Emergency Luminaires

General & Commercial Luminaires

Fire Alarms, Panels & Detectors

Door Entry Systems

CCTV Surveillance

Equality Act & Assistance Products
COMPANY OVERVIEW

Established in 1976, Channel Safety Systems has now become a leading branded manufacturer and supplier to the UK Electrical Wholesaler and Electrical Contractor markets.

The company has built up a strong franchise in Lighting with the Emergency, Security and Commercial lighting portfolios as well as in the Fire Detection, Security (Door Entry and CCTV) and Disability Assistance fields.

Our knowledge, strength of service and attention to detail have earned us multiple accreditations from the industries’ leading regulatory and trade bodies and we are proud to be affiliated with the LIA (Lighting Industry Association) ICEL (Industry Committee for Emergency Lighting), FIA (Fire Industry Association), affiliated manufacturer to the EDA (Electrical Distributors Association). We are also accredited with BSI and the Apollo Partner Plus programme.

You can find all of our products and Trade Prices listed in Luckins Live. Channel branded products can be purchased from over 1,000 wholesale branches across the UK. For assistance in finding a local stockist please refer to our website and use the postcode search facility. Channel Safety can also provide a project solution service for the Electrical contractor working in partnership with a local wholesaler.

Channel Safety’s aim is to provide the highest possible product quality and performance for an affordable, value for money price. No minimum order. £12.50 carriage on orders under £150, free next day delivery on orders of £150 or more.

USEFUL INFORMATION

Make a note of your Channel account number here

Your Internal Account Manager

Your Territory Manager

CONTACT US

Telephone 0845 884 7000
Fax 0845 884 6000
Online www.channelsafety.co.uk
Email customerservices@channelsafety.co.uk

OUR OPENING HOURS

Monday ~ Thursday 08:00am to 5:00pm
Friday 08:00am to 4:00pm
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Find Your Local Stockist & Wholesaler Online!

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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 BS5266 has been revised to conform with the European Standard EN1838 (issued in the UK under reference BS EN1838/BS5266 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.

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.
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 opposite page):

- 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

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 not be 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 lx at the floor level of the empty core area which excludes a border of 0.5 m of the perimeter of the area.
- High risk task areas

Help & Assistance when specifying Emergency Lighting

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

EMERGENCY LUMINAIRES
Meteor™ LED

PRODUCT OVERVIEW

This popular fitting is now available with a self-test option.

Weighing in at only 360g and measuring 260x100x61mm the Meteor LED fitting has a lumen output of 52 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.

PRODUCT FEATURES

- Dimensions: 100mm (W) 260mm (L) 61mm (D)
- Cut out dimensions: 230mm (L) 85mm (W)
- Light source: LED
- Power consumption: 3W
- 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

PRODUCT CODE

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/ME/M3/LED/IP65</td>
<td>Meteor low profile LED bulkhead complete with 10 LED array, IP65 version</td>
</tr>
<tr>
<td>E/ME/M3/LED/IP65/ST</td>
<td>Meteor IP65 low profile LED Bulkhead complete with 10 LED array, self test version</td>
</tr>
</tbody>
</table>

ACCESSORIES

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/ME/LED/SRK/1</td>
<td>Meteor LED semi-recessing kit</td>
</tr>
<tr>
<td>E/PIC/ME/LED/PACK</td>
<td>Meteor LED sticker pictogram pack - (AD, AL, AR &amp; AU) - Viewing distance 20m</td>
</tr>
<tr>
<td>E/PIC/ME/LED/BLADE</td>
<td>Meteor LED Blade and Diffuser kit (Achieving IP65 rating) Light fitting not included- - Viewing distance 20m</td>
</tr>
</tbody>
</table>

REPLACEMENT PARTS

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/BATT/METEOR/LED</td>
<td>Meteor LED battery - 3 cell stick AA NiCd 0.4Ah</td>
</tr>
</tbody>
</table>

PHOTOMETRIC SPACING DATA (1 lux)

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>2.4</th>
<th>5.8</th>
<th>5.4</th>
<th>2.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4m</td>
<td>1.0</td>
<td>4.9</td>
<td>5.2</td>
<td>1.0</td>
</tr>
</tbody>
</table>
**PRODUCT OVERVIEW**

The Meteor Maxi benefits from higher lumen output and a larger housing, making it a true 8W replacement. Now with optional remote control!

Measuring 110mm (W) 352mm (L) 68mm (D) the Meteor Maxi LED fitting has a lumen output of 124 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.

**PRODUCT FEATURES**

- Dimensions: 110mm (W) 352mm (L) 64mm (D)
- Light source: LED
- Power consumption: 5W
- 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
- Unit automatically tests
- Universal remote control with approx range of 10m
- 31m viewing distance

**PHOTOMETRIC SPACING DATA (1 lux)**

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>0.5 lux</th>
<th>1 lux</th>
<th>0.5 lux</th>
<th>1 lux</th>
<th>0.5 lux</th>
<th>1 lux</th>
<th>0.5 lux</th>
<th>1 lux</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5m</td>
<td>3.25</td>
<td>3.30</td>
<td>6.50</td>
<td>6.60</td>
<td>4.90</td>
<td>4.35</td>
<td>2.45</td>
<td>2.20</td>
</tr>
<tr>
<td>4m</td>
<td>3.60</td>
<td>4.00</td>
<td>7.20</td>
<td>8.00</td>
<td>6.00</td>
<td>4.55</td>
<td>3.00</td>
<td>2.30</td>
</tr>
<tr>
<td>6m</td>
<td>3.70</td>
<td>N/A</td>
<td>7.40</td>
<td>N/A</td>
<td>6.15</td>
<td>N/A</td>
<td>3.10</td>
<td>N/A</td>
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</tbody>
</table>

**Remote Control Feature**

Press once for 5 second monthly test
Press twice for three hour yearly test
LED indicators confirm pass/ fail status

**PRODUCT CODE**

<table>
<thead>
<tr>
<th>PRODUCT DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/MM/M3/LED Meteor Maxi LED 3 Hour Maintained Emergency Light C/W Remote Control</td>
</tr>
<tr>
<td>E/EM/RC Optional Remote Control</td>
</tr>
<tr>
<td>E/BEZ/MM Meteor Maxi Semi Recessing Bezel</td>
</tr>
<tr>
<td>B/BATT/MM Meteor Maxi LED Battery 3.6V 1500mAh with connector</td>
</tr>
<tr>
<td>E/PIC/ME/LED/PACK Meteor Maxi Pictogram Pack - (AD, AL, AR &amp; AU)</td>
</tr>
<tr>
<td>E/MM/BLADE Meteor Maxi Blade kit (IP65 rated, 31m viewing distance, full legend pack supplied)</td>
</tr>
</tbody>
</table>
**Brook 2**

**PRODUCT FEATURES**

- **Now with increased light output**
- Dimensions: 115mm (W) 350mm (L) 75mm (D)
- Cut out dimensions for bezel: 83mm - 337mm
- Light source: LED (50 in unit)
- Power consumption: 7.3W
- Uses typically 80% less power than that of an 8W fluorescent
- Lumen output: 320 lm (210 lm emergency mode)
- Material: Polycarbonate diffuser and body
- IP Rating: IP65
- 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

**PHOTOMETRIC SPACING DATA (1 lux)**

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>2.5m</th>
<th>2.6</th>
<th>7.7</th>
<th>8.9</th>
<th>2.9</th>
</tr>
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<tbody>
<tr>
<td>4m</td>
<td>2.6</td>
<td>4.9</td>
<td>8.9</td>
<td>2.7</td>
<td></td>
</tr>
</tbody>
</table>

**PRODUCT CODE**

- E/BK/M3/LED/2: Brook self contained, 3 hour maintained emergency LED light (Comes with remote control option)
- E/BK/M3/LED/2/ST: Brook self contained, self-test 3 hour maintained emergency LED light
- E/BZ/KIT/BROOK/WH: 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

**What is Remote Control Testing?**

Channel Safety Systems’ Remote Control Testing system is available on all products throughout this catalogue which show the following symbols:

Our unique set up reduces the need for key switches and allows any number of compatible fittings to be tested with a single remote, and it’s so simple! Click the button once for a standard 5 second “flick test” or twice for a yearly test which lasts 3 hours. After this time the fitting will automatically take itself out of test mode and the incorporated LED will show either green (pass) or red (fail). Works at a range of up to 7 metres.

**PRODUCT CODE**

- E/EM/RC: Optional Remote Control
Stratos

PRODUCT OVERVIEW

The Stratos range of slave fittings for central battery & static inverter units is available in 24v, 50v & 110v 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.

PRODUCT FEATURES

- Light source: LED
- Power consumption: 1-2W
- Uses typically 80% less power than that of an 8W fluorescent
- Lumen output: 193-235lm
- IP Rating: IP65
- Maintained or non-maintained 3 hour emergency backup
- Compliance: BS EN 60598-2-22 and other relevant standards
PRODUCT OVERVIEW

The more athletic younger brother of our Alpine fitting, this is a more streamlined LED Emergency exit sign which like the original is IP50 rated and compatible with our unique Remote Control Testing system - and this iteration is supplied complete with a full legend set.

PRODUCT FEATURES

- Dimensions: 210mm (H) 405mm (W) 29mm (D)
- IP Rating- IP50
- 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 & easy to install
- Minimal maintenance
- Light Source - SMT LED 4W

PRODUCT CODE

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/AL/M3/SL/RC</td>
<td>Alpine Slim LED exit sign c/w full legend set</td>
</tr>
<tr>
<td>E/EM/RC</td>
<td>Optional Remote Control</td>
</tr>
</tbody>
</table>

PRODUCT FEATURES

- Dimensions: 210mm (H) 405mm (W) 55mm (D)
- Light source: LED
- Power consumption: 1.9W
- Uses typically 80% less power than that of an 8W fluorescent
- 1.9 LED equivalent to 8W fluorescent
- Material: White polycarbonate
- IP Rating- IP50
- Maintained or non-maintained 3 hour emergency back-up
- 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

PRODUCT CODE

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/AL/M3/LED</td>
<td>Alpine LED exit sign (Comes complete with Arrow Up legend)</td>
</tr>
<tr>
<td>E/EM/RC</td>
<td>Optional Remote Control</td>
</tr>
</tbody>
</table>

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
5-in-1 Emergency Exit Sign

PRODUCT 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 both switchable maintained or non-maintained option.

PRODUCT FEATURES

- Maintained or Non-maintained 3 hour emergency back-up
- Incorporates 3.6V 1.5Ah NiCd battery
- 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

PRODUCT CODE

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/5in1</td>
<td>5-in-1 LED exit sign c/w full legend set and five mounting option brackets</td>
</tr>
<tr>
<td>E/EM/RC</td>
<td>Remote Control Test Unit (Optional)</td>
</tr>
</tbody>
</table>

CE LED

LED 3W IP50 30m 0.8Kg
PRODUCT OVERVIEW
The ultra slim-line Razor LED emergency exit sign range offering hanging, recessed, flush mounted and wall/ceiling mounted versions. A comprehensive family, comprising hanging, recessed, hanging recessed and wall/ceiling mounted versions, this compact range of LED exit signs comes complete with arrow up pictograms (other arrow options available).

PRODUCT FEATURES
- Light source: LED 2W
- Uses typically 80% less power than that of an 8W fluorescent
- Material: Polycarbonate / Aluminium
- IP Rating: IP40
- 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
- Comes with legend blank for single siding

PRODUCT CODE | DESCRIPTION
--- | ---
E/RZ/M3/LED/H | Razor 3 hour maintained LED exit sign hanging - Maintained only
| Comes complete with universal legend pack (arrows left/right, up/down, blank)
E/RZ/M3/LED/R | Razor 3 hour maintained LED exit sign hanging recessed - Maintained only
| Comes complete with universal legend pack (arrows left/right, up/down, blank)
E/RZ/M3/LED/F | Razor 3 hour maintained LED exit sign flush recessed - Maintained only
| Comes complete with universal legend pack (arrows left/right, up/down, blank)
E/RZ/M3/LED/W | Razor 3 hour maintained LED exit sign wall/ceiling fitting - Maintained
| Comes complete with universal legend pack (arrows left/right, up/down, blank)

REPLACEMENT PARTS
- E/PIC/RZ/PACK | Razor pictogram Set
- B/BATT/RAZOR/W | Battery for Razor (Wall only)
- B/BATT/RAZOR/F/H/R | Battery Pack for Razor
**Vale**

**PRODUCT FEATURES**

- Dimensions: 230mm (H) 355mm (W) 115mm
- Cut out dimensions: (L) 335mm (W) 95mm (D) 60mm
- Light source: LED
- Power consumption: 2.1W
- Uses typically 80% less power than that of an 8W fluorescent
- Material: White, brass and chrome
- IP Rating: IP20
- Self test as standard
- Can be switched internally to maintained or non-maintained operation
- Viewing distance: 32m
- Weight: 1.5Kg
- Compliance: BS EN 60598-2-22 and other relevant standards
- Other accessories: Double sided pictograms available

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>E/CHVL/M3/L/WHST</td>
<td>Vale LED 3 hour maintained white (Self-test complete with legend arrow up)</td>
</tr>
<tr>
<td>E/CHVL/M3/L/BRST</td>
<td>Vale LED 3 hour maintained brass (Self-test complete with legend arrow up)</td>
</tr>
<tr>
<td>E/CHVL/M3/L/CHST</td>
<td>Vale LED 3 hour maintained chrome (Self-test complete with legend arrow up)</td>
</tr>
</tbody>
</table>

**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)

**REPLACEMENT PARTS**

- B/BATT/DA/FO/VL/NIHM: Battery for Vale - NiMH New style 2 cell
- B/BATT/DA/FO/VL/NICD: Battery for Vale - NiCD 4 cell

**Dale**

**PRODUCT FEATURES**

- Dimensions: 175mm (H) 335mm (W) 38mm (D)
- Light source: LED
- Power consumption: 2.1W
- Uses typically 80% less power than that of an 8W fluorescent
- Material: White mild steel
- IP Rating: IP40
- Self test as standard
- Can be switched internally to maintained or non-maintained operation
- Viewing distance: 32m
- Weight: 1.0Kg
- Compliance: BS EN 60598-2-22 and other relevant standards
- Other accessories: Pictograms available

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/DA/M3/LED/3/ST</td>
<td>Dale LED 3 hour maintained self-test complete with arrow up legend</td>
</tr>
</tbody>
</table>

**ADDITIONAL LEGENDS**

- S/LEG/DA/AL/3: Pictogram arrow left
- S/LEG/DA/AR/3: Pictogram arrow right
- S/LEG/DA/AD/3: Pictogram arrow down
- S/LEG/DA/AU/3: Pictogram arrow up

**REPLACEMENT PARTS**

- B/BATT/DA/FO/VL/NIHM: Battery for dale - NiMH
**PRODUCT FEATURES**

- Dimensions: 250mm(H) 360mm (W) 54mm(D)
- Light source: LED
- Power consumption: 2.1W
- Uses typically 80% less power than that of an 8W fluorescent
- Material: Steel with white, chrome, brass or satin finish options
- IP Rating: IP40
- Self test as standard
- Can be switched internally to maintained or non-maintained operation
- Viewing distance: 32m
- Weight: 1.5Kg
- Compliance: BS EN 60598-2-22 and other relevant standards
- Other accessories: Double sided pictograms available

---

**Additional Legends**

<table>
<thead>
<tr>
<th>Product Code</th>
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<tbody>
<tr>
<td>S/LEG/OAU</td>
<td>Double sided arrow up legend for Forest (insert only)</td>
</tr>
<tr>
<td>S/LEG/OALR</td>
<td>Double sided arrow left/right for Forest (insert only)</td>
</tr>
<tr>
<td>S/LEG/OAD</td>
<td>Double sided arrow down legend for Forest (insert only)</td>
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</tbody>
</table>

**Mounting Brackets**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/CHFO/WMB/BI</td>
<td>Forest Satin/Silver Wall Mounting Bracket</td>
</tr>
<tr>
<td>E/CHFO/WMB/WH</td>
<td>Forest White Wall Mounting Bracket</td>
</tr>
<tr>
<td>E/CHFO/WMB/BR</td>
<td>Forest Brass Wall Mounting Bracket</td>
</tr>
</tbody>
</table>

**Poles**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/CHFO/CPB/WH</td>
<td>Forest White Ceiling Pole Bracket- Poles are 280mm (not including threads)</td>
</tr>
<tr>
<td>E/CHFO/CPB/SI</td>
<td>Forest Satin/Silver Ceiling Pole Bracket- Poles are 280mm (not including threads)</td>
</tr>
<tr>
<td>E/CHFO/CPB/BR</td>
<td>Forest Brass Ceiling Pole Bracket- Poles are 280mm (not including threads)</td>
</tr>
</tbody>
</table>

**Flag Mounting Poles**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/CHFO/FMB/WH</td>
<td>Forest white flag mounting bracket</td>
</tr>
<tr>
<td>E/CHFO/FMB/SI</td>
<td>Forest satin silver flag mounting bracket</td>
</tr>
<tr>
<td>E/CHFO/FMB/BR</td>
<td>Forest brass flag mounting bracket</td>
</tr>
</tbody>
</table>

**Replacement Parts**

Please contact Channel
EMERGENCY LUMINAIRES | LED EXIT SIGNAGE

**PRODUCT FEATURES**

- Light source: LED SMD3528
- Power consumption: 4W
- 50% energy saving over conventional fluorescent
- Self-test versions available
- Comes complete with universal legend pack
- Material: Polycarbonate housing
- IP Rating: IP20
- Maintained switchable and self-test versions available
- Viewing distance: 30m
- Weight: 1.3kg
- Compliance: BS EN 60598-2-22 and other relevant standards
- Comes with legend blank for single siding

**PRODUCT CODE**

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/CAMBER/WALL</td>
<td>Camber LED wall mounted exit sign 3hr maintained</td>
</tr>
<tr>
<td></td>
<td>Comes complete with pictogram pack (arrows left/right and up and down)</td>
</tr>
<tr>
<td>E/CAMBER/WALL/ST</td>
<td>Camber LED wall mounted exit sign 3hr maintained self-test</td>
</tr>
<tr>
<td></td>
<td>Comes complete with pictogram pack (arrows left/right and up and down)</td>
</tr>
<tr>
<td>E/CAMBER/SURF</td>
<td>Camber LED surface exit sign 3hr maintained</td>
</tr>
<tr>
<td></td>
<td>Comes complete with pictogram pack (arrows left/right, up/down, blank)</td>
</tr>
<tr>
<td>E/CAMBER/SURF/ST</td>
<td>Camber LED surface exit sign 3hr maintained self-test</td>
</tr>
<tr>
<td></td>
<td>Comes complete with pictogram pack (arrows left/right, up/down, blank)</td>
</tr>
<tr>
<td>E/CAMBER/HANG</td>
<td>Camber LED hanging exit sign 3hr maintained</td>
</tr>
<tr>
<td></td>
<td>Comes complete with pictogram pack (arrows left/right, up/down, blank)</td>
</tr>
<tr>
<td>E/CAMBER/HANG/ST</td>
<td>Camber LED hanging exit sign 3hr maintained self-test</td>
</tr>
<tr>
<td></td>
<td>Comes complete with pictogram pack (arrows left/right, up/down, blank)</td>
</tr>
</tbody>
</table>

**REPLACEMENT PARTS**

<table>
<thead>
<tr>
<th>REPLACEMENT PARTS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/BATT/CAMBER</td>
<td>Battery for Camber</td>
</tr>
</tbody>
</table>
**Betalux**

**PRODUCT OVERVIEW**

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

**PRODUCT FEATURES**

- Versatile multi-functional use, interior & exterior
- May be mounted in any orientation
- Tough polycarbonate housing
- Carrying handle for portability
- Non-maintained
- Minimal maintenance
- Easy installation
- IP65 ingress protection
- RoHS compliant
- Excellent luminaire spacings
- 3 Watt power consumption

**PRODUCT CODE**  
**DESCRIPTION**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP/BX/AU</td>
<td>Self Powered Exit Sign c/w Arrow Up Legend</td>
</tr>
<tr>
<td>SP/BX/AD</td>
<td>Self Powered Exit Sign c/w Arrow Down Legend</td>
</tr>
<tr>
<td>SP/BX/AL</td>
<td>Self Powered Exit Sign c/w Arrow Left Legend</td>
</tr>
<tr>
<td>SP/BX/AR</td>
<td>Self Powered Exit Sign c/w Arrow Right Legend</td>
</tr>
<tr>
<td>SP/BX/AD/DG</td>
<td>Self Powered Exit Sign c/w Arrow Down Legend – Grey Trim</td>
</tr>
<tr>
<td>SP/BX/AL/DG</td>
<td>Self Powered Exit Sign c/w Arrow Left Legend – Grey Trim</td>
</tr>
<tr>
<td>SP/BX/AR/DG</td>
<td>Self Powered Exit Sign c/w Arrow Right Legend – Grey Trim</td>
</tr>
</tbody>
</table>

**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.

- 6" high letters with 3/4" stroke
- Flush, Pendant or Flag Mount
- Field selectable directional indicators.

---

**GU32 - IP65 Twinspot**

**PRODUCT OVERVIEW**

Our new GU32 IP65 twinflood offers a high performance, cost-effective emergency lighting in warehouses, factories, atriums, exterior escape routes & 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 hanging kit for downward pointing installation & integral driver and NiCd battery pack.

**PRODUCT FEATURES**

- Versatile multi-functional use, interior & exterior
- May be mounted in any orientation
- Tough polycarbonate housing
- Carrying handle for portability
- Non-maintained
- Minimal maintenance
- Easy installation
- IP65 ingress protection
- RoHS compliant
- Excellent luminaire spacings
- 3 Watt power consumption

**GU32 IP65 Mounting Height**

<table>
<thead>
<tr>
<th>Mounting Height</th>
<th>Transverse to wall</th>
<th>Square Spacing</th>
<th>Axial to wall (front)</th>
<th>Axial to wall (rear)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3m</td>
<td>2.5</td>
<td>6.6</td>
<td>5</td>
<td>2.7</td>
</tr>
<tr>
<td>4m</td>
<td>2.7</td>
<td>8.7</td>
<td>6</td>
<td>2.9</td>
</tr>
<tr>
<td>6m</td>
<td>3.4</td>
<td>10</td>
<td>7.2</td>
<td>3</td>
</tr>
<tr>
<td>8m</td>
<td>4.3</td>
<td>11.2</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

---

**E/GU32/IP65**  
IP65 3 Hour Non-Maintained emergency twinflood
Grove™ Twinspot - IP20, IP65 & Self Test Versions

PRODUCT 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 & improved head design and is also available as an IP65 Self Test Version.

PRODUCT FEATURES
• Grove IP20 Dimensions: 260mm(H) 300mm(W) 70mm(D)
• Grove IP65 Dimensions: 285mm(H) 280mm(W) 75mm(D)
• No of LEDs per head: 15 | Low maintenance
• Power consumption: 15W (emergency mode)
• Uses 50% power than that of a Tungsten halogen
• Material: White metal body/polycarbonate lamps & lenses
• IP Rating: IP20 & IP65 | Non-maintained mode only
• Weight: IP20 - 2.20Kg  | IP65 - 1.95Kg
• Compliance: BS EN 60598-2-22 and other relevant standards

GROVE IP20 PHOTO METRIC DATA

<table>
<thead>
<tr>
<th>LED</th>
<th>15W</th>
<th>720 lm</th>
<th>IP20</th>
<th>1.89Kg</th>
</tr>
</thead>
</table>

PHOTOMETRIC SPACING DATA (1 lux)

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>Back - Side - Front</th>
</tr>
</thead>
<tbody>
<tr>
<td>4m</td>
<td>4.4 - 4.0m - 9.0m</td>
</tr>
<tr>
<td>6m</td>
<td>4.7m - 5.2m - 10.8m</td>
</tr>
<tr>
<td>8m</td>
<td>6.2m - 6.6m - 12.2m</td>
</tr>
</tbody>
</table>

GROVE IP65 PHOTO METRIC DATA

<table>
<thead>
<tr>
<th>LED</th>
<th>15W</th>
<th>x2 360 lm</th>
<th>IP65</th>
<th>1.85Kg</th>
</tr>
</thead>
</table>

PHOTOMETRIC SPACING DATA (1 lux)

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>Back - Side - Front</th>
</tr>
</thead>
<tbody>
<tr>
<td>4m</td>
<td>4.4 - 4.0m - 9.0m</td>
</tr>
<tr>
<td>6m</td>
<td>4.7m - 5.2m - 10.8m</td>
</tr>
<tr>
<td>8m</td>
<td>6.2m - 6.6m - 12.2m</td>
</tr>
</tbody>
</table>

GROVE IP20 VERSION
E/GR/NM3/LED/2  Grove Twin 15 x LED floodlight, 3 hour non-maintained white lamps

REPLACEMENT PARTS
B/BATT/GROVE/3  9.6V Battery pack for Grove

GROVE IP65 VERSION
E/GR/NM3/LED/IP65/RC  Grove Twin 2 x LED floodlight 3 hour non-maintained with white lamps Remote Control Test Version
E/GR/NM3/LED/IP65/2/ST  Grove Twin 2 x LED floodlight 3 hour non-maintained with white lamps Self Test Version

REPLACEMENT PARTS
B/BATT/GROVE/3  9.6V Battery pack for Grove
Azelio Surface

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

The Azelio Surface comes with two lens options, open area (150lm) & corridor (137lm), it is further enhanced by the addition of a remote-control testing option, which ensures simple & 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)

Supplied with integral driver and NiCd battery pack

PRODUCT FEATURES
- Versatile multi-functional use (escape and open area anti-panic)
- Supplied with both open area & 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
- IP20 ingress protection
- RoHS compliant
- Excellent luminaire spacings of up to 15m for corridor version

PRODUCT CODE | DESCRIPTION
--- | ---
E/AZELIO/S | Surface mounted emergency downlight. C/W open area & corridor lenses
E/EM/RC | Remote control test unit (Optional)

Azelio Recessed

PRODUCT OVERVIEW
Azelio Recessed is a compact, Self test, 3w high specification recessed emergency LED downlight supplied with both open area and escape route lenses, our new Azelio recessed emergency downlight offers a high performance, cost-effective emergency lighting downlight for indoor use where aesthetics are of prime importance.

The Azelio Recessed comes with two lens options, open area (158lm) & corridor (143lm).

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

Supplied with integral driver and NiCd battery pack

PRODUCT FEATURES
- Versatile multi-functional use (escape and open area anti-panic)
- Supplied with both open area & corridor lenses
- Auto self test
- Tough polycarbonate housing
- Suitable for recessed mounting
- Non-maintained
- Minimal maintenance
- Easy installation
- IP20 ingress protection
- RoHS compliant
- Excellent luminaire spacings of up to 15m for corridor version

PRODUCT CODE | DESCRIPTION
--- | ---
E/AZELIO/R/COA/ST | Recessed auto self test emergency downlight. C/W open area & corridor lenses
Azelio Downlights

PRODUCT OVERVIEW
Offering open area and escape route lights our new Azelio range of emergency downlights offers a simple & 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 integral driver and lithium battery pack

Pre-wired for easy installation

PRODUCT FEATURES
- Pre-wired for easy installation
- ideal size to replace existing downlights
- High output LED light source = less fittings
- Intergrated long life lithium battery
- Open area & corridor options
- Built in 'push to test' switch
- Non-Maintained
- Input Voltage: 220-240V 50/60Hz
- Light Source: SMD LED
- LED Wattage: 3w LED
- IP Rating: IP20
- 6000k- 7000k
- Weight: Azelio/OA: 280g Azelio/C: 282g
- Bezel Dia 110mm
- Lumen output corridor: 176lm Open Area: 158lm

PHOTOMETRIC SPACING DATA (1 lux)

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>0.5 Lux</th>
<th>1 Lux</th>
<th>0.5 Lux</th>
<th>1 Lux</th>
<th>0.5 Lux</th>
<th>1 Lux</th>
<th>0.5 Lux</th>
<th>1 Lux</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4m</td>
<td>n/a</td>
<td>2.10</td>
<td>n/a</td>
<td>4.20</td>
<td>n/a</td>
<td>13.00</td>
<td>n/a</td>
<td>6.50</td>
</tr>
<tr>
<td>3m</td>
<td>n/a</td>
<td>2.25</td>
<td>n/a</td>
<td>4.50</td>
<td>n/a</td>
<td>15.00</td>
<td>n/a</td>
<td>7.50</td>
</tr>
<tr>
<td>4m</td>
<td>n/a</td>
<td>2.50</td>
<td>n/a</td>
<td>5.00</td>
<td>n/a</td>
<td>18.00</td>
<td>n/a</td>
<td>9.00</td>
</tr>
</tbody>
</table>

PHOTOMETRIC SPACING DATA (1 lux)

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>0.5 Lux</th>
<th>1 Lux</th>
<th>0.5 Lux</th>
<th>1 Lux</th>
<th>0.5 Lux</th>
<th>1 Lux</th>
<th>0.5 Lux</th>
<th>1 Lux</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4m</td>
<td>n/a</td>
<td>3.75</td>
<td>n/a</td>
<td>8.25</td>
<td>n/a</td>
<td>8.25</td>
<td>n/a</td>
<td>3.75</td>
</tr>
<tr>
<td>3m</td>
<td>n/a</td>
<td>4.00</td>
<td>n/a</td>
<td>8.50</td>
<td>n/a</td>
<td>8.50</td>
<td>n/a</td>
<td>4.00</td>
</tr>
<tr>
<td>4m</td>
<td>n/a</td>
<td>4.12</td>
<td>n/a</td>
<td>9.25</td>
<td>n/a</td>
<td>11.50</td>
<td>n/a</td>
<td>4.12</td>
</tr>
</tbody>
</table>

PRODUCT CODE | DESCRIPTION
--- | ---
E/AZELIO/OA | Azelio Emergency LED Downlight Open Area non-maintained
E/AZELIO/C | Azelio Emergency LED Downlight Corridor non-maintained
E/AZELIO/BEZEL | Azelio Bezel to expand the bezel size to 165mm
Ceilo

PRODUCT FEATURES

- Dimensions: Downlight: 50mm(Ø) 25mm(D)
- Cut Out: 40mm (Ø)
- Maintained and non-maintained
- Self test and DALI versions available
- Power consumption: 5W
- Lumen Output: 150 lm
- Weight: 0.32Kg
- Compliance: BS EN 60598-2-22

PRODUCT CODE

E/CEILO/LED/ST

Ceilo downlight 5W, maintained and non-maintained self-test version

Glade

PRODUCT FEATURES

- Dimensions: 1W: 44mm(Ø) 34mm(H) 5W: 77mm(Ø) 55mm(H)
- Cut out dimensions: 1W: 35-38mm(Ø) 5W: 60-65mm(Ø)
- Light source: LED
- Power consumption: 1W or 5W versions
- Lumen output: 60 lm or 194 lm
- IP Rating: IP40
- 1W non-maintained, 5W maintained/non-maintained
- Weight: 1W: 0.254Kg 5W: 0.785Kg
- Compliance: BS EN 60598-2-22 and other relevant standards

PRODUCT CODE

E/GL/LED/NM3/1W/WH

Glade 1W non-maintained LED mini down light - white

E/GL/LED/M3/5W/WH

Glade 5W maintained LED mini down light - white

Photometric Spacing Data (1 lux)

**Ceilo 5W**

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>2.5m</th>
<th>3.0</th>
<th>5.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>4m</td>
<td>3.45</td>
<td>6.4</td>
<td></td>
</tr>
</tbody>
</table>

**Glade 5W**

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>2.5m</th>
<th>2.8</th>
<th>5.7</th>
<th>5.7</th>
<th>2.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>4m</td>
<td>3.4</td>
<td>7.3</td>
<td>7.3</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>6m</td>
<td>3.9</td>
<td>9.6</td>
<td>9.6</td>
<td>3.9</td>
<td></td>
</tr>
</tbody>
</table>

**Glade 1W**

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>2.5m</th>
<th>2.4</th>
<th>5.8</th>
<th>5.4</th>
<th>2.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>4m</td>
<td>1.0</td>
<td>4.9</td>
<td>5.2</td>
<td>1.0</td>
<td></td>
</tr>
</tbody>
</table>
Zen

The ZEN-3-NM 3 watt non-maintained offers a compact fitting that utilise the latest LED technology. This ensures an environmentally friendly emergency downlight.

PRODUCT FEATURES

- 3W non-maintained
- Long life LED technology
- Non-maintained 3 hour emergency backup
- Slim-line driver module
- Sleek & minimalistic design
- Simple ‘plug and go’ installation
- Low environmental impact
- Low maintenance
- Compliance: BS EN 60598-2-22 and other relevant standards

### PRODUCT CODE

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/ZEN/NM3</td>
<td>Zen 3w enhanced output 3hr NON-MAINTAINED emergency light with 3.6V Ni-MH 2200mA battery</td>
</tr>
</tbody>
</table>

### PHOTOMETRIC SPACING DATA (1 lux)

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>2.5m</th>
<th>3.7</th>
<th>7.45</th>
<th>7.45</th>
<th>3.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>3m</td>
<td>4.1</td>
<td>8.1</td>
<td>8.1</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>4m</td>
<td>4.4</td>
<td>8.8</td>
<td>8.8</td>
<td>4.4</td>
<td></td>
</tr>
</tbody>
</table>

33-35mm cutout
38mm Lamp Diameter
Azelo Emergency Track Exit/Open area LEDs

PRODUCT OVERVIEW
Azelo Track emergency LED available as an open area downlight or exit sign. High specification track mounted emergency LED downlight supplied with a full set of legends, our new Azelo Track mounted exit sign offers cost-effective emergency lighting where track lighting is installed.
It is supplied with a Global Track adapter.

Available in white and black (sign is green)
Supplied with integral driver and NiCd battery pack
Track adapter can be easily swapped to match almost any track profile.

PRODUCT FEATURES
Track mounted 3 hour Emergency LED
- Supplied with full legend set (eXIT SIGN ONLY)
- Quick & simple to install
- Suitable for Global track mounting
- Maintained
- Minimal maintenance
- Easy installation
- IP20 ingress protection
- RoHS compliant
- White & black options

PRODUCT CODE

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PRODUCT CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azelo Track exit sign c/w 4 legends &amp; blank legend</td>
<td>E/AZ/TRACK/EXIT</td>
</tr>
<tr>
<td>Azelo Track exit sign c/w 4 legends &amp; blank legend - BLACK</td>
<td>E/AZ/TRACK/EXIT/BK</td>
</tr>
<tr>
<td>Azelo track downlight with corridor &amp; open area lenses - White</td>
<td>E/AZ/TRACK/COA</td>
</tr>
<tr>
<td>Azelo track downlight with corridor &amp; open area lenses - Black</td>
<td>E/AZ/TRACK/COA/BK</td>
</tr>
</tbody>
</table>

LED 2W IP20 0.67Kg LED 150mm height 40mm 300mm 31.5 31.5 L1 L2 L3 N L1 125mm dia. 110mm height
Azelio Emergency Track LED

PRODUCT OVERVIEW
The Track emergency light is a Non-Maintained Emergency Light. It is supplied with a 3 circuit Global Track adapter. It is designed to provide high light output in the event of an emergency.

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

PRODUCT FEATURES
- Long Life LED technology
- Quick & simple to install
- Line Voltage: 220-240Vax, 50~60Hz
- Lamp Type: 3W White LED
- 3 hr emergency lighting duration
- Non-maintained operation
- Monitoring Battery Connection
- CE Approved

PRODUCT CODE
<table>
<thead>
<tr>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/AZELIO/TRACK</td>
</tr>
<tr>
<td>S/AZ/BK/COV</td>
</tr>
</tbody>
</table>

PHOTOMETRIC SPACING DATA (1 lux)

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>0.5 Lux</th>
<th>1 Lux</th>
<th>0.5 Lux</th>
<th>1 Lux</th>
<th>0.5 Lux</th>
<th>1 Lux</th>
<th>0.5 Lux</th>
<th>1 Lux</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4m</td>
<td>3.00</td>
<td>3.10</td>
<td>6.00</td>
<td>5.80</td>
<td>6.00</td>
<td>5.80</td>
<td>3.50</td>
<td>3.10</td>
</tr>
<tr>
<td>3m</td>
<td>3.50</td>
<td>3.25</td>
<td>7.00</td>
<td>6.50</td>
<td>7.00</td>
<td>6.50</td>
<td>3.50</td>
<td>3.25</td>
</tr>
<tr>
<td>4m</td>
<td>4.50</td>
<td>4.00</td>
<td>9.00</td>
<td>8.00</td>
<td>9.00</td>
<td>8.00</td>
<td>4.50</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Shown with black cover
The Channel Safety System i-monitor Emergency is a comprehensive DALI based emergency light testing system. i-Monitor Emergency has been designed to provide a flexible, powerful and user friendly emergency lighting testing and reporting system. 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.

**PRODUCT FEATURES**

- App based Emergency Light testing system
- Simple emergency duration & 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 & 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 I-Pads can be networked giving a total of 10,240 DALI lights.
- I-Pad can be moved to log on to any hub with a wireless access point, or additional i-Pads 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, & 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 & emergency light monitoring system. Any DALI type 8 light can be monitored & 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 10hubs= 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.
We are able to offer a wide range of compatible emergency lights; the most popular types are shown below.

### Exit Signs

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/EXDA/1**</td>
<td>DALI Maintained/Non-Maintained Recessed mounted LED Exit sign-White ** add AU, AD, ALR</td>
</tr>
<tr>
<td>E/EXDA/2**</td>
<td>DALI Maintained/Non-Maintained surface mounted LED Blade Exit sign-White ** add AU, AD, ALR</td>
</tr>
<tr>
<td>E/EXDA/3**</td>
<td>DALI Maintained/Non-Maintained Suspended mounted LED Exit sign-White ** add AU, AD, ALR</td>
</tr>
<tr>
<td>E/EXDA/4</td>
<td>DALI emergency Maintained/Non-Maintained IP65 3w exit sign c/w full legend pack</td>
</tr>
<tr>
<td>E/EXDA/5</td>
<td>DALI Maintained/Non-Maintained Wall mounted LED Exit sign-White c/w full legend pack</td>
</tr>
</tbody>
</table>

### Downlights

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/DLDA/1/**</td>
<td>DALI Emergency 3w Circular LED surface mounted ** add OA/CO lens</td>
</tr>
<tr>
<td>E/DLDA/2/**</td>
<td>DALI Emergency 3w Square LED surface mounted ** add OA/CO lens</td>
</tr>
<tr>
<td>E/DLDA/3/**</td>
<td>DALI 3w LED emergency downlight-Open Area Lens- ** add OA/CO lens</td>
</tr>
</tbody>
</table>

### Bulkheads

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/BHDA/1</td>
<td>DALI Emergency 2w LED DALI Emergency Bulkhead Non-Maintained 288 Lumens-Clear lens</td>
</tr>
<tr>
<td>E/BHDA/2</td>
<td>DALI 3W IP65 bulkhead</td>
</tr>
</tbody>
</table>

### Twinspots

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/TSDA/1</td>
<td>DALI IP65 6w LED Twinspot Emergency providing 610 Lumen output</td>
</tr>
</tbody>
</table>

### Ceiling Light

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/SOHO/M3/DA</td>
<td>DALI Soho 21w maintained ceiling light</td>
</tr>
</tbody>
</table>

Ordering Details: Please contact us with your requirements for us to provide a customised solution to meet your system requirements.
What is DALI?
DALI stands for Digital Addressable Lighting Interface. In other words, it is a worldwide standardized digital lighting interface. The DALI standard, specified in IEC standard 60929, ensures interchangeability and compatibility of lighting products from different manufacturers.

The DALI system was created by leading lighting manufacturers who recognized 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.

How long has it been around?
The history of DALI is an interesting one. The idea first came from a ballast company in Europe over 10 years ago. Three other ballast companies joined with the first to form a proposal for the International Electrotechnical Commission (IEC) in order to create a standard on communication protocols used for ballasts. About six years ago, the United States became involved as well. “Finally, the standard is being published this year,” says Pekka Hakkarainen, director of technology and business development for Coopersburg, PA-based Lutron Electronics and chair of the Lighting Controls Council at Rosslyn, VA-based National Electrical Manufacturers Association (NEMA). “[The standard] has been in its final form for maybe a little less than two years. (It) is included in the IEC standard for fluorescent ballasts, and it’s one of the annexes in the standard. It defines a method of communicating to the ballast that the industry has agreed on.” The current standard doesn’t yet define much for the DALI controls, other than the fact that they must have the capability to send messages to the ballasts.

DALI was accepted as an international standard in 2002; the first DALI ballasts were introduced into the United States in the late ’90s.

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

---

Emergency Lighting Test Switch

PRODUCT FEATURES
• Dimensions: 86mm(W) x 86mm(H) x 19mm(D)
• Material: Flame retardant ABS
• Weight: 0.14Kg
• Suitable for maintained & non-maintained luminaires

PRODUCT CODE | DESCRIPTION
--- | ---
E/CH/ELTS | Surface mounted test switch

Conversion Pack for LED Panel Lights

PRODUCT FEATURES
• Dimensions: 45mm(H) 220mm(W) 105mm(D)
• Power consumption: 22-55W
• Weight: 0.95g
• Compliance: BS EN 60598-2-22

PRODUCT CODE | DESCRIPTION
--- | ---
E/LED/PANEL/M3/MODULE | 3 hour 26-50W LED panel light emergency module
NiCd Batteries

PRODUCT FEATURES

- Available exclusively from channel safety systems
- High quality 4.0Ah nickel cadmium batteries
- Complete with connector and lead
- 1.2V per cell
- 55°C high temperature
- Dimensions: Each cell 33mmØ x 60mmL (approx)
- Weight: 0.125 Kg per cell
- Compliance: IEC 61951 - 2003 Clause 7.4.2.3
- Endurance test - 3rd party certified

Electrical characteristics per cell

- Nominal Voltage (V): 1.2
- Nominal Capacity (mAh) @ 25°C: 4000
- Maximum Continuous Discharge Current (A): 2.4

Dimensions per cell

- Diameter: 32.5 +/- 0.5
- Height (mm): 59 +/- 1.0
- Weight (g): 125 approx.

Charge conditions

- Standard: 16hrs, 0-45°C, 400mA (0.1C)
- Trickle: 24hrs, 0-70°C, 200mA (0.05C)
- Maintenance: ∞, 0-55°C, 200mA (0.05C)

Storage

- Temperature: 0 to +25°C

BATTERY CONFIGURATIONS

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>B/1.2V/4AH/NICD NiCd 4.0Ah High Temperature D Cell Tags</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>B/2.4V/4AH/NICD NiCd 2 Cell 4.0Ah High Temperature D Cell Leads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>B/2.4V/4AH/NICD/S NiCd 2 Cell 4.0Ah High Temperature D Cell Leads Side-By-Side</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>B/3.6V/4AH/NICD NiCd 3 Cell 4.0Ah High Temperature D Cell Leads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>B/3.6V/4AH/NICD/S NiCd 3 Cell 4.0Ah High Temperature D Cell Leads Side-By-Side</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>B/4.8V/4AH/NICD NiCd 4 Cell 4.0Ah High Temperature D Cell Leads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>B/4.8V/4AH/NICD/S NiCd 4 Cell 4.0Ah High Temperature D Cell Leads Side-By-Side</td>
<td></td>
<td></td>
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<tr>
<td>H</td>
<td>B/6V/4AH/NICD NiCd 5 Cell 4.0Ah High Temperature D Cell Leads</td>
<td></td>
<td></td>
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<tr>
<td>I</td>
<td>B/6V/4AH/NICD/S NiCd 5 Cell 4.0Ah High Temperature D Cell Lead Side-By-side</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Replacement Batteries

PRODUCT 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 are either 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.

To find out more information on our replacement batteries, please contact a member of our sales team on 0845 884 7000 or email customerservices@channelsafety.co.uk

Small Office UPS

PRODUCT OVERVIEW
Channel Safety can offer 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 & 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
Central Battery Systems

PRODUCT 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.

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

Mini Static Inverters

PRODUCT OVERVIEW

The STI-LED range of Mini Static Inverters have been engineered with the LED lighting market in mind offering a cost effective solution to powering unmodified LED luminaires in the event of mains failure the unit is a pure sin wave inverter with a 230v ac output.

- Pure Sine Wave
- 32 bit Micro-controller
- Multi Function LCD Display
- 3 Hour Duration
- Overload & Short Circuit Protection
- Compatible with optional remote hold off relays

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>C/STI-LED-50</td>
<td>50 Watt LED Static Inverter</td>
</tr>
<tr>
<td>C/STI-LED-120</td>
<td>120 Watt LED Static Inverter</td>
</tr>
<tr>
<td>C/STI-LED-200</td>
<td>200 Watt LED Static Inverter</td>
</tr>
<tr>
<td>C/STI-LED-400</td>
<td>400 Watt LED Static Inverter</td>
</tr>
</tbody>
</table>
| C/STI-LED-COR| Change over relay-used as hold off relay or as non maintained output.

To find out more information on our central battery systems, please contact a member of our sales team on 0845 884 7000 or email customerservices@channelsafety.co.uk
PRODUCT 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 but also a comprehensive bespoke range of AC/DC Central Battery Units with nominally 24V, 48V, 50V and 110V options, allowing BPC to provide an all-inclusive selection of reliable and cost effective products to meet the most challenging of lighting applications.

- Remote Alarm Panel- External panel for monitoring the static inverter
- Output Distribution- Internal distribution of the lighting circuits, standard in EL100XA & EL100, multiple outputs are optional.
- Maintenance Bypass Panel- to provide 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.

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

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.

ACTIVE 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.

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.

To find out more information on our static inverters, please contact a member of our sales team on 0845 884 7000 or email customerservices@channelsafety.co.uk
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Under Cupboard Lighting

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Milan
LED Luminaire

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SOHO
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Arion
LED Batten range

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Comet
Area Floodlights

Page 38
Commando
Security Lights

Page 39
Kensington & Chelsea
Floodlights

Page 40
Belmont & Bollards
Path and walkway Lighting
Estante

PRODUCT OVERVIEW
The Estante LED under cupboard lighting range is available in 300mm and 500mm strip lengths and each strip comes complete with adhesive strips and screws for fixing. A range of complimentary accessories are available for you to install your own bespoke under cupboard, shelf or cove lighting system.

Using the latest LED technology Estante provides a comfortable light distribution and an ideal solution for work space, task and accent lighting in either residential or commercial applications.

Set your imagination free and find new and innovative ways to create unique lighting designs in your home or establishment!

PRODUCT FEATURES
• Create modern task lighting in cupboards, wardrobes, under floating shelves and cabinets
• Available in 300mm and 500mm strip lengths
• Easy connectors and 90 degree corner connectors available to allow for installation around corners and longer length cupboard units up to 2 metres
• Long life LED technology with high brightness SMD3528 LED's
• Provides a comfortable light distribution that eliminates shadows
• Manufactured with an aluminium housing allowing for good heat dissipation
• Ultrathin and aesthetically pleasing fitting suitable for residential, commercial and industrial applications
• IP 20 Rated

CONNECTION OPTIONS
For the 30W driver you cannot exceed a length of 2 metres.
For the 15W driver you cannot exceed a length of 1.2 metres.

PRODUCT CODE | DESCRIPTION
---|---
E/EST/300/3000 | Estante - 300mm under cupboard lighting strip 3.4W 3000K (Warm White) Comes complete with adhesive strip and screw.
E/EST/300/4000 | Estante - 300mm under cupboard lighting strip 3.4W 4000K (Cool White) Comes complete with adhesive strip and screw.
E/EST/500/3000 | Estante - 500mm under cupboard lighting strip 5.4W 3000K (Warm White) Comes complete with adhesive strip and screw.
E/EST/500/4000 | Estante - 500mm under cupboard lighting strip 5.4W 4000K (Cool White) Comes complete with adhesive strip and screw.
E/EST/PSU/15W | Estante - 12V 15W Power supply with mains and 3.5mm DC lead (1.5m)
E/EST/PSU/30W | Estante - 12V 30W Power supply with mains and 3.5mm DC lead (1.5m)
E/EST/INTER | Estante - Interconnector used to join two lengths of lighting strip
E/EST/90 | Estante - 90 degree corner connector used to join two lengths of lighting strip
E/EST/SW | Estante - Under cupboard lighting switch
E/EST/PIR | Estante - Under cupboard lighting PIR detector
E/EST/ICW | Estante - Under cupboard lighting inter connecting wire used to join two lengths of lighting strip 210mm long
Estante

PRODUCT DIMENSIONS

Image shows 500mm Estante strip installed in recessed display unit

LED
3.4W
5.4W
3000K
4000K
IP20

300mm or 500mm strips

8.8mm
20mm

LED
Milan LED Luminaire

PRODUCT OVERVIEW

The Milan range of 15w circular LED Luminaire offers a complete range of low profile polycarbonate IP65 light fittings. It is supplied as standard with selectable 3 colour temperature options, 3000K, 4200K & 6000K.

The Milan range comes in a white finish as standard but is further enhanced with, black, chrome or brass coloured bezel options.

PRODUCT FEATURES

- Selectable 3 colour temperature options 3000K, 4200k & 6000k
- Microwave with corridor function options
- Versatile multi-functional use, interior & exterior
- May be mounted in any orientation
- Tough polycarbonate housing
- Twist on diffusser.
- Mains only & Maintained emergency options
- Minimal maintenance
- Easy installation
- IP65 ingress protection
- RoHS compliant
- Excellent luminaire spacings

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>2.5m</th>
<th>4m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency</td>
<td>4.3</td>
<td>4.8</td>
</tr>
<tr>
<td>1 lux</td>
<td>10.00</td>
<td>11.40</td>
</tr>
<tr>
<td>1 lux</td>
<td>10.00</td>
<td>11.40</td>
</tr>
<tr>
<td>1 lux</td>
<td>4.3</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Milan

- E/MILAN: Milan Led 15w Mains only Light (White)
- E/MILAN/M3: Milan Led 15w 3 Hour Maintained Emergency Light (White)
- E/MILAN/MW: Mains LED 15w Mains only Light c/w Microwave Sensor (White)
- E/MILAN/M3/MW: Milan Led 15w Emergency Microwave 3 Hour Maintained Emergency Light (White)
- E/MILAN/BEZ/BK: Milan Black bezel
- E/MILAN/BEZ/BR: Milan Brass bezel
- E/MILAN/BEZ/CH: Milan Chrome Bezel
**SoHo**

**PRODUCT OVERVIEW**

The SoHo LED luminaire is a true 2D 28W replacement and boasts a high lumen output giving it a top tier market performance. Now with the added benefit of corridor function (microwave versions).

Finished with a white base and a high light transmission polycarbonate diffuser which is held securely in place by a single clip system.

**PRODUCT FEATURES**

- **SoHo Dimensions:** 325mm(Ø)
- **Light source:** Epistar LED
- **Colour Temperature:** 5000K
- **Power consumption:** 21W Circuit Watts
- **Typical power saving:** 35-40% over conventional 2D luminaires
- **Material:** Polycarbonate base, high light transmission polycarbonate diffuser
- **IP Rating:** IP65
- **Mains or emergency 3 hour maintained and microwave options available**
- **Weight:** 1.45 Kg
- **Now with `corridor function` (microwave option only)**
- **Compliance:** BS EN 60598-2-22

**Now with Corridor Function**

- The Corridor FUNCTION enures that light is produced only when actually needed. This saves energy usage & possible light polution.
- 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 preset period. After a further preset 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% & 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 & the hold time setting has elapsed, this can be set to 10%, 20%, 30% or 50% of the full light level.

**PHOTOMETRIC SPACING DATA (1 lux)**

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>2.5m</th>
<th>4.3</th>
<th>10.00</th>
<th>10.00</th>
<th>4.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4m</td>
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<td>11.40</td>
<td>11.40</td>
<td>4.8</td>
<td></td>
</tr>
</tbody>
</table>

**PHOTOMETRIC SPACING DATA SOHO MINI (1 lux)**

<table>
<thead>
<tr>
<th>Mounting height</th>
<th>2.5m</th>
<th>4.8</th>
<th>11.00</th>
<th>11.00</th>
<th>4.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>4m</td>
<td>6.0</td>
<td>12.40</td>
<td>12.40</td>
<td>6.0</td>
<td></td>
</tr>
</tbody>
</table>

**E/SOHO**
SoHo - 21W mains version : 2100 lm

**E/SOHO/M3**
SoHo - 21W mains 3hr emergency version : 2100 lm

**E/SOHO/MW**
SoHo - 21W mains complete with microwave sensor : 2100 lm- Corridor function

**E/SOHO/M3/MW**
SoHo - 21W mains 3hr emergency version complete with microwave sensor : 2100 lm- Corridor function

**SP/SOHO/M3/ST**
SoHo - 21W mains 3hr emergency version (Self test, made to order)

**SP/SOHO/M3/MW/ST**
SoHo - 21W mains 3hr emergency version complete with microwave sensor : 2100 lm- Corridor function (Self test, made to order)

**BATTERIES**

**B/BATT/SOHO**
Battery for SoHo
Arion

PRODUCT OVERVIEW
Introducing the new Arion LED Commercial Lighting range, available in three lengths and with mains only or 3 hour maintained emergency options.

PRODUCT FEATURES
- Energy Rating A
- Three year warranty
- Colour Temperature: 4000K
- Opal polycarbonate diffuser, polycarbonate base
- Pressed steel reflector
- SMD LED chip, built-in driver
- Stainless steel clips
- IP Rating: IP65
- Available as mains only or 3 hour emergency version
- Available in three lengths

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lumen Output</td>
<td>1620 lm</td>
<td>2100 lm</td>
<td>3150 lm</td>
<td>3600 lm</td>
<td>5400 lm</td>
</tr>
<tr>
<td>Input Current</td>
<td>0.09A @230V</td>
<td>0.10A @230V</td>
<td>0.14A @230V</td>
<td>0.19A @230V</td>
<td>0.29A @230V</td>
</tr>
<tr>
<td>Input Power</td>
<td>18W</td>
<td>20W</td>
<td>30W</td>
<td>40W</td>
<td>60W</td>
</tr>
<tr>
<td>Dimensions</td>
<td>600 x 94 x 75mm</td>
<td>1200 x 95 x 75mm</td>
<td>1500 x 95 x 75mm</td>
<td>1200 x 95 x 75mm</td>
<td>1500 x 95 x 75mm</td>
</tr>
<tr>
<td>Weight</td>
<td>0.75g</td>
<td>1.35kg</td>
<td>1.6kg</td>
<td>1.35kg</td>
<td>1.6kg</td>
</tr>
</tbody>
</table>

ARION 2’ (600mm) VERSIONS
- E/ARION/18W: Arion 2ft (600mm) LED IP65 Batten, 18W: 1620lm: 4000K
- E/ARION/18W/M3: Arion 2ft (600mm) LED IP65 Batten, 18W: 1620lm: 4000K (3 hour Maintained emergency version)

ARION 4’ (1200mm) VERSIONS
- E/ARION/20W: Arion 4ft (1200mm) LED IP65 Batten, 20W: 2100lm: 4000K
- E/ARION/20W/M3: Arion 4ft (1200mm) LED IP65 Batten, 20W: 2100lm: 4000K (3 hour Maintained emergency version)
- E/ARION/40W: Arion 4ft (1200mm) LED IP65 Batten, 40W: 3600lm: 4000K
- E/ARION/40W/M3: Arion 4ft (1200mm) LED IP65 Batten, 40W: 3600lm: 4000K (3 hr Maintained emergency version)

ARION 5’ (1500mm) VERSIONS
- E/ARION/30W: Arion 5ft (1500mm) LED IP65 Batten, 30W: 3150lm: 4000K
- E/ARION/30W/M3: Arion 5ft (1500mm) LED IP65 Batten, 30W: 3150lm: 4000K (3 hr Maintained emergency version)
- E/ARION/60W: Arion 5ft (1500mm) LED IP65 Batten, 60W: 5400lm: 4000K
- E/ARION/60W/M3: Arion 5ft (1500mm) LED IP65 Batten, 60W: 5400lm: 4000K (3 hr Maintained emergency version)
Comet Floodlight Range

PRODUCT OVERVIEW
The comet collection ranges from the small but powerful 100W option (less than 2 kg in weight and an impressive 8500lm output) up to the 24000lm 300W version.

All IP65 rated and packing enough punch to be used in a variety of situations.

PRODUCT FEATURES
- Slim body to minimise wind resistance
- Die cast aluminium body with integrated cooling
- Black powder coated
- 5mm thick thermal shock and impact resistant tempered glass
- Integral adjustable stirrup mounting bracket
- Supplied with 1m power lead
- Fixed output LED driver
- Suitable for ambient temperatures -20 to +40°C
- Shock and vibration resistant

100W FEATURES
- Lumen Output: 8500lm
- Input Current: 0.43A (@230V)
- Input Power: 100W
- Dimensions: 281.6 x 320.9 x 38mm
- Weight: 9kg

200W FEATURES
- Lumen Output: 17000lm
- Input Current: 0.87A (@230V)
- Input Power: 200W
- Dimensions: 385 x 470 x 51mm
- Weight: 12.2kg

300W FEATURES
- Lumen Output: 24000lm
- Input Current: 1.37A (@230V)
- Input Power: 300W
- Dimensions: 428.6 x 470.6 x 70mm
- Weight: 16.6kg

PRODUCT CODE | DESCRIPTION
---------------|----------------------------------
E/COM/100W     | Comet 100W Floodlight
E/COM/200W     | Comet 200W Floodlight
E/COM/300W     | Comet 300W Floodlight
PRODUCT OVERVIEW

The Commando security light range offers a versatile selection of extremely robust, vandal resistant die cast aluminium body fittings with polycarbonate diffuser, making it suitable for the most harsh environments.

The Commando range includes three different sizes and a variety of mounting brackets.

The range can be further enhanced with the use of eyelid covers (36w) & brackets

PRODUCT FEATURES

- **Wattage:** 36W Delivered Lumen: 5538lm Length: 305mm
- **Wattage:** 68W Delivered Lumen: 9183lm Length: 610mm
- **Wattage:** 110W Delivered Lumen: 16287lm Length: 1220mm

**Housing:**
Heavy-duty die cast aluminium housing and top frame with powder coat finish. Can be tapped for side conduit entry.

**Lens:**
Opal polycarbonate vandal-resistant lens

**Mounting:**
Surface mount with included surface mount bracket, or use optional adjustable bracket.

**LED:**
- Colour Temp: 5000K
- 5-Year Warranty
- Aluminium PCB

**Wattage:**
- 36 Watt
- 68 Watt
- 110 Watt

**Driver:**
- Electronic Driver, 120-277V, 50/60Hz
- Dimmable Driver

**Environmental:**
- IP67
- IK10
- Operating Temperatures: -40°C to +40°C

PRODUCT CODE

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/COM/36W</td>
</tr>
<tr>
<td>E/COM/36W/EYE/1</td>
</tr>
<tr>
<td>E/COM/36W/EYE/2</td>
</tr>
<tr>
<td>E/COM/48W</td>
</tr>
<tr>
<td>E/COM/68W</td>
</tr>
<tr>
<td>E/COM/110W</td>
</tr>
<tr>
<td>E/COM/136W</td>
</tr>
<tr>
<td>E/COM/BKT/1</td>
</tr>
</tbody>
</table>

wall brackets
**Kensington**

**PRODUCT OVERVIEW**
The Kensington range of area floodlights offers a solution for car parks, sports pitches and other open areas. It is offered in two wattages both with two optical output options. The range is enhanced by mounting bracket options.

The 175w Kensington floodlight is a replacement for a traditional 400w & the 262w replaces a 1000w Metal Halide light.

The range comes with a 5 year warranty  
Colour Temp: 4000K  
Housing: 419 x 419 x 178mm (excluding bracket)

Heavy-duty die cast aluminum housing & front frame, integral heat sinking, driver compartment. Black powdercoat finish over a chromate conversion coating. Photocell adaptable. Includes receptacle and shorting cap.

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/KEN/174W/T3</td>
<td>174w 18000Lm (17073 delivered) Type 3 (C) optics (Perimeter Lighting)</td>
</tr>
<tr>
<td>E/KEN/174W/T5</td>
<td>174w 18000Lm (16964 delivered) Type 5 (F) optics 115° (Inner area)</td>
</tr>
<tr>
<td>E/KEN/262W/T3</td>
<td>262w 31000Lm (29500Lm delivered) Type 3 (C) optics (Perimeter Lighting)</td>
</tr>
<tr>
<td>E/KEN/262W/T5</td>
<td>262w 31000Lm (26264Lm delivered) Type 5 (F) optics 115° (Inner Area)</td>
</tr>
<tr>
<td>E/KEN/BKT/1</td>
<td>Yoke bracket</td>
</tr>
<tr>
<td>E/KEN/BKT/2</td>
<td>Two-piece swivel bracket</td>
</tr>
<tr>
<td>E/KEN/BKT/3</td>
<td>Pole bracket</td>
</tr>
</tbody>
</table>

**Chelsea**

**PRODUCT OVERVIEW**
The Chelsea range of area floodlights offers a solution for car parks, sports pitches and other open areas. It is offered in two wattages both with two optical output options. The range is enhanced by mounting bracket options.

The 80w Chelsea floodlight The range comes with a 5 year warranty  
Colour Temp: 5000K  
Housing: 419 x 419 x 178mm (excluding bracket)

Heavy-duty die cast aluminium housing & front frame, integral heat sinking, driver compartment. Black powdercoat finish over a chromate conversion coating. Photocell adaptable. Includes receptacle and shorting cap.

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E/CHE/81W/T3</td>
<td>81w 10500Lm (6725Lm delivered) Type 3 (C) optics (Perimeter Lighting)</td>
</tr>
<tr>
<td>E/CHE/81W/T5</td>
<td>81w 10500Lm (9220Lm delivered) Type 5 (F) optics 115° (Inner area)</td>
</tr>
<tr>
<td>E/CHE/112W/T3</td>
<td>112w 13500Lm (9487 delivered) Type 3 (C) optics (Perimeter Lighting)</td>
</tr>
<tr>
<td>E/CHE/112W/T5</td>
<td>112w 13500Lm (9220Lm delivered) Type 5 (F) optics 115° (Inner Area)</td>
</tr>
<tr>
<td>E/CHE/BKT/1</td>
<td>Yoke bracket</td>
</tr>
<tr>
<td>E/CHE/BKT/2</td>
<td>Two-piece swivel bracket</td>
</tr>
<tr>
<td>E/CHE/BKT/3</td>
<td>Pole bracket</td>
</tr>
</tbody>
</table>
**Belmont**

**PRODUCT OVERVIEW**

The Belmont range of area pole top lights offers a solution for car parks, paths and other open areas. It is offered in two wattages, with & without polycarbonate covers. The range fits on to a standard 76mm pole.

**PRODUCT FEATURES**

- 5 Year Warranty
- Heavy-duty die cast aluminium housing & front frame
- Integral heat sinking and driver compartment
- Black powdercoat finish over a chromate conversion coating
- Photocell adaptable
- IP67
- 120-277V AC 50/60 Hz

**PRODUCT CODE**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PRODUCT CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belmont 84W 8000lm (7,216lm delivered) 4000K</td>
<td>E/BEL/84</td>
</tr>
<tr>
<td>Belmont 84W 8000lm (5,854lm delivered) 4000K with polycarbonate cover</td>
<td>E/BEL/84/PC</td>
</tr>
<tr>
<td>Belmont 176W 24,553lm (17,360lm delivered) 5000K</td>
<td>E/BEL/176</td>
</tr>
<tr>
<td>Belmont 176W 24,553lm (14,521lm delivered) 5000K with polycarbonate cover</td>
<td>E/BEL/176/PC</td>
</tr>
</tbody>
</table>

**Bollards**

**PRODUCT OVERVIEW**

Our range of bollard lights are ideal for placement next to paths & walkways. They also provide illumination in areas such as car parks or in shared use areas. Bollard lights provide discrete illumination where it’s needed and offer a solution in areas where other types of lighting is impracticable. The bollards are supplied with ‘J’ brackets as standard. An optional Root mount kit is also available

Extruded aluminum housing with flush mounting base and vandal-resistant screws, domed top, black powdercoat or 316 stainless steel. Internal ballast tray for easy maintenance.

**PRODUCT FEATURES**

- Reflector: Specially designed aluminum cone reflector for LED
- Lens: Clear polycarbonate lens 115°
- Photometric performance: IES Type: III CCT: 5K
- Delivered Lumens: 15W 1,510lm
- Operating temperature: -40°C to +40°C
- Driver: Electronic Driver, 120-277V, 50/60Hz. dimmable driver
- IP Rating: IP65
- Colour Temp: 5000K

**PRODUCT CODE**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PRODUCT CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>15W LED Bollard Black Dome housing – 1073 x 178mm</td>
<td>E/BOL/DOME/BK</td>
</tr>
<tr>
<td>15W LED Bollard Stainless steel Dome Housing – 1073 x 178mm</td>
<td>E/BOL/DOME/SS</td>
</tr>
<tr>
<td>15W LED Bollard – Black flat top housing – 1057 x 178mm</td>
<td>E/BOL/FLAT/BK</td>
</tr>
<tr>
<td>Root Mount kit - 400x220mm</td>
<td>E/BOL/ROOT</td>
</tr>
</tbody>
</table>
What constitutes a fire detection & alarm system?

Fire detection and alarm systems are used to detect and alert occupants in the event of a fire-related emergency. These systems typically use a combination of heat, ionisation smoke, optical smoke and carbon monoxide detection methods.

The most secure, efficient fire detection and alarm system will use several of these types of detectors in conjunction with each other. Each detector is either mains linked or is a wireless / radio device that connects with all other detectors, call points, break glasses and sounders/visual indicator devices in the system. This means that should one detector detect a fire, the message is then relayed to all of the other connected devices.

These types of fire detection system are mains-powered but incorporate a battery backup for when the main power supply fails.

When all alarms and sounders are activated in a fire detection system, it gives the occupants of the premises more time to escape before the exits are blocked or damaged by the fire. Singular alarms will only alert the immediate area rather than the surrounding premises that may also be/ become compromised.

Fire deaths have been significantly reduced in recent years through the development of better fire detection systems. As a result, response times have also increased and nuisance activations have been lowered. Advances in fire detection technology mean that modern detectors are safer than ever before.

UK Fire alarm system categories

There are many types of fire alarm systems each suited to different building types and applications. A fire detection system can vary dramatically in both price and complexity, from a single panel with a detector and sounder in a small commercial property to an addressable fire alarm system in a multi-occupancy building. Systems have to protect both buildings and occupants.

The categories of fire alarm systems are L if they are designed to protect life, P to protect buildings and M if they are manual systems.

A guide to Zoning...

- A single zone should not exceed 2,000m² in floor space.
- Where addressable systems are in place, two faults should not remove protection from an area greater than 10,000m².
- A building may be viewed as a single zone if the floor space is less than 300m².
- Where the floor space exceeds 300m² then all zones should be restricted to a single floor level.
- Stairwells, lift shafts or other vertical shafts (non stop risers) within a single fire compartment should be considered as one or more separate zones.
- The maximum distance traveled within a zone to locate the fire should not exceed 60m.
Working with the Industries leading Manufacturers

**APOLLO**

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.

**FIKE**

Fike Safety Technology Ltd is a globally recognised supplier of products that protect people, critical assets and facilities from hazards such as fire. Fike offers solutions for 2-wire conventional systems.

**CRANFORD CONTROLS**

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.

**Kentec**

Founded in 1985, Kentec Electronics Ltd has worked closely with their customers and end users enabling it to become a world leading lifesafety control systems manufacturer.

**SOLO DETECTORS**

The Solo range is available in economical and convenient kit forms as well as the added bonus of a range of Detector testing aerosols.

**C-TEC**

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.

**HOCHIKI**

Hochiki is one of the World’s leading manufacturers of quality fire detectors and alarms for commercial and industrial applications. Hochiki’s wide range consists of Sensors, Bases, Audio & Visual, Modules, Manual Call Point and Beam Detection.

**VESDA**

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 Economy Fire Panels

PRODUCT OVERVIEW
Introducing a new range of Economy panels from C-TEC!
The new-look super-enhanced CFP Economy conventional fire panel 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 and combined keypad/keyswitch entry.

Comprehensive test and fault finding facilities are also provided.

PRODUCT FEATURES
• Intuitive user-friendly interface with colour-coded buttons and combined keypad/keyswitch entry to access level 2
• Third-party certified to EN54-2/4 by the LPCB
• 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 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 quiescent current
• Multiple indicators
• End of line units included (one per zone)
• Requires 2 x B/12V/3.2AH/SLA batteries

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

PLEASE NOTE: batteries are not included: 2, 4 & 8 Zone panels require 2x B/12V/3.2AH/SLA - listed below

COMBINED DEVICES

DETECTORS
Apollo protocol Series 65 - see page 45

CALL POINTS
Apollo protocol Series 65 - see page 45

ASPIRATING EQUIPMENT
Use in conjunction with Vesda Aspirating equipment on pages 66-67 to protect small businesses of less than 250m² and 500m²

PLEASE NOTE: This panel does not have the functions to do the following:
• Delay zones or outputs
• Set up coincidence between zones
• Make zones non latching
• Have volt free contacts for fire or fault. You would need to add E/15/A relays for fire and fault

PLEASE SEE SCIMITAR PANEL FOR FULL FUNCTION PANEL - See page 45

PANELS
F/CHSC/2/E CFP Economy 2 zone panel, keypad/keyswitch entry, does not extend (requires 2 x B/12V/3.2AH/SLA battery)
F/CHSC/4/E CFP Economy 4 zone panel, keypad/keyswitch entry, does not extend (requires 2 x B/12V/3.2AH/SLA battery)
F/CHSC/8/E CFP Economy 8 zone panel, keypad/keyswitch entry, does not extend (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)
PRODUCT 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).

COMPATIBLE DEVICES

DETECTORS

Apollo protocol - Series 65 are listed below.

SOUNDERS & VISUAL INDICATORS

All compatible sounders and visual indicators are listed below. Plus page 46

CALL POINTS

The most common call points are listed below - please see page 73 for break glass cover units.

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

SPECIFICATION

<table>
<thead>
<tr>
<th>Construction</th>
<th>Plastic lid and base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enclosure Finish</td>
<td>RAL7035</td>
</tr>
<tr>
<td>IP Rating</td>
<td>IP30</td>
</tr>
<tr>
<td>Panel Dimensions</td>
<td>380mm (W) x 235mm(H) x 96mm(D)</td>
</tr>
<tr>
<td></td>
<td>2, 4 &amp; 8 panels have the same measurements</td>
</tr>
<tr>
<td>Weight</td>
<td>1.75 Kg (without batteries)</td>
</tr>
</tbody>
</table>

PANELS

<table>
<thead>
<tr>
<th>PANELS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHSC/2</td>
<td>Scimitar 2-zone panel requires 2 x B/12V/3.2AH/SLA battery</td>
</tr>
<tr>
<td>F/CHSC/4</td>
<td>Scimitar 4-zone panel requires 2 x B/12V/3.2AH/SLA battery</td>
</tr>
<tr>
<td>F/CHSC/8</td>
<td>Scimitar 8-zone panel requires 2 x B/12V/3.2AH/SLA battery</td>
</tr>
</tbody>
</table>

REPEATER PANEL

<table>
<thead>
<tr>
<th>PANELS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHSC/R</td>
<td>Scimitar 8-zone repeater panel</td>
</tr>
<tr>
<td>F/CHSC/RDC</td>
<td>Repeater driver card</td>
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</tbody>
</table>

REMOTE INDICATOR

<table>
<thead>
<tr>
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<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHRI/60</td>
<td>Remote indicator</td>
</tr>
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</table>

BATTERIES

<table>
<thead>
<tr>
<th>PANELS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/12V/3.2AH/SLA</td>
<td>12 Volt 3.2Ah sealed lead acid battery (1 block)</td>
</tr>
</tbody>
</table>

APOLLO SERIES 65 DETECTORS

<table>
<thead>
<tr>
<th>PANELS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHSM/P</td>
<td>(S5000-317) Optical smoke detector + base</td>
</tr>
<tr>
<td>F/CHSM/A</td>
<td>(S5000-217) Ionisation smoke detector + base</td>
</tr>
<tr>
<td>F/CHHF/A</td>
<td>(S5000-122) Fixed temp (57°C) H D + base. Individually boxed and labelled</td>
</tr>
<tr>
<td>F/CHHF/A/HT</td>
<td>(S5000-137) High temp (90°C) H D + base</td>
</tr>
<tr>
<td>F/CHHR/A/65</td>
<td>(S5000-127) Rate of rise heat detector</td>
</tr>
</tbody>
</table>

SOUNDERS & VISUAL INDICATORS

<table>
<thead>
<tr>
<th>PANELS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHWB/8N/RD/DB</td>
<td>LED sounder beacon deep base</td>
</tr>
<tr>
<td>F/CHBN/RD/DB</td>
<td>24V Red LED beacon - deep base</td>
</tr>
<tr>
<td>F/CHBL/6/2</td>
<td>17-27V 6” Red fire bell</td>
</tr>
<tr>
<td>F/CHWB/R</td>
<td>High output electronic sounder - white square</td>
</tr>
<tr>
<td>F/CHWB/RD/DB</td>
<td>Electronic warbler/siren red – deep base</td>
</tr>
<tr>
<td>F/CHWB/DB</td>
<td>Base sounder White</td>
</tr>
</tbody>
</table>

CALL POINTS

<table>
<thead>
<tr>
<th>PANELS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHBG/S/3</td>
<td>Break glass – surface</td>
</tr>
<tr>
<td>F/CHBG/WP/3</td>
<td>Waterproof break glass</td>
</tr>
<tr>
<td>S/CP/Cover</td>
<td>Call Point Cover</td>
</tr>
<tr>
<td>S/CP/Key</td>
<td>Call Point Key</td>
</tr>
</tbody>
</table>
Conventional Visual Alarm Device (VADs)

PRODUCT 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'. The 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 archived over a known area
W - Wall Mounted: When mounted on a wall a level of 0.4 lux is archived over a known area
O - Open Category: Manufacturers specify the area coverage of the VAD.

### Ceiling Mounted

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/VAD/C/1</td>
<td>Ceiling Mounted Visual alarm device White body Red flash. Shallow base. 25mA in alarm 7m @3m mounting height</td>
</tr>
<tr>
<td>F/VAD/WB/C/2</td>
<td>Ceiling Mounted Visual alarm device White body Red flash with 98dB sounder deep base. 40mA in alarm 7m coverage @3m mounting height</td>
</tr>
<tr>
<td>F/VAD/C/3</td>
<td>Ceiling Mounted Visual alarm device Red body Red flash. Shallow base. 25mA in alarm 7m coverage @3m mounting height</td>
</tr>
<tr>
<td>F/VAD/WB/C/4</td>
<td>Ceiling Mounted Visual alarm device Red body Red flash with 98dB sounder. Deep base 40mA in alarm 7m coverage @3m mounting height</td>
</tr>
</tbody>
</table>

### Wall Mounted

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/VAD/W/1</td>
<td>Wall Mounted Visual alarm device White body Red flash. Shallow base 25mA in alarm 7m coverage @3m mounting height</td>
</tr>
<tr>
<td>F/VAD/WB/W/2</td>
<td>Wall Mounted Visual alarm device White body Red flash with 98dB sounder deep base. 40mA in alarm 7m coverage @3m mounting height</td>
</tr>
<tr>
<td>F/VAD/W/3</td>
<td>Wall Mounted Visual alarm device Red body Red flash. Shallowe base 25mA in alarm 7m coverage @3m mounting height</td>
</tr>
<tr>
<td>F/VAD/WB/W/4</td>
<td>Wall Mounted Visual alarm device Red body Red flash with 98dB sounder Deep base 40mA in alarm 7m coverage @3m mounting height</td>
</tr>
</tbody>
</table>
Kentec Sigma CP conventional Range

**Sigma CP**
The Sigma CP range consists of a series of conventional fire alarm control panels designed in accordance with European standards BS EN54-2 and BS EN54-4 Fire Detection and Fire Alarm systems - Control and Indicating Equipment.

The range consists of 2, 4 and 8 zone control panels. All control panels are available in two versions:

- **Compatible with Apollo Series 65 & C-Tec Active detector ranges**
- Sigma K11 range in which detectors and call points are wired on separate circuits to sounders (two sounder circuits are provided).
- Sigma T11 range in which detectors, call points and sounders are wired to the same pair of cables. Commonly referred to as a two-wire system are available to order. (Alarmsense devices see pages 50-51)

Wiring sounders to the detection circuits eliminates the need to install sounder circuit cables and also offers the ability to provide zoned or two stage sounder operation.

All control panels have an integral, mains powered battery charger and power supply designed in accordance with the requirements of BS EN54-4.

**PRODUCT FEATURES**
- Fully certified to BS EN54-2 and BS EN54-4 2-wire and standard versions in 2, 4 or 8 zones
- Compatible for use on BS5839: Part 1: 2002 installations
- 2-wire repeaters and ancillary boards
- Fully programmable using simple menu options
- Adjustable sounder delay time
- Sounder configuration options
- Zonal sounder delay detectors only
- Zonal sounder delay call points only
- Coincidence input selection
- I.S Barrier selection by zone
- Short circuit fire by zone
- Non latching zones
- Silent zones
- Zone input delay
- General panel configuration
- Simple, single board construction
- Installer friendly
- Compatible with wide range of detection devices
- Two monitored sounder outputs
- 3 Amp power supply
- Auxiliary power output
- Also available is a range of Ancillary Cards compatible with all Sigma CP Models. Up to 7 Cards of each model can be fitted
- to each Sigma CP Control Panel & Sigma CPR Repeater Panel
- Ranges. These include:
  - Sigma Ancillary Board (K580) operating software version V2.0 or above. See DS39 for more details.
  - Sigma Sounder Board (K461) operating software version V3.0

**PRODUCT CODE**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PRODUCT CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sigma CP Conventional Panel 2 Zones: Surface + LCMU- Conventional</td>
<td>F/KL11020M2</td>
</tr>
<tr>
<td>Sigma CP Conventional Panel 4 Zones: Surface + LCMU- Conventional</td>
<td>F/KL11040M2</td>
</tr>
<tr>
<td>Sigma CP Conventional Panel 8 Zones: Surface + LCMU- Conventional</td>
<td>F/KL11080M2</td>
</tr>
<tr>
<td>Sigma CPA Alarmsense Conventional Panel, 2 Zones: Surface - 2 Wire</td>
<td>F/KA11020M2</td>
</tr>
<tr>
<td>Sigma CPA Alarmsense Conventional Panel, 4 Zones: Surface - 2 Wire</td>
<td>F/KA11040M2</td>
</tr>
<tr>
<td>Sigma CPA Alarmsense Conventional Panel, 8 Zones: Surface - 2 Wire</td>
<td>F/KA11080M2</td>
</tr>
<tr>
<td>Sigma CPA Alarmsense Conventional Panel, 2 Zones: Surface</td>
<td>B/BATT/12V/7AH/SLA</td>
</tr>
<tr>
<td>Sigma CPA Alarmsense Conventional Panel, 4 Zones: Surface</td>
<td></td>
</tr>
<tr>
<td>Sigma CPA Alarmsense Conventional Panel, 8 Zones: Surface</td>
<td></td>
</tr>
<tr>
<td>12 Volt 7AH Sealed Lead acid battery (1 block) 2 required per panel</td>
<td></td>
</tr>
</tbody>
</table>

**REPEATERS**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PRODUCT CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sigma CPA-R Conventional Repeater Panel, 24V low profile enclosure, 2 Zones: Surface</td>
<td>F/E01020L2</td>
</tr>
<tr>
<td>Sigma CPA-R Conventional Repeater Panel, 24V low profile enclosure, 4 Zones: Surface</td>
<td>F/E01040L2</td>
</tr>
<tr>
<td>Sigma CPA-R Conventional Repeater Panel, 24V low profile enclosure, 8 Zones: Surface</td>
<td>F/E01080L2</td>
</tr>
<tr>
<td>Sigma CPA-R Conventional Repeater Panel with PSU 230V standard enclosure, 2 Zone: Surface</td>
<td>F/K01020M2</td>
</tr>
<tr>
<td>Sigma CPA-R Conventional Repeater Panel with PSU 230V standard enclosure, 4 Zone: Surface</td>
<td>F/K01040M2</td>
</tr>
<tr>
<td>Sigma CPA-R Conventional Repeater Panel with PSU 230V standard enclosure, 8 Zone: Surface</td>
<td>F/K01080M2</td>
</tr>
</tbody>
</table>
Alarmsense- 2 Wire

**RANGE OVERVIEW**

- 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)

**SPECIFICATION**

<table>
<thead>
<tr>
<th>Construction</th>
<th>Polycarbonate enclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enclosure Finish</td>
<td>RAL7035</td>
</tr>
<tr>
<td>Panel Dimensions</td>
<td>380mm (W) x 235mm(H) x 96mm(D)</td>
</tr>
<tr>
<td>Weight</td>
<td>1.75 Kg (without batteries)</td>
</tr>
<tr>
<td>All panels require 2 x 8V/3.2AH/SLA - listed below</td>
<td></td>
</tr>
</tbody>
</table>

**PANELS**

- F/CHAS/2: Alarmsense 2-zone fire panel requires 2 x 8V/3.2AH/SLA batteries
- F/CHAS/4: Alarmsense 4-zone fire panel requires 2 x 8V/3.2AH/SLA batteries
- F/CHAS/8: Alarmsense 8-zone fire panel requires 2 x 8V/3.2AH/SLA batteries

**REPEATER PANEL**

- F/CHSC/R: Alarmsense 8-zone repeater panel
- F/CHSC/1DC: 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)

**REMOTE INDICATOR**

- F/CHRI/AS: Alarmsense remote indicator (Not for use with sounder base units)

**CALL POINTS**

- F/CHBG/S/AS/2: (55400-894) Alarmsense surface break glass
- F/CHBG/AS/Cover: Call Point Cover
- S/BG/TESTKEY/AS: Call Point Key

**APOLLO DETECTORS & BASE**

- F/BASE/AS: (45681-244) Base for use with Alarmsense detectors
- F/CHHF/A/HT/AS: (55000-193) Alarmsense fixed high temperature heat detector Requires Base
- SP/CHSM/P/AS: (55000-390) Alarmsense optical detector Requires Base
- F/CHRF/AS: (55000-190) Alarmsense 55˚ rate of rise heat detector Requires Base

**APOLLO COMBINATION DETECTORS, SOUNDERS & BEACONS**

- F/CHHF/HT/AS/WB: (55000-197) Alarmsense high temp heat detector and sounder base type CS
- F/CHHR/AS/WB: (55000-196) Alarmsense heat detector with sounder base A1R type
- F/CHHR/AS/BN/AS: (55000-198) Alarmsense heat detector with sounder base and beacon A1R type
- F/CHSM/P/AS/WB: (55000-392) Alarmsense optical detector complete sounder base
- F/CHSM/P/AS/BN/BN: (55000-394) Alarmsense optical detector with sounder beacon base

**APOLLO SOUNDERS & VISUAL INDICATORS**

- F/CHWB/D/AS: (45681-510) Alarmsense base sounder
- F/CHWB/D/BN/AS: (45681-509) Alarmsense base mounted electronic sounder/beacon
- F/CHWB/BN/BD/AS: (55000-017) Alarmsense open-area red sounder beacon
- F/CHWB/RD/AS: (55000-018) Alarmsense open area red sounder

**APOLLO OTHER ACCESSORIES**

- F/CHRM/AS: (55000-835) Alarmsense relay module
- F/CHWB/AS/CAP/WH: (45681-294) White locking cap for Alarmsense base

Please note batteries are not included:

All panels require 2 x 8V/3.2AH/SLA - listed below
RANGE 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 systems can achieve up to 40% reduction of labour over a standard four wire conventional system.

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.

TYPICAL SYSTEM ARCHITECTURE - ALARMSENSE

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

DETECTORS

**SP/CHSM/P/AS**
Optical smoke detector

**F/CHHF/A/HT/AS**
Heat detector

**F/CHHF/HT/AS/WB**
Combined Heat detector w/ sounder base

**F/CHSM/P/AS/WB**
Optical smoke detector w/ sounder base

SOUNDERS & VISUAL INDICATORS

**F/CHWB/D/AS & 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

**F/CHSM/P/AS/WB**
Optical smoke detector w/ sounder base

COMBINED DETECTORS

**F/CHWF/A/HT/AS**
Combined Heat detector w/ sounder base

**F/CHWF/HT/AS/WB**
Combined Heat detector w/ sounder base

**F/CHWF/HT/AS/WB**
Optical smoke detector w/ sounder base

CALL POINTS

**F/CHHF/A/HT/AS**
Heat detector

**F/CHHF/HT/AS/WB**
Combined Heat detector w/ sounder base

**F/CHWF/HT/AS/WB**
Optical smoke detector w/ sounder base

**F/CHSM/P/AS/WB**
Optical smoke detector w/ sounder base

**F/CHWF/HT/AS/WB**
Combined Heat detector w/ sounder base

**F/CHWF/HT/AS/WB**
Optical smoke detector w/ sounder base

AlarmSense detectors are Apollo protocol and only devices listed on the left hand page should be used with AlarmSense panels.

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

For Callpoint and Break Glass Cover options see page 78

Batteries may vary due to stand-by times and number of devices on your system. If in doubt please contact our technical team on 0845 884 7000 or email technical@channelsafety.co.uk
PRODUCT FEATURES

- Complies to BS5839 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 & 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

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

SPECIFICATIONS

- 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 331mm2 - Back box 305mm - Depth 99mm
- Weight (excluding batteries): 2 Zone - 2.25 Kg  4 Zone - 2.28 Kg  8 Zone - 2.36 Kg

KITS

- F/CHSA/2/PRO/KIT: Sabre Pro 2 zone fire alarm kit c/w 2 call points, 6 optical smoke/heat sounders & 1 head removal tool
- F/CHSA/4/PRO/KIT: Sabre Pro 4 zone fire alarm kit c/w 2 call points, 6 optical smoke/heat sounders & 1 head removal tool
- F/CHSA/8/PRO/KIT: Sabre Pro 8 zone fire alarm kit c/w 2 call points, 6 optical smoke/heat sounders & 1 head removal tool

PANELS

- F/CHSA/2/PRO: Sabre Pro 2 zone dual wire fire alarm panel (requires 2 x B/12V/3.2AH/SLA batteries)
- F/CHSA/4/PRO: Sabre Pro 4 zone dual wire fire alarm panel (requires 2 x B/12V/3.2AH/SLA batteries)
- F/CHSA/8/PRO: Sabre Pro 8 zone dual wire fire alarm panel (requires 2 x B/12V/3.2AH/SLA batteries)
- F/CHSA/PRO2/R: Sabre Pro repeater panel for 4 and 8 Zone Panels Only

REMOTE INDICATOR

- F/CHR1/60: Remote indicator

BATTERIES

- B/12V/3.2AH/SLA: 12 Volt 3.2Ah sealed lead acid battery - 2 required

DETECTORS

- F/CHBN/6U/SA: Sabre sounder/strobe wired on zone 90dBA
- F/CHSUI/SA: Sabre industrial horn sounder 90dBA IP55
- F/CHSA/SH/PRO: Sabre combined optical smoke/heat detector
- F/CHSA/SHS/PRO: Sabre combined optical smoke/heat detector and sounder 90dBA
- F/CHSA/SHSB/PRO: Sabre combined optical smoke/heat detector and sounder with beacon 90dBA

SOUNDERS & VISUAL INDICATORS

- F/CHSU/SA: Sabre red electronic sounder unit

CALL POINTS

- F/CHBG/S/SA/CV: Sabre series break glass call point complete with cover
- F/CHBG/S/SA/WP: Sabre series IP65 break glass call point
- F/CHBG/Cover/SA: Call Point Cover
- S/BG/TESTKEY/SA: Call Point Key

INPUT / OUTPUT MODULES

- F/CHSW1/SA: Sabre Input / Output module

OTHER ACCESSORIES

- F/CHHR1/SA/PRO: Sabre head removal tool
- F/CHSA/4CONV: Expansion card for 4 zone panel to add 4 conventional zones
Sabre Pro- 2 Wire - Compatible Devices

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

**CUT FALSE ALARM COSTS**

**Sabre Pro - Special Features**

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.
PRODUCT 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 & 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 a.c
- 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

PRODUCT CODE

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/FW1001/1/16</td>
<td>Networkable single loop 16 zone panel (requires 2 x B/12V/3.2AH/SLA batteries)</td>
</tr>
<tr>
<td>F/FW1001/2/32</td>
<td>Networkable two loop 32 zone panel (requires 2 x B/12V/7AH/SLA batteries)</td>
</tr>
<tr>
<td>F/FW1001/R/16</td>
<td>Networkable repeater panel – 16 zones (requires 2 x B/12V/3.2AH/SLA batteries) C/W Network Card</td>
</tr>
<tr>
<td>F/FW1001/R/32</td>
<td>Networkable repeater panel – 32 zones (2 x B/12V/2.8AH/SLA batteries) C/W Network Card</td>
</tr>
<tr>
<td>F/FW1001/NCC/32</td>
<td>Network communications card for 32 zone for main panel</td>
</tr>
<tr>
<td>F/FW1001/NCC/16</td>
<td>Network communications card for 16 zone for main panel</td>
</tr>
</tbody>
</table>

PANEL BATTERIES

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/12V/3.2AH/SLA</td>
<td>12 Volt 3.2Ah sealed lead acid battery (1 block)</td>
</tr>
<tr>
<td>B/12V/7AH/SLA</td>
<td>12 Volt 7Ah sealed lead acid battery (1 block)</td>
</tr>
</tbody>
</table>

HUSH BUTTONS

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/FW1001/HB</td>
<td>BS5839-6 Hush button, Apollo XP95 / Discovery</td>
</tr>
</tbody>
</table>

SPECIFICATIONS

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Power Supply</td>
<td>27V DC Nominal</td>
</tr>
<tr>
<td>Earth Fault Monitoring</td>
<td>Yes (any conductor)</td>
</tr>
<tr>
<td>Max. No. of Addressable devices per loop</td>
<td>126</td>
</tr>
<tr>
<td>Max. No. of Loop powered sounders per loop @ 10mA</td>
<td>40</td>
</tr>
<tr>
<td>Weight (excluding batteries)</td>
<td>Single loop 16 zone 1.8Kg, Two loop 32 zone panel - 4.5Kg</td>
</tr>
</tbody>
</table>

Which Protocol?

- Firewatch FW1001 Panels are compatible with Apollo XP95/Discovery and Hochiki/ESP devices - please see pages 56-60
  (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 0845 884 7000 or email technical@channelsafety.co.uk
Kentec Syncro AS Addressable Range

PRODUCT OVERVIEW
Syncro AS is a versatile range of open protocol fire alarm control panels compatible with existing Syncro fire alarm panel technology.

Available with one or two detection loops capable of hosting up to 126 devices (Apollo), 240 devices (Argus Vega) or 127 devices (Hochiki). Syncro AS uses leading edge microprocessor based electronics to provide a flexible control system with high reliability and integrity.

Suitable for all small to medium sized fire detection systems, Syncro AS control panels can be expanded and networked to become part of much larger systems if the need arises, therefore providing a future proof solution for any installation.

With its large graphical display and ergonomic button and indicator layout, the Syncro AS control panel is simple and straightforward to understand for installers, commissioning engineers and end users alike.

PRODUCT FEATURES
- 16 zonal LED indicators
- 2 programmable sounder circuits
- 5 programmable inputs
- 3 programmable relays
- 3A power supply
- Large graphic display
- Real time clock
- Expandable from 1 to 2 loops*
- Certified to EN54-2/ EN54-4
- Up to 512 additional programmable I/O via Syncro I/O modules *
- Powerful, network wide cause and effects *
- Sensitivity adjustment and Drift Compensation
- Can be networked with Syncro control panels *
- Compatible with Focus and View repeaters *
- Supports Apollo and Hochiki protocols (see pages 58 & 64)
- Same look and feel as Syncro range
- Stores 500 last events in event log
- Dial up modem connection available
- Compact, stylish enclosure
- Installer friendly, removable equipment chassis
- Different language and character set variants available
- Fully EN54-2 and EN54-4 compliant improved front loading Printer option, only available in an M3 size enclosure.
- Also backward-compatible with Series 90 detectors
- Comprehensive day/night mode facility
- Programmable one touch test mode
- Powerful and versatile cause & effect programming
- Cause & effect wizard including:
  - Cause & effect action
  - Disablement configuration
  - Test mode configuration

* These items not available on Syncro AS Lite panel

PRODUCT CODE DESCRIPTION
"Syncro AS Lite" - Single Loop Standalone Analogue Addressable Fire Control Panel
F/LA81161M2 Syncro AS Lite Analogue Addressable Control Panel 1 loop: Apollo Protocol, Surface
F/LA80161M2 Syncro AS Lite Analogue Addressable Control Panel 1 loop: Apollo Protocol, Surface, c/w Enable Key Switch
F/LH81161M2 Syncro AS Lite Analogue Addressable Control Panel 1 loop: Hochiki Protocol, Surface
F/LH80161M2 Syncro AS Lite Analogue Addressable Control Panel 1 loop: Hochiki Protocol, Surface, c/w Enable Key Switch

"Syncro AS" - Single Loop Analogue Addressable Fire Control Panel - Expandable to 2 loops
F/A81161M2 Syncro AS Analogue Addressable Control Panel 1 loop: Apollo Protocol, Surface
F/A80161M2 Syncro AS Analogue Addressable Control Panel 1 loop: Apollo Protocol, Surface, c/w Enable Key Switch
F/HB1161M2 Syncro AS Analogue Addressable Control Panel 1 loop: Hochiki Protocol, Surface
F/HB0161M2 Syncro AS Analogue Addressable Control Panel 1 loop: Hochiki Protocol, Surface, c/w Enable Key Switch

Extras & Spares
S/K586A Syncro AS Loop 2 Extension Card: Apollo Protocol
S/K586H Syncro AS Loop 2 Extension Card: Hochiki Protocol
S/K55S Syncro Fault Tolerant Network Interface Card
S/X187LS Software Download Lead (Compatible with all Panels): Economy
S/K18002 Vision Window cover assembly (M2 size)
S/K10460 LCMU Line Continuity Monitoring Unit
S/M2FCLGT Bezel for Semi Flushing Panel to Wall - M2
S/K768P2 Printer Module in enclosure(385w x 125h x 90D Cabinet)
Advanced Fire Alarm Control Panels

We are proud to include the Advanced Electronics Fire alarm control panels to our range, we offer both the world proven MxPro 4 and MX5 Pro ranges. We offer the full range and have listed the most popular items below, please contact us for other options.

**MXPro 4**

The MXPro 4 is a fire system installed in 100,000s of locations worldwide, from single panel, single loop installations to large networks.

The precursor to the MxPro 5, it offers uncomplicated operation as standard and can be expanded with a huge range of peripherals and accessories to meet most needs and configurations.

MxPro 4 utilises a simplified version of Advance’s Dynamix Tools fire system software allowing easy set up and management.

**PRODUCT FEATURES**

- 1, 2, 4 or 8 loop formats
- Up to 254 devices per loop (Protocol dependent)
- Up to 1,000 fire detection zones
- Up to 203,200 devices per network
- True peer-to-peer networking
- Networkable up to 200 nodes
- Supports intelligent remote terminals, BMS interface, IP Gateway and I/O programmable I/O devices
- Circuit monitoring of local panel circuits
- Autolearn and Loop Detection
- Simple Select & Click programming
- 1,000 event log entries
- Simplified logic delivers click and go configuration
- Built in voltage and current meters
- Quick start and protect – a working system after Autolearn
- Single area false alarm management facility
- Optional Peripheral Expansion Card
- Programmable logo on screen
- Compatible with Apollo Discovery and XP95, Argus Vega, Hochiki ESP and Nittan Evolution protocols
- Approved to EN54 parts 2 and 4

**MXPro 5**

The MxPro5 is the result of decades of fire alarm and detection experience and a research and development involving installers, specifiers, consultants and end users across the world.

MxPro 5 has been designed to offer more power and performance in a user-friendly enclosure. It packs more configuration, display, status and control options into its interface as standard than any other Advanced fire panel, which means less time and expense customising a system with peripherals.

MxPro 5 is also compatible with AlarmCalm, the fire alarm false alarm management solution from Advanced.

**PRODUCT FEATURES**

- 1, 2, 4 or 8 loop formats
- Up to 254 devices per loop (protocol dependent)
- Up to 2,000 fire detection zones
- Over 200,000 devices per network
- True peer-to-peer networking
- Networkable up to 200 nodes
- Supports intelligent remote terminals, BMS interface, IP Gateway and I/O programmable I/O devices
- Built in oscilloscope, voltage and current meters
- Circuit monitoring from any panel or repeater
- On board or optional remote battery temperature sensor
- Direct USB and RS232 PC connections
- Advanced’s simple select and click programming and configuration
- Autolearn and Loop Detection
- Quick start and protect - a working system after an Autolearn
- Peripheral expansion built in
- 20 built-in, fully programmable LEDs
- 4 programmable push buttons
- 5,000 event log entries
- Complete device history from each panel
- 200 programmable false alarm management areas per panel
- Programmable screen logo
- Timed enablement of isolated zones, input and output devices
- Advanced logic delivering huge configuration opportunities
- Backward compatible with MxPro 4 network
- Compatible with Apollo Discovery and XP95, Argus Vega, Hochiki ESP and Nittan Evolution protocols
- Approved to EN54 Parts 2, 4 and 13
## MxPro 4 Panels (Apollo/Hochiki Protocol)

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CH/MX-4200</td>
<td>1-2 Loop Fire Panel (no loop cards)</td>
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<tr>
<td>F/CH/MX-4201</td>
<td>1-2 Loop Fire Panel c/w 1 loop card</td>
</tr>
<tr>
<td>F/CH/MX-4202</td>
<td>1-2 Loop Fire Panel c/w 2 loop cards</td>
</tr>
<tr>
<td>F/CH/MX-4400</td>
<td>1-4 Loop Fire Panel (no loop cards)</td>
</tr>
<tr>
<td>F/CH/MX-4401</td>
<td>1-4 Loop Fire Panel c/w 1 loop card</td>
</tr>
<tr>
<td>F/CH/MX-4402</td>
<td>1-4 Loop Fire Panel c/w 2 loop cards</td>
</tr>
<tr>
<td>F/CH/MX-4403</td>
<td>1-4 Loop Fire Panel c/w 3 loop cards</td>
</tr>
<tr>
<td>F/CH/MX-4404</td>
<td>1-4 Loop Fire Panel c/w 4 loop cards</td>
</tr>
<tr>
<td>F/CH/MX-4800</td>
<td>2-8 Loop Fire Panel with standard network card (No loop cards)</td>
</tr>
<tr>
<td>F/CH/MX-4802</td>
<td>2-8 Loop Fire Panel c/w standard network card &amp; 2 loop cards</td>
</tr>
<tr>
<td>F/CH/MX-4803</td>
<td>2-8 Loop Fire Panel c/w standard network card &amp; 3 loop cards</td>
</tr>
<tr>
<td>F/CH/MX-4804</td>
<td>2-8 Loop Fire Panel c/w standard network card &amp; 4 loop cards</td>
</tr>
<tr>
<td>F/CH/MX-4805</td>
<td>2-8 Loop Fire Panel c/w standard network card &amp; 5 loop cards</td>
</tr>
<tr>
<td>F/CH/MX-4806</td>
<td>2-8 Loop Fire Panel c/w standard network card &amp; 6 loop cards</td>
</tr>
<tr>
<td>F/CH/MX-4807</td>
<td>2-8 Loop Fire Panel c/w standard network card &amp; 7 loop cards</td>
</tr>
<tr>
<td>F/CH/MX-4808</td>
<td>2-8 Loop Fire Panel c/w standard network card &amp; 8 loop cards</td>
</tr>
<tr>
<td>F/CH/MXP-002</td>
<td>Loop driver for MX-4400/4200 (Apollo or Hochiki protocol)</td>
</tr>
<tr>
<td>F/CH/MXP-003(F)*</td>
<td>Standard Network Card (Fitted)</td>
</tr>
<tr>
<td>F/CH/MXP-009(F)*</td>
<td>Fault Tolerant Network Card (Fitted)</td>
</tr>
</tbody>
</table>

Zone cards may be required - Please contact Channel

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## MxPro 5 Panels (Apollo/Hochiki Protocol)

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CH/MX-5101</td>
<td>1-Loop Fire Panel in Small enc. (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5201</td>
<td>1-2 Loop Fire Panel c/w 1 Loop card in Medium enc. (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5202</td>
<td>1-2 Loop Fire Panel c/w 2 Loop cards in Medium enc. (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5401</td>
<td>1-4 Loop Fire Panel c/w 1 Loop card in Large enc. (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5402</td>
<td>1-4 Loop Fire Panel c/w 2 Loop cards in Large enc. (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5403</td>
<td>1-4 Loop Fire Panel c/w 3 Loop cards in large enc. (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5404</td>
<td>1-4 Loop Fire Panel c/w 4 Loop card in large enc. (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5802</td>
<td>2-8 Loop Fire Panel c/w 2 Loop cards. Standard network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5803</td>
<td>2-8 Loop Fire Panel c/w 3 Loop cards. Standard network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5804</td>
<td>2-8 Loop Fire Panel c/w 4 Loop cards. Standard network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5805</td>
<td>2-8 Loop Fire Panel c/w 5 Loop cards. Standard network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5806</td>
<td>2-8 Loop Fire Panel c/w 6 Loop cards. Standard network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5807</td>
<td>2-8 Loop Fire Panel c/w 7 Loop cards. Standard network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5808</td>
<td>2-8 Loop Fire Panel c/w 8 Loop cards. Standard network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5802/FT</td>
<td>2-8 Loop Fire Panel c/w 2 Loop cards. Fault-tolerant network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5803/FT</td>
<td>2-8 Loop Fire Panel c/w 3 Loop cards. Fault-tolerant network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5804/FT</td>
<td>2-8 Loop Fire Panel c/w 4 Loop cards. Fault-tolerant network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5805/FT</td>
<td>2-8 Loop Fire Panel c/w 5 Loop cards. Fault-tolerant network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5806/FT</td>
<td>2-8 Loop Fire Panel c/w 6 Loop cards. Fault-tolerant network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5807/FT</td>
<td>2-8 Loop Fire Panel c/w 7 Loop cards. Fault-tolerant network (Comes with 20 zone LED indicators)</td>
</tr>
<tr>
<td>F/CH/MX-5808/FT</td>
<td>2-8 Loop Fire Panel c/w 8 Loop cards. Fault-tolerant network (Comes with 20 zone LED indicators)</td>
</tr>
</tbody>
</table>

Larger Zone Cards - Available - please contact Channel
PRODUCT 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.

PRODUCT 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

CALL POINTS

Back Row, left to right: F/CHSM/P/95, F/CHHM/95 & F/CHHM/HT/95
Front Row, left to right: F/CHSM/A/95, F/CHSM/M/95 & F/BASE/95

DETECTORS

INTERFACES & ISOLATORS

F/CHIO/1/95
(SA4700-102) Single channel input/output unit complete with isolator. Contacts rated 30V 1Amp

F/CHIO/1/95/240
(SA4700-103) Single channel input/output unit 230V contacts 1A complete with surface mounting enclosure

F/CHIO/2/93
(SA4700-104) Twin channel input/output unit complete with isolator

F/BASE/95/IS/WB
(55000-720) XP95 isolator less base

F/CHIS/95/DB
(45681-284) Short circuit isolator with detector base

F/CHSN/95
(55000-852) Sounder circuit controller complete with isolator

F/CHSW/95
(SA4700-100) Switch monitor complete with isolator

SOUNDERS AND VISUAL INDICATORS

F/CHBN/95
(55000-877) XP95 loop powered beacon - requires F/BASE/95

F/CHBN/BASE/95
(45681-339) Beacon with detector base

F/CHWB/95/AP
(55000-001) Open area XP95 sounder red IP65 complete with isolator

F/CHWB/BN/95/A
(45681-331) Loop powered base sounder beacon – incorporates detector mounting base

F/CHWB/BN/95/AP
(55000-005) Open area XP95 sounder beacon red IP65

F/CHWB/BN/95/IS
(45681-330) Loop powered base sounder beacon – complete with loop isolator and detector mounting base

F/CHWB/IS/IN/95A
(45681-277) Loop powered intelligent base sounder – incorporates detector mounting base

F/CVER/RD/1
(45681-293) Red cover for CHWB/BN/95/A

F/CVER/WH/1
(45681-292) White cover for CHWB/BN/95/A
Apollo Discovery  ✔ EN54 Third Party Approved

PRODUCT OVERVIEW
Discovery is a range of high specification analogue addressable fire detectors. The Discovery range is designed to meet specifications for detectors incorporated in sophisticated systems, Discovery 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.

PRODUCT 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

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

DRIFT COMPENSATION
All 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 detector in the Discovery range 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.

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHSM/P/DISC</td>
<td>(58000-600) Discovery optical detector less base</td>
</tr>
<tr>
<td>F/CHHM/DISC</td>
<td>(58000-400) Discovery heat monitor less base</td>
</tr>
<tr>
<td>F/CHSM/A/DISC</td>
<td>(58000-500) Discovery ionisation detector less base</td>
</tr>
<tr>
<td>F/CHSM/M/DISC</td>
<td>(58000-700) Discovery smoke/heat detector less base</td>
</tr>
</tbody>
</table>

Please note:
- We have portrayed the most commonly used Discovery devices here - yet for further options please contact our sales department on 0845 884 7000 or email customerservices@channelsafety.co.uk.
- For interface units - XP95 interfaces on the previous page can be used. Contact our technical team at technical@channelsafety.co.uk to check compatibility prior to ordering.
## Apollo XP95 Visual Alarm Device (VADs)

### PRODUCT 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’.

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

### Ceiling Mounted

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/55000-742</td>
<td>Ceiling Mounted 55000-742 XP95/ Discovery Red body White flash. 9.4mA in alarm 8.5m coverage @3m mounting height.</td>
</tr>
<tr>
<td>F/55000-745</td>
<td>Ceiling Mounted 55000-745 XP95/ Discovery White body White flash. 9.4mA in alarm 8.5m coverage @3m mounting height.</td>
</tr>
<tr>
<td>F/55000-740</td>
<td>Ceiling Mounted 55000-740 XP95/ Discovery Red body White flash. 26.6mA in alarm 15m coverage @3m mounting height.</td>
</tr>
<tr>
<td>F/55000-743</td>
<td>Ceiling Mounted 55000-743 XP95/ Discovery White body White flash. 26.6mA in alarm 15m coverage @3m mounting height.</td>
</tr>
</tbody>
</table>

### Wall Mounted

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/55000-741</td>
<td>Wall Mounted 55000-741 XP95/ Discovery Red body White flash. 9.4mA in alarm 6m² coverage @2.4m mounting height.</td>
</tr>
<tr>
<td>F/55000-744</td>
<td>Wall Mounted 55000-744 XP95/ Discovery White body Red flash. 9.4mA in alarm 6m² coverage @2.4m mounting height.</td>
</tr>
</tbody>
</table>

### Open Category

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/45681-709</td>
<td>Open Category 45681-709 XP95/ Discovery BASE MOUNTED VAD White flash. 9.4mA in alarm. Approx coverage 3m Dia @ 3m mounting height.</td>
</tr>
<tr>
<td>F/45681-705</td>
<td>Ceiling Mounted 45681-705 XP95/ Discovery BASE MOUNTED SOUNDER/VAD White flash. 14mA in alarm. Approx coverage 3m Dia @ 3m mounting height.</td>
</tr>
</tbody>
</table>
Apollo Soteria

PRODUCT 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.

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

PRODUCT CODE

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Soteria Optical Smoke Detector with Isolator</td>
<td>F/SAS100-600APO</td>
</tr>
<tr>
<td>Soteria Heat Detector with Isolator</td>
<td>F/SAS100-400APO</td>
</tr>
<tr>
<td>Soteria Optical/Heat Multisensor Detector without Isolator</td>
<td>F/SAS100-700APO</td>
</tr>
<tr>
<td>Soteria Mid Level Detectors without Isolator</td>
<td>F/SAS5000-600APO</td>
</tr>
<tr>
<td>Soteria Optical Smoke Detector without Isolator</td>
<td>F/SAS5000-400APO</td>
</tr>
<tr>
<td>Soteria Heat Detector without Isolator</td>
<td>F/SAS5000-700APO</td>
</tr>
<tr>
<td>Soteria Optical/Heat multisensor Detector without Isolator</td>
<td>F/SAS5000-200APO</td>
</tr>
<tr>
<td>Xpert8 Intelligent Mounting Base</td>
<td>F/SA5000-200APO</td>
</tr>
</tbody>
</table>

REFINEMENT DEFINED

ADVANCED STYLING

DIMENSION OPTICAL DETECTOR
DIMENSION SPECIALIST OPTICAL DETECTOR
DIMENSION BACK BOX
OPTICAL/HEAT DETECTOR
XPERT8 INTELLIGENT MOUNTING BASE

HEAT DETECTOR
SA(W) 850 15M IN/OUT
SA(W) 850 15M ISOLATED
MEASUREMENTS
100MM CAP. X 365MM HEIGHT

OPTICAL/HEAT DETECTOR
SA(W) 850 15M IN/OUT
SA(W) 850 15M ISOLATED
MEASUREMENTS
100MM CAP. X 365MM HEIGHT

XPERT8 INTELLIGENT MOUNTING BASE
SA(W) 850 15M IN/OUT
SA(W) 850 15M ISOLATED
MEASUREMENTS
100MM CAP. X 365MM HEIGHT
Apollo Soteria Dimension

The ultra low profile smoke detector

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.

PRODUCT 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

The Soteria Dimension Specialist Optical Detector is independently certified to DHF TS001 for anti-ligature use in specialist areas.

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.

PRODUCT CODE

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>F/FL5100-600APO</td>
<td>Soteria Dimension Optical Detector</td>
</tr>
<tr>
<td>F/FL6100-600APO</td>
<td>Soteria Dimension Specialist Optical Detector</td>
</tr>
<tr>
<td>F/FL5000-200APO</td>
<td>Soteria Dimension Mounting Box</td>
</tr>
</tbody>
</table>

Note: Supply and installation of Soteria Dimension detectors is subject to a satisfactory site survey.
Hochiki ESP Protocol

PRODUCT 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.

PRODUCT 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 & VdS

DETECTORS

<table>
<thead>
<tr>
<th>DETECTORS</th>
<th>DESCRIPITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/ALN-EN WHT</td>
<td>Photoelectric smoke sensor - White</td>
</tr>
<tr>
<td>F/ACC-EN WHT</td>
<td>Multi-sensor - photoelectric and heat - White</td>
</tr>
<tr>
<td>F/ATJ-EN WHT</td>
<td>Analogue heat sensor - White</td>
</tr>
</tbody>
</table>

DETECTOR BASES FOR ABOVE

<table>
<thead>
<tr>
<th>DETECTOR BASES</th>
<th>DESCRIPITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/YBN/R/3 WHT</td>
<td>Sensor mounting base</td>
</tr>
<tr>
<td>F/YBN/R/3/SCI</td>
<td>Sensor mounting base with isolator</td>
</tr>
</tbody>
</table>

BASE SOUNDERS & VISUAL INDICATORS

<table>
<thead>
<tr>
<th>BASE SOUNDERS</th>
<th>DESCRIPITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/YBO-BS WHT</td>
<td>Addressable base mounted sounder white</td>
</tr>
<tr>
<td>F/YBO-B52WHT</td>
<td>Addressable white base mounted sounder indicator</td>
</tr>
<tr>
<td>F/SI/CAP2WHT</td>
<td>Base sounder cover white</td>
</tr>
</tbody>
</table>

WALL SOUNDERS & VISUAL INDICATORS

<table>
<thead>
<tr>
<th>WALL SOUNDER</th>
<th>DESCRIPITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/YBO-R/3 WHT</td>
<td>Sounder mounting base white</td>
</tr>
<tr>
<td>F/YBO-R/3SCIWH</td>
<td>Sounder mounting base with circuit isolator white</td>
</tr>
</tbody>
</table>

BASE SOUNDER BASES FOR ABOVE

<table>
<thead>
<tr>
<th>BASE SOUNDER</th>
<th>DESCRIPITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/YBO-R/3</td>
<td>Sounder mounting base</td>
</tr>
<tr>
<td>F/YBO-R/3SCI</td>
<td>Sounder mounting base with isolator</td>
</tr>
</tbody>
</table>

CALL POINTS

<table>
<thead>
<tr>
<th>CALL POINTS</th>
<th>DESCRIPITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/HCP-E SCI</td>
<td>Addressable call point with SCI red</td>
</tr>
<tr>
<td>F/HCP-W SCI</td>
<td>Weatherproof addressable call point with SCI red</td>
</tr>
<tr>
<td>F/CH/PS200</td>
<td>Call point cover</td>
</tr>
</tbody>
</table>

MODULES & CONTROLLERS

<table>
<thead>
<tr>
<th>MODULES &amp; CONTROLLERS</th>
<th>DESCRIPITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHQ-DSC2/SCI</td>
<td>Dual sounder controller with SCI</td>
</tr>
<tr>
<td>F/CHQ-DZM/SCI</td>
<td>Dual zone monitor with SCI</td>
</tr>
<tr>
<td>F/CHQ-MRC2 SCI</td>
<td>Mains relay controller with SCI</td>
</tr>
<tr>
<td>F/CHQ-SZM2/SCI</td>
<td>Single zone monitor with SCI</td>
</tr>
<tr>
<td>F/CHQ-SIM</td>
<td>Single input module</td>
</tr>
<tr>
<td>F/CHQ-POM</td>
<td>Powered output module</td>
</tr>
</tbody>
</table>

ACCESSORIES

<table>
<thead>
<tr>
<th>ACCESSORIES</th>
<th>DESCRIPITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHQ-ADAPTER</td>
<td>Adapter for new CHQ modules</td>
</tr>
<tr>
<td>F/SR/MOUNTING</td>
<td>Surface mounting box red</td>
</tr>
<tr>
<td>F/TCH-B200</td>
<td>ESP programmer &amp; PL-3 lead</td>
</tr>
</tbody>
</table>
Zerio Plus- Wireless

PRODUCT FEATURES

• EN54 Compliant
• 240 Fully Addressable Devices
• Sophisticated Cause and Effects
• In-built HMO options
• Plugable Memory Module for Back-up
• USB Keyboard to program
• Configuration Reporting via USB Memory Stick
• Intuitive Menu Structure
• 5 Access Levels
• Compatible with full range of Zerio Plus Devices
• Simple to Set-up

TYPICAL APPLICATIONS

• Large office blocks
• Hotels
• Small shops
• Restaurants

SAMPLE SYSTEM ARCHITECTURE

Please note:

• A site survey required on all wireless equipment prior to installation
• A free design service is offered upon receipt of contract awarded - for further details contact our sales office on 0845 884 7000
# FIRE DETECTION SYSTEMS | WIRELESS ANALOGUE ADDRESSABLE DEVICES

## Zerio Plus- Wireless

- **EN54 Third Party Approved**

### PANELS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PANELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 zone Zerio Plus control panel</td>
<td>F/EDA-Z5008</td>
</tr>
<tr>
<td>20 zone Zerio Plus control panel</td>
<td>F/EDA-Z5020</td>
</tr>
</tbody>
</table>

### DEVICES

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PANELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zerio Plus optical smoke detector</td>
<td>F/EDA-R5000, F/EDA-R6000</td>
</tr>
<tr>
<td>Zerio Plus optical smoke detector complete with sounder</td>
<td>F/EDA-R6030</td>
</tr>
<tr>
<td>Zerio Plus heat detector complete with sounder</td>
<td>F/EDA-D6000</td>
</tr>
<tr>
<td>Zerio Plus heat detector</td>
<td>F/EDA-D5000</td>
</tr>
</tbody>
</table>

### CALL POINT

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PANELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zerio Plus call point</td>
<td>F/EDA-C5000</td>
</tr>
<tr>
<td>Call Point Cover</td>
<td>F/EDA-Q585</td>
</tr>
</tbody>
</table>

### SOUNDERS AND VISUAL INDICATORS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PANELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zerio Plus radio sounder</td>
<td>F/EDA-A6000</td>
</tr>
<tr>
<td>Zerio Plus radio beacon</td>
<td>F/EDA-A6060</td>
</tr>
<tr>
<td>Zerio Plus Radio sounder c/w LED beacon</td>
<td>F/EDA-A6030</td>
</tr>
<tr>
<td>Zerio Plus Optical smoke detector radio beacon c/w LED beacon</td>
<td>F/EDA-R6030</td>
</tr>
</tbody>
</table>

### INTERFACE UNITS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PANELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zerio Plus radio clean contact input / output unit</td>
<td>F/EDA-T6080</td>
</tr>
</tbody>
</table>

### BOOSTERS AND AERIALS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PANELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zerio Plus booster panel (requires 240v supply)</td>
<td>F/EDA-Z6000</td>
</tr>
<tr>
<td>Zerio Plus hard wired booster panel</td>
<td>F/EDA-Z6010</td>
</tr>
<tr>
<td>High gain antenna for use with Zerio Plus</td>
<td>F/EDA-Y5000</td>
</tr>
</tbody>
</table>

### ACCESSORIES

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PANELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zerio Plus survey kit</td>
<td>F/EDA-Z5000</td>
</tr>
</tbody>
</table>

### BATTERIES

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PANELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Volt 7Ah sealed lead acid battery (1 block)</td>
<td>B/12V/7AH/SLA</td>
</tr>
<tr>
<td>Replacement batteries for detectors</td>
<td>S/BATT/EDA-Q690</td>
</tr>
</tbody>
</table>
PRODUCT OVERVIEW

XPander is Apollo’s wireless intelligent detector range. 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 XPander has been developed.

XPander 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 XPander 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 XPANDER RANGE CONSISTS OF...

- Optical Smoke Detector
- A1R Heat Detector
- CS Heat Detector
- Sounder
- Sounder Beacon
- Manual Call Point
- Interface Module

The inclusion of alarm devices such as the sounder beacon help make XPander systems compliant with the Disability Discrimination Act.

PRODUCT FEATURES

- Easy to install
- XPERT card addressing
- Self-monitoring
- Proven technology
- No special control panel needed
- 868MHz radio channels
- Up to 32 devices per interface
- Up to 5 interfaces per loop
- Analogue addressable system expansion
- Wireless
- Eliminates cabling difficulties
- Minimises building disruption
- Enables Rapid Retro-fit
- Preserves aesthetics

All detectors within the XPander range are sold with mounting bases

TYPICAL APPLICATIONS

XPander can be incorporated into fire detection systems where the use of fire cables is either impractical or undesirable, including stately homes and architecturally sensitive buildings.

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 - for further details contact our sales office on 0845 884 7000
FIRE DETECTION SYSTEMS | WIRELESS ANALOGUE ADDRESSABLE DEVICES | 65

Apollo XPander ✔ EN54 Third Party Approved

DETECTORS
Right:
F/CHHM/XPAND
60°C Heat Detector

Left:
F/CHSM/P/XPAND
Optical Smoke Detector

SOUNDERS & VISUAL INDICATORS

COMBINED SOUNDERS & VISUAL INDICATORS

CALL POINT & ACCESSORIES

PRODUCT CODE DESCRIPTION

DETECTORS
F/CHSM/P/XPAND (XPA-CB-12034) XPander wireless optical smoke detector
F/CHHM/XPAND (XPA-CB-11170) XPander wireless (60°C) heat detector

SOUNDERS & VISUAL INDICATORS
F/CHWB/XPAND (XPA-CB-14001) XPander wireless sounder - 100db (red)

COMBINED DETECTORS / SOUNDERS
F/CHSM/P/WB/XPAND (XPA-CB-14016) XPander combined sounder and optical smoke detector
F/CHHM/WB/XPAND (XPA-CB-14017) XPander combined sounder and heat detector (class A1R)
F/CHHM/HT/WB/XPAND (XPA-CB-14018) XPander combined sounder and heat detector (class CS)

COMBINED DETECTORS / SOUNDERS / VISUAL INDICATORS
F/CHSM/P/WB/BN/XPAND (XPA-CB-14020) XPander combined sounder-indicator (red) and optical detector
F/CHHM/WB/BN/XPAND (XPA-CB-14021) XPander combined sounder-indicator (red) and heat detector (class A1R)
F/CHHM/HT/WB/BN/XPAND (XPA-CB-14022) XPander combined sounder-indicator (red) and heat detector (class CS)
F/CHSM/P/WB/BNC/XPAND (XPA-CB-14024) XPander combined sounder-indicator (clear) and optical smoke detector

CALL POINTS
F/CHBG/XPAND (XPA-MC-14006) XPander wireless break glass unit

INTERFACES AND AERIALS
F/CHIF/XPAND (XPA-IN-14050-APO) XPander interface module (loop powered) with isolator

ACCESSORIES
S/XPERT TAG (29600-399) XPander blank xpert card red
S/XPERT TAG/WH (29600-413) XPander blank xpert card white
F/CH/XPAND/SVU Survey Unit Kit
VESDA - ACCESSORIES
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 BS5391 Part 1, EN 61386-1 and the new EN54 Part 20 guaranteeing you quality.
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.

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 & Warehousing.

VESDA-E VLQ
A cost-effective Aspirated Smoke Detection (ASD) solution that meets the unique needs of numerous small area applications of up to 100m² (1,000 sq. ft)

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 maintainance. A range of revolutionary new features provide unsurpassed detection performance, flexibility, field programmability, connectivity and reduced total cost of ownership.

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

#### PRODUCT FEATURES
- Reliable early detection warning
- Assured performance in challenging environments
- Superior suppression actuation
- Easy & 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

#### VESDA-E VLQ
- **F/VLQ-100**
  - VESDA-E VLQ Aspirated Smoke Detector with relays. Max pipe length 18m

#### 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

#### PIPING
- **F/CH/PIP-001/1M**
  - 1 x 3m length of pipe
- **F/CH/PIP-001/20**
  - 20 x 3m length of pipe

#### ACCESSORIES
- **F/CH/PIP-002**
  - 25mm jointing socket x 10 pack
- **F/CH/PIP-003**
  - 25mm socket union-screw tight-unit price (comes in pack x 10)
- **F/CH/PIP-005**
  - 90 degree bend x 10 pack
- **F/CH/PIP-006**
  - 45 degree bend 25mm x 10 pack
- **F/CH/PIP-007**
  - End cap 25mm x 10 pack
- **F/CH/PIP-008**
  - T piece 25mm x 10 pack
- **F/CH/PIP-009**
  - Pipe clip x 20 pack
- **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 x 10 pack
- **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 2 x B/12V/7AH/SLA batteries)
- **F/CH/VPS-220**
  - 2A PSU – Vesda (requires 2 x 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)
Firebeam - 2

FEATURES

The firebeam 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.

IDEAL FOR PROTECTING AREAS SUCH AS:-

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

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.

Firebeam is designed to fully comply with EN 54 part 12, and exceeds European standards, in particular BS5839 part 1.

*Power Supply may be required depending on system.

DISTANCE & POSITION GUIDELINES

A roof is considered flat unless the height of the apex is greater then 0.6m. If the roof is flat firebeam 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.

Firebeam has a detection area of 7.5m either side of the beam. If the roof is considered to have an apex, place the firebeam 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.
AOV Smoke Ventilation 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 & 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. The 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 & 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 & smoke detectors to the AOV multi zone system to trigger.

HOW DO I DECIDE WHICH ACTUATOR TO FIT?
There are many different types of actuators, each designed for a particular application.
It is vital that the actuator is suitable for the vent/window to be opened. A stairwell window, roof vent or louvre must have a minimum free vent area of 1m².
A lobby window must have a free vent area of 1.5m².
The standard actuators we offer come with several chain lengths, the window must open to at least the given chain length measured on the opposite side from the hinge.

We can offer many different types of actuators & vents including louvres, roof vents/domes, please contact for a bespoke quotation.
AOV Smoke Ventilation System

SYSTEM LAYOUT & 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.

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
- Multizone: Please contact us for details on available multizone systems

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

FIREMAN’S CONTROLS
- F/WSK/321/0005/61: Break glass, SVM, orange

SMOKE DETECTORS
- F/CHSM/P: (SS5000-317) Optical Smoke detector with base
**Alarmline Cable**

**PRODUCT FEATURES**
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.

- Environmental -65°C to +200°C
- 5 detection temperature ranges from 61°C to 238°C
- Simple interface to any BS5839 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.

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

**ACCESSORIES** | **PRICE EACH**
--- | ---
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

---

**Acoustic Door Holder- Wire Free**

**PRODUCT FEATURES**
- Comes complete with batteries
- Digital, acoustically triggered, battery powered, wireless magnetic door holder
- Mounts behind door avoiding accidental damage - no wiring required
- Battery life indication and low battery warning
- Can be set to automatically release daily at set times
- CE marked under the CPD - Holding force 200N

**PRODUCT CODE** | **DESCRIPTION**
--- | ---
F/CHDR/AUDIO | Acoustic wireless door holder triggered by fire alarm sounder

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**Interface Relays**

**PRODUCT OVERVIEW**
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.

**PRODUCT FEATURES**
- Simple to install
- Visible status indication
- LED Double pole change over contacts

**INTERFACE RELAYS**
---
F/CH/HDR/5 | Heavy duty 5A relay
S/E15/A | 24V 5A Relay
**Electromagnetic Door Closer**

**PRODUCT FEATURES**
The CHDC overhead door closer range offers a choice of two closers, Silver or stainless steel. Supplied with the unique high efficiency cam and roller action making them suitable where the Equality Act is a consideration. All closers are supplied as standard with a matching adjustable arm, and there is also the option of having a hold open arm. All Exidor closers come with universal fitting and are supplied with brackets for fig 1, fig 61 and fig 66 fixing.

- Stylish and aesthetically pleasing, supplied with matching cover and arms as standard
- Detachable loop allows loop and closer to be fitted separately for easy installation
- Combined swing free and hold open on same unit
- Non-handed
- 24V DC
- Supplied with brackets for fig 1 and 6 (66) as standard
- British Manufactured
- Fully tested and certified

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHDC/SI</td>
<td>Silver Overhead Door Closer- 95mA - 24V DC</td>
</tr>
<tr>
<td>F/CHDC/SS</td>
<td>Stainless Steel Overhead Door Closer- 95mA - 24V DC</td>
</tr>
</tbody>
</table>

**PRODUCT FEATURES- Floor Spring**
The CHFC series E-mag floor spring fits discreetly into the floor, giving better resistance to interference and vandalism and is suitable for use where low opening forces are required, such as care homes, hospitals or where the Equality Act is a consideration. It gives options of hold open/swing free mode, allowing the door to be opened with no resistance from the floor spring. Available in both single and double action, the floor spring can be supplied complete, or mechanism only when being used as a replacement. Optional extras include extra height spindles, 200° cam and gel infill for improved water resistance, Extra long spindles are available, Max door size 1100mm 400KG

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHFS</td>
<td>Floor spring mechanism only - 24V DC</td>
</tr>
<tr>
<td>F/CHFS/SA/16</td>
<td>16mm single action fitting set – Satin Stainless Steel</td>
</tr>
<tr>
<td>F/CHFS/SA/25</td>
<td>25mm single action fitting set – Satin Stainless Steel</td>
</tr>
<tr>
<td>F/CHFS/DA</td>
<td>Double Action fitting set – Satin Stainless Steel</td>
</tr>
</tbody>
</table>

**Wall mounted Door Retainers**

**PRODUCT 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

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHDR/24</td>
<td>24V magnetic door release</td>
</tr>
<tr>
<td>F/CHDR/240</td>
<td>240V magnetic door release</td>
</tr>
<tr>
<td>F/CHDR/8K</td>
<td>Door release mounting bracket</td>
</tr>
<tr>
<td>F/CHDR/CHAIN</td>
<td>1m chain for magnetic door release plates</td>
</tr>
</tbody>
</table>

Right: F/CHDR/24, Left, top to bottom: F/CHDR/BK, F/CHDR/CHAIN
## Special Function Call Point Units

**PRODUCT FEATURES**
- Unique 'Plug & 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

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CH/PC</td>
<td>Surface break glass – blue no resistor</td>
</tr>
<tr>
<td>F/CH/EDR/FLEX</td>
<td>Surface break glass – green no resistor</td>
</tr>
<tr>
<td>F/CH/ER</td>
<td>Surface break glass – yellow no resistor</td>
</tr>
<tr>
<td>F/CH/FVE</td>
<td>Surface vent extract unit – yellow no resistor – 3 POS key switch</td>
</tr>
</tbody>
</table>

## Call & 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

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CHBGC/KIT</td>
<td>Heavy Duty Flush and surface Break Glass Cover Kit</td>
</tr>
<tr>
<td>F/CHBGC/KIT/S</td>
<td>Heavy Duty Flush and surface Break Glass Cover Kit with Sounder</td>
</tr>
</tbody>
</table>

### 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

## Power Supply Units for Door Closers/Releases

**PRODUCT 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

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>F/CHDR/PSU/2</td>
<td>PSU 24V 2A in enclosure</td>
</tr>
<tr>
<td>F/CHDR/PSU/4</td>
<td>PSU 24V 4A</td>
</tr>
</tbody>
</table>

**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
Fire Alarm Switched Fused Spur

PRODUCT 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 output

Power Supply Units

PRODUCT 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: 2 x 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: 2 x 12V Min. 7Ah, Max. 12Ah
- 404 x 404 x 110mm metal enclosure

NON EN54 COMPLIANT POWER SUPPLY UNITS
- F/PSU/12/1/BM 12V 1A power supply unit – battery monitored (Max. 1 x 12V/7AH/SLA)
- F/PSU/12/2/BM 12V 2A power supply unit – battery monitored (Max. 1 x 12V/7AH/SLA)
- F/PSU/12/3/BM 12V 3A power supply unit – battery monitored (Max. 1 x 12V/7AH/SLA)
- F/PSU/12/5/BM 12V 5A power supply unit – battery monitored (Max. 1 x 12V/7AH/SLA)
- F/PSU/24/1/BM 24V 1A power supply unit – battery monitored (Max. 2 x 12V/7AH/SLA)
- F/PSU/24/2/BM 24V 2A power supply unit – battery monitored (Max. 2 x 12V/7AH/SLA)
- F/PSU/24/3/BM 24V 3A power supply unit – battery monitored (Max. 2 x 12V/7AH/SLA)
- F/PSU/24/5/BM 24V 5A power supply unit – battery monitored (Max. 2 x 12V/7AH/SLA)

EN54 COMPLIANT POWER SUPPLY UNITS
- F/PSU24/1.5/BMEN54 EN54 compliant 24V 1.5A power supply unit – battery monitored (Min. 2x12V/3.2AH/SLA - 12V 3.2AH)
- F/PSU24/3/EN54 EN54 compliant 24V 3A power supply unit – battery monitored (Min. 2x12V/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)

Remote Indicators

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

REMOTE INDICATORS
- F/CHRI/60 Remote indicator
- F/CHRI/AS AlarmSense remote indicator
Sealed Lead Acid Batteries

PRODUCT OVERVIEW

- Superb recovery from deep discharge
- Electrolyte suspension system
- Gas recombination / Multipurpose: float or cyclic use
- Superior energy density / Visible status indication
- Lead calcium grids for extended life

<table>
<thead>
<tr>
<th>Model Name</th>
<th>Capacity (Ah)</th>
<th>Dimensions (mm)</th>
<th>Impedance at 1kHz (mΩ)</th>
<th>1 Second Rate (Amps)</th>
<th>Terminal Type</th>
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<tbody>
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<td>NP0.8-12</td>
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<td>96 25 61.5</td>
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<td>NP1.2-12</td>
<td>1.2</td>
<td>97 48 54.5</td>
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<td>NP2.1-12</td>
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<td>50</td>
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<td>A 1</td>
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<tr>
<td>NP2.8-12</td>
<td>2.8</td>
<td>134 67 64</td>
<td>50</td>
<td>50</td>
<td>A 1</td>
</tr>
<tr>
<td>NP3.2-12</td>
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<td>134 67 64</td>
<td>50</td>
<td>50</td>
<td>A 3</td>
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<td>23</td>
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<td>350 166 174</td>
<td>7</td>
<td>7</td>
<td>E 2</td>
</tr>
</tbody>
</table>
PRODUCT 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.

- 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


<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/FFE-16581</td>
<td>Talentum Dual IR. High immunity to false sources. Suitable for indoor areas only</td>
</tr>
<tr>
<td>F/FFE-16571</td>
<td>Talentum Dual IR, Intrinsically safe (IS) for hazardous areas. High immunity to false sources. Suitable for indoor areas only</td>
</tr>
<tr>
<td>F/FFE-16511</td>
<td>Talentum Dual IR, Flameproof (Exd) for hazardous areas. High immunity to false sources. Suitable for indoor areas only</td>
</tr>
<tr>
<td>F/FFE-16589</td>
<td>Talentum Triple IR, Excellent immunity to false sources. Suitable for indoor or outdoor areas.</td>
</tr>
<tr>
<td>F/FFE-16579</td>
<td>Talentum Triple IS IR, Intrinsically Safe (IS) for hazardous Area. Excellent immunity to false sources. Suitable for indoor or outdoor areas.</td>
</tr>
<tr>
<td>F/FFE-16519</td>
<td>Talentum Triple IR, Flameproof (Exd) for hazardous areas. Excellent immunity to false sources. Suitable for indoor or outdoor areas.</td>
</tr>
<tr>
<td>F/FFE-16591</td>
<td>Talentum UV/IR2, Highest immunity to false sources. Suitable for indoor or outdoor areas.</td>
</tr>
<tr>
<td>F/FFE-16521</td>
<td>Talentum UV/IR2 Flame Detector. Flameproof (ExD). Highest immunity to false sources. Suitable for indoor or outdoor areas.</td>
</tr>
</tbody>
</table>
Solo Detector Testing

PRODUCT RANGE 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 & 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.
## Solo Detector Testing

### KIT SELECTOR

* Using Solo A5 Smoke Detector Tester Aerosol  
** Using Solo C3 CO Detector Tester Aerosol

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>SMOKE TESTING*</th>
<th>HEAT TESTING</th>
<th>CO TESTING**</th>
<th>ACCESS HEIGHT (approx. max.)</th>
<th>330 AEROSOL DISPENSER</th>
<th>461 CORDLESS HEAT TESTER</th>
<th>424 MAINS HEAT TESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/CH/SOLO/808</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>4m</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
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<td>F/CH/SOLO/809</td>
<td>●</td>
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<td>6m</td>
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<td>●</td>
<td>●</td>
</tr>
<tr>
<td>F/CH/SOLO/810</td>
<td>●</td>
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<td>9.3m</td>
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<th>100 ACCESS POLE</th>
<th>101 EXTENSION POLE</th>
<th>108 ACCESS POLE</th>
<th>200 REMOVAL TOOL</th>
<th>610 CARRYING BAG</th>
<th>760 BATTERY BATON</th>
<th>726 BATTERY CHARGER</th>
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<tr>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

### CHANNEL ECONOMY OPTION FOR DETECTOR TESTING

S/AEROSOL  
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)

F/CH/SOLO/760  
Battery baton

F/CH/SOLO/726  
Battery charger

**SOLO CO TESTING**

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

**SOLO REMOVAL & CLEANING**

F/CH/SOLO/200  
Removal tool

F/CH/SOLOA7-001  
Solo air duster aerosol 250ml

**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/808  
Smoke detector test starter pack

F/CH/SOLO/809  
Smoke detector test starter pack

F/CH/SOLO/810  
Starter kit for testing smoke detectors

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
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Entritech
Video System

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Door Access Control Only
DOOR ENTRY SYSTEMS

PRODUCT OVERVIEW
The latest Entritech offering from Channel combines easy use and installation with top video quality to produce a system which is installer friendly, service friendly, and householder friendly.

PRODUCT FEATURES
- Simple 2 core cable installation
- Single power supply supports all monitors and outdoor stations in a flexible combination of up to 32 devices.
- Clear high resolution colour picture on 7” hands free TFT monitor
- Outdoor station with built in keypad for code door unlocking 2 door release buttons so front/back doors or gates can be opened separately
- 2 outdoor door stations
- Up to 32 monitor screens
- Up to 4 monitor screens per apartment (max 32 monitors, i.e 16 apartments with 2 screens, 8 apartments with 4 screens etc.)
- 2 selectable door/gate release options
- If you have 2 outdoor units the system only unlocks the appropriate door/gate
- 2core 0.75mm PVC cable
- 140m cable run (60m PSU outdoor stations- 80m PSU/last monitor)
- Simple DIP switch monitor addressing
- PIN Code entry - Up to 99 separate user codes
- Surface or flush mounted outdoor station
- Selectable door control output. Voltage free change over or 12v 300mA DC applied/removed
- Selectable ‘Lock open’ timer, 6 or 10 seconds

PRODUCT CODE
- D/ENT/VPAN/32 Call panel with keypad, up to 32 screens. Two wire flush mounted
- D/ENT/VM/32 7 inch monitor, White. Two wire
- D/ENT/PSU/32 Central power supply adapter (24V, 2.5A) one per system
- D/ENT/DIST/32 4-Channel Distributor, For use with apartments with more than one screen
- D/ENT/SMB/32 Surface mounting box for outdoor call panel
- D/ENT/WH/ED White exit button
- D/ENT/SS/EB Stainless steel exit button
- F/CH/EDR/FLEX Green emergency door release unit
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ENTRitech™ - Audio Only

The easy-to-install 5-wire Audio only ENTRitech range has been designed for use within a wide range of applications including residential, commercial & 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.

THE KIT OPTIONS...

SURFACE MOUNTED AUDIO KITS WITH EMBEDDED INTERCOM

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D/ENT/AUDIO/1</td>
<td>1 way audio kit complete with stainless steel 1 button call station, 1 power supply &amp; 1 phone</td>
</tr>
<tr>
<td>D/ENT/AUDIO/2</td>
<td>2 way audio kit complete with stainless steel 2 button call station, 1 power supply &amp; 2 phones</td>
</tr>
<tr>
<td>D/ENT/AUDIO/3</td>
<td>3 way audio kit complete with stainless steel 3 button call station, 1 power supply &amp; 3 phones</td>
</tr>
<tr>
<td>D/ENT/AUDIO/4</td>
<td>4 way audio kit complete with stainless steel 4 button call station, 1 power supply &amp; 4 phones</td>
</tr>
<tr>
<td>D/ENT/AUDIO/6</td>
<td>6 way audio kit complete with stainless steel 6 button call station, 1 power supply &amp; 6 phones</td>
</tr>
<tr>
<td>D/ENT/AUDIO/8</td>
<td>8 way audio kit complete with stainless steel 8 button call station, 1 power supply &amp; 8 phones</td>
</tr>
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</table>

FLUSH MOUNTED AUDIO KITS WITH EMBEDDED INTERCOM

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D/ENT/AUDIO/1/FL</td>
<td>Flush 1 way audio complete with stainless steel 1 button call station, power supply &amp; 1 phone</td>
</tr>
<tr>
<td>D/ENT/AUDIO/2/FL</td>
<td>Flush 2 way audio complete with stainless steel 2 button call station, power supply &amp; 2 phones</td>
</tr>
<tr>
<td>D/ENT/AUDIO/4/FL</td>
<td>Flush 4 way audio complete with 4 button call station, power supply &amp; 4 phones</td>
</tr>
<tr>
<td>D/ENT/AUDIO/6/FL</td>
<td>Flush 6 way audio complete with 6 button call station, power supply &amp; 6 phones</td>
</tr>
<tr>
<td>D/ENT/AUDIO/8/FL</td>
<td>Flush 8 way audio complete with 8 button call station, power supply &amp; 8 phones</td>
</tr>
</tbody>
</table>

BUILD YOUR OWN...

FLUSH MOUNTED AUDIO - CALL STATION WITH EMBEDDED INTERCOM

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D/ENT/FL/1</td>
<td>Flush master unit with stainless steel 1 module unit complete with embedded intercom (up to 6 way)</td>
</tr>
<tr>
<td>D/ENT/FL/2</td>
<td>Flush master unit with stainless steel 2 module unit complete with embedded intercom (up to 12 way)</td>
</tr>
<tr>
<td>D/ENT/FL/3</td>
<td>Flush master unit with stainless steel 3 module unit complete with embedded intercom (up to 18 way)</td>
</tr>
</tbody>
</table>

SURFACE MOUNTED AUDIO - CALL STATION WITH EMBEDDED INTERCOM

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D/ENT/Master 1</td>
<td>1 Module stainless steel unit surface mounted complete with embedded intercom (up to 6 way)</td>
</tr>
<tr>
<td>D/ENT/Master 2</td>
<td>2 Module stainless steel unit surface mounted complete with embedded intercom (up to 12 way)</td>
</tr>
<tr>
<td>D/ENT/Master 3</td>
<td>3 Module stainless steel unit surface mounted complete with embedded intercom (up to 18 way)</td>
</tr>
</tbody>
</table>

BUTTON MODULES

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D/ENT/AUDIO/KP</td>
<td>Digital keypad module</td>
</tr>
<tr>
<td>D/ENT/BU01</td>
<td>1 Button module</td>
</tr>
<tr>
<td>D/ENT/BU02</td>
<td>2 Button module</td>
</tr>
<tr>
<td>D/ENT/BU03</td>
<td>3 Button module</td>
</tr>
<tr>
<td>D/ENT/BU04</td>
<td>4 Button module</td>
</tr>
<tr>
<td>D/ENT/BU06</td>
<td>6 Button module</td>
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</table>

HANDSET

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<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>D/ENT/AUDIO/HS</td>
<td>Audio only handset complete with door release button</td>
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</table>

POWER SUPPLY

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D/ENT/AUDIO/PSU</td>
<td>Power Supply Unit</td>
</tr>
</tbody>
</table>

PRODUCT 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

The ENTRitech™ system uses high quality stainless steel. A range of finishes are available, and the systems are fully tested and approved by the British Standards Institute (BSI) and complemented by a comprehensive兩年 warranty on all hardware and a ten year warranty on all electronics.

If you would like further information or would like to speak to one of our technical engineers, please call 0845 884 7000 or email info@channelsafety.co.uk.
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

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

D/ENT/DA/KIT3 CONTAINS:-
- 12Vdc 2Amp 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

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

D/ENT/DA/KIT5 CONTAINS:-
- 12Vdc 2Amp boxed power supply with battery back up
- DG180 Keypad
- Exit button
- Green break-glass unit
- Electric Release

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

D/ENT/DA/KIT7 CONTAINS:-
- 12Vdc 2Amp boxed power supply with battery back up
- Combined keypad & proximity reader
- Exit button
- Green break-glass unit
- Key fob tokens x 10 pieces
- Electric Release
- Z & L bracket

D/ENT/DA/KIT8 CONTAINS:-
- 12Vdc 2Amp boxed power supply with battery back up
- Combined keypad & proximity reader
- Exit button
- Green break-glass unit
- Key fob tokens x 10 pieces
- Magnetic lock
- Z & L bracket
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ENTRitech™ - Door Access Control Only

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 power cut?
• How will you allow legitimate visitors access, will you speak to them via an intercom?
• Is managing Time and Attendance important to your business?

PRODUCT DIMENSIONS

ACCESS KEYPAD
• Height: 137mm
• Width: 93mm
• Depth: 55mm

PROXIMITY READER
• Height: 116mm
• Width: 75mm
• Depth: 22mm

PRODUCT FEATURES

• Simple to install
• Robust construction
• IP65 Proximity reader option
• Suitable for up to 21 individual codes
• Stainless steel keypad option

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 & 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 & proximity reader including PSU, exit button, green break glass unit, electric release and 10 key fobs

ACCESSORIES

D/ENT/DA/KP/1 Stainless steel door access keypad
D/ENT/EPX10 Standalone proximity reader
D/ENT/KEY/PROX/800 Door access keypad / Proximity Reader
D/ENT/KT10-B Blue proximity tag
D/ENT/STD-PCPS Proximity card
D/ENT/EPX10-HP Hand held programmer for use with proximity reader
D/ENT/SS/EB Stainless steel exit button
D/ENT/WH/ED White exit button
D/ENT/RIM Rim type 12V DC fail secure rim release
D/ENT/MORTICE/FL Dead bolt mortice type 12 DC fail secure - FLUSH only
D/ENT/PSU 12V DC 1amp PSU
F/CH/EDR/FLEX Green emergency door release unit
D/ENT/MAG 600lbs magnetic door lock
D/ENT/MAG/MON 600lbs magnetic door lock - MONITORED
D/ENT/MAG/BRACKET Z&L Bracket for magnetic locks
D/ENT/PSU/12V/2A 12Vdc 2Amp boxed power supply
B/12V/1.2AH/SLA 12 Volt 1.2Ah sealed lead acid battery (1 block)
D/ENT/AUDIO/PSU 12V 1.5Amp dual output power supply (no battery back up)
D/ENT/PSU/12V/2A/TD PSU with time delay
Analogue High Definition Professional Kit Solutions

We have designed a high quality, competitively priced kit solution that creates a great security solution in residential, commercial or industrial premises. The beauty of our latest kit solution; iCapture- AHD is that it allows remote viewing of your CCTV system 24 hours a day, 7 days a week and from anywhere in the world. You can give yourself peace of mind & capture incidents when they occur via any internet connected personal computer or smartphone.

An Overview of AHD CCTV Recorders (DVRs)

There is a large variety of DVRs (Digital Video Recorders) available in the market place and we understand trying to buy the right system for your premises is no easy task and can differ hugely for each situation.

With this in mind we have put together this overview to the different types of systems available so that you can make a more informed decision.

DVR’s are available as standalone or PC based units. Channel offers only standalone AHD CCTV systems as we believe that they are more reliable and less likely to fail. (This is based on the fact that PC based units are more likely to fail due to overloading your hard drive with images and keeping the PC operating 24 hours a day).

All good DVR systems should have sufficient hard drive memory built into the unit for you.

What Type of Cable does an AHD System Use?

AHD CCTV cameras are connected to DVRs using the same type of coaxial cable (shotgun) as traditional analog CCTV cameras. AHD cameras can also use UTP (unshielded twisted pair) cable with video baluns to run cable up to 320 meters with CAT5 cable.

This makes the iCapture CCTV kit an ideal replacement for existing analogue systems.

How does AHD Compare to traditional analogue CCTV?

The AHD format allows much greater resolutions, up to full HD at 1920x1080 pixels or 2.4MP.

IP Rating

Ingress protection is measured using IP Rating, if a camera doesn’t state an IP rating you consider it is for internal use only. So for using CCTV cameras outdoors, we would recommend a very minimum IP rating of 55, but preferably 65 and above.

Points to Consider Before Purchasing!

Before purchasing a CCTV system, Channel urges that each business should conduct a thorough site survey into the areas needing surveillance. It is worth remembering that if people can see your cameras they will also be able to identify any potential ‘blind spots’ – so making note of highly sensitive and less sensitive areas is advised.

This exercise will determine how many cameras you are going to need – (to limit expenses you could consider adding dummy cameras to your system that you feel are less sensitive). where is the camera going? Indoors or outdoors? If outdoors use the weatherproof guide to choose what kind of an IP rating your camera requires.

Once you have drawn your conclusions as to how many cameras you need you can then select your DVR. DVR’s generally come in 4 channel, 8 channel, 16 channel options – buying more channels than you require is not necessarily a bad thing as it ensures the option of adding to your system in the future.

PLEASE NOTE:

• For further information on the CCTV Range we offer please contact our sales team on 0845 884 7000.

• Having Technical issues? email technical@channelsafety.co.uk
PRODUCT OVERVIEW

Introducing the new AHD CCTV surveillance system with wi-fi access to enable remote viewing. The kits come complete with 8 Channel AHD DVR as standard, your choice of four 1080p AHD cameras, 4x shotgun camera leads, power supply unit, and wi-fi dongle.

PRODUCT FEATURES

- Reduced installation time
- One Step on the Internet: Can connect through all types of networks via the cloud service, to allow remote monitoring easily & conveniently without any complicated setting up
- Our 8 Channel supports 1080P recording on all channels.
- Main and Sub Stream: Supports main stream and extra stream encode synchronously. Main stream is for local storage to maintain the image quality, extra stream is for network real-time transmission, to easily solve the bottleneck problem of bandwidth
- Mobile monitor: Supports all kinds of mobile monitor (iPhone, iPad, Android system)
- Browsers: Supports IE browser
- Inputs/Outputs 8 AHD video inputs, BNC & VGA Video output HDMI Video Output, 4 Audio inputs, 1 audio output, router output, RS485 (PTZ), relay input/switch inputs.

WHAT'S INCLUDED IN THE KITS?

- 1x 8 Channel AHD DVR with integrated 1TB Hard Drive
- 4x 20m Shotgun Camera Cables
- 4x AHD 1080P Cameras
- 1x PSU (Power Supply Unit)
- 1x Splitter Lead
- 1x HDMI lead
- 1x wi-fi Dongle

REMOTE VIEWING ON YOUR SMARTPHONE

Kit 1 - T/CCTV/KIT/1/AHD

iCapture™ with wi-fi (App Connect) for remote viewing

Kit 2 - T/CCTV/KIT/2/AHD
Analogue AHD CCTV Cameras

PRODUCT FEATURES

- HD over coax
- Cost competitive
- Full HD & 960H recording
- CMS compatibility with the IP range

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>T/CCTV/EYE/2.8-12/G</td>
<td>Full HD Eyeball Varifocal Grey 2.8-12mm Varifocal - 1080 AHD/960H</td>
</tr>
<tr>
<td>T/CCTV/EYE/2.8-12/WH</td>
<td>Full HD Eyeball Varifocal White 2.8-12mm Varifocal - 1080 AHD/960H</td>
</tr>
<tr>
<td>T/CCTV/DOME/2.8-12/G</td>
<td>1.3MP Eyeball Varifocal Grey 2.8-12mm Varifocal - 960p/960H</td>
</tr>
<tr>
<td>T/CCTV/DOME/2.8-12/WH</td>
<td>1.3MP Eyeball Varifocal White 2.8-12mm Varifocal - 960p/960H</td>
</tr>
<tr>
<td>T/CCTV/DOME/3.6/G</td>
<td>1.3MP Eyeball 3.6mm Varifocal Grey - 960p/960H</td>
</tr>
<tr>
<td>T/CCTV/DOME/3.6/WH</td>
<td>1.3MP Eyeball 3.6mm Varifocal White - 960p/960H</td>
</tr>
<tr>
<td>T/CCTV/INT/2.8-12/WH</td>
<td>Full HD Internal Dome 2.8-12mm Varifocal - 1080 AHD/960H</td>
</tr>
<tr>
<td>T/CCTV/EXT/2.8-12/WH</td>
<td>Full HD External Dome 2.8-12mm Varifocal - 1080 AHD/960H</td>
</tr>
<tr>
<td>T/CCTV/BULLET/2.8-12/40m</td>
<td>1.3MP Bullet Varifocal White 2.8-12mm Varifocal - 40m IR range</td>
</tr>
<tr>
<td>T/CCTV/BULLET/2.8-12/60M</td>
<td>1.3MP Bullet Varifocal White 2.8-12mm Varifocal - 60m IR range</td>
</tr>
<tr>
<td>T/CCTV/BULLET/6-22/40M</td>
<td>Full HD Bullet Varifocal White 6-22mm Varifocal - 60m IR range</td>
</tr>
<tr>
<td>T/CCTV/SPEED/DOME</td>
<td>22x (3.9-85.8mm) IR Speed Dome - Pan tilt 200m - 50m IR Illumination - IP66</td>
</tr>
<tr>
<td>T/CCTV/SPEED/PSU</td>
<td>12V DC 2 AMP IP66 Power Supply</td>
</tr>
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</table>

iCapture™ Accessories

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td>T/CCTV/MON/21</td>
<td>21&quot; LCD Monitor with VGA connector &amp; lead</td>
</tr>
<tr>
<td>T/CCTV/PSU/4 WAY</td>
<td>Power Supply DC 12V 3A with 1-4 way output connectors</td>
</tr>
<tr>
<td>T/CCTV/PSU/5A/5</td>
<td>5 Way - 5amp boxed power supply</td>
</tr>
<tr>
<td>T/CCTV/PSU/10A/9</td>
<td>9 Way - 10amp boxed power supply</td>
</tr>
<tr>
<td>T/CCTV/PSU/20A/18</td>
<td>18 Way - 20amp boxed power supply</td>
</tr>
<tr>
<td>T/CCTV/LEAD/20M</td>
<td>CCTV Lead (pure copper cable) 20 metres</td>
</tr>
<tr>
<td>T/CCTV/SIGN/1</td>
<td>A5 Self adhesive window sticker 148mm x 210mm (Warning 24hr CCTV)</td>
</tr>
<tr>
<td>T/CCTV/BALUN</td>
<td>Transmission device to transmit video signal over un-shielded twisted pair cable (max 330m)</td>
</tr>
<tr>
<td>E/CHWG/12</td>
<td>Protective wire cage</td>
</tr>
<tr>
<td>T/CCTV/BNC</td>
<td>BNC crimp connectors for use with RG59 coaxial cables</td>
</tr>
<tr>
<td>T/CCTV/2M</td>
<td>Double female BNC coupler to join pre-made shotgun cables together</td>
</tr>
<tr>
<td>T/CCTV/DC2</td>
<td>Male &amp; Female power connector for use with CAT 5 cable</td>
</tr>
</tbody>
</table>
WiFi CCTV Camera Systems

PRODUCT OVERVIEW

Wi-Fi CCTV Surveillance system, with choice of Dome or Bullet cameras. Utilising the latest technology these CCTC systems will help protect any home, business, or property while providing stable and high quality images direct to your preferred viewing device. Each camera requires a PSU.

PRODUCT FEATURES

- Easy installation and operation
- 8 Channels
- 1080P/960P/720P Wireless NVR
- Built-in WIFI module with high performance and high stability
- Mobile monitor: Supports iPhone, iPad, Android systems using IP Pro App
- Automatic connection between NVR and IPC
- Supports video preview/recording/playback/backup

WHAT’S INCLUDED IN THE KITS?

- 1x 8 Channel NVR with integrated 1TB Hard Drive
- 2 x WiFi 4mm 2MP HD Dome or Bullet Cameras
- 1x PSU (Power Supply Unit)
- PSU for each camera
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.

System Design Guidance


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 BS7036.
- 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.

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.

Types of Disability

- 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
PRODUCT FEATURES

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 discreetly 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.

- 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, BS8300 & 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 1metre

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.

- N/HARK+
  Stainless steel kit option complete with battery back up and “call acknowledge” feature

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, BS8300 & other care standards.

PUSH BUTTON

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

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.
Complete toilet alarm kit, comprising Pull cord, Reset unit, Power supply unit and Indicator finished in white polycarbonate

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/HARK/1</td>
<td>Complete kit with pull cord, reset, PSU/Indicator</td>
</tr>
<tr>
<td>N/HARK+</td>
<td>Stainless steel option complete with battery back up (battery included) &amp; Call Acknowledge option</td>
</tr>
</tbody>
</table>

**PUSH BUTTON**

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/HARK/1/PB</td>
<td>HARK 1 push button</td>
</tr>
<tr>
<td>N/HARK+/PB/SS</td>
<td>HARK Stainless Steel Push Button</td>
</tr>
</tbody>
</table>

**PULL CORDS**

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/HARK/1/PC</td>
<td>HARK 1 pull cord</td>
</tr>
<tr>
<td>N/HARK+/PC/SS</td>
<td>HARK pull cord stainless steel</td>
</tr>
</tbody>
</table>

**INDICATOR UNITS**

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/HARK/1/PSU</td>
<td>HARK 1 power supply unit</td>
</tr>
<tr>
<td>N/HARK+/PSU/SS</td>
<td>HARK power supply unit stainless steel</td>
</tr>
<tr>
<td>N/CHWB/BN/12V/DB</td>
<td>Sounder Beacon</td>
</tr>
</tbody>
</table>

**RESET UNITS**

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/HARK/1/RS</td>
<td>HARK 1 reset unit</td>
</tr>
<tr>
<td>N/HARK+/RS/SS</td>
<td>HARK reset unit stainless steel</td>
</tr>
</tbody>
</table>

**INDICATOR UNITS, PANELS AND ACCESSORIES (special engraving available P.O.A)**

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/HARK/RU/1</td>
<td>HARK 1-way indicator unit</td>
</tr>
<tr>
<td>N/HARK/RU/1/SS</td>
<td>HARK 1-way indicator unit stainless steel</td>
</tr>
<tr>
<td>N/HARK/RU/2</td>
<td>HARK 2-way indicator unit</td>
</tr>
<tr>
<td>N/HARK/RU/2/SS</td>
<td>HARK 2-way indicator unit stainless steel</td>
</tr>
<tr>
<td>N/HARK/RU/3</td>
<td>HARK 3-way indicator unit</td>
</tr>
<tr>
<td>N/HARK/RU/3/SS</td>
<td>HARK 3-way indicator unit stainless steel</td>
</tr>
<tr>
<td>N/HARK/RU/4</td>
<td>HARK 4-way indicator unit</td>
</tr>
<tr>
<td>N/HARK/RU/4/SS</td>
<td>HARK 4-way indicator unit stainless steel</td>
</tr>
<tr>
<td>N/HARK/RU/5</td>
<td>HARK 5-way indicator unit</td>
</tr>
<tr>
<td>N/HARK/RU/5/SS</td>
<td>HARK 5-way indicator unit stainless steel</td>
</tr>
<tr>
<td>N/HARK/RU/6</td>
<td>HARK 6-way indicator unit</td>
</tr>
<tr>
<td>N/HARK/RU/6/SS</td>
<td>HARK 6-way indicator unit stainless steel</td>
</tr>
<tr>
<td>N/HARK/RU/7</td>
<td>HARK 7-way indicator unit</td>
</tr>
<tr>
<td>N/HARK/RU/7/SS</td>
<td>HARK 7-way indicator unit stainless steel</td>
</tr>
<tr>
<td>N/HARK/RU/8</td>
<td>HARK 8-way indicator unit</td>
</tr>
<tr>
<td>N/HARK/RU/8/SS</td>
<td>HARK 8-way indicator unit stainless steel</td>
</tr>
<tr>
<td>N/HARK/RU/9</td>
<td>HARK 9-way indicator unit</td>
</tr>
<tr>
<td>N/HARK/RU/9/SS</td>
<td>HARK 9-way indicator unit stainless steel</td>
</tr>
<tr>
<td>N/HARK/CA</td>
<td>Call Acknowledge Button on remote indicators (Hark+ ONLY)</td>
</tr>
</tbody>
</table>
**What is an Audio-Frequency Induction Loop System?**

Audio-frequency induction 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 an induction 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, order goods or services, listen to public performances, etc.

An induction loop system therefore comprises the following main elements:

- **The audio source** - typically a microphone, television or radio (or a combination of these).
- **The Induction Loop Amplifier**
- **The loop** - typically a single turn of wire usually run around the perimeter of the room or a special counter loop fixed to the underside of a table.
- **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, induction loop systems can also be used for other limited area broadcasting applications such as museum ‘walk through’ guided tours and surveillance talkback systems.

**The Main Elements Of An Audio-Frequency Induction Loop System**

Some induction loop systems may require additional audio sources such as multiple microphone or line level inputs. To facilitate this, many CHIL range amplifiers include an ‘Outreach’ socket which allows the connection of multiple inputs via a range of specially designed single gang audio connector plates.

**How Does An Induction Loop System Work?**

Audio-frequency induction loop systems do not use radio frequencies; they operate at audio frequencies. The signal from an audio source is fed into an induction 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. Employing 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 for amplifying localised speech. 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. An induction 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) induction 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 problem 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 CHIL range of induction loop equipment is one of the most comprehensive in the UK. It comprises a huge range of amplifiers, microphones, connector plates and test equipment covering virtually every conceivable AFILS application. Before deciding which induction loop system to use, you first need to ascertain the size of the area to be covered in square metres (m²). Bear in mind it may not be necessary to cover the whole of the area, for example in a church only the pews may require coverage.

To calculate the size of the area in square metres, multiply the length by the width. For example, a room 6m x 6m in size would equal 36m². (The coverage provided by an AFILS amplifier is also quoted in square metres).

The chart below, and information in the rest of this section, will help you select the best CHIL Range product(s) for the job.

**Table: CHIL Sizes of Area Requiring Coverage**

<table>
<thead>
<tr>
<th>SIZE OF AREA REQUIRING COVERAGE</th>
<th>CHIL PRODUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counters, desks, tables &amp; other small areas up to 1.2m²</td>
<td>CHIL1000/2 professional loop amplifier</td>
</tr>
<tr>
<td>Rooms up to 50m²</td>
<td>CHIL102L</td>
</tr>
<tr>
<td>Rooms up to 200m² (11 x 11m)</td>
<td>CHIL200E professional loop amplifier</td>
</tr>
<tr>
<td>Rooms up to 200m² (14 x 14m)</td>
<td>CHIL200/2 professional loop amplifier</td>
</tr>
<tr>
<td>Rooms up to 500m² (22 x 22m)</td>
<td>CHIL500/2 professional loop amplifier</td>
</tr>
<tr>
<td>Rooms up to 1000m² (30 x 30m)</td>
<td>CHIL1000/2 professional loop amplifier</td>
</tr>
</tbody>
</table>

Designed to meet or exceed the requirements of BS7594 and EN60118-4 when correctly installed, all of the amplifiers in the CHIL range offer excellent intelligibility, true current mode amplification, phantom power (for electret microphones) and full compatibility with the ‘outreach plate’ audio input extension system (except the PL1, VL1 and DL50).

Many are also available in kit format for ease of specification, purchase and installation.
PORTABLE INDUCTION LOOP KITS

PRODUCT FEATURES

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 BS7594 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.

- 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 durable cardboard storage/carry case
- I/CHIL/PL3 kit includes PL1 amplifier complete with battery & integral microphone, plugtop charger and ‘AFILS available’ sticker
- 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
- Dimensions: 300mm (H) 250mm (W) 100mm (D)
- Battery Internal 12V VRSLA (Valve Regulated Sealed Lead Acid)
- Weight: 1.7Kg

INDUCTION LOOP KITS

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>I/CHIL/PL1</td>
<td>Portable induction loop system</td>
</tr>
<tr>
<td>I/CHIL/PL3</td>
<td>Portable induction loop system complete with carry case</td>
</tr>
</tbody>
</table>

TESTING EQUIPMENT

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
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</thead>
<tbody>
<tr>
<td>I/CH/FPROK/1</td>
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</table>

SIGNS AND STICKERS

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
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</thead>
<tbody>
<tr>
<td>I/CH/PIL/L</td>
</tr>
</tbody>
</table>

COUNTER TOP KITS

PRODUCT FEATURES

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: 1 x I/CHIL/ML1 wall-mounting induction loop amplifier, 1 x I/CHIL/AMT self-adhesive microphone, 1 x I/CHIL/TX2 pre-formed counter loop & 1 x 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 BS6083) and BS7594:1993
- 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 BS8300, the Equality Act and the Care Standards Act
- Dimensions 143mm(H) 83mm(W) 32mm(D)
- Weight 300g (amplifier only)

PRODUCT CODE | DESCRIPTION
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I/CHIL/ML1/K</td>
<td>Counter induction loop kit</td>
</tr>
<tr>
<td>I/CHIL/ML1</td>
<td>1.5m² wall mounting double gang</td>
</tr>
</tbody>
</table>
**Induction Loop Amplifier Kits**

**PRODUCT FEATURES**
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

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**1.5m\(^2\) COUNTER INDUCTION LOOP AMPLIFIER KIT**
I/CHIL/103C Counter hearing loop kit with PDA 103 amplifier, AMT microphone and TX2 counter loop

**50m\(^2\) 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 200m\(^2\) Wall mounted loop amplifier

**200m\(^2\) INDUCTION LOOP AMPLIFIER KITS**
I/CHIL/K1 Meeting room loop induction kit complete with 1x I/CHIL/200E, 1x I/CHIL/APM plated microphone and 1x loop fitted sticker
I/CHIL/K2 Lecture room loop induction kit: complete with 1x I/CHIL/200E, 1x I/CHIL/AMT tie/desk microphone, 1x I/CHIL/AML lectern microphone, 2x I/CHIL/APJ outreach plates and 1x loop fitted sticker
I/CHIL/K3 TV & music room loop induction kit complete with 1x I/CHIL/200E, 1x I/CHIL/AMH handheld microphone, 1x I/CHIL/APS scart lead, 1x I/CHIL/APJ outreach plate, 1x I/CHIL/APL outreach plate, 1x loop fitted sticker

**TESTING EQUIPMENT**
I/CHIL/FPROK/1 Fosmeter Pro Induction loop test kit complete with signal generator

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**Professional Induction Loop Amplifiers**

**PRODUCT FEATURES**
Induction loop amplifiers are ideal for use in large prestigious applications such as theatres, churches, cinemas, conference halls; where first class sound and reliability are a must.

- Dimensions 80mm(H) 380mm(W) 220mm(D)
- Weight I/CHIL/200/2 – 3.74Kg, I/CHIL/500/2 – 3.46Kg; I/CHIL/1000/2 – 4.54Kg

**PRODUCT CODE**
- I/CHIL/200/2 200m\(^2\) professional free-standing induction loop amplifier
- I/CHIL/500/2 500m\(^2\) professional free-standing induction loop amplifier
- I/CHIL/RM 19 rack-mount kit for pro-range amp
- I/CHIL/WM Wall-mount kit for pro-range amp

**TESTING EQUIPMENT**
I/CHIL/FPROK/1 Fosmeter Pro Induction loop test kit complete with signal generator
Outreach Plates

PRODUCT FEATURES

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).

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

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

Microphones

PRODUCT FEATURES

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.

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

To avoid interference, microphone cables should be sited at least one metre away from loop cable.

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>I/CH/APM</td>
<td>Professional handheld microphone for CHIL/200E or CH/AXLR plate (requires CH/AXLR lead)</td>
</tr>
<tr>
<td>I/CH/AMR</td>
<td>Levalier radio microphone complete with microphone, receiver, transmitter, PSU. Connects to CHIL/200E or CH/AXLM outplate</td>
</tr>
<tr>
<td>I/CH/AMD</td>
<td>Desktop microphone for CHIL/ML1, CHIL/DOM, CHIL/102, CHIL/200E, CHIL/PL1 or CH/AMH outplate</td>
</tr>
<tr>
<td>I/CH/AML</td>
<td>Lectern microphone for CHIL/ML1, CHIL/DOM, CHIL/102, CHIL/200E, CHIL/PL1 or CH/AMH outplate</td>
</tr>
<tr>
<td>I/CH/AMR/H</td>
<td>Handheld radio microphone c/w mic, receiver, transmitter, psu. Connects to CHIL/200E or CH/AXLM outplate</td>
</tr>
<tr>
<td>I/CH/AMT</td>
<td>Tie/desk microphone for CHIL/ML1, CHIL/DOM, CHIL/102, CHIL/200E, CHIL/PL1 or CH/AMH outplate</td>
</tr>
</tbody>
</table>
QUANTEC - TYPICAL SYSTEM ARCHITECTURE

PRODUCT 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.

PRODUCT FEATURES
- Multiple call levels including standard, en suite, help required, emergency, attack, presence & attendance
- Tailored to suit a site's exact operational requirements
- Call accept feature & 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 & expand
- Low maintenance time and costs
- New for 2016- a cost-effective expansion kit that adds true BS8300 compliant accessible toilet alarm functionality to a Quantec Addressable Call System (order code N/QT951)

1000s of sites are currently benefitting from the Quantec Addressable Call System...

Prospect View (Health Centre) Worcestershire
Todmorden House (Health Centre) Yorkshire
St Kentigerns (Hospice) North Wales
Abraham Guest (Secondary School) Greater Manchester

Quantec - Addressable Call System

Images show from left to right Quantec call point with reset button and Quantec display unit with controls
# Quantece - 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/QT609S** Quantec call point with reset button and sounder (no remote socket)
- **N/QT609R** 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** Quantec 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

Quantece available in stainless steel - please contact Channel for details
Quantec - Dementia Care

PRODUCT 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.

PRODUCT 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

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Mains supply</th>
<th>230V A.C 50/60Hz. Max. current 350mA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Power Supply</td>
<td>27V DC (nominal)</td>
</tr>
<tr>
<td>Max. switching current</td>
<td>25mA</td>
</tr>
<tr>
<td>Max. switching voltage</td>
<td>30Vdc</td>
</tr>
<tr>
<td>Main Fuse</td>
<td>1 x 1 A HRC ceramic (20x5mm)</td>
</tr>
<tr>
<td>Battery</td>
<td>1 x 12V 7Ah battery</td>
</tr>
<tr>
<td>Battery Fuse</td>
<td>1 x 3.15 A F (20x5mm) this limits the current drawn from the battery</td>
</tr>
<tr>
<td>Weight</td>
<td>3.5kg (not including battery)</td>
</tr>
</tbody>
</table>

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 & 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
Quantec - Dementia Care

TYPICAL SYSTEM ARCHITECTURE
A Medium Intensity Patient Monitoring System with Ensuite Ushering.

- Enuresis (bed wet) Sensor: Triggers a call when moisture is detected in the patient's bed.
- Infrared Ceiling Receiver: Picks up any help required, emergency or 'staff attack' calls made by a carer's infrared transmitter.
- Enuresis/Bed Exit Interface Socket: Sensing the pressure change when the patient exits and returns to bed.
- PIR Movement Sensors: Sense patient movement and instruct the controller to switch lights on, off or dim and to raise a call dependent on the status of the behaviour pattern selected.
- Corridor Display: Indicates the location and type of all incoming calls (as programmed).
- Door Contacts: Can be set up to trigger a call when the bedroom door is opened.
- Room Status Controller: Allows carers to arm/isolate the system and reset any active calls. Optional door bell will trigger a call when pressed by the patient.
- Superbright LED Light: Switches on, off or dims dependent on the status of the behaviour pattern selected.

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.

If you would like to know more about the Quantec Dementia Care system please contact our sales team on 0845 884 7000.
Channel Call System

PRODUCT 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.

PRODUCT 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, overdoor 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 BS8300, the Equality Act and the Care Standards Act

APPLICATIONS
- Nursecall
- Dementia Care
- Staff Protection
- Emergency Assistance
- Cell Call
- Affray Locations
- Care Homes
- Hospitals
- GP Surgeries
- Hotels
- Leisure Centres
- Shops
- Offices
- Factories

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.

Planning a system
The following points should be considered when designing or planning a call system.

- Indicator panels
- Call Points
- Ancillary calling devices
- Call latch modules
- Overdoor lights
- Remote sounders
- Relay units
- Master reset buttons
- Mute buttons

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.
### Panels
- **N/CC/941**: 1-way call panel c/w PSU & reset button
- **N/CC/941/SS**: 1-way Stainless steel call panel c/w PSU Optional battery back-up
- **N/CC/941/B**: Battery back-up kit for N/CC/941/SS
- **N/CC/944**: 4-way call panel (requires N/CC/930 12V 250mA PSU)
- **N/CC/930**: 12V 250mA PSU for N/CC/944
- **N/CC/910/S**: 10-way call panel c/w PSU - Surface Mounted 214W x 178H x 37Dmm
- **N/CC/910/F**: 10-way call panel c/w PSU - Flush Mounted 214W x 178H x 37Dmm (Cut out 176 x 162 x 55Dmm)
- **N/CC/920/S**: 20-way call panel c/w PSU - Surface Mounted 214W x 178H x 37Dmm
- **N/CC/920/F**: 20-way call panel c/w PSU - Flush Mounted 214W x 178H x 37Dmm (Cut out 176 x 162 x 55Dmm)
- **F/PSU/12/1/BM**: 12V 1 amp Power supply (optional for 910/920 panels)
- **B/12V/2.3AH/SLA**: 12V 2.3AH sealed lead acid battery

### Call Points
- **N/CH/802DB**: Standard call point with button reset & remote socket
- **N/CH/802DM**: Standard call point (magnetic reset)
- **N/CH/802DEM**: Emergency & standard call / reset point (magnetic reset)
- **N/CH/804DE**: Emergency call / reset point (button reset)

### Water Resistant Call Points
- **N/CH/802DEWM**: Master water resistant alert point (magnetic reset)
- **N/CH/802DEWS**: Slave water resistant alert point

### Pull Cord
- **N/CH/807C**: Quantec ceiling pull cord unit

### Remote Sounder
- **N/CH/888D**: Remote sounder

### Over Door Lights
- **N/CH/806C**: Overdoor light
- **N/CH/806CS**: Overdoor light & sounder

### Monitoring Points
- **N/CH/894DKB**: Button reset door monitoring point
- **N/CH/894DKM**: Magnetic reset door monitoring point

### Reset Units
- **N/CH/809DB**: Button reset point

### Tail Lead
- **N/CH/805C/6**: 6ft (1.8m) tail call lead
- **N/CH/805/14**: 14ft (4.2m) tail call lead

### Magnetic Reset Keys
- **N/CH/803M**: Magnetic reset key complete with keyring
Channel Orbital Range - Refuge Alarm System

**PRODUCT 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 the 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 BS9999 & BS5839 Pt9. 2010 compliant, and we offer our consultants assistance for BS5839, BS9999, 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 BS5839 Pt9
- CE 2019 certified
- Available with flush or surface mounting back box
- 2 disabled toilet alarm indicators

**4, 8, 16, & 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 BS5839 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.
Channel Orbital Range - Refuge Alarm System

**Loop Wiring Diagram**

- The Loop highway is protected against OPEN and SHORT circuit cable failure, allowing full system function under a fault condition.
- Toilet call loop interface bring back toilet call indications on the same network.

**Radial Diagram**

- Toilet call loop interface bring back toilet call indications on the same network.

**TYPICAL SCHEMATIC FOR A 6 LINE DISABLED REFUGE CALL 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-S** 8 Way SURFACE Stainless steel refuge panel with disabled toilet alarm indicator – Loop wired
- **R/CH/ORB-L-RS8-OLED-F** 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/F/L/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.