

CHANNEL

Your Trusted Safety Partner

2026 Product Catalogue





Deta Electrical is a market leading manufacturer and distributor of wiring, lighting, cable management and electrical installation accessories, with a reputation for unrivalled quality, reliability, service and value for money.

Deta's mission is to use its passion and expertise to provide best-in-class products that meet and exceed ever-changing customer needs. Focused on continuous progression, Deta is committed to investment in innovation, product design and ease of installation, ensuring electricians and contractors have the support they need today and for the future.



Think electrical, think... deta[▲]

DETA VIMARK TTE TOWER BRACKENHEATH
BRITICENT CHANNEL DETA.E TIMEGUARD

CHANNEL

Your Trusted Safety Partner

Since 1976, Channel Safety has been a trusted name in Emergency Lighting, Fire Detection and Assistance Systems. Now part of Deta, we combine decades of experience with an innovation led approach to deliver reliable, compliant and high performance life safety solutions. From intelligent product design to free system support, site guidance and accredited CPD training, we assist contractors and wholesalers in delivering safer, more efficient installations.

Channel's exclusive SmartTest technology and technical expertise ensure every solution is built around quality, ease of maintenance and long term performance.

As an extension of our partners' teams, driving demand and supporting commercial success, you gain more than a supplier: you gain a specialist partner committed to raising industry standards and empowering safer choices.

Contents

Fire Detection Systems	2
Emergency Lighting	62
Assistance Products	112
Door Entry Systems	134
Index	142
Channel Partners	150







Fire Alarms, Panels and Detectors

Site Alarms	4
Domestic Detection	5
BS 5839-6 Grade C Domestic Fire Alarm	6
4 Wire Conventional	8, 10
Visual Alarm Devices	9
2 Wire Conventional	12
BS 8629:2019 Evacuation Alert System	16
Sprinkler Monitoring System	17
Invacuation/Lockdown Systems	18
Analogue Addressable Systems	19
Wireless Analogue Addressable Systems	36
REACH Wireless	38
Aspirating Equipment	40
AOV System	42
Beam Smoke Devices	44
Fire System Accessories	45
Maintenance Test Equipment	50
The Knowledge	52

Site Master Wired Standalone/Linked System



Overview

The Site Master Plus is an easily installed, simple to operate, reliable site alarm. These units require no external wiring (unless you wish to link to other Evacuator products), are manufactured using high quality components and feature an extremely loud 118dB sounder.

Features

- Operated by a Manual Call Point
- Complete with reset key and resettable membrane
- Easily installed and requires no external wiring
- Link products using two core cable
- Integrated high power flashing strobe
- Extremely loud 118dB sounder
- Powered by 9V PP3 battery
- Optional call point cover
- Can be linked to other Evacuator products
- Manufactured in the UK



F/CHEV/BGU



F/CHEV/PB

Site Master Wired Standalone/Linked System

- F/CHEV/BGU Stand alone break glass call point fire alarm, 118Db sounder
- F/CHEV/PB Stand alone push button alarm, 118Db sounder

Evacuator Synergy – RF Wireless System

Overview

The Evacuator Synergy - RF wireless site alarm requires no cabling and can be wirelessly interconnected with up to 40 call points, sounder/strobe and detection Synergy RF devices within a single system. The base station acts as the systems control panel, featuring a screen to display when the system is in test or alarm state and monitors all linked devices in case of low battery. Each linked site alarm, including the base station, is given a numerical "address" allowing the triggered device to be easily identified.

Features

- Category 1 radio module
- 25mm bright LED display unit
- Scratch resistant UV decals
- 85dB buzzer
- 40 addressable zones
- Automatic battery low indication
- Completely wireless operation (No mains required)
- 'Plug and play' simple self
- Low maintenance costs
- Silent range test
- Battery Powered

Evacuator Synergy – RF Wireless System

- F/CHEV/SYN/BS Wireless Master unit with break glass call point 85Db sounder
- F/CHEV/SYN/BGU Wireless break glass call point fire alarm, 108Db sounder and strobe
- F/CHEV/SYN/SD Wireless smoke detector 108Db sounder
- F/CHEV/SYN/HD Wireless heat detector, 108Db sounder
- F/CHEV/SYN/SDWS Wireless smoke detector with sounder, 108Db sounder
- F/CHEV/SYN/SS Wireless sounder strobe
- F/CHEV/SYN/GSM Wireless GSM dialer
- F/CHEV/SYN/INT2 Wireless relay interface



Base Station



GSM Dialer



BGU Sounder Strobe



Sounder Strobe



Smoke Detector

Domestic Detection

Overview

Our range of mains powered optical smoke and heat alarms with back-up power options of either 9V replaceable or 10-year sealed in non-replaceable battery, satisfying both Grade D2 and D1 domestic requirements respectively as laid down by BS 5839: Part 6 and the Building Regulations of England and Wales, Scotland and Northern Ireland.

A Carbon Monoxide alarm compliments the range.

All alarms supplied with a base, making installation easier.

Features

- Optical alarms are suitable for all circulation areas and habitable rooms, making it ideal for hallways and landings, as well as living rooms and bedrooms
- Heat alarms are designed for areas where fumes or dust may cause nuisance alarms, making it ideal for kitchens, attics and garages
- CO alarm detect dangerous levels of Carbon Monoxide, making it ideal for installation in all rooms with fuel burning appliances
- High visibility dust covers supplied to prevent dust ingress during building works
- Linkable up to 12 optical, heat and Carbon Monoxide alarms in total for larger properties
- Alarms have missing battery indicator and a mechanism that prevents installation of the alarm if the battery is missing
- Supplied with a common mounting base that allows the alarm to be pushed simply into place
- Mounting base has a foam gasket built into mounting surface to prevent dust ingress
- Mounting base has a large wiring space and fly lead electrical connection into alarm
- The input/output base allows interlinking to other systems
- 5 year guarantee



1163

Domestic Detection

- 1163 Mains Powered Optical Alarm with Replaceable 9V Battery Back-Up
- 1164 Mains Powered Optical Alarm with Tamper Proof Long Life Battery Back-Up
- 1165 Mains Powered Heat Alarm with Replaceable 9V Battery Back-Up
- 1166 Mains Powered Heat Alarm with Tamper Proof Long Life Battery Back-Up
- 1171 Mains Powered Combined Optical Smoke and Heat Alarm with Tamper Proof Long Life Battery Back-Up
- 1190 Wireless Alarm Controller for use with 1171 Combined Detector
- 1139 Battery Powered Carbon Monoxide Alarm (10 Year)
- 1169 Mains Powered Carbon Monoxide Alarm
- 1142 Carbon Dioxide and Temperature Monitor
- 1191 Input/Output Base
- 1192 Input/Output Base with Battery Back-Up - 10-Year Battery Life



1139



1165



1169



1190

HUSH ActiV



Overview

Hush ActiV is conventional stand-alone Grade C domestic fire detection and alarm system to BS 5839-6 (2019) ideal for use in flats, houses and other residential dwellings. Supplied as a cost-effective kit for ease of specification and ordering.

Features

- Includes all of the devices you need to create a typical LD2 dwelling system (additional ActiV detection and alarm devices available to accommodate larger systems or systems requiring LD1 coverage)
- Monitored for head removal, wiring, PSU and battery faults
- Attractive double gang Hush-ActiV controller comes with its own rechargeable 72-hour standby battery and separate mains power supply unit
- Uses attractively designed EN54 certified detection and alarm devices



Hush ActiV Benefits

- **Safer:** Raises the typical level of fire protection in a dwelling from BS 5839-6 Grade D (unmonitored mains/battery alarms) to Grade C (monitored wiring and a central controller)
- **Easy-To-Access User Controls:** No need to stand on a chair to test or hush/silence devices
- **Secure Monitored Wiring:** All field wiring monitored for open and short circuit faults
- **Environmentally Friendly:** Up to 50% reduction in the mains power consumption of a typical grade D system, less plastic and only one replaceable lithium-ion battery per system providing over 72 hours' standby
- **Reduced Lifetime Ownership Costs:** Separate fire detectors and sounders are less expensive to replace than mains/battery alarms and all smoke detectors have built-in drift compensation to increase service life expectancy
- **No Intrusive BS 5839-1 Maintenance Visits:** Monthly user/occupant test is sufficient
- **Direct Grade D System Upgrades:** Utilises the same wiring scheme as most mains/battery alarm solutions



F/C4403A2
60°C Heat Detector



F/C4414
Multi Sensor



F/C4416
Optical Smoke Detector



F/BF431C/CC/W
Base Sounder



F/CH/HAK/1



Contains:

- 1 x Hush ActiV Controller
- 1 x 230V/24V 250mA PSU
- 1 x ActiV Multi Sensor Fire Detector
- 1 x ActiV Heat Detector
- 1 x ActiV Smoke Detector
- 3 x ActiV Detector Bases
- 1 x ActiV 96dBA Sounder
- 1 x ActiV Base Sounder Lid

F/CH/HAK/2



Contains:

- 1 x Hush ActiV Controller
- 1 x 230V/24V 250mA PSU
- 1 x ActiV Heat Detector
- 1 x ActiV Smoke Detector
- 3 x ActiV Detector Bases
- 1 x ActiV 96dBA Sounder
- 1 x ActiV Base Sounder Lid

F/CH/HAK/3



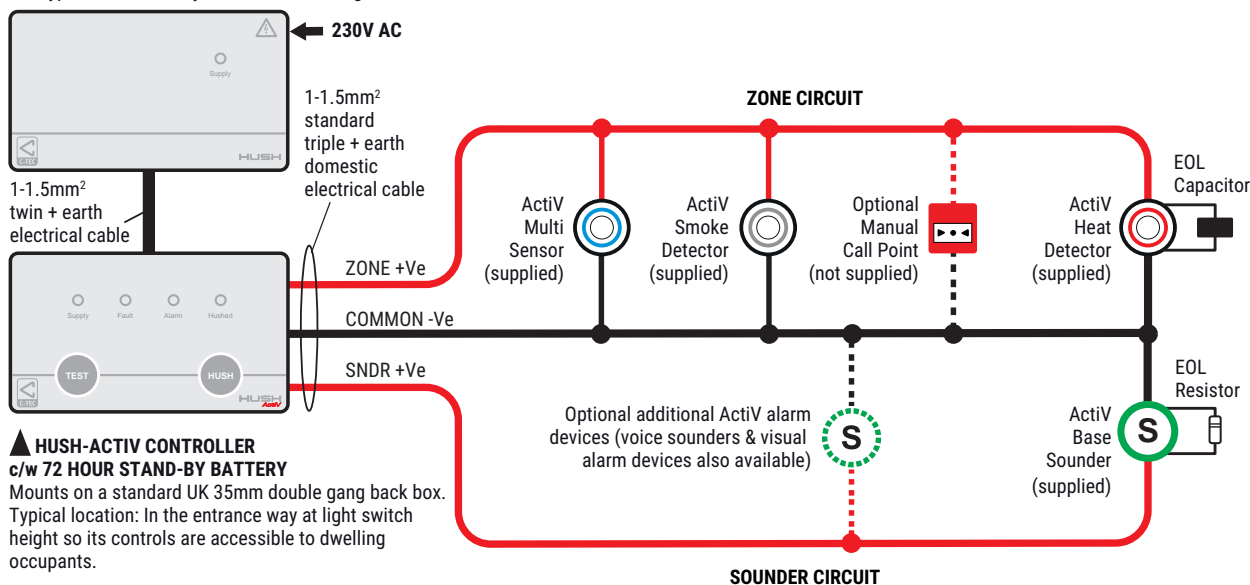
Contains:

- 1 x Hush ActiV Controller
- 1 x 230V/24V 250mA PSU
- 1 x ActiV Multi Sensor Fire Detector
- 1 x ActiV Heat Detector
- 3 x ActiV Detector Bases
- 1 x ActiV 96dBA Sounder
- 1 x ActiV Base Sounder Lid

Hush-ActiV Hak/1 Kit Wiring

230V/24V 250mA PSU

Mounts on a standard UK 35mm double gang back box
Typical location: Adjacent to the dwelling's Mains fusebox.



HUSH-ACTIV CONTROLLER
c/w 72 HOUR STAND-BY BATTERY
Mounts on a standard UK 35mm double gang back box.
Typical location: In the entrance way at light switch height so its controls are accessible to dwelling occupants.

Please note: HAK/2 and HAK/3 kits have a different mix of field devices. Component order on all kits can be changed to suit specific applications

BS 5839-6 Grade C Domestic Fire Alarm

F/C4403A1R	ActiV_Class A1R Rate-of-Rise Heat_Detector to EN54-5 (Needs base)
F/C4403A2	ActiV_Class A2 Standard (60°C) Fixed Temp Heat_Detector to EN54-5 (Needs base)
F/C4416	ActiV_Optical Smoke_Detector to EN54-7 (Needs base)
F/C4414	ActiV_Multi-Sensor Fire_Detector to EN54-5/7 (Needs base)
F/C4408D	ActiV_Diode Base
F/BF431C/CC/W	ActiV Base mounted sounder - White
F/BF456C/CC/W	ActiV Base mounted sounder/beacon
F/CLOOM	Interface loom to link to other systems

Overview

The Scimitar fire panel range is certified to EN54 parts 2, 4 and 13 and offers an array of user and installer-friendly features at a very competitive price.

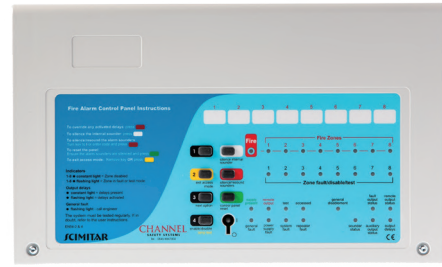
Supplied in an attractive flush or surface mountable plastic enclosure, 2, 4 and 8 zone versions are available, each featuring four conventional sounder circuits, class change and alert inputs, on-board fire and fault relays and keypad/keyswitch entry.

A wide range of engineering functions are also provided including selectable zone delays, coincidence and non-latching zone facilities. Comprehensive test and fault finding facilities are also provided.

Optional repeaters and relay expansion cards are also available.

Features

- LPCB certified to the latest versions of EN54 Parts 2 and 4
- Intuitive user-friendly interface with colour coded buttons and combined keypad/keyswitch entry to access level 2
- 2, 4 or 8 zone circuits (dependent on model purchased)
- Four conventional sounder circuits
- Integral 1.5A EN54-4/A2 compliant switch mode PSU
- Two on-board relays (Fire and Fault)
- Two open-collector outputs (Remote and Reset)
- 'Class change' and alert inputs
- Installer-friendly design accommodates easy first fix and straightforward maintenance
- Attractive flush or surface mountable plastic lid and enclosure – no bezel required
- Low 25mA quiescent current
- Multiple indicators
- End of line units included (one per zone)
- Ancillary system expansion connections provided for up to eight two-wire repeaters (one F/CHSC/RDC network driver card required per system)



Requires 2x B/12V/3.2AH/SLA (Listed below)

Compatible Devices



Detectors
Apollo protocol Series 65



Sounders and Visual Indicators
All compatible sounders and visual indicators are listed below.



Call Points
The most common call points are listed below.

Scimitar

Panels

- F/CHSC/2 Scimitar 2-zone panel requires 2 x B/12V/3.2AH/SLA battery
- F/CHSC/4 Scimitar 4-zone panel requires 2 x B/12V/3.2AH/SLA battery
- F/CHSC/8 Scimitar 8-zone panel requires 2 x B/12V/3.2AH/SLA battery

Batteries

- B/12V/3.2AH/SLA 12 Volt 3.2Ah sealed lead acid battery (1 block)

Bases

- F/BASE/60 (45681-201) Series Diode Detector Base
- F/BASE/65/F (45681-200) Series Standard Base
- F/BASE/SW (45681-206) Sav Wire Detector Base
- F/BASE/65/RL (45681-245) Series Relay Base

Detectors

- F/CHSM/P (55000-317) Optical Smoke Detector + Base
- F/CHHF/A/HT (55000-137) High Temp Heat Detector + Base
- F/CHHF/A/65 (55000-122) Series Heat Detector No Base
- F/CHHR/A/65 (55000-127) Rate Of Rise Heat Detector, No Base 85°C
- F/CHHR/A/HT/65 (55000-132) R Rate Of Rise Heat Detector Less Base
- F/CHSM/P/65 (55000-317) Optical Smoke Detector - No Logo
- F/CHSM/P/FLASH (55000-316) Series Optical Smoke Detector With Flashing Led

Sounders and Visual Indicators

- F/CHWB/BN/RD/DB LED sounder beacon deep base
- F/CHBN/RD/DB 24V Red LED beacon – deep base
- F/CHBL/6/2 17-27V 6" Red fire bell
- F/CHWB/R High output electronic sounder – white square
- F/CHWB/RD/DB Electronic warbler/siren red – deep base
- F/CHWB/D Base sounder white
- F/CHBN/D/RING Beacon to fit over F/CHWB/D
- F/CHWB/D/COVER/WH White cover to fit F/CHWB/D

Call Points

- F/CHBG/S/5 Break glass – surface
- F/CHBG/WP/3 Waterproof break glass
- F/CHBG/S/5/CV Call Point Cover
- S/BG/TESTKEY/1 Call Point Key

Repeater Panel

- F/CHSC/R 8 zone repeater panel
- F/CHSC/RDC Repeater driver card

Construction	Plastic lid and base
Enclosure Finish	RAL7035
IP Rating	IP30
Panel Dimensions	380mm(W) x 235mm(H) x 96mm(D) 2, 4 and 8 panels have the same measurements
Weight	1.75 Kg (without batteries)
Enclosure Finish	RAL7035 Textured

Conventional Visual Alarm Devices (VADs)



Overview

A European standard has been published to assess the performance of Visual Alarm Devices (VADs), which were often referred to as 'beacons' or 'sounder beacons'.

They assist hearing impaired people or staff working in noisy environments to recognise when a fire alarm has been activated. EN54-23:2010 has been introduced to standardise the requirements, and performance of VADs to ensure that adequate light intensity is achieved where required.

There are 3 categories of VADs:

- C Ceiling Mounted:** When mounted on a ceiling a level of 0.4 lux is achieved over a known area
- W Wall Mounted:** When mounted on a wall a level of 0.4lux is achieved over a known area
- O Open Category:** Manufacturers specify the area coverage of the VAD.



F/VAD/C/1



F/VAD/WB/C/2



F/VAD/C/3



F/VAD/WB/C/4

Ceiling Mounted VADs

- F/VAD/C/1** Ceiling mounted visual alarm device white body red flash. Shallow base. 25mA in alarm 7m @3m mounting height.
- F/VAD/WB/C/2** Ceiling mounted visual alarm device white body red flash with 98dB sounder deep base. 40mA in alarm 7m coverage @3m mounting height
- F/VAD/C/3** Ceiling mounted visual alarm device red body red flash. shallow base. 25mA in alarm 7m coverage @3m mounting height.
- F/VAD/WB/C/4** Ceiling mounted visual alarm device red body red flash with 98dB sounder. Deep base 40mA in alarm 7m coverage @3m mounting height



F/VAD/W/1



F/VAD/WB/W/2



F/VAD/W/3



F/VAD/WB/W/4

Wall Mounted VADs

- F/VAD/W/1** Wall mounted visual alarm device white body red flash. Shallow base. 25mA in alarm 7m coverage @3m mounting height
- F/VAD/WB/W/2** Wall mounted visual alarm device white body red flash with 98dB sounder deep base. 40mA in alarm 7m coverage @3m mounting height
- F/VAD/W/3** Wall mounted Visual alarm device red body red flash. Shallow base. 25mA in alarm 7m coverage @3m mounting height
- F/VAD/WB/W/4** Wall mounted visual alarm device red body red flash with 98dB sounder. Deep base. 40mA in alarm 7m coverage @3m mounting height

Overview

Orbis® incorporates entirely new designs, both mechanical and electronic. The purpose of Orbis® is to make installation, commissioning and maintenance quicker, enhance the reliability of detection and reduce the incidence of false alarms.

It offers a range of conventional detectors developed and tested to create advantages for fire engineers and installers, as well as owners and users of buildings. It is ideal for use in small to medium size installations. This range has put ease of installation and reliability in daily operation at the forefront of considerations. The attractive and compact design means that Orbis® will blend in well with all architectural styles.

Orbis® is a range with modern styling and a mounting base that saves installation time. It is electrically compatible with Apollo Series 65 and previous ranges of conventional detector.

Features

- TimeSaver Base® designed for fast installation
- StartUp™ for fast commissioning
- FasTest® reduces maintenance time
- Automatic drift compensation with DirtAlert® warning to easily identify dirty detectors
- SensAlert® which indicates that the detector is not operating properly
- Wide voltage and operating temperature ranges
- Optical sensor designed for high reliability and reduced false alarm incidence
- Multisensor smoke detector for detecting fast-burning fires

Orbis® has been tested and approved to the following standards:

- Optical Smoke Detector - EN 54-7
- Multisensor Detector - EN 54-5, EN 54-7 and CEA 4021
- Heat Detector - EN 54-5

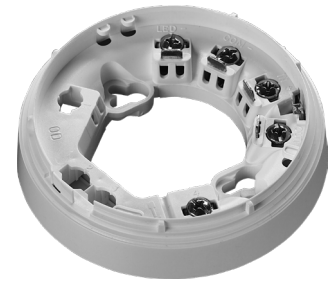
Orbis®

Panels

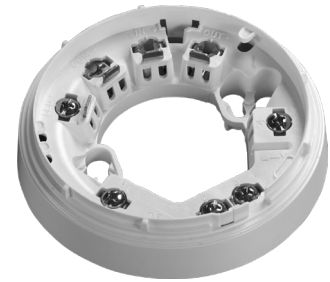
F/BASE/IS	(ORB-MB-50018) Orbis I.S. Timesaver Base
F/BASE/OR	(ORB-DB-00003) Orbis Diode Detector Base
F/BASE/OR/IS/AD	(ORB-BA-50008) Orbis S Base Adapter
F/BASE/OR/MAR	(ORB-MB-00001-MAR) Orbis Time Saver Base - Marine Certified
F/ORB-SW-10005	(ORB-SW-10005) Orbis Sav-Wire Base

Detectors

F/CHSM/P/OR	(ORB-OP-12001) Orbis Optical Smoke Detector
F/CHSM/M/OR	(ORB-OH-13001) Orbis Multisensor Smoke Detector
F/CHHR/A/OR	(ORB-HT-11001) Orbis AR Heat Detector
F/CHSM/IS	(ORB-OP-52027) Intrinsically Safe Smoke Detector
F/CH/ORB-HT-51145	(ORB-HT-51145) Orbis I.S. AR Heat Detector
F/ORB-OP-42001-MAR	(ORB-OP-42001-MAR) Orbis Marine Optical Smoke Detector
F/CHGB/ORB	(29600-378) Orbis Detector Circuit Galvanic Barrier



F/BASE/OR



F/ORB-SW-10005



F/CHHR/M/OR



F/CHSM/M/OR



EVAC ALERT

EVACUATION ALERT SYSTEM

- ▶ Assists the fire & rescue services in evacuating high-rise residential buildings
- ▶ Comprises a range of evacuation alert control panels with easy-to-operate toggle switches supplied in robust 'GERDA' cabinets
- ▶ Single and multi-way flat interfaces, self-testing evacuation alert sounders and Equality Act-compliant visual alarm devices
- ▶ Facilitates the safe and orderly evacuation of buildings containing flats
- ▶ Reliable hard-wired technology
- ▶ Free system design assistance service
- ▶ Fully compliant with BS 8629



You're Safe with C-TEC



c-tec.com

Overview

Two-wire AlarmSense has been developed to make the design and installation of a fire detection and alarm system easier and more economic for small to medium sized buildings. The range also allows an existing system to be extended or modified if necessary, this flexibility makes AlarmSense an excellent choice for use in Houses of Multiple Occupation (HMO's).



Most conventional fire systems are designed to work with two pairs of wires per zone: one pair for detection devices such as smoke detectors, heat detectors and manual call points; the other for alarm devices such as bells, sounders or strobes. By using different voltage bands for quiescent and alarm states, AlarmSense components can be connected to the same pair of supply wires.

When powered and controlled by the AlarmSense two-wire fire panel, this reliable technology takes all the complexity out of fire alarm system design, leading to quicker, less expensive and more flexible installations. Research shows an AlarmSense two-wire system can achieve up to 40% reduction of labour over a standard four wire conventional system.

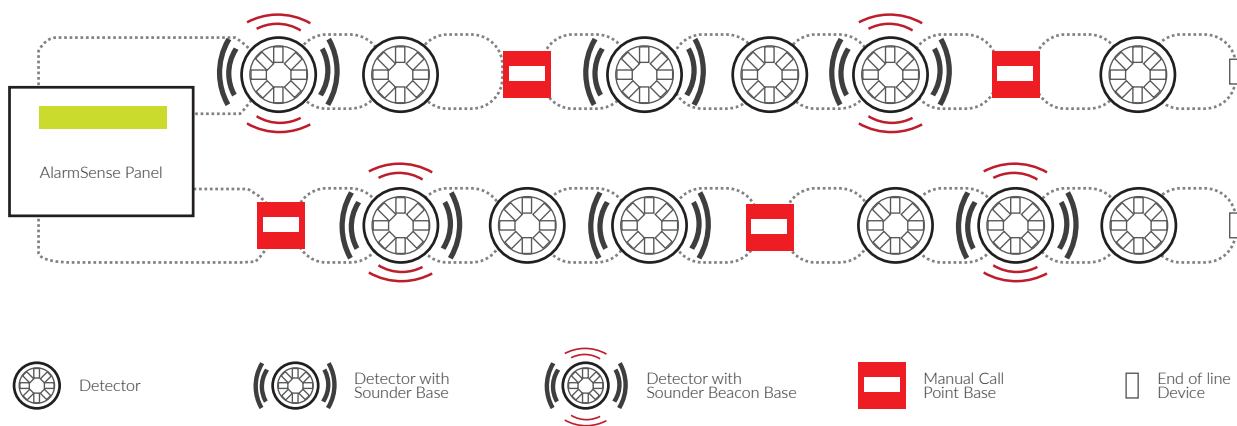
Features

- A powerful C-TEC manufactured, LPCB approved EN54 compliant 2-wire fire alarm panel
- Designed to work with Apollo's AlarmSense range of detectors, call points, sounders and beacons
- Available with 2, 4 and 8 AlarmSense zone circuits
- Installer-friendly design accommodates easy first fix and straightforward maintenance
- Attractive flush or surface mountable plastic lid and enclosure
- Auxiliary remote, fire, fault and reset outputs
- 'Class change' and alert inputs
- Four conventional sounder circuits (for use with non-AlarmSense sounders)
- Low quiescent current – for extended standby times with small batteries
- Intuitive user-friendly interface
- Multiple indicators provide a comprehensive overview of system status
- System expansion connections for up to eight two-wire repeater panels and a range of Relay Output Cards
- Wide range of engineering functions including zone test, coincidence, zone delay and non-latching zones
- Two on-board relays (Fire and Fault)
- Two open-collector outputs (Remote and Reset)



All panels require 2x B/12V/3.2AH/SLA batteries (Listed below)

Typical System Architecture



Please note: Do not use Series 65 detectors on AlarmSense systems, they could cause severe system malfunction.



Apollo products are certified in a global arena to meet the most exacting standards set by both our customers and the dynamic and challenging environments in which they are designed to operate.

Apollo holds in excess of 2500 product approvals worldwide. Their products are stringently tested to international land and marine based standards. The company is quality certified by LPCB to ISO9001:2008 and ISO14001:2004 for their Environment Management System.

AlarmSense 2 Wire Conventional Fire Detection

Panels

F/CHAS/2	AlarmSense 2-zone fire panel. Requires 2x B/12V/3.2AH/SLA batteries.
F/CHAS/4	AlarmSense 4-zone fire panel. Requires 2x B/12V/3.2AH/SLA batteries.
F/CHAS/8	AlarmSense 8-zone fire panel. Requires 2x B/12V/3.2AH/SLA batteries.

Repeater Panel

F/CHSC/R	AlarmSense 8 zone repeater panel. Requires 2x B/12V/3.2AH/SLA batteries.
F/CHSC/RDC	Repeater driver card
S/E20/A	Relay card for use with AlarmSense (fitted in panel)

Batteries

B/12V/3.2AH/SLA	12 Volt 3.2Ah sealed lead acid battery (1 block)
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Remote Indicator

F/CHRI/AS	AlarmSense remote indicator (Not for use with sounder base units)
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Detector Base

F/BASE/AS	(45681-244) Alarmsense Detector Base
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Detectors

F/CHHF/A/HT/AS	(55000-193) Alarmsense Degree Fixed Heat Detector Cs Type
F/CHHF/AS	(55000-190) Alarmsense Heat Detector Ar
SP/CHSM/P/AS	(55000-390) Alarmsense Optical Detector No Logo
F/CHSM/P/IN/AS	(55000-391) Alarmsense Integrating Optical Smoke Detector

Break Glass Call Points

F/CHBG/S/AS/2	(55400-894) Alarmsense Surface Break Glass
F/CHBG/AS/COVER	(44251-175) Cover For Surface Break Glass Individual Cover

Sounders/Beacons

F/CHWB/D/AS	(45681-510) Alarmsense Base Sounder
F/CHWB/D/BN/AS	(45681-509) Alarmsense Base Warbler/Beacon
F/CHWB/RD/AS	(55000-018) Alarmsense Open Area Red Sounder
F/CHWB/BN/RD/AS	(55000-017) Alarmsense Open Area Red Sounder Beacon
F/CHWB/AS/CAP/WH	(45681-294) White Locking Cap For Alarmsense Base

Ancillary Items

SP/CHIF/AS	Alarmsense input unit
F/CHRI/AS	(53832-070) Alarmsense Remote Indicator Circular
F/CHRM/AS	(55000-835) Alarmsense Relay Module Output Only
S/BG/TEST KEY/AS	(44251-176) Key For Alarmsense Surface Break Glass

Compatible Devices



SP/CHSM/P/AS
Optical Smoke Detector



F/CHHF/A/HT/AS
Heat Detector



F/CHHF/HT/AS +
F/CHWB/D/AS
Heat detector base
C/W sounder base



SP/CHSM/P/AS +
F/CHWB/D/BN/AS
Smoke detector base
C/W sounder base

AlarmSense detectors are Apollo protocol and only devices listed should be used with AlarmSense panels.



F/CHWB/D/AS and
F/CHWB/AS/CAP/WH
Base sounder with white
locking cap



F/CHWB/BN/RD/AS
Red sounder visual indicator



F/CHWB/RD/AS
Red sounder



F/CHBG/S/AS/2
Surface mounted break glass

Only AlarmSense sounders and visual indicators should be used with AlarmSense panels.

Batteries may vary due to stand-by times and number of devices on your system.

Construction	Polycarbonate enclosure
Enclosure Finish	RAL7035
Panel Dimensions	380mm(W) x 235mm(H) x 96mm(D) 2, 4 and 8 panels have the same measurements
Weight	1.75 Kg (without batteries)

Sabre Pro – 2 Wire



Overview

The Sabre Pro is a conventional 2-wire fire alarm system that is cost-effective and adaptable to a variety of applications, big or small, making it the normal choice for many smaller applications.

Each fire detection system is bespoke to each premises' – Channel Safety offers complete system designs, based on the contract awarded.

Cut False Alarm Costs

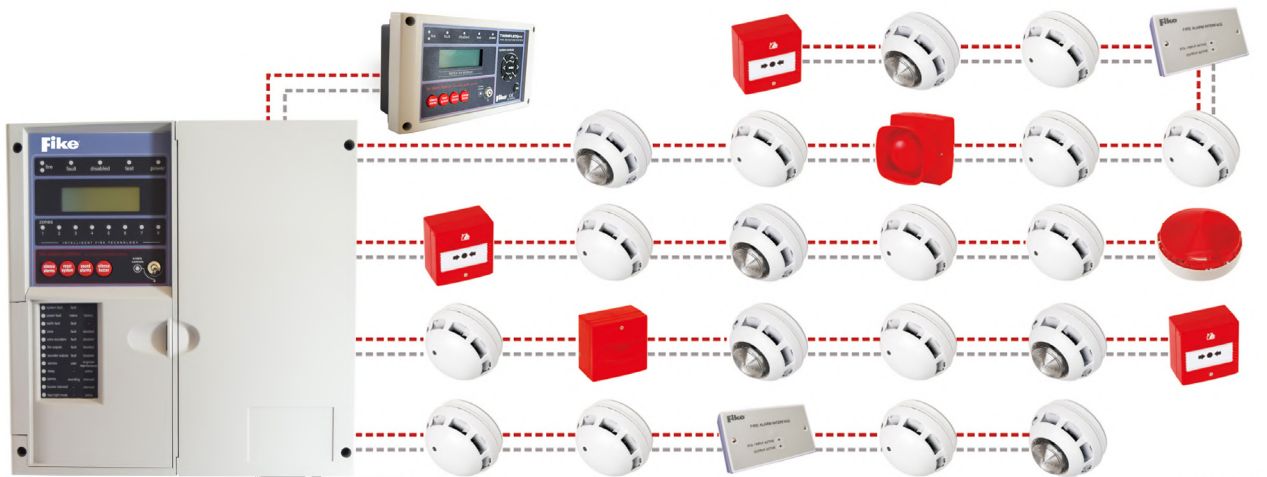
- Drift-compensation reduces false alarms, but this feature is not normally found in conventional or two wire systems
- The Sabre detector not only has this feature as standard, but when it reaches its upper limit there is a warning on the panel and at the detector
- The Sabre Pro system also has an in built pre alarm facility that can be programmed through the control panel. This "Alarm Confirmation" feature can significantly reduce the effect of nuisance alarms



Batteries are not included, all panels require 2x B/12V/3.2AH/SLA to operate, listed below.

Features

- Complies to BS 5839 and EN54 part 4
- 32 devices per zone
- Output module available for plant shutdown or door release
- Panels are supplied without battery – options are listed
- 4 line x 20 character LCD display
- Ability to differentiate between callpoint or detector alarms
- Checkpoint alarm verification procedure
- Highlighted selection menu
- Event log storing up to 500 events
- 3 enhanced test modes
- Allows detectors and sounders to be installed on the same pair of wires
- Built-in EOL capability in all devices
- Use of Multipoint detector offers 7 modes of detection
- No extra devices needed for audible warning
- Self-calibrates every 6 hours
- Continuously monitors for dust contamination



A single repeater panel can be powered using 24V from the main panel. More than one repeater panel requires a separate PSU.

Sabre Pro - 2 Wire

Control Panels

F/CHSA/2/PRO	(505-0602) Sabre Pro 2 Zone Dual Wire Fire Alarm Panel
F/CHSA/4/PRO	(505-0604) Sabre Pro 4 Zone Dual Wire Fire Alarm Panel
F/CHSA/8/PRO	(505-0608) Sabre Pro 8 Zone Dual Wire Fire Alarm Panel
F/CHSA/2/PRO/KIT	(604-0002) Sabre 2 zone fire alarm kit C/W 2 call points, 6 optical smoke/heat sounders and 1 head removal tool
F/CHSA/4/PRO/KIT	(604-0004) Sabre 4 zone fire alarm kit C/W 2 call points, 6 optical smoke/heat sounders and 1 head removal tool
F/CHSA/8/PRO/KIT	(604-0008) Sabre 8 zone fire alarm kit C/W 2 call points, 6 optical smoke/heat sounders and 1 head removal tool
F/CHSA/2/PRO/BK	(505-0602-B) Sabre Pro 2 Zone Dual Wire Fire Alarm Panel - Black
F/CHSA/4/PRO/BK	(505-0604-B) Sabre Pro 4 Zone Dual Wire Fire Alarm Panel - Black
F/CHSA/8/PRO/BK	(505-0008-B) Sabre Pro 8 Zone Dual Wire Fire Alarm Panel - Black
F/CHSA/PRO2/R	(505-0010) Sabre Pro2 Repeater
F/CHSA/4/PRO/CARD	(505 0006) Sabre Pro 4 Zone 2-Wire Expansion Card

Batteries

B/12V/3.2AH/SLA	(NP3.2-12) 12 Volt 3.2Ah Sealed Acid Battery (2 Required)
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Break Glass Call Points

F/CHBG/S/SA/CV	(402-0606) Sabre Series Break Glass Call Point C/W Cover
F/CHBG/S/SA/WP	(402-0007) Sabre Series Break Glass Call Point
S/BG/TEST KEY/SA	(45-0022-S) Sabre Call Point Test Key - Individual Key
F/CHWB/AS/CAP/WH	(45681-294) White Locking Cap For AlarmSense Base

Combined Detector Devices

F/CHSA/SH/PRO	(204 0603) Sabre Combined Optical Smoke/Heat Detector
F/CHSA/SH/PRO/BK	(204-0003-B) Sabre Optical Smoke/Heat Detector Black
F/CHSA/SHS/PRO	(204 0601) Sabre Combined Smoke/Heat Detector And Sounder
F/CHSA/SHS/PRO/BK	(204-0001-B) Sabre Smoke/Heat/Sndr Detector Black
F/CHSA/SHSB/PRO	(204 0612) Sabre Combined Smoke/Heat With Sounder Strobe
F/CHHRT/SA/PRO	(25-0046-201) Ch Hrt Sabre Pro Head Removal Tool

Sounders/VADs/Beacons

F/CHWB/RD/SA	(F0296337) Sabre 2-Wire IP65 Sounder
F/CHWB/VAD/SA	(F0296336) Sabre 2-Wire Sounder/VAD - Wall Mounted
F/CHBN/SA/WP	(302-0023) Sabre Zone Powered Beacon IP55 - Weatherproof
F/CHBN/SU/SA	(302-0612) Sabre Sounder/Strobe Wired On Zone
F/CHSU/I/SA	(302-0004) Sabre Industrial Horn Sounder, Red
F/CHSU/SA	(302-0601) Sabre Red Electronic Sounder
F/CHSU/SA/WH	(302-0602) Sabre White Electronic Sounder

Input/Output Module

F/CHSW1/SA	(802-0606) Sabre Input Output Module - Zone Powered
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F/CHSA/SH/PRO,
F/CHSA/SHS/PRO &
F/CHSA/SHSB/PRO



F/CHBN/SU/SA
Sounder/Strobe wired on zone



F/CHSU/I/SA
Industrial Horn Sounder



F/CHSU/SA
Electronic Sounder Unit



F/CHBG/S/SA/CV
Break Glass Call Point



F/CHWB/RD/SA
Sabre 2-Wire IP65 Sounder



F/CHWB/VAD/SA
Sabre 2-Wire Sounder/VAD
- Wall Mounted

Please note: Only Sabre Pro detectors, combination detectors/sounders, call points and sounders and visual indicator devices should be used with Sabre Pro panels.

Construction	5VB rated ABS
Battery Charger	170 mA current limiter
Battery (reverse polarity)	3.2AH F 20mm (in line with battery leads) Glass
Panel Dimensions	Fascia 331mm ² – Back box 305mm – Depth 99mm
Weight (excluding batteries)	2 Zone – 2.25 Kg 4 Zone – 2.28 Kg 8 Zone – 2.36 Kg

Overview

Following recent fire in numerous high rise buildings, BS 8629:2019 now gives guidance on Evacuation Alert Systems which are recommended in blocks of flats to assist the Fire and Rescue Service (FRS) in evacuating part or all of a building in an emergency.

In domestic buildings with a storey more than 18m above ground level, an evacuation alert system should be provided to enable the fire and rescue services to initiate operation of fire alarm sounders within each dwelling on any single floor, multiple floors and the entire building, according to circumstances.

Separate to the fire alarm system, the EACIE system allows the fire brigade to evacuate any or all zones at the flick of a switch.

Toggle switches and LED indication will make viewing evacuation zone status and implementing evacuation strategies quick, simple and straightforward.

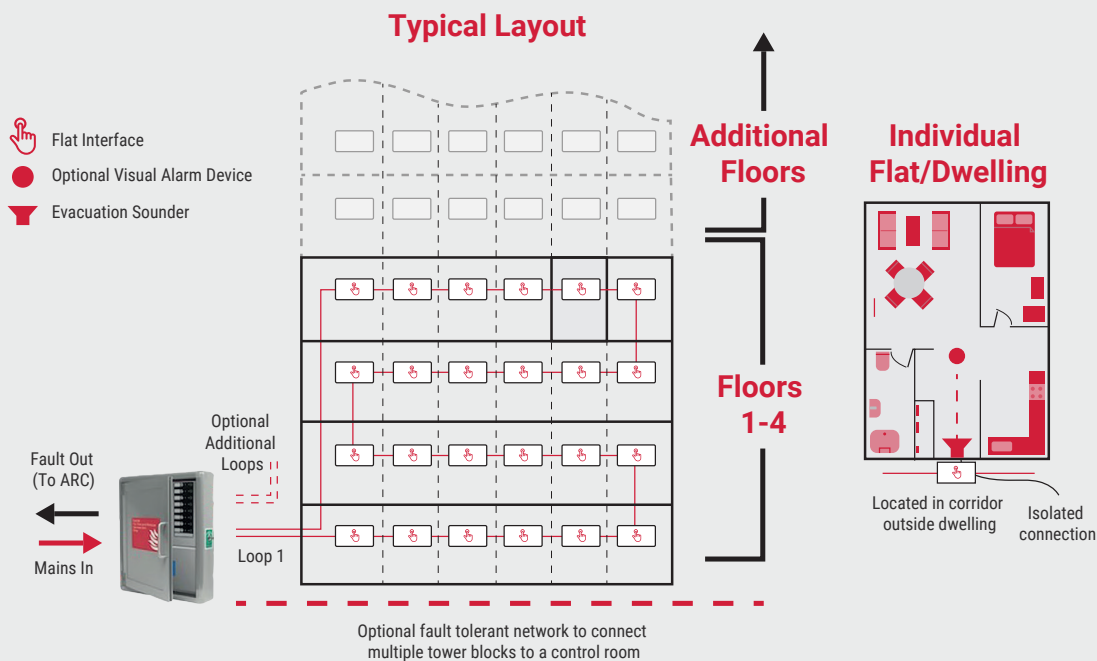
Each EACIE panel is housed in its own security-rated enclosure with a BS EN 1303-compliant lock and key mechanism for exclusive access by the fire and rescue service – ensuring minimal risk of unauthorised use.

The EACIE will work with hard-wired, radio and/or hybrid systems.



Is it Mandated?

As of December 1st 2022, BS 8629 was incorporated into Approved Document B (UK Building regulations). As a result, any new residential building over 18m in height is required to have an Evacuation Alert system by law.



Please note: As each system needs to be individually designed, please contact us for further information

Sprinkler Monitoring System

NEW

Overview

Newer regulations, such as the UK's BS 9251:2020, require electronic monitoring of isolation valves to confirm they are open and other critical points to raise immediate alarms in case of failure.

Sprinkler monitoring requirements mandate the continuous supervision of critical components like isolation valves, tank levels, and pumps to ensure the system functions correctly. Specific requirements depend on the building's size and use, with systems often needing to monitor pressures, power, and temperature in addition to flow.



SAP501E/CA

Sprinkler Monitoring System

- SAP501E/CA SAP 1 Loop 16 Zone Addressable Cast Protocol Sprinkler Monitoring Panel. Ideal for monitoring up to 255 sprinkler flow switches
- CA730 Input Output Module - One input output unit or CA734 mini I/O unit required per monitored flow switch - Includes a 1A 30V DC volt-free changeover relay
- CA734 Mini I/O Unit - One input output unit or CA734 mini I/O unit required per monitored flow switch - Includes a 1A 30V DC volt-free changeover relay
- B/12V/3.2AH/SLA 12V 3.2Ah Battery (2 required) For main control panel



CA730



CA734

BS 9251:2020

In the UK, this standard now mandates electronic monitoring for critical points in domestic and residential systems, particularly Category 2 and above. These include; monitored isolation valves, water tank levels, booster sets and flow switches.

All signalling and alarm cabling must be fully supervised for open or short circuits.

The equipment below can help you meet the requirements of BS 9251:2020.



Invacuation/Lockdown Systems



Overview

With the **Terrorism (Protection of Premises) Act 2025**, also known as Martyn's Law, receiving Royal Assent, **premises with a capacity of 200 or more are now legally required** to prepare to have public protection measures in place, including lockdown plans, by April 2027.

It is named after Martyn Hett, one of the 22 victims of the 2017 Manchester Arena bombing. It requires those responsible for certain public premises and events to ensure that the public are better protected from terrorism and to be prepared and ready to keep people safe in the event of an attack.

In addition, certain larger premises and events must consider, and where appropriate, take steps to reduce their vulnerability to terrorist attacks.

The Act applies to publicly accessible buildings or land (not private premises or private parts of premises). A building will often have land associated with it, for example a pub with a beer garden, or a hotel with outside grounds used for dining and events - these are included as part of the premises.

Our new range of Invacuation/Lockdown System Control Panels can help venues fulfil their obligations. Designed for use with our lockdown call points, voice sounders and VADs they can be configured to help schools, theatres and other commercial and public venues comply. For further guidance please contact our lockdown support team.

The equipment below can help you meet the requirements of **Terrorism (Protection of Premises) Act 2025**.



Lockdown Call Point



Invacuation Voice Sounder



Invacuation Voice Sounder/VAD

Invacuation/Lockdown Systems

LAP501/CA	1 loop single message lockdown/invacuation Control Panel
LAP2/CA	2 loop multi- message lockdown/invacuation Control Panel
CA470B/LD	Blue Call Point used to signal an incident has occurred that requires a lockdown procedure to be initiated
CA446A/DW/LD	Powerful wall-mounting high-output voice sounder specifically designed for use on a Invacuation/Lockdown system. Can sound multiple messages
CA447A/DW/LD	Powerful wall-mounting high-output voice sounder/VAD specifically designed for use on a Invacuation/Lockdown system. Can sound multiple messages

Which type of premises MUST take action?

- Schools/Educational Establishments
- Shops and Shopping Centres
- Hotels and Holiday Parks
- Visitor Attractions
- Premises used the sale of food and drink for consumption on the premises
- Entertainment and leisure facilities
- Sports Grounds
- Healthcare premises
- Public authority facilities
- Libraries/museums/galleries, halls
- Places of worship
- Stations forming part of a transport system



Overview

Our market-leading EN54 certified Firewatch addressable fire panel offers optimum performance at a very competitive price. Available as a cost-effective single loop 16 zone panel in a plastic enclosure or a robust 1 or 2 loop 32 zone metal panel, it offers an array of user and installer-friendly features including powerful 500mA loop drivers, keypad AND keyswitch entry, two programmable conventional sounder circuits, multiple engineer facilities and the ability to interconnect up to eight Firewatch main panels or eight Firewatch repeaters onto a two wire RS485 network.



Batteries are not included.
16 zone panels require 2x B/12V/3.2AH/SLA (Min)
& 32 zone panels require 2x B/12V/7AH/SLA (Min)

Features

- Compatible with Apollo's XP95/Discovery and Hochiki's ESP protocols
- The ability to interconnect up to eight Firewatch main panels (any variant) onto a two wire RS485 network. Alternatively, up to eight Firewatch repeaters can be connected to a non-networked Firewatch main panel
- Combined keypad/keyswitch entry to access levels 2 and 3
- Two independently programmable conventional sounder circuits
- Two programmable inputs
- A fault output relay and three programmable relay outputs with voltage free changeover contacts
- Three zone dependency functions (A, B & C to EN54-2 clause 7.12)
- A day/night (building occupied/unoccupied) function
- An investigation delay period function
- A phased evacuation and delays to outputs facility to EN54-2
- An alarm counter that records the number of times the panel has been in an alarm state to EN54-2
- Powerful short circuit protected loop drivers, capable of supporting up to 40 loop powered 10mA sounders per loop
- An integral EN54-4/A2 switch mode PSU rated @ 185-260V AC
- 50-60Hz (1.4A on a 16 zone panel, 3A on a 32 zone panel)
- Earth fault monitoring
- An easy to read, 80 character back-lit display
- 40 characters of custom text per device
- 999 event monitoring
- Comprehensive test facilities to EN54-2 and a wide range of functions including auto-learn loops, monitor a point, test outputs, one man walk test and loop continuity test
- An intuitive Windows based upload-download PC program that allows the system to be programmed quickly and easily

Firewatch Panels

FW1001 Panels

- F/FW1001/1/16 (XFP501E/X) Networkable Single Loop 16 Zone Panel - Apollo
- F/FW1001/1/16H (XFP501E/H) Networkable Single Loop 16 Zone Panel - Hochiki
- F/FW1001/1/16/CA (XFP501E/CA) Networkable Single Loop 16 Zone Panel - Cast
- F/FW1001/1/32 (XFP501/X) Networkable One Loop 32 Zone Panel - Apollo
- F/FW1001/1/32/H (XFP501/H) Networkable One Loop 32 Zone Panel - Hochiki
- F/FW1001/1/32/CA (XFP501/CA) Networkable One Loop 32 Zone Panel - Cast
- F/FW1001/2/32 (XFP502/X) Networkable Two Loop 32 Zone Panel -Apollo
- F/FW1001/2/32/H (XFP502/H) Networkable Two Loop 32 Zone Panel -Hochiki
- F/FW1001/2/32/CA (XFP502/CA) Networkable Two Loop 32 Zone Panel -Cast

Panel Batteries

- B/12V/3.2AH/SLA 12 Volt 3.2Ah sealed lead acid battery (1 block)
- B/12V/7AH/SLA 12 Volt 7Ah sealed lead acid battery (1 block)

Hush Buttons

- F/FW1001/HB BS 5839-6 Hush button, Apollo XP95/Discovery

Which Protocol?

Firewatch FW1001 Panels are compatible with Apollo XP95/Discovery and Hochiki/ESP devices – please see pages 22–29 (Hochiki panel needs to be ordered if using Hochiki devices).

Please note:

- Batteries are not included
- Please state when ordering whether you require Apollo or Hochiki protocol
- Batteries may vary due to stand-by times and number of devices on your system. If in doubt, please contact our technical team on 01582 544 500 or email sales.css@deta.co.uk

Internal Power Supply	27V DC Nominal
Earth Fault Monitoring	Yes (any conductor)
Max. No. of Addressable devices per loop	126
Max. No. of Addressable devices per loop @ 10mA	40
Weight	Single loop 16 zone panel – 1.8Kg/Two loop 32 zone panel – 4.5Kg

Overview

Whether you want to minimise false alarms, integrate with building management systems or remotely monitor networked sites, MxPro 5's high-performance solutions bring you peace of mind that your fire system is actively protecting people and property.



Its intuitive programming, powerful networking, comprehensive cause and effect and unique diagnostic features put you in complete control of your fire protection.

Available in a range of flexible formats and supporting four leading detector protocols, MxPro delivers performance, quality and ease of use.

Every MxPro 5 features Advanced's unbeatable networking capabilities and Dynamix Tools fire panel software making it is easy to use and configure, from the smallest to the largest of sites and with complicated cause-and effect.

Features

- 1, 2, 4 or 8 loop formats
- Up to 254 devices per loop (protocol dependent)
- Up to 200,000 devices per network
- Networkable up to 200 nodes
- Built in voltage and current meters
- On board or optional remote battery temperature sensor
- Advanced's simple select and click programming and configuration
- Quick start and protect - A working system after an Auto learn is performed
- 20 built-in, fully programmable LEDs
- 5000 event log entries
- 201 programmable false alarm management areas per panel
- Timed enablement of isolated zones, input and output devices
- Backward compatibility with MxPro 4 network
- Approved to EN54 Parts 2, 4 and 13
- Certified by FM Approvals to EN54 Parts 2 and 4
- Autolearn and loop detection
- Up to 2000 fire detection zones
- True peer-to-peer networking
- Supports intelligent/programmable remote terminals, BMS interface, IP Gateway and I/O Drivers
- Circuit monitoring from any panel or repeater
- Direct USB and RS232 PC connections
- Peripheral expansion built in
- 4 programmable push buttons
- Complete device history from each panel
- Programmable screen logo
- Advanced logic delivering huge configuration opportunities
- Compatible with Apollo, Argus, Hochiki and Nittan protocols



London's Natural History Museum is protected using an Advanced MXPro system.



MxPro 5 Panels (Apollo/Hochiki Protocol)

MxPro5 Control Panels

- F/CH/MX-5101 (MX-5101) 1 loop fire panel
- F/CH/MX-5101M (MX-5101M) 1- loop fire panel in medium enc
- F/CH/MX-5201 (MX-5201) 1-2 loop panel C/W1 loop card
- F/CH/MX-5202 (MX-5202) 1-2 loop panel C/W 2 loop card
- F/CH/MX-5401 (MX-5401) 1 - 4 loop fire panel C/W 1 loop cards
- F/CH/MX-5402 (MX-5402) 1 - 4 loop fire panel C/W 2 loop cards
- F/CH/MX-5402D (MX-5402D) 1-4 loop panel fire panel C/W 2 loop card
- F/CH/MX-5403 (MX-5403) 1 - 4 loop fire panel C/W 3 loop cards
- F/CH/MX-5403D (MX-5403D) 1 - 4 loop fire panel 3 loop cards deep enclosure
- F/CH/MX-5404 (MX-5404) 1 - 4 loop fire panel C/W 4 loop cards
- F/CH/MX-5404D (MX-5404D) 1 - 4 loop fire panel 4 loop cards deep enclosure
- F/CH/MX-5803 (MX-5803) 2-8 loop fire panel 3 loop cards standard network
- F/CH/MX-5805 (MX-5805) 2-8 loop fire panel 5 loop cards standard network
- F/CH/MX-5806 (MXP-5806) 2-8 loop fire panel 6 loop cards standard network
- F/CH/MX-5808 (MX-5808) 2-8 loop fire panel 8 loop cards standard network
- F/CH/MX-5808/FT (MX-5808/FT) 2-8 loop fire panel 8 loop cards fault tolerant

Repeater Panels

- F/CH/MX-5010 (MX-5010) Remote control terminal (RDT), standard network
- F/CH/MX-5020 (MX-5020) Remote control terminal (RCT), small, standard net
- F/CH/MX-5020/FT (MX-5020/FT) Remote Control Terminal, Fault Tolerant small

Mounting Accessories

- F/CH/MXM-501 (MXM-501) Semi-Flushing bezel
- F/CH/MXM-502 (MXM-502) semi flushing bezel - medium enclosure
- F/CH/MXM-503 (MXM-503) semi flushing bezel for MX5000
- F/CH/MXM-503-SSB (MXM-503-SSB) Semi flush bezel s/steel brushed - large
- F/CH/MXM-521 (MXM-531) Semi-flushing bezel MX5010/5020
- F/CH/MXM-524-D2-SSB-F (MXM-524-D2-SSB-F) Spare door s/steel brushed - large/fitted

Ancillary Items

- F/CH/MXP-502 (MXP-502) Loop driver card
- F/CH/MXP-503 (MXP-503) Network card - standard
- F/CH/MXP-503(F) (MXP-503(F)) Network card, standard, fitted
- F/CH/MXP-507 (MXP-507) MX-5000 2 way relay card
- F/CH/MXP-509 (MXP-509) Fault tolerant network card
- F/CH/MXP-511 (MXP-511) Access enable key switch
- F/CH/MXP-511F (MXP-511F) Access enable key switch -fitted
- F/CH/MXP-512F (MXP-512F) MX-5000 printer assembly fitted
- F/CH/MXP-513L-050RD (MXP-513L-050RD) 50 zone fire (red) - large enclosure
- F/CH/MXP-513L-200RYF (MXP-513L-200RYF) 200 zone LED indication red/yellow fitted
- F/CH/MXP-516 (MXP-516) MX-5000 2 pos key switch (trapped)
- F/CH/MXP-516F (MXP-516F) MX-5000 2 pos key switch (trapped) fitted
- F/CH/MXP-517 (MXP-517) MX-5000 2 pos key switch (untrapped)
- F/CH/MXP-517F (MXP-517F) MX-5000 2 pos key switch (untrapped) fitted
- F/CH/MXP-545 (MXP-545/FT) Peripheral Expansion Network Node standard network
- F/CH/MXP-545/FT (MXP-545/FT) PENN fault tolerant
- F/CH/MXP-550 (MXP-550) 3A 24V EN54-4 Power Supply
- F/CH/MXS-501 (F/CH/MXS-501) Spare single loop base card C/W PSU
- F/CH/MXS-502 (MXS-502) Spare Two Loop Base Card C/W PSU
- F/CH/MXS-504 (MXS-504) Spare display card
- F/CH/MXS-511 (MXS-511) Access enable key switch
- F/CH/PC-NET-003 (PC-NET-003) Software and lead
- F/CH/TOUCH-10 (TOUCH-10) Touch-screen terminal (standard)
- F/CH/TOUCH-10 (TOUCH-10) Touch-screen terminal (standard)



Control Panel	Maximum internal Battery
F/CH/MX-5101	2 X 12V 7AH
F/CH/MX-520-	2 X 12V 12AH
F/CH/MX-540-	2 X 12V 18AH
F/CH/MX-580-	2 X 12V 18AH

Overview

The XP95 range of analogue addressable fire detectors is advanced in design, improved in performance and has unique features that benefit the installer and the end user.

The detectors have been carefully researched and developed by the Apollo design team and the range has undergone rigorous testing to ensure that it meets not only European and other standards but also the demands of today's high technology environments.

XP95 detectors provide an alarm facility that automatically puts an alarm flag on the data stream and reports its address when the pre-set EN54 thresholds are exceeded.

Features

- Digital Protocol for error-free transmission
- Alarm Flag for fast alarm reporting
- Alarm Address for fast location of alarm
- Automatic addressing with the patented XPERT card
- Electronics-free, easy fit base
- Ease of installation
- Wide range of compatible interface units
- Wide range of compatible panels
- Compatible with Series 90 and Discovery
- Elegant, unobtrusive design
- Wide range of products
- Great flexibility in system design



F/CHBG/IS/95/2



F/CHBG/WP/95/1



F/CHSM/P/95



F/CHHM/95



F/BASE/95/IS



F/CHSM/M/95



F/CHHM/HT/95

XP95 Addressable Fire Detection

Break Glass Call Points

- F/CHBG/IS/95/2 (SA5900-908) XP95 Addressable Break Glass
- F/CHBG/WP/95/1 (58200-950) XP95 Weatherproof Break Glass
- F/CHBG/AS/COVER (44251-175) Cover For Surface Break Glass - Individual Cover
- S/BG/TEST KEY/AS (44251-176) Key For Surface Break Glass

Mounting Bases

- F/BASE/95 (45681-210) XP95 Mounting Base C/W XPERT Card
- F/BASE/95/IS (45681-215) Intrinsically Safe Mounting Base
- F/BASE/95/IS/WB (45681-211) XP95 Isolator Base
- F/SA5000-200AP (SA5000-200) XPERT 8 Mounting Base C/W XPERT Card
- SP/BASE/95/BK (45681-361) Black Base For SP/CHSM/P/95/BK

Detectors

- F/CHSM/P/95 (55000-600) XP95 Optical Smoke Monitor Less Base
- F/CHHM/95 (55000-400) XP95 Temperature (Heat) Monitor No Base
- F/CHHM/HT/95 (55000-401) XP95 High Temperature Heat Detector
- F/CHSM/M/95 (55000-885) XP95 Multi Sensor Detector
- F/CHHM/95/IS (55000-440) XP95 Intrinsically Safe Heat Detector
- F/CHSM/P/95/IS (55000-640) XP95 Intrinsically Safe Optical Smoke Detector
- F/CHBM/SA/95 (SA7100-100) XP95 Intelligent Auto-Aligning Beam Detector
- F/CHBM/R/95/EXT/KIT (29600-526) Auto-Aligning Beam Detector Extension Kit 100M
- SP/CHSM/P/95/BK (55000-660) XP95 Black Optical Smoke Monitor Less Base

NEW Base Mounted Sounders/Beacons

- F/58002-300 (58002-300) Discovery Base Sounder - Base Type
- F/58002-350 (58002-350) Discovery Base Sounder Visual Indicator White Flash - Base Type
- F/58002-351 (58002-351) Discovery Base Sounder Visual Indicator Red Flash - Base Type
- F/58006-300 (58006-300) Discovery Base Sounder Black - Base Type
- F/58006-350 (58006-350) Discovery Base Sounder Visual Indicator Black Body White Flash - Base Type
- F/58006-351 (58006-351) Discovery Base Sounder Visual Indicator Black Body Red Flash - Base Type
- F/SA5000-200 (SA5000-200) XPERT 8 Mounting Base C/W XPERT Card
- F/SA5000-204 (SA5000-204) XPERT 8 Mounting Base C/W XPERT Card- Black

Standard Sounder/Beacons

- F/CHBN/95 (55000-877) XP Loop Powered Beacon
- F/CHBN/95/RD (55000-878) Loop Powered Beacon White Body Red Flash
- F/CHBN/95/WP/RD (55000-009) XP Beacon C/W Isolator Red Lens
- F/CHWB/95/AP (55000-001) Open Area XP Sounder Red IP65 C/W Isolator
- F/CHWB/95/AP/WH (55000-002) Intelligent Open Area Sounder White
- F/CHWB/AN/95/A (45681-276) Ancillary Base Sounder incorporates Detector Base
- F/CHWB/AP/95 (55000-278) Loop Sounder Open Area Red Square
- F/CHWB/AP/95/WP (55000-274) Weatherproof Loop Sounder Open Area Square Type

Overview

A European standard has been published to assess the performance of Visual Alarm Devices (VADs), which were often referred to as 'beacons' or 'sounder beacons'.

They assist hearing impaired people or staff working in noisy environments to recognise when a fire alarm has been activated. EN54-23:2010 has been introduced to standardise the requirements, and performance of VADs to ensure that adequate light intensity is achieved where required.

There are 3 categories of VADs:

- C Ceiling Mounted:** When mounted on a ceiling a level of 0.4 lux is achieved over a known area
- W Wall Mounted:** When mounted on a wall a level of 0.4lux is achieved over a known area
- O Open Category:** Manufacturers specify the area coverage of the VAD.



F/55000-742



F/55000-744



F/45681-709



F/BF451A/SRRC



F/CHIO/1/95/240



F/CHIO/2/95



F/CHIS/95/DB



F/CHDR/95

XP95 Addressable Fire Detection - Continued

Standard Sounder/Beacons - Continued

F/CHWB/BN/95/AP	(55000-005) Open Area XP Sounder Beacon Red Ip
F/CHWB/BN/95/IS	(45681-330) Loop Powered Base Sounder Beacon
F/CHWB/BN/AP/95	(55000-293) Multi Tone Open Area Sounder Beacon C/W Indicator
F/CHWB/BN/OA/95/IS/WP	(55000-298) Red Ip Open Area Sounder/ Beacon With Isolator
F/CHWB/BN/OA/95/WP	(55000-296) Red Ip Open Area Sounder/ Beacon With Isolator
F/CHWB/IN/95/A	(45681-278) Loop Powered Intelligent Base Sounder
F/CHWB/IS/IN/95A	(45681-277) Loop Powered Intelligent Base Sounder Isolating
F/CHWB/VAD/BASE	(45681-700) Discovery Sounder Vad Base I.S
F/COVER/RD/1	(45681-293) Red Cover For CHWB/BN/A
F/COVER/WH/1	(45681-292) White Cover For CHWB/BN/A

XP95 Visual Alarm Devices (VADs)

F/55000-741	(55000-741) Wall Mounted XP95/Discovery Red Body White Flash
F/55000-742	(55000-742) Ceiling Mount XP95/Discovery Red Body White Flash
F/55000-743	(55000-743) Ceiling Mount XP95/Discovery Red Body White Flash
F/55000-744	(55000-744) Ceiling Mount XP95/Discovery White Body
F/55000-745	(55000-745) Ceiling Mount XP95/Discovery White Body
F/45681-705	(45681-705) Base Mounted XP95 Sounder VAD Base Cat. O (White Flash) Isolating
F/45681-709	(45681-709) XP95 VAD Base Cat. O (White Flash) Isolating

Interface Units

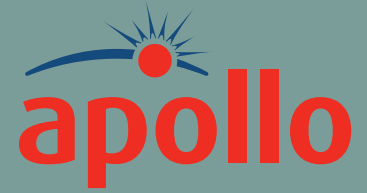
F/CHIO/1/95	(SA4700-102) Single Channel Input/Output Unit
F/CHIO/1/95/DIN	(SA4700-302) Intelligent Dinrail I/O Unit
F/CHIO/1/95/240	(SA4700-103) Intelligent Mains Switching I/O Unit
F/CHIO/2/95	(SA4700-104) Sa Intelligent Twin Input/Output Unit
F/CHIS/95	(55000-720) XP95 Isolator Less Base
F/CHIS/95/DB	(45681-284) Short Circuit Isolator C/W Base
F/CHIS/95/DIN	(55000-802) Din Rail Dual Isolator
F/CHDR/95	(55000-982-) XP95 Door Retainer
F/CHSN/95	(55000-852) Sounder Controller C/W Isolator
F/CHSN/95/DIN	(55000-182) Din Rail Mounted Sounder Controller
F/CHSW/95/P	(SA4700-100) Intelligent Switch Monitor
F/CHZM/IS/95	(55000-845) XP95 Zone Monitor C/W Isolator
F/CHZM/95/DIN	(55000-812) Zone Monitor With Din Rail Mounting

Specialist Devices

F/CHDU/300-750	(53541-170) Ducting Sampling Tube (300-750mm)
F/CHFD/UV/IR2	(55000-065) Conventional Uv/Ir Flame Detector
F/CHGB/95	(29600-098) Galvanic Barrier (Single Channel)
F/CHPT/D/95	(55000-856) Protocol Translator Ch
F/CHPT/S/95	(55000-855) I.S Protocol Translator Channel
F/CH/DIN/INT/ENC	(29600-239) Din Rail Interface Enclosure H125 X W150 X D180

Introducing Apollo's NEW Base Sounder and Sounder/Beacon

Installation time reduced by up to 75%



Ease of Install

Uses the trusted XPERT card for fast, reliable addressing—just like you're used to.

- Install the standard detector base
- Click in the sounder or Sounder/Beacon
- Click on the detector
- Done!

Improved Performance

Get more from every loop. With reduced current draw, you can fit up to two-thirds more devices without compromising sound

The NEW base sounder and sounder visual indicator by Apollo is a versatile and reliable device designed for use in fire detection systems. All devices are available in black or white finishes.

The Sounder/VID is available in both white and red flash versions, making it suitable for a variety of environments and applications. This device can be integrated with an Apollo addressable detector or used as a stand-alone unit with a base cap, providing flexibility in installation and usage.



F/SA5000-200
XPERT 8 Mounting Base
C/W XPERT Card



F/58002-300
Plug In Base Sounder



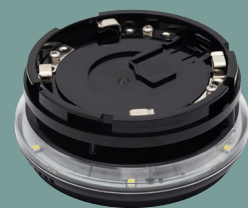
F/58002-350
Plug In Base Sounder/VID White Flash
F/58002-351
Plug In Base Sounder/VID Red Flash



F/SA5000-204
XPERT 8 Mounting Base
C/W XPERT Card - Black



F/58006-300
Plug In Base Sounder - Black



F/58006-350
Plug In Base Sounder/VID - Black
F/58006-351
Plug In Base Sounder/VID Red Flash

Overview

The Apollo Discovery is a range of high specification analogue addressable fire detectors. It is designed to meet specifications for detectors incorporated in sophisticated systems, and provides engineers with an additional dimension in fire protection capability.

The Discovery communications protocol is a development of the proven XP95 protocol, making both ranges of detector compatible.

Features

- Rejection of transient signals
- Flashing LED option
- Five response modes for ease of optimisation to changing environments
- Drift compensation to ensure constant sensitivity
- Four bytes of user programmable non-volatile memory
- Alarm flag for fast alarm reporting
- Conventional alarm facility during CIE processor fault
- 360° visibility in alarm
- Compatible with XP95 systems

Discovery Addressable Fire Detection

Bases

F/SA5000-200AP (SA5000-200) XPERT 8 Mounting Base C/W XPERT Card

Detectors

F/CHSM/P/DISC (58000-600) Discovery Optical Detector Less Base
 F/CHSM/M/DISC (58000-700) Discovery Smoke/Heat Detector Less Ba
 F/CHHM/DISC (58000-400) Discovery Heat Monitor Less Base
 F/CHCO/DISC (58000-300) Carbon Monoxide Gas Detector
 F/CHCO/HM/DISC (58000-305) Discovery Carbon Monoxide/Heat Detector
 F/CHSM/P/DISC/MAR (58000-600MAR) Mar Discovery Marine Optical Smoke Detector

Break Glass Call Points

F/CHBG/IS/DISC/1 (58100-908) Discovery Break Glass Call Point Isolating
 F/CHBG/DISC/WP (58200-951) Discovery Weatherproof Break Glass Call Point Isolating
 F/58200-975MAR (58200-975MAR) Discovery Marine Wp Call Point

New Base Mounted Sounders/Beacons

F/58002-300 (58002-300) Discovery Base Sounder Base Type
 F/58002-350 (58002-350) Discovery Base Sounder Visual Indicator White Flash Base Type
 F/58002-351 (58002-351) Discovery Base Sounder Visual Indicator Red Flash Base Type
 F/58006-300 (58006-300) Discovery Base Sounder Black Base Type
 F/58006-350 (58006-350) Discovery Base Sounder Visual Indicator Black Body White Flash Base Type
 F/58006-351 (58006-351) Discovery Base Sounder Visual Indicator Black Body Red Flash Base Type
 F/SA5000-200AP (SA5000-200) XPERT Mounting Base C/W XPERT Card
 F/SA5000-204 (SA5000-204) XPERT Mounting Base C/W XPERT Card Black

Standard Sounder/Beacons

F/58002-300 (58002-300) Discovery Base Sounder
 F/58002-350 (58002-350) Discovery Base Sound Visual Indicator White Flash
 F/58002-351 (58002-351) Discovery Base Sound Visual Indicator Red Flash
 F/58006-300 (58006-300) Discovery Base Sounder Black
 F/58006-350 (58006-350) Discovery Base Sound Visual Indicator Black Wht
 F/58006-351 (58006-351) Discovery Base Sound Visual Indicator Black Red
 F/CHWB/BN/DISC/A (45681-393) Discovery Sounder Beacon Base
 F/CHWB/BN/DISC/AP/R (58000-005) Discovery Openarea Sounder Beacon Red Lens
 F/CHWB/IS/DISC (45681-702) Discovery Sounder Base With Isolator
 F/CHVWB/BN/RD/DISC (58000-030) Open Area Voice Sender/Beacon Red

Compatible Products

Access to the Apollo Discovery range of audio visual signalling equipment with advanced features such as choice of volume, tones, including class change.

Drift Compensation

All Apollo Discovery smoke detectors include compensation for sensor drift caused, for example, by dust in the chamber, and will hold the sensitivity at a constant level even with severe chamber contamination.

Sensitivity Selection

Each Apollo Discovery detector can operate in one of five response modes, which can be selected from the control panel. The response characteristics of the detectors have been carefully set so that the detectors will comply with the requirements of the relevant EN54 in all response modes. Mode selection depends on application – Mode 1 will give a higher sensitivity to fire than in Mode 5.

Call Points



F/CHBG/IS/DISC
Break Glass complete with isolator

Sounders and Visual Indicators



F/CHWB/BN/DISC/AP/R
Open-Area Sounder Indicator
– Red Lens



F/CHWB/BN/DISC/A
Sounder Visual Indicator Base



F/CHSM/P/DISC
Optical Detector less Base



F/CHHM/DISC
Heat Monitor less Base



F/CHSM/M/DISC
Smoke/Heat Detector less Base

Please note:

- We have portrayed the most commonly used Discovery devices here – yet for further options please contact us.
- For interface units – XP95 interfaces on the previous page can be used. Contact our technical team at technical@deta.co.uk to check compatibility prior to ordering.



Overview

Hochiki's Intelligent range of automatic fire detection and alarm equipment is designed and manufactured to the highest international standards, offering life safety products and systems of incomparable reliability. This extensive range of products includes high performance sensors, a wide selection of input and output modules, and ancillaries. All products use Hochiki's high integrity communications link, ENHANCED SYSTEM PROTOCOL (ESP) that is fundamental to the range.

Specified in many prestigious buildings, ESP is a secure, expandable digital protocol that, together with Hochiki's Intelligent range of devices, is the premier choice for system designers.

The protocol can support up to 240 different codes, ensuring that future products can be accommodated with ease.

Features

- Removable, high performance chamber
- Twin fire LEDs allow 360 viewing
- Locking mechanism (sensor to base)
- Variable sensitivity – Electronically addressed
- All base fixing centres are 48 – 74mm
- Approved by LPCB and Vds

ESP (Intelligent)

Smoke Sensors

F/ALN-EN	ALN-EN - Photoelectric Smoke Sensor - Ivory Case
F/ALN-EN(BLK)	ALN-EN(BLK) - Photoelectric Smoke Sensor - Black Case
F/ALN-EN(SCI)	ALN-EN(SCI) - Optical Smoke Sensor With SCI - Ivory Case
F/ALN-EN(WHT)	ALN-EN(WHT) - Photoelectric Smoke Sensor - White Case
F/ALN-EN(WHT)-SCI	ALN-EN(WHT)-SCI - Optical Smoke Sensor With SCI - White Case

Heat Sensors

F/ACB-EW	ACB-EW - Weatherproof Multi-Heat Sensor - Ivory Case
F/ATJ-EN	ATJ-EN - Heat Sensor - Ivory Case
F/ATJ-EN(BLK)	ATJ-EN(BLK) - Multi-Heat Sensor - Black Case
F/ATJ-EN(SCI)	ATJ-EN(SCI) - Heat Sensor With SCI - Ivory Case
F/ATJ-EN(WHT)	ATJ-EN(WHT) - Intelligent Heat Sensor-White (Esp)
F/ATJ-EN(WHT)SCI	ATJ-EN(WHT)SCI - Intelligent Heat Sensor (Esp)

Multi Sensors

F/ACC-EN	ACC-EN - Multi-Sensor Photoelectric/Heat - Ivory Case
F/ACC-EN(BLK)	ACC-EN(BLK) - Multi-Sensor Photoelectric/Heat - Black Case
F/ACC-EN(BLK)SCI	ACC-EN(BLK)SCI - Intelligent Multi Sensor (Esp)
F/ACC-EN(WHT)	ACC-EN(WHT) - Multi-Sensor Optical/Heat - White Case
F/ACC-EN(WHT)SCI	ACC-EN(WHT)SCI - Intelligent Multi Sensor (Esp)
F/ACD-EN	ACD-EN - Multi-Sensor With CO - Ivory Case
F/ACD-EN(WHT)	ACD-EN(WHT) - Multi-Sensor With CO - White Case

Sensor Bases

F/YBN-R/3	YBN-R/3 - Sensor Mounting Base Ivory
F/YBN-R/3(BLK)	YBN-R/3(BLK) - Sensor Mounting Base (Black)
F/YBN-R/3(BLK)-SCI	YBN-R/3(BLK)-SCI - Short Circuit Isolator Base
F/YBN-R/3(SCI)	YBN-R/3(SCI) - Short Circuit Isolator Base (Ivory)
F/YBN-R/3(WHT)	YBN-R/3(WHT) - Sensor Mounting Base (White)
F/YBN-R/3(WHT)-SCI	YBN-R/3(WHT)-SCI - Short Circuit Isolator Base (White)
F/YBO-R/3(RED)	YBO-R/3(RED) - Mounting Base For Wall Sounders (Red)
F/YBO-R/3(WHT)	YBO-R/3(WHT) - Mounting Base For Wall Sounders (White)
F/YBO-R/SCI(RED)	YBO-R/SCI(RED) - Short-Circuit Isolator Base For Wall Sounders (Red)
F/YBO-R/SCI(WHT/SNDR)	YBO-R/SCI(WHT/SNDR) - Short-Circuit Isolator Base - For Wall Sounders (White)
F/YBV-R/4	YBV-R/4 - Mounting Base For SCI Sensor - Ivory
F/YBV-R/4(WHT)	YBV-R/4(WHT) - Mounting Base For SCI Sensors - White



F/ACB-EW
Weatherproof Multi-Heat Sensor



F/ATJ-EN(WHT)
Analogue Heat Sensor - White



F/ATJ-EN(BLK)
Analogue Heat Sensor - Black



F/ACC-EN(WHT)
Multi-sensor - Optical/Heat
- White



F/YBN-R/3(BLK)
Sensor Mounting Base - Black

ESP (Intelligent) - Continued

Beacons

F/CHQ-AB	CHQ-AB - Addressable Beacon - Ivory Case, Red Lens (Non En54-23 Compliant)
F/CHQ-AB(AMB)	CHQ-AB(AMB) - Addressable Beacon - Ivory Case, Amber Lens (Non En54-23 Compliant)
F/CHQ-AB(AMB)WHT	CHQ-AB(AMB)WHT - Addressable Beacon - White Case, Amber Lens (Non En54-23 Compliant)
F/CHQ-AB(BLU)	CHQ-AB(BLU) - Addressable Beacon - Ivory Case, Blue Lens (Non En54-23 Compliant)
F/CHQ-AB(WHT)	CHQ-AB(WHT) - Addressable Beacon - White Case, Red Lens (Non En54-23 Compliant)
F/CHQ-ARI	CHQ-ARI - Addressable Remote Indicator - Ivory Case, Clear Lens (Non En54-23 Compliant)
F/CHQ-ARI(WHT)	CHQ-ARI(WHT) - Addressable Remote Indicator - White Case, Clear Lens (Non En54-23 Compliant)
F/CHQ-CB(RED)/RL	CHQ-CB(RED)/RL - Ceiling Beacon - Red Case, Red LEDs (7.5M)
F/CHQ-CB(RED)/WL	CHQ-CB(RED)/WL - Ceiling Beacon - Red Case, White LEDs (7.5M)
F/CHQ-CB(RED)/WL-15	CHQ-CB(RED)/WL-15 - Ceiling Beacon - Red Case, White LEDs (15M)
F/CHQ-CB(WHT)/RL	CHQ-CB(WHT)/RL - Ceiling Beacon- White Case, Red LEDs (7.5M)
F/CHQ-CB(WHT)/WL	CHQ-CB(WHT)/WL - Ceiling Beacon - White Case, White LEDs (7.5M)
F/CHQ-CB(WHT)/WL-15	CHQ-CB(WHT)/WL-15 - Ceiling Beacon - White Case, White LEDs (15M)
F/CHQ-CB/RL	CHQ-CB/RL - Ceiling Beacon - Ivory Case, Red LEDs (7.5M)
F/CHQ-CB/WL	CHQ-CB/WL - Ceiling Beacon - Ivory Case, White LEDs (7.5M)
F/CHQ-CB/WL-15	CHQ-CB/WL-15 - Ceiling Beacon - Ivory Case, White LEDs (15M)
F/CHQ-WB(RED)/RL	CHQ-WB(RED)/RL - Wall Beacon - Red Case, Red LEDs
F/CHQ-WB(RED)WL	CHQ-WB(RED)WL - Wall Beacon - Red Case, White LEDs
F/CHQ-WB(WHT)/RL	CHQ-WB(WHT)/RL - Wall Beacon - White Case, Red LEDs
F/CHQ-WB(WHT)/WL	CHQ-WB(WHT)/WL - Wall Beacon - White Case, White LEDs
F/CHQ-WB/RL	CHQ-WB/RL - Wall Beacon - Ivory Case, Red LEDs
F/CHQ-WB/WL	CHQ-WB/WL - Wall Beacon - Ivory Case, White LEDs



F/CHQ-AB



F/CHQ-WS2



F/YBO-BSB2(WHT)/WL



F/YBO-BS

Base Sounder Beacons

F/YBO-BSB2(BLK)/RL	YBO-BSB2(BLK)/RL - Base Sounder Beacon - Black Case, Red LEDs
F/YBO-BSB2(BLK)/WL	YBO-BSB2(BLK)/WL - Base Sounder Beacon - Black Case, White LEDs
F/YBO-BSB2(WHT)/RL	YBO-BSB2(WHT)/RL - Base Sounder Beacon - White Case, Red LEDs
F/YBO-BSB2(WHT)/WL	YBO-BSB2(WHT)/WL - Base Sounder Beacon - White Case, White LEDs
F/YBO-BSB2/RL	YBO-BSB2/RL - Base Sounder Beacon - Ivory Case, Red LEDs
F/YBO-BSB2/WL	YBO-BSB2/WL - Base Sounder Beacon - Ivory Case, White LEDs

Manual Call Points

F/CHQ-CP2	CHQ-CP2 - Addressable Call Point PCB
F/HCP-E(BLU)-SCI	HCP-E(BLU)-SCI - Hcp-E(Blu)-SCI Blue Addressable SCI Call Point
F/HCP-E(SCI)	HCP-E(SCI) - Addressable Call Point With SCI (Red)
F/HCP-E/Y(SCI)	HCP-E/Y(SCI) - Addressable Call Point With SCI (Yellow)
F/HCP-EQ(SCI)	HCP-EQ(SCI) - Manual Call Point With SCI "Smoke Vent" (Orange)
F/HCP-W(SCI)	HCP-W(SCI) - Weatherproof Addressable Call Point With SCI (Red)
F/HCP-W/Y(SCI)	HCP-W/Y(SCI) - Yellow Addressable Weatherproof SCI Call Point
F/SCP CALLPOINT KEY	SCP CALLPOINT KEY - Reset Sti Call Point Keys With Pips - 1 Piece
F/SCP-W(DPS)	SCP-W(DPS) - Addressable Weatherproof Call Point



F/HCP-E(BLU)-SCI

Sounders

F/CHQ-WS2	CHQ-WS2 - Wall Sounder - Red Case
F/CHQ-WS2(WHT)	CHQ-WS2(WHT) - Wall Sounder - White Case
F/YBO-BS	YBO-BS - Base Sounder - Ivory Case
F/YBO-BS(BLK)	YBO-BS(BLK) - Base Sounder - Black Case
F/YBO-BS(WHT)	YBO-BS(WHT) - Base Sounder - White Case
F/Wall Sounder Beacons	Wall Sounder Beacons
F/CHQ-WSB2(WHT)/RL	CHQ-WSB2(WHT)/RL - Wall Sounder Beacon - White Case, Red LEDs
F/CHQ-WSB2(WHT)/WL	CHQ-WSB2(WHT)/WL - Wall Sounder Beacon - White Case, White LEDs
F/CHQ-WSB2/RL	CHQ-WSB2/RL - Wall Sounder Beacon - Red Case, Red LEDs
F/CHQ-WSB2/WL	CHQ-WSB2/WL - Wall Sounder Beacon - Red Case, White LEDs



F/HCP-E(SCI)

ESP (Intelligent) - Continued

Enclosures

F/SMB-1	SMB-1 - Enclosure Grey Base/Clear Lid
F/SMB-1(LID)	SMB-1(LID) - Lid For Enclosure Grey
F/SMB-2	SMB-2 - Din Mounting Box - Large (Up To 6 Din Rail Modules)
F/SMB-2(LID)	SMB-2(LID) - Lid For Large Din Mounting Box Grey
F/SMB-3	SMB-3 - Din Mounting Box - Small (Up To 4 Din Rail Modules)
F/SMB-3(LID)	SMB-3(LID) - Lid For Small Din Mounting Box Grey
F/SMB-ADAPTOR	SMB-ADAPTOR - Smb Adaptor Plate



F/CHQ-DSC2(SCI)

Programming Devices

F/Micro USB Cable	Micro USB Cable - Male USB A To Male USB Micro B Cable, USB 2.0 1M (For Device Programming)
F/PL-2	PL-2 - Programming Lead (Jack Plug To Croc Clip)
F/PL-3	PL-3 - Esp Device Programming Lead 3-Way Connector
F/TCH-B200	TCH-B200 - Esp Hand Held Programmer



F/CHQ-POM

Interface Modules

F/CHQ-ADAPTOR	CHQ-ADAPTOR - Adaptor For New CHQ Modules
F/CHQ-BACKBOX	CHQ-BACKBOX - Module Back Box
F/CHQ-BOX LID(WHT)	CHQ-BOX LID(WHT) - CHQ Module Box Lid (White)
F/CHQ-DIM2(SCI)	CHQ-DIM2(SCI) - Dual Input Module With SCI
F/CHQ-DIM2/DIN(SCI)	CHQ-DIM2/DIN(SCI) - Dual Input Module - Din Enclosure With SCI
F/CHQ-DRC2(SCI)	CHQ-DRC2(SCI) - Dual Relay Controller With SCI
F/CHQ-DRC2/DIN(SCI)	CHQ-DRC2/DIN(SCI) - Dual Relay Controller - Din Enclosure With SCI
F/CHQ-DSC2(SCI)	CHQ-DSC2(SCI) - Dual Sounder Controller With SCI
F/CHQ-DSC2/DIN(SCI)	CHQ-DSC2/DIN(SCI) - Dual Sounder Controller - Din Enclosure With SCI
F/CHQ-DZM(SCI)	CHQ-DZM(SCI) - Dual Zone Monitor With SCI
F/CHQ-DZM(SCI)-IS	CHQ-DZM(SCI)-IS - Intrinsically Safe Compatible Dual Zone Monitor With SCI
F/CHQ-DZM/DIN(SCI)	CHQ-DZM/DIN(SCI) - Dual Zone Monitor - Din Enclosure With SCI
F/CHQ-DZM/DIN(SCI)-IS	CHQ-DZM/DIN(SCI)-IS - Intrinsically Safe Compatible Dual Zone Monitor - Din Enclosure With SCI
F/CHQ-ISM	CHQ-ISM - Intrinsically Safe Compatible Sounder Module
F/CHQ-ISM/DIN	CHQ-ISM/DIN - Intrinsically Safe Compatible Sounder Module - Din Enclosure
F/CHQ-MRC2(SCI)	CHQ-MRC2(SCI) - Mains Relay Controller With SCI
F/CHQ-MRC2/DIN(SCI)	CHQ-MRC2/DIN(SCI) - Mains Relay Controller Din Enclosure With SCI
F/CHQ-MRC2/FS DIN(SCI)	CHQ-MRC2/FS DIN(SCI) - Fail Safe Mains Relay Din Module With SCI
F/CHQ-MRC2/FS(SCI)	CHQ-MRC2/FS(SCI) - Fail Safe Mains Relay Module With SCI
F/CHQ-PCM(SCI)	CHQ-PCM(SCI) - Plant Control Module With SCI
F/CHQ-PCM/DIN(SCI)	CHQ-PCM/DIN(SCI) - Plant Control Module - Din Enclosure With SCI
F/CHQ-POM	CHQ-POM - Powered Output Module
F/CHQ-SIM	CHQ-SIM - Single Input Module
F/CHQ-SOM	CHQ-SOM - Single Output Module
F/CHQ-SUB	CHQ-SUB - CHQ-Box Sub Assembly
F/CHQ-SZM2(SCI)	CHQ-SZM2(SCI) - Single Zone Monitor With SCI
F/CHQ-SZM2/DIN(SCI)	CHQ-SZM2/DIN(SCI) - Single Zone Monitor - Din Enclosure With SCI



F/CHQ-SIM

Accessories

F/CHQ-WPK	CHQ-WPK - Weatherproofing Kit (Red)
F/CHQ-WPK(WHT)	CHQ-WPK(WHT) - Sounder Weatherproofing Kit (White)
F/HINGED COVER (PS200)	HINGED COVER (PS200) - Hinged Cover For Call Point
F/SR MOUNTING BOX	SR MOUNTING BOX - Surface Mounting Call Point Back Box (Red)

Overview

The new collection of SOTERIA® addressable fire detectors are the next generation in fire recognition technology. Powered by CoreProtocol® – Apollo’s fire loop communication protocol – SOTERIA® enhances detection, reduces false alarms and improves reliability. SOTERIA® detectors are user-programmable and can be set to a sensitivity mode best suited for the application. This provides total reassurance in installations where adaptability to changing conditions is paramount. By applying the latest developments in electronics, Apollo’s SOTERIA® detector range meets the demand for ever-more sophisticated alarm systems. These detectors have been designed for use in commercial, industrial, financial, government, IT/telecoms and healthcare sectors, where there is a demand for integration with Building Management Systems (BMS) and more sophisticated functionality.

Features

Currently covering heat and optical detection areas – either individually or in innovative combinations – the exclusive technology incorporated into the Soteria range offers an unrivalled host of benefits, including:

- Enhanced reliability of smoke detection
- Reduction in false alarms
- PureLight® technology
- Simple installation with a new easy-fit base and an isolator located in the head.
- A sleek and stylish low profile design
- Compatible with XP95 and Discovery protocols
- Comprehensively tested to exceed EN54 standards
- Extensively tested at Apollo’s state of the art in-house testing facilities



Optical Smoke Detector



Optical/Heat Backbox



Tri-Sensor Detector



Multi Optical/Heat Detector

Apollo Soteria

Soteria Level Detectors with Isolator

- F/FL5100-760APO Soteria Multi Optical/Heat Detector – Black
- F/SA5100-600APO Soteria Optical Smoke Detector with Isolator
- F/SA5100-400APO Soteria Heat Detector with Isolator
- F/SA5100-700APO Soteria Optical/Heat Multisensor Detector without Isolator
- F/SA5100-810APO Soteria Tri-Sensor Detector (Dual Optical/Heat/CO)
- F/SA5000-200APO XPERT8 Intelligent Mounting Base
- F/SA5000-204APO Soteria Black Base

Dimension Optical Detector

FL5100-600APO

Measurements
140mm Diameter
x 71mm Depth
(with Backbox)



Dimension Specialist Optical Detector

FL5100-600APO

Measurements
170mm Diameter
x 71mm Depth
(with Backbox)



Dimension Backbox

FL5100-600APO

Measurements
113mm x 71mm Depth



Heat Backbox

SA5000-400 (Non Isolated)
SA5100-400 (Isolated)

Measurements
100mm x 38.5mm Height



Optical/Heat Backbox

SA5000-700 (Non Isolated)
SA500-700 (Isolated)

Measurements
100mm x 38.5mm Height



Optical Smoke Detector

SA5000-600 (Non Isolated)
SA500-600 (Isolated)

Measurements
100mm Diameter x 36mm Height



XPERT 8 Intelligent Mounting Base

SA5000-200
XPERT 8 Card
38532-064

Measurements
100mm x 12mm Depth



Overview

The innovative design of the Soteria Dimension Optical Detector differs from standard fire detectors, having no chamber and being flush mounted. A new optical sensing technology is used to detect smoke particles outside the detector housing. A combination of Infra-Red (IR) LEDs and photo-diodes identify smoke particles, detected just below the detector housing and initiates an alarm. Soteria Dimension Optical Detector is designed to be flush mounted, with a very low profile, only 4.55mm below the ceiling. The Soteria Dimension Specialist Optical Detector is independently certified to DHF TS001 for anti-ligature use in specialist areas.

Features

- Comprehensively tested to exceed EN 54-7 standard
- With the intelligence of CoreProtocol
- Backwards compatible with XP95 and Discovery systems
- Unique chamberless fire detection technology
- Intelligent sensing of foreign and transient objects to reduce false alarms
- Integrated Switchable Isolator as standard
- Virtual chamber eliminates dust and insect ingress
- External light rejection
- Drift compensation
- Tri-Coloured LED status indicator
- Custom finishes available

Operation

The Soteria Dimension Optical Detector contains two daylight filtered photo-diodes and three IR emitters in different positions and angles. Different combinations of these are used to act as smoke sensors and proximity sensors to measure the smoke level at the detector and to detect any physical obstruction or interference of the detector.



Soteria Dimension Optical Detector



Soteria Dimension Optical Detector



Soteria Dimension Optical Detector - Black



Soteria Dimension Specialist Optical Detector



Soteria Dimension Backbox

Apollo Soteria Dimension

- F/FL5100-600APO Soteria Dimension Optical Detector
- F/FL6100-600APO Soteria Dimension Specialist Optical Detector
- F/FL5000-200APO Soteria Dimension Mounting Box
- F/FL5100-660APO Soteria Dimension Optical Detector - Black



FIRE DETECTION & ALARM TECHNOLOGY COMES OF AGE



XFP CAST from C-TEC

C-TEC's XFP CAST 'distributed intelligence' addressable fire alarm system has a host of features designed to facilitate easy installation, servicing, maintenance and operation. Powered by its own CAST (C-TEC Addressable System Technology) protocol, it breathes new life into C-TEC's best-selling XFP addressable fire panels which integrate seamlessly with C-TEC's best in class CAST fire detectors, manual call points, sounders, VADs and interface modules. Certified to all relevant parts of EN 54 including EN 54-13 (system compatibility), its features include:-

- ☆ Up to 255 CAST addressable devices per loop
- ☆ Two 'soft' addressing options – manual via a handheld programmer or automatic via an XFP fire panel
- ☆ Wide range of CAST field devices ranging from three programmable fire detectors, a sturdy manual call point, multiple fire alarm warning devices – including sounders, voice sounders and W, C & O Class VADs – a series of powerful interface modules and more
- ☆ 40V loop drive voltage
- ☆ Autonomous decision-making for fast response times
- ☆ Powerful multi-level addressing to facilitate easy device addition and swapped device identification
- ☆ Multiple volumes, tones & detector modes
- ☆ Reduced unwanted alarms - CAST's optical & multi-sensor fire detectors feature smart transient rejection algorithms to negate the impact of sudden steam surges
- ☆ Powerful cause and effects
- ☆ ENVISION ENABLED – fully compatible with C-TEC's powerful Cloud based data management, commissioning and maintenance software



c-tec.com



MADE
IN THE
UK

Overview

CAST by C-TEC is the result of a multi-million pound investment project by the UK's largest independent manufacturer of life safety electronic systems. Conceived, designed and realised by C-TEC, the CAST project involved the creation of a powerful proprietary communication protocol (C-TEC Addressable System Technology, abbreviated to 'CAST') and multiple control panels and field devices and a new Cloud-based remote access, data management and system testing software package called ENVISION. When the world's most advanced distributed intelligence protocol meets the world's most powerful control, indicating, detection and alarm equipment, the result is an array of cutting-edge features and benefits.

Features

Fully compatible with C-TEC's XFP addressable fire panel range and ENVISION Fire 'IoT' software package.

- Up to 255 addressable devices per loop
- 40V loop drive voltage to help ensure devices work as expected even on long wiring runs
- Autonomous decision-making for faster response times
- Multiple type codes making the system easier to program and test
- Two 'soft' addressing options – automatic via the panel or manual via a powerful handheld programmer
- Powerful multi-level addressing facilitating easy device addition and swapped device identification
- Multiple volumes, tones and detector modes that can be easily changed at any CAST compatible panel via a PC laptop
- High-speed data transmission and robust data transfer ensuring rapid response to fires, faults, pre-alarms and other system events
- EN54-13 compliance providing reassurance to all that the system's components will work as expected
- Geographical location of open and short circuit faults to speed up installation and maintenance times
- The ability to easily accommodate spurs on retro-fit systems allowing the easy upgrade of existing systems
- An intuitive replace device function
- Powerful cause and effects allowing the system to be tailored to suit a specific application
- Future seamless integration with other CAST life safety systems to reduce energy, servicing and installation costs
- Designed and manufactured in the UK



C-TEC Cast Fire Detection

Cast Fire Alarm Control Panels

F/FW1001/1/16/CA	(XFP501E/CA) CAST XFP 1 LOOP 16 Zone
F/FW1001/1/32/CA	(XFP501/CA) CAST XFP 1 LOOP 32 Zone
F/FW1001/2/32/CA	(XFP502/CA) CAST XFP 2 LOOP 32 Zone
F/FW1001/R/16	(XFP510-31) NETWORKABLE REPEATER PANEL - 16 ZONES
F/FW1001/R/32	(XFP510-16) NETWORKABLE REPEATER PANEL - 32 ZONE
F/FW1001/NCC/16	(CFP761) NETWORK COMMUNICATIONS CARD FOR 16 ZONE
F/FW1001/NCC/32	(AFP711) NETWORK COMMUNICATIONS CARD FOR 32 ZONE
ZFP120CA	(ZFP120CA) CAST ZFP 1 loop 20z Touchscreen Panel
ZFP120PCA	(ZFP120PCA) CAST ZFP 1 loop 20z Touchscreen and Printer
ZFP140CA	(ZFP140CA) CAST ZFP 1 loop 40z Touchscreen Panel
ZFP140PCA	(ZFP140PCA) CAST ZFP 1 loop 40z Touchscreen and Printer
ZFP1CA	(ZFP1CA) CAST ZFP 1 Loop Standard Panel - Blank
ZFP220CA	(ZFP220CA) CAST ZFP 2 loop 20z Touchscreen Panel
ZFP220PCA	(ZFP220PCA) CAST ZFP 2 loop 20z Touchscreen and Printer
ZFP240CA	(ZFP240CA) CAST ZFP 2 loop 40z Touchscreen Panel
ZFP240PCA	(ZFP240PCA) CAST ZFP 2 loop 40z Touchscreen and Printer
ZFP2CA	(ZFP2CA) CAST ZFP 2 Loop Standard Panel - Blank
ZFP2LCA	(ZFP2LCA) CAST ZFP 2 Loop -Blank-Medium Cabine
ZFP2MCA	(ZFP2MCA) CAST ZFP 2 Loop -Blank-Large Cabinet
ZFP420CA	(ZFP420CA) CAST ZFP 4 loop 20z Touchscreen Panel
ZFP420PCA	(ZFP420PCA) CAST ZFP 4 loop 20z Touchscreen and Printer
ZFP440CA	(ZFP440CA) CAST ZFP 4 loop 40z Touchscreen Panel
ZFP440PCA	(ZFP440PCA) CAST ZFP 4 loop 40z Touchscreen and Printer
ZFP4CA	(ZFP4CA) CAST ZFP 4 Loop Standard Panel - Blank
ZFP4LCA	(ZFP4LCA) CAST ZFP 4 Loop - Blank-Medium Cabinet
ZFP4MCA	(ZFP4MCA) CAST ZFP 4 Loop - Blank-Large Cabinet
ZFP6LCA	(ZFP6LCA) CAST ZFP 6 Loop - Blank-Medium Cabinet
ZFP6MCA	(ZFP6MCA) CAST ZFP 6 Loop - Blank-Large Cabinet
ZFP8LCA	(ZFP8LCA) CAST ZFP 8 Loop - Blank-Medium Cabinet
ZFP8MCA	(ZFP8MCA) CAST ZFP 8 Loop - Blank-Large Cabinet
ZREP1CA	(ZREP1CA) CAST Mini Repeater Panel - Flush
ZREP1SCA	(ZREP1SCA) CAST Mini Repeater Panel - Surface

C-TEC Cast Fire Detection - Continued

Bases

- CA408 (CA408) CAST Detector Base
- CA408B (CA408B) CAST Detector Base Black
- CA408R (CA408R) CAST Relay Base

Detectors

- CA414 (CA414) CAST Programmable Multisensor Detector
- CA416 (CA416) CAST Optical Smoke Detector
- CA416B (CA416B) CAST Optical Smoke Detector - Black
- CA402 (CA402) CAST Programmable Heat Detector

Break Glass Call Points

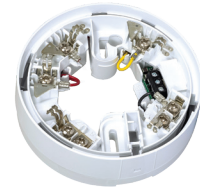
- CA470 (CA470) CAST Universal Manual Call Point Red
- CA470B (CA470B) CAST Manual Call Point Surface Blue
- CA470GR (CA470GR) CAST Manual Call Point Surface Green
- CA470W (CA470W) CAST Manual Call Point Surface White
- CA470Y (CA470Y) CAST Manual Call Point Surface Yellow
- CA47067 (CA47067) CAST Manual Call Point Surface IP67 Red

Sounders/VADs

- CA430ADR (CA430ADR) CAST Wall Sounder Deep Red
- CA430ADR65 (CA430ADR65) CAST Wall Sounder Deep IP55/65 Red
- CA430ASR (CA430ASR) CAST Wall Sounder Shallow Red
- CA431AW (CA431AW) CAST Base Sounder White
- CA432AW (CA432AW) CAST O Class Base Sounder VAD White
- CA433ADR (CA433ADR) CAST Wall Sounder VAD Deep Red
- CA433ADR65 (CA433ADR65) CAST Wal Sounder VAD Deep IP55/65 Red
- CA433ADRR (CA433ADRR) CAST Hi-OP Sounder Red VAD Deep Base
- CA433ASR (CA433ASR) CAST Wall Sounder VAD Shallow Red
- CA446ADR (CA446ADR) CAST Wall Voice Sounder Deep Red
- CA446ASR (CA446ASR) CAST Wall Voice Sounder Shallow Red
- CA447ADR (CA447ADR) CAST Wall Voice Sounder VAD Deep Red
- CA447ADR65 (CA447ADR65) CAST Voice Sounder VAD Deep Red IP55/65
- CA450ASR (CA450ASR) CAST Compact Wall Sounder, Red
- CA450ASW (CA450ASW) CAST Compact Ceiling Sounder, White
- CA451ASR (CA451ASR) CAST Compact Wall Sounder VAD Red
- CA451ASW (CA451ASW) CAST Compact Ceiling Sounder VAD White
- CA454AW (CA454AW) CAST Base Voice Sounder White
- CA455AW (CA455AW) CAST O Class Base Voice SNDR/VAD White
- CA456AW (CA456AW) CAST C Class Base Sounder VAD White
- CA457AW (CA457AW) CAST C Class Base Voice SNDR/VAD White
- CA458ASR (CA458ASR) CAST Compact Wall VAD Red
- CA458ASW (CA458ASW) CAST Compact Ceiling VAD White
- CA459AW (CA459AW) CAST O Class Base VAD White
- CA460AW (CA460AW) CAST C Class Base VAD White

Interface Units

- CA730 (CA730) CAST Input Output Module
- CA731 (CA731) CAST Mains Switching Input Output Unit
- CA732 (CA732) CAST Zone Monitor Module
- CA734 (CA734) CAST Mini Input Output Module
- CA736 (CA736) CAST1 Way Flat Interface Double Gang
- CA737 (CA737) CAST 4 Way Flat Interface -Needs CA737SU
- CA737PCB (CA737PCB) CAST 4 Way Flat Interface PCB Only
- CA737PSU (CA737PSU) CAST Psu Kit For CA737
- CA738 (CA738) CAST 1 Way Sounder Controller
- CA739 (CA739) CAST 4 Way Sounder Control-Need CA739PSU
- CA739PCB (CA739PCB) CAST 4 Way Sounder Control - PCB ZFP Only
- CA739PSU (CA739PSU) CAST 24V 1.5A Aux PSU For Use With CA739
- CA740 (CA740) CAST 4W Conventional Zone Convertor
- CA740PCB (CA740PCB) CAST Conventional Zone Convert 4-Way PCB
- CAPROG (CAPROG) CAST Handheld Programmer



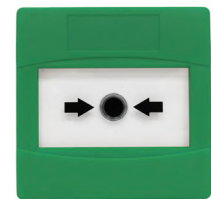
CA408R



CA402



CA470



CA470GR



CA430ADR



CA451ASW



CA460AW



CA731

Overview

With heat, smoke and CO fire detection plus a tone or voice sounder and visual alarm device in one unit, our CAST-PRO devices simplify installation, detect real fires quickly, reduce false alarms effectively and indicate true alarm conditions decisively. British-built and third-party certified to all relevant EN 54 standards, they are fully compatible with our ZFP CAST and XFP CAST protocol addressable fire panels.

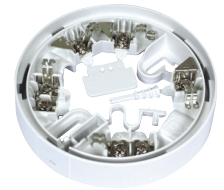
C-TEC CAST-PRO Fire Detection

Bases

CA408 (CA408)	CAST Detector Base
CA408B (CA408B)	CAST Detector Base
CA408R (CA408R)	CAST Relay Base

Detectors and Detector sounder/VADs

CP402	CAST PRO Heat Detector
CP402T	CAST-PRO Heat Detector, Tone Sounder
CP402TV	CAST-PRO Heat Detector, Tone Sounder, White VAD
CP402V	CAST-PRO Heat Detector, Voice Sounder
CP402VV	CAST-PRO Heat Detector, Voice Sounder, White VAD
CP411	CAST PRO Optical Heat Co Detector
CP411T	CAST PRO Optical Heat Co Detector, Tone Sounder
CP411TV	CAST PRO Optical Heat Co Detector, Tone Sounder, White VAD
CP411TVR	CAST PRO Optical Heat Co Detector, Tone Sounder Red VAD
CP411V	CAST PRO Optical Heat Co Detector, Voice Sounder
CP411VV	CAST PRO Optical Heat Co Detector, Voice Sounder, White VAD
CP411VVR	CAST PRO Optical Heat Co Detector, Voice Sounder Red VAD
CP414	CAST PRO Optical Heat Multisensor
CP414B	CAST PRO Optical Heat Multisensor BLACK
CP414BTV	CAST PRO Optical Heat Multisensor, Tone Sounder, White VAD BLACK
CP414T	CAST PRO Optical Heat Multisensor, Tone Sounder
CP414TV	CAST PRO Optical Heat Multisensor, Tone Sounder, White VAD
CP414TVR	CAST PRO Optical Heat Multisensor, Tone Sounder, Red VAD
CP414V	CAST PRO Optical Heat Multisensor, Voice Sounder
CP414VV	CAST PRO Optical Heat Multisensor, Voice Sounder, White VAD
CP414VVR	CAST PRO Optical Heat Multisensor, Voice Sounder and Red VAD
CP416	CAST PRO Optical Detector
CP416T	CAST-PRO Optical Detector, Tone Sounder
CP416TV	CAST-PRO Optical Detector, Tone Sounder, White VAD
CP416V	CAST-PRO Optical Detector, Voice Sounder
CP416VV	CAST-PRO Optical Detector, Voice Sounder, White VAD
CPDUCT/OPT	CAST PRO Duct Smoke Detection Kit C/W CAST PRO Optical Detector and Base



CA408



CP402



CP411T



CP414TV



CP414VVR



CP416

Overview

With 240 devices across a maximum of 100 zones, the Zerio Plus Wireless system offers the perfect solution for small domestic buildings up to large commercial premises. System programming. Each device is programmed onto the system using a simple user friendly menu and each device is logged on using a wireless link.

Location descriptions can be added by using a PC or simply programmed using a standard PC keyboard plugged into the panel or for a single device the in-built keypad. With analogue detector functionality and complex multi-path fault tolerant signalling, the system minimizes false alarms whilst providing maximum protection for the occupants of a building. In order to ensure wireless coverage either wired or radio booster panels can be installed at appropriate positions. During the automatic set-up the system will configure this equipment to ensure the most effective operation is achieved.

The system complies in full with EN54 Part 25.

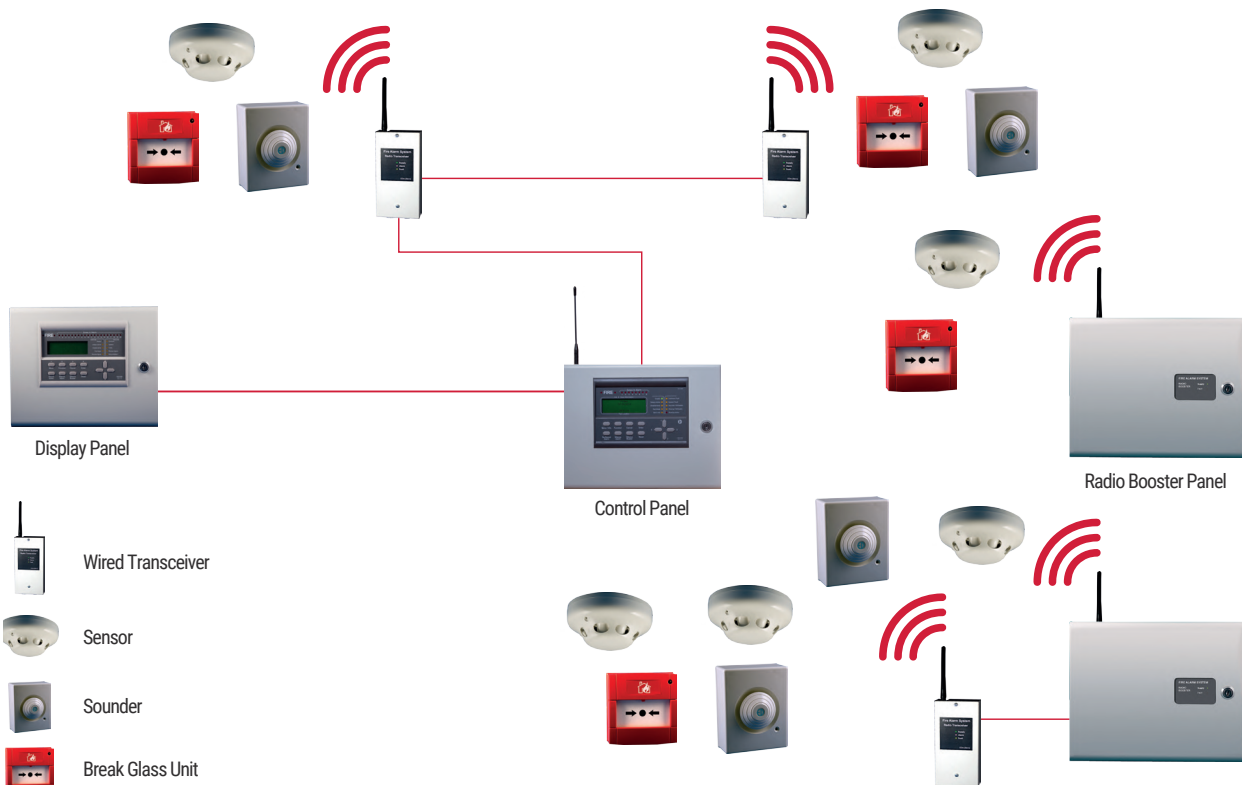


Features

- EN54 Compliant
- 240 Fully addressable devices
- Sophisticated cause and effects
- In-built HMO options
- Pluggable memory module for back-up
- USB keyboard to program
- Intuitive menu structure
- Configuration reporting via USB memory stick
- 5 access levels
- Compatible with full range of Zerio Plus devices
- Simple to set-up

Typical Applications

- Large office blocks
- Hotels
- Small shops
- Restaurants



Maximum of 8 control/booster panel per system. Please contact us if larger systems are required.

Please note:

- A site survey is required on all wireless equipment prior to installation
- A free design service is offered upon receipt of contract awarded

Zerio Plus – Wireless

Panels

F/EDA-Z5008	8 zone Zerio Plus control panel (requires 1x 12/7 battery – listed to right)
F/EDA-Z5020	20 zone Zerio Plus control panel (requires 1x 12/7 battery – listed to right)
F/EDA-Z5100	100zone Zerio Plus control panel (requires 1x 12/7 battery – listed to right)

Devices

F/EDA-R5000	Zerio Plus optical smoke detector
F/EDA-R6000	Zerio Plus optical smoke detector complete with sounder
F/EDA-R6030	Zerio Plus optical smoke detector complete with sounder visual indicator
F/EDA-D6000	Zerio Plus heat detector complete with sounder
F/EDA-D6030	Zerio Plus heat detector complete with sounder visual indicator
F/EDA-D5000	Zerio Plus heat detector

Call Point

F/EDA-C5000	Zerio Plus call point
F/EDA-Q585	Call Point Cover

Sounders and Visual Indicators

F/EDA-A6000	Zerio Plus radio sounder
F/EDA-A6060	Zerio Plus radio beacon
F/EDA-A6030	Zerio Plus Radio sounder C/W LED beacon
F/EDA-R6030	Zerio Plus optical smoke detector radio beacon C/W LED beacon

Interface Units

F/EDA-T6080	Zerio Plus radio clean contact input/output unit
F/EDA-A6040	Output only unit (Contacts rated at 30d DC 1A)
F/EDA-A6041	Input/Output unit (Contacts rated at 30d DC 1A)
F/EDA-Z6011	Wireless interface for networked systems

Boosters and Aerials

F/EDA-Z6000	Zerio Plus booster panel (requires 240v Supply and 1x 12/7 battery)
F/EDA-Z6010	Zerio Plus hard wired booster panel
F/EDA-Y5000	High gain antenna for use with Zerio Plus

Accessories

F/EDA-Z5000	Zerio Plus survey kit
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Batteries

B/12V/7AH/SLA	12 Volt 7Ah sealed lead acid battery (1 block)
S/BATT/EDA-Q690	Replacement batteries for detectors



F/EDA-D6000



F/EDA-R6000



F/EDA-R06030



F/EDA-D6030 – White



F/EDA-D6030 – Ivory



F/EDA-A6000



F/EDA-A6030



F/EDA-C5000



F/EDA-T6080



F/EDA-T5100



F/EDA-Z6000 and
F/EDA-Y5000

REACH Wireless Intelligent Detector Range

Overview

REACH is a hybrid wireless solution, enabling units to be connected to our hard-wired loop systems via a loop-interface, just like any other device. This makes REACH ideally suited to buildings and structures with restricted or complex access and installation conditions - such as listed buildings, out-buildings, temporary structures and limited downtime sites such as offices.



Detectors are often installed in buildings where wiring presents a challenge. This could be because the fabric of the building or its design will be negatively affected by the use of cables. It is sometimes very difficult to introduce cable runs into buildings which were not designed for the modern age. It is for these architecturally sensitive buildings that REACH has been developed.

REACH is a system in which individual detectors, call points and alarm devices communicate with the XP95 loop by radio signals. An interface is connected to the loop in the same way as any other interface, such as an input/output unit.

Every REACH device is assigned an address and this address is recognised by the control panel in the same way as is the address of any device connected directly to the loop wiring.

The REACH range consists of:

- Loop interface module (Max 32 devices)
- Optical smoke detector
- Heat detector
- Multi detector (optical/heat)
- Manual call point
- Sounder base
- Sounder VAD bases
- Open area Sounders
- Open area sounder/VADs
- Input module
- Output module
- Remote Indicator
- Survey kit

The inclusion of alarm devices such as the sounder/VADs help make REACH systems compliant with the Disability Discrimination Act.

Features

- Easy to install
- Soft addressing
- Self-monitoring
- Proven technology
- No special control panel needed
- 868MHz radio channels
- Up to 32 devices per interface
- Up to 10 interfaces per loop (panel dependent)
- Analogue addressable system expansion
- Wireless
- Eliminates cabling difficulties
- Minimises building disruption
- Enables rapid retro-fit
- Preserves aesthetics
- All detectors within the REACH range are sold with mounting bases



REACH Wireless Intelligent Detector Range

REACH Wireless

F/RW1000-600APO	REACH Optical Smoke Detector
F/RW1000-400APO	REACH Heat Detector
F/RW1000-700APO	REACH Multi-Sensor Detector (Optical/Heat)
F/RW1500-210APO	REACH Open-Area Sounder VAD Cat. W – White Body (White-Flash) (W-2.5-7)
F/RW1500-220APO	REACH Open-Area Sounder VAD Cat. W – Red Body (White Flash) (W-2.5-7)
F/RW1300-110APO	REACH Sounder Base
F/RW1300-210APO	REACH Sounder VAD Base (White Flash) (C-3-15)
F/RW1300-211APO	REACH Sounder VAD Base (Red Flash) (C-3-10)
F/RW1500-110APO	REACH Open-Area Sounder – White Body
F/RW1500-120APO	REACH Open-Area Sounder – Red Body
F/RW1300-010	REACH AV Base Cap - White
F/RW1300-020	REACH AV Base Cap - Red
F/RW1900-901APO	REACH Manual Call Point
F/RW1500-800APO	REACH Remote Indicator Module
F/RW1700-030APO	REACH XP95 Loop Interface Module
F/RW1700-051APO	REACH Input Module
F/RW1700-052APO	REACH Output Module
F/RW1800-060APO	REACH Survey Kit Lite



Reach Loop Interface Module



Reach Detector



Reach Manual Call Point



Reach Remote Indicator



Reach Loop I/O Module



Reach Open Area Sounders



Reach Open Area Sounders/VADs



Reach Sounder Base



Reach Sounder/VADs Base

VESDA®

Overview

The VESDA range of pipes and fittings have been specially developed to provide fully matched components for the optimal performance of your whole Vesda aspirating system.

They are also manufactured to comply with the requirements of BS 5391 Part 1, EN 61386-1 and the new EN54 Part 20.

The pipes are a metric standard of 25mm external diameter with suitable adapters available for imperial to metric conversions and are designed for use with any make of low pressure aspirating type smoke detection system.

Unlike some metal pipes, Vesda ABS pipework is very light in weight. This makes it easy to handle in high and difficult places where systems are often installed.



F/VEP-A10-P and F/VES Range



F/VEA-040-A00

How does Vesda work?

A Vesda detector is much like a vacuum cleaner. It sucks air from the protected environment via purpose built aspirating pipe and fittings and samples the quality of air passing through the Vesda detection laser chamber. Vesda detectors are available in a variety of models to accommodate a broad range of environments and applications. From small to very large, open spaces and from the cleanest to the dirtiest environments, Vesda provides reliable, high-sensitivity, very early warning smoke detection.

Typical Applications

Vesda delivers absolute protection across a wide range of industries and applications: apartments, Hotels, Shops, Offices (and other accommodation), Correctional Facilities, Clean Rooms, Cold Storage, Hospitals and Health care, Insurance, Nuclear Facilities, Portable Switch Rooms, Power Generation, Records Storage, Transportation, Wind Power Generation and Warehousing.

Vesda - VES-A00-P and VES-A10-P

The VESDA-E VES is similar to the flagship VESDA-E VEP aspirating smoke detector but also includes a valve mechanism in the inlet manifold and software to control the airflow from the four Sectors (pipes). This configuration enables a single zone to be divided into four separate sectors, for example, distinguishing between separate aisles within a data room. The VES-A10-P has an LED display while the VES-A00-P benefits from a 3.5" display.

Vesda-E Vep

The VESDA-E VEP series of smoke detectors bring the latest and most advanced detection technology to provide very early warning and the best nuisance alarm rejection to a wide range of applications. Built on the Flair detection technology and years of application experience, VEP detectors deliver absolute calibration for lifetime performance and a range of revolutionary new features that deliver user value.

Vesda-E Vea

The VESDA-E VEA series of detectors combine VESDA reliability and early warning smoke detection with pinpoint addressability and a variety of annunciation options that truly surpass traditional spot detectors. VEA uses patented sampling points and multi-channel microbore air-sampling with enhanced or standard alarm sensitivity setting for the sampling points. As a multi-channel addressable system, the VEA detector is able to divide a protected space into sampling locations, enabling the localization of a fire for a faster incident response. VEA is suitable for the protection of area where pinpoint location of fire events is essential, thus providing ideal fire detection solutions for offices, hospitals, schools, prisons, multi-storey dwellings, cabinets in data centres and warehouse racks. A wide range of features provide flexibility, enhanced connectivity and reduced total cost of ownership.

Vesda-E Veu

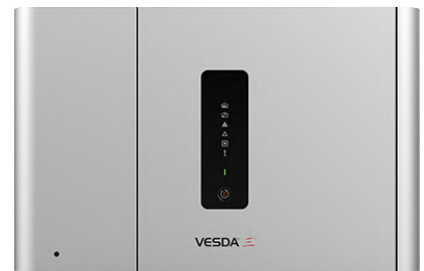
The VEU series of aspirating smoke detectors are the premium detectors of the VESDA-E range. An ultra-wide sensitivity range; 15 times greater than the VESDA VLP, and provision for more sampling holes provide and increased coverage in high airflow applications by at least 40%. Considerably longer linear pipe runs and extended branched pipe network configurations cater perfectly to applications with higher ceilings providing an increased coverage by up to 80% whilst allowing convenient detector mounting for ease of service and maintenance. A range of revolutionary new features provide unsurpassed detection performance, flexibility, field programmability, connectivity and reduced total cost of ownership.

Features

- Reliable early detection warning
- Assured performance in challenging environments
- Superior suppression actuation
- Easy and low maintenance
- Reliable detection in large open spaces
- Flexible solution in any facility type
- Wide coverage
- Action before suppression
- Provides time for orderly evacuation
- Avoids risks to precious assets
- Business continuity
- Active air sampling
- Where smoke detection is a challenge
- Tolerant of harsh environments
- Detects smoke in a varied range of conditions and applications
- Prevents nuisance alarms
- Overcomes the effects of smoke dilution
- Security and inmate safety
- Vandalism prevention
- EN 54-20 compliant



F/VEU-A10



F/VEU-A00

Aspirating Equipment

VESDA-E VEA

F/VEA-040-A00 VESDA-E VEA-40 Detector with LEDs. Max pipe length 40 x 100m

F/VEA-040-A10 VESDA-E VEA-40 Detector with 3.5" Display Max pipe length 40 x 100m

VESDA-E VEU

F/VEU-A00 VESDA-E VEU with LED's. Max pipe length 4 x 100m or 800m with branches

F/VEU-A10 VESDA-E VEU with 3.5" Display. Max pipe length 4 x 100m or 800m with branches

VESDA-E VEP

F/VEP-A00-P VESDA-E VEP with LEDs, 4 pipe. Max pipe length 4 x 70m or 560m with branches

F/VEP-A10-P VESDA-E VEP with 3.5" Display, 4 pipe. Max pipe length 4 x 70m or 560m with branches

VESDA-VES

F/VES-A00-P VESDA VES Scanner with LED Display, 4 Pipe, Max pipe length 280m linear or 560m branched (No. of holes dependent)

F/VES/A00-P VESDA VES Scanner with 3.5" Display, 4 pipe, Max pipe length 280m linear or 560m branched (No. of holes dependent)

Piping

F/CH/PIP-001 1 x 3m length of pipe

Accessories

F/CH/PIP-002 25mm jointing socket

F/CH/PIP-003 25mm socket union-screw tight-unit price (comes in pack x 10)

F/CH/PIP-005 90 degree bend

F/CH/PIP-006 45 degree bend 25mm

F/CH/PIP-007 End cap 25mm

F/CH/PIP-008 T piece 25mm

F/CH/PIP-009 Pipe clip

F/CH/PIP-012 Solvent cement

F/CH/PIP-014 Pipe cutters

F/CH/PIP-015 Flush sample point – head only

F/CH/PIP-016 Trunk adaptor

F/CH/PIP-059-001 Flush sample point assembly

F/CH/PIP-059-007 Conical sampling point

F/CH/PIP-221-035 10mm capillary pipe x 30m

F/CH/PIP-222-059 Discrete end cap

F/CH/VSP-005 Filter for all Vesda detectors

PSU's

F/CH/VPS-215 1.5A PSU – Vesda (requires 2x B/12V/7AH/SLA batteries)

F/CH/VPS-220 2A PSU – Vesda (requires 2x B/12V/12AH/SLA batteries)

Batteries

B/12V/7AH/SLA 12 Volt 7Ah sealed lead acid battery (1 block)

B/12V/12AH/SLA 12 Volt 12Ah sealed lead acid battery (1 block)

Automatic Opening Vent System



What is an AOV?

AOV is simply an abbreviation for "Automatic Opening Vent". An AOV system is a control system designed to vent air or smoke for use in natural and smoke ventilation.

So Why Do I Need An AOV System?

AOV control systems are used mainly to control the ventilation of smoke in a fire. Changes to building regulations were made due to the results of investigations into smoke inhalation.

When a detector or call point is triggered an AOV control system will open actuators, windows or vents to create ventilation. This clears smoke for people leaving the building and vents smoke out of the area that has been triggered. The provisional standard that is now available for reference is EN:12101.

Smoke Control Systems are required in multi-storey residential buildings, hotels, student accommodation and principally to protect the stairs to assist escape in the event of a fire, in compliance with the recommendations of Approved Document B and BS 9991:2015.

In multi-storey residential buildings, the main escape route is always via common corridors and/or lobbies into the stairs. That aim is to keep stairs reasonably free of smoke and to improve conditions in corridors and lobbies opening onto the stairs.



How Do I Decide Which AOV System To Fit?

You first need to decide what items you need to control on your system. You should work out how many items will need to open separately and then class each one as a zone.

See the following examples:



Example 1:

You have one roof vent or window which must open when the fire alarm is triggered...

In this situation you have 1 zone. You need to first see how the roof vent or window operates. If it is manual opening then you will need to add an AOV actuator which can be triggered to open or close. If there is already a fire system in place there may be smoke detectors fitted. In this situation you can link an AOV single zone to your fire system which will trigger when smoke is detected in that area. The AOV actuator when triggered will open, when reset it will close. Yellow call points can be added for override or system test. (If there is no fire system in place a detector can be fitted to trigger the system.)

Example 2:

You have 4 floors, a window on each, and a vent for a shaft on the roof...

This situation would leave you with 5 zones. Here you would use an AOV multi zone panel which will be able to open/close each zone independently. Under this condition it may be that the vent should open together with any zone that is triggered. (A roof vent will be on a smoke shaft or stairwell. Opening it together with a window will then create a chimney effect clearing smoke.)

In this case you can set the AOV multi zone with zone 1 as a "master". A simple solution that will then trigger zone 1 together with any of the zones 2-5.

Again you would then need to add an actuator to each window/vent and either link to your existing fire system or add call points and smoke detectors to the AOV multi zone system to trigger.

System Layout and Wiring

The diagram below shows the typical system architecture for a single zone panel system. The AOV can be triggered by an input from a fire alarm system or dedicated smoke detectors.

AOV Smoke Ventilation System

Control Panels

F/SVM/24V-5A/BASIC	Smoke control panel 1-zone 24V-5A
F/SVM/24V-8A/BASIC	Smoke control panel 1-zone 24V-8A
F/SVL/MULTI/2-6	2-6 Channel AOV control panel 24V
F/SVL/ZC	15A Additional Zone card for above

Chain Drives

F/HCV500/0350	Chain drive 24Vdc, 500N, 350mm
F/HCV500/0600	Chain drive 24Vdc-500N-600mm
F/HCV500/0800	Chain drive 24Vdc, 500N, 800mm
F/HCV500/1000	Chain drive 24Vdc, 500N, 1000mm
F/HCVSS/BKT	Bracket for above

Fireman's Controls

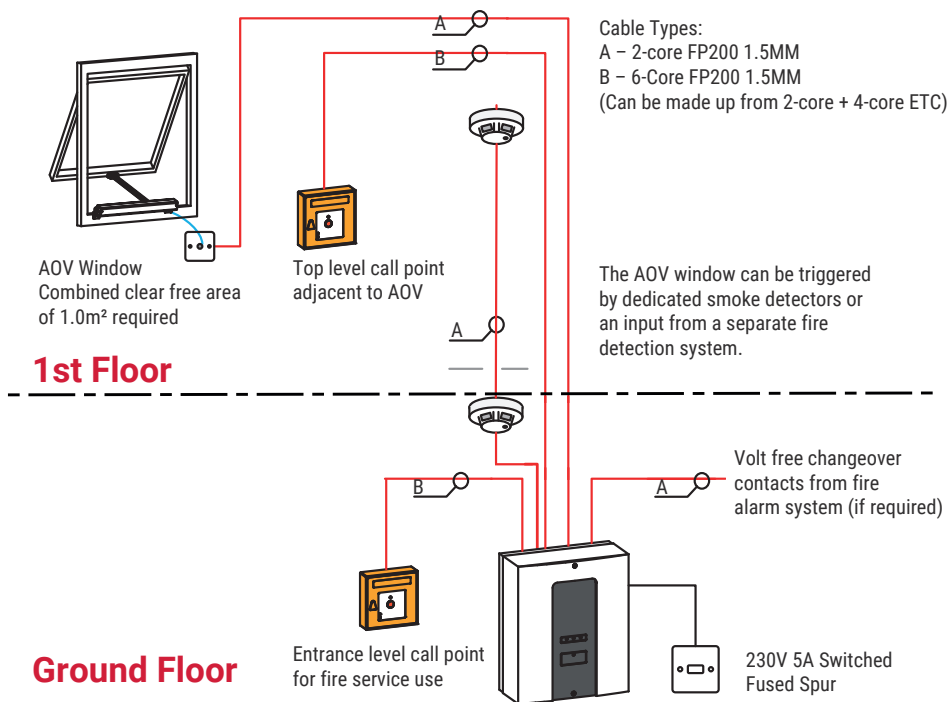
F/WSK/321/0005/61	Break glass, SVM, orange
F/IMCP	Break glass for SVL Multi

Smoke Detectors

F/CHSM/P	(55000-317) Optical smoke detector with base
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F/SVM/24V-8A/BASIC



F/VEP-A10-P and F/VES Range



F/WSK/321/0005/61

Overview

The Fire Beam specialist detection system is reliable and easy to maintain, and more importantly it will reduce the risk of expensive false alarms and misalignment faults. Beam detectors offer a cost effective solution for protecting large open spaces. One single unit installed on a wall can detect smoke over areas far greater than that of traditional point detectors.



Distance and Position Guidelines

A roof is considered flat unless the height of the apex is greater than 0.6m. If the roof is flat Fire Beam system can be placed anywhere under the roof between 0.3m and 0.6m below the roof, up to a maximum height of 40m from the floor. Fire Beam has a detection area of 7.5m either side of the beam. If the roof is considered to have an apex, place the Fire Beam system 0.3m to 0.6m down from the top of the apex, up to a maximum height of 40m from the floor. The maximum protected area either side of the beam can be extended by 1% for every degree of roof pitch, see the example.

Mid Range Distance Kits (70-140 Metres)

Designed to cover distances between 70 and 140 metres, the Fire Beam Mid Range Kit is a clear acrylic plate with 3 extra reflectors attached.

Long Range Distance Kit (140-160 Metres)

Designed to cover distances between 140 and 160 metres, the Fire Beam Long Range Kit is a clear acrylic plate with 8 extra reflectors attached.

Simply add the single reflector that is provided with the standard Fire Beam into the spare space on the plate using the screws provided. Fire Beam is designed to fully comply with EN 54 part 12, and exceeds European standards, in particular BS 5839 part 1.

Fire Beam - 2

Self Adjusting Beams

F/CHBM/SA/2	Self adjusting beam detector 7 - 70m range
F/CHBM/70/KIT/2	70 - 140m range kit for CHBM/SA/2
F/CHBM/140/KIT/2	140 -160m range kit for CHBM/SA/2
F/CHBM/ADAPTER	Unistrut Adapter for CHBM/SA/2
F/PSU24/1.5/BMEN54	Power supply

Anti-Fog Kits

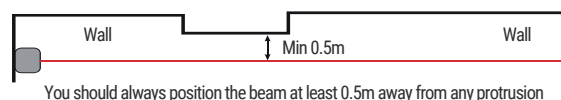
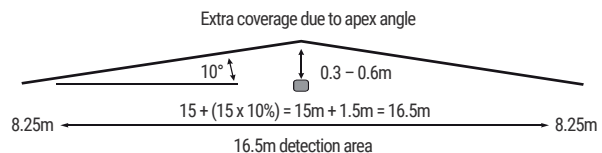
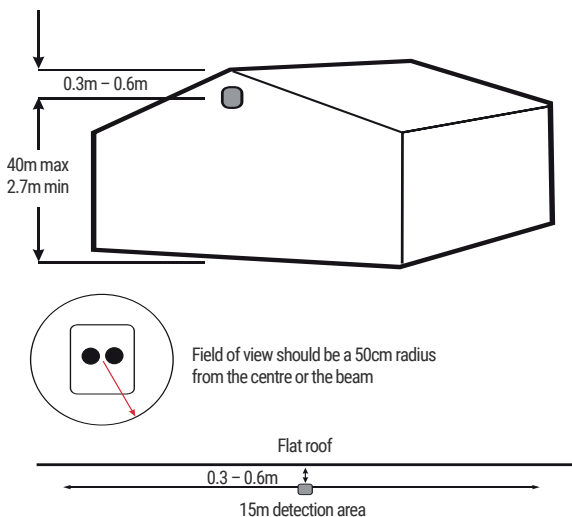
SP/CHBM/70KIT	Anti-Fog 70-140m range kit for CHBM/SA/2
SP/CHBM/140/KIT	Anti-Fog 140-160m range kit for CHBM/SA/2

Addressable Beam Detectors

F/CHBM/SA/95	SA7100-100 Apollo Self Adjusting Beam 8-50M
F/CHBM/R/95/EXT/KIT	29600-526 50-100M Extension Kit

Ideal For Protecting Areas Such As:

- Warehouses
- Theatres
- Sport centres
- Places of worship
- Atriums
- Supermarkets



Alarmline Cable



Overview

The Alarmline cable is designed to detect at fixed temperature along its entire length. Upon operation, the cable gives a short circuit signal which can be linked very simply to your existing fire alarm system. Fully monitored by use of an end of line resistor, Alarmline cable offers detection in areas previously unprotected.



Features

- Environmental -65°C to +200°C
- 5 detection temperature ranges from 61°C to 238°C
- Simple interface to any BS 5839 system, FM approved
- Fully monitored
- Twin-conductor switching heat sensing cable
- Effective monitoring at precise point of risk
- Economical, reliable and durable detection
- Simple and easy to install
- Applied where other types of fire detection are unsuitable
- Ideal for dirty or harsh environments such as:
Escalator pits, Pipe and cable tunnels/trays, Conveyor belts, Petro chemical, Freezers cold rooms, Within racking

Alarmline Cable

Cable

F/AD68-0100	63°-70°C Alarmline cable (68°C nominal) * Supplied in 100m, 200m, 500m and 1000m lengths only
F/AD88-0100	79°-95°C Alarmline cable (88°C nominal) * Supplied in 100m, 200m, 500m and 1000m lengths only
F/AD105-0100	101°-108°C Alarmline cable (105°C nominal) * Supplied in 100m, 200m, 500m and 1000m lengths only
F/AD185-0100	177°-189°C Alarmline cable (185°C nominal) * Supplied in 100m, 200m, 500m and 1000m lengths only

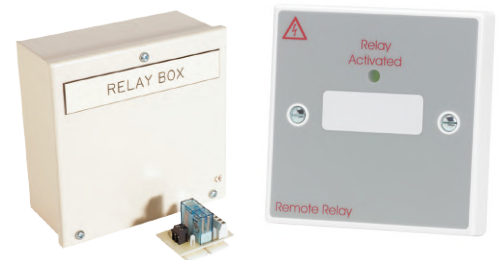
Accessories

F/ACAC-CP-025	P clip for use with Alarmline cable – Pack of 25
F/ACA-CT-025	T clip for use with Alarmline cable – Pack of 25

Interface Relays

Features

- Our heavy duty relay units are designed for interfacing heavy loads such as door release units or plant shut down equipment with fire alarm systems



Interface Relays

S/E15/A	24V 5A double pole relay
S/E60/A	12Vdc 5A double pole
S/E55/A	230V 5A double pole relay
F/CH/HDR/5	24 V 5A double pole relay in heavy duty box
S/CH/BF376	24V 5A Relay on single gang plate

Please note: The plate is about 1/2 the size of the box in the current picture.

Loop Powered Addressable Door Holder

Features

- Reduced installation cost – no mains supply or PSU required
- No batteries to replace
- Complies with BS 7273-4
- Allows phased evacuation
- Fully monitored by the fire alarm control panel
- 200N Holding force



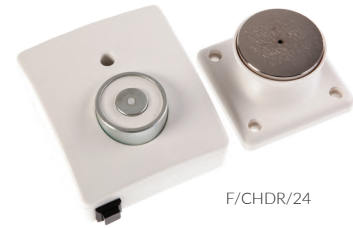
Apollo Door Retainer

F/CHDR/95	(55000-982) XP95 Loop powered door release
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Wall Mounted Door Retainer

Features

- With a flame retardant, low profile ABS plastic body, installation is made simple, with knockouts provided for entry of surface mount conduit, there is ample room to connect external wiring to the 4.0mm terminals. Each door retainer is fitted with a spring loaded release pin mounted centrally within the electro-magnet. On power off, the release pin then ensures that the fire door is pushed away from the electro-magnet.
- Additional accessories are available, including floor brackets, chains and additional keeper plates
- Flame retardant, low profile ABS plastic body
- All door retainers are designed to comply to the latest requirements of EN 61000-3-2, EN 50081-1, EN 60950 and EN 1155



F/CHDR/24



F/CHDR/BK



F/CHDR/CHAIN

Wall Mounted Door Retainers

F/CHDR/24	24V magnetic door release
F/CHDR/240	240V magnetic door release
F/CHDR/BK	Door release mounting bracket
F/CHDR/CHAIN	1m chain for magnetic door release plates

Power Supply Units for Door Closers/Releases

Features

- 27V DC nominal output
- Remote control of output
- Choice of switching options:
Closing of normally open contact
- Application of an external 24V DC supply
- LED Indication:
mains status/output fuse failure
- Mains transient protection
- Fail safe operation

Typical Applications

- Opening of a normally closed volt-free contact
- Closing of a normally open volt-free contact
- Application of an external 24V DC supply such as a sounder circuit



F/CHDR/PSU/4

Alarmline Cable

F/CHDR/PSU/2	PSU 24V 2A in enclosure
F/CHDR/PSU/4	PSU 24V 4A

Special Function Call Point Units

Features

- Unique 'Plug and Go' installation concept
- Total 'Flex-Ability' in the choice of operating element
- Anti-Tamper facility
- Enhanced aesthetics
- Backward compatibility
- Proven design approved and certified to EN54-11
- Use of glass or resettable plastic element
- Alarm indicator and 240v changeover contacts
- Back box with fixing screws

Special Function Call Point Units

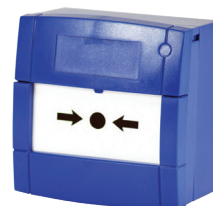
F/CH/PC	Surface break glass – blue no resistor
F/CH/EDR/FLEX	Surface break glass – green no resistor
F/CH/ER	Surface break glass – yellow no resistor
F/CH/FVE	Surface vent extract unit – yellow no resistor – 3 POS key switch



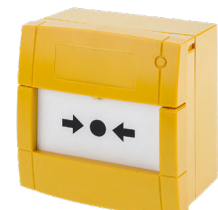
F/CH/FVE



F/CH/EDR/FLEX



F/CH/PC



F/CH/ER

Fire Alarm Switched Fused Spur

Overview

This product provides a secure method for safely isolating the mains voltage supply to fire systems in accordance with BS 5839: Part 1 (2002).

Features

- Both the Live and Neutral supply is switched
- Integral fuse, which cannot be removed without taking the cover off
- The supply can only be isolated by means of a keylock switch
- The key is removable in both ON/OFF positions
- A Green LED is used to indicate mains present at the switched outputs

Fire Alarm Switched Fused Spur

F/CHFA/SFS Key operated double pole switched fused spur



F/CHFA/SFS

Remote Indicators

Features

- Used to show operation of hidden smoke detectors
- Supply voltage range – 5-28Vdc
- IP Rating – F/CHRI/60 – IP 42 and F/CHRI/AS – IP66
- Current – 24mA
- Weight – F/CHRI/60 – 38g and F/CHRI/AS – 117g
- It can be used to link into either addressable, conventional, 2-wire and 4-wire fire detection system arrangements

Remote Indicators

F/CHRI/60 Remote indicator
 F/CHRI/AS AlarmSense remote indicator (round)



F/CHRI/60

Call Point and Key Point Covers

Call Point Cover Features

- Constructed from tough clear polycarbonate
- Easy to install, can retrofit over existing devices
- Includes integral sounder, powered by a 9V PP3 battery (included)
- Protects equipment from accidental operation, vandalism, product misuse, dust and weather
- Flush and surface mounted versions available

Key Point Cover Features

- Sturdy ABS plastic key holder secures and provides visible storage of emergency keys
- Supplied with printed glass (perspex) that reads "BREAK GLASS FOR KEY"
- Constructed from robust ABS plastic casing with a crystal styrene window to protect your emergency keys until needed

Call Point and Key Point Covers

Call Point Cover
 F/CHBGC/KIT Heavy duty flush and surface Break Glass Cover Kit
 F/CHBGC/KIT/S Heavy duty flush and surface Break Glass Cover Kit with Sounder

Accessories
 F/CHSG 10 pack spare glass

Key Point Cover
 F/KEY BOX Break glass key box
 F/KEY BOX GLASS Spare glass for key box



F/CHBGC/KIT
 Surface Break Glass Cover
 (Break Glass Unit not included)



F/KEY BOX
 Break Glass Key Box

Document Box

Overview

This A4 'Fire' document box is ideal for the safe keeping of important documents, log books and other paperwork for a building's fire system. The wall mounted enclosure has been specifically branded for fire applications, powder white and labelled 'Fire Documents'. The enclosure is lockable and is provided with 2 keys.

Features

- 1.2mm Powder coated Steel
- Red with white Fire logo
- 2 Keys Provided (keyed alike)
- H: 310mm x W: 245mm x D: 50mm

Document Box

F/DOCBOX/1 Document box Metal A4 lockable



F/DOCBOX/1

Log Books

Fire Alarm Log Book

- The fire log book allows you to record all aspects of your building's fire safety procedures, inspections and maintenance. You must have a fire log book on the premises at all times to comply with fire regulations,
- Ensure it remains in a designated spot where everyone can find it when needed.

Emergency Lighting Log Book

Complete log book for emergency lighting, The Regulatory Reform (Fire Safety) Order 2005 requires the 'responsible person' for a premises to ensure that all fire safety facilities, equipment and devices are maintained in efficient working order and in good repair. This references BS5266 Part 1 as the minimum Standard that emergency lighting systems should conform to and requires a comprehensive system of checking, maintaining and repairing all fire safety equipment on an on-going and regular basis.

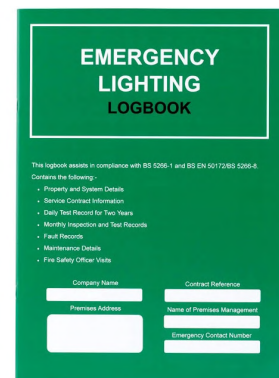
- Covers your legal obligations
- Everything in one document
- BS 5266-1 Compliant
- Site information
- Luminaire/Test Switch Locations
- Daily/Monthly Test and Inspection Records
- Service Records
- Fault Action Records



F/CHGL/FA

Document Box

F/CHLG/FA Fire Alarm Log Book
E/CHLG/EL Emergency Lighting Log Book



E/CHLG/EL

Power Supply Units

Overview

We supply a high efficiency, cost effective range of switch mode power supplies featuring mains and battery monitoring. The modular construction enables easy maintenance and upgrade capability. Encapsulated units are class II double insulated.

EN54 Compliant 1.5A PSU Features

- 24V 1.5A EN54-4/A2 Boxed PSU
- VdS certified to EN54-4/A2
- Batteries: 2x 12V Min. 2Ah, Max. 3.4Ah
- 380 x 235 x 96mm plastic enclosure

EN54 Compliant 3A PSU Features

- 24V 3A EN54-4/A2 Boxed PSU
- LPCB certified to EN54-4/A2
- Batteries: 2x 12V Min. 7Ah, Max. 12Ah
- 404 x 404 x 110mm metal enclosure



Power Supply Units

Non EN54 Compliant Power Supply Units

F/PSU/12/1/BM	12V 1A power supply unit – battery monitored (Max. 1x B/12V/7AH/SLA)
F/PSU/12/2/BM	12V 2A power supply unit – battery monitored (Max. 1x B/12V/7AH/SLA)
F/PSU/12/3/BM	12V 3A power supply unit – battery monitored (Max. 1x B/12V/7AH/SLA)
F/PSU/12/5/BM	12V 5A power supply unit – battery monitored (Max. 1x B/12V/7AH/SLA)
F/PSU/24/1/BM	24V 1A power supply unit – battery monitored (Max. 2x B/12V/7AH/SLA)
F/PSU/24/2/BM	24V 2A power supply unit – battery monitored (Max. 2x B/12V/7AH/SLA)
F/PSU/24/3/BM	24V 3A power supply unit – battery monitored (Max. 2x B/12V/7AH/SLA)
F/PSU/24/5/BM	24V 5A power supply unit – battery monitored (Max. 2x B/12V/7AH/SLA)

EN54 Compliant Power Supply Units

F/PSU24/1.5/BMEN54	EN54 compliant 24V 1.5A power supply unit – battery monitored (Min. 2x B/12V/3.2AH/SLA – 12V 3.2AH)
F/PSU24/3/EN54/1	EN54 compliant 24V 3A power supply unit – battery monitored (Min. 2x B/12V/12AH/SLA – 12V 12AH)

Batteries

B/12V/2.1AH/SLA	12 Volt 2.1Ah sealed lead acid battery (1 block)
B/12V/2.3AH/SLA	12 Volt 2.3Ah sealed lead acid battery (1 block)
B/12V/2.8AH/SLA	12 Volt 2.8Ah sealed lead acid battery (1 block)
B/12V/7AH/SLA	12 Volt 7Ah sealed lead acid battery (1 block)

Talentum® Flame Detectors

Overview

Talentum® is perfect for environments and industries where steam, smoke and dust are commonplace.

Using infra-red (IR) sensing technology flames can be detected through such elements as dust, steam and smoke; they are also immune to the effects of wind or draughts of air. With the addition of an ultra-violet (UV) sensor a flame detector becomes highly immune to false signals such as sunlight. The optical sensors within the detector receive the IR and/or UV radiation emitted by the flames. The processor within the detector analyses the optical sensor signal waveforms and determines if they represent flames and if so accepts them. If the signals do not match the internal algorithms for flames then they are considered to be false sources and rejected.

Features

- Available for indoor and outdoor areas
- Flame-proof, explosion-proof and high ambient temperature options
- Internal self-test capability giving the highest immunity to false-flame sources
- Detects invisible flames from fuels such as Hydrogen and other inorganic fuels
- Immune to the effects of wind, draughts and sunlight

Where Talentum® Performs

Agriculture | Automotive | Aircraft Hangers | Aeronautical Repair | Bed Fillings | Biomass Storage and Handling | Chemical Plants | Coal Racks | Generators | High Voltage Equipment | LNG/LPG Production | Military and Marine | Nuclear and Non-Nuclear Power Plants | Petrochemical | Pharmaceutical Production | Printing | Refineries | Spray Booths | Storage Tanks | Tunnels | Waste Recycling | Woodworking



Talentum®

F/FFE-16581	Talentum Dual IR. High immunity to false sources. Suitable for indoor areas only
F/FFE-16571	Talentum Dual IR. Intrinsically safe (IS) for hazardous areas. High immunity to false sources. Suitable for indoor areas only
F/FFE-16511	Talentum Dual IR. Flameproof (Exd) for hazardous areas. High immunity to false sources. Suitable for indoor areas only
F/FFE-16589	Talentum Triple IR. Excellent immunity to false sources. Suitable for indoor or outdoor areas.
F/FFE-16579	Talentum Triple IS IR, Intrinsically Safe (IS) for hazardous area excellent immunity to false sources. Suitable for indoor or outdoor areas.
F/FFE-16519	Talentum Triple IR, Flameproof (Exd) for hazardous areas. Excellent immunity to false sources. Suitable for indoor or outdoor areas.
F/FFE-16591	Talentum UV/IR2. Highest immunity to false sources. Suitable for indoor or outdoor areas.
F/FFE-16521	Talentum UV/IR2 Flame Detector. Flameproof (ExD). Highest immunity to false sources. Suitable for indoor or outdoor areas.

Solo Detector Testing

Overview

Fire detector test and service equipment must be safe both for engineer and system. As a minimum it must comply with international codes and standards and be approved/endorsed by detector manufacturers and third party listing agencies but it also needs to be cost-effective, portable and versatile.

The Solo range meets and exceeds all of these requirements and more!

Smoke Testing

Functional checking is accomplished by introducing a smoke, or simulated smoke, stimulus from the protected area through the vents of a detector to the sensor(s). It is required by all national standards around the world and testing by electronic means that do not involve this test is not sufficient to comply.

Heat Testing

Functional checking of heat detectors, with a genuine heat source, is now required by major national standards around the world. Testing with heat sources not designed for the purpose can be both dangerous and damaging. The Solo range of heat detector testing equipment is designed specifically for purpose and provides a professional solution.

CO Testing

Many multi-sensor fire detectors detect carbon monoxide (CO) as well as smoke and/or heat. Under international codes and standards the CO cell needs to be functionally tested with a CO stimulus from the protected area through the detector vents to the sensor.

Solo CO – used in conjunction with Solo 330/332 dispensers – provides a safe way of achieving this with CO concentration levels high enough to activate an alarm, but low enough not to pose danger to user health.

Removal and Cleaning

Detectors need removal and replacement for various reasons. The vast majority are fitted on bayonet mountings and the task can be done using specialist tools fitted to appropriate access poles. Using such specialist devices saves the time, cost, disruption and risk to safety that ladders, scaffolding or access gear represents. Faced with a vast array of different models shapes and sizes the professional needs a universal tool. Compatible with an astonishingly wide range of detectors, the colour-coded heads of the Solo 200 rotate to provide a combination of sizes and settings for just about every detector.

Telescopic Poles

Solo Telescopic Poles are required for detectors out of normal reach. Their use saves the time, cost, disruption and risk to safety that ladders, scaffolding or access gear represents.

Testing Kits

The contents of each Testing Kit are determined according to your individual testing needs – see the next page for our Kit Selector and Product Range Selector to help you choose the solution right for you.



Aerosols



Removal and Cleaning



Testing Kits

Solo Detector Testing

Kit Selector

Product Code	Smoke Testing*	Heat Testing	CO Testing**	Access Height (Approx. Max.)	330 Aerosol Dispenser	461 Cordless Heat Tester	424 Mains Heat Tester
F/CH/SOLO/808	•		•	4m	•		
F/CH/SOLO/809	•		•	6m	•		
F/CH/SOLO/811	•		•	6m	•		
F/CH/SOLO/812	•		•	6m	•		
F/CH/SOLO/814	•	•	•	8.2m	•		•
F/CH/SOLO/822	•	•	•	6m	•	•	
F/CH/SOLO/823	•	•	•	9.3m	•	•	

*Using Solo A5 Smoke Detector Tester Aerosol

**Using Solo C3 CO Detector Tester Aerosol

Product Code	100 Access Pole	101 Extension Pole	108 Access Pole	200 Removal Tool	610 Carrying Bag	760 Battery Baton	726 Battery Charger
F/CH/SOLO/808			•				
F/CH/SOLO/809	•						
F/CH/SOLO/811	•			•	•		
F/CH/SOLO/812	•	• (x2)		•	•		
F/CH/SOLO/814	•			•	•		
F/CH/SOLO/822	•			•	•	•	•
F/CH/SOLO/823	•	• (x3)		•	•	•	•

Solo Detector Testing

Channel Economy Option For Detector Testing

F/CH/SMOKESABRE-01-001 Handheld spray for generic detector testing 150ml

Solo Smoke Testing

F/CH/SOLO/330 Smoke dispenser
F/CH/SOLOA5 Solo test smoke aerosol 250ml

Solo Heat Testing

F/CH/SOLO/423 Mains heat tester (110V)
F/CH/SOLO/424 Mains heat tester (220V)
F/CH/SOLO/461 Cordless heat tester kit
F/CH/SOLO/460 Cordless heat tester (head unit only)

Solo CO Testing

F/CH/SOLO/CO Solo CO fire detector tester aerosol

Solo Removal and Cleaning

F/CH/SOLO/200 Removal tool

Solo Telescopic Poles

F/CH/SOLO/100 Telescopic pole (6m reach)
F/CH/SOLO/101 Extension pole (1.13m length)
F/CH/SOLO/108 Telescopic pole (3.5m reach)

Solo Accessories

F/CH/SOLO/610 Carrybag (including pole bag)

Solo Testing Kits

F/CH/SOLO/811 Smoke kit 6m for testing and removing
F/CH/SOLO/812 Smoke kit 8.2m for testing and removing
F/CH/SOLO/814 Smoke/mains heat kit 6m for testing
F/CH/SOLO/822 Cordless – Smoke/heat kit 6m for testing
F/CH/SOLO/823 Cordless – Smoke/heat kit 9m for testing

The Knowledge

Fire Detection and Fire Alarm Systems for Buildings

The Regulatory Reform (Fire Safety) Order (FSO) Became Law On 1 October 2006.

Legally You Must Comply! What Is The FSO?

Fire authorities no longer issue fire certificates and those previously in force now have no legal status. The Regulatory Reform (Fire Safety) Order (FSO) replaced most fire safety legislation with one new Order.

It means that any person who has some level of control in premises (normally the employer) must take steps to reduce the risk from fire, consider how to contain a fire should one break out and then also make sure people can safely escape if there is a fire.

- All fire alarm designs should be based on an assessment of the risk
- All Fire Risk Assessments should be carried out by a competent person
- Fire Risk assessments must be reviewed regularly

What Constitutes a Fire Risk Assessment and Its Outcome?

- Identifying fire hazards such as sources of ignition, fuel or oxygen
- Identifying all people at risk in and around the premises
- Evaluating the risk of a fire starting and the risk to people from a fire
- Removing or reducing fire hazards or risks to people from a fire
- Protecting people by providing fire precautions
- Recording the significant findings
- Preparing an emergency plan
- Informing and instructing any relevant people, including visitors
- Providing training for staff
- Reviewing the fire risk assessment regularly and make changes where necessary
- Keeping accurate fire risk assessment records

Where Does The Order Apply?

Virtually all premises and nearly every type of building structure and certain open spaces.

If you would like to find out more about how Apollo products can help you comply with the FSO please contact us on **023 9249 2412** or visit our website on www.apollo-fire.co.uk

This guide is intended to be an aid to designers and installers of fire detection systems. It is not to be used as a substitute for BS 5839-1 which should be read in full.

In order to help identify the relevant sections, each diagram includes a reference to BS 5839-1.

Designer Responsibilities

Notes:

(1) BS 5839-1 recommends that a fire detection system is designed by a competent person, who takes responsibility for completing the design and signing off a 'Design certificate'. This should not be confused with other certificates relating to Installation.

(2) If the contract allows, it is suggested that the Designer witnesses testing of the completed system to ensure the original design is still appropriate; the Design certificate can then be completed after any amendments are included.

The following recommendations should be followed when designing a fire detection system:

- Establish the level of fire protection suitable to the premises type in agreement with the owner/occupier and relevant interested parties
- Document any reasons to justify variation of design
- Identify detection and alarm zones
- Raise specification document and building plan to show location of:
 - All manual call points
 - All types of detector
 - All sounders and visual alarms
 - Any other items of detection
- Cable specification for each circuit
- State the System and equipment to be used
- Details of other equipment that may be linked into the system to be specified
- Measures incorporated to limit false alarms
- Provide a fire plan or cause and effect chart
- Design certificate signed



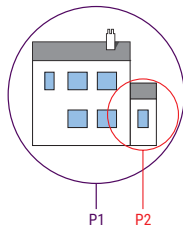
We are proud to offer CPD training for both Fire Detection and Emergency Lighting.

The Knowledge

Fire Alarm and Detection Systems are categorised in the following way:

Property Protection Fire Systems

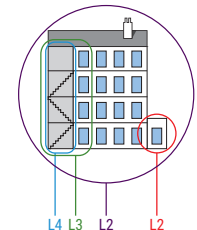
- P** AFD designed primarily to protect property
- P1** AFD installed throughout all areas
- P2** AFD installed only in defined areas



AFD - Automatic Fire Detection

Life Protection Fire Systems

- L** AFD designed to primarily protect human life
- L1** AFD installed throughout all areas
- L2** AFD installed in defined areas in addition to L3
- L3** AFD installed in escape routes and rooms or areas opening onto these routes
- L4** AFD installed in escape routes comprising circulation area and spaces such as corridors and stairways
- L5** A non-prescriptive system in which protected area(s) and/or the location of detectors is designed to satisfy a specific fire risk objective (other than that of L1 to L4)
- M** System design to be operated manually (no AFD)



Detection Zones

A detection zone should cover no more than 1 storey, unless total floor area is less than 300m². Voids in the same fire compartment should be included in the same floor zone. The maximum floor area of a zone should not be greater than 2,000m², except for some large open plan areas that incorporate manual call points only, which can be extended to 10,000m².

The maximum search distance for the fire fighters to see the seat of the fire within a zone should not exceed 60m assuming the route taken is the worst possible option. Vertical structures like stairwells, lift shafts etc., should be considered as separate zones.

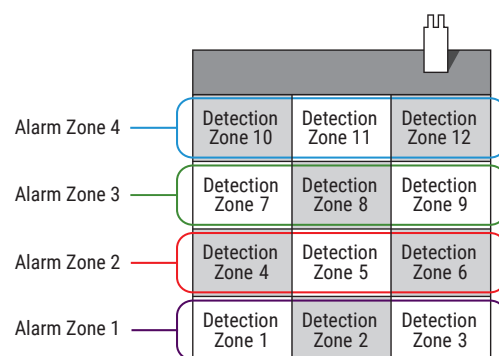
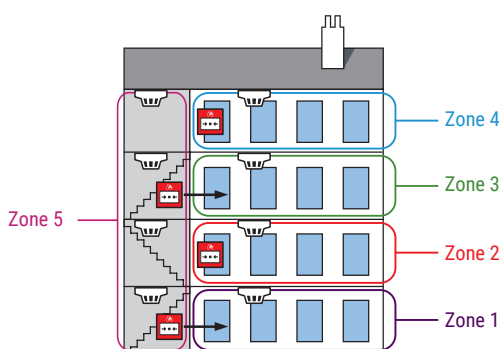
A manual call point within a staircase should be connected to the zone associated with that floor and ideally be mounted on the accommodation side of the corridor exit. Automatic sensors on the stairwell remain as part of the stairwell detection zone.

Alarm Zones

An alarm zone is clearly defined within the standard but generally is an area of the building coinciding with the fire compartment boundaries. There must be a clear break between these alarm zones to ensure alert and evacuation messages are not overheard from adjacent areas.

The only other criteria is that an alarm zone may consist of a number of detection zones but not vice versa.

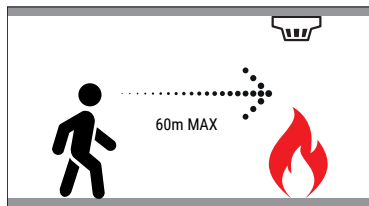
Alarm zones are required when phased or staged evacuation is required. It is therefore important that care should be taken to ensure only one message is heard at any one time particularly where two alarm zones are attached.



Section 2

Clause 12.3.b

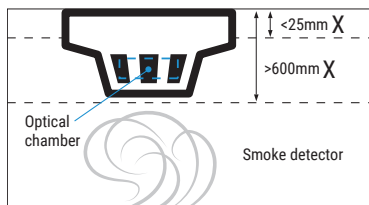
Search Distances



A person searching a zone for a fire in a non-addressable fire system should not have to travel more than 60m to identify the source of a fire.

Clause 21.2.4.a

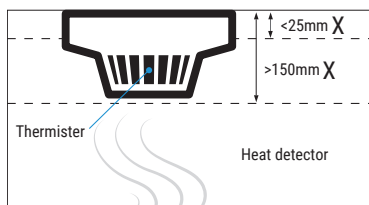
Smoke Detector Ceiling Mounting



The sensing element of a smoke detection device (optical smoke or ionisation chamber) should not be less than 25mm below ceiling, and not greater than 600mm below ceiling.

Clause 21.2.4.b

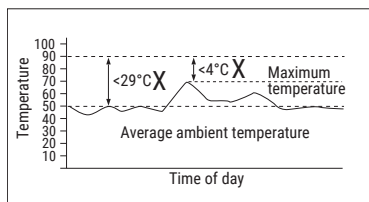
Heat Detector Ceiling Mounting



The sensing element of a heat detection device should not be less than 25mm below ceiling, and not greater than 150mm below ceiling.

Clause 33.2.3

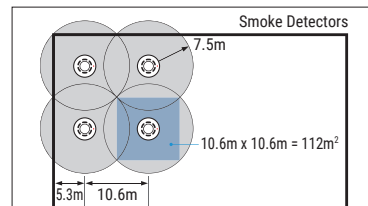
Heat Detector Ceiling Mounting



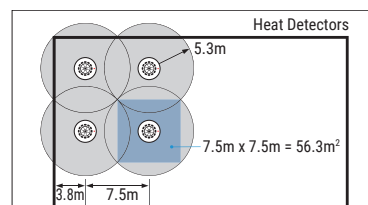
The minimum static response to heat devices should not be less than 29°C above the average ambient temperature, or less than 4°C above the highest temperature the device can expect to experience.

Clauses 21.2 and 21.8

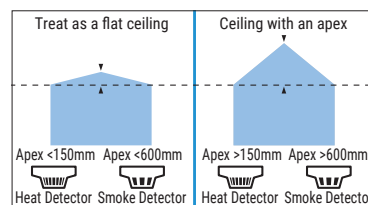
Point Detector Coverage



When mounted on a flat ceiling, smoke detection devices have an individual coverage of 7.5m radius. However these radii must overlap to ensure there are no 'blind spots'. Therefore individual coverage can be represented by a square measuring 10.6m x 10.6m giving an actual area coverage of 112m² per device.



When mounted on a flat ceiling, heat detection devices have an individual coverage of 5.3m radius. However these radii must overlap to ensure there are no 'blind spots'. Therefore individual coverage can be represented by a square measuring 7.5m x 7.5m giving an actual area coverage of 56.3m² per device.



For ceilings that feature an apex: as long as the height of the apex from the rest of the ceiling is less than 150mm for heat detectors or less than 600mm for smoke detectors, then these can be treated the same as flat ceilings. For higher apices, a device should be installed at the highest point. The distance to adjacent devices can be increased by 1% per degree of angle of the roof up to a maximum of 25%.

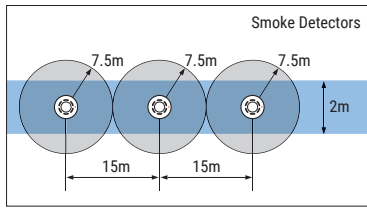
Response	All Categories of System	
Max Height	General Area	10% of Area
Heat RoR	9m	10.5m
Heat Fixed	7.5m	10.5m
Smoke/CO point	10.5m	12.5m
Optical Beam Normal Sensitivity	25m	28m
Optical Beam enhanced Sensitivity	40m*	43m*
ASD General Limit	10.5m	12.5m
ASD Class C with at least 5 holes	15m	18m
ASD Class C with at least 15 holes	25m	28m
ASD Class B with at least 15 holes	40m†	43m†

* Supplemented detection recommended unless risk of stratification is minimal.

† Multi-level detection recommended unless risk of stratification is minimal.

The Knowledge

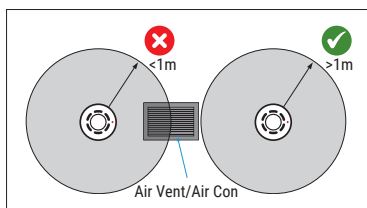
Point Detector Coverage Continued



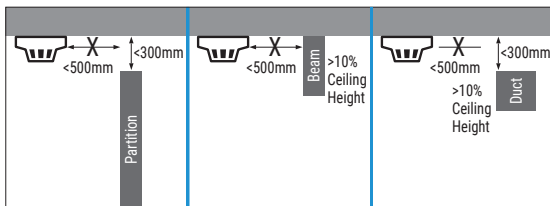
In corridors less than 2m wide the horizontal spacing of detectors may be increased, the areas of coverage need not overlap as in the case of a room. Any corridor over 2m wide is deemed a room and device spacing should follow the standard for rooms.

Clauses 21.1 and 21.2

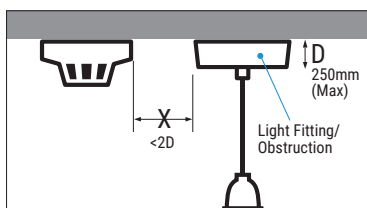
Air Vents and Ceiling Obstruction



Do not site detectors less than 1 m from air supply points or air circulating units.

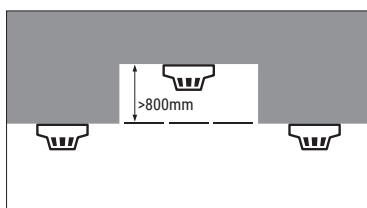


A device should not be mounted within 500mm of any obstruction. If the top of a solid partition is less than 300mm from ceiling then treat it as a wall. Similarly, ceiling obstructions such as beams should be treated as walls if deeper than 10% of the ceiling height. Air handling ducts with less than a 300mm gap to ceiling and standing down more than 10% of the ceiling height, should also be treated as a wall.



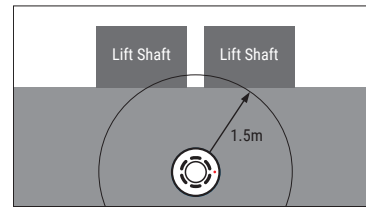
Never mount devices closer than twice the depth of light fittings or other obstructions on the ceiling.

Ceiling Voids

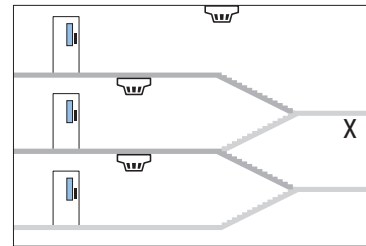


Voids less than 800mm in height need not have independent coverage, unless fire or smoke is able to spread from one area to another through the void or risk assessment shows AFD (Automatic Fire Detection) to be necessary.

Lifts, Risers and Stairways



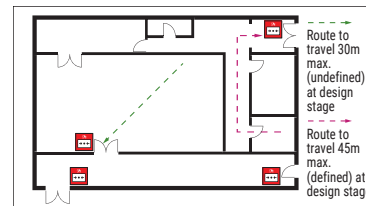
Vertical shafts like lifts, risers and open stairways should have a device mounted within 1.5m of any opening. (This is not necessary for enclosed stairways, because as noted below, there are detectors on every landing within the stairway).



Enclosed stairways should have a detector at the top of the stairway and on each main landing.

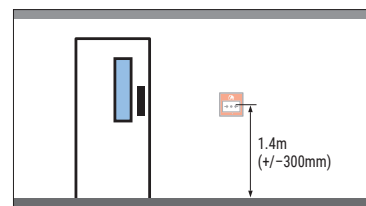
Clause 19

Manual Call Points



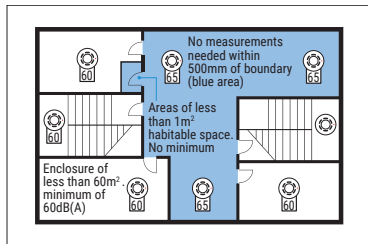
A person should not have to travel more than 45m to reach a Manual Call Point, for a defined escape route.

For an undefined route a person should not have to travel more than 30m to reach a Manual Call Point.

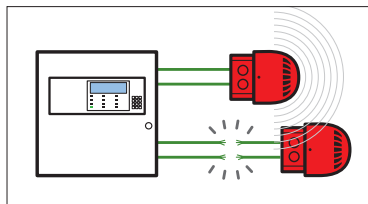


The centre of the element of the manual call point should be positioned 1.4m (+/-300mm) from floor level. Unless a wheelchair user is likely to be the first person to raise the alarm. (Between 800-1200mm according to Doc. M. + Equality Act). BS 5839 states transparent hinged covers should be fitted to all manual call points.

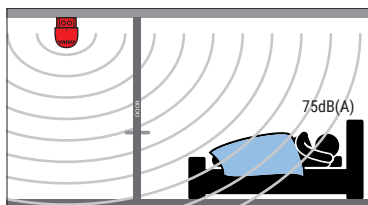
Clause 15 AV Devices



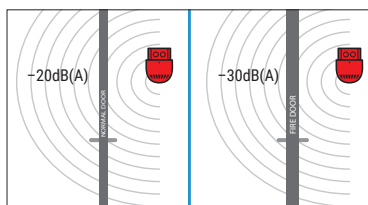
The minimum sound level should be 65 dB(A) or 5 dB(A) above a background noise which is louder than 60 dB(A) (if lasting more than 30 seconds) and at a frequency of between 500 Hz and 1000 Hz. The maximum sound level should not be greater than 120 dB(A) at any normally accessible point. May be reduced to 60 dB(A) in stairways, enclosures up to 60m² and specific points of limited extent. If using fire alarm as a lockdown alarm this must be a distinctly different tone to that of the fire alarm.



Sounder device cabling should be arranged so that in the event of a fault at least one sounder will remain operational during a fire condition.

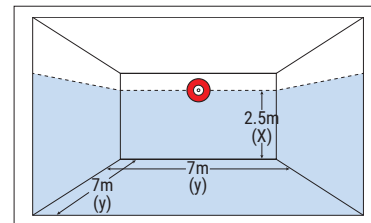


For areas where people are sleeping, sounder devices should produce a minimum 75 dB(A) at the bed-head with all doors shut. In buildings providing sleeping accommodation for deaf or people with impaired hearing, bedrooms should have both audible and visual alarms. (Note: Visual Alarm Devices are not intended to wake sleeping persons).



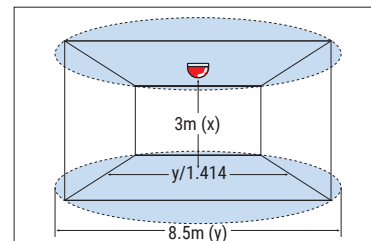
Decibel loss occurs through doors: approximately -20 dB(A) through a normal door, and approximately -30 dB(A) through a fire door. Unless a sounder is installed in a bedroom, it is unlikely that 75 dB(A) will be achieved.

Clause 16 Visual Alarm Devices



The coverage volume code is presented as W-x-y.

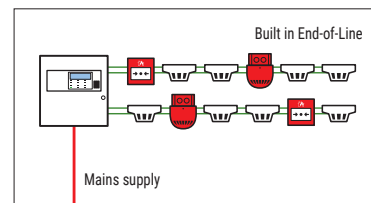
If the wall mounted Visual Alarm Device (VAD) is installed at the height of 2.5m from floor level, and the coverage is 7m x 7m square, then it would be referred to as W-2.5-7.



The coverage volume code is presented as C-x-y.

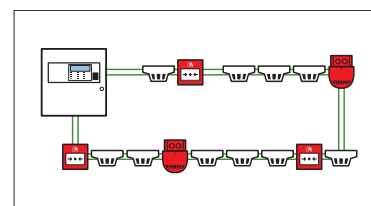
If the ceiling mounted Visual Alarm Device (VAD) is installed at the height of 3m from floor level, and the coverage diameter is 8.5m, then it would be referred to as C-3-8.5.

Clause 11.2 and 25.9 Cabling Requirements



Fire resistant cabling is now required within the whole fire alarm system including the mains supply cables. The use of non-fire resisting cables whether mechanically protected by fire-resisting construction or not, will no longer comply with BS 5839-1. All detection, alarm and mains supply FR cables should be red in colour.

Short Circuit Isolators



Short circuit isolators limit the effect of one fault to 2000m² and to a single storey of the building. '2 simultaneous faults on a circuit should not disable protection within an area greater than 10,000m².

The Knowledge

Installation Considerations and Key Points

- Suitable means of local safe isolation of the low voltage supply circuit for the power supply and control equipment must be provided (see Section 2 Clause 24.1.4 and also Section 6 Clause 4.3).
- All cables to be fire resistant with a minimum cross-sectional area of 1 mm² (see Section 2 Clause 25.7).
- All joints 'other than those within the system components' to be fire resistant. Junction boxes to be labelled 'FIRE ALARM' (see Section 2 Clause 35.4).
- Enhanced cable to be used where more than 4 zones of phased evacuation required, in multi storey systems, hospitals (un-sprinklered over 30m) or risk assessment requires enhanced cable (see Section 2 Clause 35.4).
- Cable using trunking as a means of containment must be clipped using fire resistant supports WITHIN THE TRUNKING (see Section 2 Clause 35.3 Note 1).
- Fire Alarm control panel(s) are installed at a location appropriate for staff and firefighters (see Section 2 Clause 22).
- Manual call points are required at all exits to the open air – whether or not the exits are specifically designed to be fire exits unless, for example, the exits lead to an enclosed courtyard from which there is no escape (see Section 2 Clause 19.4).
- CO fire detectors should be spaced as per smoke detectors, but cannot be used without smoke detectors on escape routes (see Section 2 Clause 20c).
- Multi-sensors, incorporating smoke detection should be spaced as smoke detectors, if used as individual types, for example heat in the day and smoke at night then detectors are spaced in this case as per heat detectors (see Section 2 Clause 20e).
- Linear heat detecting cables should conform to BS EN 54-22 or BS EN 54-28 as appropriate (see Section 2 Clause 10.13).
- Unusual ceilings: Cellular ceiling, perforated ceilings or ceilings with closely spaced beams have special spacing and installation requirements (see Section 2 Clause 21.2.13 Fig 16, 17 and Table 1).
- Bells and Electronic sounders cannot be mixed (see Section 2 Clause 15.1.5).
- Sound levels can be reduced to 60 dB(A) in stairs, small cellular rooms or enclosures of no more than APPROXIMATELY 60m². Bedhead levels remains 75 dB(A) (see Section 2 Clause 15.1.1 a).
- Geographical Zone plan required at all CIE and Repeater panel locations on site. Not providing this cannot be listed as a Variation (see Section 2 Clause 22).
- Where applicable, all areas of the building have been fitted with Sounders and Visual Alarm/Tactile Devices in areas of high ambient noise, or where deaf people or people with impaired hearing may be alone or isolated from others i.e. bedrooms and sanitary facilities (see Section 2 Clauses 17.1 and 17.2).
- A minimum of one sounder is required in each fire compartment (see Section 2 Clause 15.1.10).
- Full documentation required, test results as fitted drawings etc. (see Section 5 Clause 38.1).
- An installation certificate will be required (see Section 5 Clause 39.1).
- Ensure that the installation wiring complies with the BS 5839-1 requirements and the latest edition of the IET Electrical Regulations.
- If an insulation resistance test is carried out, ensure that the field devices are disconnected. Make sure that the loop cables are grounded before field devices are reconnected.
- Once a detector has been fitted, ensure that the dust cap stays on until the system has been commissioned and the environment is clean.

Documentation

On completion of commissioning and user training all documentation will have to be collected and handed to the client or their representative.

This will include:

- Design, Installation and Commissioning certificates
- Cable and insulation resistance test records
- "As fitted" drawings of the final installation, including cable run details
- Product manuals and user instructions System log book
- A copy of the fire plan documentation against which the commissioning engineer programmed the system.
- The designer's specification and a written list of agreed Variations

Installation and Handover Checklist

- 1 The system complies with the original specification/design.
- 2 Any changes to original specification/design have been referred to the system designer for approval.
- 3 System has been installed to meet recommendations of category L1, L2, L3, L4, L5, P1, P2, M.
- 4 Variations to the defined category have been identified and the schedule of variations agreed with the client.
- 5 Cables meet requirements for standard/enhanced/mixed.
- 6 Cables are segregated as required and suitably supported (no plastic clips, cable ties or trunking used as sole means of support).
- 7 Cables are mechanically protected as required.
- 8 Junction boxes are correctly labelled and identified on drawings. Connector blocks are fire resistant.
- 9 All cable insulation and continuity resistance measurements are logged.
- 10 All cable penetrations are sleeved and fire stopped.
- 11 Mains supply is dedicated, non-switched, correctly fused and labelled.
- 12 Mains supply is correctly identified at all distribution boards.
- 13 Standby battery verification has been carried out for all power supplies.
- 14 All batteries are clearly marked and labelled with date of installation.
- 15 Field wiring is labelled and correctly terminated in all control and ancillary equipment.
- 16 Isolators are fitted as appropriate, operate correctly and are marked on drawings.
- 17 There are a minimum of two sounder circuits installed.
- 18 Sound pressure levels have been checked and recorded and meet the minimum requirements.
- 19 Detector type and spacing is appropriate to the system category.
- 20 MCPs are located correctly and travel distance is appropriate to the system category.
- 21 Remote signalling has been checked for correct operation to Alarm Receiving Centre.
- 22 Zone plans have been fitted in all appropriate locations (adjacent to control equipment and repeaters) this must be a plan, a list does not suffice.
- 23 As fitted drawings are complete and have been updated where required, including cable size and routing.
- 24 Log book and operating instructions have been issued to the responsible person.
- 25 The premises management have been adequately trained in the use of the fire alarm system.

Quick Guide

A Guide to Building Regulations, IP Ratings, and Kelvin Light Scale

Building Regulations

To ensure specified luminaires meet the requirements of the current building regulations it is important to consider the legislation contained within the Building Regulations. The most relevant of these are:

Approved Document L

- Approved Document L1A: Conservation of fuel and power (New Dwellings) (2006 Edition)
- Approved Document L1B: Conservation of fuel and power (Existing Dwellings) (2006 Edition)
- Approved Document L2A: Conservation of fuel and power (New buildings other than dwellings) (2006 Edition)
- Approved Document L2B: Conservation of fuel and power (Existing buildings other than dwellings) (2006 Edition)

Part L requires that energy efficient lighting is installed in both domestic and non-domestic dwellings, existing, new & refurbished (over 100m²).

Part L gives design information for the following (non-domestic dwellings):

- Selection of lamp types
- Effective use of daylight
- Control gear and power factor correction
- Use of lighting controls
- Luminaire efficiency

Approved Document B

- Approved Document B (Fire safety) – Volume 1: Dwellinghouses (2006 Edition)
- Approved Document B – Volume 2: Buildings other than Dwellinghouses (2006 Edition)

Part B deals with the fire safety requirements for emergency lights and the use of thermoplastic materials.

It is our recommendation that reference be made to the latest version of the Approved Documents. Full details can be found on: www.planningportal.gov.uk

IP Ratings

The International Protection code, commonly known as the Ingress Protection code (IP) indicates the protection afforded by an enclosure against the ingress of foreign (solid) bodies and ingress of moisture and liquids. The IP rating also classifies the protection given by an enclosure against touching live or moving parts.

The IP rating is given by the use of two numbers.

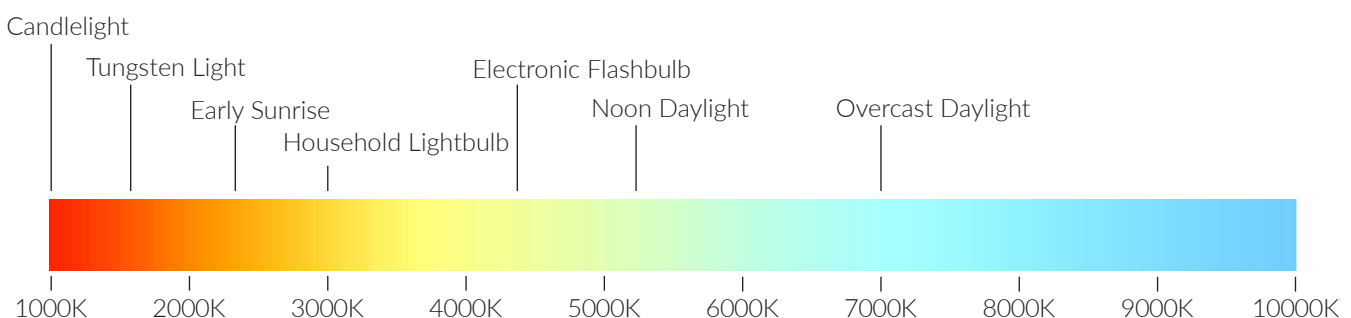
First Digit - Protection Against Ingress of Solid Objects

0	No protection
1	Protection against large sized bodies such as hands
2	Protection against medium sized bodies such as fingers
3	Protection against small sized bodies 2.5mm dia. or larger such as tools and wires
4	Protection against very small sized bodies 1mm dia. or greater
5	Protection against harmful deposits of dust (Dust proof)
6	Complete protection against deposits of dust (Dust tight)

Second Digit - Protection Against Ingress of Liquids

0	No protection
1	Protection against vertically falling drops of water
2	Protection against drops of water up to 15° from the vertical
3	Protection against rain falling up to 60° from the vertical
4	Protection against splashed water from any angle
5	Protection against jets of water from any angle
6	Protection against water from heavy seas
7	Protection against immersion for a defined period
8	Protection against immersion for an indefinite period

Kelvin Colour Temperature Scale







Emergency Lighting

Emergency Lighting	64
Commercial Lighting	97
Central Battery Units and Static Inverters	102
The Knowledge	108

Emergency Lighting

Channel SmartTest	65
Bulkheads	66
Exit Signage	73
Twinspot	80
Downlights	84
LED Track Lighting	90
DALI Emergency Light Test System	92
Wireless DALI Emergency Light Test System	94
A Guide to DALI Controls	96
Emergency Light Test Switch	96

CHANNEL SmartTest

SIMPLE IS SMARTER

Emergency light remote testing at the touch of a button.

At Channel, we're constantly working to give our customers the edge. With our unique system, any number of our compatible emergency lights can be individually tested with just one universal remote tester, saving time and money.



Minimises Disruption

No need to switch off local lighting circuit during monthly 5-second and annual 3-hour tests



No hanging around for test to finish

Any faults indicated by flashing red LED



Easy Access

Fitting tested from up to 7m



Saves time and money

No need for a key switch

Product Code
E/EM/RC

Description
Optional Remote Control

AS SIMPLE AS...

1

Point the Remote Tester at the compatible emergency fitting.
1 click for the monthly 5-second test.

2

2 clicks for the Annual 3 hour test.
(One further click aborts test if necessary)

3

Any issues will be indicated by a flashing red LED until the fault is rectified and the light retested.



LOOK FOR THE SYMBOL

SmartTest is compatible with the following products:

Meteor Maxi™ LED	67
Brook	68
Alpine Slim	72
Alpine™	72
5-in-1 Emergency Exit Sign	76
Grove™ Twinspot - IP65	80
Azelio Surface	84
Azelio Recessed	85
Glade 5W	87

Meteor™ LED



Overview

This popular fitting is now available with a self-test option and now benefits from a LiFePo4 long life lithium battery.

Weighing in at only 360g and measuring 260x100x61mm the Meteor LED fitting has a lumen output of 105lm in emergency mode from a 10 LED array, a hinged gear tray allows for easy installation.

The unit boasts an aesthetically pleasing design and is virtually maintenance free. The biggest success, as with the majority of our LED products, is that it operates on 20% of the power that a standard 8W fluorescent would consume.

Convert your Meteor Bulkhead fitting into an attractive emergency exit sign with a blade and diffuser kit.



E/PIC/ME/LED/BLADE
Bulkhead shown with NEW Blade and Diffuser Kit

Features

- Uses typically 80% less power than that of an 8W fluorescent
- Maintained or non-maintained 3 hour emergency backup
- Weight: 0.36Kg
- Compliance: BS EN 60598-2-22 and other relevant standards
- Other accessories: Semi-recessing kit and diffuser with legend
- Dimensions: 100mm (W) 260mm (L) 61mm (D)
- Cut out dimensions: 230mm (L) 85mm (W)

Photometric Spacing Data

Meteor	Transverse to Wall	Transverse to Transverse	Axial to Axial	Axial to Wall
Mounting Height	1 Lux	1 Lux	1 Lux	1 Lux
2.5m	3.2m	6.3m	5.9m	3.2m
4.0m	1.6m	5.2m	5.5m	1.6m

Meteor™ LED

- E/ME/M3/LED/IP65/LI Meteor low profile LED bulkhead complete with 10 LED array, IP65 version
- E/ME/M3/LED/IP65/ST/LI Meteor IP65 low profile LED Bulkhead complete with 10 LED array, self test version

Accessories

- E/ME/LED/SRK/1 Meteor LED semi-recessing kit
- E/PIC/ME/LED/PACK Meteor LED sticker pictogram pack – (AD, AL, AR and AU) – Viewing distance 20m
- E/PIC/ME/LED/BLADE Meteor LED Blade and Diffuser kit (Achieving IP65 rating) Light fitting not included – Viewing distance 20m

Replacement Parts

- B/BATT/METEOR/LED Meteor LED battery – 3 cell stick AA NiCd 800Mah – For use with NiCd Version
- B/BATT/LI/Type1 LiFePo4 3.2v 1000mAh

Overview

The Meteor Maxi benefits from higher lumen output and a larger housing, making it a true 8W replacement.

Now with optional remote control and a LiFePo4 long life lithium battery, the Meteor Maxi LED fitting has an emergency lumen output of 190lm in emergency mode from a 10 LED array. A hinged gear tray allows for easy installation.

The unit boasts an aesthetically pleasing design and is virtually maintenance free. The biggest success, as with the majority of our LED products, is that it operates on 20% of the power that a standard 8W fluorescent would consume.

Features

- Now with 'Manual', 'SmartTest' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Uses typically 80% less power than that of an 8W fluorescent
- Maintained or non-maintained 3 hour emergency backup
- Compliance: BS EN 60598-2-22 and other relevant standards
- Other accessories: Semi-recessing kit and diffuser with legend
- Now with optional remote control
- Complete with exit legend kit
- Incorporates remote control testing facility
- Allows testing without disruption
- Universal remote control with approx range of 10m
- 31m viewing distance
- Dimensions: 110mm (W) 352mm (L) 64mm (D)
- Dimensions: Blade 160mm (H) + fitting



Photometric Spacing Data (1 Lux)

Meteor Maxi	 Transverse to Wall		 Transverse to Transverse		 Axial to Axial		 Axial to Wall	
	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux
Mounting Height								
2.5m	3.3m	3.25m	6.6m	6.5m	4.9m	4.35m	2.45m	2.2m
4.0m	4.0m	3.6m	8.0m	7.2m	6.0m	4.55m	3.0m	2.3m

Meteor™ Maxi LED

EMMX01	Meteor Maxi LED 3 Hour Maintained Emergency Light C/W Remote Control Facility
E/EM/RC	Optional Remote Control
E/BEZ/MM	Meteor Maxi Semi Recessing Bezel
B/BATT/MM	Meteor Maxi LED Battery 3.6V 1500mAH with connector – For use with NiCd Version
E/PIC/ME/LED/PACK	Meteor Maxi Pictogram Pack – (AD, AL, AR and AU)
E/MM/BLADE	Meteor Maxi Blade kit (IP65 rated, 31m viewing distance, full legend pack supplied)
B/BATT/LI/TyPE4	Meteor Maxi Battery – LiFePo4 3.2v 1500mAh

Brook



Overview

The Brook emergency light presents an ideal solution for industrial or commercial applications. With a remarkable 372 and 244Lm for seamless adaptation to your specific needs, it incorporates cutting-edge LED and battery technology for a modern, high-performance solution with extended lifetimes. With an IP65 rating, this efficient emergency bulkhead is both durable and weather-protected, expanding its suitability for a wide range of applications.



Features

- Now with 'Manual', 'SmartTest' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Uses typically 80% less power than that of an 8W fluorescent
- Material: Polycarbonate diffuser and body
- Maintained or non-maintained 3 hour emergency backup
- Weight: 0.95Kg
- Compliance: BS EN 60598-2-22 and other relevant standards
- Other accessories: Semi-recessing bezel available
- Dimensions: 115mm (W) 350mm (L) 75mm (D)
- Cut out dimensions for bezel: 100mm – 337mm

Photometric Spacing Data

Brook	Transverse to Wall	Transverse to Transverse	Axial to Axial	Axial to Wall
Mounting Height	1 Lux	1 Lux	1 Lux	1 Lux
2.5m	3.7m	8.8m	8.1m	3.4m
4.0m	4.3m	10.2m	10.3m	4.3m

Brook

- EBRK01 Brook Bulkhead Range with LiFePo4 battery (Manual, SmartTest and Self-test)
- E/BEZ/BK/1 Brook semi-recessing bezel
- E/PIC/ME/LED/PACK Brook pictogram pack – AD/AL/AR/AU
- E/EM/RC Optional Remote Control

Replacement Parts

- B/BATT/BROOK/2 Brook battery – 3 cell NiCd – For use with NiCd Version
- B/BATT/LI/TYPE2 LiFePo4 3.2v 3000mAh

LOOKING FOR A HIGHER OUTPUT FITTING?

Please see **Grove Ultra** and **Stratos Ultra**

Grove Ultra
page 81



Stratos Ultra
page 71



Overview

IP65 weatherproof rated and suitable for both internal and external environments, the SOLENT LED Bulkhead is designed to provide high light output in the event of a lighting power failure.

Features

- Now with 'Manual' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Maintained/Non-maintained operation
- Can be ceiling or wall mounted
- Comes with Pictogram Pack
- Sleek and minimalistic design with polycarbonate construction
- Lightweight and easy to install
- Semi-recessing kit available
- Low environmental impact and running costs
- Meets BS EN 60598-1:2008 and other relevant standards
- 154lm emergency output
- Hinged screwless gear tray
- 16mm or 20mm conduit entry



Photometric Spacing Data

Solent LED	Transverse to Wall	Transverse to Transverse	Axial to Axial	Axial to Wall
Mounting Height	1 Lux	1 Lux	1 Lux	1 Lux
2.5m	3.6m	7.9m	6.9m	2.9m
4.0m	3.6m	10.0m	8.6m	2.9m

Light Source	White LED
IP Rating	IP65
Emergency Duration	3 hours (minimum)
Lumen Output	154lm Maintained and Emergency output (6000K)
Mains Current (max.)	50mA (max) 35mA quiescent (3W)
Recharge Period	Less than 24 Hours
Charge Indicator	Integral green LED Red LED fault indicator
Changeover Voltage	As per requirements of BS EN 60598-1:2008
Battery	LiFePo4 3.2v 1500mAh

Solent

ESOL01 Solent 3W IP65 Emergency Bulkhead
 E/BEZ/SOL Solent Semi Flushing Bezel

Stratos



Overview

The Stratos range of slave fittings for central battery and static inverter units is available in 24V, 50V, 110V and 230V AC/DC versions. The Stratos range offers a slimline profile in a contemporary design. Each light benefits from an IP65 housing and comes with a legend pack as standard.

Features

- Uses typically 80% less power than that of an 8W fluorescent
- Lumen output: 193-235lm
- Maintained or non-maintained 3 hour emergency backup
- Compliance: BS EN 60598-2-22 and other relevant standards
- Dimensions: 145mm (W) 265mm (L) 40mm (D), Blade 145mm (H)

Stratos

E/STRATOS/24	Stratos 7x LED – 1W, IP65, 24V AC/DC slave bulkhead C/W exit sign pictogram (1W 198lm IP65)
E/STRATOS/50	Stratos 7x LED – 1W, IP65, 50V AC/DC slave bulkhead C/W exit sign pictogram (1W 198lm IP65)
E/STRATOS/110	Stratos 7x LED – 1W, IP65, 110V AC/DC slave bulkhead C/W exit sign pictogram (1W 198lm IP65)
E/STRATOS/230	Stratos 7x LED – 1W, IP65, 230V AC/DC slave bulkhead C/W exit sign pictogram (1W 198lm IP65)
E/STRATOS/M3	Stratos 7x LED – 1W, IP65, 3 hr maintained bulkhead C/W exit sign pictogram (1W 198lm maintained/129lm Emergency IP65)
E/STRATOS/M3/2W	Stratos 7x LED – 2W, IP65, 3 hr maintained bulkhead C/W exit sign pictogram (2W 235lm maintained/238lm Emergency IP65)
E/STRATOS/HI	Stratos High output 2xLED – 5W 210/250V AC 50/60hz (522lm)
E/STRATOS/COLD	Stratos for temp range -20°C to +40°C – 214 LED, 2W, 210/25V AC, 50/60hz; 186/254 V DC
E/STRATOS/REC/KIT	Stratos Semi Recessing Kit
E/STRATOS/PIC/KIT	Stratos Hanging Blade legend C/W exit sign pictogram



Stratos



Drop Down Blade



Legend



Cold



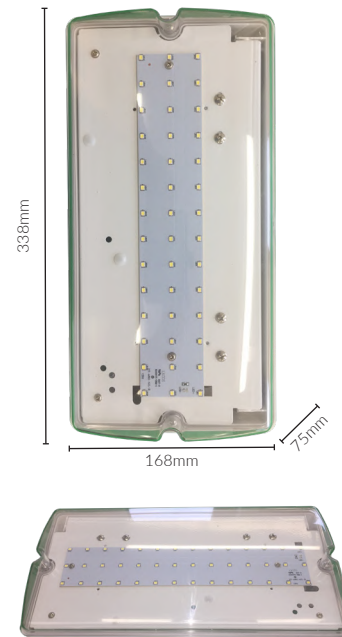
High Output

Overview

With an ultra high output (1500lm), this emergency light is ideal for high risk task lighting or high level mounting applications. The Stratos Ultra offers a stylish solution to meet the higher lighting level required in BS 5266:2016. It gives amazing spacing even at very high mounting heights.

Features

- Now with both 'Manual' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Approximately 15x the light output of a typical LED bulkhead
- Maintained or non-maintained operation
- Polycarbonate construction with clear diffuser
- Hinged gear tray for easy installation
- Cable entry: rear, end and side of fitting
- Easy to install
- Low environmental impact
- Low running costs and low maintenance
- Meets BS EN 60598-2-22 and other relevant standards



Bulkheads

Photometric Spacing Data

Stratos Ultra	Transverse to Wall	Transverse to Transverse	Axial to Axial	Axial to Wall
Mounting Height	1 Lux	1 Lux	1 Lux	1 Lux
2.5m	3.8m	7.2m	6.4m	3.4m
4.0m	4.2m	7.3m	6.2m	3.2m

Light Source	42x SMD 2835 White LED
IP Rating	IP65
Emergency Duration	3 hours (minimum)
Lumen Output	1500lm Maintained and Emergency output (6000K)
Mains Current (Max.)	100mA (max.) 78mA quiescent (18W)
Recharge Period	Less than 24 Hours
Charge Indicator	Integral green LED
Changeover Voltage	As per requirements of BS EN 60598-1:2008
Battery	9.6V 4.5Ah Ni-Cd

Stratos Ultra

ESTU01 Stratos Ultra – High Power 3 Hr Maintained Emergency Bulkhead

Alpine Slim



Overview

The athletic younger brother of our Alpine fitting, this is a streamlined LED Emergency exit sign which like the original is IP20 rated and compatible with our unique Remote Control Testing system. This iteration is supplied complete with a full legend set and now benefits from a LiFePo4 long life lithium battery.



Features

- Now with 'Manual', 'SmartTest' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Maintained or Non-maintained 3 hour emergency back-up
- 5 downward pointing LEDs to illuminate exit door.
- Low environmental impact
- Minimal maintenance
- Meets BS EN 60598-2-22 and other relevant standards
- Lightweight and easy to install
- Light Source - SMT LED 4W
- Dimensions: 185mm (H) 317mm (W) 29mm (D)

Alpine Slim

EALSL1	Alpine Slim 3Hr Exit Sign LiFePo4
E/EM/RC	Optional Remote Control
B/BATT/AL/SL/LI	LiFePo4 3.2v 1500mAh

Alpine™



Overview

The Alpine fitting, is an LED IP20 Emergency exit sign rated and compatible with our unique Remote Control Testing system and is supplied with an arrow up legend benefits from a LiFePo4 long life lithium battery. It also incorporates the 'Triple Test' option of standard test, Smart Test or automatic Self-Test' at the flick of a switch.



Features

- Now with 'Manual', 'SmartTest' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Uses typically 80% less power than that of an 8W fluorescent
- 1.9 LED equivalent to 8W fluorescent
- Material: White polycarbonate
- Maintained or non-maintained 3 hour emergency backup
- Viewing distance: 32m
- Compliance: BS EN 60598-2-22 and other relevant standards
- Incorporates remote control testing facility
- Allows testing without disruption
- Unit tests for seconds or 3 hours
- Universal remote control with approx range of 10m
- Dimensions: 210mm (H) 405mm (W) 55mm (D)

Alpine™

EALP01	Alpine LED exit sign (Comes complete with Arrow Up legend)
E/EM/RC	Optional Remote Control

Additional Legends

E/PIC/AL/AD	Alpine pictogram - arrow down
E/PIC/AL/AL	Alpine pictogram - arrow left
E/PIC/AL/AR	Alpine pictogram - arrow right
E/PIC/AL/AU	Alpine pictogram - arrow up

Replacement Parts

B/BATT/ALPINE	Alpine battery - 3 cell NiCd - For use with NiCd Version
B/BATT/TYPE1	LifePO4 3.2V 1500mAh

Alpine Large



Overview

The Alpine Large offers the option of self test emergency exit signs for larger areas. With viewing distances up to 60m the Alpine large is suitable for almost any application where longer viewing distances are required.

Features

- Brushed Stainless Steel Housing
- Maintained operation
- Metal body – Polycarbonate legend plate
- Self test technology
- Cable entry: rear, end and side of back box
- Low environmental impact
- Low running costs
- Low maintenance
- Meets BS EN 60598-2-22 and other relevant standards
- Dimensions: 334mm (H) 622mm (W) 39mm (D)

Light Source	SMT LED
IP Rating	IP20
Emergency Duration	3 hours (minimum)
Lumen Output	368lm
Mains Current (Max.)	150mA (max.) 40mA quiescent (3W)
Recharge Period	Less than 24 hours
Charge Indicator	Integral green charge and Red fault LED
Changeover Voltage	As per requirements of BS EN 60598-1:2008
Battery	3.6V 3000mAh Nickel Cadmium

Alpine Large

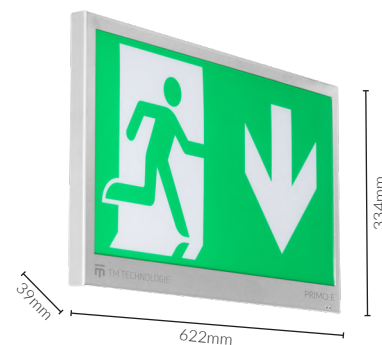
E/ALPINE/LARGE/60M Alpine Large maintained self-test exit sign 60m viewing distance

E/AL/LEG/LARGE/AU Alpine Large – legend – Arrow UP

E/AL/LEG/LARGE/AD Alpine Large – legend – Arrow DOWN

E/AL/LEG/LARGE/AL Alpine Large – legend – Arrow LEFT

E/AL/LEG/LARGE/AR Alpine Large – legend – Arrow RIGHT



Exitor



Overview

The Exitor utilises LED technology for low cost, high output, emergency illumination.

Features

- Now with both 'Manual' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Maintained or Non-maintained 3 hour emergency back-up
- Down light panel LEDs to illuminate exit door
- Low environmental impact
- Minimal maintenance
- Meets BS EN 60598-2-22 and other relevant standards
- Lightweight and easy to install, hinged cover
- Supplied with full legend set



Light Source	SMT LED 3W
Colour Temperature	5500K
IP Rating	IP20
Emergency Duration	3 hours (minimum)
Mains Voltage	230V 50Hz ± 10%
Mains Current	CHARGING 55-90mA - 35mA quiescent (3W)
Recharge Period	Less than 24 hour
Charge Indicator	Integral green LED
Changeover Voltage	As per the requirements of BS EN 60598-2-22
Temperature Range	5°C to 40°C
Weight	690gm
Battery	3.2v 1500mAh LiFePo4
Material and Finish	Polycarbonate construction, white/opal finish

Exitor

EEXT01 Exitor 3Hr Exit Sign 4 X Legends LiFePo4 C/W full legend set
 B/BATT/EX/LI LiFePo4 3.2v 1500mAh

Overview

The ultra slim-line Razor LED emergency exit sign range comes in hanging, recessed, flush mounted and wall/ceiling mounted versions. This compact range of LED exit signs comes complete with universal legend pack (other arrow options available).

Features

- Now with both 'Manual' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Uses typically 80% less power than that of an 8W fluorescent
- Material: Polycarbonate/Aluminium
- Maintained 3 hour emergency backup
- Weight: 0.8Kg
- Compliance: BS EN 60598-2-22 and other relevant standards
- Viewing Distance: 28 metres
- Comes complete with universal legend pack, and blank legend for single siding

Razor™

- ERZR01** Razor Hanging Recessed - LiFePo4 Battery - Maintained only
Comes complete with universal legend pack (arrows left/right, up/down, blank)
- ERZF01** Razor Flush - LiFePo4 Battery - Maintained only
Comes complete with universal legend pack (arrows left/right, up/down, blank)
- ERZH01** Razor Hanging Surface - LiFePo4 Battery - Maintained only
Comes complete with universal legend pack (arrows left/right, up/down, blank)
- ERZW01** Razor LED Exit Sign Wall/Ceiling - LiFePo4 Battery - Maintained only
Comes complete with universal legend pack (arrows left/right, up/down, blank)

Replacement Parts

- E/PIC/RZ/PACK** Razor Pictogram Set
- B/BATT/RZ/LI** LiFePo4 3.2v 1500mAh - For use in Wall, Recessed and Flush



E/RZ/M3/LED/H - Hanging



E/RZ/M3/LED/W - Wall/Ceiling



E/RZ/M3/LED/F - Recessed



E/RZ/M3/LED/R - Hanging Recessed

5-in-1 Exit Sign



Overview

The 5-in-1 emergency exit sign means you will always have the correct mounting method. The 5-in-1 is supplied with a full legend set and is further enhanced by our unique remote control testing option. It can be installed in switchable maintained or non-maintained modes.

Features

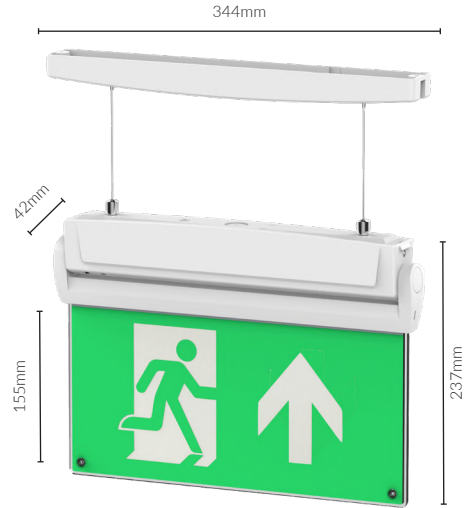
- Now with 'Manual', 'SmartTest' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Maintained or Non-maintained 3 hour emergency back-up
- 30m viewing distance
- Low environmental impact
- Minimal maintenance
- Meets BS EN 60598-2-22 and other relevant standards
- Full legend set included

5 Mounting options supplied as standard:

- Wall
- Ceiling
- Flag
- Recessed
- Suspended

5-in-1 Exit Sign

E5IN12	5-in-1 Emergency Exit Sign C/W Legends and five mounting option bracket
E/EM/RC	Remote Control Test Unit (Optional)
B/BATT/5IN1/LI	LiFePO4 3.2V 1500MaH



Suspended



Wall



Ceiling



Flag



Recessed



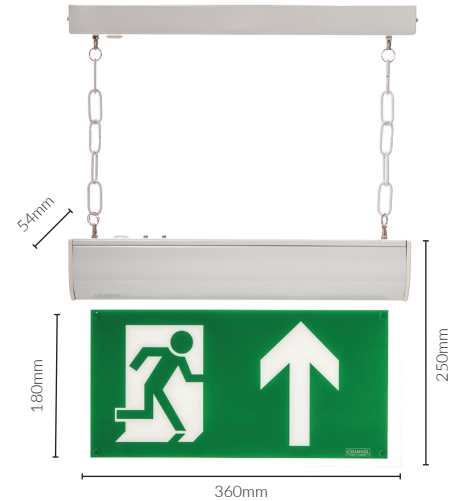
Overview

Our Forest self-test range offers an LED exit sign in white, brass, chrome and satin chrome finishes. It comes with 1M chains that can be shortened or extended to suit the installation requirements.

Other mounting options are available using the wall or flag mounting brackets.

Features

- Now with 'Manual' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Uses typically 80% less power than that of an 8W fluorescent
- Material: Polycarbonate/Aluminium
- Maintained 3 hour emergency backup
- Compliance: BS EN 60598-2-22 and other relevant standards
- Viewing Distance: 32m
- Comes complete with universal legend pack
- Comes with legend blank for single siding
- Self test as standard



Exit Signage

Forest

- EFOWH1 Forest LED 3Hr Maintained in White (Self-test complete with arrow up legend)
- EFOBR1 Forest LED 3Hr Maintained in Brass (Self-test complete with arrow up legend)
- EFOCH1 Forest LED 3Hr Maintained in Chrome (Self-test complete with arrow up legend)
- EFOSA1 Forest LED 3Hr Maintained in Satin (Self-test complete with arrow up legend)

Additional Legends

- S/LEG/FO/AU Double sided arrow up legend for Forest (insert only)
- S/LEG/FO/ALR Double sided arrow left/right for Forest (insert only)
- S/LEG/FO/AD Double sided arrow down legend for Forest (insert only)

Mounting Brackets

- E/CHFO/WMB/SI Forest Satin Silver Wall Mounting Bracket
- E/CHFO/WMB/WH Forest White Wall Mounting Bracket
- E/CHFO/WMB/BR Forest Brass Wall Mounting Bracket

Flag Mounting Brackets

- E/CHFO/FMB/WH Forest white flag mounting bracket
- E/CHFO/FMB/SI Forest satin silver flag mounting bracket
- E/CHFO/FMB/BR Forest brass flag mounting bracket

Replacement Parts

Please contact Channel



Overview

Our Vale self-test range offers an LED exit sign in white, brass and chrome finishes. It is an LED IP20 Emergency exit sign supplied with an arrow up legend and benefits from a LiFePo4 long life lithium battery. It also incorporates the 'Dual Test' option of standard test or automatic Self-Test' at the flick of a switch.



Features

- Now with 'Manual' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Uses typically 80% less power than that of an 8W fluorescent
- Material: White, brass and chrome
- Can be switched internally to maintained or non-maintained operation
- Viewing Distance: 25m
- Compliance: BS EN 60598-2-22 and other relevant standards
- Other accessories: Double sided pictograms available
- Dimensions: 230mm (H) 355mm (W) 115mm
- Cut out dimensions: (L) 335mm (W) 95mm (D) 60mm

Vale

- EVLWH1 Vale LED 3Hr Maintained in White (Self-test/Manual Test complete with legend arrow up)
- EVLSA1 Vale LED 3Hr Maintained in Brass (Self-test/Manual Test complete with legend arrow up)
- EVLCH1 Vale LED 3Hr Maintained in Chrome (Self-test/Manual Test complete with legend arrow up)

Additional Legends

- S/LEG/VL/AD Vale double sided pictograms arrow down legend (insert only)
- S/LEG/VL/ALR Vale double sided arrow pictograms left/right (insert only)
- S/LEG/VL/AU Vale legend arrow up insert pictograms only (insert only)

Overview

No power needed! With its self-luminous tritium power, easy installation and sleek design, the Betalux exit sign is revolutionising the emergency exit industry.

The Betalux is vandal resistant, waterproof, explosion proof and incapable of generating sparks, making it ideal in harsh and dangerous environments such as offshore oil rigs, mines, refineries, munitions plants and chemical factories.

Having no wires it is an ideal choice where architectural integrity is a priority, such as heritage sites, hotels, office buildings, theatres and restaurants.



Features

- Last up to 20 years based on initial brightness option
- Aluminium frame in polycarbonate window
- Dimensions: 218mm (H) 396mm (W) 28mm (D)

Illumination Source: Betalux tubes manufactured from borosilicate (hard) glass internally coated with zinc sulfide phosphor and filled with tritium gas. No electrical energy source required.

Brightness: Minimum initial brightness at time of manufacture of 0.15 foot lambert. Brightness variation between letters does not exceed ratio of 3 to 2.

Construction: Cased in high impact ABS fire-retardant plastic. Legend covers: red, green, or black. Frame colors: Aluminum, white or black.

Betalux

SP/BX/AU/DG/EN	Self Powered Exit Sign C/W Arrow Up Legend
SP/BX/AD/DG/EN	Self Powered Exit Sign C/W Arrow Down Legend
SP/BX/AL/DG/EN	Self Powered Exit Sign C/W Arrow Left Legend
SP/BX/AR/DG/EN	Self Powered Exit Sign C/W Arrow Right Legend

Grove™ Twinspot Range



Overview

We are excited to bring you vastly improved lumen outputs with our new generation Grove twinspot fittings! Both fittings now boast an impressive 720lm output!

The Grove range has new and improved head design and is also available as an IP65 Self Test Version.

Grove IP20



Features

- No of LEDs per head: 30 – Low maintenance
- Power consumption: 6W (emergency mode)
- Uses 50% power than that of a Tungsten halogen
- Material: White metal body/polycarbonate lamps and lenses
- IP20 – Non-maintained mode only
- Compliance: BS EN 60598-2-22 and other relevant standards
- Dimensions: 250mm (H) 300mm (W) 70mm (D)



Photometric Spacing Data

Grove IP20	↔ Transverse to Wall	↔ Transverse to Transverse
Mounting Height	1 Lux Back - Side - Front	1 Lux
2.5m	3.5m - 3.9m - 6.5m	10.0m
4.0m	4.0m - 4.5m - 7.0m	12.5m
6.0m	4.5m - 5.0m - 7.5m	13.5m
8.0m	5.0m - 5.5m - 8.5m	15.0m

Grove IP20

E/GR/NM3/LED/LI Grove Twin 15x LED floodlight, 3 hour non-maintained with white lamps

Replacement Parts

B/BATT/GR/LI 9.6V Battery Pack for Grove

Grove IP65



Features

- Now with 'Manual', 'SmartTest' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- No of LEDs per head: 30 – Low maintenance
- Uses 50% power than that of a Tungsten halogen
- Power consumption: 6W (emergency mode)
- Material: White polycarbonate body, lamps and lenses
- Compliance: BS EN 60598-2-22 and other relevant standards
- Dimensions: 279mm (H) 292mm (W) 68mm (D)



Photometric Spacing Data

Grove IP65	↔ Transverse to Wall	↔ Transverse to Transverse
Mounting Height	1 Lux Back - Side - Front	1 Lux
2.5m	3.9m - 4.9m - 8.0m	10.0m
4.0m	4.8m - 5.6m - 10.0m	13.0m
6.0m	5.5m - 7.0m - 12.5m	15.0m
8.0m	5.6m - 7.6m - 13.3m	15.3m

Grove IP65

EGRO01 Grove Twin 2x LED floodlight 3 hour non-maintained with white lamps. Remote control test version.

E/GR/NM3/LED/IP65/2/110 110V AC Grove Twinflood 3-hour non-maintained with white lamps. Remote control test version

Accessories

E/GR/POWERPACK/ 230v Remote Power Pack IP65/2

E/GR/H+B/LED/IP65/2 Remote Head and Box IP65

Replacement Parts

B/BATT/GR/LI 9.6V Battery Pack for Grove

Overview

An ultra high output emergency twinspace, the Grove Ultra is ideal for use in areas with high ceilings or areas requiring high emergency lux levels – The Grove Ultra gives 1800 lumen output in the emergency mode! It also offers a maintained operation.

Features

- Now with both 'Manual' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Approximately 3x the light output of a typical LED twinspace
- Maintained or non-maintained operation
- Polycarbonate body with metal lamps
- May be mounted in any orientation
- Cable entry: rear, end and side of fitting
- Easy to install
- Low environmental impact
- Low running costs
- Low maintenance
- Meets BS EN 60598-2-22 and other relevant standards



Twinspace

Photometric Spacing Data

Grove Ultra	Transverse Distance to Wall	Transverse Between Lights	Axial Distance to Opposite Lights
Mounting Height	1 Lux/1800lm	1 Lux/1800lm	1 Lux/1800lm
10.0m	12.0m	36.0m	35.0m
15.0m	12.0m	30.0m	38.0m
18.0m	12.0m	23.0m	29.0m

Light Source	2(5x3W) Osram
IP Rating	IP65
Emergency Duration	3 hours (minimum)
Mains Voltage	230V 50Hz ± 10%
Mains Current (Max.)	90mA (18W)
Recharge Period	Less than 24 hours
Charge Indicator	Integral green LED
Changeover Voltage	As per the requirements of BS EN 60598-2-22
Temperature Range	-5°C to 40°C
Weight	2.4Kg
Battery	9.6V 6000mAh LiFePo4

Grove Ultra

EGRU01 Grove Ultra High Power 3 Hr Emergency Twinspace

Replacement Parts

B/BATT/GR/ULTRA/LI 9.6V Battery Pack for Grove Ultra

GU32 - IP65



Overview

Our new GU32 IP65 twinflood offers a high performance, cost-effective emergency lighting in warehouses, factories, atriums, exterior escape routes and large open areas.

The GU32 IP65 gives 368lm in the emergency mode.

High specification optic design and performance allows increased spacing providing reduced cost.

Supplied with a hanging kit for downward pointing installation, an integral driver and LiFePo4 battery pack.



Features

- Now with both 'Manual' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Versatile multi-functional use, interior and exterior
- May be mounted in any orientation
- Tough polycarbonate housing
- Carrying handle for portability
- Non-maintained
- Minimal maintenance
- Easy installation
- RoHS compliant
- Excellent luminaire spacings



Spacing Data

GU32 - IP65	Transverse to Wall	Square Spacing	Axial to Wall (Front)	Axial to Wall (Back)
Mounting Height				
2.5m	2.5m	6.6m	5.0m	2.7m
4.0m	2.7m	8.7m	6.0m	2.9m
6.0m	3.4m	10m	7.2m	3.0m
8.0m	4.3m	11.2m	8.0m	4.0m

GU32 - IP65

EGU321 IP65 3 Hour Non-Maintained emergency twinflood with self test

Replacement Parts

B/BATT/GU32/LI LiFePO4 3.2V 5500mAh

GU32



Overview

The GU32 non-maintained IP20 LED twinspace is an ideal option for interior installations, providing up to three hours of emergency lighting thanks to the 1 x 3.6V, 4.5Ah battery. The polycarbonate body, in a white finish provides a robust exterior, perfect for warehouses, factories, open areas and corridors.

Features

- Non-maintained operation
- Polycarbonate construction
- May be mounted in any orientation
- Cable entry: rear, end and side of fitting
- Easy to install
- Low environmental impact
- Low running costs
- Low maintenance
- Meets BS EN 60598-2-22 and other relevant standards



Twinspace

Photometric Spacing Data

GU32	Transverse to Wall	Transverse to Transverse
Mounting Height	1 Lux	1 Lux
2.5m	3.0m	8.5m
4.0m	3.5m	10.5m
6.0m	4.0m	11.5m

Light Source	SMT LED 2 x 30pcs
IP Rating	IP20
Emergency Duration	3 hours (minimum)
Lumen Output	380lm
Mains Current	(max) 150mA (max) 40mA quiescent (3W)
Recharge Period	Less than 24 hours
Charge Indicator	Integral green charge and lamp healthy LEDs
Changeover Voltage	As per requirements of BS EN 60598-1:2008
Battery	3.2v 3000mAh

GU32 - IP20

E/GU32/LI 3 Hour Non-Maintained emergency twin flood

Replacement Parts

B/BATT/GU32/LI LiFePO4 3.2v 3000mAh

Azelio Surface

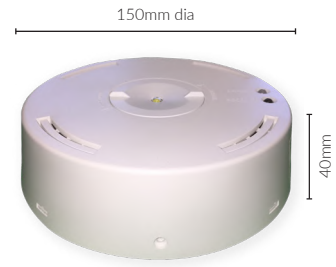


Overview

Azelio Surface is a compact, high specification surface mounted emergency LED downlight supplied with both open area and escape route lenses. This new emergency downlight offers high performance, cost-effective emergency lighting for indoor use where aesthetics are of prime importance.

The Azelio Surface comes with two lens options, open area (240lm) and corridor (210lm). It is further enhanced by the addition of a remote-control testing option, which ensures simple and cost-effective testing.

High specification optic design and performance allows increased spacing providing reduced cost, with up to 15m spacing between fittings (3m mounting height).



Corridor Lens - 50mm Dia.

Features

- Now with 'Manual', 'SmartTest' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Versatile multi-functional use (escape and open area anti-panic)
- Supplied with both open area and corridor lenses
- Remote Control test facility (Additional control unit required)
- Tough polycarbonate housing
- Suitable for surface mounting
- Two types of high performance lenses for escape route or open area illumination
- Non-maintained
- Minimal maintenance
- Easy installation
- RoHS compliant
- Excellent luminaire spacings of up to 15m for corridor version
- BESA Box fixings

Photometric Spacing Data

Azelio Surface Open Area	↔		↔		↔		↔	
	Transverse to Wall		Transverse to Transverse		Axial to Axial		Axial to Wall	
Mounting Height	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux
2.4m	4.5m	3.4m	9.25m	7.4m	4.5m	3.4m	4.5m	3.4m
3.0m	4.7m	3.65m	10.1	8.6m	10.1m	8.6m	4.7m	3.65m
4.0m	4.6m	3.45m	9.8m	8.4m	9.8m	8.4m	4.6m	3.45m

Azelio Surface Corridor	↔		↔		↔		↔	
	Transverse to Wall		Transverse to Transverse		Axial to Axial		Axial to Wall	
Mounting Height	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux
2.4m	3.25m	2.2m	4.8m	4.5m	14.45m	13.5m	8.83m	5.8m
3.0m	2.35m	2.15m	4.65m	4.4m	13.9m	13.1m	7.6m	6.7m
4.0m	3.0m	2.5m	5.5m	3.8m	16.6m	16.0m	9.0m	7.2m

Azelio Surface

EAZS01 Azelio Surface 3W Downlight LiFePo4 - Tri Test C/W open area and corridor lenses
 E/EM/RC Remote control test unit (Optional)

Replacement Parts
 B/BATT/AZ/LI LiFePo4 Lithium Battery

Overview

Azelio Recessed is a compact, 3W high specification recessed emergency LED downlight, incorporating Manual, 'SmartTest' and 'Automatic Self Test' at the flick of a switch. Supplied with both open area and escape route lenses, our new Azelio recessed emergency downlight offers a high performance, cost-effective solution for indoor use where aesthetics are of prime importance.

The Azelio Recessed comes with two lens options: open area (240lm) and corridor (280lm).

High specification optic design and performance allows increased spacing providing reduced cost, with up to 15m spacing between fittings (3m mounting height).

Features

- Now with 'Manual', 'SmartTest' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Versatile multi-functional use (escape and open area anti-panic)
- Supplied with both open area and corridor lenses
- Auto self test
- Tough polycarbonate housing
- Suitable for recessed mounting
- Maintained
- Minimal maintenance
- Easy installation
- RoHS compliant
- Excellent luminaire spacings of up to 15m for corridor version
- 70-75mm cutout



Open Area Lens



Corridor Lens

Photometric Spacing Data

Azelio Recessed Open Area	↔		↔		↔		↔	
	Transverse to Wall		Transverse to Transverse		Axial to Axial		Axial to Wall	
Mounting Height	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux
2.4m	n/a	3.75m	n/a	8.25m	n/a	8.25m	n/a	3.75m

Azelio Recessed Corridor	↔		↔		↔		↔	
	Transverse to Wall		Transverse to Transverse		Axial to Axial		Axial to Wall	
Mounting Height	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux
2.4m	n/a	3.75m	n/a	8.25m	n/a	8.25m	n/a	3.75m

Azelio Recessed

EAZR01 Azelio Recessed 3W Downlight LiFePo4 (RC and ST) C/W open area and corridor lens
E/EM/RC Remote control test unit (Optional)

Glade 1W



Overview

The Glade 1W Non-Maintained emergency downlight offers a discrete emergency option. Now supplied with both open area and corridor lenses, the Glade 1W is further enhanced with a long life LiFePo4 lithium battery.

Features

- Now with both 'Manual' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Open Area and Corridor Lens
- 6000K CCT
- Non-maintained 3-hour emergency back-up
- Slimline driver module with sleek and minimalistic design
- Simple plug and go installation
- Low maintenance and low environmental impact
- 40mm cut out



Photometric Spacing Data

Glade 1W Open Area	Transverse to Wall	Transverse to Transverse	Axial to Axial	Axial to Wall
Mounting Height	1 Lux - 150lm	1 Lux - 150lm	1 Lux - 150lm	1 Lux - 150lm
2.5m	3.35m	6.15m	6.15m	3.35m
4.0m	3.4m	6.3m	6.3m	3.4m

Glade 1W Corridor 3m Wide	Transverse to Wall	Transverse to Transverse	Axial to Axial	Axial to Wall
Mounting Height	1 Lux - 110lm	1 Lux - 110lm	1 Lux - 110lm	1 Lux - 110lm
2.5m	5.1m	9.4m	n/a	n/a
4.0m	4.4m	9.1m	n/a	n/a

Light Source	LED
IP Rating	IP20
Dimensions	Lamp: Ø 50mm, Module: 180 x 40 x 25mm, Battery Module: 115 x 27 x 27mm
Lumen Output	Open Area 150Lm - Corridor 110Lm
Power Consumption	1W
Weight	Module and battery 210gm
Material	Polycarbonate Module
Compliance	BS EN 60598-2-22 and all other relevant standards and regulations
Battery	3.2V 1.5Ah Lithium LiFePo4

Glade 1W

EGLD11 Glade 1W LiFePo4 Battery

Glade 5W



Overview

The Glade 5W maintained emergency downlight offers a discrete emergency option. Now supplied with both open area and corridor lenses, the Glade 5W is further enhanced with a long life LiFePo4 lithium battery and benefits from our Smart Test remote control testing system.

Features

- Now with 'Manual', 'SmartTest' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Open Area and Corridor Lens
- 6000K CCT
- Maintained 3-hour emergency back-up
- Slimline driver module with sleek and minimalistic design
- Simple plug and go installation
- Low maintenance and low environmental impact
- 60mm cut out



Photometric Spacing Data

Glade 5W Open Area	Transverse to Wall	Transverse to Transverse	Axial to Axial	Axial to Wall
Mounting Height	1 Lux - 290lm	1 Lux - 290lm	1 Lux - 290lm	1 Lux - 290lm
2.5m	4.1m	8.1m	8.1m	4.1m
4.0m	4.6m	9.2m	9.2m	4.6m

Glade 5W Corridor 3m Wide	Transverse to Wall	Transverse to Transverse	Axial to Axial	Axial to Wall
Mounting Height	1 Lux - 230lm	1 Lux - 230lm	1 Lux - 230lm	1 Lux - 230lm
2.5m	4.1m	8.1m	8.1m	4.1m
4.0m	4.6m	9.2m	9.2m	4.6m

Light Source	LED
IP Rating	IP20
Dimensions	Lamp: Ø 70mm, Module: 180 x 40 x 25mm, Battery Module: 117 x 40 x 35mm
Lumen Output	Open Area 290Lm - Corridor 230Lm
Power Consumption	5W
Weight	Module and battery 390gm
Material	Polycarbonate Module
Compliance	BS EN 60598-2-22 and all other relevant standards and regulations
Battery	3.2V 5.5Ah LiFePo4

Glade 5W

EGLD51 Glade 5W LiFePo4 Battery inc 2 Lenses

Glen LED Downlight



Overview

The Glen is a 3W recessed LED downlight provides excellent value for money. The Glen offers substantial energy and maintenance savings over its lifetime and benefits from a LiFePO4 battery.

Features

- Now with both 'Manual' and 'Automatic Self Test' at the flick of a switch. Allows either option in one standard unit.
- Polycarbonate/metal construction
- Simple 'plug and go' installation
- Non maintained operation 3 hours emergency backup
- Low environmental impact
- Green charge LED
- Meets BS EN 60598-2-22 and other relevant standards
- 35mm Cutout



Black

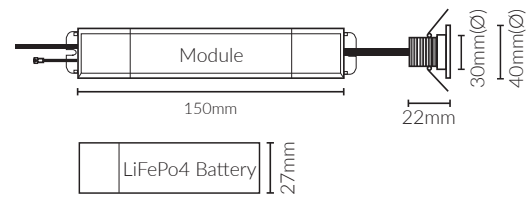
Silver



White

Photometric Spacing Data

GU32	Transverse to Wall	Transverse to Transverse
Mounting Height	1 Lux	1 Lux
2.8m	3.5m	7.1m
4.0m	3.1m	6.4m



Light Source	SMT LED 5500K (3W)
Light Output	143-158lm
IP Rating	IP20
Emergency Duration	3 hours
Mains Voltage	220 - 240V AC 50Hz ± 10%
Mains Current (max)	90mA
Recharge Period	24 hours
Charge Indicator	Green LED
Temperature Range	10°C - 40°C
Weight	250g
Battery	3.2V 1500mAh LiFePO4



Glen LED Downlight

- EGLN31 3W Glen Emergency Downlight - White Bezel
- E/GLEN/BEZ/BK Glen Black Bezel - Pack of 5
- E/GLEN/BEZ/SI Glen Silver Bezel - Pack of 5

Azelio Downlight



Overview

Offering open area and escape route lenses our Azelio emergency downlight offers a simple and cost effective emergency lighting solution for most applications.

The 95-100mm cut out makes it ideal to replace existing tungsten/dichroic downlights.

High specification optic design and performance allows increased spacing providing reduced cost, with up to 15m spacing between fittings (3m mounting height).

Supplied with an integral driver and lithium battery pack, pre-wired for easy installation.

Features

- Ideal size to replace existing downlights
- High output LED light source = less fittings
- Open area and corridor comes supplied as standard
- Built in 'push to test' switch
- Non-Maintained
- Input Voltage: 220-240V 50/60Hz
- Light Source: SMD LED
- Weight: Open Area: 280g/Corridor: 282g
- Bezel dia. 110mm
- Lumen output: Open Area: 158lm/Corridor: 176lm



Open Area Option



Corridor Option



Extension Bezel to 165mm dia.

Photometric Spacing Data

Azelio Open Area	↔		↔		↔		↔	
	Transverse to Wall		Transverse to Transverse		Axial to Axial		Axial to Wall	
Mounting Height	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux
2.4m	n/a	3.75m	n/a	8.25m	n/a	8.25m	n/a	3.75m
3.0m	n/a	4.0m	n/a	8.5m	n/a	8.5m	n/a	4.0m
4.0m	n/a	4.12m	n/a	9.25m	n/a	9.25m	n/a	4.12m

Azelio Corridor	↔		↔		↔		↔	
	Transverse to Wall		Transverse to Transverse		Axial to Axial		Axial to Wall	
Mounting Height	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux
2.4m	n/a	3.75m	n/a	8.25m	n/a	8.25m	n/a	3.75m
3.0m	n/a	4.0m	n/a	8.5m	n/a	8.5m	n/a	4.0m
4.0m	n/a	4.12m	n/a	9.25m	n/a	9.25m	n/a	4.12m

Azelio Downlight

E/AZELIO/COA

Azelio Emergency LED Downlight non-maintained C/W Open Area and corridor lenses

E/AZELIO/BEZEL

Azelio Bezel to expand the bezel size to 165mm

Azelio Emergency Track Exit/Open Area LEDs



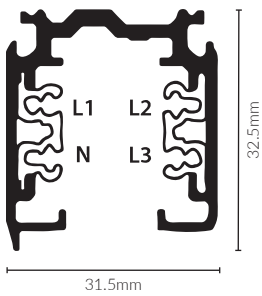
Overview

The Azelio emergency track LED is available as an open area downlight or exit sign. It is supplied with a full set of legends and offers cost-effective emergency lighting where track lighting is installed.

It is supplied with a 3 circuit Global Track adapter. Available in black or white (green exit legend) and supplied with an integral driver. A track adapter can be easily swapped to match almost any track profile.

Features

- Track mounted 3 hour Emergency LED
- Supplied with full legend set (exit sign only)
- Quick and simple to install
- Suitable for Global track mounting
- Maintained
- Minimal maintenance
- RoHS compliant



Azelio Emergency Track Exit/Open Area Track

- E/AZ/TRACK/EXIT/BK/LI Azelio Track exit sign C/W 4 legends and blank legend
- E/AZ/TRACK/COA/BK/LI Azelio track downlight with corridor and open area lenses

Azelio Emergency Track LED



Overview

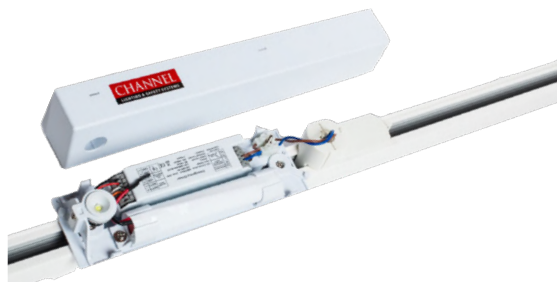
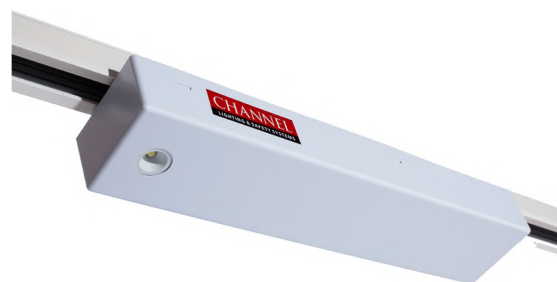
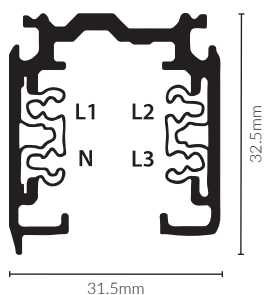
The Track emergency light is a non-maintained emergency light.

It is supplied with a 3 circuit Global Track adapter and designed to provide high light output in the event of an emergency.

The track adapter can be easily swapped to match almost any track profile.

Features

- Pre-wired for easy installation
- Long Life LED technology
- Quick and simple to install
- Line Voltage: 220-240Vax, 50~60Hz
- Lamp Type: 3W White LED
- 3 hr emergency lighting duration
- Non-maintained operation
- CE Approved
- Dimensions: 320mm (L) 67mm (W) 40mm (D), excludes track adapter



Shown with Black Cover

Photometric Spacing Data

Azelio Emergency Track ELD	Transverse to Wall		Transverse to Transverse		Axial to Axial		Axial to Wall	
	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux	0.5 Lux	1 Lux
Mounting Height								
2.4m	3.5m	3.1m	6.0m	5.8m	6.0m	5.8m	3.0m	3.1m
3.0m	3.5m	3.25m	7.0m	6.5m	7.0m	6.5m	3.5m	3.25m
4.0m	4.5m	4.0m	9.0m	8.0m	9.0m	8.0m	4.5m	4.0m

Azelio Emergency Track LED

E/AZELIO/TRACK/LI
S/AZ/BK/COV

Azelio Emergency Track Light: Supplied with 3 circuit GLOBAL TRACK Adapter
Azelio Emergency Track Light Black Cover (Cover only, E/AZELIO/TRACK required)

Track Lighting

i-Monitor DALI Emergency Light Testing System



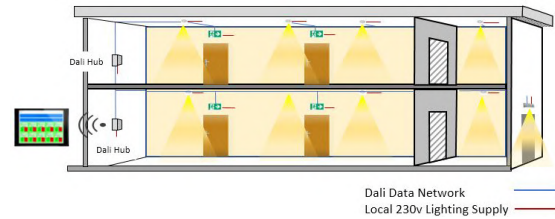
Overview

The i-monitor is a comprehensive DALI based emergency light testing system that has been designed to be flexible, powerful and user friendly.

The i-Monitor control panels are standard Apple iPad devices utilising a specific 'App' which is intuitive and very easy to use for both the commissioning engineer as well as a user. The 'App' is used to configure all the connected DALI emergency devices.

Features

- App based Emergency Light testing system
- Simple emergency duration and function test scheduling
- System diagnostic information
- Control Hubs connect up to 128 DALI lights
- I-Pad can control 10 hubs (1280 DALI lights)
- Simple menu navigation
- Records results and sends notification emails
- Scalable to 10,240 DALI Lights
- Air print compatible
- Master i-Pad can control 10 hubs
- Each hub has 2 outputs
- Up to 8 x iPads can be networked giving a total of 10,240 DALI lights
- iPad can be moved to log on to any hub with a wireless access point, or additional iPads can be used



i-Monitor PRO DALI Lighting Control & Emergency Light Test

The i-Monitor Pro uses a PC or laptop for the control & monitoring of the system. It is simply linked to any Multi-Controller.

Featuring an intuitive graphic user interface and commissioning tool, coupled with a very powerful database engine, the system provides an intuitive and simple way to initially set-up the system, as well as presentation of live real time status. A wide range of sensors, switch input interfaces and scene button panel options ensure market leading functionality and flexibility.

System Architecture

The i-Monitor PRO offers a solution for Commercial applications such as offices, schools, universities, hotels, airports etc.

The simple display provides clear and concise visualisation of the lighting control scheme. Unlimited control groups, system Diagnostics, alert messages power consumption data, and emergency light test reports further enhance the benefits of the system.

The Monitor Pro software can be used to configure any connected DALI device to form local control groups. DALI devices do not need to be physically in the same DALI field network to function as part of a control group. Thus a control group can be as simple as a single switch controlling one local light, right up to say, a switch controlling the whole building. The i-Monitor PRO offers a sophisticated lighting control and emergency light monitoring system.

Any DALI type 8 light can be monitored and controlled.

Multi Controller

Each Multi-Controller can control 10 hubs.
 Each hub has 2 outputs.
 Each output can control 64 lights (128 per hub)
 128 x 10 hubs = 1280 lights.

The i-Monitor Pro uses a simple graphical display designed to provide clear and simple visualisation and management of lighting control systems.

Icons representing system elements can be overlaid on building schematics and incorporated into a site plan. These icons are dynamic and allow the state of the system and current output levels to be viewed at a glance giving a real-time system wide view.

i-Monitor DALI Emergency Light Testing System



We are able to offer a wide range of iD-Mesh compatible emergency lights; the most popular are shown below.



iD-Mesh DALI Emergency Light Testing System

Exit Signs

- E/EXDA/1** DALI Maintained/Non-Maintained Recessed mounted LED Exit sign - White ** add AU, AD, ALR
- E/EXDA/2** DALI Maintained/Non-Maintained surface mounted LED Blade Exit sign - White ** add AU, AD, ALR
- E/EXDA/3** DALI Maintained/Non-Maintained Suspended mounted LED Exit sign - White ** add AU, AD, ALR
- E/EXDA/4 DALI emergency Maintained/Non-Maintained IP65 3W exit sign C/W full legend pack

Downlights

- E/DLDA/1** DALI Emergency 3W Circular LED surface mounted ** add open or corridor lens OA/CO
- E/DLDA/2** DALI Emergency 3W Square LED surface mounted ** add open or corridor lens OA/CO
- E/DLDA/3** DALI 3W LED emergency downlight - recessed ** add open or corridor lens OA/CO

Bulkheads

- E/BHDA/1 DALI Emergency 2W LED DALI Emergency Bulkhead Non-Maintained 288 Lumens-Clear lens
- E/BHDA/2 DALI 3W IP65 bulkhead

Twispots

- E/TSDA/1 DALI IP65 6W LED Twispot Emergency providing 610 Lumen output

Ceiling Light

- E/SOHO/M3/DALI DALI Soho 21W maintained ceiling light

Ordering Details: Please contact us with your requirements for us to provide a customised solution to meet your system requirements.

iD-Mesh Wireless DALI Emergency Light Testing System



Overview

We are proud to introduce our new iD-Mesh wireless DALI emergency lighting testing system.

iD-Mesh offers a cost effective solution which overcomes the issue of installing a data network.

Each emergency light is incorporated in to a wireless data network and forms part of the transmit/receive mesh.

System monitoring and reports are all via the cloud and can be viewed on any internet connected device. This ensures that your emergency lighting is functioning and compliancy data is available.

Any issues are immediately reported advising the exact location and nature of the fault, ensuring a first time fix.

Features

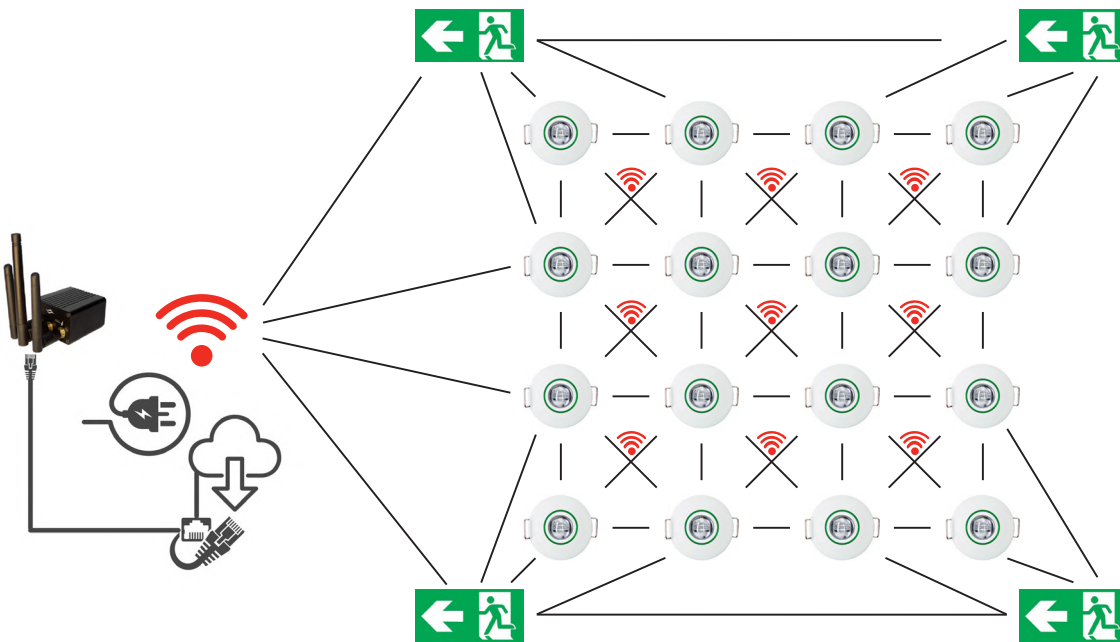
- Each iD-Mesh hub can control up to 239 lights
- Multiple iD-Mesh hubs can be used to create systems WITH NO LIMIT ON SIZE
- iD-Mesh hubs have a range of up to 500m line of sight and up to 100m within a building
- The iD-Mesh wireless nodes can be fitted in to any suitable DALI emergency light
- Each hub reports to the cloud platform which can be viewed at any location via a web browser
- The nodes have an approximate range of 50m
- The mesh technology enables all nodes to both receive and transmit data to the hub, this ensures that signals have multiple paths to/from the node
- Persistent gateways mean that if communication is lost, data is stored until communication is re-established.
- Transmits at Long Range 868Mhz
- Commissioning and system changes are carried out using an "iD-Mesh Works" robust tablet
- The iD-Mesh Works tablet builds the mesh at the push of a button



E/ID/MESH/WORKS



E/ID/MESH/HUB



Including the gateway, the maximum for each mesh is 240 points.

iD-Mesh Wireless DALI Emergency Light Testing System



We are able to offer a wide range of iD-Mesh compatible emergency lights; the most popular are shown below.



iD-Mesh Wireless DALI Emergency Light Testing System

Exit Signs

- E/EXDA/1** DALI Maintained/Non-Maintained Recessed mounted LED Exit sign - White ** add AU, AD, ALR
- E/EXDA/2** DALI Maintained/Non-Maintained surface mounted LED Blade Exit sign - White ** add AU, AD, ALR
- E/EXDA/3** DALI Maintained/Non-Maintained Suspended mounted LED Exit sign - White ** add AU, AD, ALR
- E/EXDA/4 DALI emergency Maintained/Non-Maintained IP65 3W exit sign C/W full legend pack

Downlights

- E/DLDA/1** DALI Emergency 3W Circular LED surface mounted ** add open or corridor lens OA/CO
- E/DLDA/2** DALI Emergency 3W Square LED surface mounted ** add open or corridor lens OA/CO
- E/DLDA/3** DALI 3W LED emergency downlight - recessed ** add open or corridor lens OA/CO

Bulkheads

- E/BHDA/1 DALI Emergency 2W LED DALI Emergency Bulkhead Non-Maintained 288 Lumens-Clear lens
- E/BHDA/2 DALI 3W IP65 bulkhead

Twinspots

- E/TSDA/1 DALI IP65 6W LED Twinspot Emergency providing 610 Lumen output

Ceiling Light

- E/SOHO/M3/DALI DALI Soho 21W maintained ceiling light

Ordering Details: Please contact us with your requirements for us to provide a customised solution to meet your system requirements.

A Guide to DALI Controls

What is DALI?

DALI stands for Digital Addressable Lighting Interface. In other words, it is a worldwide standardised digital lighting interface. The DALI standard, specified in IEC standard 60929, ensures interchange ability and compatibility of lighting products from different manufacturers.

The DALI system was created by leading lighting manufacturers who recognised the need for a common interface. DALI was engineered to meet the new challenges of lighting control – more flexibility, greater scalability of control and faster installation.

Basic Rules for DALI Products and Systems

There are a few basic rules to take into account when planning and wiring a DALI system.

Max. Addresses per System (Subnet) – 63

It's officially 64, but you need to leave one free, to make system updates easier.

Polarity

DALI connections are not polarity sensitive.

Max. DALI Current per System (Subnet)

250mA DALI supply.

The total current that is supplied by all sources of the control system must not be more than 250mA.

DALI Wiring Safety Rating

DALI wiring and connections should be treated like Mains voltage wiring. Though the signal is 16 volts the hardware is not SELV rated (Safety Extra Low Voltage).

Which Wire for DALI Cable?

You must use 2-conductor, mains rated wire.

The DALI System at Work

Traditional DALI allows for individual light fittings to be controlled and grouped together into logical areas.

The DALI protocol allows for a maximum of 64 fittings on a single network and the network can be broken up into 16 different possible areas.

DALI Enables Total Control

Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings. In combination with dimmable drivers, presence and daylight sensors, energy savings of up to 80 per cent can be achieved.

If the operation of the lighting is to be rearranged or regrouped, the costs per circuit in a fixed output system could be four times higher than those in a DALI system.

The ability to send queries and obtain replies – two-way communication – can greatly reduce maintenance costs. For example, DALI allows automatic testing and reporting of monthly function tests of emergency lighting. In addition, energy consumption and lamp condition can be checked for each luminaire, very easily and at no additional cost.

Other features of using DALI

- Simplicity and Robustness
- Scalability and Flexibility
- Energy and cost-saving
- DALI creates potential for connectivity
- DALI is a global standard

Maximum DALI Cable Length	Recommended Minimum Conductor Size for DALI Wiring
Less than 100 meters	0.5mm ²
100 to 150 meters	0.75mm ²
More than 150 meters	1.5mm ²
More than 300 meters	Not recommended, avoid runs over 300 meters

Emergency Lighting Test Switch



Features

- Dimensions: 86mm(W) x 86mm(H) x 19mm(D)
- Material: Flame retardant ABS
- Weight: 0.14Kg
- Compliance: EMC – 89/336/EEC LVD-73/23/EEC
- Suitable for maintained and non-maintained luminaires

Emergency Lighting Test Switch

E/CH/ELTS Surface mounted test switch





Commercial Lighting

Bulkheads

98

Milan LED Luminaires



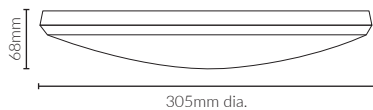
Overview

The Milan range of 15W circular LED Luminaires offers a complete range of low profile polycarbonate IP65 light fittings. It is supplied as standard with selectable 3 colour temperature options, 3000K, 4200K and 6000K. The Milan range comes in a white finish as standard but is further enhanced with a black, chrome or brass coloured bezel options. The Milan range is further enhanced with the option of remote control testing on the emergency versions.

Features

- Selectable 3 colour temperature options 3000K, 4200K and 6000K
- Mains output 1400lm Emergency output 132lm
- Microwave with corridor function options
- Versatile multi-functional use, interior and exterior
- Tough polycarbonate housing
- May be mounted in any orientation
- Twist on diffuser
- Mains only and Maintained emergency options
- Minimal maintenance
- Easy installation
- RoHS compliant
- Excellent luminaire spacings

Product Dimensions



White



Black



Chrome



Brass



Black eyelid



White eyelid

Photometric Spacing Data

Milan	Transverse to Wall	Transverse to Transverse	Axial to Axial	Axial to Wall
Mounting Height	1 Lux	1 Lux	1 Lux	1 Lux
2.4m	4.3m	10.0m	10.0m	4.3m
4.0m	4.8m	11.4m	11.4m	4.8m

Milan LED

- E/MILAN Milan LED 15W Mains Only Light
- E/MILAN/M3/RC/LI Milan LED 15W 3hr Maintained Emergency Light – Remote Control Option
- E/MILAN/M3/MW/RC/LI Milan LED 15W Emergency Microwave 3hr Maintained Emergency Light – Remote Control Option
- E/EM/RC Remote Control Option
- E/MILAN/BEZ/CH Milan Chrome Bezel
- E/MILAN/BEZ/BR Milan Brass Bezel
- E/MILAN/BEZ/BK Milan Black Bezel
- E/MILAN/EYE/WH Milan White Eyelid Bezel
- E/MILAN/EYE/BK Milan Black Eyelid Bezel

Overview

The SoHo LED luminaire is a true 2D 28W replacement and boasts a high lumen output giving it a top tier market performance. It has the added benefit of corridor function (microwave versions) and three colour temperature options, 3000K, 4200K and 6000K.

The SoHo is also available with our optional remote control emergency testing function.

The SoHo is finished with a white base and a high light transmission polycarbonate diffuser, held securely in place by a single clip system. It also incorporates a corridor function, (microwave versions), colour change and remote control testing option on the emergency version.



Features

- Mains Output: 2100lm, Emergency Output: 287lm
- Three colour temperature options
- Power consumption: 21W Circuit Watts
- Typical power saving: 35-40% over conventional 2D luminaires
- Now with 'corridor function' (microwave option only)
- Mains or emergency 3 hour maintained and microwave options available
- Compliance: BS EN 60598-2-22
- 3 colour temperature selection, 3000K, 4200K & 6000K
- SoHo Dimensions: 325mm diameter

Now with corridor function, three colour temperature options and remote control functionality

- The corridor function ensures that light is produced only when actually needed. This saves energy usage and possible light pollution
- When a person enters a corridor or room, the light will come on/increase to full brightness
- When the person leaves the corridor/room, a presence detector will dim the light after a pre-set period. After a further pre-set period, if no movement is detected the light will switch off completely
- The light also incorporates a daylight sensor so it only illuminates if the ambient light is below a pre-set level

The setting available are:

Distance (sensitivity) Setting – The detector has a maximum range of 10M. Distance detected range can be adjusted to 100%, 75%, 50% and 0% of the maximum range (approx 6m radius mounted at 3m height).

Hold Time Setting – The 'Hold time' is the period the lamp remains at 100% once movement has ceased. The sensor can be adjusted to 5s, 30s, 60s, 5min, 10min, 20min and 30min.

Daylight Setting – Day light value can be adjusted to 2 lux, 10 lux, 50 lux and disabled. If you choose 'Disabled' then the light will operate all the time no matter how bright the ambient light level is.

Stand-By Period (Corridor Function) – This is the time period the light will remain at the dimmer light level. Once the chosen time has elapsed the light will turn off. This can be over ridden so the light remains at the dimmed level until movement is detected.

Stand-by Dimming Level – This is the level the light dims to once movement has ceased and the hold time setting has elapsed, this can be set to 10%, 20%, 30% or 50% of the full light level. Choice of three colour temperatures, 3000k, 4200k and 6000k.

Photometric Spacing Data

SoHo	Transverse to Wall	Transverse to Transverse	Axial to Axial	Axial to Wall
Mounting Height	1 Lux	1 Lux	1 Lux	1 Lux
2.4m	4.3m	10.0m	10.0m	4.3m
4.0m	4.8m	11.4m	11.4m	4.8m

SoHo

E/SOHO	SoHo 21W Mains Version, 2100lm
E/SOHO/MW	SoHo 21W Mains Complete with Microwave Sensor , 2100lm – Corridor Function
E/SOHO/M3/RC/LI	SoHo 21W Mains Version 3hr Emergency Light with Remote Control Option, 2100lm
E/SOHO/M3/MW/RC/LI	SoHo 21W Mains Version 3hr Emergency Light with Microwave Sensor Remote Control Option, 2100lm
E/EM/RC*	Remote Control Option
SP/SOHO/M3/ST	SoHo 21W Mains 3hr Emergency Version, 2100lm
SP/SOHO/M3/MW/ST	21W Mains 3hr Emergency Version Complete with Microwave Sensor, 2100lm – Corridor Function (Self Test, made to order.)

Tokyo

Overview

The Tokyo LED luminaire is a sleek and elegant range of environmentally friendly, low energy LED light fittings whose slimline appearance blends in seamlessly with the surroundings. It comes complete with features such as colour temperature (CCT) selection, wattage selection, corridor mode and emergency.

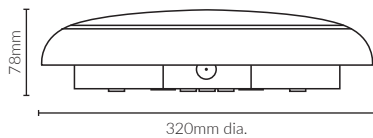
The range includes emergency and microwave versions.

Features

- CCT Switchable (3000K/4000K/6000K)
- 4 Selectable wattages as standard
- Easy and quick installation – hinge feature on tray allows for 2-part fitting
- Surface mounted luminaire with 4 side and 1 rear conduit entry point
- Available with microwave sensor (Corridor Function)
- Emergency 1W LiFeP04 battery pack
- Chrome bezel accessory available



Product Dimensions



Photometric Spacing Data

Tokyo	Transverse to Wall	Transverse to Transverse	Axial to Axial	Axial to Wall
Mounting Height	1 Lux	1 Lux	1 Lux	1 Lux
2.4m	3.1m	6.1m	3.1m	6.1m
4m	2.6m	6.5m	2.6m	6.5m

Tokyo LED

- CE6010 Tokyo 12-22w CCT3 Bulkhead
- CE6020 Tokyo 12-22w CCT3 Bulkhead – Microwave
- CE6030 Tokyo 12-22w CCT3 Bulkhead – Emergency
- CE6040 Tokyo 12-22w CCT3 Bulkhead – Microwave and Emergency
- CE6050 Tokyo Chrome Bezel





Central Battery Units & Static Inverters

AC/DC Central Battery Units	103
Static Inverters	104
Replacement Batteries	106
Sealed Lead Acid Batteries	107

AC/DC Central Battery Units

Overview

All Channel Safety Central Battery Units (CBU) are bespoke designs with a range of standard features and benefits providing a robust solution to meet specific customer requirements, supplied in wall mounted and free standing cabinets with options for high ingress protection.

Features

- Bespoke designs
- Ventilated mild steel cabinets
- Maintained and Non-Maintained options available
- 12/24/36/48/50/110/220V DC output options
- Extensive range of Slave Luminaires available
- Various back up run times to suit specifications
- Options for self-contained battery compartments



AC/DC Battery Slave Light Fittings

Overview

AC/DC Central battery units require the use of special lights known as 'slave fittings'.

The slave fittings obtain their emergency power supply from a separate central bank of batteries. The central battery system makes maintenance and testing easier, and fittings are available in 24V, 50V, 110V and 230V AC/DC.

Features

As the name implies a central battery emergency light is one where its power comes from one source. The central battery slave fittings do not have an integral battery but rely on the central battery to supply them.

Central battery systems come in either maintained or non-maintained. They must be wired in fire rated cables.



Stratos Slave Fittings

The Stratos range of slave fittings offers a slimline profile in contemporary design. Each light is supplied with a legend pack as standard. Optional drop down exit blades and semi-recessing kits are available.



Stratos Salve

E/STRATOS/24	Stratos 7x LED – 1W, IP65, 24 V AC/DC slave bulkhead C/W exit sign pictogram (1W 198lm IP65)
E/STRATOS/50	Stratos 7x LED – 1W, IP65, 50 V AC/DC slave bulkhead C/W exit sign pictogram (1W 198lm IP65)
E/STRATOS/110	Stratos 7x LED – 1W, IP65, 110 V AC/DC slave bulkhead C/W exit sign pictogram (1W 198lm IP65)
E/STRATOS/230	Stratos 7x LED – 1W, IP65, 230 V AC/DC slave bulkhead C/W exit sign pictogram (1W 198lm IP65)
E/STRATOS/REC/KIT	Stratos Semi Recessing Kit
E/STRATOS/PIC/KIT	Stratos Hanging Blade legend C/W exit sign pictogram

Mini Static Inverters



Overview

The Channel range of Mini LED Inverters has been engineered to suit LED lighting. Offering a cost effective solution to powering unmodified LED Luminaires in the event of mains failure, the unit is a pure sine wave inverter with a 230V AC output. The range is designed to comply with the latest European and British Standard BS EN 50171:2021.

Features

- Engineered to suit LED lighting
- Cost effective solution to powering unmodified LED Luminaires in the event of mains failure
- Multi-functional LCD display
- 32 bit micro-controller
- Overload and short circuitry protection
- Compatible with optional remote hold-off relays
- Steel housing
- Designed in accordance with BS EN 50171:2021
- 3 hour emergency duration
- Wall mount or free standing
- One fused output, 5A input
- Additional fused outputs available on request
- Remote alarm monitoring and test options available on request



C/STI-LED-120



C/STI-LED-800

Code	Output Power	Maximum Input Current	Weight: Inverter Cubicle (Kg)	Weight: Batteries	Dimensions (H x W x D in mm)
C/STI-LED-120	120w	<3.0A	16.5	24.1kg	Inverter Cubicle 305 x 472 x 166 Battery Cubicle 238 x 472 x 174
C/STI-LED-200	200w	<5.0A	16.5	34.5kg	Inverter Cubicle 305 x 472 x 166 Battery Cubicle 238 x 472 x 174
C/STI-LED-400	400w	<5.0A	16.5	34.5kg (x2)	Inverter Cubicle 305 x 472 x 166 Battery Cubicle (x2) 238 x 472 x 174
C/STI-LED-800	800w	<5.0A	38	37kg (x2)	Inverter Battery Cubicle 780 x 500 x 380

Input		Output		Environment/General	
Input Voltage (V)	220-240	Output Protection	Fuse	Relative Humidity	90% non-condensing
Maximum Input Current (A)	<3.0	Output Frequency (Hz)	50	Ventilation	Forced Air
Float Voltage (V)	27.5	Output Power (W)	120	Operating Temp (°c)	0 to +22
MCB Type	13A Fused Spur	Output Regulation	1-5% Dependent on Load	Ingress Protection (IP) Rating	IP22
Input Terminal Size (mm)	1.5	Low Voltage Disconnect (V)	19.2	Fixing Locations	Wall Mount/Free Standing
Frequency (Hz)	50	System Duration (Hours)	3	Cable Entry	Top/Side
DC Supply (V)	24V	Overload Capacity	20% continuously for > 1 hour, 150% continuously for 10 minutes, 200% continuously for <1 minute	Noise (dBA)	20dBA at 1M
Phase	Single Phase	Output Category	Maintained		
Efficiency (100% Load)	<95%	Change Over Time	0.05 Seconds		
Input Efficiency at 100% Load	>95%	Output Voltage (V)	220-240		
		Output Phase	Single Phase		

Overview

The PowerPro EL Ranges are Static Inverter Systems designed specifically for emergency lighting applications according to European BS EN50171 specification.

A highly versatile range, not only providing capacity up to 160kVA allowing Channel to provide an all-inclusive selection of reliable and cost effective products to meet the most challenging of lighting applications.

Features

- **Remote Alarm Panel**
External panel for monitoring the static inverter
- **Output Distribution**
Internal distribution of the lighting circuits, standard in EL100XA and EL100, multiple outputs are optional
- **Maintenance Bypass Panel**
Provides flexibility during maintenance, service and/or repairs to the equipment. The bypass can ensure that the system is isolated from the critical load whilst work can be carried out
- **Phase Failure Monitoring**
Factory fitted relays to ensure that the system monitors all three phases. Failure of any phase activates the emergency lights.
- **Sub-Circuit Monitoring**
Factory Fitted relays monitor external lighting circuits, if any of the external circuits fail the emergency lights are activated
- **Lighting Control Interface**
Allows communication via a node/module to the testing and monitoring systems.
- **Fire Alarm monitoring**
An alarm condition from the fire alarm panel will activate the emergency lights
- **Night-Watchmen Switch**
Enables switching of the emergency lights from a remote location, fail safe in an emergency condition
- **Timer Control**
Solar dials or 24hour timers can be used to activate the non-maintained contractor.
- **Earth Fault Alarm**
Monitoring of battery positive and negative for earth leakage



Our Static Inverter Systems are able to provide the following input and output configurations:

- Single Phase Input : Single Phase Output
- Three Phase Input : Single Phase Output
- Three Phase Input : Three Phase Output
- On Mains failure, the system converts DC power from the central battery to AC output. Our systems allow the use of our modern energy efficient luminaires, while our on-line 'NO BREAK' inverter systems enable the use of high-pressure discharge lighting.

No-Break

We manufacture a "No-Break" Emergency Lighting Static Inverter System that guarantees there will be no changeover switching of the supply to the load on mains failure. The load is totally unaffected by supply variation and is constantly fed with stabilised, smoothed and conditioned power.

Static Inverter Systems for Emergency Lighting

A totally integrated, energy efficient cost-effective and unobtrusive solution for all Emergency Lighting situations:

- Passive Standby
- Active Standby
- No-Break for ALL lighting loads including high pressure discharge
- All systems can be configured 1:1, 3:1 or 3:3
- Integration with our complementary products for Emergency Lighting
- Optional output current limiters

Static Standby

"Active Standby" is our constantly running, off load, Static Inverter which can be monitored for function at all times – reassuring to know that the system will work when an emergency load is applied.

Passive Standby

Our low cost flexible Passive Standby Static Inverter System is ideal for use with fluorescent and incandescent lighting sources. Traditional technology provides proven reliability with one of the lowest component counts in the industry. Low heat output, high efficiency (typically greater than 95% AC-AC).

Conforms with all current relevant harmonised European standards.

Replacement Batteries

Overview

In critical standby applications the battery can be a large integral part of the system and can also be an unpredictable element of the design.

Depending on models, batteries have either a 3 to 5 year or 8 to 10 year design life. There are six key factors that can affect UPS battery life-the placement, ambient temperature, cycling, maintenance, battery chemistry and battery storage. It is important that sufficient maintenance is carried out to extend the life of your battery to the fullest.



Small Office UPS

Features

- Channel Safety offers a wide range of Small Office/Home Office related line interactive UPS products, designed to offer total power protection to a broad range of applications.
- Our PowerStar and PowerPrem+ ranges will provide clean and reliable backup power to ensure continued data integrity and optimum performance under a wide range of mains power conditions.

PowerStar – Line Interactive UPS

Available from 650VA – 3kVA

- Fully intelligent line interactive
- Microprocessor based design
- Overload protection
- Boost and buck AVR voltage stabilisation



PowerPrem+ – Line Interactive UPS

Available from 800VA – 5kVA

- Microprocessor-based line interactive technology
- Built-in boost and buck AVR
- Tower and rackmount convertible design (1-3kVA)
- Hot swappable battery design (1-3kVA)



PowerOn – Online Double Conversion UPS

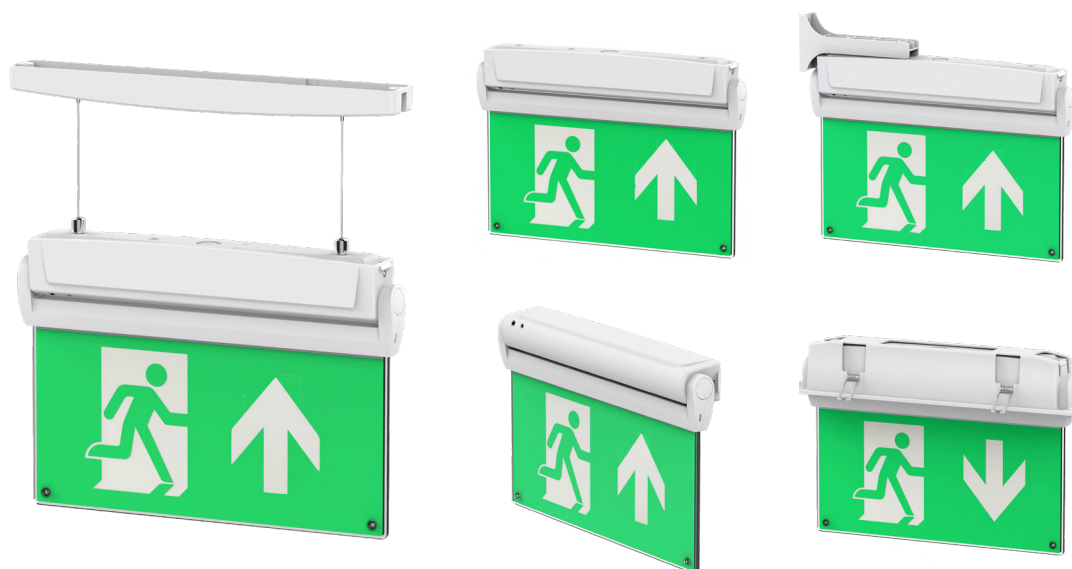
Available from 1kVA – 3kVA

- Digital Signal Processor (DSP) technology
- Tower and rackmount convertible design
- Hot swappable battery design
- Multiple communication ports



The Knowledge

A Guide to Emergency Lighting



Emergency Lighting – An Overview

Lighting makes up approximately 20% of the UK's energy consumption and non-domestic lighting shamefully accounts for approximately 24 million tonnes of CO₂ per annum.

As we all know, LED technology is rapidly taking over the lighting business, providing not only an attractive alternative to its conventional counterparts but also proving to provide long term savings in energy and subsequent replacement costs.

In addition to energy savings, LEDs in general illumination applications provide longer operating life (in the region of up to 50,000 hours), directionality, compact size, ease of control and dimmability compared to incumbent technologies they replace.

Contractors should be advising about the benefits of LED lighting solutions...

The LED has many benefits that should be highlighted to customers during a site survey, such as:

Reduced air conditioning costs as LED lights have a lower heat output LED lights last longer than conventional lighting. They create less waste and boast more easily recycled components Cost saving over a longer period of time The LED pros outweigh the cons when it comes to choosing efficient, cost effective lighting solutions for commercial, residential or industrial properties.

System Design Guide

The British Standard BS 5266 has been revised to conform with the European Standard EN1838 (issued in the UK under reference BS EN1838/BS 5266 Part 7) which specifies luminous requirements for emergency systems installed in premises. It also now calls up the luminaire product standard BS EN60598-2-22.

System Design Guide Continued...

An escape lighting luminaire complying with EN 60598-2-22 shall be sited to provide appropriate illuminance near each exit door and at positions where it is necessary to emphasise potential danger or safety equipment. The positions to be emphasised shall include the following:

- At each exit door intended to be used in an emergency
- Near stairs so that each flight of stairs receives direct light near any other change in level
- Mandatory emergency exits and safety signs
- At each change of direction
- At each intersection of corridors
- Outside and near to each final exit
- Near first Aid Post
- Near fire fighting equipment
- Near escape equipment for the disabled
- Near disabled refuge and call points

Exit Signage Requirements

- Safety signs shall be illuminated to at least 50% of the required luminance within 5 seconds and full required luminance within 60 seconds.
- The colours shall conform to the requirements of ISO 3864.
- The luminance of any area of safety colour of the sign shall be at least 2 cd/m² in all relevant viewing directions.
- The ratio of the maximum to the minimum luminance within either white or the safety colour shall be not greater than 10:1.
- All signs must be of the same type within a building and not mixed

For further information review the Technical Statement published by ICEL (ICEL TS03 Issue 1 – 12/12) on Emergency Exit "Clear" Signs.

Quick Guide

Help and Assistance Specifying Emergency Lighting

Emergency Escape Lighting

To provide visibility for evacuation purposes lighting is required in the volume of the space. In this standard the recommendation is filled by the mounting of luminaires at least 2m above the floor. Signs which are provided at all exits intended to be used in an emergency and along escape routes shall be illuminated to indicate unambiguously the route of escape to a point of safety. Where direct sight of an emergency exit is not possible, an illuminated directional sign (or series of signs) shall be provided to assist progression towards the emergency exit.

An escape lighting luminaire complying with EN 6059-2-22 shall be sited to provide appropriate illuminance near each exit door and at positions where it is necessary to emphasise potential danger or safety equipment.

The positions to be emphasised shall include the following (see below):

- At each exit door intended to be used in an emergency
- Near stairs so that each flight of stairs receives direct light
- Near any other change in level
- Mandatory emergency exits and safety signs
- At each change of direction
- At each intersection of corridors
- Outside and near to each final exit
- High risk task areas

Various specific locations now require additional emergency illumination:

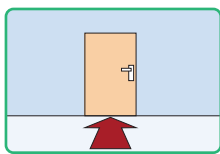
- 5 Lux** Refuge Areas, Panic Bars, Swimming Pool Areas
- 15 Lux** Kitchens, First Aid Rooms, Plant Rooms, Fire Alarm Control Equipment, Reception Areas
- 50 Lux** Treatment Rooms

Escape Route Lighting

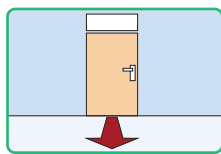
- For escape routes up to 2m in width, the horizontal illuminances on the floor along the centre line of an escape route shall be not less than 1 lx and the central band consisting of not less than half of the width of the route shall be illuminated to a minimum of 50% of that value.

Open Area (Anti-Panic) Lighting

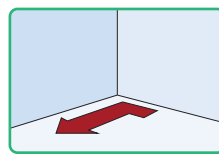
- The horizontal illuminance shall be not less than 0.5 lux at the floor level of the empty core area which excludes a border of 0.5m of the perimeter of the area.
- High risk task areas



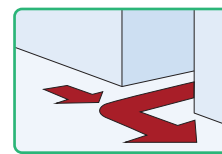
At each door



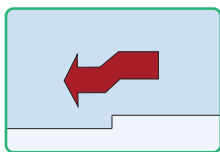
Outside each final exit and near any obstructions



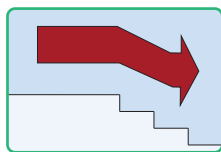
Near any changes of direction



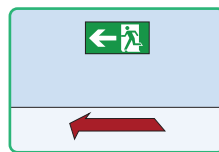
Near each intersection



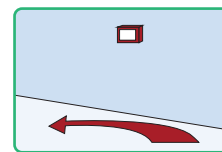
At each change of floor level



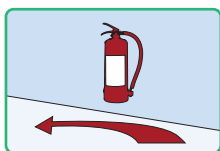
On each staircase so that all treads and risers receive direct light



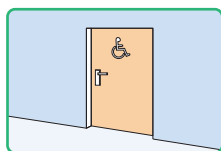
To illuminate all exit and safety signs and first aid points



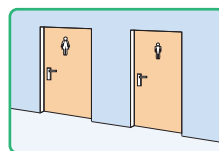
Near each fire alarm call point



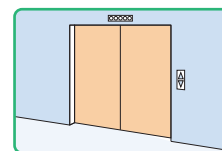
Near fire fighting equipment



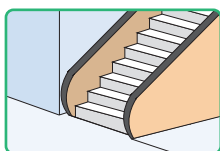
Inside disabled toilets



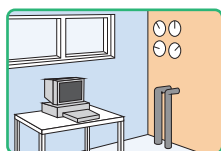
In toilets with a total floor area of 8m² or more/with no natural light



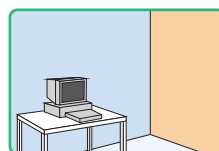
Near lift cars and inside



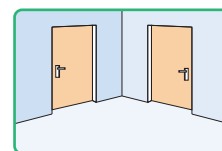
Escalators and moving walkways



Control and plant rooms and electrical cupboards



Room with no natural lights



A minimum of two fittings per fire compartment

Quick Guide

A Guide to Building Regulations, IP Ratings, and Kelvin Light Scale

Building Regulations

To ensure specified luminaires meet the requirements of the current building regulations it is important to consider the legislation contained within the Building Regulations. The most relevant of these are:

Approved Document L

- Approved Document L1A: Conservation of fuel and power (New Dwellings) (2006 Edition)
- Approved Document L1B: Conservation of fuel and power (Existing Dwellings) (2006 Edition)
- Approved Document L2A: Conservation of fuel and power (New buildings other than dwellings) (2006 Edition)
- Approved Document L2B: Conservation of fuel and power (Existing buildings other than dwellings) (2006 Edition)

Part L requires that energy efficient lighting is installed in both domestic and non-domestic dwellings, existing, new & refurbished (over 100m²).

Part L gives design information for the following (non-domestic dwellings):

- Selection of lamp types
- Effective use of daylight
- Control gear and power factor correction
- Use of lighting controls
- Luminaire efficiency

Approved Document B

- Approved Document B (Fire safety) – Volume 1: Dwellings (2006 Edition)
- Approved Document B – Volume 2: Buildings other than Dwellings (2006 Edition)

Part B deals with the fire safety requirements for emergency lights and the use of thermoplastic materials.

It is our recommendation that reference be made to the latest version of the Approved Documents. Full details can be found on: www.planningportal.gov.uk

IP Ratings

The International Protection code, commonly known as the Ingress Protection code (IP) indicates the protection afforded by an enclosure against the ingress of foreign (solid) bodies and ingress of moisture and liquids. The IP rating also classifies the protection given by an enclosure against touching live or moving parts.

The IP rating is given by the use of two numbers.

First Digit - Protection Against Ingress of Solid Objects

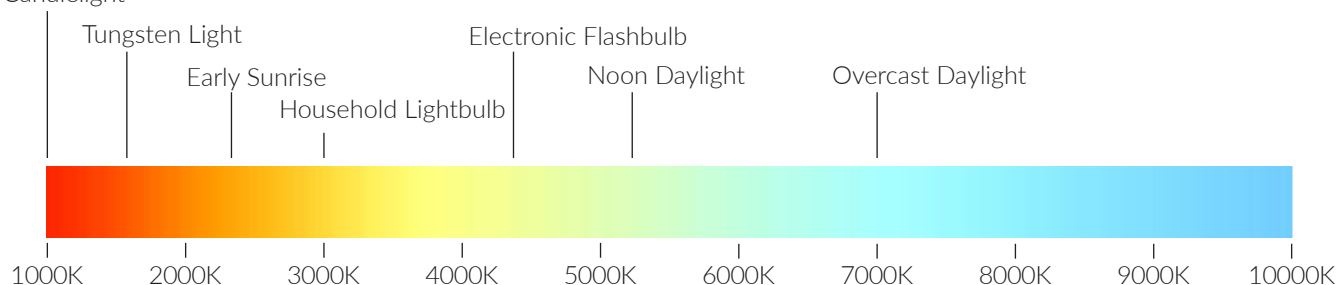
0	No protection
1	Protection against large sized bodies such as hands
2	Protection against medium sized bodies such as fingers
3	Protection against small sized bodies 2.5mm dia. or larger such as tools and wires
4	Protection against very small sized bodies 1mm dia. or greater
5	Protection against harmful deposits of dust (Dust proof)
6	Complete protection against deposits of dust (Dust tight)

Second Digit - Protection Against Ingress of Liquids

0	No protection
1	Protection against vertically falling drops of water
2	Protection against drops of water up to 15° from the vertical
3	Protection against rain falling up to 60° from the vertical
4	Protection against splashed water from any angle
5	Protection against jets of water from any angle
6	Protection against water from heavy seas
7	Protection against immersion for a defined period
8	Protection against immersion for an indefinite period

Kelvin Colour Temperature Scale

Candlelight





Assistance Products

Induction Loop Systems	113
Toilet Alarm Kits	116
Nurse Call Systems	118
Refuge Alarm System	124
The Knowledge	130

Portable Induction Loop Kits

Overview

Attractively designed in tough ABS plastic, the I/CHIL/PL1 portable induction loop system is a truly portable and extremely durable audio frequency induction loop system, packed full of features and available at a very competitive price. Fully compliant with BS 7594 and EN60118-4, it is ideal for use in schools, shops, nursing homes, leisure centres, hotels, banks, GP surgeries, reception desks and many other private, public and civic applications.



Features

- Indicators provided for power on, input level, charging required and charging in progress
- I/CHIL/PL1 kit includes PL1 amplifier, plugtop charger, "induction loop available" sticker and wall bracket
- I/CHIL/PL3 kit includes PL1 amplifier complete with battery and integral microphone, plugtop charger and 'AFILS available' sticker
- Dimensions: 300mm (H) 250mm (W) 100mm (D)
- FPROK1 kit includes Fosmeter Pro, 1 x Audio Signal Generator, 2 x protective pouch, 1 x 32 ohm headphones for FPRO, 2 x 9 V battery
- Ideal for restricted person to person contact in areas such as banks, post offices, small meeting rooms, reception desks, open plan offices and ticket booths
- Battery Internal 12V VRSLA (Valve Regulated Sealed Lead Acid)
- Weight: 1.7Kg

Portable Induction Loop Kits

Induction Loop Kits

I/CHIL/PL1	Portable induction loop system
I/CHIL/PL3	Portable induction loop system complete with carry case

Testing Equipment

I/CH/FPROK/1	Fosmeter Pro Induction loop test kit complete with signal generator
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Signs and Stickers

I/CH/PIL/L	Desktop portable induction loop display sign
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Counter Top Kits

Overview

The ML1/K counter induction loop kit is ideal for use in post offices, banks, building societies, ticket offices and reception areas. Comprising a compact wall-mounting double gang induction loop amplifier, a self-adhesive microphone and pre-formed counter loop, it can generate a loop listening field of 1.5m² approx. making it ideal for counters, desktops and tables.

Attractively-packaged kit includes:

- 1x I/CHIL/ML1 wall-mounting induction loop amplifier, 1x I/CHIL/AMT self-adhesive microphone, 1x I/CHIL/TX2 pre-formed counter loop and 1x I/CHIL/TEAR 'loop fitted' sticker
- Double-gang wall-mounting I/CHIL/ML1 amplifier fits standard 25mm back boxes and is ideal for mounting under desks, counters or table tops
- Fully compliant with EN60118-4 (formerly BS 6083) and BS 7594:1993
- Installer-friendly design requires no specialist audio experience or connectors
 - the ML1 can be fitted by any competent electrician
- Can be used to help building managers and service providers comply with BS 8300, the Equality Act and the Care Standards Act
- Dimensions: 143mm (H) 83mm (W) 32mm (D)
- Weight: 300g (amplifier only)



Counter Top Kits

I/CHIL/ML1/K	Counter induction loop kit
I/CHIL/ML1	1.5m ² wall mounting double gang

Induction Loop Amplifier Kits



Overview

A range of current mode induction loop amplifier designed to meet or exceed the requirements of BS7594 and EN60118-4 when correctly installed.

Ideal for the following applications:

- Meeting rooms
- Lecture theatres
- Shops
- Churches
- Schools
- TV lounges
- Health and fitness club
- Other small to medium sized applications



Induction Loop Amplifier Kits

1.5m² Counter Induction Loop Amplifier Kit

I/CHIL/103C Counter hearing loop kit with PDA 103 amplifier, AMT microphone and TX2 counter loop

50m² Induction Loop Amplifier Kits

I/CHIL/103L Small room induction loop kit complete with AMT tie/desk microphone, 30m of loop cable and x2 induction loop stickers

I/CHIL/103R Small room induction loop kit complete with APM omni-directional plated microphone, 30m of loop cable and x2 induction loop stickers

Pda 200e Amplifier

I/CHIL/200E 200m² Wall mounted loop amplifier

200m² Induction Loop Amplifier Kits

I/CHIL/K1 Meeting room loop induction kit complete with 1x I/CHIL/200E, 1x I/CH/APM plated microphone and 1x loop fitted sticker

I/CHIL/K2 Lecture room loop induction kit: complete with 1x I/CHIL/200E, 1x I/CH/AMT tie/desk microphone, 1x I/CH/AML lectern microphone, 2x I/CH/APJ outreach plates and 1x loop fitted sticker

I/CHIL/K3 TV and music room loop induction kit complete with 1x I/CHIL/200E, 1x I/CH/AMH handheld microphone, 1x I/CH/APS scart lead, 1x I/CH/APJ outreach plate, 1x I/CH/APL outreach plate, 1x loop fitted sticker

Testing Equipment

I/CH/FPROK/1 Fosmeter Pro Induction loop test kit complete with signal generator

Professional Induction Loop Phase Shifting Amplifiers

Overview

A must for theatres, cinemas, churches, conference halls and any other prestigious project where top quality sound is essential, our professional high-tech PDA-PRO amplifiers can cover areas from 200m² up to 1000m² and feature metal compensation control to offset the frequency response problems associated with excessive metal in a building.



Professional Induction Loop Phase Shifting Amplifiers

PDA/S Phase Shifting Dual Hearing Loop Amplifiers

Type S – Standard perimeter loops for large areas

- I/CHIL/5/SD "200m² free-standing PDA/S hearing loop amplifier, 4.75A"
- I/CHIL/5/SW "200m² wall-mounting PDA/S hearing loop amplifier, 4.75A"
- I/CHIL/7/SD "500m² free-standing PDA/S hearing loop amplifier, 7.5A"
- I/CHIL/7/SW "500m² wall-mounting PDA/S hearing loop amplifier, 7.5A"
- I/CHIL/11/SD "1000m² free-standing PDA/S hearing loop amplifier, 11A"
- I/CHIL/11/SW "1000m² wall-mounting PDA/S hearing loop amplifier, 11A"

PDA/D Phase Shifting Dual Hearing Loop Amplifiers Class D output

Type D – phase shifted amps for low overspill and large areas

- I/CHIL/PDA5/DD "200m² free-standing PDA/D phased-shifting hearing loop amplifier, 2 x 3.25A"
- I/CHIL/5/DWA "200m² wall-mounting PDA/D phased-shifting hearing loop amplifier, 2 x 3.25"
- I/CHIL/7/DD "500m² free-standing PDA/D phased-shifting hearing loop amplifier, 2 x 5A"
- I/CHIL/7/DW "500m² wall-mounting PDA/D phased-shifting hearing loop amplifier, 2 x 5A"
- I/CHIL/11/DD "1000m² free-standing PDA/D phased-shifting hearing loop amplifier, 2 x 7.5A"
- I/CHIL/11/DW "1000m² wall-mounting PDA/D phased-shifting hearing loop amplifier, 2 x 7.5A"

Outreach Plates

Overview

Any PDA range amplifier marked with the 'Outreach Compatible' symbol is compatible with our unique Outreach Plate audio input extension system. This system allows the connection of multiple microphone or line level inputs via a range of single gang connector plates.

Carefully designed to cover the most common variants of audio connector (including XLR line, XLR mic., 3.5mm jack, dual phono and 1/4" jack), a maximum of 10 outreach plates (any mix) can be daisy chained to an amplifier's Outreach socket using standard two pair audio cable such as Belden 8723 (or equivalent).



Outreach Plates

I/CH/APJ	3.5mm mono jack plate for connection of CH/AMT, CH/AMH, CH/AML or CH/AMD microphones
I/CH/APL	Dual phono line level audio plate for connection of CH/APS SCART lead or other line level audio feeds
I/CH/APQM	6.35mm stereo jack plate for connection of CH/AMR/L or H radio mic.
I/CH/APQL	6.35mm stereo jack plate for the connection of line level feeds from mixing desks, etc.
I/CH/APXM	XLR mic level plate for connection of CH/AMP microphone
I/CH/APXL	XLR line level plate for connection of mixing desk line level feeds
I/CH/APM	Omni - directional plated microphone for wall/ceiling/desk mounting
I/CH/BELDEN/25	25m of Belden 8723 audio cable
I/CH/FLAT/2005	100m x 1.0mm copper tape (flat loop)
I/CH/FLAT/3005	100m x 1.5mm copper tape (flat loop)

Please note: I/CHIL/PL1 and I/CHIL/DOM amplifiers do not have outreach sockets. I/CHIL/MK1 amplifier can have a maximum of three outreach plates connected to it.

Microphones

Overview

These microphones have the highest tolerance of magnetic feedback and are therefore recommended for induction loop systems. Dynamic microphones should not be used as they contain moving coil magnets which can be affected by the magnetic field generated by the loop.

Phantom power is provided on all Induction Loop amplifiers, so the microphones with internal batteries are not necessary. To avoid interference, microphone cables should be sited at least one metre away from loop cable.



Microphones

I/CH/AMP	Professional handheld microphone for CHIL/200E or CH/APXM plate (requires CH/AXLR lead)
I/CH/AMR	Lavalier radio microphone complete with microphone, receiver, transmitter, PSU. Connects to CHIL/200E or CH/APQM outreach plate
I/CH/APM	Omni directional plated microphone for wall/ceiling mounting. Connects to CHIL/ML1, CHIL/102, CHIL/200E
I/CH/AMD	Desktop microphone for CHIL/ML1, CHIL/DOM, CHIL/102, CHIL/200E, CHIL/PL1 or CH/APJ outreach plate
I/CH/AML	Lectern microphone for CHIL/ML1, CHIL/DOM, CHIL/102, CHIL/200E, CHIL/PL1 or CH/APJ outreach plate
I/CH/AMR/H	Handheld radio microphone C/W mic, receiver, transmitter, psu. Connects to CHIL/200E or CH/APQM outreach plate
I/CH/AMT	Tie/desk microphone for CHIL/ML1, CHIL/DOM, CHIL/102, CHIL/200E, CHIL/PL1 or CH/APJ outreach plate
I/CH/PRO45	High Quality hanging ambient microphone
I/CH/FLAT/2005	100m x 1.0mm copper tape (flat loop)
I/CH/FLAT/3005	100m x 1.5mm copper tape (flat loop)

Please note: All microphones supplied with a connection lead except I/CH/AMP. If using an AMP, a range of connection leads are available.

Hark™ and Hark+



Overview

The Hark Help and Assistance Response Kit is simple to install and provides peace of mind wherever an indication of 'assistance required' is called for. Meeting the BS Standard requirement for all disabled toilets to be fitted with an emergency toilet alarm.

Available in kit solutions finished in white or stainless steel, to fit discretely into any decor or environment.

The unit benefits from a reassuring audible sound from within the reset unit which confirms that assistance is on the way in addition the unit has braille text.

Features

- Only 3 points to install on a standard system, and can be simply linked and expanded to other systems
- Simple to expand as requirements increase
- Sounder within the reset unit to give audible reassurance that assistance is on the way
- Kits supplied with Twin pull cord rings, Braille text on the reset unit as well as a Disabled Persons sticker
- Multi-way remote indicator units available
- Assists in compliance with the DDA, BS 8300 and other care standards
- Suitable for commercial and public buildings as well as specialist areas such as hospitals, restaurants, nursing and retirement homes
- Call acknowledge on Hark+

Additional Options

The Help Alarm Response Kit can be linked to a remote multi-way indicator panel (for use in a reception or staffed area).

A 12 volt relay unit can be used to interface the unit to a wide range of equipment such as:

- BMS
- Fire alarms
- Intruder Alarms
- Paging transmitters

Additional pull cord units can be added to the system to allow for larger rooms or multi area coverage. Please note that additional pull cords will operate and be reset by the same unit as the initial pull cord.

Alarm Indicator Units

The Indicator Units are simple to install and meet the BS requirement for all disabled toilets to be fitted with an emergency toilet alarm. 75 db at 1 metre.

These units can be purchased as either 1 or up to 11 indicators and come finished in either White Polycarbonate or Stainless Steel. Custom engraving is available.

Push Button

The HARK Push Button can be used instead of a hanging pull cord to notify that the user is in distress.



N/HARK/1 – Complete toilet alarm kit, comprising Pull Cord, Reset Unit, Power Supply Unit and Indicator finished in white polycarbonate

Pull Cord Units

The pull cord unit is supplied with a red plastic ring. An extra ring is supplied to conform to 'Approved Document M'. The second ring should be fitted lower down near floor level. Activating a call is simply made by pulling the cord. This will activate the re-assurance indicator on the pull cord unit. In turn this will also illuminate the reset unit and trigger the internal sounder. At the same time the Overdoor indicator/sounder unit will illuminate and trigger it's own internal sounder.

Reset Units

The reset unit has a blue engraved legend 'RESET'. When a call is activated the reset switch illuminates and the internal sounder activates. The call is reset by simply pressing the reset switch. The reset switch is supplied with Braille legend on the switch piece.

Indicator/Sounder Units

The Overdoor indicator/Sounder unit is supplied with an integral Power supply unit. A fused spur should be fitted nearby and wired to this unit to provide power. The unit will illuminate and sound as soon as a call is activated. The unit will cease once the reset switch is pressed.

HARK includes a variety of different accessories to work in compliance for a professional end result.

These accessories combine modern aesthetics and high functionality providing you with the ideal solution for the most demanding installations. HARK assists with compliance with the DDA, BS 8300 and other care standards.

Hark™ and Hark+

Hark and Hark+

N/HARK/1 Complete kit with pull cord, reset, PSU/ Indicator
 N/HARK+ Stainless steel option complete with battery back up (battery included) & Call Acknowledge option

Push Button

N/HARK/1/PB HARK 1 push button
 N/HARK+/PB/SS HARK Stainless Steel Push Button

Pull Cords

N/HARK/1/PC HARK 1 pull cord
 N/HARK+/PC/SS HARK pull cord stainless steel

Power Supply/Indicator Units

N/HARK/1/PSU HARK 1 power supply unit
 N/HARK+/PSU/SS HARK power supply unit stainless steel
 N/CHWB/BN/12V/DB Sounder Beacon

Reset Units

N/HARK/1/RS HARK 1 reset unit
 N/HARK+/RS/SS HARK reset unit stainless steel

Indicator Units, Panels and Accessories (Special Engraving Available P.O.A)

N/HARK/RI/1 HARK 1-way indicator unit
 N/HARK/RI/1/SS HARK 1-way indicator unit stainless steel
 N/HARK/RI/2 HARK 2-way indicator unit
 N/HARK/RI/2/SS HARK 2-way indicator unit stainless steel
 N/HARK/RI/3 HARK 3-way indicator unit
 N/HARK/RI/3/SS HARK 3-way indicator unit stainless steel
 N/HARK/RI/4 HARK 4-way indicator unit
 N/HARK/RI/4/SS HARK 4-way indicator unit stainless steel
 N/HARK/RI/5 HARK 5-way indicator unit
 N/HARK/RI/5/SS HARK 5-way indicator unit stainless steel
 N/HARK/RI/6 HARK 6-way indicator unit
 N/HARK/RI/6/SS HARK 6-way indicator unit stainless steel
 N/HARK/RI/7 HARK 7-way indicator unit
 N/HARK/RI/7/SS HARK 7-way indicator unit stainless steel
 N/HARK/RI/8 HARK 8-way indicator unit
 N/HARK/RI/8/SS HARK 8-way indicator unit stainless steel
 N/HARK/RI/9 HARK 9-way indicator unit
 N/HARK/RI/9/SS HARK 9-way indicator unit stainless steel
 N/HARK/CA Call Acknowledge Button on remote indicators (Hark+ ONLY)



N/HARK+ – Stainless steel kit option complete with battery back up and "call acknowledge" feature



HARK™ Indicator/Sounder Units



HARK™ Pull Cord Units and Push Button Option. Available in stainless steel or white polycarbonate.



HARK™ Alarm Indicator Unit in stainless steel finish and Reset Unit

Quantec – Addressable Call System



Overview

Quantec is a powerful yet easy to use addressable call system that helps ensure vital communication throughout a building.

The way the system operates can be tailored to suit a care facility's specific requirements with different day, night and call divert arrangements easily accommodated to meet the exact operational needs and precise layout of any building. This flexibility, coupled with many advanced features such as multiple call levels and full monitoring of all network devices, makes Quantec the obvious choice for larger nursing homes.

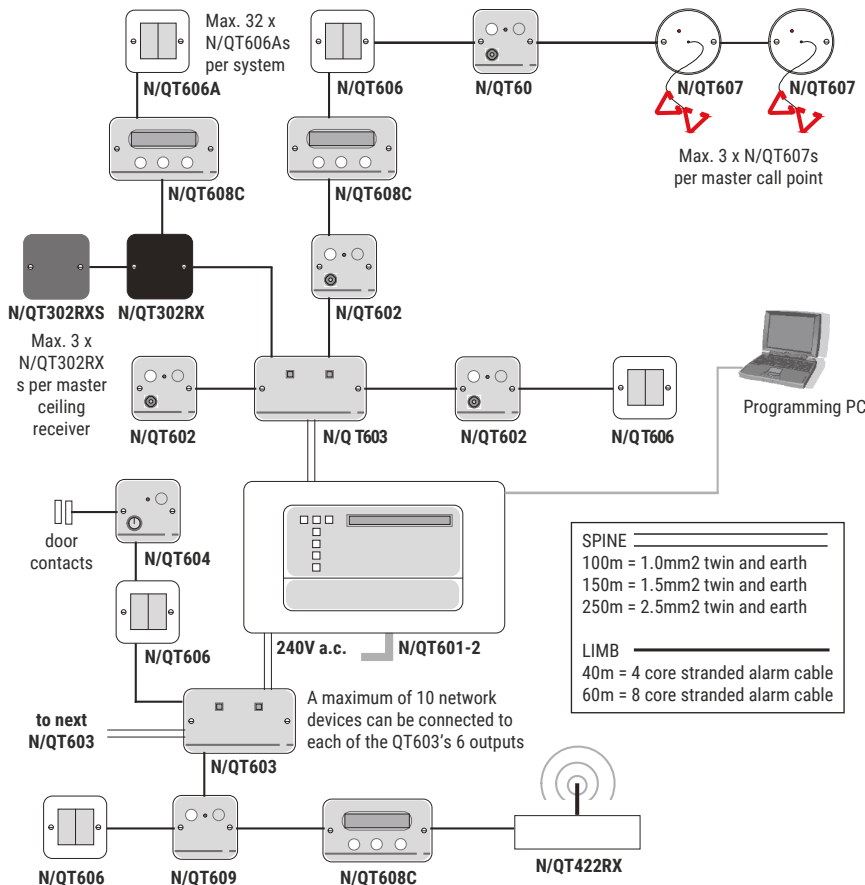


Left to right: Quantec Call Point with Reset Button and Quantec Display Unit with Controls

Features

- Multiple call levels including standard, en suite, help required, emergency, attack, presence and attendance
- Tailored to suit a site's exact operational requirements
- Call accept feature and Automatic call divert
- Illuminates overdoor lights and corridor lights
- Staff attendance allows staff entering rooms to log their 'attendance' via an infrared call point or ceiling receiver
- Call follower sounders (optional)
- Night mode allows Quantec to work in a totally different way at night, providing for fewer staff and reduced sound levels
- Infrared staff protection helps protect staff against disturbed patients, intruders and aggressive visitors
- 'Surveyor' data analysis software allows the outputting of custom reports
- Optional paging facilities (DECT telephone capability also available)
- Laptop programmable system controller
- Minimising disturbance, with no expensive rewiring
- Easy to install and expand
- Low maintenance time and costs
- A cost-effective expansion kit that adds true BS 8300 compliant accessible toilet alarm functionality to a Quantec Addressable Call System (order code N/QT951)

Quantec – Typical System Architecture



1000s of Sites are Benefiting from the Quantec Addressable Call System...



Todmorden House, Yorkshire (Health Centre)



St Kentigerns, North Wales (Hospice)



Abraham Guest, Greater Manchester (Secondary School)

Quantec – Addressable Call System

Panels

- N/QT601-2 Quantec addressable nurse call panel (requires x2 B/12V/7AH/SLA batteries)
- N/CH385 Flush bezel for Quantec QT601-2
- B/12V/7AH/SLA 12 Volt 7Ah sealed lead acid battery (1 block)

Display Units

- N/QT608C Quantec display unit with controls
- N/QT608CD Quantec display unit with no controls

Call Points

- N/QT602 Quantec call point with reset button (remote socket)
- N/QT602R Quantec call point with reset button and I/R receiver (remote socket)
- N/QT602M Quantec magnetic reset/call unit (remote socket)
- N/QT609 Quantec call point with reset button (no remote socket)
- N/QT609RS Quantec call point with reset button and I/R receiver (no remote socket)

Door Monitoring Stations

- N/QT604 Quantec door monitoring station with reset button

Over Door Lights

- N/QT606 Quantec slave overdoor light
- N/QT606A Quantec addressable overdoor light

Addressable Sounders

- N/QT688/2 Quantec high output addressable sounder

Pull Cord

- N/QT607 Quantec ceiling pull cord unit

Tail Lead

- N/CH/805C/6 6ft (1.8m) tail call lead
- N/CH/805/14 14ft (4.2m) tail call lead

Magnetic Reset Key

- N/CH/803M Magnetic reset key complete with keyring

Dual Action Transmitter

- N/QT412RXA Dual action infra-red/radio transmitter (push for attack/pull for attack)
- N/QT423 Configurator for N/QT412RXA
- N/QT611 Universal interface (call unit)

Infra-Red Ceiling Receivers

- N/QT302RX Quantec master infra-red ceiling receiver

Portable Receiver

- N/QT1001/S Quantec portable receiver (pocket data pager)

Network Splitter

- N/QT603 Network splitter, 5 outputs – up to 60 addressable devices per splitter



Quantec available in stainless steel

Overview

Designed in conjunction with an NHS Trust widely regarded as the leading light in the provision of high-intensity dementia care, Quantec Dementia Care products allow care providers to enhance the level of care they provide for patients suffering from Dementia, Alzheimers, Incontinence and other degenerative illnesses.

The system is engineer programmable to suit the exact requirements of an individual patient/bedroom and includes all of the inputs, outputs, timers and power needed for the connection of PIR movement sensors, enuresis sensors, bed exit mats, low voltage LED lighting, door monitoring contacts, slave infrared ceiling receivers, slave controllers, overdoor lights, room status controllers and more. The controller comes with a number of pre-set DIP-switch selectable configurations, all geared towards giving patients the freedom and dignity they need to live their lives as normally as possible with as little intervention from carers as their condition will allow.



Dementia Care Product Family

Features

- Can be configured to automatically switch lights on and off when movement is detected to safely guide patients to and from ensuite areas
- Provides clear and concise indication of room status data at ALL relevant Quantec displays (e.g. Bedroom 1, Bed Exit)
- All room/patient call activity is logged at the main Quantec Controller for optional output to our Quantec Surveyor data management software
- Comes with 10 pre-set patient monitoring configurations including: high-intensity, medium-intensity and ensuite ushering
- Can be easily adapted to the changing needs and ongoing behaviour patterns of Dementia and Alzheimers sufferers
- Many of the components shown can be easily added to existing Quantec systems
- All network devices are designed and manufactured in the UK

Mains supply	230V A.C 50/60Hz. Max. current 350mA
Internal Power Supply	27V DC (nominal)
Max. Switching Current	25mA
Max. Switching Voltage	30V DC
Main Fuse	1x 1 A HRC ceramic (20x5mm)
Battery	1x 12V 7Ah battery
Battery Fuse	1x 3.15 A F (20x5mm) this limits the current drawn from the battery
Weight	3.5kg (battery not included)

Quantec - Dementia Care

Panel

- N/QT601-2 Quantec addressable nurse call panel (requires 1x B/12V/7AH/SLA battery)
- N/QT630 Quantec dementia care controller complete with PSU (requires 1x B/12V/7AH/SLA battery)
- B/12V/7AH/SLA 12 Volt 7Ah sealed lead acid battery (1 block)

Display Units

- N/QT608C Quantec display unit with controls
- N/QT608CD Quantec display unit with no controls

Interface Units And PIR Accessories

- N/QT636 Quantec interface unit
- N/QT638 Quantec PIR movement sensor requires a QT645 PIR power interface if connecting via a QT604/QT604M/QT611

Over Door Lights, IR Receiver and Led Lamp

- N/QT606 Quantec slave overdoor light
- N/QT606A Quantec addressable overdoor light
- N/QT302RXRS Quantec slave IR ceiling receiver

MATS

- N/QT633 Bed exit mat (connects to a QT636/637 interface unit)

Dual Action Transmitter

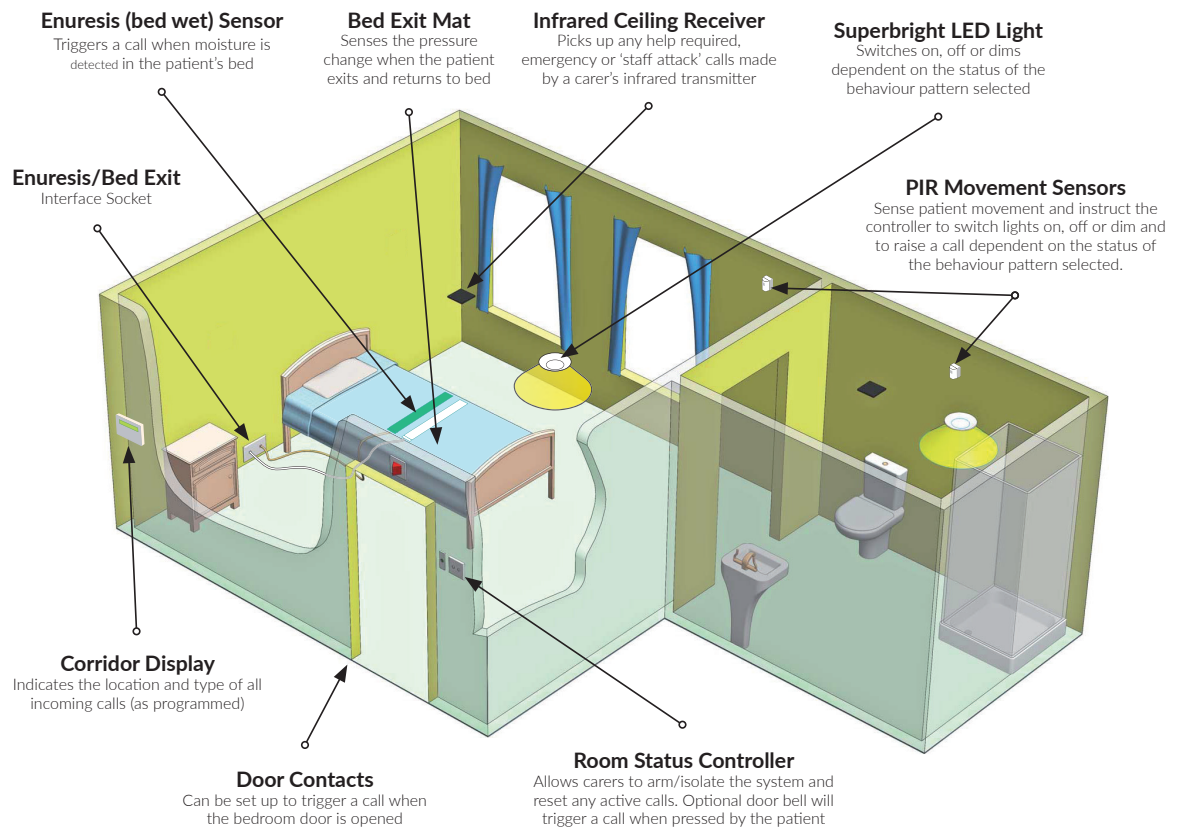
- N/QT412RXA Dual action infra-red/radio transmitter (push for attack/pull for attack)
- N/QT423 Configurator for N/QT412RXA
- N/QT611 Universal interface (call unit)

Network Splitter

- N/QT603 Network splitter, 5 outputs – up to 60 addressable devices per splitter

Typical System Architecture

A Medium Intensity Patient Monitoring System with Ensuite Ushering.



Benefits Of Using Quantec Dementia Care

- Allows Nursing homes to offer specialist Dementia care with little additional cost
- Allows Nursing homes to meet the requirements of local authority dementia care provision targets
- Gives confidence to residents, relatives and staff of a safe, caring approach.
- Allows residents to have a greater degree of autonomy without the need for staff assistance

Overview

Incorporating a wide range of indicator panels and an extensive array of system components (including ceiling pulls, wall-mounting call points, monitoring points, water resistant alert points, overdoor lights, remote sounders, relays and call latch modules), Channel Call System is without doubt one of the most versatile and reliable conventional call systems on the market.

Channel Call System is a wired system where individual devices are connected to the main control panel which when activated, will indicate the exact location of an "event".

Within the Channel Call System, we offer a 10 and 20 zone call controllers, which are compatible with all Channel Call System call points, ceiling pulls, infrared ceiling receivers, monitoring points, overdoor lights and remote sounders.

Depending on how the controller is configured and the devices connected to it, both standard and emergency calls can be indicated via its buzzer and zonal LEDs. Two buttons (A and B) are also provided to allow the user to reset, mute or accept standard calls.

Flush or surface call controllers are available. The N/CC800 control panels are available to cover 10-90 zones. Please contact us for bespoke systems.



A 10-20 zone call controller and a 30 zone panel



N/CC/9205

Features

- Hard wired for total reliability – 4 to 6 core security cable is ideal for most installations
- Wide range of indicator panels covering 1 to 90 zones
- Extensive range of ancillaries including ceiling pulls, wall-mounting call points, monitoring points, water resistant alert points, over door lights, remote sounders, relays and call latch modules
- Simple to install, easy to operate and highly reliable
- All power supplies capable of 12V sealed lead acid battery charging
- Two levels of call – standard (constant tone) and emergency (intermittent tone)
- Can be used to help building managers and service providers comply with BS 8300, the Equality Act and the Care Standards Act

Features

- | | |
|------------------------|--------------------|
| • Nursecall | • Cell Call |
| • Dementia Care | • Affray Locations |
| • Staff Protection | • Care Homes |
| • Emergency Assistance | |

Planning a System

The following points should be considered when designing or planning a call system.

- | | |
|-----------------------------|----------------------|
| • Indicator panels | • Call latch modules |
| • Call Points | • Overdoor lights |
| • Ancillary calling devices | |

How Does it Work?

Depending on the type of calling devices used, the system can be set up to operate as a standard system – on which standard (constant tone) calls are generated – or an emergency system – on which standard (constant tone) and emergency (intermittent tone) calls are generated.

Need Some Assistance?

We understand that planning an installation of a nurse call system can be difficult and the rules vary, so please check with the relevant bodies before planning.

UK Rest Homes – Social Services will usually approve the installation and the standard system is normally ideal. Their main requirement is for the rest point to be within sight of the caller to ensure the call is attended to properly.

UK Nursing Homes – The local health authority will usually approve the installation and the standard system may be satisfactory but some authorities will want the emergency facility. Also, some authorities only allow button operated emergency call/reset points and others require the magnetic key type.

Channel Call System

Control Panels

N/CC/941/SS	(NC941/SS) 1 zone call controller C/W 12V 250mA PSU and reset button SS steel
N/CC/943B	(NC943B) Single zone call controller 12V PSU, call accept
N/CC/944	(NC944) 4 zone call controller C/W mute/reset button, requires 12V PSU
N/CC/944/SS	(NC944/SS) 4 zone call controller C/W mute/reset button, requires 12V PSU SS
N/CC/910F	(NC910F) 10 Zone Master Call Controller flush
N/CC/910S	(NC910S) 10 Zone Master Call Controller surface
N/CC/920F	(NC920F) 20 Zone Master Call Controller flush
N/CC/920S	(NC920S) 20 Zone Master Call Controller surface
N/CC/910EF	(NC910EF) 10 Zone Expansion Unit - Flush
N/CC/910ES	(NC910ES) 10 Zone Expansion Unit - Surface
N/CC/920EF	(NC920EF) 20 Zone Expansion Unit - Flush
N/CC/920ES	(NC920ES) 20 Zone Expansion Unit Surface
F/PSU/12/1/BM	(N/A) 12v 1A Power Supply Unit (Optional for 910/290 panels)
B/12V/2.3AH/SLA	(NP2.3/12) 12V 2.3AH sealed lead acid battery
N/CH/930	(NC930) 12V 250mA double gang PSU
N/CH/930/SS	(NC930/SS) 12V 250mA double gang PSU stainless steel

Call Points

N/CH/802DB	(NC802DB) Mk4 call point button reset
N/CH/802DEB-1/2	(NC802DEB-1/2) MK4 one/two button emergency call point
N/CH/804DE	(NC804DE) MK4 emergency call point button reset
N/CH/917L	(NC917L) Standard call push protruding button
N/CH/802DEWA	(NC802DEWA) IP67 Yellow Panic alarm - Requires N/CH/889ERM
N/CH/802DEWP	(NC802DEWP) IP67 Blue Panic alarm - Requires N/CH/889ERM
N/CH/889ERM	(NC889ERM) Multi purpose call latch mod

Pull Cord

N/CH/807C	(NC807C) Ceiling pull unit
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Overdoor lights and sounders

N/CH/806C	(NC806C) Mk3 Overdoor light
N/CH/806C/SS	(NC806C/SS) Stainless steel overdoor light
N/CH/806CS	(NC806CS) Overdoor light with sounder
N/CH/806CS/SS	(NC806CS/SS) Stainless steel overdoor light with sounder
N/CH/888D	(NC888D) Remote sounder

Monitoring Points

N/CH/894DKB	(NC894DKB) Isolatable monitoring point button reset
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Reset Units

N/CH/809DB	(NC809DB) Mk4 button reset point
N/CH/809DB/SS	(NC809DB/SS) Mk4 button reset point stainless steel

Accessible Toilet Alarm Kits

N/CH/951	(NC951) Accessible toilet alarm system
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Tail Calls/Remote call

N/CH/805AS	(NC805AS) Remote airswitch
N/CH/805C/14	(NC805C/14) 14ft Tail Call Button 90° jack socket
N/CH/805C/6	(NC805C/6) 6ft Tail Call Button 90° jack socket
N/CH/805D	(NC805D) 4-12ft Coiled Lead 90° jack socket
N/CH/805DSP	(NC805DSP) Double stereo jack plug

Infrared Devices

N/CH/302RXC	(NC302RXC) 800 series IR ceiling receiver
N/QT412RXA	(QT412RXA) IR/radio TX Push attack/pull attack
N/QT412RXCA	(QT412RXCA) IR/radio TX Push call/pull attack
N/QT424/1	(QT424/1) Single Way charging unit for QT412 range Tx's
N/QT424/10	(QT424/10) 10 Way charging unit for QT412 range Tx's
N/QT616	(QT616) Quantec Portable IR/RF fall detector
N/CH/302RT	(NC302RT) Nursecall Infrared test receiver

Magnetic Reset Keys

N/CH/803M	(NC803M) Mag reset key and keyring - Single
N/CH/803M/10	(NC803M/10) Mag reset key and keyring (Pack 10)



Call and Monitoring Points
N/CH/802DB and N/CH/894DKM



Sounder Unit
N/CH/888D



Ceiling Pull Cord
N/CH/807C



Master Water Resistant Alert Point (Magnetic Reset)
N/CH/802DEWM



Over Door Light
N/CH/806C



Pneumatic Pad
N/CH/805/AS

Overview

A refuge system provides a means of calling for assistance in the event of an emergency. A designated “safe area” isolates exiting occupants from the effects of smoke and heat during a fire or emergency situation. The communication system allows the person in need to inform security of their location in the building and provides an area that are relatively safe places where people who cannot easily use fire escapes.

Most risk assessments show the need for a Refuge System, giving reassurance that the building management know of the occupants whereabouts during an emergency.

The primary function of the Refuge Communication System is to provide a voice link between two points in a building. When a call is generated at the refuge area, the central control panel will sound and display the location of the incoming call.

Lifting the handset and pressing the appropriate zone button at the central station will open the speech channel (loudspeaker) allowing a ‘full duplex’ conversation to take place. The disabled refuge outstation can be used to call for assistance and reassure the person until help arrives.



Safety Regulations and Disability Discrimination Act

Part M of the UK government’s building regulations insists that all new non-domestic buildings with more than one-storey must provide refuge areas for public safety purposes.

The Disability Discrimination Act (DDA) consists of several pieces of civil law that enable disabled people who feel they have been discriminated against to take action for damages against organisations or individuals should these considerations not be implemented to support their personal safety in the event of an emergency.

All of Channel’s disabled refuge systems are BS 9999 and BS 5839 Pt9. 2010 compliant, and we offer our consultants assistance for BS 5839, BS 9999, as well as providing relevant specification templates.

Simple and Effective – Simple and effective ‘full duplex’ two-way communication in these areas is essential, firstly to assist rescue teams in determining where assistance is required and secondly to reassure people help is on the way.

2-Way Product Features

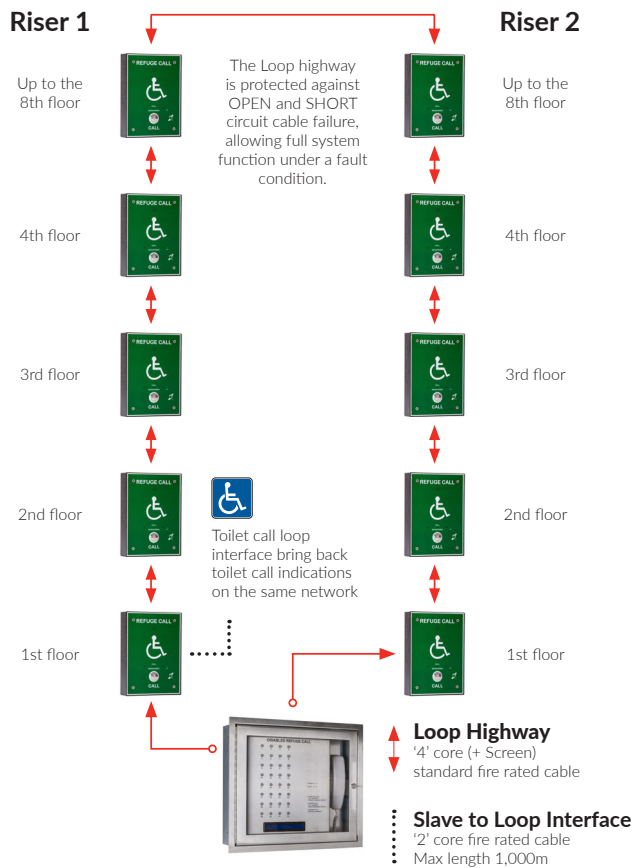
- Battery support 24 + 3 hours (emergency)
- Fully compliant to BS 5839 Pt9
- CE 2019 certified
- Available with flush or surface mounting back box
- 2 disabled toilet alarm indicators

4, 8, 16, and 32-Way Product Features

- The Orbital refuge alarm range is a disabled refuge and disabled toilet alarm system. The main panels are offered in a stainless steel finish in either a surface or flush enclosure with black screen print and glazed lockable door.
- The master panel has the separate call switches and indicators for each disabled refuge location.
- The panel has a built in alphanumeric blue OLED screen for disabled refuge zone description and ‘32’ disabled toilet alarm zone indication.
- The disabled refuge outstations are wired in radial ‘2’ core ‘1.5’mm enhanced fire rated cable or as a loop wired ‘4’ core ‘1.5’mm enhanced fire rated cable.
- A volt free changeover contact is provided for remote call in and fault reporting. A fire panel inhibit input is also fitted as standard.
- Battery support 24 + 3 hours.
- Fully compliant to BS 5839 Pt9 and CE 2019 certified.
- A simple two core cable should be wired from the disabled toilet PSU/Sounder unit to the nearby disabled refuge outstation. The refuge outstation back box is supplied with terminals for this connection.

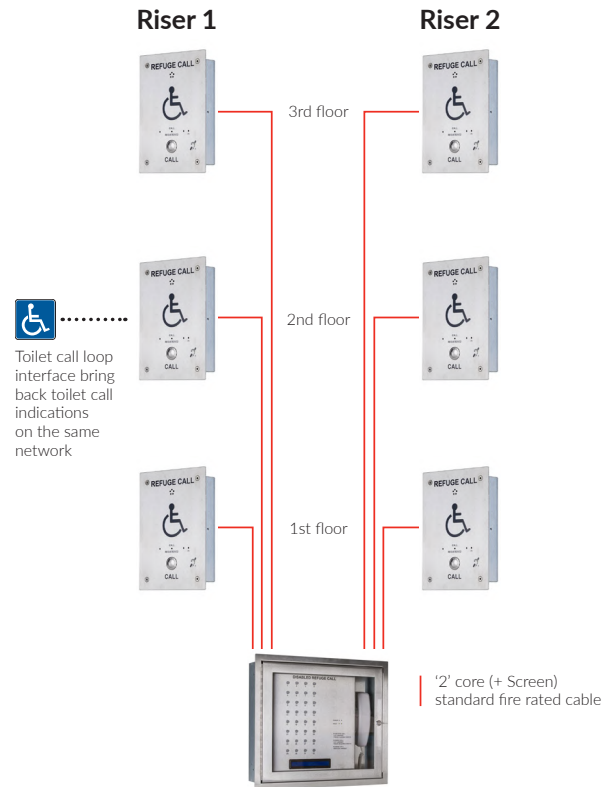
See page 116 for details of **HARK Disabled Persons Alarm Systems** (toilet alarms)

Loop Wiring Diagram



Radial Diagram

Typical schematic for a 6 line disabled refuge call system



Channel Orbital Range – Refuge Alarm System

Panels

R/CH/ORB/R/RS2/F	2 Way FLUSH Stainless steel refuge panel with disabled toilet alarm indicator – Radially wired
R/CH/ORB/R/RS2/S	2 Way SURFACE Stainless steel refuge panel with disabled toilet alarm indicator – Radially wired
R/CH/ORB/R/RS4/OLED/F	4 Way FLUSH Stainless steel refuge panel with disabled toilet alarm indicator – Radially wired
R/CH/ORB/R/RS4/OLED/S	4 Way SURFACE Stainless steel refuge panel with disabled toilet alarm indicator – Radially wired
R/CH/ORB/L/RS4/OLED/F	4 Way FLUSH Stainless steel refuge panel with disabled toilet alarm indicator – Loop wired
R/CH/ORB/L/RS4/OLED/S	4 Way SURFACE Stainless steel refuge panel with disabled toilet alarm indicator – Loop wired
R/CH/ORB/R/RS8/OLED/F	8 Way FLUSH Stainless steel refuge panel with disabled toilet alarm indicator – Radially wired
R/CH/ORB/R/RS8/OLED/S	8 Way SURFACE Stainless steel refuge panel with disabled toilet alarm indicator – Radially wired
R/CH/ORB/L/RS8/OLED/F	8 Way FLUSH Stainless steel refuge panel with disabled toilet alarm indicator – Loop wired
R/CH/ORB/L/RS8/OLED/S	8 Way SURFACE Stainless steel refuge panel with disabled toilet alarm indicator – Loop wired
R/CH/ORB/L/RS16/OLED/F	16 Way FLUSH Stainless steel refuge panel with disabled toilet alarm indicator – Loop wired
R/CH/ORB/L/RS16/OLED/S	16 Way SURFACE Stainless steel refuge panel with disabled toilet alarm indicator – Loop wired
R/CH/ORB/L/RS32/OLED/F	32 Way FLUSH Stainless steel refuge panel with disabled toilet alarm indicator – Loop wired
R/CH/ORB/L/RS32/OLED/S	32 Way SURFACE Stainless steel refuge panel with disabled toilet alarm indicator – Loop wired
R/CH/RCO/H/GB	Green outstation faceplate inc. AFILS induction loop. (requires back box)
R/CH/RCO/H/SS/1	Stainless steel outstation faceplate inc. AFILS induction loop. (requires back box)
R/CH/RCO/S/BB/1	Refuge Call Back Box – surface mounting (radial) – C/W Disabled toilet alarm input
R/CH/RCO/F/BB/1	Refuge Call Back Box – flush mounting (radial) – C/W Disabled toilet alarm input
R/CH/RCO/S/L/BB/1	Refuge Call Back Box – surface mounting (loop) – C/W Disabled toilet alarm input
R/CH/RCO/FL/BB/1	Refuge Call Back Box – flush mounting (loop) – C/W Disabled toilet alarm input

Please note: Larger panels are also available on request should you require a larger system.

SigTel Refuge Alarm System



Overview

For most people, a simple instruction like “please leave the building by the nearest available exit” can be acted upon quickly and easily. But for wheelchair users, the disabled and infirm, this isn't always the case.

Current Building Regulations recognise this and insist that all new non-domestic buildings with more than one storey provide ‘refuge’ areas – relatively safe places where people who cannot easily use fire escapes and evacuation lifts can call for assistance and wait until help arrives.

Simple, effective two-way communication in these areas is essential, firstly to assist rescue teams in determining where assistance is required and secondly to reassure people help is on the way. Communication systems in refuge areas are known as Emergency Voice Communication (EVC) Systems. Their design and installation is governed by BS 5839 part 9.

Features

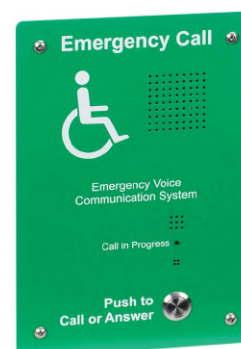
- New-look 4, 8 and 16 line master controllers with semi-recessed handsets save valuable space in crowded control rooms
- Enhanced networking facility allows up to 14 master controllers to be interlinked for systems of up to 224 lines
- New optional 224 Line Desk Controllers allow operators to communicate with up to 224 disabled refuge or fire telephone outstations from a single accessible point
- Optional anti-tamper enclosures available for controllers located in areas accessible to the public
- Wide range of ‘Disabled Refuge’ (Type B) outstations available in stainless steel or green steel (flush, surface or weatherproof options available)
- ‘Fire Telephone’ (Type A) outstations available in locking or non-locking red steel cabinets
- All outstations offer true duplex speech and can be mixed and matched to suit the application
- Unique ‘auto-learn’ facility allows fast system set up
- Devices can be named/edited using the buttons on a master controller or via an optional PC programming configurator (part no. EVC423).
- All extensions can be named with user-defined text of up to 15 characters
- Fully monitored hardware and software
- System operates at 24V DC. In the event of mains failure, operation can be maintained for 24 hours (standby) and 3 hours (in use) using 2 x 12V 7 Ahr batteries
- Optional FITT line tester allows cable faults to be checked prior to equipment connection
- Easily interfaced to accessible toilet alarm systems, hearing loop systems, strobes or CCTV activation relays
- Ideal for disabled refuge, fire telephone and stadium marshalling applications
- Perfect for hotels, shopping malls, office blocks, transport terminals, sports stadiums, entertainment complexes, etc



R/CH/EVC302S



R/CH/EVC301RPO



R/CH/EVC302GF

Where are disabled refuges/Type B outstations required?

An emergency voice communication system is a life safety intercom (or telephone) system designed to operate reliably in a fire alarm emergency. Its equipment and wiring must be monitored for faults that might occur prior to the emergency and its cabling and battery backup supply must ensure it keeps working during the emergency. According to BS5839 part 9, there are two types of EVC system; disabled refuge and fire telephone. They may be separate, or they may be combined into one system.

Disabled refuge systems

A disabled refuge system typically connects handsfree intercom outstations to a central control room and is used to inform management that someone needs immediate assistance to exit the building.

Fire telephone systems

A fire telephone system is used by management (and marshals at a sports ground) and the fire service before, during and after a fire to communicate with fire marshals and fire fighters.

Regulations affecting EVC systems?

The installation of an emergency voice communication system is governed by BS5839 Part 9: Code of practice for the design, installation, commissioning and maintenance of emergency voice communication systems.

Disabled Refuge Systems are called for by:

- Building Regulations; Approved Document B (Fire Safety); Volume 2, Section 4: Design for vertical escapes
- BS9999: Code of practice for fire safety in the design, management and use of buildings; Clause 41.9 Communications; Clause 46.8 Use of refuges
- Regulatory Reform Order (Fire Safety Order) Oct 2005
- Risk assessments undertaken by the responsible person must make provision for means of escape for disabled people.
- Supplementary Guide: Means of escape for disabled people
- Equality Act 2010 (supersedes the Disability Discrimination Act)
- UN Convention on the rights of people with disabilities

Fire telephone systems are called for by:

- BS9999: Code of practice for fire safety in the design, management and use of buildings; Clause 24 Communication systems for fire and rescue service use London District Surveyors Association in conjunction with LFCDA Fire Safety Guide No. 3; Section 2: Fire Safety Measures London Fire and Civil Defence Authority (London Fire Brigade) Fire Safety Guidance Note Number: 30 (Rev 3) Guide to safety at sports grounds; 16.11: Telephone communications – internal
- Where are disabled refuges/Type B outstations required?
- Refuge areas are called for in all non-domestic buildings with more than one storey and they should be provided at each storey exit (i.e. each protected stairway affording egress)
- Examples of a refuge area include an enclosure such as a protected lobby, corridor or stairway or an area in open air such as a flat roof, balcony, podium or similar place which is sufficiently protected (or remote) from any risk of fire and has its own means of escape

Where are disabled refuges/Type B outstations regulations?

Refuge areas are called for in all non-domestic buildings with more than one storey and they should be provided at each storey exit (i.e. each protected stairway affording egress).

Examples of a refuge area include an enclosure such as a protected lobby, corridor or stairway or an area in open air such as a flat roof, balcony, podium or similar place which is sufficiently protected (or remote) from any risk of fire and has its own means of escape.



R/CH/ECU-224



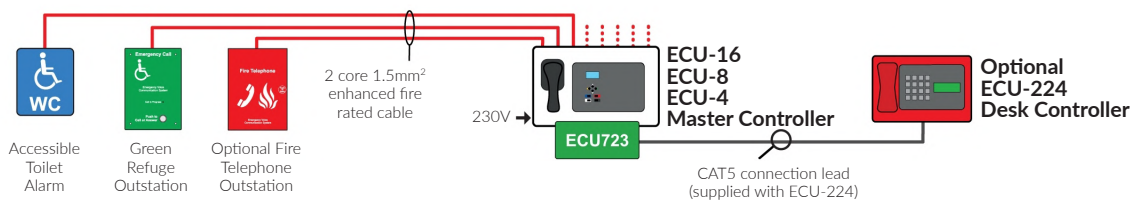
R/ECU-8NT



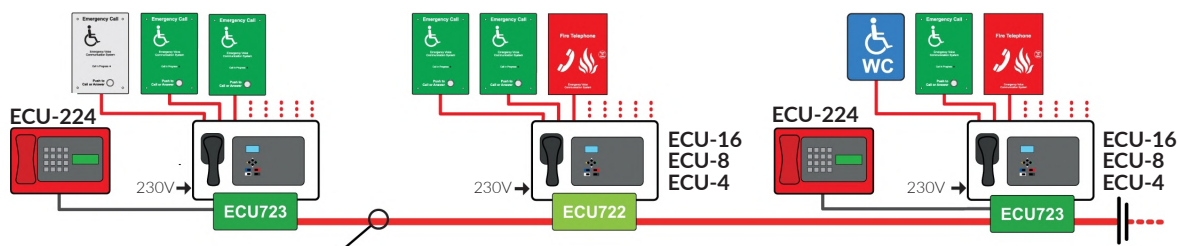
R/CH/ECU-224



R/ECU-8NT



Network SigTel system wiring with multiple ECU-224 Desk Controllers



Communication Network (only required on network SigTel systems). ECU722 and ECU723 cards mount inside master controllers. Wire the network in 4 x 2 core 1.5mm² enhanced fire rated cable. Total network length – 1km. Total no. of networked controllers = 14 (or 224 lines) ECU723 cards are only required if using an optional desk controller. If a desk controller is not required use an ECU722 card instead. Master controllers without handsets (ECU-8NT) are also available but these are not compatible with ECU-224 desk controllers.

SigTel Refuge Alarm Systems

4-224 Way Line Controllers

R/ECU-4	4 Line SigTel Master Controller C/W handset. Max 2 x 7Ah batteries
R/ECU-8	8 Line SigTel Master Controller C/W handset. Max 2 x 7Ah batteries
R/ECU-16	16 Line SigTel Master Controller C/W handset. Max 2 x 7Ah batteries
R/ECU-8NT	8 Line SigTel Master Controller (no handset). Max 2 x 7Ah batteries
R/ECU722	Network card, allows up to 14 ECU-4, 8, 16 or 8NTs to be interlinked. (To network a controller that has an optional ECU-224 desk controller fitted use an ECU723 interface/network card instead, see below)
R/CH/EVC385	Grey flush bezel for ECU-4, 8, 16 or 8NT controllers
R/CH/BF359/3M	Flush stainless steel anti-tamper enclosure for ECU-4, 8, 16 or 8NT Medium depth (725W x 448H x 130Dmm)
R/CH/BF359/3CL	Cam lock kit for R/CH/BF359/3M or R/CH/BF359/3D
R/CH/BF359/3SL	Electromagnetic solenoid lock kit for R/CH/BF359/3M or R/CH/BF359/3D

4-224 Way Line Desk Controllers

R/CH/ECU-224M	Optional 1-224 line SigTEL Desk Controller with handset and display. Requires an R/CH/ECU723 fitted with an R/CH/ECU-4, 8 or 16 Controller. R/CH/ECU-224s are NOT compatible with R/CH/ECU-8NT Controllers
R/CH/ECU-723	R/CH/ECU-224 interface/network card. Allows an ECU-224 desk controller to be connected to an R/CH/ECU-4, 8 or 16 Controller. Can also act as a network card if networking is required. NOT compatible with R/CH/ECU-8NT Controllers

Disabled Refuge (Type B) Outstations

R/CH/EVC302GF	Green handsfree R/CH/EVC outstation, flush mounting
R/CH/EVC302GS	Green handsfree R/CH/EVC outstation, surface mounting
R/CH/EVC302F	Stainless steel handsfree R/CH/EVC outstation, flush mounting
R/CH/EVC302S	Stainless steel handsfree R/CH/EVC outstation, surface mounting
R/CH/BF359/1	IP66 rated enclosure, steel, non-locking (for R/CH/EVC302GF or F)

Disabled Refuge (Type A) Outstations

R/CH/EVC301RPO	Red fire telephone outstation, C/W handset (push to open)
R/CH/EVC301RLK	Red fire telephone outstation, C/W handset (key lockable)
R/CH/T-BEZ301	Red flush bezel for R/CH/EVC301RPO and R/CH/EVC301RLK
R/CH/EVC401/PH	Roaming Mk2 red fire telephone handset C/W heavy duty jack plug
R/CH/EVC301/JP	Single gang jack plate for use with R/CH/EVC401/PH 2

SigTel Programming Software, Testers, Spares and Accessories

R/CH/ECU-PPT	ECU handset complete with Push-to-Talk button
R/CH/FITT/R/CH/EVC	Line tester (saves time on large installations)
R/CH/CATCON	Adaptor box to convert fire-rated cable to Cat 5
R/CH/XSB	Blue xenon strobe, 12V (requires 1 x SDM)
R/CH/SDM	Strobe driver module, 12V



The Knowledge

Quick Guide



Disability and the Equality Act 2010

From 1 October 2010, the Equality Act has combined all previous acts relating to discrimination, into one, more encompassing legal area.

This means that although the Disability Discrimination Act (DDA) has been superseded by the Equality Act, the Disability Equality Duty in the DDA continues to apply.

Equality Act 2010

The Equality Act 2010 aims to protect disabled people and prevent disability discrimination. It provides legal rights for disabled people in the areas of:

- Employment
- Education
- Access to goods, services and facilities including larger private clubs and land based transport services buying and renting land or property
- Functions of public bodies, for example the issuing of licences

The Equality Act also provides rights for people not to be directly discriminated against or harassed because they have an association with a disabled person. This can apply to a carer or parent of a disabled person. In addition, people must not be directly discriminated against or harassed because they are wrongly perceived to be disabled.

The Definition of 'Disability'

Under the Equality Act 2010, a person has a disability if:

- they have a physical or mental impairment
- the impairment has a substantial and long-term adverse effect on their ability to perform normal day-to-day activities

For the purposes of the Act, these words have the following meanings:

- 'substantial' means more than minor or trivial
- 'long-term' means that the effect of the impairment has lasted or is likely to last for at least twelve months (there are special rules covering recurring or fluctuating conditions)
- 'normal day-to-day activities' include everyday things like eating, washing, walking and going shopping

People who have had a disability in the past that meets this definition are also protected by the Act.

Progressive conditions considered a disability – There are additional provisions relating to people with progressive conditions. People with HIV, cancer or multiple sclerosis are protected by the Act from the point of diagnosis. People with some visual impairments are automatically deemed to be disabled.

Conditions that are specifically excluded – Some conditions are specifically excluded from being covered by the disability definition, such as a tendency to set fires or addictions to non-prescribed substances.

System Design Guidance

Always refer to the requirements of the Building Regulations 1991, and the Building Regulations (Amendment) 1998, Part M (Access and facilities for disabled people) so as to practice good building design. All business must now provide facilities for disabled persons and this legal obligation extends to the fire alarm system.

There are numerous methods of compliance with the Disability Discrimination Act including fixed equipment such as visual alarm indicators, portable equipment such as vibrating pagers and pillows or instructing staff to ensure the safety of disabled persons using the premises.

- Failure to provide fire alarm protection for disabled persons in any business premises is a breach of the law.
- All automatic door opening installations must comply to BS 7036.
- On any door opening installation please be aware finger guards may be required either roller blind type or finger guard (plastic).

Penalties for failing to comply

The DDA gives disabled people the right to bring a civil claim against your business where they find you have breached the provisions of the DDA and discriminated against them. If in doubt contact our technical team on 0845 884 7000.

Types of Disability

A typical perception of a disabled person is that they are wheelchair users, however this is a huge misconception. The split of disability according to the latest available figures in the UK is as follows:

- | | |
|---------------------------|-----|
| • Hearing Impairment | 51% |
| • Mobility Problems | 22% |
| • Wheelchair users | 3% |
| • Blind/partially sighted | 15% |
| • Speech impediments | 4% |
| • Other | 5% |

Who is affected by the Disability & Equality Act

- Does your organisation provide goods or services to the public?
- Do members of the general public visit your premises?
- Does your organisation conduct interviews on your premises?
- Do you carry out training/instruction in your premises?
- Does your organisation have a WEB site?
- Are you a landlord?

Useful Contacts...

Equality Advisory Support Service

Phone: 0808 800 0082

Textphone: 0808 800 0084

Website: www.equalityadvisoryservice.com

Quick Guide

A Guide to Induction Loop System

What is an Audio-Frequency Induction Loop System?

Hearing loop systems allow hearing impaired people to hear more clearly. Most hearing aids have a 'T' or 'MT' switch which allows them to pick up the electromagnetic field generated by a hearing loop system. The hearing aid converts this signal into a sound suited to its user's specific hearing requirements.

Any person with a hearing aid positioned within or near the loop can hear the loop signal by switching their hearing aid to the correct position, allowing them to participate more effectively in general conversation, ordering goods or services, listening to public performances, etc.

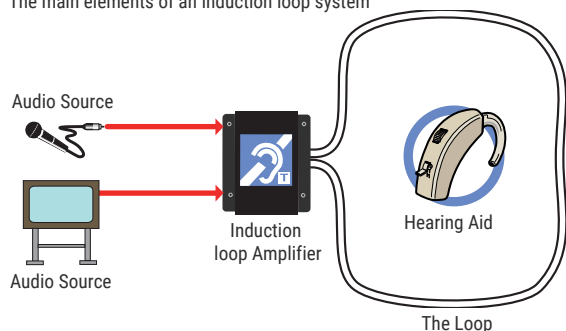
A hearing loop system therefore comprises the following main elements:

- **The audio source** – typically a microphone, television or other audio input (sometimes more than one).
- **The hearing loop amplifier**
- **The loop** – typically one or two turns of wire usually run around the perimeter of the room or a special counter loop fixed to the underside of a table or desk.
- **The receiver(s)** – any hearing aid with a 'T' or 'MT' switch or a specially designed loop listening device.

In addition to the many routine benefits for hearing aid users, hearing loop systems can also be used for other limited area broadcasting applications such as museum 'walk through' guided tours and surveillance talkback systems.

Some hearing loop systems may require additional audio sources such as multiple microphone or line level inputs. To facilitate this, many PDA range amplifiers include a patented 'Outreach' socket which allows the connection of multiple inputs via a range of specially designed single gang audio connector plates.

The main elements of an induction loop system



How Does An Induction Loop System Work?

Hearing loop systems do not use radio frequencies; they operate at audio frequencies. The signal from an audio source is fed into a hearing loop amplifier, which amplifies and sets the signal level in the same way as a conventional amplifier. The amplified signal, instead of going to a loudspeaker, is fed to a closed loop of cable that is normally placed around the perimeter of the room (although other, more sophisticated 'loop patterns' can be employed). Using a constant current amplifier ensures the current is maintained at the set level whilst providing a flat frequency response without the need for equalisation circuitry. The current flowing through the loop generates a magnetic field that radiates in the space around the loop cable. Any lines of magnetic flux that pass through the telecoil in a receiver, such as a hearing aid, will generate a current in the coil that is then converted back to audio and fed into the listener's ear. It is important to remember that the magnetic field will 'bleed' outside the perimeter of the loop and therefore a loop system cannot be considered confidential.

Why We Have Induction Loop Systems

In normal use, hearing aids utilise a microphone that can amplify localised speech from a distance of up to 2m away. Whilst this is effective for local conversations/ quiet environments, it is less effective for listening to speech or music at a distance or in front of a security screen at a ticket counter. This is because the hearing aid's microphone also picks up any background noise in the room and unwanted speech from other conversations. A hearing loop system works by moving the required sound closer to the hearing aid via the hearing aid's telecoil which is activated by turning it to the 'T' or 'MT' position. As telecoils are fitted as standard to most hearing aids (over 90% are said to have the 'T' position) hearing loop systems can be considered cost-effective compared to other hearing assistance systems. Infrared systems, for example, require special receivers, the cost and maintenance of which must be met by the service provider. Many modern hearing aids do not just amplify all frequencies equally; they are tailored to suit the user's hearing requirements and amplify different bands by different amounts. This gives maximum intelligibility, so the user has the best chance of understanding what is said.

Which induction loop system should I use?

The Channel Safety range of hearing loop equipment comprises a huge range of amplifiers, microphones, connector plates, loop cable and test equipment covering every conceivable AFILS application. Designed to meet or exceed the requirements of BS 7594 and EN60118-4, our amplifiers offer excellent intelligibility, true current mode amplification, 'phantom' power (for use with electret microphones) and full compatibility with our Outreach plate audio input extension system. Much of our equipment is available in kit format for ease of use, specification, purchase and installation.

Please contact us for assistance in designing the system to suit your requirements.

Quick Guide

A Guide to Building Regulations, IP Ratings, and Kelvin Light Scale

Building Regulations

To ensure specified luminaires meet the requirements of the current building regulations it is important to consider the legislation contained within the Building Regulations. The most relevant of these are:

Approved Document L

- Approved Document L1A: Conservation of fuel and power (New Dwellings) (2006 Edition)
- Approved Document L1B: Conservation of fuel and power (Existing Dwellings) (2006 Edition)
- Approved Document L2A: Conservation of fuel and power (New buildings other than dwellings) (2006 Edition)
- Approved Document L2B: Conservation of fuel and power (Existing buildings other than dwellings) (2006 Edition)

Part L requires that energy efficient lighting is installed in both domestic and non-domestic dwellings, existing, new & refurbished (over 100m²).

Part L gives design information for the following (non-domestic dwellings):

- Selection of lamp types
- Effective use of daylight
- Control gear and power factor correction
- Use of lighting controls
- Luminaire efficiency

Approved Document B

- Approved Document B (Fire safety) – Volume 1: Dwellings (2006 Edition)
- Approved Document B – Volume 2: Buildings other than Dwellings (2006 Edition)

Part B deals with the fire safety requirements for emergency lights and the use of thermoplastic materials.

It is our recommendation that reference be made to the latest version of the Approved Documents. Full details can be found on: www.planningportal.gov.uk

IP Ratings

The International Protection code, commonly known as the Ingress Protection code (IP) indicates the protection afforded by an enclosure against the ingress of foreign (solid) bodies and ingress of moisture and liquids. The IP rating also classifies the protection given by an enclosure against touching live or moving parts.

The IP rating is given by the use of two numbers.

First Digit - Protection Against Ingress of Solid Objects

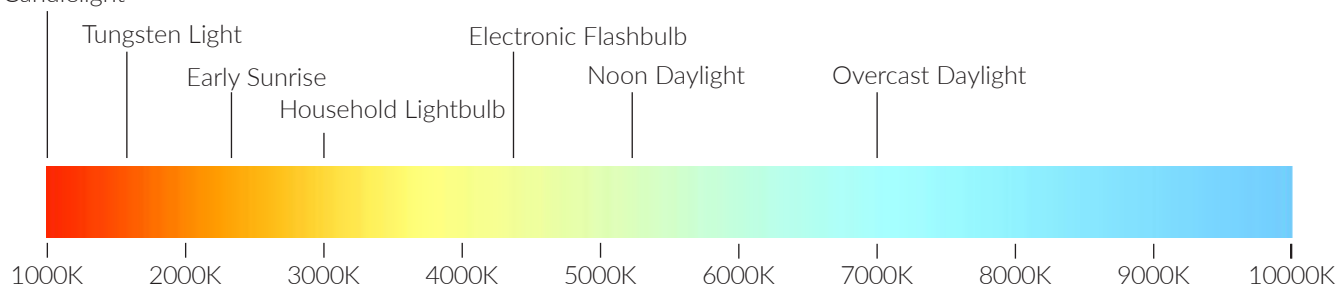
0	No protection
1	Protection against large sized bodies such as hands
2	Protection against medium sized bodies such as fingers
3	Protection against small sized bodies 2.5mm dia. or larger such as tools and wires
4	Protection against very small sized bodies 1mm dia. or greater
5	Protection against harmful deposits of dust (Dust proof)
6	Complete protection against deposits of dust (Dust tight)

Second Digit - Protection Against Ingress of Liquids

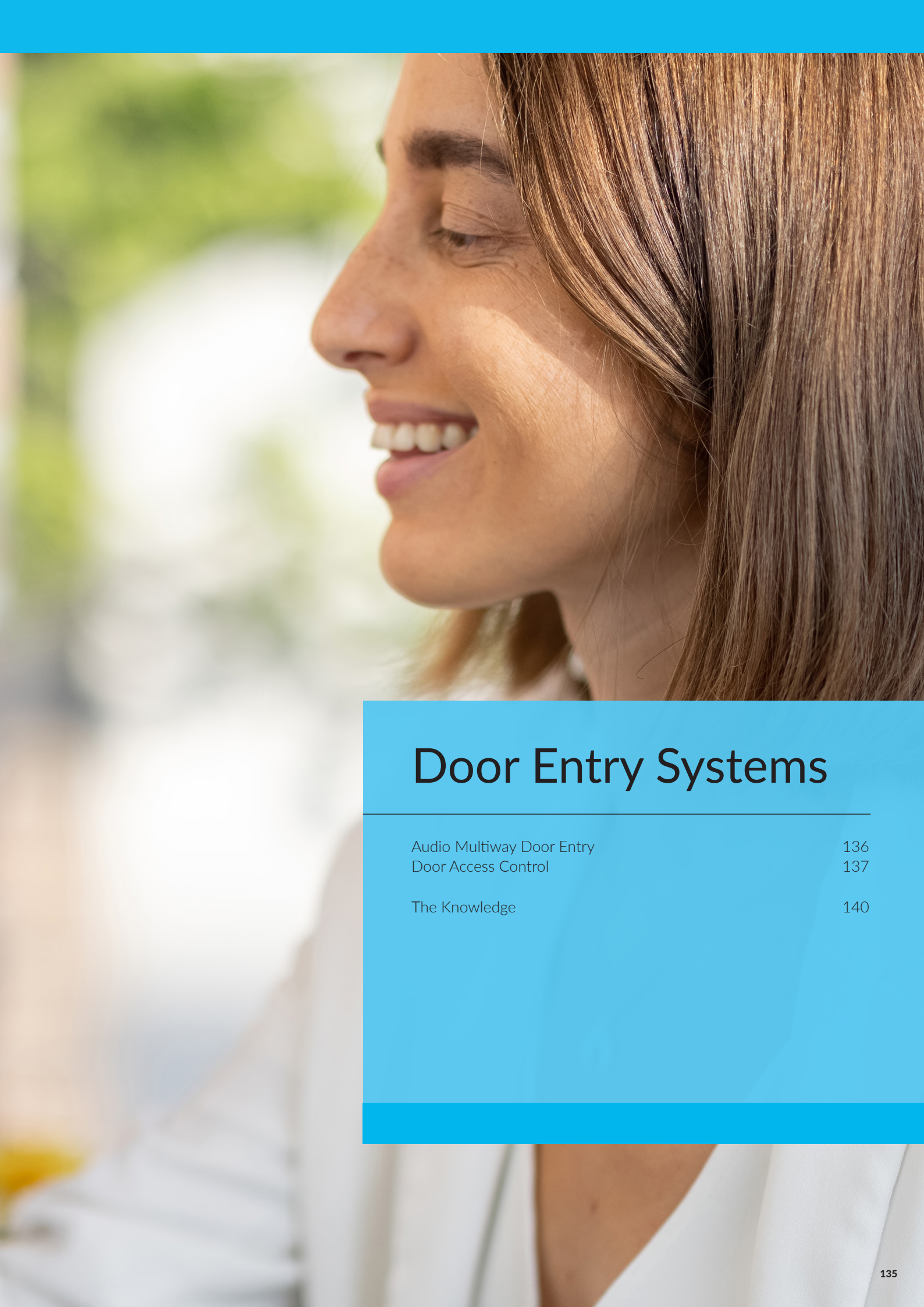
0	No protection
1	Protection against vertically falling drops of water
2	Protection against drops of water up to 15° from the vertical
3	Protection against rain falling up to 60° from the vertical
4	Protection against splashed water from any angle
5	Protection against jets of water from any angle
6	Protection against water from heavy seas
7	Protection against immersion for a defined period
8	Protection against immersion for an indefinite period

Kelvin Colour Temperature Scale

Candlelight







Door Entry Systems

Audio Multiway Door Entry	136
Door Access Control	137
The Knowledge	140

ENTRitech™ – Audio Door Entry

Overview

The easy-to-install 5-wire Audio only ENTRitech range has been designed for use within a wide range of applications including residential, commercial and industrial properties. ENTRitech uses up to date technology and is beautifully presented in a modern series of designs supplied in 17 gauge 1.367mm thick stainless steel. This modular system is supplied in easy to order kit form with flush kit options available from 1 way to 8 way. Please contact us for details.

Features

- Stainless steel call stations
- Cost effective in installation time and materials
- Encapsulated electronics/IP44 rated call station
- Available in flush or surface mounted versions
- 1 – 18 way systems available to special order

ENTRitech™ Audio – Kit Options...

Surface Mounted Audio Kits With Embedded Intercom

- D/ENT/AUDIO/1 1 way audio kit complete with stainless steel 1 button call station, 1 power supply and 1 phone
- D/ENT/AUDIO/2 2 way audio kit complete with stainless steel 2 button call station, 1 power supply and 2 phones
- D/ENT/AUDIO/3 3 way audio kit complete with stainless steel 3 button call station, 1 power supply and 3 phones
- D/ENT/AUDIO/4 4 way audio kit complete with stainless steel 4 button call station, 1 power supply and 4 phones
- D/ENT/AUDIO/6 6 way audio kit complete with stainless steel 6 button call station, 1 power supply and 6 phones
- D/ENT/AUDIO/8 8 way audio kit complete with stainless steel 8 button call station, 1 power supply and 8 phones

Flush Mounted Audio Kits With Embedded Intercom

- D/ENT/AUDIO/1/FL Flush 1 way audio complete with stainless steel 1 button call station, power supply and 1 phone
- D/ENT/AUDIO/2/FL Flush 2 way audio complete with stainless steel 2 button call station, power supply and 2 phones
- D/ENT/AUDIO/4/FL Flush 4 way audio complete with 4 button call station, power supply and 4 phones
- D/ENT/AUDIO/6/FL Flush 6 way audio complete with 6 button call station, power supply and 6 phones
- D/ENT/AUDIO/8/FL Flush 8 way audio complete with 8 button call station, power supply and 8 phones

ENTRitech™ Audio – Build Your Own...

Flush Mounted Audio – Call Station With Embedded Intercom

- D/ENT/FL/1 Flush master unit with stainless steel 1 module unit complete with embedded intercom (up to 6 way)
- D/ENT/FL/2 Flush master unit with stainless steel 2 module unit complete with embedded intercom (up to 12 way)
- D/ENT/FL/3 Flush master unit with stainless steel 3 module unit complete with embedded intercom (up to 18 way)

Surface Mounted Audio – Call Station With Embedded Intercom

- D/ENT/MASTER 1 1 Module stainless steel unit surface mounted complete with embedded intercom (up to 6 way)
- D/ENT/MASTER 2 2 Module stainless steel unit surface mounted complete with embedded intercom (up to 12 way)
- D/ENT/MASTER 3 3 Module stainless steel unit surface mounted complete with embedded intercom (up to 18 way)

Button Modules

- D/ENT/AUDIO/KP Digital keypad module
- D/ENT/BU01 1 Button module
- D/ENT/BU02 2 Button module
- D/ENT/BU03 3 Button module
- D/ENT/BU04 4 Button module
- D/ENT/BU06 6 Button module
- D/ENT/TMB Trades men button
- S/E60/A 12 Volt relay

Handset

- D/ENT/AUDIO/HS Audio only handset complete with door release button

Power Supply

- D/ENT/AUDIO/PSU Power Supply Unit



ENTRitech™ – Door Access Control

Overview

What to consider when choosing an Access Control System?

- How many doors/buildings do you need to secure?
- Do you need different levels of access to certain areas?
- Do you need to control who goes out as well as in? How will people exit in the event of an emergency or powercut?
- How will you allow legitimate visitors access, will you speak to them via an intercom?
- Is managing Time and Attendance important to your business?

Features

- Simple to install
- Robust construction
- IP65 Proximity reader option
- Suitable for up to 21 individual codes
- Stainless steel keypad option

Access Keypad	(H)137 x (W)93 x (D)55mm
Proximity Reader	(H)116 x (W)75 x (D)22mm

ENTRitech™ Door Access Control

D/ENT/KEY/PROX/800	Combined Proximity and Keypad Access
D/ENT/EPX10	Standalone Proximity Reader
D/ENT/WH/ED	White Push to Exit Button
D/ENT/SS/EB	Stainless Steel Push to Exit Button
F/CH/EDR/FLEX	Surface Break Glass – Green, No Resistor
D/ENT/KT10-B	Proximity Fob/Token Blue - Single
D/ENT/STD-PCPS	Proximity Card with Slot



D/ENT/DA/KP/1
Stainless Steel Door Access Keypad



D/ENT/KEY/PROX/800
Combined Proximity and Keypad Access



D/ENT/EPX10
Standalone Proximity Reader



D/ENT/KT10-B
Proximity Fob/Token Blue - Single



D/ENT/STD-PCPS
Proximity Card with Slot



D/ENT/SS/EB
Stainless Steel Push to Exit Button



D/ENT/WH/ED
White Push to Exit Button



F/CH/EDR/FLEX
Surface Break Glass – Green, No Resistor

ENTRitech™ – Door Access Control

Kit 1 – Pin



D/ENT/DA/KIT1 contains:

- 12Vdc 2Amp boxed power supply with battery back up
- Digital Keypad with up to 21 individual codes
- Exit button
- Green break-glass unit
- Electric lock release

Kit 2 – Pin



D/ENT/DA/KIT2 contains:

- 12Vdc 2Amp boxed power supply with battery back up
- Digital Keypad with up to 21 individual codes
- Exit button
- Green break-glass unit
- Magnetic lock
- Z&L bracket

Kit 3 – Proximity



D/ENT/DA/KIT3 contains:

- 12Vdc 2 Amp boxed power supply with battery back up
- Proximity reader (up to 2000 users)
- Exit button
- Green break glass unit
- Key fob tokens x 10 pieces
- Hand held programmer
- Electric lock release

Kit 4 – Proximity



D/ENT/DA/KIT4 contains:

- 12Vdc 2Amp boxed power supply with battery back up
- Proximity reader for use with up to 2000 users
- Exit button
- Green break-glass unit
- Key fob tokens x 10 pieces
- Hand held programmer
- Magnetic lock
- Z&L bracket

Kit 5 – Keypad



D/ENT/DA/KIT5 contains:

- 12Vdc 2Amp boxed power supply with battery back up
- DG180 Keypad
- Exit button
- Green break-glass unit
- Electric Release

Kit 6 – Keypad



D/ENT/DA/KIT6 Contains:

- 12Vdc 2Amp boxed power supply with battery back up
- DG180 Keypad
- Exit button
- Green break-glass unit
- Magnetic Lock
- Z&L bracket

Kit 7 – Pin and Proximity



Kit 8 – Pin and Proximity



D/ENT/DA/KIT7 contains:

- 12Vdc 2Amp boxed power supply with battery back up
- Combined keypad and proximity reader
- Exit button
- Green break-glass unit
- Key fob tokens x 10 pieces
- Electric Release

D/ENT/DA/KIT8 Contains:

- 12Vdc 2Amp boxed power supply with battery back up
- Combined keypad and proximity reader
- Exit button
- Green break-glass unit
- Key fob tokens x 10 pieces
- Magnetic lock
- Z and L bracket

ENTRitech™ – Door Access Control

Kits

- D/ENT/DA/KIT1 Key pad door access kit 1: including PSU, digital keypad, exit button, green break glass unit and electric lock release
- D/ENT/DA/KIT2 Key pad door access kit 2: including PSU, digital keypad, exit button, green break glass unit, magnetic lock and Z&L bracket
- D/ENT/DA/KIT3 Proximity reader door access kit 3: including PSU, exit button, green break glass unit, electric lock release, 10 key fobs and a hand held programmer
- D/ENT/DA/KIT4 Proximity reader door access kit 4: including PSU, exit button, green break glass unit, magnetic lock, Z&L bracket, 10 key fobs and a hand held programmer
- D/ENT/DA/KIT5 Key pad door access kit 5: including PSU, keypad, exit button, green break glass unit, Electric release.
- D/ENT/DA/KIT6 Key pad door access kit 6: including PSU, keypad, exit button, green break glass unit, magnetic lock and Z&L bracket
- D/ENT/DA/KIT7 Proximity reader door access kit 7: Combined keypad and proximity reader including PSU, exit button, green break glass unit, magnetic lock and 10 key fobs
- D/ENT/DA/KIT8 Proximity reader door access kit 8: Combined keypad and proximity reader including PSU, exit button, green break glass unit, electric release and 10 key fobs

The Knowledge

Quick Guide

Quick Guide

A Guide to Building Regulations, IP Ratings, and Kelvin Light Scale

Building Regulations

To ensure specified luminaires meet the requirements of the current building regulations it is important to consider the legislation contained within the Building Regulations. The most relevant of these are:

Approved Document L

- Approved Document L1A: Conservation of fuel and power (New Dwellings) (2006 Edition)
- Approved Document L1B: Conservation of fuel and power (Existing Dwellings) (2006 Edition)
- Approved Document L2A: Conservation of fuel and power (New buildings other than dwellings) (2006 Edition)
- Approved Document L2B: Conservation of fuel and power (Existing buildings other than dwellings) (2006 Edition)

Part L requires that energy efficient lighting is installed in both domestic and non-domestic dwellings, existing, new & refurbished (over 100m²).

Part L gives design information for the following (non-domestic dwellings):

- Selection of lamp types
- Effective use of daylight
- Control gear and power factor correction
- Use of lighting controls
- Luminaire efficiency

Approved Document B

- Approved Document B (Fire safety) – Volume 1: Dwellings (2006 Edition)
- Approved Document B – Volume 2: Buildings other than Dwellings (2006 Edition)

Part B deals with the fire safety requirements for emergency lights and the use of thermoplastic materials.

It is our recommendation that reference be made to the latest version of the Approved Documents. Full details can be found on: www.planningportal.gov.uk

IP Ratings

The International Protection code, commonly known as the Ingress Protection code (IP) indicates the protection afforded by an enclosure against the ingress of foreign (solid) bodies and ingress of moisture and liquids. The IP rating also classifies the protection given by an enclosure against touching live or moving parts.

The IP rating is given by the use of two numbers.

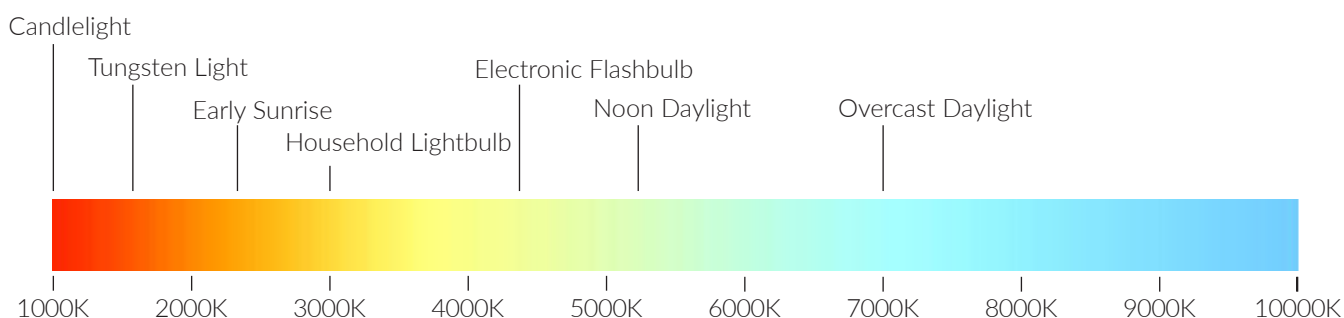
First Digit - Protection Against Ingress of Solid Objects

0	No protection
1	Protection against large sized bodies such as hands
2	Protection against medium sized bodies such as fingers
3	Protection against small sized bodies 2.5mm dia. or larger such as tools and wires
4	Protection against very small sized bodies 1mm dia. or greater
5	Protection against harmful deposits of dust (Dust proof)
6	Complete protection against deposits of dust (Dust tight)

Second Digit - Protection Against Ingress of Liquids

0	No protection
1	Protection against vertically falling drops of water
2	Protection against drops of water up to 15° from the vertical
3	Protection against rain falling up to 60° from the vertical
4	Protection against splashed water from any angle
5	Protection against jets of water from any angle
6	Protection against water from heavy seas
7	Protection against immersion for a defined period
8	Protection against immersion for an indefinite period

Kelvin Colour Temperature Scale



Index – Fire Detection Systems

Product Name	Page No.
Alarmline Cable	45
AlarmSense 2 Wire Conventional Fire Detection	12
Apollo Discovery Addressable Fire Detection	25
Apollo Soteria	30
Apollo Soteria Dimension	31
Aspirating Equipment	40
Automatic Opening Vent System	42
BS 8629:2019 Evacuation Alert System	16
C-TEC CAST-PRO	35
C-TEC XFP CAST Fire Detection	33
Conventional Visual Alarm Devices (VADs)	9
Domestic Detection	6
Evacuator Synergy – RF Wireless System	5
Fire Alarm Switched Fused Spur	47
Fire Beam - 2	44
Firewatch Panels – FW1001	19
Hochiki ESP Protocol	27
HUSH ActiV – BS 5839-6 Grade C Domestic Fire Alarm	7
Interface Relays	45

Product Name	Page No.
Invacuation/Lockdown Systems	18
Loop Powered Addressable Door Holder	45
MxPro 5 Advanced Fire Alarm Control Panels	20
Orbis®	10
Power Supply Units	49
Power Supply Units for Door Closers/Releases	46
REACH Wireless Intelligent Detector Range	38
Remote Indicators	47
Sabre Pro – 2 Wire	14
Scimitar	8
Site Master Wired Standalone/Linked System	4
Solo Detector Testing	50
Special Function Call Point Units	46
Sprinkler Monitoring System	17
Talentum® Flame Detectors	49
Wall Mounted Door Retainer	46
XP95 Addressable Fire Detection	22
Zerio Plus – Wireless	36

Product Code	Page No.
1139	5
1142	5
1163	5
1164	5
1165	5
1166	5
1169	5
1171	5
1190	5
1191	5
1192	5
B/12V/12AH/SLA	41
B/12V/2.1AH/SLA	49
B/12V/2.3AH/SLA	49
B/12V/2.8AH/SLA	49
B/12V/3.2AH/SLA	8, 13, 15, 17
B/12V/3.2AH/SLA	19
B/12V/7AH/SLA	37, 41, 49
B/12V/7AH/SLA	19
CA402	34
CA408	34
CA408 (CA408)	35
CA408B	34
CA408B (CA408B)	35
CA408R	34
CA408R (CA408R)	35
CA414	34
CA416	34
CA416B	34
CA430ADR	34
CA430ADR65	34
CA430ASR	34
CA431AW	34
CA432AW	34
CA433ADR	34
CA433ADR65	34
CA433ADRR	34
CA433ASR	34
CA446A/DW/LD	18
CA446ADR	34
CA446ASR	34
CA447A/DW/LD	18
CA447ADR	34
CA447ADR65	34
CA450ASR	34
CA450ASW	34
CA451ASR	34
CA451ASW	34
CA454AW	34
CA455AW	34

Product Code	Page No.
CA456AW	34
CA457AW	34
CA458ASR	34
CA458ASW	34
CA459AW	34
CA460AW	34
CA470	34
CA47067	34
CA470B	34
CA470B/LD	18
CA470GR	34
CA470W	34
CA470Y	34
CA730	17, 34
CA731	34
CA732	34
CA734	17, 34
CA736	34
CA737	34
CA737PCB	34
CA737PSU	34
CA738	34
CA739	34
CA739PCB	34
CA739PSU	34
CA740	34
CA740PCB	34
CAPROG	34
CP402	35
CP402T	35
CP402TV	35
CP402V	35
CP402VV	35
CP411	35
CP411T	35
CP411TV	35
CP411TVR	35
CP411V	35
CP411VV	35
CP411VVR	35
CP414	35
CP414B	35
CP414BTV	35
CP414T	35
CP414TV	35
CP414TVR	35
CP414V	35
CP414VV	35
CP414VVR	35
CP416	35
CP416T	35
CP416TV	35

Product Code	Page No.
CP416V	35
CP416VV	35
CPDUCT/OPT	35
E/CHLG/EL	48
F/45681-705	23
F/45681-709	23
F/55000-741	23
F/55000-742	23
F/55000-743	23
F/55000-744	23
F/55000-745	23
F/58002-300	22, 25
F/58002-350	22, 25
F/58002-351	22, 25
F/58006-300	22, 25
F/58006-350	22, 25
F/58006-351	22, 25
F/58200-975MAR	25
F/ACA-CT-025	45
F/ACAC-CP-025	45
F/ACB-EW	27
F/ACC-EN	27
F/ACC-EN(BLK)	27
F/ACC-EN(BLK)SCI	27
F/ACC-EN(WHT)	27
F/ACC-EN(WHT)SCI	27
F/ACD-EN	27
F/ACD-EN(WHT)	27
F/AD105-0100	45
F/AD185-0100	45
F/AD68-0100	45
F/AD88-0100	45
F/ALN-EN	27
F/ALN-EN(BLK)	27
F/ALN-EN(SCI)	27
F/ALN-EN(WHT)	27
F/ALN-EN(WHT)-SCI	27
F/ATJ-EN	27
F/ATJ-EN(BLK)	27
F/ATJ-EN(SCI)	27
F/ATJ-EN(WHT)	27
F/ATJ-EN(WHT)SCI	27
F/BASE/60	8
F/BASE/65/F	8
F/BASE/65/RL	8
F/BASE/95	22
F/BASE/95/IS	22
F/BASE/95/IS/WB	22
F/BASE/AS	13
F/BASE/IS	10
F/BASE/OR	10
F/BASE/OR/IS/AD	10

Product Code	Page No.
F/BASE/OR/MAR	10
F/BASE/SW	8
F/BF431C/CC/W	7
F/BF456C/CC/W	7
F/C4403A1R	7
F/C4403A2	7
F/C4408D	7
F/C4414	7
F/C4416	7
F/CH/DIN/INT/ENC	23
F/CH/EDR/FLEX	46
F/CH/ER	46
F/CH/FVE	46
F/CH/HDR/5	45
F/CH/MX-5010	21
F/CH/MX-5020	21
F/CH/MX-5020/FT	21
F/CH/MX-5101	21
F/CH/MX-5101M	21
F/CH/MX-5201	21
F/CH/MX-5202	21
F/CH/MX-5401	21
F/CH/MX-5402	21
F/CH/MX-5402D	21
F/CH/MX-5403	21
F/CH/MX-5403D	21
F/CH/MX-5404	21
F/CH/MX-5404D	21
F/CH/MX-5803	21
F/CH/MX-5805	21
F/CH/MX-5806	21
F/CH/MX-5808	21
F/CH/MX-5808/FT	21
F/CH/MXM-501	21
F/CH/MXM-502	21
F/CH/MXM-503	21
F/CH/MXM-503-SSB	21
F/CH/MXM-521	21
F/CH/MXM-524-D2-SSB-F	21
F/CH/MXP-502	21
F/CH/MXP-503	21
F/CH/MXP-503(F)	21
F/CH/MXP-507	21
F/CH/MXP-509	21
F/CH/MXP-511	21
F/CH/MXP-511F	21
F/CH/MXP-512F	21
F/CH/MXP-513L-050RD	21
F/CH/MXP-513L-200RYF	21

Index – Fire Detection Systems

Product Code	Page No.	Product Code	Page No.	Product Code	Page No.	Product Code	Page No.
F/CH/MXP-516	21	F/CHBM/R/95/EXT/ KIT	22, 44	F/CHQ-CB(WHT)/ WL-15	28	F/CHSG	47
F/CH/MXP-516F	21	F/CHBM/SA/2	44	F/CHQ-CB/RL	28	F/CHSM/IS	10
F/CH/MXP-517	21	F/CHBM/SA/95	22, 44	F/CHQ-CB/WL	28	F/CHSM/M/95	22
F/CH/MXP-517F	21	F/CHBN/95	22	F/CHQ-CB/WL-15	28	F/CHSM/M/DISC	25
F/CH/MXP-545	21	F/CHBN/95/RD	22	F/CHQ-CP2	28	F/CHSM/M/OR	10
F/CH/MXP-545/FT	21	F/CHBN/95/WP/RD	22	F/CHQ-DIM2(SCI)	29	F/CHSM/P	8, 43
F/CH/MXP-550	21	F/CHBN/D/RING	8	F/CHQ-DIM2/DIN(SCI)	29	F/CHSM/P/65	8
F/CH/MXS-501	21	F/CHBN/RD/DB	8	F/CHQ-DRC2(SCI)	29	F/CHSM/P/95	22
F/CH/MXS-502	21	F/CHBN/SA/WP	15	F/CHQ-DRC2/DIN(SCI)	29	F/CHSM/P/95/IS	22
F/CH/MXS-504	21	F/CHBN/SU/SA	15	F/CHQ-DSC2(SCI)	29	F/CHSM/P/DISC	25
F/CH/MXS-511	21	F/CHCO/DISC	25	F/CHQ-DSC2/DIN(SCI)	29	F/CHSM/P/DISC/MAR	25
F/CH/ORB-HT-51145	10	F/CHCO/HM/DISC	25	F/CHQ-DZM(SCI)	29	F/CHSM/P/FLASH	8
F/CH/PC	46	F/CHDR/24	46	F/CHQ-DZM(SCI)-IS	29	F/CHSM/P/IN/AS	13
F/CH/PC-NET-003	21	F/CHDR/240	46	F/CHQ-DZM(DIN(SCI))	29	F/CHSM/P/OR	10
F/CH/PIP-001	41	F/CHDR/95	23, 45	F/CHQ-DZM(DIN(SCI))- IS	29	F/CHSN/95	23
F/CH/PIP-002	41	F/CHDR/BK	46	F/CHQ-ISM	29	F/CHSN/95/DIN	23
F/CH/PIP-003	41	F/CHDR/CHAIN	46	F/CHQ-ISM/DIN	29	F/CHSU/I/SA	15
F/CH/PIP-005	41	F/CHDR/PSU/2	46	F/CHQ-MRC2(SCI)	29	F/CHSU/SA	15
F/CH/PIP-006	41	F/CHDR/PSU/4	46	F/CHQ-MRC2/DIN(SCI)	29	F/CHSU/SA/WH	15
F/CH/PIP-007	41	F/CHDU/300-750	23	F/CHQ-MRC2/FS	29	F/CHSW/95/P	23
F/CH/PIP-008	41	F/CHEV/BGU	4	F/CHQ-MRC2/FS(SCI)	29	F/CHSW1/SA	15
F/CH/PIP-009	41	F/CHEV/PB	4	F/CHQ-PCM(SCI)	29	F/CHVWB/BN/RD/ DISC	25
F/CH/PIP-012	41	F/CHEV/SYN/BGU	4	F/CHQ-PCM/DIN(SCI)	29	F/CHWB/95/AP	22
F/CH/PIP-014	41	F/CHEV/SYN/BS	4	F/CHQ-POM	29	F/CHWB/95/AP/WH	22
F/CH/PIP-015	41	F/CHEV/SYN/GSM	4	F/CHQ-SIM	29	F/CHWB/AN/95/A	22
F/CH/PIP-016	41	F/CHEV/SYN/HD	4	F/CHQ-SOM	29	F/CHWB/AP/95	22
F/CH/PIP-059-001	41	F/CHEV/SYN/INT2	4	F/CHQ-SUB	29	F/CHWB/AP/95/WP	22
F/CH/PIP-059-007	41	F/CHEV/SYN/SD	4	F/CHQ-SZM2(SCI)	29	F/CHWB/AS/CAP/WH	13, 15
F/CH/PIP-221-035	41	F/CHEV/SYN/SDWS	4	F/CHQ-SZM2/DIN(SCI)	29	F/CHWB/BN/95/AP	22
F/CH/PIP-222-059	41	F/CHFA/SFS	47	F/CHQ-WB(REL)/RL	28	F/CHWB/BN/95/IS	22
F/CH/ SMOKESABRE-01-001	50	F/CHFD/UV/IR2	23	F/CHQ-WB(REL)WL	28	F/CHWB/BN/AP/95	22
F/CH/SOLO/100	50	F/CHGB/95	23	F/CHQ-WB(WHT)/RL	28	F/CHWB/BN/DISC/A	25
F/CH/SOLO/101	50	F/CHGB/ORB	10	F/CHQ-WB(WHT)/WL	28	F/CHWB/BN/DISC/ AP/R	25
F/CH/SOLO/108	50	F/CHHF/A/65	8	F/CHQ-WB/RL	28	F/CHWB/BN/OA/95/ IS/WP	23
F/CH/SOLO/200	50	F/CHHF/A/HT	8	F/CHQ-WB/RL	28	F/CHWB/BN/OA/95/ WP	23
F/CH/SOLO/330	50	F/CHHF/A/HT/AS	13	F/CHQ-WPK	29	F/CHWB/BN/RD/AS	13
F/CH/SOLO/423	50	F/CHHF/AS	13	F/CHQ-WPK(WHT)	29	F/CHWB/BN/RD/DB	8
F/CH/SOLO/424	50	F/CHHM/95	22	F/CHQ-WS2	28	F/CHWB/D	8
F/CH/SOLO/460	50	F/CHHM/95/IS	22	F/CHQ-WS2(WHT)	28	F/CHWB/D/AS	13
F/CH/SOLO/461	50	F/CHHM/DISC	25	F/CHQ-WSB2(WHT)/ RL	28	F/CHWB/D/BN/AS	13
F/CH/SOLO/610	50	F/CHHM/HT/95	22	F/CHQ-WSB2(WHT)/ WL	28	F/CHWB/D/COVER/ WH	8
F/CH/SOLO/811	50	F/CHHR/A/65	8	F/CHQ-WSB2/RL	28	F/CHWB/IN/95/A	23
F/CH/SOLO/812	50	F/CHHR/A/HT/65	8	F/CHQ-WSB2/WL	28	F/CHWB/IS/DISC	25
F/CH/SOLO/814	50	F/CHHR/A/OR	10	F/CHRI/60	47	F/CHWB/IS/IN/95A	23
F/CH/SOLO/822	50	F/CHHRT/SA/PRO	15	F/CHRI/AS	13, 47	F/CHWB/R	8
F/CH/SOLO/823	50	F/CHIO/1/95	23	F/CHRM/AS	13	F/CHWB/RD/AS	13
F/CH/SOLO/CO	50	F/CHIO/1/95/240	23	F/CHSA/2/PRO	15	F/CHWB/RD/DB	8
F/CH/SOLO/100A5	50	F/CHIO/1/95/DIN	23	F/CHSA/2/PRO/BK	15	F/CHWB/RD/SA	15
F/CH/TOUCH-10	21	F/CHIO/2/95	23	F/CHSA/2/PRO/KIT	15	F/CHWB/VAD/BASE	23
F/CH/VPS-215	41	F/CHIS/95	23	F/CHSA/4/PRO	15	F/CHWB/VAD/SA	15
F/CH/VPS-220	41	F/CHIS/95/DB	23	F/CHSA/4/PRO/BK	15	F/CHZM/95/DIN	23
F/CH/VSP-005	41	F/CHIS/95/DIN	23	F/CHSA/4/PRO/CARD	15	F/CHZM/IS/95	23
F/CHAS/2	13	F/CHLG/FA	48	F/CHSA/4/PRO/KIT	15	F/CLOOM	7
F/CHAS/4	13	F/CHPT/D/95	23	F/CHSA/8/PRO	15	F/COVER/RD/1	23
F/CHAS/8	13	F/CHPT/S/95	23	F/CHSA/8/PRO/BK	15	F/COVER/WH/1	23
F/CHBG/AS/COVER	13, 22	F/CHQ-AB	28	F/CHSA/8/PRO/KIT	15	F/DOCBOX/1	48
F/CHBG/DISC/WP	25	F/CHQ-AB(AMB)	28	F/CHSA/PRO2/R	15	F/EDA-A6000	37
F/CHBG/IS/95/2	22	F/CHQ-AB(AMB)WHT	28	F/CHSA/SH/PRO	15	F/EDA-A6030	37
F/CHBG/IS/DISC/1	25	F/CHQ-AB(BLU)	28	F/CHSA/SH/PRO/BK	15	F/EDA-A6040	37
F/CHBG/S/5	8	F/CHQ-AB(WHT)	28	F/CHSA/SHS/PRO	15	F/EDA-A6041	37
F/CHBG/S/5/CV	8	F/CHQ-ADAPTOR	29	F/CHSA/SHS/PRO/BK	15	F/EDA-A6060	37
F/CHBG/S/AS/2	13	F/CHQ-ARI	28	F/CHSA/SHSB/PRO	15	F/EDA-C5000	37
F/CHBG/S/SA/CV	15	F/CHQ-ARI(WHT)	28	F/CHSC/2	8	F/EDA-D5000	37
F/CHBG/S/SA/WP	15	F/CHQ-BACKBOX	29	F/CHSC/4	8	F/EDA-D6000	37
F/CHBG/WP/3	8	F/CHQ-BOX LID(WHT)	29	F/CHSC/8	8	F/EDA-D6030	37
F/CHBG/WP/95/1	22	F/CHQ-CB(LID)(WHT)	28	F/CHSC/R	13	F/EDA-Q585	37
F/CHBGC/KIT	47	F/CHQ-CB(RED)/RL	28	F/CHSC/R	8	F/EDA-R5000	37
F/CHBGC/KIT/S	47	F/CHQ-CB(RED)/WL	28	F/CHSC/RDC	8, 13	F/EDA-R6000	37
F/CHBL/6/2	8	F/CHQ-CB(RED)/ WL-15	28				
F/CHBM/140/KIT/2	44	F/CHQ-CB(WHT)/RL	28				
F/CHBM/70/KIT/2	44	F/CHQ-CB(WHT)/WL	28				
F/CHBM/ADAPTER	44						

Index – Fire Detection Systems

Product Code	Page No.	Product Code	Page No.	Product Code	Page No.	Product Code	Page No.
F/EDA-R6030	37	F/IMCP	43	F/SMB-2(LID)	29	F/YBV-R/4(WHT)	27
F/EDA-T6080	37	F/KEY BOX	47	F/SMB-3	29	LAP2/CA	18
F/EDA-Y5000	37	F/KEY BOX GLASS	47	F/SMB-3(LID)	29	LAP501/CA	18
F/EDA-Z5000	37	F/Micro USB Cable	29	F/SMB-ADAPTOR	29	S/BATT/EDA-Q690	37
F/EDA-Z5008	37	F/ORB-OP-42001-MAR	10	F/SR MOUNTING BOX	29	S/BG/TEST KEY/AS	13, 22
F/EDA-Z5020	37	F/ORB-SW-10005	10	F/SVL/MULTI/2-6	43	S/BG/TEST KEY/SA	15
F/EDA-Z5100	37	F/PL-2	29	F/SVL/ZC	43	S/BG/TESTKEY/1	8
F/EDA-Z6000	37	F/PL-3	29	F/SVM/24V-5A/BASIC	43	S/CH/BF376	45
F/EDA-Z6010	37	F/PSU/12/1/BM	49	F/SVM/24V-8A/BASIC	43	S/E15/A	45
F/EDA-Z6011	37	F/PSU/12/2/BM	49	F/TCH-B200	29	S/E20/A	13
F/FFE-16511	49	F/PSU/12/3/BM	49	F/VAD/C/1	9	S/E55/A	45
F/FFE-16519	49	F/PSU/12/5/BM	49	F/VAD/C/3	9	S/E60/A	45
F/FFE-16521	49	F/PSU/24/1/BM	49	F/VAD/W/1	9	SAP501E/CA	17
F/FFE-16571	49	F/PSU/24/2/BM	49	F/VAD/W/3	9	SP/BASE/95/BK	22
F/FFE-16579	49	F/PSU/24/3/BM	49	F/VAD/WB/C/2	9	SP/CHBM/140/KIT	44
F/FFE-16581	49	F/PSU/24/5/BM	49	F/VAD/WB/C/4	9	SP/CHBM/70KIT	44
F/FFE-16589	49	F/PSU24/1.5/BMEN54	44, 49	F/VAD/WB/W/2	9	SP/CHIF/AS	13
F/FFE-16591	49	F/PSU24/3/EN54/1	49	F/VAD/WB/W/4	9	SP/CHSM/P/95/BK	22
F/FL5000-200APO	31	F/RW1000-400APO	39	F/VEA-040-A00	41	SP/CHSM/P/AS	13
F/FL5100-600APO	31	F/RW1000-600APO	39	F/VEA-040-A10	41	ZFP120CA	33
F/FL5100-660APO	31	F/RW1000-700APO	39	F/VEP-A00-P	41	ZFP120PCA	33
F/FL5100-760APO	30	F/RW1300-010	39	F/VEP-A10-P	41	ZFP140CA	33
F/FL6100-600APO	31	F/RW1300-020	39	F/VES-A00-P	41	ZFP140PCA	33
F/FW1001/1/16	19	F/RW1300-110APO	39	F/VES/A00-P	41	ZFP1CA	33
F/FW1001/1/16/CA	19, 33	F/RW1300-210APO	39	F/VEU-A00	41	ZFP220CA	33
F/FW1001/1/16H	19	F/RW1300-211APO	39	F/VEU-A10	41	ZFP220PCA	33
F/FW1001/1/32	19	F/RW1500-110APO	39	F/Wall Sounder Beacons	28	ZFP240CA	33
F/FW1001/1/32/CA	19, 33	F/RW1500-120APO	39	F/WSK/321/0005/61	43	ZFP240PCA	33
F/FW1001/1/32/H	19	F/RW1500-210APO	39	F/YBN-R/3	27	ZFP2CA	33
F/FW1001/2/32	19	F/RW1500-220APO	39	F/YBN-R/3(BLK)	27	ZFP2LCA	33
F/FW1001/2/32/CA	19, 33	F/RW1500-800APO	39	F/YBN-R/3(BLK)-SCI	27	ZFP2MCA	33
F/FW1001/2/32/H	19	F/RW1700-030APO	39	F/YBN-R/3(BLK)-SCI	27	ZFP420CA	33
F/FW1001/HB	19	F/RW1700-051APO	39	F/YBN-R/3(SCI)	27	ZFP420PCA	33
F/FW1001/NCC/16	33	F/RW1700-052APO	39	F/YBN-R/3(WHT)	27	ZFP440CA	33
F/FW1001/NCC/32	33	F/RW1800-060APO	39	F/YBN-R/3(WHT)-SCI	27	ZFP440PCA	33
F/FW1001/R/16	33	F/RW1900-901APO	39	F/YBO-BS	28	ZFP4CA	33
F/FW1001/R/32	33	F/SA5000-200	22	F/YBO-BS(BLK)	28	ZFP4LCA	33
F/HCP-E(BLU)-SCI	28	F/SA5000-200AP	22, 25	F/YBO-BS(WHT)	28	ZFP4MCA	33
F/HCP-E(SCI)	28	F/SA5000-200APO	30	F/YBO-BSB2(BLK)/RL	28	ZFP6LCA	33
F/HCP-E/Y(SCI)	28	F/SA5000-204	22, 25	F/YBO-BSB2(BLK)/WL	28	ZFP6MCA	33
F/HCP-EO(SCI)	28	F/SA5000-204APO	30	F/YBO-BSB2(WHT)/RL	28	ZFP8LCA	33
F/HCP-W(SCI)	28	F/SA5100-400APO	30	F/YBO-BSB2(WHT)/WL	28	ZFP8MCA	33
F/HCP-W/Y(SCI)	28	F/SA5100-600APO	30	F/YBO-BSB2/RL	28	ZREP1CA	33
F/HCV500/0350	43	F/SA5100-700APO	30	F/YBO-BSB2/WL	28	ZREP1SCA	33
F/HCV500/0600	43	F/SA5100-810APO	30	F/YBO-R/3(RED)	27		
F/HCV500/0800	43	F/SCP CALLPOINT KEY	28	F/YBO-R/3(WHT)	27		
F/HCV500/1000	43	F/SCP-W(DPS)	28	F/YBO-R/3(WHT)	27		
F/HCVSS/BKT	43	F/SMB-1	29	F/YBO-R/SCI(RED)	27		
F/HINGED COVER (PS200)	29	F/SMB-1(LID)	29	F/YBO-R/SCI(WHT/ SNDR)	27		
		F/SMB-2	29	F/YBV-R/4	27		

Index – Emergency Lighting

Product Name	Page No.
5-in-1 Exit Sign	76
A Guide to DALI Controls	96
AC/DC Battery Slave Light Fittings	103
AC/DC Central Battery Units	103
Alpine Large	73
Alpine Slim	72
Alpine™	72
Azelio Downlight	89
Azelio Emergency Track Exit/Open Area LEDs	90
Azelio Emergency Track LED	91
Azelio Recessed	85
Azelio Surface	84
Betalux	79
Brook	58
Emergency Lighting Test Switch	96
Exitor	74
Forest	77
Glade 1W	86
Glade 5W	87
Glen LED Downlight	88
Grove Ultra	81

Product Name	Page No.
Grove™ Twinspace Range	80
GU32	83
GU32 - IP65	82
i-Monitor DALI Emergency Light Testing System	92
iD-Mesh Wireless DALI Emergency Light Testing System	94
Meteor Maxi™ LED	67
Meteor™ LED	66
Milan	98
Mini Static Inverters	104
Razor™	75
Replacement Batteries	106
Sealed Lead Acid Batteries	107
Small Office UPS	106
SmartTest	65
SoHo	99
Solent LED	59
Static Inverters	105
Stratos	60
Stratos Ultra	61
Tokyo	100
Vale	78

Product Code	Page No.	Product Code	Page No.	Product Code	Page No.
B/12V/0.8AH/SLA	107	E/CHFO/FMB/SI	77	E/STRATOS/50	70, 103
B/12V/1.2AH/SLA	107	E/CHFO/FMB/WH	77	E/STRATOS/COLD	70
B/12V/12AH/SLA	107	E/CHFO/WMB/BR	77	E/STRATOS/HI	70
B/12V/17AH/SLA	107	E/CHFO/WMB/SI	77	E/STRATOS/M3	70
B/12V/2.1AH/SLA	107	E/CHFO/WMB/WH	77	E/STRATOS/M3/2W	70
B/12V/2.3AH/SLA	107	E/DLDA/1/**	93, 95	E/STRATOS/PIC/KIT	70, 103
B/12V/2.8AH/SLA	107	E/DLDA/2/**	93, 95	E/STRATOS/REC/KIT	70, 103
B/12V/24AH/SLA	107	E/DLDA/3/**	93, 95	E/TSDA/1	93, 95
B/12V/3.2AH/SLA	107		65, 67, 68,	E5IN12	76
B/12V/4AH/SLA	107	E/EM/RC	72, 76, 84,	EALP01	72
B/12V/7AH/SLA	107		85, 98, 99	EALS1	72
B/BATT/5IN1/LI	76	E/EXDA/1**	93, 95	EAZR01	85
B/BATT/AL/SL/LI	72	E/EXDA/2**	93, 95	EAZS01	84
B/BATT/ALPINE	72	E/EXDA/3**	93, 95	EBRK01	68
B/BATT/AZ/LI	84	E/EXDA/4	93, 95	EEXT01	74
B/BATT/BROOK/2	68	E/GLEN/BEZ/BK	88	EFOBR1	77
B/BATT/EX/LI	74	E/GLEN/BEZ/SI	88	EFOCH1	77
B/BATT/GR/LI	80	E/GR/H+B/LED/IP65/2	80	EFOSA1	77
B/BATT/GR/ULTRA/LI	81	E/GR/NM3/LED/IP65/2/110	80	EFOWH1	77
B/BATT/GU32/LI	82, 83	E/GR/NM3/LED/LI	80	EGLD11	86
B/BATT/LI/Type1	66	E/GR/POWERPACK/IP65/2	80	EGLD51	87
B/BATT/LI/TYPE2	68	E/GU32/LI	83	EGLN31	88
B/BATT/LI/TYPE4	67	E/ME/LED/SRK/1	66	EGRO01	80
B/BATT/METEOR/LED	66	E/ME/M3/LED/IP65/LI	66	EGRU01	81
B/BATT/MM	67	E/ME/M3/LED/IP65/ST/LI	66	EGU321	82
B/BATT/RZ/LI	75	E/MILAN	98	EMMX01	67
B/BATT/TYPE1	72	E/MILAN/BEZ/BK	98	ERZF01	75
CE6010	100	E/MILAN/BEZ/BR	98	ERZH01	75
CE6020	100	E/MILAN/BEZ/CH	98	ERZR01	75
CE6030	100	E/MILAN/EYE/BK	98	ERZW01	75
CE6040	100	E/MILAN/EYE/WH	98	ESOL01	69
CE6050	100	E/MILAN/M3/MW/RC/LI	98	ESTU01	71
E/AL/LEG/LARGE/AD	73	E/MILAN/M3/RC/LI	98	EVLCH1	78
E/AL/LEG/LARGE/AL	73	E/MM/BLADE	67	EVLSA1	78
E/AL/LEG/LARGE/AR	73	E/PIC/AL/AD	72	EVLWH1	78
E/AL/LEG/LARGE/AU	73	E/PIC/AL/AL	72	S/AZ/BK/COV	91
E/ALPINE/LARGE/60M	73	E/PIC/AL/AR	72	S/LEG/FO/AD	77
E/AZ/TRACK/COA/BK/LI	90	E/PIC/AL/AU	72	S/LEG/FO/ALR	77
E/AZ/TRACK/EXIT/BK/LI	90	E/PIC/ME/LED/BLADE	66	S/LEG/FO/AU	77
E/AZELIO/BEZEL	89	E/PIC/ME/LED/PACK	66, 67, 68	S/LEG/VL/AD	78
E/AZELIO/COA	89	E/PIC/RZ/PACK	75	S/LEG/VL/ALR	78
E/AZELIO/TRACK/LI	91	E/SOHO	99	S/LEG/VL/AU	78
E/BEZ/BK/1	68	E/SOHO/M3/DALI	93, 95	SP/BX/AD/DG/EN	79
E/BEZ/MM	67	E/SOHO/M3/MW/RC/LI	99	SP/BX/AL/DG/EN	79
E/BEZ/SOL	69	E/SOHO/M3/RC/LI	99	SP/BX/AR/DG/EN	79
E/BHDA/1	93, 95	E/SOHO/MW	99	SP/BX/AU/DG/EN	79
E/BHDA/2	93, 95	E/STRATOS/110	70, 103	SP/SOHO/M3/MW/ST	99
E/CH/ELTS	96	E/STRATOS/230	70, 103	SP/SOHO/M3/ST	99
E/CHFO/FMB/BR	77	E/STRATOS/24	70, 103		

Index – Assistance Products

Product Name	Page No.
Channel Call System	122
Channel Orbital Range – Refuge Alarm System	124
Counter Top Kits	113
Hark™ and Hark+	116
Induction Loop Amplifier Kits	114
Microphones	115

Product Name	Page No.
Outreach Plates	115
Portable Induction Loop Kits	113
Professional Induction Loop Phase Shifting Amplifiers	114
Quantec – Addressable Call System	118
Quantec – Dementia Care	120
SigTel Refuge Alarm System	126

Product Code	Page No.
B/12V/2.3AH/SLA	123
B/12V/7AH/SLA	119, 120
F/PSU/12/1/BM	123
I/CH/AMD	115
I/CH/AML	115
I/CH/AMP	115
I/CH/AMR	115
I/CH/AMR/H	115
I/CH/AMT	115
I/CH/APJ	115
I/CH/APL	115
I/CH/APM	115
I/CH/APQL	115
I/CH/APQM	115
I/CH/APXL	115
I/CH/APXM	115
I/CH/BELDEN/25	115
I/CH/FLAT/2005	115
I/CH/FLAT/3005	115
I/CH/FPROK/1	113, 114
I/CH/PIL/L	113
I/CH/PRO45	115
I/CHIL/103C	114
I/CHIL/103L	114
I/CHIL/103R	114
I/CHIL/11/DD	114
I/CHIL/11/DW	114
I/CHIL/11/SD	114
I/CHIL/11/SW	114
I/CHIL/200E	114
I/CHIL/5/DWA	114
I/CHIL/5/SD	114
I/CHIL/5/SW	114
I/CHIL/7/DD	114
I/CHIL/7/DW	114
I/CHIL/7/SD	114
I/CHIL/7/SW	114
I/CHIL/K1	114
I/CHIL/K2	114
I/CHIL/K3	114
I/CHIL/ML1	113
I/CHIL/ML1/K	113
I/CHIL/PDA5/DD	114
I/CHIL/PL1	113
I/CHIL/PL3	113
N/CC/910EF	123
N/CC/910ES	123
N/CC/910F	123
N/CC/910S	123
N/CC/920EF	123
N/CC/920ES	123
N/CC/920F	123
N/CC/920S	123
N/CC/941/SS	123
N/CC/943B	123
N/CC/944	123
N/CC/944/SS	123
N/CH/302RT	123
N/CH/302RXC	123
N/CH/802DB	123
N/CH/802DEB-1/2	123
N/CH/802DEWA	123
N/CH/802DEWP	123
N/CH/803M	119, 123

Product Code	Page No.
N/CH/803M/10	123
N/CH/804DE	123
N/CH/805/14	119
N/CH/805AS	123
N/CH/805C/14	123
N/CH/805C/6	119, 123
N/CH/805D	123
N/CH/805DSP	123
N/CH/806C	123
N/CH/806C/SS	123
N/CH/806CS	123
N/CH/806CS/SS	123
N/CH/807C	123
N/CH/809DB	123
N/CH/809DB/SS	123
N/CH/888D	123
N/CH/889ERM	123
N/CH/894DKB	123
N/CH/917L	123
N/CH/930	123
N/CH/930/SS	123
N/CH/951	123
N/CH385	119
N/CHWB/BN/12V/DB	117
N/HARK/1	117
N/HARK/1/PB	117
N/HARK/1/PC	117
N/HARK/1/PSU	117
N/HARK/1/RS	117
N/HARK/CA	117
N/HARK/RI/1	117
N/HARK/RI/1/SS	117
N/HARK/RI/2	117
N/HARK/RI/2/SS	117
N/HARK/RI/3	117
N/HARK/RI/3/SS	117
N/HARK/RI/4	117
N/HARK/RI/4/SS	117
N/HARK/RI/5	117
N/HARK/RI/5/SS	117
N/HARK/RI/6	117
N/HARK/RI/6/SS	117
N/HARK/RI/7	117
N/HARK/RI/7/SS	117
N/HARK/RI/8	117
N/HARK/RI/8/SS	117
N/HARK/RI/9	117
N/HARK/RI/9/SS	117
N/HARK+	117
N/HARK+/PB/SS	117
N/HARK+/PC/SS	117
N/HARK+/PSU/SS	117
N/HARK+/RS/SS	117
N/QT1001/S	119
N/QT302RX	119
N/QT302RXRS	120
N/QT412RXA	119, 120, 123
N/QT412RXC	123
N/QT423	119, 120
N/QT424/1	123
N/QT424/10	123
N/QT601-2	119, 120
N/QT602	119
N/QT602M	119

Product Code	Page No.
N/QT602R	119
N/QT603	119, 120
N/QT604	119
N/QT606	119, 120
N/QT606A	120, 120
N/QT607	119
N/QT608C	119, 120
N/QT608CD	119, 120
N/QT609	119
N/QT609RS	119
N/QT611	119, 120
N/QT616	123
N/QT630	120
N/QT633	120
N/QT636	120
N/QT638	120
N/QT688/2	119
R/CH/BF359/1	128
R/CH/BF359/3CL	128
R/CH/BF359/3M	128
R/CH/BF359/3SL	128
R/CH/CATCON	128
R/CH/ECU-224M	128
R/CH/ECU-723	128
R/CH/ECU-PPT	128
R/CH/EVC301/JP	128
R/CH/EVC301RLK	128
R/CH/EVC301RPO	128
R/CH/EVC302F	128
R/CH/EVC302GF	128
R/CH/EVC302GS	128
R/CH/EVC302S	128
R/CH/EVC385	128
R/CH/EVC401/PH	128
R/CH/FITT/R/CH/EVC	128
R/CH/ORB/L/RS16/OLED/F	125
R/CH/ORB/L/RS16/OLED/S	125
R/CH/ORB/L/RS32/OLED/F	125
R/CH/ORB/L/RS32/OLED/S	125
R/CH/ORB/L/RS4/OLED/F	125
R/CH/ORB/L/RS4/OLED/S	125
R/CH/ORB/L/RS8/OLED/F	125
R/CH/ORB/L/RS8/OLED/S	125
R/CH/ORB/R/RS2/F	125
R/CH/ORB/R/RS2/S	125
R/CH/ORB/R/RS4/OLED/F	125
R/CH/ORB/R/RS4/OLED/S	125
R/CH/ORB/R/RS8/OLED/F	125
R/CH/ORB/R/RS8/OLED/S	125
R/CH/RCO/F/BB/1	125
R/CH/RCO/FL/BB/1	125
R/CH/RCO/H/GB	125
R/CH/RCO/H/SS/1	125
R/CH/RCO/S/BB/1	125
R/CH/RCO/S/L/BB/1	125
R/CH/SDM	128
R/CH/T-BEZ301	128
R/CH/XSB	128
R/ECU-16	128
R/ECU-4	128
R/ECU-8	128
R/ECU-8NT	128
R/ECU722	128

Index – Door Entry Systems

Product Name	Page No.
Entritech™ – Audio Door Entry	136
Entritech™ – Door Access Control	137

Product Code	Page No.
D/ENT/AUDIO/1	136
D/ENT/AUDIO/1/FL	136
D/ENT/AUDIO/2	136
D/ENT/AUDIO/2/FL	136
D/ENT/AUDIO/3	136
D/ENT/AUDIO/4	136
D/ENT/AUDIO/4/FL	136
D/ENT/AUDIO/6	136
D/ENT/AUDIO/6/FL	136
D/ENT/AUDIO/8	136
D/ENT/AUDIO/8/FL	136
D/ENT/AUDIO/HS	136
D/ENT/AUDIO/KP	136
D/ENT/AUDIO/PSU	136
D/ENT/BU01	136
D/ENT/BU02	136
D/ENT/BU03	136
D/ENT/BU04	136
D/ENT/BU06	136
D/ENT/DA/KIT1	139
D/ENT/DA/KIT2	139
D/ENT/DA/KIT3	139
D/ENT/DA/KIT4	139
D/ENT/DA/KIT5	139
D/ENT/DA/KIT6	139
D/ENT/DA/KIT7	139
D/ENT/DA/KIT8	139
D/ENT/EPX10	137
D/ENT/FL/1	136
D/ENT/FL/2	136
D/ENT/FL/3	136
D/ENT/KEY/PROX/800	137
D/ENT/KT10-B	137
D/ENT/MASTER 1	136
D/ENT/MASTER 2	136
D/ENT/MASTER 3	136
D/ENT/SS/EB	137
D/ENT/STD-PCPS	137
D/ENT/TMB	136
D/ENT/WH/ED	137
F/CH/EDR/FLEX	137
S/E60/A	136

YOUR TRUSTED SAFETY PARTNER

At Channel, we are dedicated to being your trusted safety partner.

As industry experts with over 45 years of safety expertise, we have built a loyal customer base driven by an excellence in technical and customer support. We continue to offer our renowned end-to-end design service and new CPD training for professionals looking to develop their knowledge of fire safety and emergency lighting solutions.

- ✓ Free CPD training
- ✓ Free design service
- ✓ Free site visits
- ✓ Breadth and depth of product range
- ✓ Competitive pricing
- ✓ Extensive product ranges
- ✓ Trusted for over 45 years
- ✓ International Committee for Emergency Lighting (ICEL), Lighting Industry Association (LIA), Electrical Distributors Association – affiliate member (EDA) and Apollo Partner Plus



**CHANNEL POS
NOW AVAILABLE**

**Get in touch for
more information**



CHANNEL

FREE CPD TRAINING

BS5839 PT1 2025 - Fire Detection & Fire Alarm Systems for Non-Domestic Buildings

BS8629 2019 - Fire Evacuation Systems for Residential Buildings

BS5266 PT1 2019 - Understanding Emergency Lighting Design & Installation



WHAT YOU'LL LEARN

- ✓ Keep your work regulation-compliant
- ✓ Stop losing fire safety work to security companies
- ✓ Master photometric data and spacing ratios for emergency lighting fittings
- ✓ Key distinctions between residential and commercial buildings which impact installations
- ✓ Design and Commissioning support available from Channel for all of the above installations

SESSION DETAILS

- Free to attend ✓
- CPD Accredited ✓
- 45-90 mins of interactive learning with 10-40 contractors ✓
- Sessions hosted in partnership with electrical wholesalers ✓
- Delivered by experienced Channel professionals and former "sparks" ✓



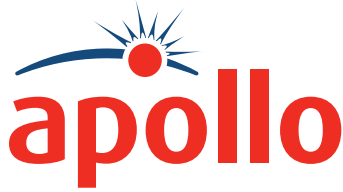
Your Trusted Safety Partner

channelsafety.co.uk

Scan to find out more about our specific CPD courses



CHANNEL Partners



Apollo Fire Detectors Ltd is one of the largest independent smoke detector manufacturers in the World. Apollo offers solutions for Analogue Addressable, 2-wire conventional, 4-wire conventional and wireless fire detection devices and alarm systems. Channel's relationship with Apollo has positioned it as a leading systems designer and supplier.



Cranford Controls Ltd specialise in the manufacture of audible and visual warning devices along with sounders, beacons and ancillary devices for the fire, security and process control industries.



The Solo range is available in economical and convenient kit forms as well as the added bonus of a range of Detector testing aerosols.



Advanced systems are found in applications from small, single-panel fire panel sites to huge multi-node networks, in many prestigious and challenging locations.



Hochiki is one of the Worlds' leading manufacturers of quality fire detectors and alarms for commercial and industrial applications. Hochiki's wide range consists of Sensors, Bases, Audio and Visual, Modules, Manual Call Point and Beam Detection.



VESDA by Xtralis very early warning aspirating smoke detection solutions with continuous air sampling provide the earliest possible warning of an impending fire hazard. VESDA aspirating smoke detectors buy the critical time needed to investigate an alarm and initiate an appropriate response to prevent injury, property damage or business disruption.



C-TEC is a leading UK independent manufacturer of quality life safety electronic equipment with a portfolio of products that includes Fire Alarm control panels, Voice Alarm systems, Power Supplies, Nurse Call systems and Audio-Frequency Induction Loop systems.

Think electrical, think... deta[^]



deta[^]

With over 65 years of electrical industry experience, Deta has grown to become a trusted market leading manufacturer and distributor of wiring, lighting, cable management and electrical installation accessories, with a reputation for unrivalled quality, reliability, service and value for money. As the number one electrical brand of choice amongst new build housing developers, Deta's products are widely specified and installed across the private and social housing sectors, as well as high rise developments, student accommodation and care homes.



Vimark

Steeped in over 25 years of history, Deta Electrical's long established Vimark brand holds a reputation for the supply of high quality, value for money electrical and wiring accessories. Offering a wide portfolio of products, including wiring accessories, motion sensors, ventilation, hand dryers, back boxes and electrosparcs, Vimark is a long established and trusted brand that supports electrical contractors with their everyday installation requirements.



tte

TTE is a market leading brand of electrical conduit tube and fittings, combining the former Top Tubes Electrical and Stephen Glover businesses. With more than 50 years' experience, TTE has been specified and installed on many high-profile projects, including the London 2012 Olympic site, Wembley Stadium, Westfield Shopping Centre, Dubai International Airport and The Louvre Museum Abu Dhabi. TTE offers a reliable and best in class cable management solution that is fully compliant with British Standards.



**TOWER
TOWER**

A long established brand, well regarded for its vast range of high quality installation materials, the trusted Tower brand represents an exciting addition to Deta's comprehensive brand portfolio. The Tower offer includes its highly acclaimed range of Installation Materials, including the original Tower Cable Clips, an 18th Edition Fire Rated range, Portable Power and Low Voltage Cable.



Brackenheath

Established in 1978, Brackenheath is renowned for supplying high quality and competitively priced domestic and commercial lighting products. Through continuous investment in LED and sensing technologies, Brackenheath pioneered the design of its market leading iSpot[®] range of slim profile, driverless LED Floodlights and continues to lead the way in bringing to market new and innovative LED lighting solutions.



**BRITICENT
SITE ELECTRICS**

Since its inception in 1908, Briticent Site Electrics has enjoyed more than 100 years of successful trading with a long-standing customer base. Briticent built its reputation on the Gripper[®] range of handlamps, and over the years has developed a core range of essential site lighting and power distribution products. Briticent continues to lead the way with new and innovative energy saving products, becoming the site lighting brand of choice amongst electrical installers throughout the UK and Ireland.



deta.e

Deta.e offers products that seamlessly combine Deta Electrical's core value of environmental preservation with its long established and trusted reputation for delivering high quality electrical products at competitive prices. Offering a range of smart, safe, and secure EV charge points, Deta.e embraces cutting edge technologies that offer sustainable solutions to assist homeowners and businesses in making an easy transition to a new energy efficient future. (deta-e.co.uk)



TIMEGUARD[®]

A trusted UK industry leader synonymous with quality and innovation, Timeguard has more than 25 years' experience in the manufacture and sale of time, light, safety, wi-fi and climate control electrical products. Continuously delivering energy savings that owners and occupiers are looking for, alongside the creation of new designs that offer easy installation, Timeguard has become a favourite among homeowners and installers. (timeguard.com)



deta[▲]

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