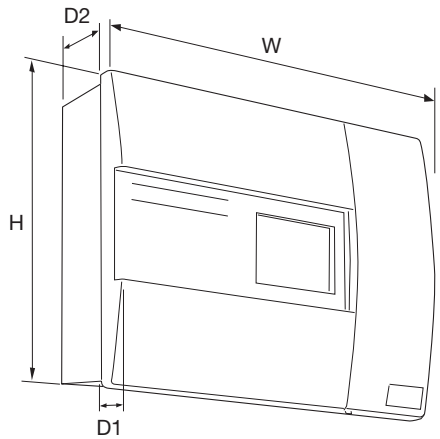

## Compatible repeater panels

The FX6000 has both a passive and a touchscreen repeater panel available. Ideal for larger sites, the repeater allows you to display the system information at multiple locations.


| Features | FX6000PR | FTPR6000 |
|---|---|---|
| Active or passive option | ✓ | ✓ |
| No programming required | ×* | ✓ |
| Programmable input | × | ✓ |
| Integral battery and power supply | ✓ | ✓ |
| Supervisor and engineer modes through code access | ✓ | ✓ |
| Fire and fault volt free programmable relays | × | ✓ |
| Adjustable volume from panel | × | ✓ |
| Ingress protection | IP30 | IP30 |

*Programming not required on network version.

## Dimensions




| | H (mm) | W (mm) | D1 (mm) | D2 (mm) |
|---|---|---|---|---|
| Standard | 397 | 497 | 55 | 125 |

## Catalogue numbers

| Description | Code |
|---|---|
| 2 loop control panel | FX60002 |
| 4 loop control panel | FX60004 |
| 2 loop control panel, integral printer | FX60002P |
| 4 loop control panel, integral printer | FX60004-P |
| Add to end of product code if network card required | NC |
| If an additional loop card is required | ZPCB2148P2 |
| Network Kit for FX6000 | DF6000NETKIT |
| Printer kit (for retro fit) | DF6000PKIT |
| Hinged protective cover kit | DF6000COV |
| Passive repeater panel | FX6000PR |
| Touch-screen repeater panel | FTPR6000 |
| Fire alarm system log book | MFALOG |

# Sensors

Our addressable range has multiple options for intelligent addressable sensors. All sensors are designed for optimum functionality in mid-large sized builds. They are all soft addressed and have integral short circuit isolators. We also offer a loop connected remote indicator, designed to offer discreet remote indication and an ability to monitor multiple sensors. This helps to minimise wiring requirements.

## Optical smoke sensor
**FXN723**

### Typical applications:

Suitable for most applications.

Fastest response to slow burning or smouldering fires which give rise to large visible smoke particles.

## Photo-thermal sensor
**FXN722***

### Typical applications:

Responds quickly to fast clean burning fires.

Maintains the advantage of optical sensors when detecting smouldering fires.

## Heat sensor
**FXN725**

### Typical applications:

Environments where the ambient conditions might cause false alarms with smoke detectors.

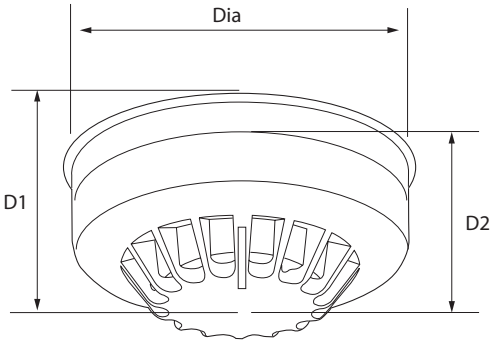
Examples include areas with high levels of dust or fumes.

The FXN725 can operate in 3 modes: rate of rise, fixed heat 77°C and fixed heat 90°C.

These modes are set by the panel.

*The FXN722 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.

## Dimensions




| Description | Diameter (mm) (incl base) | Depth (mm) (excl base) | Depth (mm) (incl base) |
|---|---|---|---|
| Optical | 104 | 33 | 45 |
| Photo-thermal | 104 | 43 | 55 |
| Heat | 104 | 43 | 55 |

## Performance

| Feature | FXN723 | FXN722 | FXN725 | FXN725 | FXN725 |
|---|---|---|---|---|---|
| Mode | Optical | Photo-thermal | Rate of rise | Fixed heat 77°C | Fixed heat 90°C |
| Area coverage* | 100m$^2$ | 100m$^2$ | 50m$^2$ | 50m$^2$ | 50m$^2$ |
| Heat class | N/A | A2S | A2R | BS | CS |
| Alarm temperature | N/A | 60 ˚C | 60 ˚C | 77 ˚C | 92 ˚C |
| Ingress protection | IP30 | IP30 | IP30 | IP30 | IP30 |

*(subject to local standards)

## Catalogue numbers

| Description | Code |
|---|---|
| Optical smoke sensor - FXN723 | 400002FIRE-0005X |
| Photo-thermal sensor - FXN722 | 400004FIRE-0007X |
| Multi-mode heat sensor - FXN725 | 400003FIRE-0006X |

# Indicators

Our indicators are designed as additional indication devices when sensors have been triggered. These products are designed to be used as indicators only, and not visual alarm devices (see p26 and 29 for EN54-23 certified VADs).

## Addressable remote indicator
**MRIAD**

### Typical applications:

Monitoring multiple sensors within a specific area.

Must be configured through site installer. The remote indicator can be programmed as a sounder.

## Standard remote indicator
**FX251D**

### Typical applications:

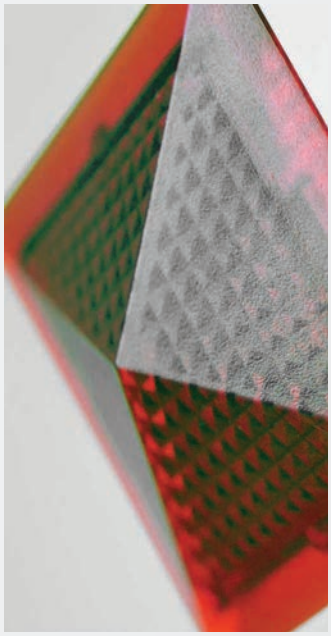
The FX251D can only be connected to one sensor and is powered by this sensor.

There is a weather resistant version also available. (Not IP65).

## Staff warning device
**FXN338BCN**

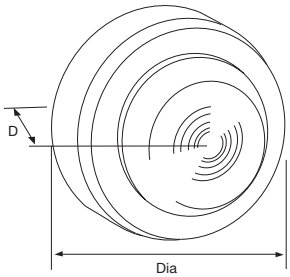
### Typical applications:

As this product does not meet EN54-23 requirements as a beacon we recommend it as an internal warning device in offices, schools or manned reception areas.

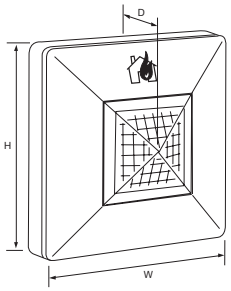


Remote indicator lens detail

## Dimensions




Staff warning device




Remote indicators

| Description | Diameter (mm) | Depth (mm) |
|---|---|---|
| Staff warning device | 101 | 33 |

| Description | Height (mm) | Width (mm) | Depth (mm) |
|---|---|---|---|
| Remote indicators | 87 | 87 | 30 |

## Catalogue numbers

| Description | Code |
|---|---|
| Loop connected remote indicator | MRIAD |
| Standard remote indicator | FX251D |
| Weather resistant standard remote indicator | CIR301WP |
| Staff warning device | FXN338BCN |

# Bases

We stock a variety of bases, providing a wide functionality for different situations. The standard base (FXN720) provides a foundation for our addressable sensors. The range of bases also includes capability for additional sounder and sounder beacon operation. Both our sounder base (FXN538) and VAD sounder beacon base (FXN577) can be used as standalone devices when fitted with our cover plate (CASC).

## Standard base
**FXN720**

### Typical applications:

General use product, recommended for use in all environments

## Sounder base
**FXN538**

### Typical applications:

Areas of limited extent, where lower output volume is required

Areas with limited cable space

Concrete ceilings, to save cabling

## Sounder beacon base
**FXN557 (FXN537)**


### Typical applications:

The FXN577 is an EN54-23 certified Visual Alarm Device (VAD) sounder beacon base.

It is compatible with the Eaton range of intelligent addressable sensors and can also be used as a dedicated discreet standalone device.

(The FXN577 sounder beacon base is also available for indication purposes, where EN 54-23 is not a requirement.)

## Sounder base with cover
**FXN538 + CASC**

### Typical applications:

Optional cover plate can be used to enable the sounder to operate as a dedicated discreet stand alone device

VAD sounder beacon base shown with optical sensor

### Features

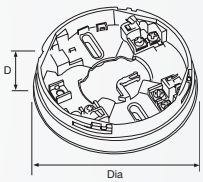
| | FXN720 | FXN538 | FXN537 | FXN557 |
|---|---|---|---|---|
| First fix base | ✓ | ✓ | ✓ | ✓ |
| Loop integrity switch | ✓ | ✓ | ✓ | ✓ |
| Multiple cable entry points | ✓ | × | × | × |
| Selectable tones | × | ✓ | ✓ | ✓ |
| Ingress protection | | IP40 | IP40 | IP21C |

## Performance

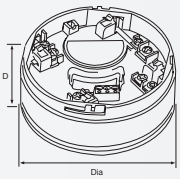
| | FXN538 | FXN557 |
|---|---|---|
| **Sound output** | | |
| Low volume | 84dB at < 4mA | 77dB at < 6.6mA |
| Medium volume | 92dB at < 8mA | 89dB at < 8mA |
| High volume | 95dB at < 12mA | 90dB at < 9mA |
| **Flash rate** | n/a | 0.5 Hz flash* |

*Polar dispersion infromation available on datasheet

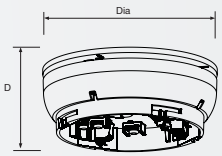
## Dimensions



Standard base



Sounder base



Sounder beacon base

| Description | Diameter (mm) | Depth (mm) |
|---|---|---|
| Standard base | 104 | 22 |
| Sounder base | 102 | 40 |
| Sounder beacon base | 115 | 44 |

## Catalogue numbers

| Description | Code |
|---|---|
| Standard base | FXN720 |
| Sounder base | FXN538 |
| VAD sounder beacon base | FXN557 |
| Sounder beacon base | FXN537 |
| Cover plate (pack of 5) | CASC |
| Base shroud | BAR3000-1 |

# Callpoints

Two versions of the intelligent addressable callpoint are available, the surface/flush mounted FXN501 or the weatherproof FXN503. Both have an integral short circuit isolator and are very simple to install. The callpoints are packaged with 2 frangible glass elements and test key, with a comprehensive range of further accessories available.

## Surface/flush mounted callpoint
**FXN501**

### Typical applications:

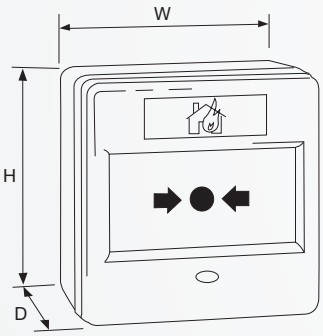
General use product, suitable for use in most indoor applications.

## Weatherproof callpoint
**FXN503**

### Typical applications:

Builds requiring a callpoint in harsh conditions. For example, outside or in a wash down area.

## Dimensions




| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| Surface mounted | 87 | 87 | 36 |
| Flush mounted | 87 | 87 | 57 |
| Weatherproof | 87 | 87 | 59 |

## Features

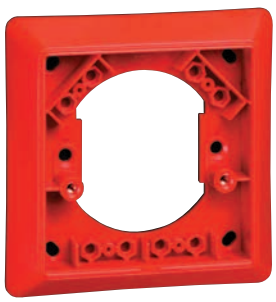
| | FXN501 | FXN503 |
|---|---|---|
| Fast fit clip | ✓ | ✓ |
| High Visibility LED | ✓ | ✓ |
| Heavy duty terminals | ✓ | ✓ |
| Ingress protection | IP42 | IP65 |

## Catalogue numbers

| Description | Code |
|---|---|
| Surface/flush callpoint | FXN501 |
| Weatherproof callpoint | FXN503 |
| CXPC Protective hinged cover (pack of 10) | CXPC |
| MBGBEZ Recessing bezels (pack of 10) | MBGBEZ |
| MBGREKIT Resettable element kit (pack of 10) | MBGREKIT |
| Spare break glasses (pack of 5) | FX5G |
| MFBGKEY3 Callpoint keys (pack of 10) | MFBGKEY3 |

## Further accessories:

Callpoint shown with protective hinged cover



Callpoint recessing bezel

# Wall sounders and VADs

There are also two versions of our intelligent addressable wall sounder, the internal (FXN538LPS) and the weatherproof (FXN538LPSWP). Their highly efficient design offers excellent sound output levels despite the low current consumption. They both contain an integral short circuit isolator and have multiple tones and volume levels which can be controlled from the panel globally, or individually via site installer.

We also offer a new open class Visual Alarm Device (MASB880), combining the high output sound of the wall sounders with a stronger LED to meet the EN54-23 VADs requirements. The open class functionality allows the VADs to be installed in open areas such as warehouses or airport terminals.

## Wall sounder
**FXN538LPS/ FXN538LPSWP**

## Typical applications:

Both an indoor and weatherproof variant of the wall sounder are available, allowing for consistent performance for any application where a wall sounder is required.

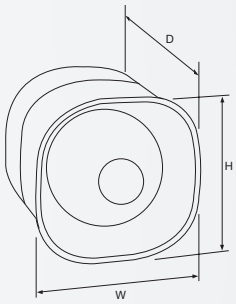
## VAD wall sounder beacon
**FXN559LPS/ FXN559LPSWP**
**FXN539LPS/FXN539LPSWP**


## Typical applications:

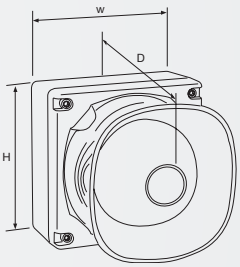
The FXN599 is an addressable open class VAD suitable for all markets where EN54-23 VADs are now a requirement. **White flash only.**

(The FXN539LPS wall sounder beacon is also available for indication purposes, where EN 54-23 is not a requirement. **Red flash only.**)

## Dimensions




Internal wall sounder / sounder beacon




Weatherproof wall sounder/ sounder beacon

| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| Wall sounder | 105 | 105 | 95 |
| WP wall sounder | 108 | 108 | 103 |
| VAD sounder beacon | 108 | 108 | 96 |
| WP VAD sounder beacon | 110 | 110 | 105 |

## Tones

| Tones | FXN538LPS/ FXN538LPSWP | FXN559LPS/ FXN559LPSWP |
|---|---|---|
| Continuous | ✓ | ✓ |
| Two tone @ 1Hz cycle | ✓ | ✓ |
| Slow whoop 500-1200Hz in 3.5 seconds / 0.5secs gap | ✓ | ✓ |
| Pulsed 1Hz (Virtual Tone) | ✓ | ✓ |
| Pulsed sweep ISO8201 3x500ms 800-970Hz 1½ Sec Gap | × | × |
| Bell tone | × | × |

## Sound output

| | FXN538LPS/ FXN538LPSWP | FXN559LPS/ FXN559LPSWP |
|---|---|---|
| Low volume | 87dB at < 2mA | 87dB at < 8.6mA |
| Medium volume | 93dB at < 3mA | 93dB at < 10mA |
| High volume | 100dB at < 6mA | 100dB at < 11mA |
| **Flash rate** | n/a | 0.5Hz Flash |

| | FXN538LPS/ FXN559LPS/ FXN539LPS | FXN538LPSWP/ FXN559LPSWP/ FXN539LPSWP |
|---|---|---|
| Ingress protection | IP42 | IP66 |

## Catalogue numbers

| Description | Code |
|---|---|
| Internal wall sounder | FXN538LPS |
| Weatherproof wall sounder | FXN538LPSWP |
| Vad wall sounder beacon | FXN559LPS |
| Weatherproof VAD wall sounder beacon | FXN559LPSWP |
| Wall sounder beacon | FXN539LPS |
| Wall sounder beacon weatherproof | FXN539LPSWP |

## Wall sounder VAD
## CASB493/CASB493WP
## CASB483/ CASB483WP

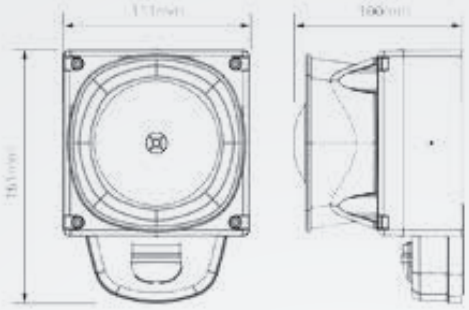
NEW PRODUCT

### Typical applications:

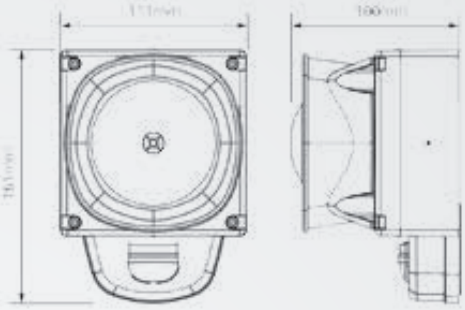
This EN 54-23 compliant sounder beacon visual alarm device (VAD) is suitable for fire notification in commercial buildings. The weatherproof variant, with an IP66 ingress protection rating, can be used in wet and outdoor environments.

Red (CASB483/WP) or white (CASB493/WP) flash options available.

### Dimensions



Wall sounder VAD



Wall sounder VAD (weatherproof)

| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| Wall sounder VAD | 147 | 106 | 92 |
| Wall sounder VAD (weatherproof) | 151 | 111 | 100 |

## Wall VAD
## CAB492W/CAB482W

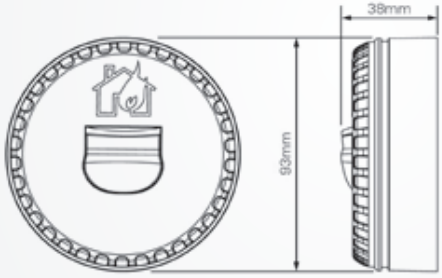
NEW PRODUCT

### Typical applications:

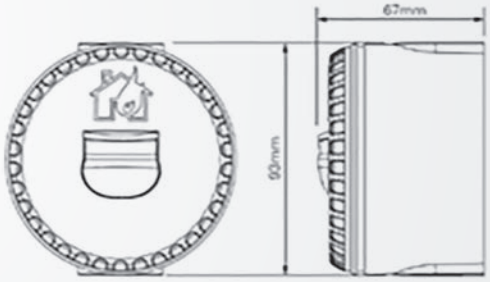
A low-profile, low-current solution to the latest EN 54-23 fire standard, this fire alarm beacon VAD. It is also compatible with a range of bases making it suitable for a variety of applications.

Red (CAB482W) or white (CAB492W) flash options available.

### Dimensions




Wall VAD (shallow base)




Wall VAD (deep base)

| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| Wall VAD (shallow base) | 93 | 93 | 38 |
| Wall VAD (deep base) | 93 | 93 | 67 |

## Ceiling VAD
## CAB492CS/CAB482CS

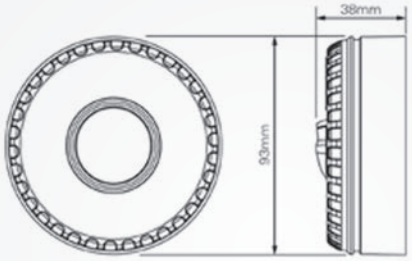
NEW PRODUCT

## Typical applications:

This EN 54-23 certified, low-current fire alarm beacon is suitable for ceiling mounting. It is compatible with a shallow base providing flexibility as to where the VAD can be installed.

Red (CAB492CS) or white (CAB482CS) flash options

## Dimensions




Ceiling VAD

| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| Ceiling VAD | 93 | 93 | 38 |

## Tones

| | CASB493/CASB493WP<br>CASB483/CASB483WP | CAB492W/CAB482W | CAB492CS/CAB482CS |
|---|---|---|---|
| Flash rate (low power consumption) | 0.5Hz | 0.5Hz | 0.5Hz |
| Operating current (depending on setting and LED colour) | 13.4-47.5mA | 12.5-45mA | 12.5-45mA |
| IP protection | IP21C<br>WP variant : IP66 | Shallow base: IP33C<br>Deep base: IP65 | IP21C |

## Catalogue numbers

| Description | Code |
|---|---|
| CASB493 Wall sounder VAD, red, white flash | 8500110FULL-0199X |
| CASB483 Wall sounder VAD, red, red flash | 8500111FULL-0197X |
| CASB493WP Wall sounder VAD, red, white flash, weatherproof | 8500114FULL-0200X |
| CASB483WP Wall sounder VAD, red, red flash, weatherproof | 8500115FULL-0201X |
| CAB492WS Wall VAD, red, white flash, shallow base | 812033FULL-0209X |

| Description | Code |
|---|---|
| CAB492WD Wall VAD, red, white flash, deep base | 812034FULL-0210X |
| CAB482WS Wall VAD, red flash, shallow base | 812035FULL-0211X |
| CAB482WD Wall VAD, red, red flash, deep base | 812036FULL-0212X |
| CAB492CS Ceiling VAD, red, white flash, shallow base | 812050FULL-0269X |
| CAB482CS Ceiling VAD, red, red flash, shallow base | 812037FULL-0214X |

# Addressable fire systems

Devices - beam detectors

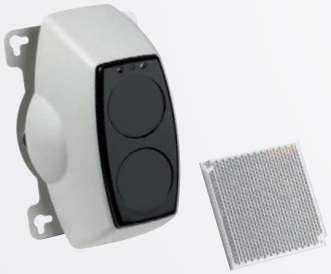

Beam detectors, typically used in large open areas, such as airports, shopping centres and warehouses

# Beam detectors

There are two available loop powered reflective beam detectors in the intelligent addressable range. The MAB50R has a range of up to 50 metres and the MAB100R has a range of up to 100 metres. Neither requires a power supply and are both equipped with a simple set up mode to enable easy and quick alignment during installation.

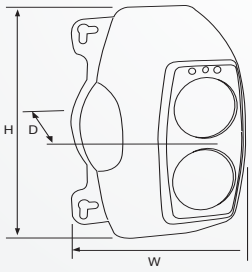
The beam detector is loop powered with one unique address, and has the ability to add address text at the panel. There is a maximum limit of 20 per loop (based on loop loading calculations).

## Addressable reflective beam detector
**MAB50R / MAB100R**



## Dimensions

| H (mm) | W(mm) | D (mm) |
|---|---|---|
| 210 | 130 | 120 |




## Typical applications:

Large open areas such as warehouses, manufacturing plants, shopping centres, airports etc.

Allows access to the automatic gain control data from the detector.

The beam detector will show fire, fault and pre-alarm.

## Features

| | MAB50R | MAB100R |
|---|---|---|
| Operating range | 5 to 50 metres | 50 to 100 metres |
| Tolerance to beam misalignment at 35% | Detector ± 0.8˚, Prism ± 5.0˚ | Detector ± 0.8˚, Prism ± 5.0˚ |
| Fire alarm thresholds | 2.50dB (25%)<br>3.74dB (35%)<br>6.02dB (50%) | 2.50dB (25%)<br>3.74dB (35%)<br>6.02dB (50%) |
| Optical wavelength | 880nm | 880nm |
| Ingress protection | IP40 | IP40 |

Beam detectors have 3 operating modes:

**Prism targeting mode** designed to provide simple initial alignment of beam and reflector assembly.

**Alignment mode** enables accurate fine tuning of beam alignment without the need for additional calibration equipment or a second operator.

**Normal running mode** during standard operation.

# Duct probe mounting kit

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 addressable optical detector and base and is supplied with full fixing instructions.

## Duct probe unit
**MDP201**

Duct probe unit shown with optical detector fitted

## Typical applications:

Detecting presence of smoke in ventilation ducts.

Requires base and detector to be ordered separately.

## Features

| | |
|---|---|
| Duct width range | 300mm to 1500mm<br>5 to 50 metres |
| Duct air speed range | 1m/s to 20m/s<br>Detector ± 0.8˚<br>Prism ± 5.0˚ |
| Temperature range | -20°C or +60°C |
| Optical wavelength | 880nm |
| Ingress protection | IP67 |

## Catalogue numbers

| Description | Code |
|---|---|
| MAB50R Reflective beam detector (50m range) | 400030FIRE-0067X |
| MAB100R Reflective beam detector (100m range) | 400031FIRE-0071X |
| Mounting bracket | MRBFP |
| Spare reflector | MABR |
| Duct probe unit | MDP201 |

# Interfaces

We supply an extensive range of interfaces to support our control panels. Interfaces allow for a wide variety of installations to be simplified without the use of specialist or customised equipment. For assistance deciding which interfaces will benefit you the most, contact our technical support team at firetechsupport@eaton.com

## Zone monitor unit
**CZMU352**


### Typical applications:

The unit connects a zone of suitable conventional detectors (20 detectors per zone) and a separate zone of conventional callpoints (if required) to an addressable panel.

It allows for easier connection to existing conventional detection zones, as long as the devices used are compatible.

## Spur isolator unit
**CSI350**


### Typical applications:

The spur isolator unit enables a spur of intelligent addressable devices to be connected to a main analogue loop. This simplifies the installation of remote parts of buildings or system extensions.

The CSI350 doesn't take an address in the number sequence.

Recommended no more than a zones worth of devices per isolator.

## Shop monitor unit
**MSU840**


### Typical applications:

The shop monitor unit is designed to allow small units with conventional fire systems to be fully integrated with a main intelligent addressable fire system.

It is ideal for connecting individual shop units into a main shopping centre system.

Recommended for use with conventional VADs **(see p80)**. Please note: A PSU **(see p38)** is required to operate conventional sounder circuits.

The MSU840 can have 2 sounder circuits, each with up to 0.3A of power.

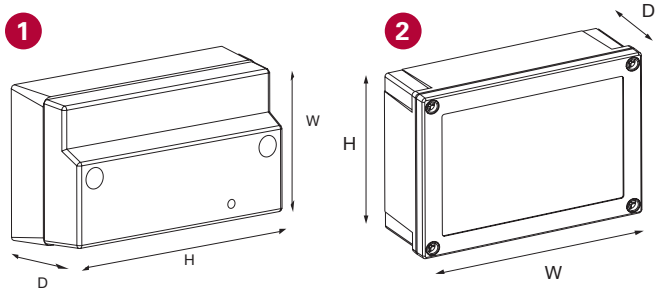
## 3 channel I/O unit
**CIO351**


### Typical applications:

The 3 channel input/output unit enables simple interfacing between the fire system and other equipment such as nurse call systems or access control systems. The inputs are fully monitored for open and short circuits.

Relay contacts are rated at 30V dc 1A. See below for further options.

## Dimensions




| Description | | H (mm) | W (mm) | D (mm) |
|---|---|---|---|---|
| Interface style 1 | 1 | 88 | 147 | 60 |
| Interface style 2 | 2 | 129 | 180 | 60 |

## Catalogue numbers

| Description | Code |
|---|---|
| Zone monitor unit | CZMU352 |
| Shop monitor unit | MSU840 |
| Spur isolator unit | CSI350 |
| 3 channel input/output unit resets on reset (recognised as 1 address) | CIO351 |
| 230V ac relay unit | CMIO353 |

## 230V ac relay unit
**CMIO353**


## Typical applications:

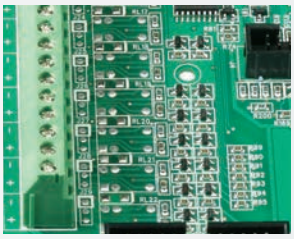
Enables simple interfacing between the fire system and other equipment such as nurse call systems or access control systems.

The ability of the output unit to switch 230V ac mains at 8A makes the unit ideal for plant control or mains powered door holders.

The input is monitored for open and short circuits therefore can be used for fire input applications such as monitoring sprinkler flow switches.

If you require higher current switching (10A) **please see page 84** for MAR724.

## 4 to 20mA interface
**CGI420**



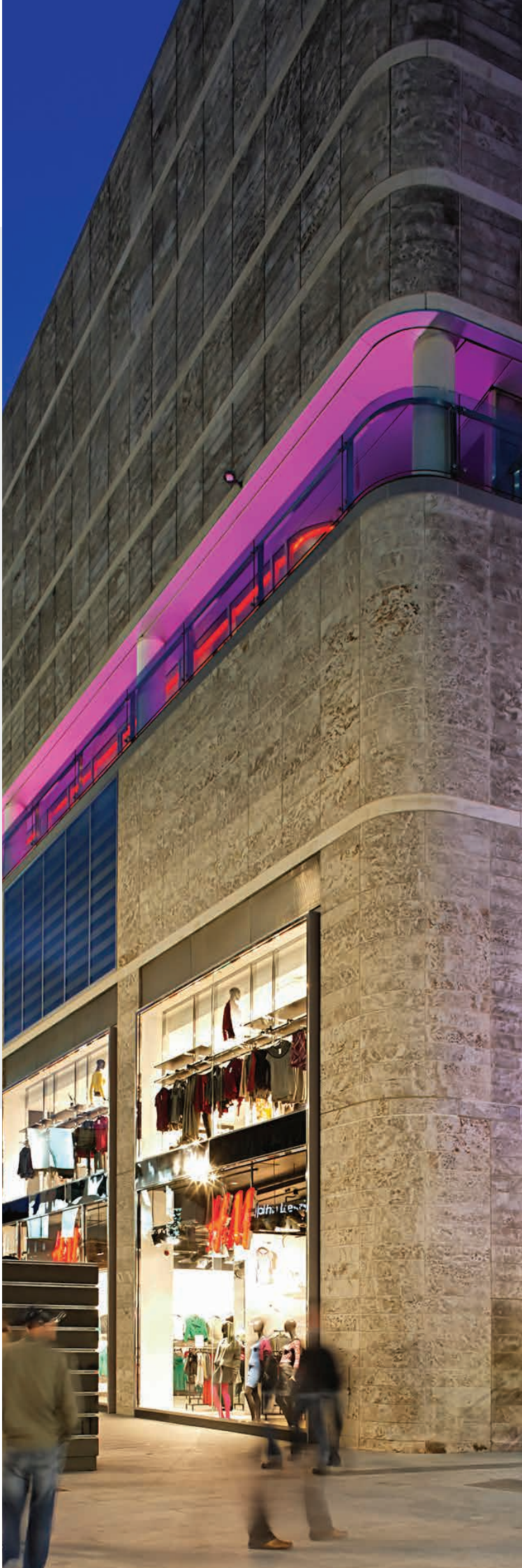
## Typical applications:

Designed to interface with gas detection modules and are compatible with Eaton intelligent addressable control panels.

The supply to the gas detector is taken directly from the interface.

## Features

| | CZMU352/CSI350/ MSU840/CIO351 | CMIO353 |
|---|---|---|
| Ingress protection | IP40 | IP65 |



# Interfaces continued

## 4 way sounder controller unit
**CSC354CPR**

### Typical applications:

The 4 way sounder controller unit (CSC354CPR) adds functionality to your addressable panel by powering up to 4 lines of conventional output devices.

The CSC354CPR gives access to Eaton's extensive range of conventional devices, including EN54-23 certified VADs, beacons, signboards, bells and sounders.

It is ideal in situations where there is a requirement for devices with a high current draw or where conventional sounder circuits are in a remote location away from the fire alarm control panel.

### Dimensions

| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| 4 way sounder controller Unit | 300 | 300 | 74 |

### Catalogue numbers

| Description | Code |
|---|---|
| 4 way sounder controller unit | CSC354CPR |

## Mimic relay boards
**CIOP4 / CIOP8**


### Typical applications:

These addressable mimic relay boards (CIOP4) and (CIOP8) are 4 and 8 way soft addressing output modules, incorporating integral short circuit isolators.

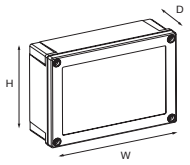
The units are suitable for switching low voltage (24V dc at 1A maximum), via a set of latching relay contacts.

The flexibility of these modules is further enhanced by the fact that each output can be programmed for a range of triggers such as disablement, fault, fire, test panel, test zone prealarm, fire routing equipment, fire protecting equipment and reset with up to 16 different trigger sources per output.

These units have an additional 4 inputs which can initiate a reset, silence, evacuate and test function.

### Dimensions

| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| CIOP4/8 mimic relay board | 180 | 244 | 63 |



Mimic relay

### Features

| | CSC354CPR | CIOP4/CIOP8 |
|---|---|---|
| Ingress protection | IP30 | IP65 |

### Catalogue numbers

| Description | Code |
|---|---|
| 4 way mimic relay board, 4 inputs, 4 outputs | CIOP4 |
| 8 way mimic relay board, 8 inputs, 8 outputs | CIOP8 |
| 4 to 20mA interface | CGI420 |

## Fan controller unit
**JFC6 and JFC18**



## Typical applications:

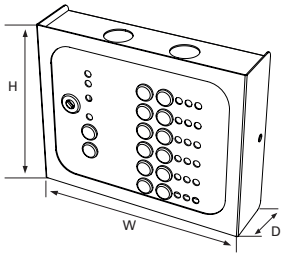
JFC18 and JFC6 fan controller units work in conjunction with the Eaton's range of intelligent addressable control panels, providing the capability to control and display the status of AHU fans.

The units are connected to the control panel by means of the comms loop, utilizing only one address whilst providing the ability to monitor and control up to 18/6 AHU fans. Each JFC18 and JFC6 unit incorporates its own CPU specifically configured to control the relevant input and output logic making programming quick and easy using Eaton site installer software.

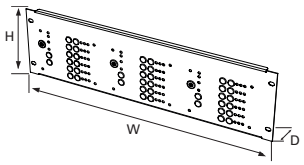
Recently upgraded to be compatible with new Smoke Management protocols. Both JFC6 and JFC18 are ideal for use in conjunction with updated CF3000 panels and the new MCOM-FC interface module.

## Dimensions

| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| JFC6 Fan controller unit (surface mount) | 125 | 155 | 42 |
| JFC18 Fan controller unit (rack mount) | 133 | 482 | 30 |




JFC6 Fan controller unit (surface mount)




JFC18 Fan controller unit (rack mount)

## Catalogue numbers

| Description | Code |
|---|---|
| Fan controller unit (surface mount) | JFC6 |
| Fan controller unit (rack mount) | JFC18 |

# Micro interfaces

Whereas our standard interfaces are designed to be installed in the position required on the loop, our range of micro interfaces are compact enough to sit within a panels' enclosure, or in our dedicated mini module enclosure (ULBU) which can house up to 3 mini modules.


## Micro zone monitor unit
**JIU872**

### Typical applications:

The micro zone monitor unit (JIU872) is suitable for interfacing a zone of up to 20 conventional detectors onto an intelligent addressable control panel.

It will operate with any conventional detector in configuration with a schottky diode type base (CDBB300).


## Micro single channel input unit
**MJIM**

### Typical applications:

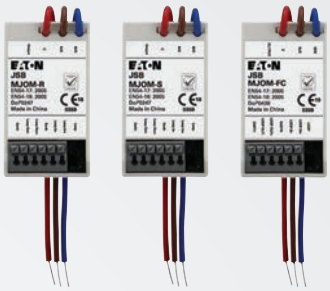
The micro single channel input unit (MJIM) is suitable for monitoring a set of normally open, volt free contacts such as sprinkler system flow switches and auxiliary panel fire/fault signals. Other examples include non-fire input signals such as flow valve open contacts, generator start up, fire door closed etc.


## Micro single channel output unit
**MJOM**

### Typical applications:

The micro single channel output unit (MJOM) is suitable for switching low voltage (24V dc at 1A maximum), via a set of non latching relay contacts.

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



**Variants**

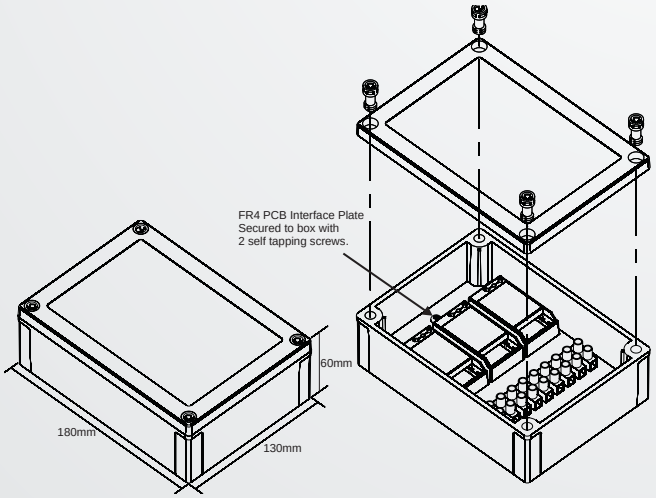
The MJOM-R gives a 5 second pulse on reset, and is used for connecting/resetting beam detectors.

The MJOM-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 MJOM-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.

## Installation into mini module box

1. Fit the unit in position in accordance to the mounting diagram below.
2. Connect the unit according to standard connections.
3. Up to 3 units can be fitted inside a micro module box unit




## Features

| | JIU872 | MJOM | MJIM |
|---|---|---|---|
| Soft addressed | ✓ | ✓ | ✓ |
| Short circuit isolators | ✓ | ✓ | ✓ |
| Single address | ✓ | ✓ | ✓ |
| Ingress protection | IP40 | IP40 | IP40 |

## Catalogue numbers

| Description | Code |
|---|---|
| Micro zone monitor unit | JIU872 |
| Micro single channel output unit | MJOM |
| Micro single channel output unit (sounder) | MJOM-S |
| Micro single channel output unit (reset on reset) | MJOM-R |
| Micro single channel output unit (fan controller output unit) | MJOM-FC |
| Micro single channel input unit | MJIM |
| Mini module box unit (empty box) | ULBU |

# Network interfaces

Eaton offer multiple network interfaces which allow our panels and devices a wider variety of functionality. These network interfaces allow the connection of the Eaton network system to a computer network, and PC based applications such as site monitor, site graphic and web server.

## Lon to RS232 adaptor
**EC0232**


### Typical applications:

The EC0232 Lon to RS232 adapter allows connection of our system network (LonWorks) devices to PC based applications such as site monitor, site graphics and web server.

In addition to the standard adaptor, Eaton offer 2 variants for use with a HMX PA/VA system - the ECO232PAVA with no handshaking, and the EC0232PAVA3D with a 3 min time delay.

## Dual-channel LonWorks BMS interface
**EC200**


### Typical applications:

The EC200 dual-channel LonWorks BMS interface is an "add-on" to the network which translates the pre-configured network variables to a set of un-configured network variables which can then be bound to a BMS, giving full access to the fire network data.

## TCP/IP interface
**EC400**


### Typical applications:

The EC400 is a high performance, reliable and secure network infrastructure device for accessing Eaton Lon Network of intelligent addressable control panels over intranet or ethernet.

The EC400's built in configuration server manages up to 256 IP devices on 1 IP channel without a dedicated management PC.

Easy to understand diagnostic LEDs allow installers to install and troubleshoot the device without expert knowledge and dedicated troubleshooting tool.

## Lon network booster
**EC540**

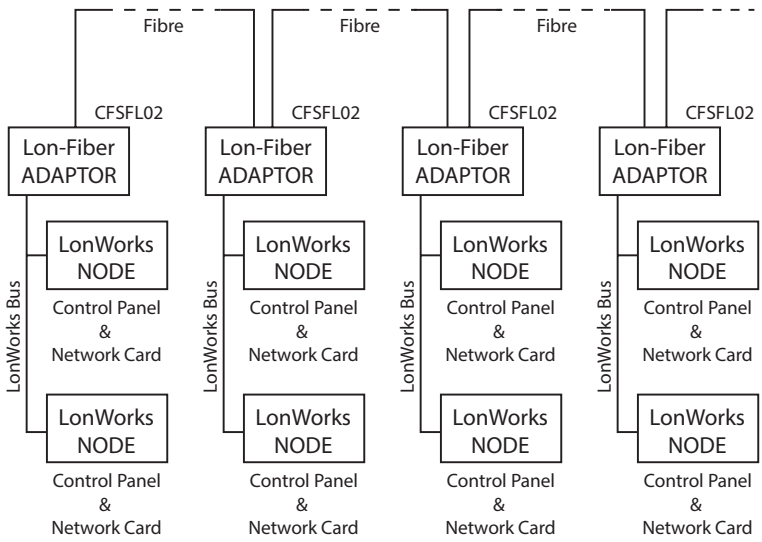

### Typical applications:

The Lon network booster (EC540) is the solution to interconnect multiple EIA-709 channels.

This unit provides up to 5 ports and routes packets between these ports. In spite of its small size the (EC540) provides best class performance and flexibility in use.

In order to provide the optimal router configuration the (EC540) supports 2 to 5 ports as well as the 2 operating modes "smart switch mode" and "configured router mode".

Fibre optic multi-drop link - example network diagram



## BACnet gateway
**EC650B**


### Typical applications:

The BACnet gateway (EC650B) is a CEA- 709/BACnet gateway which maps CEA-709 network variables (NVs) to standard BACnet server objects. When ordered with this part code (EC650B), the LonWorks to BACnet address mapping is pre-loaded and ready for use with the the intelligent addressable CF3000 system interface board.

## Modbus gateway
**EC700**

### Typical applications:

The modbus gateway is part of the InfraLINK range of network infrastructure components from partners.

All of the modbus gateways feature a robust hardware platform with high performance CPU and UART for fast communications without loss of data. The LonWorks to modbus address mapping is pre-loaded and ready for use with the CF3000 fire system interface board.

## Single mode Lon to fibre optic adapter
**CFSFL01**


### Typical applications:

The single mode Lon to fiber optic adapter (CFSFL01) allows connection of the system network (LonWorks) devices through optical fibre, and to allow both point to point or multi drop topology.

## Dual channel Lon to fibre optic adapter
**CFSFL02**


### Typical applications:

The dual channel Lon to fiber optic adapter (CFSFL02) allows connection of the system network (LonWorks) devices through optical fibre, and to allow both point to point or multi drop topology.

## Features

| | EC400/EC540 | EC700 |
|---|---|---|
| Ingress protection | IP40 (IP20 screws) | IP20 |

## Catalogue numbers

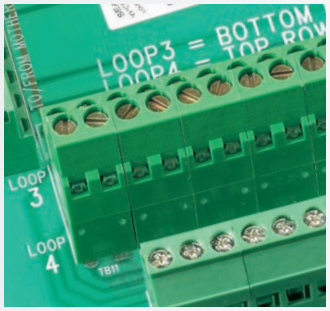
| Description | Code |
|---|---|
| Dual-channel lonworks BMS interface (non handshake) | EC200 |
| Dual-channel lonworks BMS interface (self configuring for use with EC700) | EC200S |
| Lon to RS232 adapter | EC0232 |
| Lon to RS232 adapter (For HMX pa/va system - no handshake) | EC0232PAVA |
| Lon to RS232 adapter (For HMX pa/va system - 3 min time delay) | EC0232PAVA3D |

| Description | Code |
|---|---|
| TCP/IP interface | EC400 |
| Lon network booster | EC540 |
| Bacnet gateway | EC650B |
| Modbus gateway | EC700 |
| Single mode lon to fibre optic adaptor | CFSFL01 |
| Dual channel lon to fibre optic adaptor | CFSFL02 |

# Ancillaries

A range of ancillaries are available to complement and extend the capability of our existing hardware.

## Loop splitter unit
**ZPCB2222**

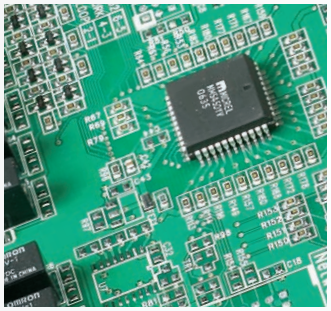



### Typical applications:

Allows expansion of the FX6000 intelligent addressable panel from 4 to 16 loops.

This interface is mainly applicable in countries where the mixing of detectors, sounders, callpoints and interfaces are not permissible on the same loop or the number of devices per loop is limited to a small number.

## Mimic PCB
**ZPCB2252-MML / ZPCB2252-MSL**



### Typical applications:

Up to 250 outputs can be connected to the mimic PCBs (ZPCB2252-MML) and (ZPCB2252-MSL). This offers more capability to the extensive options already offered by the FX6000 control panel.

These boards are typical used for geographical LED mimic displays.

## SPS Range -
**SPS-2423**
**SPS-2433**
**SPS-2453**

### Typical applications:

Offers a compact, robust and versatile power solution to installers, allowing them to safely power fire detection and signaling systems in small to large installations.

Compact and discrete design allows for these SPS to be installed in a visible location such as a hotel lobby for instance.

## Features

| | SPS-2423/SPS-2433/SPS-2453 |
|---|---|
| Ingress protection | IP30 |

## Catalogue numbers

| Description | Code |
|---|---|
| Loop splitter unit | ZPCB2222 |
| Loop Mimic LED PCB (Master) | ZPCB2252-MML |
| Loop Mimic LED PCB (Slave) | ZPCB2252-MSL |
| Loop Mimic Relay PCB (Master) | ZPCB2252-MMR |
| Loop Mimic Relay PCB (Slave) | ZPCB2252-MSR |
| Safety power supply 24V / 1.5A (batteries not supplied) | SPS-2423 |
| Safety power supply 24V / 2.5A (batteries not supplied) | SPS-2433 |
| Safety power supply 24V / 4.5A (batteries not supplied) | SPS-2453 |

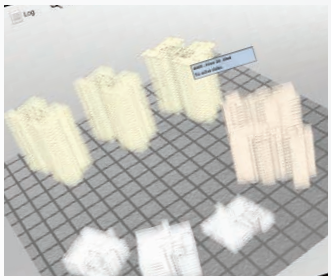
CE


Terminal 2 D,E
Abflug Departures Terminal 1 A,B,C,Z Terminal 2 D,E
A,B,C,Z D,E

# Software

Eaton offer a number of specialised programs to aid with the installation, maintenance, functionality and servicing of our addressable systems. Installed using the USB analogue systems panel interface **(see p44)** and a PC or laptop, these software programs help to solidify our addressable systems' capabilities and make it easier for users to control and organise the system on their site.

## Graphical visualisation software
**EFGVS**



### Typical applications:

Eaton Fire Graphic Visualisation Software (EFGVS) is a state of the art and powerful supervision management tool for Eaton Fire addressable systems.

Users can monitor, visualise in 2D and 3D, control and interrogate their systems to ensure alarms are located quickly and dealt with efficiently.

Ergonomic and intuitive, EFGVS includes a comprehensive list of advanced features offering the system designer and site supervisor a very efficient tool ensuring all information and controls be available at their fingertips.

## Site monitor
**SITEMONITOR**

### Typical applications:

Site monitor / webserver software is designed to monitor Eaton fire systems and allow quick PC based administration.

Using a simple interface, authorised users can view control panel event history, event status, device properties and other information depending on access permissions defined by the system administrator.

## Catalogue numbers

| Description | Code |
|---|---|
| Graphical Visualisation Software license 1-2 panels including an EC0232 interface | EFGVS1-2 |
| Graphical Visualisation Software license up to 6 panels including an EC0232 interface | EFGVS3-6 |
| Graphical Visualisation Software license up to 10 panels including an EC0232 interface | EFGVS7-10 |
| Graphical Visualisation Software license above 10 panels including an EC0232 interface | EFGVS11-PLUS |
| Graphical Visualisation Software license up to 10 panels with TCP/IP interlink | EFGVS7-10-TCPIP |
| Graphical Visualisation Software license above 10 panels with TCP/IP interlink | EFGVS11-PLUS-TCPIP |
| Graphical Visualisation Designer Software license - no panel connectivity | EFGVS-DESIGN |

| Description | Code |
|---|---|
| Graphical Visualisation Premium Designer Software license including an EC0232 interface | EFGVS-PREMIUMDESGN |
| Interface to connect panel network (LONWorks) to PC (RS232) | EC0322 |
| Site monitor / webserver software | EF-SITEMONITOR |

All software products except SITEMONITOR include EC0232 (p36) as standard

# Testing equipment

As well as offering complete fire systems, Eaton can also provide testing equipment to ease the process of installation, commissioning, maintenance and fault finding.

## Loop tester kit
**LP800KIT**

### Typical applications:

The loop tester kit is a hardware/software combination that can be used to test, commission and fault find a loop of up to 200 intelligent addressable devices (sensors, sounders, ancillary devices) without having to connect the loop to the intelligent addressable control panel.

The loop tester is connected between the loop and PC, and allows the engineer to quickly identify and locate any loop device that is operating outside its operating conditions.

## USB analogue systems panel interface
**USBINT2**

### Typical applications:

The analogue systems panel interface is a universal serial bus converter that provides conversions from RS232 to USB, TTL to USB or TTL to RS232.

These options provide the connectivity required between a PC and intelligent addressable control panels, wireless control panels, and wireless survey tools including our range of software solutions (**see page 43**).

## Addressable device programmer
**CF800PROG**

### Typical applications:

The addressable device programmer is a versatile tool to aid the installation, commissioning, maintenance and servicing of current intelligent addressable devices and fire systems.

This unit is light, robust and easy to operate using a user friendly menu structure on 2 x 40 character LCD display. It is powered from a single PP3 size, heavy duty battery or an external supply.

CF800PROG can:

Program sensor modes **(see p24).**

Change address details

Change heat detector settings

Read analogue levels

## Catalogue numbers

| Description | Code |
|---|---|
| Loop tester kit | LP800KIT |
| Addressable device programmer | CF800PROG |
| USB panel interface | USBINT2 |

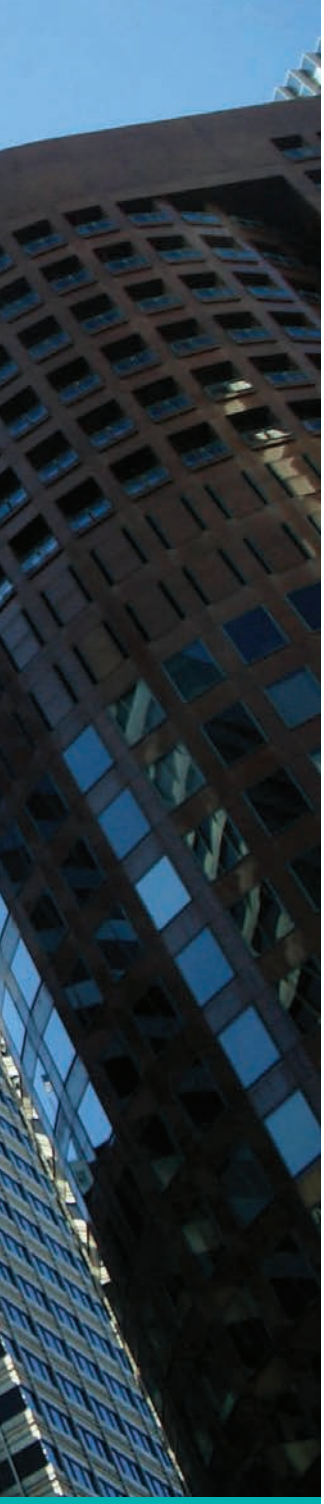
# Notes

# UL Systems

Underwriters Laboratories Inc. (UL) is an independent product safety certification organisation, established in 1894, to develop standards and test procedures for products, materials, components, assemblies, tools and equipment. Chiefly dealing with product safety it also evaluates and certifies the efficiency of a company's business processes through its magnificent system registration programs.

Since the launch of our UL Listed fire product range, several prestigious projects worldwide have been supplied including Hyatt Resort and Spa, Shangri-la at the Fort and Times Square projects in South East Asia and several major projects in the Middle East including a major projects within the prestigious Riyadh Financial District in the Kingdom of Saudi Arabia.

The Eaton UL range is designed to provide a solution for all sizes of project, from the simple small stand alone system to the large multi panel networked system with PA/VA and BMS integration.



# Contents

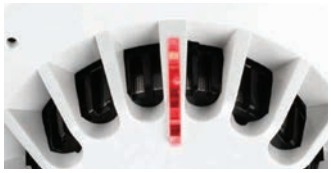
## UL listed fire systems range

### Panels



### Devices



















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LISTED
4AC5
FIRE ALARM
EQUIPMENT

# ULFX6000 series
## UL listed control panels


ULFX6000RM (wall mount red metal)

ULFX6000 (wall mount graphite)

The ULFX6000 series panels are UL listed, high specification, wall or rack mounted fire panels. Combining sophisticated functionality with simple operation and aesthetically pleasing design, the panels are available in a number of loop configurations. Each panel is networkable with up to 126 other Eaton UL fire panels.

The control panel has the ability to support complex cause and effect programming. A wide range of user controllable functions make the system ideal for a diverse range of projects, from industrial applications through to large multi-site commercial developments.

### Benefits

- Soft addressing
- Large versatile touchscreen user interface
- Integral printer (optional)
- Integral battery and power supply
- 2 x 12Ah batteries included
- Flexible distributed network capability
- Full range of compatible devices
- 4 notification appliance circuits (NACs) outputs
- 2 or 4 class A style 7 SLC loops
- PAS (Positive Alarm Sequence)

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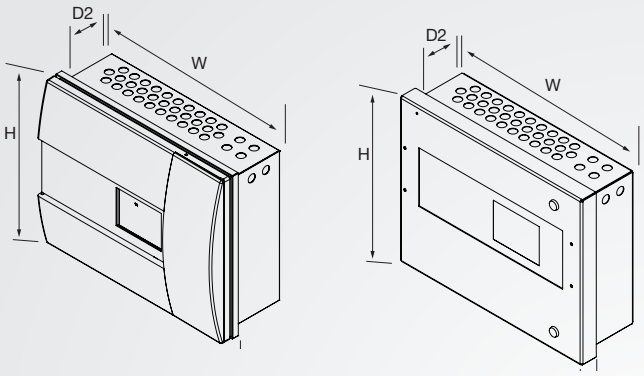
FIRE ALARM
EQUIPMENT

## Dimensions




| Description | H (mm) | W (mm) | D1 (mm) | D2 (mm) |
|---|---|---|---|---|
| ULFX6000 | 397 | 497 | 75 | 130 |
| ULFX6000RM | 398 | 505 | 48 | 118 |

## Compatible repeater panels

The ULFX6000 has both a standard and a touchscreen repeater panel available. Ideal for larger sites, the repeater allows you to display the system information from multiple locations.

## Features

| | ULFX6000PR | ULFPTR6000 |
|---|---|---|
| Active or passive option | × | ✓ |
| No programming required | ✓* | ✓ |
| Multi language capability | × | ✓ |
| Allows networking with other Eaton fire panels | × | ✓ |
| Integral power supply | ✓ | ✓ |
| Ingress protection | IP30 | IP40 |

*Except local text information

## Catalogue numbers

| Description | Code |
|---|---|
| 2 loop panel | ULFX60002G |
| 4 loop panel | ULFX60004G |
| 2 loop panel, integral printer | ULFX60002GP |
| 4 loop panel, integral printer | ULFX60004GP |
| 2 loop panel, network card | ULFX60002GNC |
| 4 loop panel, network card | ULFX60004GNC |
| 2 loop panel, integral printer, network card | ULFX60002GPNC |
| 4 loop panel, integral printer, network card | ULFX60004GPNC |

| Description | Code |
|---|---|
| 2 loop panel, network card, red metal box | ULFX60002NCRM |
| 4 loop panel, network card, red metal box | ULFX60004NCRM |
| Rack mounted 2 loop panel | ULFXR6000L2 |
| Rack mounted 4 loop panel | ULFXR6000L4 |
| Rack mounted 2 loop panel c/w network card | ULFXR6000L2NC |
| Rack mounted 4 loop panel c/w network card | ULFXR6000L4NC |
| Loop connected passive repeater panel | ULFX6000PR |
| Touchscreen network repeater panel | ULFPTR6000 |

# Sensors

Our UL range has multiple options for intelligent addressable sensors. All sensors are designed for optimum functionality in mid-large sized builds. They are all soft addressed and have integral short circuit isolators.

## Addressable sensor base
**UCAB300**

### Typical applications:

Specifically designed for use with all of our UL addressable sensors, the UCAB base will be used in all builds.

## Optical smoke sensor
**ULFX320**

### Typical applications:

Suitable for most applications.

Fastest response to slow burning or smouldering fires which give rise to large visible smoke particles.

## Photo-thermal sensor
**ULFX340**

### Typical applications:

Responds quickly to fast clean burning fires.

Maintains the advantage of optical sensors when detecting smouldering fires.

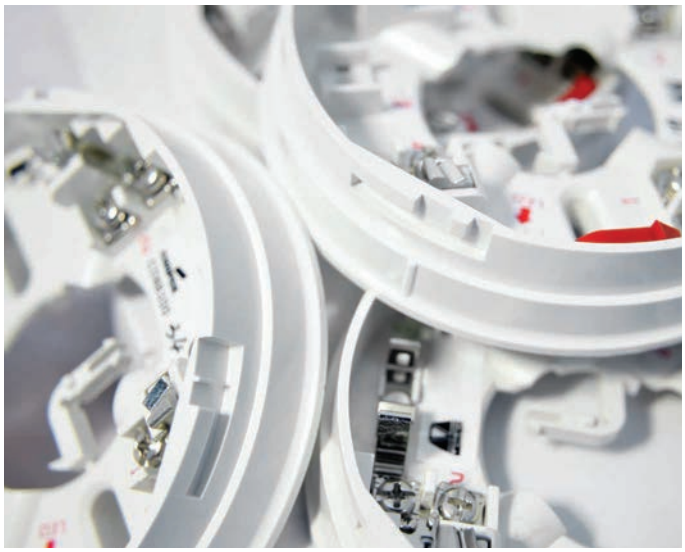
## Heat sensor
**ULFX330**

### Typical applications:

Environments where the ambient conditions might cause false alarms with smoke detectors.

Examples include areas with high levels of dust or fumes.

Sensor detail



Addressable base detail



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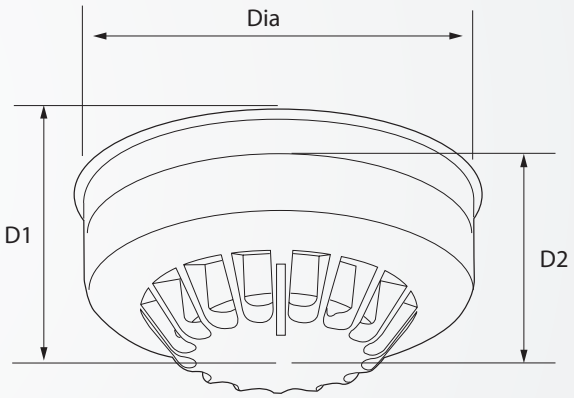
## Performance

| Heat Class | ULFX320 | ULFX340 | ULFX330 |
|---|---|---|---|
| Heat element rating | N/A | 135°F | ROR + Fixed 135°F, Fixed 135°, Fixed 194°F |
| Heat detector spacing | N/A | 50ft (heat alone operation) | 50ft |
| Heat class | N/A | A2S | A2R |

## Dimensions




| Description | Diameter (mm) (incl base) | Depth (mm) (excl base) | Depth (mm) (incl base) |
|---|---|---|---|
| Optical | 104 | 33 | 45 |
| Photo-thermal | 104 | 43 | 55 |
| Heat | 104 | 43 | 55 |


## Features

| | ULFX320 | ULFX340 | ULFX330 |
|---|---|---|---|
| Ingress protection | IP30 | IP30 | IP30 |

## Catalogue numbers

| Description | Code |
|---|---|
| ULFX320 Optical smoke sensor | 400005FIRE-0017X |
| ULFX340 Photo-thermal sensor | 400006FIRE-0018X |
| ULFX330 Heat sensor | 400007FIRE-0019X |
| Addressable sensor base | UCAB300 |
| Addressable sounder base | ULFXN538LBS |

# Detectors

Our UL range has multiple options for conventional detectors. All detectors have a removable detector chamber and drift compensation. The range of detectors for different applications allow for all build requirements to be met.

As there is no UL certified conventional panel a ULMIU872 micro interface (p59) is required in conjunction with a UL intelligent addressable panel to use conventional detectors.

## Optical smoke detector
**UCPD-2W**

### Typical applications:

Suitable for most applications.

Fastest response to slow burning or smouldering fires which give rise to large visible smoke particles.

## Photo-thermal detector
**UCPT-2W**

### Typical applications:

Responds quickly to fast clean burning fires.

Maintains the advantage of optical sensors when detecting smouldering fires.

## Fixed heat detector (135°F)
**UCHT-2W**

### Typical applications:

Environments where the ambient conditions might cause false alarms with smoke detectors.

Examples include areas with high levels of dust or fumes.

## Performance

| Heat class | UCPD-2W | UCPT-2W | UCHT-2W |
|---|---|---|---|
| Heat element rating | N/A | 135°F | 135°F |
| Heat detector spacing | N/A | 50ft (heat alone operation) | 50ft |
| Mounting position | Ceiling in open areas | Ceiling in open areas | Ceiling in open areas |

## Features

| | UCPD-2W | UCPT-2W | UCHT-2W |
|---|---|---|---|
| Ingress protection | IP40 | IP40 | IP40 |



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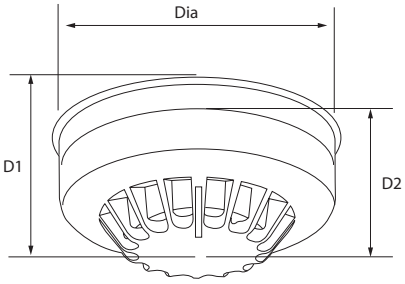
## Conventional detector base
**CB2E**

## Typical applications:

The CB2E has been specifically designed for compatibility with our UL range of conventional detectors. It can be be used in all builds with conventional detectors.


## Dimensions




| Description | Diameter (mm) (incl base) | Depth (mm) (incl base) | Depth (mm) (excl base) |
|---|---|---|---|
| Optical | 104 | 45 | 33 |
| Photo-thermal | 104 | 55 | 43 |
| Heat | 104 | 55 | 43 |

## Catalogue numbers

| Description | Code |
|---|---|
| 2 wire detector, optical | UCPD-2W |
| 2 wire detector, opto-heat | UCPT-2W |
| 2 wire detector, fixed heat 135°f | UCHT-2W |
| Standard detector base | CB2E |

# Horns and strobes

Our UL range incorporates a variety of audio and visual notification devices. Each device has up to 48% savings in current draw compared to similar products. The whole range is easy to install and has voltage test points for quick troubleshooting and easy spot checking, saving time on both installation and maintenance.

## Wall mount horn
**HNR**

### Typical applications:

The horns are ideal for retrofit jobs, limited space environments and pre-existing wire configurations.

## Ceiling mount horn
**HNWC**

### Typical applications:

The horns are ideal for retrofit jobs, limited space environments and pre-existing wire configurations.

## Wall mount horn strobe/synchronised strobe
**HSR/STR**

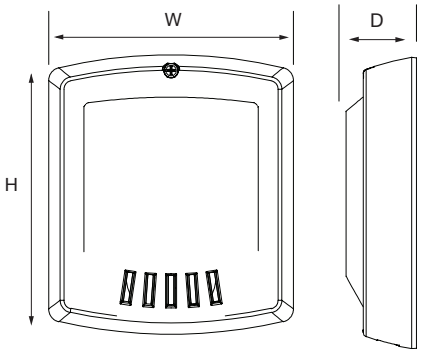

### Typical applications:

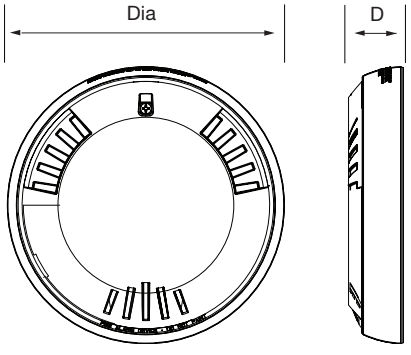
With the range of settings for both audio and visual purposes, these products are effectively 9 models in 1 appliance. With this functionality, and both ceiling and wall mount options available, it will meet almost any build requirements.

The synchronised option enhances both the sound and light output by keeping the outputs of multiple devices in sync.

## Ceiling mount horn strobe/synchronised strobe
**HSWC/STWC**


## Dimensions




| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| Wall mount horn HNR | 133 | 116 | 56 |
| Wall mount horn strobe/ synchronised strobe HSR/STR | 131 | 131 | 110 |

| Description | Diameter (mm) | Depth (mm) |
|---|---|---|
| Ceiling mount horn HNWC | 166 | 34 |
| Ceiling mount horn/ synchronised strobe HSWC | 166 | 34 |



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## Wall mount outdoor synchronised strobe
**RSSWP-2475W-FR**

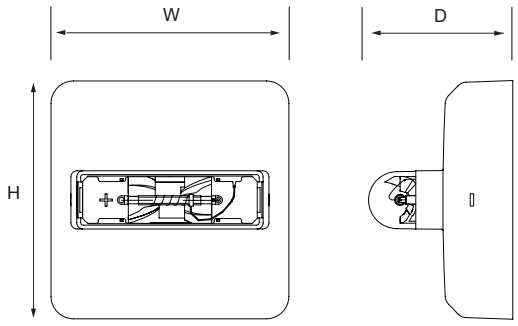

## Ceiling mount outdoor synchronised strobe
**RSSWP-2475C-FW**

## Typical applications:

The outdoor synchronised strobes are UL certified to meet adverse weather conditions. They are perfect for builds where outdoor indication is required.

These units use a universal, common mounting base making them ideal for retrofit jobs, limited space environments and pre-existing wire configurations.

## Dimensions




| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| RSSWP* | 131 | 131 | 110 |

*Both wall mount and ceiling mount variants

## Catalogue Numbers

| Description | Code |
|---|---|
| HNR Wall mount horn | HNR |
| HNWC Ceiling mount horn | CN128972 |
| HSR Wall mount horn strobe | HSR |
| HSWC Ceiling mount horn strobe | CN127464 |
| STR Wall mount synchronised strobe | STR |
| STWC Ceiling mounted synchronised strobe | CN127488 |
| RSSWP-2475W-FR Wall mount outdoor synchronised strobe | CN129013 |
| RSSWP-2475C-FW Ceiling mount outdoor synchronised strobe | CN124446 |
| WPSBB -R Exposed conduit, surface mount back box (RED) | CN109751 |
| WPSBB-R + WP-KIT Concealed conduit surface mount back box (RED) | CN109751 + CN104486 |

# Pull stations

The addressable pull stations are constructed of high quality, die cast metal for long lasting performance. The range consists of the UL listed MPS range of pull stations and the UL listed fast response input initiating module (ULMCIM-C).

## Single action addressable pull station
**UMPS-100/ UMPS-100WP**


### Typical applications:

Indoor/weatherproof pull station for use with addressable systems (UMPS-100/UMPS-100WP).

A dual action model is also available (UMPS-200, not shown), where the push bar rotates inward allowing the pull handle to be grasped in a one handed motion.

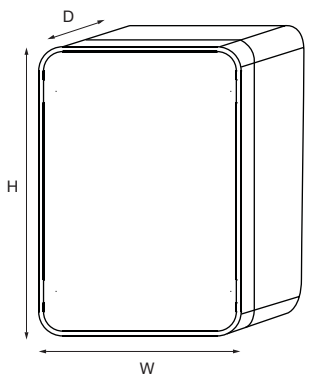
## Single action conventional pull station
**SG42BK2**


### Typical applications:

Cost effective conventional version of the single action pull station, must be used in conjunction with ULMIU872. **Back box ordered seperately.**


Pull station detail

## Dimensions




| H (mm) | W (mm) | D (mm) |
|---|---|---|
| 118 | 80 | 80 |

## Catalogue numbers

| Description | Code |
|---|---|
| Single action pull station, supplied with back box (addressable) | UMPS-100 |
| Weatherpoof single action pull station | UMPS-100WP |
| Double action pull station | UMPS-200 |
| Weatherproof double action pull station | UMPS-200WP |
| ULMIU872 Micro zone monitor unit | 400025FIRE-0054X |
| ULMCIM-C micron single channel input unit (call point) | 400014FIRE-0057X |
| Conventional single action pull station (back box ordered seperately) | SG42BK2 |
| Conventional double action pull station (back box ordered seperately) | SG42BK1 |
| Indoor back box for conventional, surface mounting | SGB32S |
| Weatherproof back box for conventional, weatherproof | SGB-32C |



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# Interfaces

We supply an extensive range of interfaces to support our UL control panels. Interfaces allow for a wide variety of installations to be simplified without the use of specialist or customised equipment. For assistance deciding which interfaces will benefit you the most, contact our technical support team; **firetechsupport@eaton.com**

## 4 Way Sounder Controller Unit
**ULCSC354**

### Typical applications:

The unit connects 4 lines of conventional output devices on a single address to an addressable panel. Ideal for when specialist devices with a high current draw are required, such as Eaton's UL ceiling and wall horns/strobes. Or where conventional sounder circuits are in a remote location away from the fire alarm control panel.

## Shop monitor unit
**ULCSUM355**


### Typical applications:

The shop monitor unit is designed to allow small units with conventional fire systems to be fully integrated with a main intelligent addressable fire system.

It is ideal for connecting individual shop units into a main shopping centre system.

## Spur isolator unit
**ULCSI350**


### Typical applications:

The spur isolator unit enables a spur of intelligent addressable devices to be connected to a main analogue loop. This simplifies the installation of remote parts of buildings or system extensions.

## 3 channel I/O unit
**ULCIO351**


### Typical applications:

The 3 channel input/output unit enables simple interfacing between the fire system and other equipment such as nurse call systems or access control systems. The inputs are fully monitored for open and short circuits.

## 230V ac relay unit
**ULCMIO353**

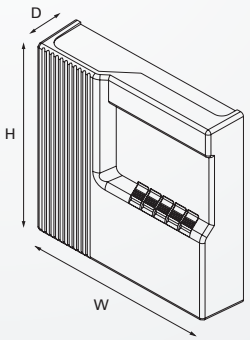

### Typical applications:

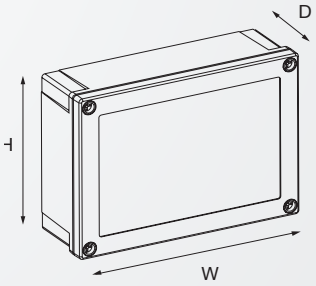
Enables simple interfacing between the fire system and other equipment such as nurse call systems or access control systems.

The ability of the output unit to switch mains also makes the unit ideal for plant control or mains powered door holders.

The input is monitored for open and short circuits so can be used for fire input applications such as monitoring sprinkler flow switches.

## Dimensions




| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| Interface units | 129 | 180 | 60 |
| 4 way sounder controller unit | 300 | 300 | 74 |

## Features

| | ULCSC354 | ULCSUM355 /ULCSI350/ ULCIO351/ULCMIO353 |
|---|---|---|
| Ingress protection | IP30 | IP40 |



SIGNALING UL LISTED

# Micro interfaces

Whilst our standard UL interfaces are designed to be installed in the position required on the loop, our range of micro interfaces can sit within a panels' enclosure.

## Micro single channel output units
**ULMCOM/ULMCOM-S**


### Typical applications:

The Micro Single Channel Output Unit (ULMCOM) is suitable for switching low voltage (24V dc at 1A maximum), via a set of non latching relay contacts.

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

The ULMCOM-S is identified by the panel as a sounder.

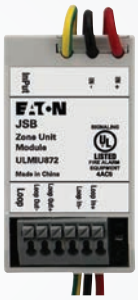
## Micro single channel input units
**ULMCIM/ULMCIM-C**


### Typical applications:

The Micro Single Channel Input Unit (ULMCIM) is suitable for monitoring a set of normally open, volt free contacts such as sprinkler system flow switches and auxiliary panel fire/fault signals. Other examples include non-fire input signals such as flow valve open contacts, generator start up, fire door closed etc.

The ULMCIM-C is identified by the panel as a call point and is designed for use with pull stations.

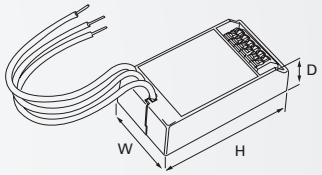
## Micro zone monitor unit
**ULMIU872**




### Typical applications:

The Micro Zone Monitor Unit (ULMIU872) is suitable for monitoring a zone of up to 20 UL approved conventional detectors.

## Dimensions




| H (mm) | W (mm) | D (mm) |
|---|---|---|
| 65 | 35 | 18.5 |

We offer an enclosure for our micro interfaces, see p38.

## Features

| | ULMCOM/ ULMCOM-S | ULMCIM/ ULMCIM-C | ULMIU872 | ULMIU872 | ULBU |
|---|---|---|---|---|---|
| Ingress protection | IP40 | IP40 | IP40 | IP40 | IP40 |

## Catalogue numbers

| Description | Code |
|---|---|
| 4-Way sounder controller unit | ULCSC354 |
| Shop monitor unit | ULCSUM355 |
| Spur isolator unit | ULCSI350 |
| 3 Channel input/output unit resets on reset | ULCIO351 |
| 120V/230V ac relay unit | ULCMIO353 |
| ULMIU872 Micro zone monitor unit | 400025FIRE-0054X |

| Description | Code |
|---|---|
| ULMCOM Micro single channel output unit (recognised as output unit) | 400015FIRE-0060X |
| ULMCOM-S Micro single channel output unit (recognised as sounder) | 400016FIRE-0063X |
| ULMCIM Micro single channel input unit (recognised as input unit) | 400013FIRE-0051X |
| ULMCIM-C Micro single channel input unit (recognised as callpoint) | 400014FIRE-0057X |
| Mini module box unit (empty box) | ULBU |

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# Contents

## Conventional fire systems

### Conventional fire system panels



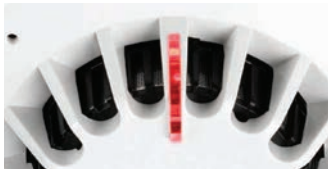






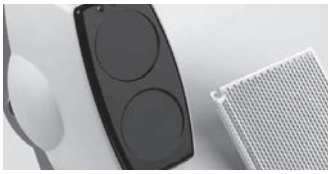
### Conventional devices













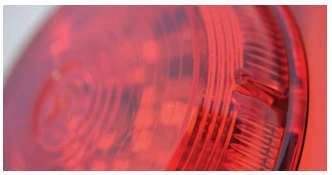




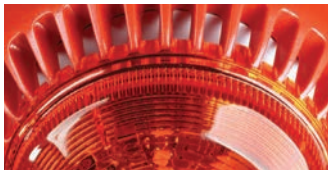














# EFCV8Z
## Conventional control panel

Eaton's 8 zone conventional fire system panel delivers a straightforward, intuitive interface that makes programming and maintenance simple.

Approved to EN54-2&4, it offers a comprehensive set of functionalities in a modern, robust and discrete enclosure. It's appearance and performance makes the panel well suited for life safety notification in a wide variety of small to medium sized buildings, particularly schools, warehouses, retail stores and office buildings.

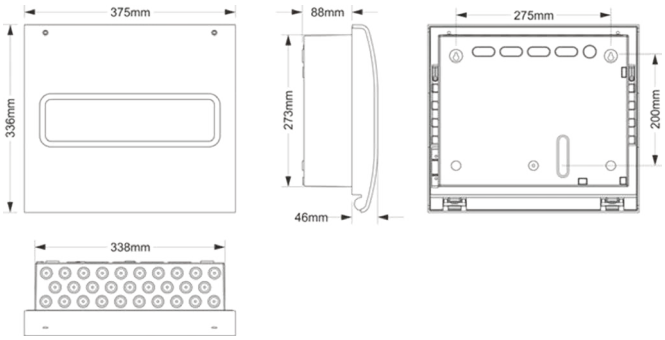
With the addition of an isolator barrier the panel has the additional flexibility to monitor standard or intrinsically safe conventional zone circuits, making it suitable for industrial applications.

| | EFCV8ZONE |
|---|---|
| No. of zones | 8 |
| Detectors per zone | 32 |
| Maximum loading per zone | 32mA |
| Repeater Port | ✓ |
| No. of sounder circuits | 4 |
| Maximum loading per sounder circuit | 250mA |
| Ingress protection | IP30 |

### Benefits

- Zones switchable between standard conventional and intrinsically safe zones (using isolator barrier)
- One man test facility
- Class change input
- Interlink relay functionality for connecting 2 panels together
- Interlink relay allows for greater system flexibility
- Supports an expansion card for Fire Routing Equipment, Fire Protection Equipment and fire relays per zone
- Modern and discreet enclosure

## Dimensions




| | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| Complete Panel | 336 | 375 | 134 |
| Back Box | 273 | 338 | 88 |

## Catalogue numbers

| Description | Code |
|---|---|
| Eaton 8 Zone Conventional Panel | EFCV8Z |
| End of Line Module | EOLM-1 |

# FX2200CPD series
## Conventional control panel


"A flexible conventional solution that ensures ease of use and high reliability"

The FX2200CPD range of conventional control panels provide a solution to any conventional system requirement. The advanced features include a simple "one-shot" user test facility, class change contacts, battery voltage alarms and charger temperature compensation, all included as standard to ensure ease of use and high reliability.

Attention to detail is emphasised by the neat log book holder feature, allowing essential records to be stored close to hand, ready for quick reference. For larger installations, custom configuration of the panels offers even greater flexibility, allowing project specific requirements to be easily met, in a competitive and cost effective package.

### Benefits

- Compact design
- Surface or semi-flush mounting
- Numerical access code (no lost keys)
- 2 or 4 zones panels
- Flexible, high specification system
- Simple "one-shot" auto-reset user test facility
- Maintenance free poly switch circuit protection, with auto reset

| | FX2202 | FX2204 |
|---|---|---|
| No. of zones | 2 | 4 |
| Detectors per zone | 32 | 32 |
| No. of alarm circuits | 2 | 2 |

| | FX2202 | FX2204 |
|---|---|---|
| Ingress protection | IP30 | IP30 |

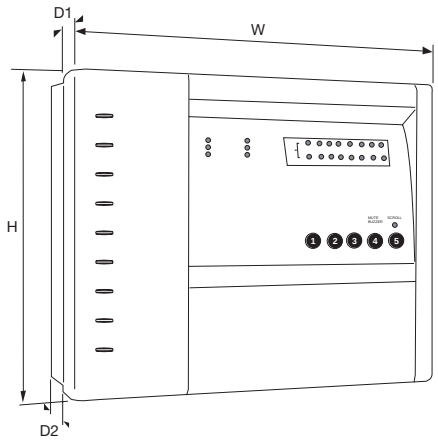
## Compatible Repeater Panel

To complement the FX2200 range a repeater panel is available for connection to the 4 zone control panel. Specifically designed for ease of installation, it requires only 2 interconnecting wires from the main panel, saving material cost and labour time. Further repeater panels can be cascaded which does not affect standby time as each has its own mains supply and standby battery. The repeater displays all the same functions as the main panel and includes an indicator test facility.

## Features

- Charger with built in temperature compensation
- Displays essential information at other key locations in a large building/site
- Zone fire and fault conditions
- Test mode in operation
- Zones or alarm lines in disabled mode

## Dimensions




| | H (mm) | W (mm) | D1 (mm) | D2 (mm) |
|---|---|---|---|---|
| 2 / 4 zone panel | 270 | 332 | 45 | 47 |
| Cut-out | 265 | 327 | - | - |

**Note:** If surface mounting add D1 and D2 to obtain depth dimension

## Catalogue numbers

| Description | Code |
|---|---|
| Conventional 2 Zone Panel | FX2202CPD |
| Conventional 4 Zone Panel | FX2204CPD |
| Fire Alarm System Log Book | MFALOG |

# CF5000 series
## Conventional control panel


"Contemporary and compact panel design that provides a solution to any conventional system requirement"

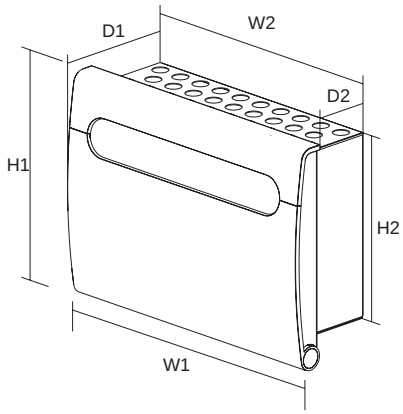
The new CF5000 conventional control panel is currently available in a 16 zone version. The panel features an array of user friendly features and are available at very competitive prices. The attractive flush or surface mountable plastic enclosure, with metal back box, has been designed through intensive voice of the customer research to provide ample space for termination of cables.

### Benefits

- Zonal relay card as standard
- One man test facility
- Non latching zone feature
- Class change input
- Fire and fault relays
- Discreet enclosure
- Supplied complete with battery for 24 hour standby

| | CF50016 |
|---|---|
| No. of zones | 16 |
| Detectors per zone | 30 |
| No. of alarm circuits | 4 |
| Zonal relay card | ✓ |
| Ingress protection | IP30 |

## Dimensions




| Description | H1 (mm) | W1 (mm) | D1 (mm) | H2 (mm) | W2 (mm) | D2 (mm) |
|---|---|---|---|---|---|---|
| | Total height | Total width | Total depth | Back box height | Back box width | Back box depth |
| 16 Zone | 276 | 375 | 136 | 232 | 335 | 96 |

## Catalogue numbers

| Description | Code |
|---|---|
| 16 zone control panel | CF50016 |
| Fire alarm system log book | MFALOG |

# EFCDP


NEW PRODUCT

The Eaton Fire EFCDP EN54 compliant conventional panel series is designed to provide simplicity and reliability to end users.

Available with 2, 4 or 8 zones, this easy to install panel provides ease of access through its spacious interior ensuring plenty of room for wiring and battery change. It comes with a 1.25 Amp 27V power supply and includes space for 2 x 3.2 Ah sealed lead acid batteries. Battery management is fully monitored through the system. Fire and fault voltage-free relays and a class change input are included.

Activation of the panel is carried out via access code. The panel features soft tactile colour coded buttons to facilitate control and programing, and is easily tested through one man walk tests – reducing maintenance costs for the end-user.

The panel is compliant with European standards EN54-2 & 4, Fire Detection and Alarm Systems - Control & Indicating Equipment, and carries an LPCB mark.

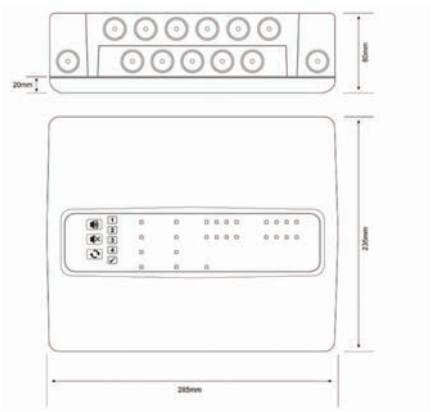
## Benefits

- Easy to install and maintain
- One-man test facility
- Compatible with Eaton D200 detector series
- Up to 30 detection devices per zone
- Secured with code entry for activation of controls
- Test with or without sounders in test mode
- Ease of programming with colour coded, soft tactile buttons
- Modern and compact enclosure

| | EFCDP |
|---|---|
| No. of zones | 2, 4, 8; EOLR = 6K8 |
| Detectors per zone | 30 |
| Power supply | Switch mode 1.25A/27Vdc |
| Monitored sounder outputs | 2 |

| | EFCDP |
|---|---|
| Alarm load | 800mA (shared) |
| Cable entry | 13 entries, 20mm diameter knockouts |
| Max battery size | 2 x 3.2Ah, 12V, SLA |
| Compliance | EN54 Parts 2 and 4 |


## Dimensions



| | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| Back Box | 235 | 287 | 60 |
| Lid | 235 | 285 | 20 |
| Total depth (back box + lid fitted) | | | 80 |

## Catalogue numbers

| Description | Code |
|---|---|
| EFCDP Conventional Detection Panel 2 zones | EFCDP2Z |
| EFCDP Conventional Detection Panel 4 zones | EFCDP4Z |
| EFCDP Conventional Detection Panel 8 zones | EFCDP8Z |

# Detectors and remote indicator

The conventional range offers a multi-mode, 5 in 1 detector (FXN922), covering many building needs. It's quick and simple to install with a stylish low profile design. The detector is mounted on our standard conventional base (EFXN520) but can also be used in conjunction with our relay base (FXN520R) for local switching. Each detector is fitted with a 360˚ viewable LED for indication.

This multi-mode detector can be configured to operate as either an optical detector, photo-thermal detector or 1 of 3 heat detector modes (A1R, BS, CS) using the four position switches located at the back of the detector. The FXN922 is certified for use in all 5 modes.

Compatible with panels EFCV8, FXP2200, CF5000.

## Multimode detector
**FXN922**

Base not included. See p74 for compatible bases.

### Optical smoke detector mode

**Typical applications:**

Suitable for most applications.

Fastest response to slow burning or smouldering fires which give rise to large visible smoke particles.

### Photo-thermal detector mode

**Typical applications:**

Responds quickly to fast clean burning fires.

Maintains the advantage of optical sensors when detecting smouldering fires.

### Rate of rise heat detector mode

**Typical applications:**

Environments where the ambient conditions might cause false alarms with smoke detectors.

Examples include areas with high levels of dust or fumes.

### Fixed heat detector (77°) mode

**Typical applications:**

Environments where a change in temperature is a likely occurrence. Using a fixed heat negates false alarms from insignificant temperature rises.

### Fixed heat detector (92°) mode

**Typical applications:**

Environments where the ambient heat levels are likely to be above normal temperatures, such as restaurant kitchens.

**Note:**

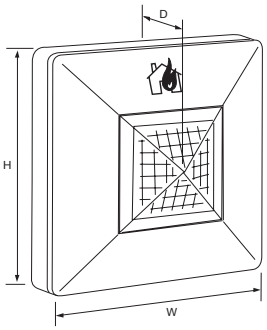
We can also supply separate detectors for each individual mode if they are required. These are displayed in the catalogue numbers in the table over the page.

## Remote indicator
**FX251D**

**Typical applications:**

The remote indicator is ideal for applications such as void spaces or outside locked or inaccessible rooms to provide indication of the activation of an automatic detector.

## Dimensions

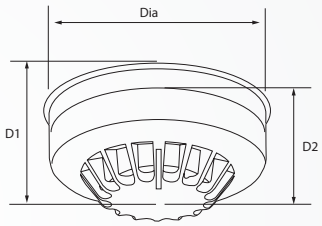



| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| Remote indicator | 87 | 87 | 49 |

## Performance

| Feature | Optical smoke mode | Photo-thermal mode | Rate of rise mode | Fixed heat 77 ˚C mode | Fixed heat 92 ˚C mode |
|---|---|---|---|---|---|
| Area coverage (subject to local standards) | 100m$^2$ | 100m$^2$ | 50m$^2$ | 50m$^2$ | 50m$^2$ |
| Heat class | N/A | A2S | A1R | BS | CS |
| Alarm temperature | N/A | 60 ˚C | 60 ˚C | 77 ˚C | 92 ˚C |

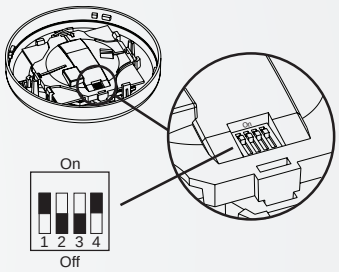
## Dimensions




| Description | Diameter (mm) (incl base) | Depth (mm) (incl base) | Depth (mm) (excl base) |
|---|---|---|---|
| Multimode detector* | 104 | 42 | 55 |
| Optical smoke detector | 104 | 33 | 45 |

* All other conventional detectors share same dimensions

## Switch settings




| Description | SW1 | SW2 | SW3 | SW4 |
|---|---|---|---|---|
| Optical mode | - | OFF | OFF | OFF |
| Photo-thermal mode | - | OFF | OFF | ON |
| Rate of rise mode | - | ON | OFF | OFF |
| Fixed heat 77° mode | - | OFF | OFF | ON |
| Fixed heat 92° mode | - | ON | ON | OFF |

| | 5 in 1/EFXN533/ EFXN632\EFXN525/ EFXN524\EFXN526 | FX251D/CIR301WP |
|---|---|---|
| Ingress protection | IP40 | IP30 |

## Catalogue numbers

| Description | Code |
|---|---|
| 5 in 1 Multi-Mode Detector FXN922 | 400017FIRE-0031X |
| Optical Smoke Detector | EFXN533 |
| Photo-Thermal Detector | EFXN533 |
| Rate of Rise Heat Detector | EFXN525 |
| Fixed Heat Detector 77 ˚C | EFXN524 |
| Fixed Heat Detector 92 ˚C | EFXN526 |
| Remote Indicator | FX251D |
| Weatherproof Remote Indicator | CIR301WP |

# Detectors for EFCDP panel range

The D200 conventional detector range offers a multipurpose offering for both smoke and heat detection. The range includes optical, heat and multi-sensor detectors suitable for applications within two-wire conventional systems and addressable systems suitable for conventional detectors.

The detectors provide fire detection and alarm system designers with a standard compliant economical product for life safety and property protection.

## Optical smoke detector
**D200-O**

### Typical applications:

Suitable for most applications.

Early detection of fire and high immunity against unwanted alarms.

## Multi-sensor detector
**D200-HO**

### Typical applications:

Ideal for both fast-flaming and slow smouldering fires.

Dual purpose detector to detect smoke, heat or a combination, supported by high immunity against unwanted alarms

## Heat detector
**D200-H**

### Typical applications:

Environments where the ambient conditions might cause false alarms with smoke detectors.

Examples include areas with high levels of dust or fumes.

## Performance

| | D200-O | D200-HO | D200-H |
|---|---|---|---|
| Alarm current (max) | 40mA | 50mA | 50mA |
| Alarm response threshold (smoke) | N/A | 0.08 - 0.15 dB/m | 0.08 - 0.15 dB/m |
| Alarm response threshold (heat) | N/A | $59_0$c static and rate of rise | $59_0$c static and rate of rise |

## Dimensions

| | D200-O | D200-HO | D200-H |
|---|---|---|---|
| Dimensions (mm) excluding contacts | 102 x 34 | 102 x 45 | 99 x 45 |

## Catalogue numbers

| Description | Order code |
|---|---|
| D200-HO two-wire multi-sensor detector | 400020FIRE-0034X |
| D200-O two-wire optical smoke detector | 400019FIRE-0033X |
| D200-H two-wire heat detector | 400018FIRE-0032X |

**Note:** products must be ordered in multiples of 8 pcs


Doncaster
Doncaster

# Bases

There are two types of conventional detector bases, compatible with our range of detector heads to provide a wide functionality for different applications. The standard base (EFXN520) is a general use product, providing a foundation for our conventional detectors, whereas the relay base (FXN520R) provides a local relay signal in the event of its host detector being triggered, making it ideal for instigating a local response.

**Note:** Bases not compatible with D200 conventional detector range.

## Standard base
**EFXN520**

### Typical applications:

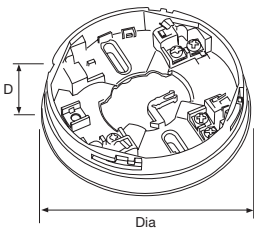
General use product, suitable for use in most indoor applications.

## Relay base
**FXN520R**

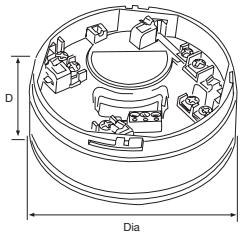
### Typical applications:

Areas where a local response is required.

## Dimensions




Standard base




Relay base

| Description | Dia (mm) | D (mm) |
|---|---|---|
| Standard base | 104 | 22 |
| Relay base | 102 | 40 |

## Catalogue numbers

| Description | Code |
|---|---|
| Standard base | EFXN520 |
| Relay base | FXN520R |

# Duct probe detector

The presence of smoke in a ventilation duct is detected by sampling the airflow through the duct via two sampling tubes. An optical 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.

## Duct probe unit
**MDP201**

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

## Typical applications:

Detecting presence of smoke in ventilation ducts.

## Features

| | |
|---|---|
| Duct width range | 300mm to 1500mm<br>5 to 50 metres |
| Duct air speed range | 1m/s to 20m/s<br>Detector ± 0.8˚<br>Prism ± 5.0˚ |
| Temperature range | -20°C or +60°C |
| Ingress protection | IP67 |

## Catalogue numbers

| Description | Code |
|---|---|
| Mounting bracket | MRBFP |
| Duct probe unit | MDP201 |

Duct probe units can be used to detect the presence of smoke in a ventilation duct

# Callpoints

Two versions of the conventional callpoint are available, the surface or flush mounted FX201 or the weatherproof FX203. Both have an integral short circuit isolator and are very simple to install. The callpoints are packaged with 2 frangible glass elements and test key, with a comprehensive range of further devices available.

## Surface/flush mounted callpoint
**FX201**

### Typical applications:

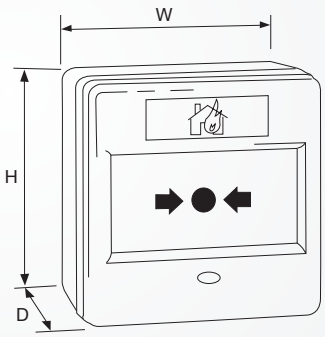
General use product, suitable for use in most indoor applications.

## Weatherproof callpoint
**FX203**

### Typical applications:

Builds requiring a callpoint in harsh conditions. For example, outside or in a wash down area.

## Dimensions




| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| Surface mounted | 87 | 87 | 57 |
| Flush mounted | 87 | 87 | 36 |
| Weatherproof | 87 | 87 | 59 |

## Features

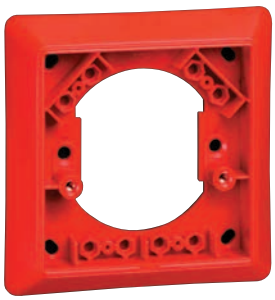
| | FX201 | FX203 |
|---|---|---|
| Fast fit clip | ✓ | ✓ |
| Heavy duty terminals | ✓ | ✓ |
| Ingress protection | IP42 | IP65 |

## Catalogue Numbers

| Description | Code |
|---|---|
| Surface/flush callpoint | FX201 |
| Weatherproof callpoint | FX203 |
| CXPC Protective hinged cover (pack of 10) | CXPC |
| Spacer plates (pack of 10) | MBGSP |
| MBGBEZ Recessing bezels (pack of 10) | MBGBEZ |
| MBGREKIT Resettable element kit (pack of 10) | MBGREKIT |
| FX5G Spare break glasses (pack of 10) | FX5G |
| MFBGKEY3 Callpoint keys (pack of 10) | MFBGKEY3 |

## Further accessories:

Callpoint shown with protective hinged cover



Callpoint recessing bezel

# Bells

Bells still remain a popular choice for many applications where they can sometimes be used as a signal for non-fire purposes, such as class change in a school.

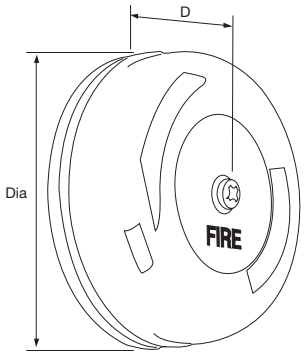

Bells can be used for non fire applications such as class change in a school

## Internal 6 inch bell
**FX006**


## Typical applications:

Can be used for non-fire applications, such as class change in a school.

## Dimensions




Internal 6 inch bell

| Description | Dia (mm) | D (mm) |
|---|---|---|
| 6 inch internal bell | 152 | 63 |

## Sound output

| | FX006 | MWB824 |
|---|---|---|
| Sound Output | 93-95dB(A) at 24V dc | 95dB(A) (+/-2) |

## Features

| | FX006 |
|---|---|
| Ingress protection | IP21C |

## Catalogue numbers

| Description | Code |
|---|---|
| FX006 Internal 6 inch bell | FX006 |

# Sounders

We have an extensive range of conventional sounders, designed to meet every specification's functional and aesthetic needs. Completely EN54 Pt. 3 certified, each sounder offers a unique solution to your conventional system requirements.

## Flush sounder
**FX003**

### Typical applications:

Ideal for retail, hotel and residential applications such as sheltered housing.

## Surface sounder
**FX002SB**

### Typical applications:

This all-purpose sounder has been designed to be both robust and aesthetically pleasing to meet many build requirements.

## Weatherproof surface sounder
**FX002DB**

### Typical applications:

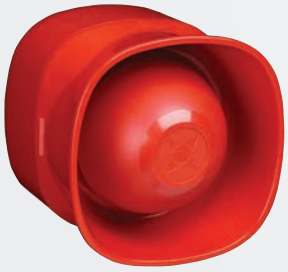
The weatherproof sounder is perfect for harsh weather conditions where a sounder is needed. With selectable tones a high volume can be easily achieved meaning this sounder functions well in outdoor settings.

## High output wall sounder
**FX007**

### Typical applications:

With a maximum output of 120dB(a), this sounder is ideal for areas with high ambient noise levels like warehouses.

## Low current wall sounder
**MLC624**



### Typical applications:

Designed to provide a high sound output with a low current consumption the MLC624 is perfect for areas where high sound levels need to be achieved but sounder circuit capacity is limited.

## Base mountable sounder
**FXN824**

### Typical applications:

With a slim and aesthetically pleasing design this base sounder is ideal for applications such as hotel bedrooms where a detector/sounder or a detector/sounder-beacon is required.

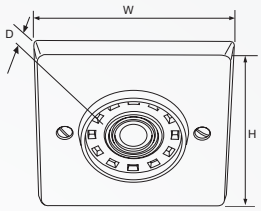
Please note a detector base is still required when used in conjunction with a detector

Wall sounder detail

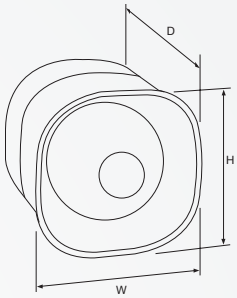
## Sound output

| | FX003 | FX002 | FX007 | MLC624 | FXN824 |
|---|---|---|---|---|---|
| Sound output | 98dB(a) at 1 Metre (+/-2) | 105dB(a) max (+/-2) at 24V dc | 120dB(a) (+/-2) Max at 1m (tone 5)<br>114dB(a) (+/-2) Max at 1m (tone3) | 100dB(a) at 24V dc | 80/90dB(a) (+/-3) @ 1 Metre |
| Tones | 32 | 32 | 32 | 3 | 8 |

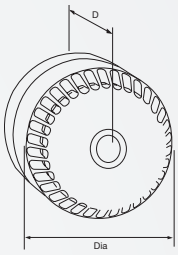
## Dimensions



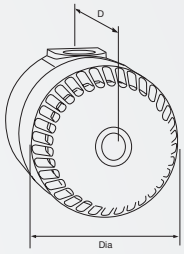

Flush sounder



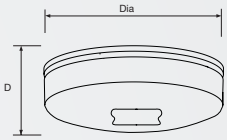

Wall sounder




Surface sounder




Weatherproof surface sounder




Base mountable sounder

| Description | H (mm) | W (mm) | D (mm) |
|---|---|---|---|
| Flush sounder | 86 | 86 | 36 |
| High output wall sounder | 105 | 105 | 95 |
| Low current wall sounder | 105 | 105 | 95 |

| Description | Dia (mm) | D (mm) |
|---|---|---|
| Surface sounder | 93 | 63 |
| Weatherproof surface sounder | 93 | 93 |
| Base mountable sounder | 111 | 26 |

## Features

| | FX003/ FX003W | FX002SB | FX002DB |
|---|---|---|---|
| Ingress protection | IP20 | IP54 | IP65 |

| | FX007 | MLC624 | FXN824 |
|---|---|---|---|
| Ingress protection | IP42 | IP30 | IP65 |

## Catalogue Numbers

| Description | Code |
|---|---|
| Flush sounder, red | FX003 |
| Flush sounder, white | FX003W |
| Low profile surface sounder, red | ROLP-R-S |
| Weatherproof deep base surface sounder back box, red (IP65) | ROLP-R-D |
| High output wall sounder | FX007 |
| Low current wall sounder | 650001FULL-0003X |
| Base mountable sounder | FXN824 |
| Blanking plate for FXN824 (pack of 5) | MDS824COV |
| Deep base for surface sounder (IP65) | FX000WP |

# Visual alarm devices (VADs)

From 31st December 2013 a new beacon standard, EN 54-23 became mandatory throughout the EU where Construction Product Regulation (CPR) applies. It directly affects the use of visual alarm devices (VADs) in fire detection and alarm systems for non-domestic premises. Its purpose is to standardise the requirements, test methods and functional criteria of VADs to ensure that their visual performance is measured and presented in a uniform manner.

Eaton's LX range has been designed to comply with the new EN 54-23 standard. With current consumption as low as 10mA, the range has been developed to provide the lowest current consumption with the highest possible coverage. Three years in the making, the LX range, available for wall and ceiling applications, features a number of patented technologies including an innovative lens and flash pattern.

## Solista LX wall
**FXSOLWRS**


### Typical applications:

With both a shallow base and deep base option the Solista meets requirements of a large range of builds.

## Solista LX ceiling
**FXSOLCWS**


### Typical applications:

The ceiling option Solista helps to cover different types of room sizes to meet the requirements of the CoP 0001 design guidelines.

## RoLP LX wall
**FXROLPWR**


### Typical applications:

The RoLP LX Wall is ideal for dual use applications where a visual alarm device is required in addition to an audible alarm.

The RoLP LX Wall is available to use with any standard RoLP sounder.

## Symphoni LX wall
**FXSYG1WR**


### Typical applications:

The Symphoni LX Wall base can be used in combination with any standard Symphoni sounder.

Its high sound output makes it suitable for open areas or areas where there is higher than normal background noise.

## Symphoni LX WP wall (weatherproof)
**FXSYG1WR-WP**


### Typical applications:

The Symphoni LX WP Wall device offers a weatherproof alternative to the Symphoni LX Wall device. With an ingress protection rating of IP66, it is suited for wet and outdoor environments.

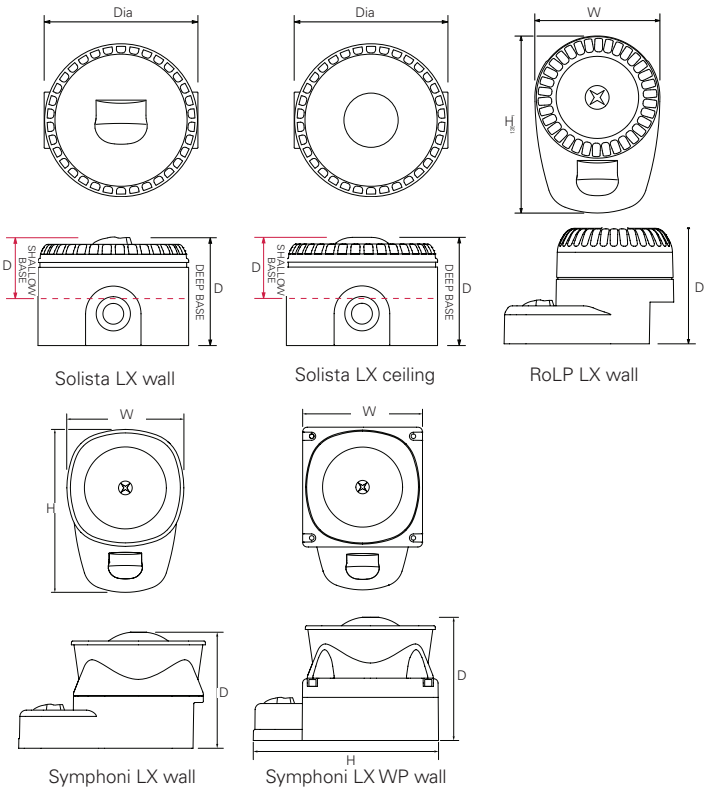
These products are all **red flash**, for more options please contact:

firetechsupport@eaton.com

## Performance

| | Solista LX wall | Solista LX ceiling | RoLP LX wall | Symphoni LX wall | Symphoni LX WP wall |
|---|---|---|---|---|---|
| Sound output | N/A | N/A | 102dB(A) (Typical tone 3 - RoLP) | 100dB(A) (Typical tone 3 - Symphoni) | 100dB(A) (Typical tone 3 - Symphoni) |
| Minimum current consumption | 10mA | 10mA | 22mA | 15mA | 15mA |
| EN54-23 coverage reference | W-2.4-7.5 | C-3-7.5 | W-2.4-7.5 | W-2.4-7.5 | W-2.4-7.5 |
| Coverage volume | 135m$^3$ (15m$^3$) | 132m$^3$ (21m$^3$) | 135m$^3$ (15m$^3$) | 135m$^3$ (15m$^3$) | 135m$^3$ (15m$^3$) |
| Flash rate | 1Hz (switchable to 0.5Hz) | 1Hz (switchable to 0.5Hz) | 1Hz (switchable to 0.5Hz) | 1Hz (switchable to 0.5Hz) | 1Hz (switchable to 0.5Hz) |
| Ingress protection | IP33C | IP33C | IP65 | IP21C | IP66 |

## Dimensions




| Description | Dia (mm) | D (mm) | W (mm) | H (mm) |
|---|---|---|---|---|
| Solista LX wall deep base | 93 | 66 | - | - |
| Solista LX wall shallow base | 93 | 38 | - | - |
| Solista LX ceiling shallow base | 93 | 37 | | |
| RoLP LX wall | - | 95 | 95 | 135 |
| Symphoni LX wall | - | 92 | 106 | 147 |
| Symphoni LX WP wall | - | 92 | 106 | 147 |

## Catalogue numbers

| Description | Code |
|---|---|
| Solista wall red body shallow base | FXSOLWRS |
| Solista wall red body deep base | FXSOLWRD |
| Solista LX ceiling | FXSOLCWS |
| RoLP wall red body base and sounder | FXROLPWR |
| RoLP wall red body base only | FXROLPWR-B |
| Symphoni LX wall red body | FXSYG1WR |
| Symphoni LX wall weatherproof red body | FXSYG1WR-WP |

For more guidance on EN-54-23 and placement of VADs, refer to our Fire Installer's Mate pocket guide.

# Indicators

In areas which do not have to meet the new regulations regarding EN54-23 visual alarm devices, our range of indicators can still provide reliable light indication.

## Low profile LED indicator
**MLB124SB**

### Typical applications:

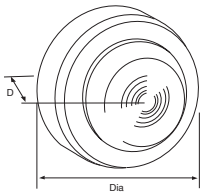
In regions where the EN54-23 VADs standard is not a requirement, the LED indicator can be used as an indicating device.

## Weatherproof LED indicator
**MLB124DB**

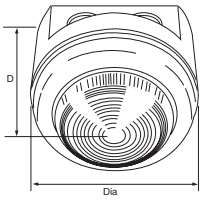
### Typical applications:

The weatherproof version of the LED indicator provides an IP65 option ideal for outdoor use.

## Dimensions




Low profile LED indicator




Weatherproof LED indicator

| Description | W (mm) | D (mm) |
|---|---|---|
| Low profile LED indicator | 95 | 53 |
| Weatherproof LED indicator | 95 | 80 |

**Note:** From 31st December 2013 a new beacon standard, EN 54-23 became mandatory across Europe where Construction Product Regulation (CPR) applies. If you are in a region where this standard applies please understand that these indicators do not meet the requirements of the new standards - **see p80 for compliant beacons and sounder beacons**

## Features

| | MLB124SB | MLB124DB |
|---|---|---|
| Ingress protection | IP54 | IP65 |

## Catalogue numbers

| Description | Code |
|---|---|
| Low profile LED beacon | MLB124SB |
| Weatherproof LED beacon | MLB124DB |

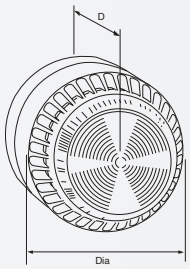
# Sounder indicators

In areas which do not have to meet the new regulations regarding EN54-23 visual alarm devices, our range of sounder indicators can still provide excellent sound quality and light indication.

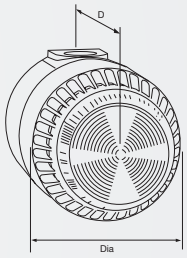
## Xenon sounder indicator
**FL-RL-R-S**

## Weatherproof Xenon sounder indicator
**FL-RL-R-D**

## Dimensions



Xenon sounder indicator



Weatherproof xenon sounder indicator

| Description | Dia (mm) | D (mm) |
|---|---|---|
| Xenon sounder indicator | 93 | 92 |
| Weatherproof xenon sounder indicator | 93 | 121 |

## Typical applications:

In regions where the EN54-23 VADs standard is not a requirement, the xenon sounder indicator provides an alternative option to the xenon indicator - where an audible warning is required in addition to light indication.

## Typical applications:

The weatherproof version of the sounder indicator is IP65 rated which allows for installation in harsher environments.

## Sound output

| | XENON sounder indicator, FL-RL-R-S/FL-RL-R-D |
|---|---|
| Sound output | 101dB(a) at 24V dc (typical tone 3) |
| Tones | 32 |

## Features

| | FL-RL-R-S | FL-RL-R-D |
|---|---|---|
| Ingress protection | IP54 | IP65 |

## Catalogue numbers

| Description | Code |
|---|---|
| Conventional xenon sounder indicator | FL-RL-R-S |
| Weatherproof IP65 xenon sounder indicator | FL-RL-R-D |

**Note:** From 31st December 2013 a new beacon standard, EN 54-23 became mandatory across Europe where Construction Product Regulation (CPR) applies. If you are in a region where this standard applies please understand that these indicators do not meet the requirements of the new standards - **see p80 for compliant beacons and sounder beacons**

# Door retainers and relay unit

Door retainers enable doors to be held open under normal conditions but automatically be released in the event of fire alarm activation.

Eaton have a range of door retainers which are robust and simple to install. Both floor and wall mounted retainers, with either mains or 24V dc power supplied variations, are available.

## Heavy duty door retainer MDR240/MDR24L

### Typical applications:

Robust and simple to install, the heavy duty door retainer is ideal for a wide range of applications, such as nursing homes, hospitals, schools and industrial premises.

## Compact door retainer FX021240LC/ FX02124VLC

### Typical applications:

Equally as reliable, the compact door retainer is also a good choice for nursing homes, hospitals and also busy corridors.

## Heavy duty relay unit MAR724

### Typical applications:

Designed for interfacing heavy loads such as door release units or plant shut down equipment with fire alarm systems.

This unit is simple to fix and install and the neat unobtrusive design makes it suitable for use in a wide range of areas.

The heavy duty relay unit is powered by 24V dc external supply and is provided with 2 separate sets of changeover contacts.

Can switch 230V ac mains at 10A

## Performance

| | MDR240 | MDR24L | FX021240LC | FX02124VLC |
|---|---|---|---|---|
| Holding force | 40kg | 40kg | 45kg | 40kg |
| Power consumption | 1.2VA | 40mA | 1.2VA | 40mA |
| Ingress protection | IP40 | IP40 | IP42 | IP40 |

## Catalogue numbers

| Description | Code |
|---|---|
| Mains powered heavy duty door retainer | MDR240 |
| 24V dc heavy duty door retainer | MDR24L |
| Floor mounting bracket for heavy duty door retainers | ZMDRFBB |
| Mains powered compact door retainer | FX021240LC |
| 24V dc compact door retainer | FX02124VLC |
| Floor mounting bracket for compact door retainers | FX021LCFB |
| Spare striker plate for either magnet | ZMDRSWIV |
| Heavy duty relay unit | MAR724 |

# Power supply

Specifically recommended as an auxiliary power supply unit for fire detection system components such as electromagnets, notification devices, etc.

Using the unit in large systems eliminates the problem of long power cable runs which simplifies installation.

## EN54 pt.4 approved power supply unit
**SPS Range**

## Typical applications:

The new range of EN 54-4 certified safety power supplies offer a compact, robust and versatile power solution to installers, allowing them to safely power fire detection and signaling systems in small to large installations.

Compact and discrete design allows for these SPS to be installed in a visible location such as a hotel lobby for instance. Comprehensive yet simple status indicators on the front of the unit help installers, commissioners and maintainers assess status of the unit.

## Features

| | SPSS-2423/2433/2453 |
|---|---|
| Ingress protection | IP30 |

## Catalogue numbers

| Description | Code |
|---|---|
| Safety power supply 24V / 1.5A (batteries not supplied) | SPS-2423 |
| Safety power supply 24V / 2.5A (batteries not supplied) | SPS-2433 |
| Safety power supply 24V / 4.5A (batteries not supplied) | SPS-2453 |

Door retainers enable doors to be held open under normal conditions but automatically be released in the event of fire alarm activation.

CE

# Notes

**Spring Mews**
London, UK

## Contact

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**Online Resources**

Visit www.eaton.com for the following resources:

- 24/7 online product support
- Catalogue and literature
- Product profiles
- Datasheets, installation and user manuals

At Eaton, we're energized by the challenge of powering a world that demands more. With over 100 years experience in electrical power management, we have the expertise to see beyond today. From groundbreaking products to turnkey design and engineering services, critical industries around the globe count on Eaton.

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