

# Fire Equipment Catalogue



**firesense** <sup>ltd</sup>  
FIRE DETECTION EQUIPMENT

Version 6

Complete this checklist as you work through your new install to make sure everything is ready for commissioning and to make sure your site is as compliant as possible.

- Does the system have a mains isolation switch installed?  
If not head to Page 56.
- Is there a log book and lockable document box for the system?  
Head to page 56 for the log books  
Head to page 56 for the document boxes
- Is the panel correctly identifiable with a fire alarm sign?  
See page 60 for signage
- Are all call points identified with the correct signage?  
See page 60 for signage
- Are the panel batteries correctly labelled with the tested date?
- Has the manual been left for the customer?
- Has a USB stick been left with the current panel software?
- Does the customer have a suitable call point test key left at the site?



**Standby Battery Calculation**

$$C_{min} = 1.25(TI_{III} + DI_2T_2)$$

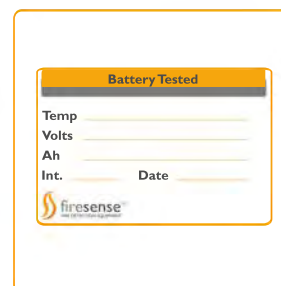
$C_{min}$  = minimum capacity of battery when new at a 20 hour discharge rate at 20 °C in ampere-hours (aH)

- 1.25 = ageing factor allowing 5% per year over 4 years
- $T_I$  = battery standby period in hours
- $T_2$  = alarm time in hours (usually 0.5)
- $I_1$  = battery standby load in amperes
- $I_2$  = battery alarm load in amperes
- $D$  = battery de-rating factor (usually assumed at 1.75) This allows for the inefficiency of the battery under high load conditions

**Example:**

Assume standby load of 250mA, alarm load of 750mA and a standby period of 24 hours with 30 minutes in alarm condition:

$$\begin{aligned} C_{min} &= 1.25((24 \times 0.25) + 1.75(0.75 \times 0.5)) \\ &= 1.25((6 + 0.66)) \\ &= 8.32 \text{ aH} \end{aligned}$$





Contents	Page No.
Conventional Panels	4
Conventional Detectors	7
Conventional Sounders & Beacons	10
Conventional Call Points & Accessories	14
Alarmsense	16
Twinflex	17
Eaton BiWire	18
Automatic Opening Vent Systems	19
Advanced ExGo & Lifeline	20
Addressable Panels	21
Addressable Detectors	30
Wireless Detection	35
Test Equipment	41
Signaline	44
Hydrosense	45
Beam Detection	46
Aspirating Systems	48
Disable Refuge	51
PAVA	55
Scope Paging Equipment	58
Induction Loop Equipment	59
Conventional Call Systems	60
Addressable Call Systems	61
FireCo	62
Door Holders & Closers	64
Power Supply Units	65
Cable & Accessories	66
Site Alarms	68
Fire Extinguishers	69
Fire Ancillaries	70
Batteries	71
Domestic Fire Alarms	72
Fire Alarm Signage	74
Evacuation Alert Systems	75
Emergency Lighting	77
VAD Spec	82
BS Guide	85
Disabled Refuge Guide	90
Delivery Policy	91
Terms & Conditions	92
Returns Policy	94
Notes	95





The Sigma CP Range consists of a series of conventional fire alarm control panels designed in accordance with European standards BS EN54-2 and 4. The panels are available in two versions, Sigma KII, Conventional, where the detectors and call points are wired on separate circuits to sounders and Sigma TII, Savwire, where the detectors, call point and sounders are wired to the same pair of cables.



**Four Wire Panel**

- Fully certified to EN54-2 and 4
- Compatible for use on BS5839: Part 1: 2002 installations
- Compatible with a wide range of detection devices
- Two monitored sounder outputs
- 3 Amp power supply
- Auxiliary power output
- Max 2 x 7Ah batteries

**Part Code**

KE8002SL	KLI1020M2
KE8004SL	KLI1040M2
KE8008SL	KLI1080M2

**Conventional Four Wire Panels**

2 Zone Panel, Surface
4 Zone Panel, Surface
8 Zone Panel, Surface



**Sav-Wire Panel**

- Fully certified to EN54-2 and 4
- Compatible for use on BS5839: Part 1: 2002 installations
- Compatible with a wide range of detection devices
- Two monitored sounder outputs
- 3 Amp power supply
- Auxiliary power output
- Max 2 x 7Ah batteries

**Part Code**

KE8202S	TII020M2
KE8204S	TII040M2
KE8208S	TII080M2

**Conventional Sav-Wire Panels**

2 Zone Panel, Surface
4 Zone Panel, Surface
8 Zone Panel, Surface



**Repeater Panel**

- Two wire serial connection
- Up to 7 panels per system
- 230V AC or 24V DC powered versions
- Full Control over main panel
- Volt free fire and fault contact outputs

**Part Code**

KE87042LS	E01020L2
KE87044LS	E01040L2
KE87048LS	E01080L2
KE87042MSS	K01020M2
KE87044MSS	K01040M2
KE87048MSS	K01080M2

**Conventional Repeater Panels**

2 Zone Panel, Surface, 24V
4 Zone Panel, Surface, 24V
8 Zone Panel, Surface, 24V
2 Zone Panel, Surface, 230V
4 Zone Panel, Surface, 230V
8 Zone Panel, Surface, 230V



The Sigma XT has EN12094-I approval rating. With 3 detection zones as standard, extinguishant release can be configured to activate from any combination of detection zone inputs to allow any 2 from 3 type activations.



**Sigma XT Panel**

- Approved to EN12094-I, EN54-2 & 4
- Three detection zones as standard
- Configurable first stage sounder delays
- Zero time delay upon manual release option
- Compatible with I.S barriers
- Supports up to 7, 4 wire status indicators
- Built in Extract Fan control
- Max 2 x 7Ah batteries

**Part Code**

KE8070S	K11031M2
---------	----------

**Sigma XT Extinguishant Panels**

XT Extinguishant Control Panel
--------------------------------

The Sigma XT+ has an approval rating of EN12094-I. With up to 8 zones of conventional and 4 extinguishant areas available.



**Sigma XT+ Panel**

- Approved to EN12094-I, EN54-2 and 4
- 2, 4 or 8 detection zones
- 1 to 4 extinguishant areas
- Dual extinguishant outputs for each area
- Fault volt free contact per area
- Extract fan control
- Serial connection for Sigma SI status units and ancillary boards
- Max 2 x 7-12Ah batteries

**Part Code**

KE8071IS	K21001M2
KE80712S	K21021M3
KE80714IS	K21041M3
KE807142S	K21042M3
KE80718IS	K21081M3
KE807182S	K21082M3
KE807183S	K21083M4
KE807184S	K21084M4

**Sigma XT Extinguishant Panels**

XT+, 1 Area, Surface
XT+, 1 Area, 2 Zone, Surface
XT+, 1 Area, 4 Zone, Surface
XT+, 2 Area, 4 Zone, Surface
XT+, 1 Area, 8 Zone, Surface
XT+, 2 Area, 8 Zone, Surface
XT+, 3 Area, 8 Zone, Surface
XT+, 4 Area, 8 Zone, Surface

Haes conventional fire alarm control panels are available in 2-32 Zones and are approved to EN54-2 & 4.

The Eclipse range is available as 2 or 4 zones with an array of engineering options including Twin Wire setting by DIL switch, makes it a great entry level fire panel. The Excel can support up to 12 zones, each selectable to be Twin Wire and with a comms card can be networked with up to 8 control panels in a fault tolerant loop. The Evoque is that largest and starts at 16 with support for up to 32 zones. A conventional panel only, however it can be networked with the Excel panels using a comms card to a fault tolerant loop.



**Emento Eclipse**

- 2 or 4 Zones
- False Alarm Management
- Twin Wire Selection by DIL Switch
- Approved to EN54 2 & 4
- Fire and fault relays
- One man walk test
- Non latching zones
- Class change inputs

**Part No.**

HA8002E	ECL-2
HA8004E	ECL-4

**Emento Eclipse**

Eclipse 2 Zone
Eclipse 4 Zone



**Emento Excel**

- 2-12 Zones
- Network up to 8 control panels
- 3 modes to manage false alarms
- Individually selectable Twin Wire Zones
- Approved to EN54 2 & 4
- Programmable relays and outputs
- One man walk test
- Fully functional repeater panels

**Part No.**

HA8002	XLEN-2
HA8004	XLEN-4
HA8006	XLEN-6
HA8008	XLEN-8
HA8012	XLEN-12

**Emento Excel**

Excel 2 Zone
Excel 4 Zone
Excel 6 Zone
Excel 8 Zone
Excel 12 Zone



**Emento Evoque**

- 16-32 zones
- Network up to 8 control panels
- 3 modes to manage false alarms
- 4 sounder circuits
- Approved to EN54 2 & 4
- Programmable relays & outputs
- One man walk test
- Fully functional LCD remote display units

**Part No.**

HA8016	XL32-16
HA8024	XL32-24
HA8032	XL32-32

**Emento Evoque**

Evoque 16 Zone
Evoque 24 Zone
Evoque 32 Zone



**Emento Repeater**

- 12 Zonal fire and fault indicators
- Activate controls via keyswitch or code entry
- 1.25Amp switch mode PSU
- Class change I/P
- Alert I/P
- 6 programmable switched -ve outputs
- Test more, with or without sounders
- Disable zones, sounder O/Ps, aux O/Ps &

**Part No.**

HA8700	XLEN-R-12
HA8701	XL-RDU

**Repeater Panels**

Emento 12 Way Repeater
Emento Remote Display Unit



**Network Comms Card**

- Simple plug in communication card
- Allows networking of up to 8 control panels
- Add up to 8 repeater panels or remote display units to the network
- 2 core cable between cards
- Fully monitored fault tolerant network or legacy radial circuit wiring
- Includes 6 x programmable outputs

**Part No.**

HA8300	TPCA04-H
HA8306	TPCA05
HA1014	OPCARD-8
HA8310	SNDEXT-4
HA8403	FMK-ECL
HA8401	FMK-XLEN
HA8404	FMK-XL32
HA8405	FMK-ES-03

**Haes Peripherals**

Excel Zone Extension Card - High Spec
Network Comms Card
Output Extension Card
Sounder Circuit Extension Card
FMK-ECL Bezel
FMK-XLEN Bezel
FMK-XL32 Bezel
FMK-ES-03 Bezel



A range of four wire panels suitable for conventional equipment. All certified to EN54-2 and EN54-4. They provide a simple, cost effective solution, suitable for many fire detection applications.



### 2, 4 & 8 Zone CPD

- Fully Certified to EN54-2 and EN54-4
- 2 or 4 monitored sounder circuits
- Max 2 x 12V 3.2Ah batteries
- Fire and fault relays
- Class change and programmable fire/fault relay

### Part No.

CO8002CPD	FX2202CPD-NB
CO8004CPD	FX2204CPD-NB
CO8008E	EFCV8Z - NB
CO8270BW	EFBWCV-REPEATER

### Cooper JSB Conventional Panels

2 Zone Control Panel
4 Zone Control Panel
8 Zone Control Panel
Bi-wire and Conventional Repeater Panel



### 2, 4 & 8 Zone CFP

- LPCB certified to EN54 parts 2 and 4
- 4 conventional sounder circuits
- Integral 1.5A EN54-4/A2 compliant switch mode PSU
- Fire and fault relays
- Class change and alert inputs
- Max 2 x 12V 3.2Ah batteries

### Part No.

CT8002	CFP702-4
CT8004	CFP704-4
CT8008	CFP708-4
CT8700	CFP760

### C-TEC Conventional Panels

2 Zone CFP Panel
4 Zone CFP Panel
8 Zone CFP Panel
8 Zone CFP Repeater Panel



### 2, 4 & 8 Zone Panel

- EN54 Parts 2 & 4 compliant
- Semi-flush kit available
- Zone disablement facility
- Max 2 x 3.4Ah batteries
- 8 sounder circuits available on 8 Zone Panel

### Part No.

GE8002	75585-02NMB
GE8004	75585-04NMB
GE8008	75585-08NMB
GE8700	75586-08NMB

### SMS Conventional Panels

2 Zone FP585 Panel
4 Zone FP585 Panel
8 Zone FP585 Panel
8 Zone FP585 Repeater Panel



### 2, 4 & 8 Zone Duo-Cel

- 4 sounder circuits
- Surface mounting
- EN54 and CPD approved 1.5A switched mode power supply
- Max 2 x 3.4Ah batteries
- Fire and fault relays
- Class change facility

### Part No.

TY8002FC	508.031.702
TY8004FC	508.031.703
TY8008FC	508.031.704
TY8708FCAC	508.031.705
TY8708FCDC	508.031.706

### Fireclass Conventional Panels

2 Zone Duo-Cel Panel
4 Zone Duo-Cel Panel
8 Zone Duo-Cel Panel
8 Zone Duo-Cel AC Repeater Panel
8 Zone Duo-Cel DC Repeater Panel



### 2, 4 & 8 Zone Horizon

- 2 sounder outputs
- Surface mounting
- Fire & fault relays
- Max 2 x 12V 7Ah batteries
- Designed to comply with EN54 Parts 2 & 4

### Part No.

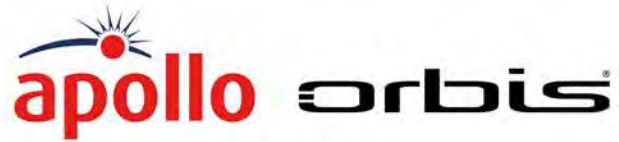
HZ8002	002-492-222
HZ8004	002-492-242
HZ8008	002-492-282

### Horizon Conventional Panels

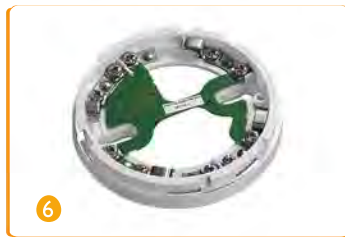
2 Zone Panel
4 Zone Panel
8 Zone Panel



The Series 65 range of conventional detectors incorporates well-proven sensing technologies, together with advances in materials and electronics technology.



Orbis is a range of conventional detectors which has been developed with sophisticated technology previously only found in intelligent detectors.



**Part No. Series 65 Detectors & Bases**

1	AP2002	55000-317APO	Optical Smoke Detector
2	AP2003	55000-122APO	AIR 57°C Rate of Rise Heat Detector
	AP2004	55000-127APO	BR 75°C Rate of Rise Heat Detector
	AP2005	55000-132APO	CR 90°C Rate of Rise Heat Detector
	AP2005S	55000-137APO	CS 90°C Static Heat Detector
5	AP2006D	45681-201APO	Detector Mounting Base with Diode
	AP2006R	45681-245APO	Standard Relay Base
	AP2006AR	45681-246APO	Auxiliary Relay Base
	AP2006ER24	45681-248APO	End-of-line Relay Base 24V
6	AP2206	45681-206APO	Savewire Detector Mounting Base
	API002	53832-070APO	Mini Disc Remote Indicator

**Part No. Orbis Detectors & Bases**

4	AP2022	ORB-OP-12001-APO	Optical Smoke Detector
3	AP2023R	ORB-HT-11001-APO	Heat AIR Detector
	AP2023S	ORB-HT-11166-APO	Heat AIS Detector
	AP20232S	ORB-HT-11002-APO	Heat A2S Detector
	AP2024R	ORB-HT-11003-APO	Heat BR Detector
	AP2024S	ORB-HT-11004-APO	Heat BS Detector
	AP2025S	ORB-HT-11006-APO	Heat CS Detector
	AP2025R	ORB-HT-11005-APO	Heat CR Detector
	AP2027	ORB-OH-13001-APO	Multisensor Smoke Detector
	AP2026D	ORB-DB-00003-APO	TimeSaver Diode Base
7	AP2026R	ORB-RB-10004-APO	TimeSaver Relay Base
8	AP2226	ORB-SW-10005-APO	Sav-Wire Base
	AP2026H	ORB-HB-00020-APO	Heater Base



Eaton's comprehensive range of conventional detectors that are compatible with Eaton conventional control panels.

**Part No. Eaton Detectors & Bases**

9	CO2002	CPD321	Optical Smoke Detector
	CO2003	CFR330	Rate of Rise Heat Detector
10	CO2004	CMT360	Fixed Heat Detector, 77°C
	CO2005	CHT390	Fixed Heat Detector, 92°C
11	CO2006	CDBB300	Detector Mounting Base
12	CO2008	FXN922	Multi-Mode Detector





Vision detectors offer advanced levels of detection, they are easy to install and commission and provide a variety of benefits.



Ziton's conventional range of fire detection is approved to EN54 Parts 5 and CPD Certified. It has a stylish low profile design and is available in Polar white.



Part No.	Conventional Detectors & Bases	
1	GE2002 2020P	Vision Optical Smoke
2	GE2003 2020PT	Vision Optical Heat
	GE2004 2020F	Vision Fixed Temperature Heat
5	GE2004R 2020R	Vision Rate of Rise Heat
	GE2005 2020HF	Vision High Temperature Heat
	GE2006 2020B	Vision Standard Detector Base
6	GE2006D 2020BSD	Vision Detector Base with Diode
	GE2006DB 2020DB	Vision Deep Detector Base
	GE2006DDB 2020DBSD	Vision Deep Detector Base with Diode

Part No.	Conventional Detectors & Bases	
3	ZI2002N DC-9102E	Optical c/w remote indicator output, white
4	ZI2003N DC-9103E	Fixed & Rate-of-Rise Heat/w Remote Indicator Output, White
7	ZI2006DN DB-01D	Base with Diode, White
8	ZI2006ND Z-AUXD-2P	Deep Mounting Base



Hochiki's range of conventional detectors and bases. The range is available in Ivory and White.

Part No.	Hochiki CDX Ivory	
9	HO2002N SOC-E3N	Photoelectric Smoke
	HO2003 DCD-AE3	60°C Heat
10	HO2003F DFJ-AE3	60°C Fixed Temperature Heat
	HO2004 DCD-CE3	90°C Heat
	HO2004F DFJ-CE3	90°C Fixed Temperature Heat
	HO2006D YBN-R/6SK	Schottky Diode Base
	HO2008 YBO-R/6PA	Savwire Base
11	HO2009 DFG-60BLK	Weatherproof Heat

Part No.	Hochiki CDX White	
12	HO2002NW SOC-E3N(WHT)	Photoelectric Smoke
	HO2003W DCD-AE3(WHT)	60°C Heat
13	HO2003FW DFJ-AE3(WHT)	60°C Fixed Temperature Heat
	HO2004W DCD-CE3(WHT)	90°C Heat
	HO2004FW DFJ-CE3(WHT)	90°C Fixed Temperature Heat
14	HO2006DW YBN-R/6SK(WHT)	Schottky Diode Base
	HO2008W YBO-R/6PA(WHT)	Savwire Base







**NITTAN**

Nittan Evolution range of conventional smoke & heat detectors.



Fireclass range of conventional smoke & heat detectors



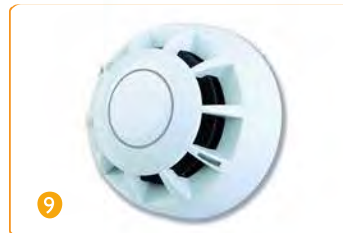
Part No.	Conventional Detectors & Bases	
1	NI2002E	EVC-P Optical Smoke Detector
	NI2002ED	EVC-DP Dual Optical Smoke Detector
2	NI2003E	EVC-H-A2S Heat Detector 54-70° C
	NI2004E	EVC-H-CS Heat Detector 84-100° C
5	NI2006ED	UB-4SD Evolution Base with Diode
6	NI2400E	EVC-IR Dual Band IR Flame Detector
	NI2402EIS	EVC-PY-IS Intrinsically Safe Optical Smoke Detector

Part No.	Conventional Detectors & Bases	
3	TY2002NFC	516.900.001 70IP Optical Smoke
4	TY2004FC	516.600.003 60IH-R Rate of Rise Heat
	TY2003FC	516.600.214 60IH-F Fixed Temperature Heat
	TY2008FC	516.600.004 60ICH Enhanced Carbon Monoxide
	TY2506FC	517.050.041 4B Detector Base
8	TY2006DFC	517.050.045 4B-D Diode Base
	TY3006DFC	577.001.037 60ISB Diode Sounder Base
7	TY2009FC	516.600.006 60IF Infrared Flame Detector



C-TEC ActiV range of conventional smoke & heat detectors.

Part No.	Conventional Detectors & Bases	
9	CT2002	C4416 Optical Smoke Detector
10	CT2003	C4403AIR AIR Rate of Rise Heat Detector
	CT2004	C4403A2 A2 Standard Fixed 60°C Heat Detector
	CT2005	C4403B B High Fixed 75°C Heat Detector
13	CT2006	C4408 Non-Diode Base
12	CT2006D	C4408D Diode Base
14	CT2006R	C4408R Relay Base
11	CT2008	C4414 Multisensor Detector



Fulleon is a leading producer of premium fire alarm signalling devices, producing life saving audible and visual units which are supplied to any country around the world.

With over 30 years experience in the design and manufacture of fire alarms from the traditional fire bell to the more innovative voice sounder, and with the growing need for alarm beacons and AV units to comply with the Disabilities Discrimination Act (DDA), there is a product to suit all applications.

- 18-28Vdc
- 12mA
- 102dB

1

- 18-28Vdc
- 12mA
- 102dB

2

- 18-28Vdc
- 18mA
- 97dB

3

- 18-28Vdc
- 68mA
- 101dB
- 1Hz

4

- W-2.4-7.5
- 18-28Vdc
- 22-37mA
- 102dB
- 1Hz

5

- 9-60Vdc
- 10-25mA
- 1Hz
- W-2.4-7.5

6

- 18-35Vdc
- 8.7-11mA
- 90dB
- 0.5Hz

7

- W-2.4-7.5
- 18-28Vdc
- 15-30mA
- 100dB
- 1Hz

8

Part No.	Solista LX Ceiling VAD
FU9010RRD	812028FULL-0165X Red Deep Base, Red Flash
FU9010WRD	812023FULL-0124X White Deep Base, Red Flash
FU9010VRS	812022FULL-0123X White Shallow Base, Red Flash
FU9010VWD	812021FULL-0122X White Deep Base, White Flash
FU9010VWS	812020FULL-0121X White Shallow Base, White Flash

Part No.	Solista LX Wall Beacon VAD
FU9011RRD	812005FULL-0107 Red Deep Base, Red Flash
FU9011RRS	812013FULL-0114X Red Shallow Base, Red Flash
FU9011RWD	812008FULL-0109X Red Deep Base, White Flash
FU9011RWS	812007FULL-0108X Red Shallow Base, White Flash
FU9011WRD	812016FULL-0117X White Deep Base, Red Flash

Part No.	Cooper Fulleon Red 6" Bell
11 FU3056RX	521601FULL-1601 Centrifugal Bell, 24V
12 FU3056ER	502001FULL-2001 Electronic Solenoid Bell, 24V

Part No.	Askari Compact Sounder
3 FU3000CRSB	550068FULL-0142XE Red, Tone Select Switch, Surface
FU3000CWBS	550072FULL-0216X White, Tone Select Switch, Surface

Part No.	Roshni Wall Sounder VAD
FU9020MRR	8500030FULL-0030X Maxi LX, Red Base, Red Flash
FU9020MRW	8500028FULL-0028X Maxi LX, Red Base, White Flash
FU9020MWR	8500029FULL-0029X Maxi LX, White Base, Red Flash
5 FU9030RVV	8500023FULL-0023X LX, Red Base, White Flash
FU9031IRR	8500025FULL-0025X LX, Red Base, Red Flash

Part No.	Roshni Sounder
1 FU3007RD	540503FULL-0403X Sounder, Deep Red Base
2 FU3007WD	540504FULL-0410X Sounder, Deep White Base
FU3703RD	593001FULL-0139 Deep Red Base, Only
FU3703RS	593005FULL-0212 Shallow Red Base, Only
9 FU3709W	631202FUL-0117E Mains Powered Deep Base, White
FU3709R	631201FUL-0109E Mains Powered Deep Base, Red

Part No.	Flashni Sounder VID
FU9060CRD	8500030FULL-0030X Red Base, Clear Lens, Deep Base
FU9060CRS	640005FULL-0034 Red Base, Clear Lens, Shallow Base
4 FU9060RRSX	640025FULL-0061X Red Base, Red Lens, Shallow Base
FU9060RRD	640031FULL-0111XE Red Base, Red Lens, Deep Base

Part No.	Squashni Sounder VAD
7 FU9070VAD	5666140FULL-1079X SQG3-23 Base Sounder VAD

Part No.	Symphoni Sounder
FU3006R	8500030FULL-0030X Sounder, Red
FU3004W	650002FULL-0004X Sounder, White

- 86-264Vac
- 100ma

9

- 9-28Vdc
- 240mA
- 120dB
- IP66

10

Part No.	Symphoni Hi-Output
FU3005R	651004FULL-0009X Sounder, Red
10 FU3005RW	651012FULL-0057X Sounder, Red, Weatherproof
FU3005W	651003FULL-0008X Sounder, White

- 20-28Vdc
- 25mA
- 95dB

11

- 18-30Vdc
- 25-35mA
- 95dB

12

Part No.	Symphoni LX Sounder VAD
FU9022RR	8500045FULL-0045X Wall, Red Base, Red Flash
8 FU9021RRVW	8500050FULL-0050X Red Base, Red Flash, Weatherproof

Cranford Controls Ltd specialise in the manufacture and supply of audible and visual warning devices along with sounders, beacons and ancillary devices for the fire, security and process control industries.

Cranford Controls offer an extensive range of approved products which have been independently tested to the appropriate standards including EN54 by the LPCB, VdS and Intertek, and are CE marked to comply with the requirements of the Construction Products Regulation (CPR).

- 17-27 Vdc
- 25mA
- 93dB



1

- 20-35Vdc
- 3-5mA



2

- 20-35Vdc
- 3-5mA



3

- 21-28Vdc
- 10-34mA
- 99dB



4

- 18-30Vdc
- 6-12mA
- 93dB



5

- 21-28Vdc
- 8-30mA
- 82-102dB



6

- 18-30Vdc
- 15-30mA
- W-2.4-8



7

- 18-30Vdc
- 15-30mA
- C-3-8



8

**Part No. VTB 32E Spatial Sounder VID**

CR9020DRA	511-101L	Deep Red Base, Amber Lens
CR9020DRR	511-097L	Deep Red Base, Red Lens
1 CR9020DWA	511-102L	Deep White Base, Amber Lens
2 CR9020DWR	511-098L	Deep White Base, Red Lens
CR9020SRA	511-099L	Shallow Red Base, Amber Lens
CR9020SRR	511-095L	Shallow Red Base, Red Lens
CR9020SWA	511-100L	Shallow White Base, Amber Lens
4 CR9020SWR	511-096L	Shallow White Base, Red Lens

**Part No. Ceiling Sounder LED VAD C-3-8**

CR9030CDRW	511-208	Deep Red Base, White Flash
CR9030CDWW	511-202	Deep White Base, White Flash
CR9030CSRW	511-207	Shallow Red Base, White Flash,
CR9030CSWW	511-201	Shallow White Base, White Flash
CR9030CDRR	511-206	Deep Red Base, Red Flash
CR9030CDWR	511-204	Deep White Base, Red Flash
7 CR9030CSRR	511-205	Shallow Red Base, Red Flash
CR9030CSWR	511-203	Shallow White Base, Red Flash

**Part No. VXB Spatial Beacon VID**

2 CR9050SRR	512-001	LED, Shallow Red Base, Red Lens
CR9050SWR	512-002	LED, Shallow White Base, Red Lens
CR9050DRR	512-003	LED, Deep Red Base, Red Lens
3 CR9050DWR	512-004	LED, Deep White Base, Red Lens

**Part No. Wall Sounder LED VAD W-2.4-8**

CR9030WDRW	511-308	Deep Red Base, White Flash
CR9030WDWW	511-302	Deep White Base, White Flash
CR9030WSRW	511-303	Shallow Red Base, White Flash
CR9030WSWW	511-301	Shallow White Base, White Flash
CR9030WDRR	511-306	Deep Red Base, Red Flash
10 CR9030WDWR	511-304	Deep White Base, Red Flash
CR9030WSRR	511-305	Shallow Red Base, Red Flash
CR9030WSWR	511-303	Shallow White Base, Red Flash

**Part No. Ceiling LED VAD C-3-8**

CR9010CDWW	512-202	Deep White Base, White Flash
8 CR9010CSWW	512-201	Shallow White Base, White Flash
CR9010CDWR	512-204	Deep White Base, Red Flash
CR9010CSWR	512-203	Shallow White Base, Red Flash

**Part No. Wall LED VAD W-2.4-8**

CR9010WDWW	512-302	Deep White. Base, White Flash
CR9010WSWW	512-301	Shallow White Base, White Flash
CR9010WDWR	512-304	Deep White Base, Red Flash
CR9010WSWR	512-303	Shallow White Base, Red Flash

**Part No. Sounders EN54 part 3**

6 CR3000EDR	510-019	VTG Sounder Deep Base , Red
CR3000EDW	510-020	VTG Sounder Deep Base, White
9 CR3000ESR	510-017	VTG Sounder Shallow Base, Red
CR3000ESW	510-018	VTG Sounder Shallow Base, White
5 CR3010EW	507-001	Base Sounder, White
1 CR3050E	309-024	Approved Centrifugal Bell 6 Inch, Red

- 21-28Vdc
- 8-30mA
- 82-102dB



9

- 18-30Vdc
- 25-40mA
- W-2.4-8
- 99dBA



10

- 21-28Vdc
- 10-34mA
- 99dB



11

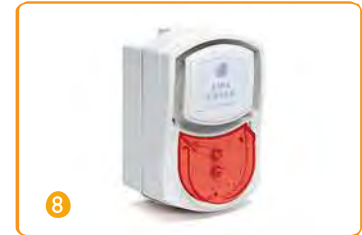
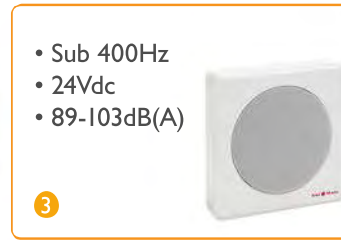
- 21-28Vdc
- 10-34mA
- 99dB



12



For 25 years VimpeX have built an excellent reputation for dependable life save fire evacuation, alarm and signalling products. Ranges including Fire-Cryer, Banshee and the new Identifire products.



Part No.	Banshee Excel Sounders	
1	VI300IRS	902CHA6AO
	VI300IWS	902CHA4AO
	VI300IGS	902CHA5AO
	VI300IRD	903CHA6AO
	VI300IWD	903CHA4AO
	VI300IGD	903CHA5AO

Part No.	Tritone Sounders	
9	VI3100RF	10-1010RFX-S
	VI3100RS	10-1010RSX-S
	VI3100WF	10-1010WFX-S
11	VI3100WS	10-1010WSX-S

Part No.	Fire Alarm Bells	
2	VI3056R	CBE6-RS-024-EN
	VI3056RD	CBE6-RD-024-EN
	VI3056RW	CBE6-RW-024-EN
	VI3057RD	CBE6-RD-230-EN
	VI3057RW	CBE6-RW-230-EN
4	VI9040	SNV0004

Part No.	Tritone VID	
	VI9100FRR	10-1310RFR-S
	VI9100FRW	10-1310RFW-S
12	VI9100FVR	10-1310WFR-S
	VI9100SRR	10-1310RSR-S
	VI9100SRW	10-1310RSW-S
	VI9100SWR	10-1310WSR-S

Part No.	Animal Friendly Sounder	
3	VI3902	ANI-S
	VI3902WP	SND-0015

Part No.	Tritone Sounder VID	
10	VI9200FRR	10-1110RFR-S
	VI9200FRW	10-1110RFW-S
	VI9200FWA	10-1110WFA-S
	VI9200SRR	10-1110RSR-S
	VI9200SRW	10-1110RSW-S
	VI9200SWG	10-1110WSG-S
	VI9200SWR	10-1110WSR-S

Part No.	Ceiling VAD	
5	VI9012CW	CBEI002-C

Part No.	Fire-Cryer Voice Sounder	
7	VI3801S	FC3/A/R/0/S
	VI3801D	FC3/A/R/0/D
	VI3802	FC3/A/W/0/S
	VI3802D	FC3/A/W/0/D
6	VI9060S	FC3/A/R/R/S
	VI9060D	FC3/A/R/R/D
8	VI3802WR	FC3/A/W/R/S
	VI3802WRD	FC3/A/W/R/D

Part No.	Voice Message Controller	
VI8802PSU	VMC/02/02/02/M2	VMC, c/w 2.5A PSU
VI8802PSUKM2	VMC/01/02/02/M2	VMC, c/w Keypad & 2.5A PSU
VI8805PSUZ	VMC/02/01/05/M3	VMC, c/w ZEP & 5.25A PSU
VI8802PSU3	VMC/02/02/05/M3	VMC c/w 5.25A PSU



Klaxon Signals are UK specialists in the design and manufacturer of world class signalling equipment. Klaxon Signals produce audible and visual signalling equipment, utilised in fire evacuation, industrial signalling and mass notification markets around the world.

- 106dB(A)
- 9-60Vdc
- 4-41mA

1

- 10-60Vdc
- 10-50mA
- 110dB(A)

2

- 17-60Vdc
- 40mA
- IP65

3

- 17-60Vdc
- 40mA
- IP65

4

- 17-60Vdc
- 45mA
- 97dB(A)

5

- 17-60Vdc
- 40mA
- IP65

6

- 17-60Vdc
- 45mA
- 97 dB(A)

7

- 17-60Vdc
- 45mA
- 97 dB(A)

8

Part No.	Sonos Sounders	
TX3002RS	PSS-0003	Sonos Red Sounder, Shallow Base
1 TX3002RD	PSS-0020	Sonos Red Sounder, Deep Base
TX3002WS	PSS-0039	Sonos White Sounder, Shallow Base
TX3002WD	PSS-0050	Sonos White Sounder, Deep Base

Part No.	Nexus Sounder	
2 TX3021R	PNS-0013	Nexus 110 Red Sounder 110dB(A)
TX3023R	PNS-0001	Nexus 105 Red Sounder 105dB(A)
TX3024R	PNS-0005	Nexus 120 Red Sounder 120dB(A)

Part No.	Sonos Pulse Ceiling VAD	
TX9010RDWF	ESB-5007	Red Deep Base, White Flash
TX9010RDRF	ESD-5007	Red Deep Base, Red Flash
3 TX9010WSWF	ESB-5006	White Shallow Base, White Flash
4 TX9010RSRF	ESD-5008	Red Shallow Base, Red Flash

Part No.	Sonos Pulse Wall VAD	
6 TX9011RDWF	ESB-5003	Red Deep Base, White Flash
TX9011RDRF	ESD-5003	Red Deep Base, Red Flash
TX9011WSWF	ESB-5002	White Shallow Base, White Flash
TX9011RSRF	ESD-5004	Red Shallow Base, Red Flash

Part No.	Sonos Pulse Ceiling Sounder VAD	
TX9023RDWF	ESC-5007	Red Deep Base, White Flash
TX9023RDRF	ESF-5007	Red Deep Base, Red Flash
7 TX9023RSRF	ESF-5008	Red Shallow Base, Red Flash
8 TX9023WDRF	ESF-5005	White Deep Base, Red Flash

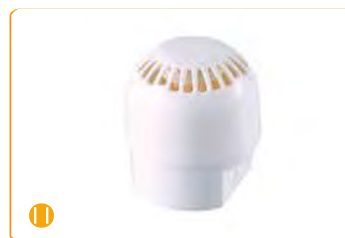
Part No.	Sonos Pulse Wall Sounder VAD	
TX9022RDWF	ESC-5003	Red Deep Base, White Flash
5 TX9022RDRF	ESF-5003	Red Deep Base, Red Flash
TX9022RSRF	ESF-5004	Red Shallow Base, Red Flash
TX9022WDRF	ESF-5001	White Deep Base, Red Flash

Part No.	Nexus Pulse Sounder VID	
TX9021RR	END-6001	105 Red Base, Red Flash
TX9020RR	END-6002	110 Red Base, Red Flash
9 TX9021RW	ENC-6001	105 Red Base, White Flash
TX9020RW	ENC-6002	110 Red Base, White Flash



Part No.	Voice Message Controllers	
10 TX9074I	PNV-0022	Fire Alarm System
TX9074G	PNV-0004	Gas Extinguishing System

Part No.	Sonos Voice Sounders	
TX3031RS	PSV-0010	Red, Shallow Base
TX3030	PSV-0009	Red, Deep Base
TX3031WS	PSV-0012	White, Shallow Base
11 TX3031WD	PSV-0011	White, Deep Base



Part No.	Sonos Voice Sounder Beacons	
12 TX9033RS	PSV-0014	Red, Shallow Base, Red Lens
TX9033RD	PSV-0013	Red, Deep Base, Red Lens
TX9033	PSV-0016	White, Shallow Base, Red LED
TX9033DRW	PSV-0015	White, Deep Base, Red LED

KAC offers a comprehensive range of indoor and outdoor call points. They are easy to install with their Plug and Play design, offer proven reliability and are designed by highly experienced engineers. They come in a full range of colour and marking options and are compliant to EN54-II and LPCB listings.

- 470 or 680 Ohm Resistors
- EN54-II
- 30VDC

1

- 470 or 680 Ohm Resistors
- EN54-II
- 30VDC

2

- NO/NC Contacts
- EN54-II
- 30VDC

3

- 470 or 680 Ohm Resistors
- EN54-II
- 30VDC

4

- 2 or 3 Position Keyswitch
- NO/NC Contacts
- 30VDC
- Trapped or Untrapped Keyswitch

5

- 2 or 3 Position Keyswitch
- NO/NC Contacts
- 30VDC
- Trapped or Untrapped Keyswitch

6

- 2 or 3 Position Keyswitch
- NO/NC Contacts
- 30VDC
- Trapped or Untrapped Keyswitch

7

- 2 or 3 Position Keyswitch
- NO/NC Contacts
- 30VDC
- Trapped or Untrapped Keyswitch

8

Part No.	Manual Call Points
1 KA400ISPR	MIA-R470SF-STCK-01 Red, Resettable
KA400ISGR	MIA-R470SG-STCK-01 Red, Glass
2 KA400ISPY	MIA-Y470SF-K013-II Yellow, Resettable
KA400ISPG	MIA-G470SF-K013-II Green, Resettable
4 KA400ISPB	MIA-B470SF-K013-II Blue, Resettable
KA4002SGR	MIA-R680SG-STCK-01 Red, 680 Ohm Resistor, Glass
KA4002SPR	MIA-R680SF-K013-01 Red, 680 Ohm Resistor, Resettable
KA4005SGR	M2A-R470SG-K013-01 Red, with LED, Glass
KA420ISPR	MIB-R470SF-K013-01 Red, Savwire, Resettable
KA420ISGR	MIB-R470SG-STCK-01 Red, Savwire, Glass

Part No.	Keyswitch Manual Call Points
7 KA4022NG	K20SGS-II Green, 2 Position, Untrapped Key
KA4022NR	K20SRS-II Red, 2 Position, Untrapped Key
KA4022NY	K20SYS-II Yellow, 2 Position, Untrapped Key
8 KA4022NB	K20SBS-II Blue, 2 Position, Untrapped Key
KA4022NWI	K20SWS-II White, 2 Position, Untrapped Key
KA4022TR	K2ISRS-II Red, 2 Position, Trapped Key
KA4022TY	K2ISYS-II Yellow, 2 Position, Trapped Key
KA4022TG	K2ISGS-II Green, 2 Position, Trapped Key

Part No.	IP67 Manual Call Points
9 KA4080PR	WIA-R470SF-K013-01 Red, Resettable, 470 Ohm
KA4080GR	WIA-R470SG-STCK-01 Red, Glass, 470 Ohm
KA4080MRG	WIA-R330SG-K013-01 Red, Glass, Mains Rated
KA4280PR	WIB-R470SF-K013-01 Red, Plastic, Savwire
10 KA4080GY	WIA-Y470SG-K013-II Yellow, Glass, 470 Ohm
11 KA4080GG	WIA-G470SG-K013-I2 Green, Glass, 470 Ohm
12 KA4083PB	W3A-B000SG-K013-II Blue, Resettable, 680 Ohm
KA4083PG	W3A-G000SF-K013-II Green, Resettable, NO/NC

Part No.	Keyswitch Manual Call Points
KA4023NR	K30SRS-II Red, 3 Position, Untrapped Key
5 KA4023TRF	K30SRS-43 Red, 3 Position, Trapped Key
6 KA4023NY	K30SYS-II Yellow, 3 Position, Trapped Key

Part No.	NO/NC Manual Call Points
3 KA4030SGG	M3A-G000SG-STCK-I2 Green, Glass
KA4030SPG	M3A-G000SF-STCK-I2 Green, Resettable
KA4030SGR	M3A-R000SG-STCK-01 Red, Glass
KA4040SGG	M4A-G000SG-STCK-I2 Green, Double Pole, Glass
KA4040SGPRM	M4A-G000SF-K013-I3 Red, Double Pole, Resettable
KA4004SPR	M4A-Y000SF-K013-II Yellow, Double Pole, Resettable

- 470 Ohm Resistor
- IP67 Rating
- EN54-II
- 30VDC

9

- 470 Ohm Resistor
- IP67 Rating
- EN54-II
- 30VDC

10

- 470 Ohm Resistor
- IP67 Rating
- EN54-II
- 30VDC

11

- NO/NC Contacts
- IP67 Rating
- EN54-II
- 30VDC

12

Part No.	Manual Call Point Spares
13 KA4701	SC070 Test Key
14 KA4700	PS200 Cover Flap
KA4702R	SR Back Box, Red
KA4704	PS210 Resettable Element
KA4705	MUS155 Pack of 5 Breakglass Spares
KA4710	MUS156 Pack of 10 Breakglass Spares







**Part No. Cooper Fulleon Call Points**

6	FU400IR	4920016FULL-0018XC	Red, 470/680 Ohm Resistor
	FU4070	4990047FULL-0420X	Red, Weatherproof
	FU4080R	4990001FUL-0022	Polycarbonate Cover
	FU4700	4990010FUL-0045	Resettable Element, Pack of 10
	FU4702	516200FULL-5017	Glass Element, Pack of 10
11	FU400IT	4990009FUL-0040	Call Point Test Key, Pack of 10

**Part No. SyCALL Call Points**

1	VI400IRDSI	SY-RD01	Red, Resettable Element
2	VI400IGDI	SY-GD01	Green, Resettable Element
	VI400IBDI	ST-BD01	Blue, Resettable Element
	VI420ISY	SY-RF03	Red, Resettable Element, Savwire
	VI4080RSI	SYV-RS01	Red, Resettable Element, IP67
	VI470ISY	SY-PC01	Hinged Protective Cover
12	VI400IKSY	SY-RK01	Reset Key

**Part No. CQR Call Points**

3	CQ4001	FP3/RD	FP3 Surface Call Point Red
4	CQ4001G	FP3/GR	FP3 Surface Call Point Green
15	CQ4001K	FP3/KEY	Spare FP3 Key
	CQ4002G	FP3/GLASS	Glass for FP3 Pack of 5

**Part No. Smart+Guard Call Point Covers**

	VII01ISR	SG-S-R	Surface, No Sounder, Red
	VII01ISG	SG-S-G	Surface, No Sounder, Green
7	VII010SG	SG-SS-R	Surface, Sounder, Red
	VII010SGG	SG-SS-G	Surface, Sounder, Green
	VII029R	SGE-SS-R	Surface, Sounder, Red, Waterproof
	VII029G	SGE-SS-G	Surface, Sounder, Green, Waterproof

**Part No. STI Europe Call Points**

5	SE4100R	RP-RS2-01	Red, 470 & 680 Ohm, Surface
	SE4001RF	RP-RF2-01	Red, 470 & 680 Ohm, Flush

**Part No. STI Europe Euro Stoppers**

	SEI010EU	STI-15C10/ML	Red, No Sounder
	SEI0010EUS	STI-15C20/ML	Red, with integral sounder

**Part No. STI Europe Keybox**

	SE4900	STI-6720	Small Keybox
	SE4900G	STI-6725	Keybox Replacement Glass

**Part No. Manual Call Point Keys**

10	KA4701O	SC061	KAC, Old Style
20	CO4707OL	MFBG KEY 2	Menvier, Old Style, Pack of 5
9	AP4701	44251-176APO	Apollo, Pack of 10
14	GE4501T	S4-34899	Gent Vigilon MCP
18	GE4703	I4112-10	Gent Conventional, Pack of 10
	HY4001T	HF-CKEY-01	Hyfire, Pack of 10
19	HW4700	CPK-03	Howler, Old Style
13	VI4700STI	RP-K/10	Nittan/Zeta/STI Test, Pack of 10
	ZE4702	43-637	Zeta CP3-Key
	ZE4703	43-060	Zeta ZT-SK/2 Key
17	FK4901K	45-0022	Fike, Pack of 5
16	ED4701	EDA-Q591	Electro Detectors
8	XSI260	Keybox	Engineers Key Set



Two-wire AlarmSense has been developed to make the installation and design 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).



Part Code	Haes AS Panels	
HA8102	ALS-2	2 Zone Panel
HA8104S	ALS-4	4 Zone Panel
HA8108	ASP-8	8 Zone Panel
HA8112	ASP-12	12 Zone Panel
HA8112R	ASP-R-12	Repeater Panel

Part Code	C-TEC AS Panels	
1 CT8102	CFP702-2	2 Zone CFP Panel Surface/Semi Flush
CT8104	CFP704-2	4 Zone CFP Panel Surface/Semi Flush
CT8108	CFP708-2	8 Zone CFP Panel Surface/Semi Flush
CT8700	CFP760	8 Zone Repeater Panel

Part Code	AS Detectors	
3 AP2102	55000-390APO	Optical Smoke Detector
5 AP2101	55000-391APO	Integrating Optical Smoke
4 AP2103	55000-190APO	AIR Heat Detector (Standard)
AP2104	55000-193APO	CS Heat Detector (High Temp)
7 AP2106	45681-244APO	Detector Base
12 AP2100	55000-835APO	Alarm Relay
8 AP4101N	55400-894APO	Manual Call Point
11 API002	53832-070APO	Mini Disc Remote Indicator

Part Code	AS Detector & Sounder	
AP2102S	55000-390APO	Optical Smoke & Sounder
AP2101S	55000-393APO	Integrating Optical Smoke & Sounder
6 AP2103S	55000-196APO	AIR Heat Detector & Sounder
AP2104S	55000-197APO	CS Heat Detector & Sounder

Part Code	AS Detector & Sounder VID	
AP2102SB	55000-394APO	Optical Smoke Detector & Sounder VID
AP2103SB	55000-198APO	AIR Heat Detector & Sounder VID
AP2104SB	55000-199APO	CS Heat Detector & Sounder VID

Part Code	AS Sounder & Sounder VID	
13 AP3100R	55000-018APO	Open Area Sounder - Red
14 AP9120R	55000-017APO	Open Area Sounder VID- Red
9 AP3110	45681-510APO	Sounder Base
10 AP9130	45681-509APO	Sounder VID Base
AP3700W	45681-294	Locking White Cap

Part Code	Kentec AS Panels	
2 KE8102S	KAI1020M2	2 Zone CPA Panel Surface
KE8104S	KAI1040M2	4 Zone CPA Panel Surface
KE8108S	KAI1080M2	8 Zone CPA Panel Surface
KE8401M2	M2FCLGT	Flush Bezel

Key Features of AlarmSense include:

- Detectors, manual call points and sounders that are connected on the same two wires
- Sounders can be wired to the same point as detectors
- Failsafe operation of manual call points when detectors are removed
- Zonal fire tracking and alarm indication
- Synchronisation of visual/audible alarms
- Detectors and manual call point alarms are identifiable separately
- Detectors and manual call points can be disabled separately
- Reduction in wiring and installation costs
- Ease of installation



The TWINFLEXpro2 two-wire fire alarm system incorporating the Multipoint ASD combined smoke and heat detector with optional built-in sounder and strobe, allows the whole system to be easily installed using only one pair of wires per zone.



• 25-35Vdc  
• 10mA  
• 97dB

**Part Code**

**Twinflexpro2 Panels**

1	FK80922	505-0002	2 Zone Control Panel - cannot use repeater
	FK80942	505-0004	4 Zone Control Panel
	FK80982	505-0008	8 Zone Control Panel
2	FK87902	505-0010	Repeater Panel - 4 & 8 Zone Only

The TwinflexPro<sup>2</sup> panel is available in 2,4 & 8 zone variants which support up to 32 Twinflex devices per circuit. The TwinflexPro<sup>2</sup> is able to recognise and separately identify between smoke detector, heat detector and a manual call point alarm. The panel also monitors each zone for detector head removal, device fault, End of line fault and open or short circuit fault. The panel provides two monitored outputs that may be configured as conventional sounder circuits, a volt free common fire relay and a volt free common fault relay. There are also two multifunction latching/non-latching inputs and one monitored input programmable with options such as Class-Change and Remote fire.

Using the Multipoint ASD detector as part of the TWINFLEXpro<sup>2</sup> two wire fire alarm system means that when a detector is wired to the system, a sounder and strobe can also be connected without extra installation time or cost. This greatly reduces the number of points that need to be installed and the time it takes to install. As the Multipoint ASD offers 7 different modes of detection, the installation is made even simpler since one device suits all applications. Whatever type of detection is required, it can be selected by the flick of a switch at the time of commissioning – 3 different smoke modes, 2 fixed temperature heat modes, a rate of rise mode and a combination smoke or heat mode.

**Part Code**

**Twinflexpro2 Detectors**

3	FK2902ASD	204-0003	Multipoint ASD Detector
	FK2902SASD	204-0001	Multipoint ASD Detector & Sounder
4	FK2902SBASD	204-0012	Multipoint ASD Detector & Sounder Strobe

**Part Code**

**Twinflexpro2 Call Points**

5	FK4901CC	402-0006	Manual Call Point, c/w Cover
	FK4901K	45-0022	Manual Call Point Keys, Pack of 5
	FK4901WC	402-0007	Weatherproof Manual Call Point, c/w Cover

**Part Code**

**Twinflexpro2 Audio/Visual**

6	FK3901R	302-0001	Hatari Sounder, Red
	FK3901W	302-0002	Hatari Sounder, White
	FK3902R	313-0021	Sound Point, Red
	FK3902W	313-0022	Sound Point, White
7	FK3903R	302-0004	Hi Point IP55 Sounder
9	FK9920LP	302-0012	Flashpoint Low Profile
	FK9920D	302-0022	Flashpoint Domed
8	FK9921W	302-0023	Weatherproof Flashpoint



**Part Code**

**Twinflexpro2 Ancillary Devices**

11	FK2918	802-0006	Input / Output Module
12	FK2502R	25-0046-201	ASD Head Removal Tool
10	FK1007	600-0092	Remote LED
	FK4901C	25-0083-303	Manual Call Point Protective Cover
	FK2506D	900-0003	ASD Deep Back Box





BiWire Flexi combines two technologies to provide a truly versatile fire safety solution. The panel can be configured to allow either two-wire or conventional devices to work on a zone. Each zone is individually configurable so a mixture of types can therefore be installed on the same system. This provides you with the flexibility to utilise all the time saving benefits of a two wire system with the ability to use a wide range of conventional devices, where required. It shares the same straightforward, intuitive as the BiWire Ultra and EFCV8Zone conventional panels, providing a proven solution for simple programming and maintenance. The BiWire Flexi fire alarm system is certified to EN54 part 2 and 4 and is designed to meet the recommendations of BS5839.



### 2-8 Zone Panel

- 200mA per zone
- EOLM-3 End of Line BiWire Zones
- EOLM-1 End of Line Standard Conventional Zones
- 2 x 12V 5Ah batteries
- IP30
- Max of 32 detectors and Manual Call Points per zone

### Part Code

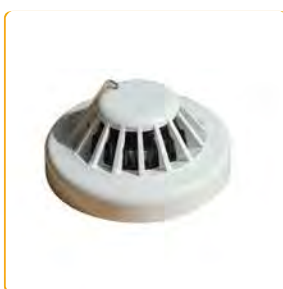
### Bi-Wire Flexi Panel

CO8202NBW	EFBW2ZFLEXI	2 Zone Panel Surface
CO8204FBW	EFBW4ZFLEXI	4 Zone Panel Surface
CO8208NBW	EFBW8ZFLEXI	8 Zone Panel Surface

The BiWire Ultra detector can be configured to one of 5 settings including 3 heat detector modes, helping to prevent false alarms in areas with known high levels of dust, fumes, steam or smoke.

DIL switch Mode Selection:

- Optical Smoke (15m Range)
- Multi-criteria opto-thermal (15m Range)
- A2R Characteristic 60°C (10.6m range)
- BS Medium Temp 77°C (10.6m range)
- CS High Temp 92°C (10.6m range)



### 5 in 1 Detector

- 360° indicator LED
- Configurable detector
- Optical detector
- 1 of 3 heat detector modes
  - Rate of rise - 60°C
  - Fixed heat - 77°C or 92°C

### Part Code

### Bi-Wire Ultra Detector & Base

CO2202BW	EFBW5INIDET	5 in 1 Detector
CO2006		Standard Base

Two versions of the BiWire Ultra callpoints are available in this range, the EF201BWCP which can be either surface or flush mounted and the EF203BWCPWP which is a weatherproof version.



### Manual Call Point

- Fast clip on cover
- High visibility LED
- Complete with test key
- H: 87 W: 87 D: 53 (mm) surface
- IP65 rated

### Part Code

### Bi-Wire Ultra Call Points

CO4200BW	EF201BWCP	Callpoint, Surface/flush
CO4200BWW	EF203BWCPWP	Callpoint, weatherproof
FU4070	CXPC	Protective hinged cover
CO4703	MBGREKIT	Resettable element kit
CO4706	FX5G	Spare break glasses (pack of 5)



### Base Sounder

- EN54-3 certified sounder
- Complete with first fix base
- Can operate as a stand alone sounder
- IP21C

The BiWire Ultra wall sounder and wall sounder VAD offers low current consumption and high sound output. It has been designed to meet EN54-3 for the sounder and EN54-23 for the beacon VAD.

The BiWire Ultra base sounder and base sounder VAD can be used both with a sensor or as a stand alone device.



### Sounder VAD

- EN54-23 certified VAD
- High sound output
- Weatherproof option
- 99 +/- 3dB(A)
- 3 tones
- IP21C

### Part Code

### Bi-Wire Ultra Sounder/ Sounder VADs

CO3200BW	EF502IBWS	Base Sounder
CO9200BW	EF502IBWSB	Base Sounder VAD
CO3210BW	EF009	Wall Sounder
CO3210BWW	EF009WVP	Wall Sounder Weatherproof
CO9210BW	EF009SB	Wall Sounder VAD
CO9210BWW	EF009SBWP	Wall Sounder VAD Weatherproof

AOV control systems are used mainly to control the ventilation of smoke in a fire. 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. They are supplied as a single or multi zone panel and are triggered by detectors or call points. This will then activate actuators to open or close.



**Part Code AOV Control Panels**

1	HAI900M	MZAOV-1001A	1 Zone Non Extendable, 3A PSU
	HAI900M2	MZAOV-1001	Two Zone, Extendable to 4, 3A PSU
	HAI900M52	MZAOV-1002	Two Zone, Extendable to 4, 5A PSU
2	HAI900M12	MZAOV-1003	Two Zone, Extendable to 8, 10A PSU
3	HAI901	MZAOV-3001	Two Zone Extension Card
4	HAI902	MZAOV-3002	PIR, Rain sensor & BMS add on card

**Part Code AOV Actuators**

5	GZ3005	147030	Slimchain 24V, 300mm, RH, 1.1A, Silver
	GZ3005W	147031	Slimchain, 24V, 300mm, RH, 1.1A, White
6	GZ3004	147040	Slimchain, 24V, 500mm, RH, 1.1A, Silver
7	GZ3003	147080	Powerchain, 24V, 600mm, 1.5A, Silver

**Part Code AOV Control Panels**

8	AP2002	55000-317APO	S65 Optical Smoke
	AP2006D	45681-201APO	S65 Detector Base, c/w diode
	HO2002N	SOC-E3N	CDX Optical Smoke
	HO2006D	YBN-R/6SK	CDX Detector Base, c/w diode

AOV actuators can be used on windows for smoke ventilation when attached to one of the AOV control panels.

When the AOV panel is triggered it sends a positive or negative (open or close) 24v DC to the actuator. This allows smoke to vent until the action is reversed by either resetting the AOV system or by reversing the trigger input (detector, call point or fire panel input).



**Standard Call Point**

- Smash Glass Activation
- 89W x 93H x 60D
- Max 30v DC
- Max 2A Current
- C NC NO - Switch

**Part Code AOV Standard Call Point**

KA4001SPO	MIA-A470SF-K013-II	Break Glass, Orange
-----------	--------------------	---------------------



**KeySwitch Call Point**

- Smash Glass Activation
- 89W x 93H x 60D
- Max 30v DC
- Max 2A Current
- C NC NO - Switch

**Part Code AOV KeySwitch Call Point**

KA4022TA	K21SAS-II	2 Position, Orange
KA40231NO	K30SAS-II	3 Position, Orange



**Rocker Switch Call Point**

- Smash Glass Activation
- 89W x 93H x 60D
- Max 30v DC
- Max 2A Current
- C NC NO - Switch

**Part Code AOV Rocker Switch Call Point**

KA4051RO	AA9201-G015-01	2 Position, Orange
KA405030RO	AA9230-G015-01	3 Position, Orange

## ExGo

The ExGo system includes a main extinguishing control panel and a range of panels and devices including repeater units, hold and abort buttons and active end of line devices. All programming is carried out at the control panel via a simple and intuitive menu structure and LCD screen. A time-stamped log tracks all activation events and can (along with all panel settings) be downloaded to a PC tool for reference, storage, filtering and printing. ExGo is approved to EN54 Parts 2, 4 & 13 and extinguishing standard EN12094-1.



### ExGo Panel

- 3 conventional detection zones
- 1 flooding/extinguishing zone
- Large countdown timer on LCD screen
- 3 sounder circuits rated at 700mA max
- RS485 link to remote status indicators
- 72hr battery standby possible
- 1,000 event log entries
- 8 additional programmable relay outputs via EXP-008 relay module

### Part Code

### ExGO Panel

AD8590	Ex-3001	3 Zone, 1 release output
--------	---------	--------------------------



### Remote Status Indicators

- Small and Compact
- RS485 network port
- Optional manual release or display only
- Surface mount or semi-flush option
- Up to 7 remote status indicators per one ExGo 1 Loop Panel
- Key switch option for mode select or enable controls
- Programmable inputs & outputs

### Part Code

### Remote Status Indicators

AD8591	Exp-3020	LCD & LED Indicators Only
AD8591MSKS	Exp-3021	LCD & LED With Mode Select Keyswitch
AD8591MRB	Exp-3030	LCD & LED With Manual Release Button
AD8591MBK	Exp-3031	LCD & LED With Manual Release Button & Mode Select Keyswitch



### Hold/Abort Buttons

- Range of finishes available
- Surface or flush mount
- IP65 option
- Complies with BS7273-1 requirements
- Standard units available in white plastic finish

### Part Code

### Hold Open Button

AD8852P	Exp-003-001	Plastic Enclosure
AD8852PW	Exp-003-065	Plastic Enclosure, IP65
AD8852B	Exp-003-003	Brass Trim Cover Plate
AD8852SS	Exp-003-002	Stainless Steel Trim Cover Plate

### Part Code

### Abort Button

AD8853P	Exp-004-001	Plastic Enclosure
AD8853PW	Exp-004-065	Plastic Enclosure, IP65
AD8853B	Exp-004-003	Brass Trim Cover Plate
AD8853SS	Exp-004-002	Stainless Steel Trim Cover Plate

## LifeLine

The LifeLine Radio Paging Panel is a hearing impaired alert system suitable for the Equality Act. It uses a quick and simple connection to the fire system via a relay or ESPA card. There are 8 volt free programmable trigger inputs and 4 programmable push buttons. The panel comes with an informative 128 x 64 graphical LCD display and is compliant with BS5839-1:2002.



### LifeLine Panel

- Fire system independent
- Message transmit every 10s until acknowledged
- 9 LED indicators, 5 user, 4 diagnostic
- Unlimited number of pagers/users
- Key-locked engineering and test functions
- Transmits at UHF 459.150 MHz
- Dedicated RS232 port supporting ESPA 4.4.4

### Part Code

### LifeLine Panel & Devices

AD0900	PX-100	LifeLine 2W Control Panel
AD0902	LL-PG	LifeLine Vibrating Pager Unit
AD09064	MXP-047	ESPA Pager Interface (for MxPro 4)
AD0906	MXP-547	ESPA Pager Interface (for MxPro 5)



### Bedside Unit & Vibrating Pillow Pad

- Used to waken an individual during alarm situation
- Pillow unit linked via wire to bedside unit which features a low frequency strobe light
- Bedside unit connects to LifeLine via a radio receiver

### Part Code

### SleepCOM Unit & Pillow Pad

AD0905	LL-SC	SleepCOM Bedside Unit & Vibrating Pillow Pad
--------	-------	--

With all radio equipment, a site survey must be completed before any installation to check suitability.



The MxPro 5 is Advanced's highest performance, analogue addressable fire alarm control panel and is approved to EN54 parts 2, 4 and 13. 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.

# MxPro<sup>5</sup>



### 1 Loop Panel

- EN54 Part 2, 4 and 13 Approved
- 1 loop
- Small enclosure
- Maximum 7Ah internal batteries
- 20 programmable LED's
- Optional programmable key switch
- Programmable Input
- Medium, Large and Deep enclosure options

### Part Code

AD8551	MX-5101
AD8551N	MX-5101N
AD8350	MXP-502
AD8350N	MXP-567
AD8351	MXP-503
AD8351F	MXP-503F
AD8450S	MXM-501

### 1 Loop Panels & Peripherals

1 Loop Panel, Apollo/Hochiki
1 Loop Panel, Nittan
Loop Card, Apollo/Hochiki/Argus Vega
Loop Card, Nittan
Standard Network Card
Fault Tolerant Network Card
Semi Flushing Bezel, Small Enclosure <sup>^</sup>



### 2 Loop Panel

- EN54 Part 2, 4 and 13 Approved
- 1 or 2 loops
- Medium enclosure
- Maximum 12Ah internal batteries
- Up to 50 additional programmable LED's
- Up to 8 programmable key switches or 4 plus printer
- Plexi-glass door option
- Large and Deep enclosure options

### Part Code

AD85521	MX-5201
AD85521N	MX-5201N
AD8350	MXP-502
AD8350N	MXP-567
AD8351	MXP-503
AD8351F	MXP-503F
AD8450M	MXM-502

### 1-2 Loop Panels & Peripherals

Panel, c/w 1 Loop Card, Apollo/Hochiki <sup>1</sup>
Panel, c/w 1 Loop Card, Nittan <sup>2</sup>
Loop Card, Apollo/Hochiki/Argus Vega
Loop Card, Nittan
Standard Network Card
Fault Tolerant Network Card
Semi Flushing Bezel, Small Enclosure <sup>^</sup>



### 4 Loop Panel

- EN54 Part 2, 4 and 13 Approved
- 1 to 4 loops
- Large enclosure
- Maximum 17Ah internal batteries
- Up to 200 additional programmable LED's
- Up to 8 programmable key switches or 4 plus printer
- Plexi-glass door option
- Deep and Extended enclosure options

### Part Code

AD85541	MX-5401
AD85541N	MX-5401N
AD8350	MXP-502
AD8350N	MXP-567
AD8351	MXP-503
AD8351F	MXP-503F
AD8450L	MXM-502

### 1-4 Loop Panels & Peripherals

Panel, c/w 1 Loop Card Apollo/Hochiki <sup>1</sup>
Panel, c/w 1 Loop Cards, Nittan <sup>2</sup>
Loop Card, Apollo/Hochiki/Argus Vega
Loop Card, Nittan
Standard Network Card
Fault Tolerant Network Card
Semi Flushing Bezel, Large Enclosure <sup>^</sup>



### Remote Terminals

- 3 types available
- Optional level 2 access enable key switch
- Programmable display for up to 2,000 zones along with sector based controls.
- TouchIO - Touch Screen Remote Control Terminal also available. A panel and network node in its own right, not a compromised extra on a fire panel

### Part Code

AD85582	MX-5802
AD845IEE	MXM-536

### 2-8 Loop Panels & Peripherals

Panel, c/w 2 Loop Cards, Apollo/Hochiki <sup>*</sup>
Semi Flushing Bezel, Extended Enclosure

### Part Code

AD8750	MX-5010
AD8751S	MX-5020
AD8752L	MX-5030
AD8451	MXM-521
AD8451L	MXM-509

### Repeater & Peripherals

Remote Display Terminal
Remote Control Terminal, Small <sup>*</sup>
Remote Control Terminal, Large <sup>*</sup>
Semi Flushing Bezel, for MX5010/5020
Semi Flushing bezel for MX5030

### Part Code

AD8710T	TOUCH-10
AD8710BB	TOUCH-10-SBB

### TouchIO Remote Control Terminal

Touch Screen Remote Terminal <sup>*</sup>
Touch Control Back Box



### AlarmCalm

- Push button operation
- Customisable slide in label
- Acknowledge signal and silence verification outputs
- LED pulse on stage one activation, constant on AlarmCalm Button activation
- Set different sounder ring styles for each event/time period

### Part Code

AD1000	MXP-541A-002
--------	--------------

### AlarmCalm False Alarm Management

Intelligent Alarm Acknowledgement
-----------------------------------

<sup>\*</sup>Fault tolerant options available.

<sup>^</sup>Stainless Steel Brushed and Mirrored Bezels and Doors are also available

<sup>1</sup>Add AD8350 to increase loops (Pre populated versions are available)

<sup>2</sup>Add AD8350N to increase loops (Pre populated versions are available)

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. Syncro AS connects seamlessly to other Syncro AS, or Syncro multi-loop panels and repeaters via the fully fault tolerant and robust Syncro network. 16 zonal LED indicators are provided as standard and the panel will support up to 50 network wide software zones.



**Syncro 1 & 2 Loop AS Panels**

- Fully EN54-2, EN54-4 approved
- Expandable from 1 to 2 loops
- 16 zonal LED indicators
- 2 programmable sounder circuits
- Supports Apollo, Argus Vega and Hochiki protocols
- 3A power supply
- Max 2 x 7Ah batteries

**Part Code**

KE8510ASK	A80161M2
KE8520ASK	A80162M2

**Syncro AS 1 & 2 Loop Panels, Apollo**

Syncro AS 1 Loop, C/W Enable Key
Syncro AS 2 Loop, C/W Enable Key

**Part Code**

KE8510HSK	H80161M2
KE8520HSK	H80162M2

**Syncro AS 1 & 2 Loop Panels, Hochiki**

Syncro AS 1 Loop, C/W Enable Key
Syncro AS 2 Loop, C/W Enable Key



**Syncro 1 & 2 Loop AS Panels**

- 5 Programmable Inputs
- 3 Programmable relays
- Large Graphic Display
- Compatible with View Repeaters
- Stores 500 last events in event log
- Comprehensive day/night mode facility

**Part Code**

KE8401M2	H80161M2
KE8402S	H80162M2

**Bezels**

Bezel for Semi Flushing Panel to Wall - M2
Syncro Flushing Collar to fit box size 500W x 355H



**Fault Tolerant Network Card**

- Up to 64 nodes
- High integrity protocol
- Fully secure against short or open circuits
- Simple 2-wire loop connection
- Repeaters share network connection
- Network wide cause and effect logic
- Flexible configuration options
- Panels configurable to act on network events or not as required

**Part Code**

KE8300	K555
KE8302A	K586A
KE831816	K560
KE83188	K547
KE83186	K546
KE83184	K545

**Kentec Syncro Ancillaries**

Syncro Fault Tolerant Network Interface Card
Syncro AS Loop 2 Extension Card, Apollo
Syncro I/O - 16 Channel I/O board
Syncro I/O - 8 Way Relay Extender Board
Syncro I/O - 6 Way Sounder Extender Board
Syncro I/O - 4 Way Conventional Detection Zone Module



**Syncro View LCD Repeater**

- Simple two wire serial connection
- 24V DC or 230V AC power options
- Up to 15 annunciators can be connected to each Syncro, Syncro Response or Syncro AS fire control panel.
- Max 2 x 1.9Ah batteries

**Part Code**

KE8702CPS	K67751M1
KE8702CS	K67001M1
KE8702PS	K67750M1
KE8702S	K67000M1

**Syncro View LCD Repeater Panel**

Enable Control, 750mA PSU, Surface
Enable Control, Surface
750mA PSU, Surface
Surface

**VIZULINX**

Vizulinx is a fire alarm management solution which enables you to monitor your fire systems remotely. Highly configurable using an embedded web server and simple configuration wizard, it can be used to pass fire system events via e-mail, SMS, Modbus and message format using an IP connection.



**Vizulinx**

- Monitor fire alarm activity on your workstation or device
- Receive alerts by email, SMS or pager
- Easy user subscription function
- Internal memory event log
- Isolated RS232 port
- Housed or module only options
- DIN rail mountable (module only)

Connection to the fire panel can be either RS232 serial data from the Syncro family of panels or up to 16 switched GPIO inputs from other fire panels (including Taktis)

**Part Code**

KE8340	K85000
KE8340M2	K85000M2

**Syncro AS 1 & 2 Loop Panels, Hochiki**

Vizulinx - Module Only
Vizulinx - Housed Version (M2)

LoopSense is an Intelligent Analogue Addressable Fire Alarm Control Panel. Available in one or two loops, the LoopSense comes packed with options and features that facilitate flexibility, ease of installation and commissioning. LoopSense is suitable for small to medium sized fire detection systems and is compatible with Apollo XP95 and Discovery detectors.



**Loopsense 1-2 Loop Panel**

- Clear back-lit 240 x 64 graphic LCD.
- 32 Zone Indication LEDs
- 500mA loop current.
- Auto learn facility.
- Removable front door and chassis.
- Range of Add Ons, including the SmartTerminal Repeater.
- Fully Approved to EN54-2 & 4
- Max 2 x 17Ah batteries

**Part Code**

AM85013M	8281-0105
AM85023M	8281-0205

**LoopSense Control Panels**

1 Loop, 500mA, 32 Zone, 3A PSU, Metal
2 Loop, 500mA, 32 Zone, 3A PSU, Metal

**Part Code**

AM8300	4310-0050
AM8301	4310-0060
AM8302	4310-0082
AM1000	8210-0001

**LoopSense Panel Add-Ons**

8 Way, Relay Board, Volt Free CO Contacts
8 Way, Sounder Board
8 Way, Conventional Zone Card
Loop Enable/Activation Key



**Smart Terminal Repeater**

- Back-lit 4 line x 40 character LCD
- Navigation keys allow the SmartTerminal to operate and interrogate the FACP
- Buzzer and system Reset
- Flush or surface enclosure
- Stand alone power supply capabilities
- Flush mount fixing kit available
- Max 30 Per LoopSense

**Part Code**

AM8700	4380-0011
AM8700PSU	4380-0012
AM8400	4210-0003

**LoopSense Repeater**

Smart Terminal Repeater without PSU
Smart Terminal Repeater with 2A PSU
Smart Terminal Recess Mount Kit

**Part Code**

AM8701	4380-0013
AM8701M	4380-0014
AM8401	4210-0002

**LoopSense Slimline Repeater**

Smart Terminal Slimline without PSU
Smart Terminal Slimline without PSU - Metal
Smart Terminal Slimline Recess Mount Kit

FireFinder Plus is an Intelligent Analogue Addressable Fire Alarm Control Panel that is available in 1 to 8 loop panel options. The FireFinder Plus is suitable for medium to large sized fire detection systems and is compatible with Apollo XP95 and Discovery Detectors. FireFinder Plus is configurable as a peer to peer network up to 100 panels/nodes with a maximum of 150 Loops.



**FireFinder 1-8 Loop Panel**

- Fully Expandable 1 to 8 Loop Fire Alarm Control Panel
- Large Graphic (240 x 64 pixel) Display
- 500mA Loop Current
- 4 Programmable Monitored Inputs
- 4 Programmable Monitored Sounder Outputs
- 5 Programmable Relays
- 2 Auxiliary Power Outputs
- Max 2 x 38Ah batteries

**Part Code**

AM8510P	8681-0108
AM8520	8681-0208
AM8530	8681-0308
AM8540	8681-0408
AM8520P	8681-0110-0001
AM85208XP	8681-0113
AM85288XP	8681-0813

**FireFinder Plus Panels**

1 Loop Panel, 32 Zone, 5A PSU, SPIM
2 Loop Panel, 32 Zone, 5A PSU, SPIM
3 Loop Panel, 32 Zone, 5A PSU, SPIM
4 Loop Panel, 32 Zone, 5A PSU, SPIM
1 Loop Panel, 32 Zone, 5A PSU, SPIX
1 Loop Panel, 64 Zone, 5A PSU, SP8X
8 Loop Panel, 64 Zone, 18A PSU, SPI6X

- SPIM - accommodates up to 4 Loops, 64 Zone LEDs (32 as standard) and 2 Add-on termination boards
- SPIX - includes a locked glazed outer door and accommodates up to 4 loops, 64 Zone LEDs (32 as standard) 2 Add-on modules and 2 Add-on termination boards.

- SP8X - has a locked glazed outer door and accommodates up to 8 loops, 64 Zone LEDs (as standard), 4 Add-on modules and 4 Add-on termination boards.
- SPI6X - comes with a locked glazed outer door and accommodates up to 16 loops (2 nodes), 128 Zone LEDs (64 fitted as standard), 8 Add-on modules and 10 Add-on termination boards



**Remote Terminals**

- Up to 30 SmartTerminal's can be connected to each FireFinder Panel
- Large LCD with Backlight
- Internal Buzzer
- Flush or Surface Mountable Enclosure
- Control Enable Key Switch
- Controls have tactile and audible feedback
- Slimline version available

**Part Code**

AM8702	8681-0108
AM87022	4380-0002
AM8703	4380-0003

**FireFinder Plus Repeater**

Smart Terminal without PSU
Smart Terminal with 2A PSU
Smart Terminal Slimline without PSU

**Part Code**

AM8308	4310-0040
AM8306P	4210-0006
AM8307	4310-0096
AM8304	8610-0001

**FireFinder Panel Add-Ons**

16 Way Input Board
Network Interface Card 2-Wire
Smart Terminal Driver Card
Slave CPU (For Even Numbered Loops)





The C-TEC XFP panel is certified to EN54-2/4 by the LPCB. It is available as a single loop 16 zone panel, a one loop 32 zone, or two loop 32 zone panel with either Apollo or Hochiki protocols. Up to eight XFP's can be interconnected, making the XFP ideal for any small to medium sized application.



#### I Loop Panel

- Approved to EN54 Part 2 and 4
- 2 sounder circuits
- 2 programmable inputs
- Fault output relay and 3 programmable relay outputs with voltage free changeover contacts
- Earth fault monitoring
- Max 2 x 3.2Ah batteries

#### Part Code

CT8501A	XFP501E/X
CT8501H	XFP501E/H
CT850132A	XFP501/X
CT850132H	XFP501/H
CT8300	CFP761
CT8308	AFP711

#### XFP I Loop Control Panels

XFP I Loop, 16 Zone, Apollo Protocol
XFP I Loop, 16 Zone, Hochiki Protocol
XFP I Loop, 32 Zone, Apollo Protocol
XFP I Loop, 32 Zone, Hochiki Protocol
XFP 16 Zone Network Driver Card
XFP 32 Zone Network Driver Card



#### I-2 Loop Panel

- Approved to EN54 Part 2 and 4
- 2 sounder circuits
- 2 programmable inputs
- Fault output relay and 3 programmable relay outputs with voltage free changeover contacts
- Earth fault monitoring
- Optional flush-mounting stainless steel enclosures
- Max 2 x 7Ah batteries

#### Part Code

CT8502A	XFP502/X
CT8502H	XFP502/H
CT8300	CFP761
CT8308	AFP711

#### I-2 Loop Control Panels

XFP 2 Loop, 32 Zone, Apollo Protocol
XFP 2 Loop, 32 Zone, Hochiki Protocol
XFP 16 Zone Network Driver Card
XFP 32 Zone Network Driver Card



#### Repeater Panel

- Max 8 repeaters per system
- Requires 2 x 3.2Ah batteries
- 16 & 32 Zone available
- Main panel requires a network communication card fitted
- Up to 500m of cable may be fitted to an XFP repeater network

#### Part Code

CT87016	XFP510-16
CT87032	XFP510-32

#### Repeater Panels

XFP 16 Zone Repeater Panel
XFP 32 Zone Repeater Panel



#### Sprinkler Panel

- Ideal for monitoring up to 126 Sprinkler flow switches
- One switch monitoring unit required per monitored flow switch
- Utilises the same technology as C-TEC's popular XFP addressable fire panel
- Up to 16 sprinkler zone indicators available (assignable via the panel's PC programming tools).

#### Part Code

CT8501SAP	SAP501E/X
CT8300	CFP761

#### Sprinkler Alarm Panel

Sprinkler Alarm, 1 Loop, 16 Zone
XFP 16 Zone Network Driver Card

The EP203 three zone automatic extinguisher panel has been designed for use in areas housing expensive, dangerous or irreplaceable items of equipment. It is third party approved by LPCB to EN12094-1 and features a 128 x 64 pixel graphic display to aid programming.



#### Extinguisher Panel

- Third part LPCB certified to EN12094 part 1 and EN54 parts 2 & 4
- Functions as a standard 3 zone fire panel with additional circuitry for controlling the release of fire suppressing gas into protected areas
- Unique 128 x 64 pixel graphical display
- Powerful 3A EN54-4 switch mode PSU
- System line terminator included with all panels
- Max 2 x 7Ah batteries

#### Part Code

CT8590	EP203
CT8390	EP212
CT8391	EP214

#### Automatic Extinguisher Panel

3 Zone Automatic Extinguisher Panel
Output Expansion Relay Board
System Line Terminator, 2 per system
Abort Button

#### Part Code

CT1090	EP210F
CT1091	EP210S
CT1092	EP211

#### Remote Status Unit

Remote Status Unit, Flush
Remote Status Unit, Surface
Economy Status Unit, Single Gang



C-TEC's EN54 Part 2 & 4 touchscreen controlled fire alarm panel has been created with the input of some of the world's fire alarm and life safety experts. It can be configured from a small 'one out, all out' system to large multi looped networked systems with sophisticated cause and effects. The panel has features such as a fully filterable 20,000+ event memory, optional paging facilities, powerful 500mA loop drivers with plug on connectors, spacious cabinets and intuitive PC programming tool.



**1 Loop Panel**

- EN54 Part 2, 4 and 13 Approved
- Apollo XP95/Discovery protocol
- Up to 64, 8 loop peer to peer panel network capacity
- Hi-integrity and single path networking options
- Max 2 x 18Ah batteries

**Part Code**

CT85123	ZFP1/20/X
CT85123P	ZFP1/20P/X
CT85143	ZFP1/40/X
CT85143P	ZFP1/40P/X

**ZFP 1 Loop Control Panels**

20 Zone LED, 3A PSU
20 Zone LED, 3A PSU, Printer
40 Zone LED, 3A PSU
40 Zone LED, 3A PSU, Printer, 2 Keyswitches



**2-8 Loop Panel**

- EN54 Part 2, 4 and 13 Approved
- Apollo XP95/Discovery protocol
- 3 cabinet sizes - standard, medium and large
- Up to 8 loops per panel (4 in a standard cabinet)
- Up to 64, 8 loop peer to peer panel network capacity
- Hi-integrity and single path networking options
- Max 2 x 18Ah batteries

**Part Code**

CT8520A	ZFP2/X
CT8540A	ZFP4/X
CT85220A	ZFP2/20/X
CT85420A	ZFP4/20/X
CT85620	ZFP6M/20/X
CT85820	ZFP8M/20/X
CT85240APK	ZFP2/40P/X
CT85440APK	ZFP4/40P/X
CT85640APK	ZFP6M/40P/X
CT85840P	ZFP8M/40P/X

**ZFP 2-8 Loop Control Panels**

2 Loop, Blank Module
4 Loop, Blank Module
2 Loop, 20 Zone LED
4 Loop, 20 Zone LED
6 Loop, Medium Enclosure, 20 Zone LED
8 Loop, Medium Enclosure, 20 Zone LED
2 Loop, 40 Zone LED, Printer, 2 Keyswitches
4 Loop, 40 Zone LED, Printer, 2 Keyswitches
6 Loop, 40 Zone LED, Printer, 2 Keyswitches
8 Loop, 40 Zone LED, Printer, 2 Keyswitches



**ZFP Ancillaries**

- Wide range of Switch & Indicator modules
- Optional thermal printers
- Wide range of flush fit bezels and attractive glazed stainless steel frames

**Part Code**

CT83104HS	Z11
CT83108FS	Z12
CT83118HS	Z13
CT831116FS	Z14
CT8320N	Z44
CT8340N	Z47
CT8561	Z51
CT8403S	ZBEZS
CT8403M	ZBEZM
CT8403L	ZBEZL

**ZFP Ancillaries**

4 Relay PCB (half size)
8 Relay PCB (full size)
8 Input Output PCB (half size)
16 Input Output PCB (full size)
20 Zone Indicator Module c/w Name Slots
40 Zone Indicator Module c/w Name Slots
Printer Module
Flush Fit Bezel for Standard Cabinet
Flush Fit Bezel for Medium Cabinet
Flush Fit Bezel for Large Cabinet



**Compact Controller**

- Flush or surface options
- Touchscreen
- Fully functional user & engineer controls

**Part Code**

CT8702F	ZREPIF
CT8702S	ZREPI S
CT8309	ZHN

**ZFP Compact Controller**

Flush c/w Hi-NET PCB
Surface c/w Hi-NET PCB
Hi-NET Multi Path Fault Tolerant Network PCB

C-TEC's Hush-ActiV is a new standalone BS 5839-6 Grade C compliant residential fire detection and alarm solution, specifically designed to better protect people and property. Easy to install and fully monitored for detector removal, wiring, PSU and battery faults, it includes easily accessible HUSH and TEST buttons to facilitate full compliance with the Equality Act and offers substantial benefits for residents, installer, landlords and more.



**Hush-ActiV**

- Grade C domestic fire detection & alarm system to BS-5839-6
- Supplied as a cost effective kit
- Controller includes a replaceable 72 hour standby battery that lasts over 10 years in normal use
- IP40
- -5°C to +40°C
- 146 W x 85 H x 25 D (mm)

**Part Code**

CTI0301	HAK/1
CTI0302	HAK/2
CTI0303	HAK/3

**HUSH-ACTIV Standalone Kit**

BS 5839-6 Grade C Stand-Alone Domestic Fire Alarm Kit
BS 5839-6 Grade C Stand-Alone Domestic Fire Alarm Kit
BS 5839-6 Grade C Stand-Alone Domestic Fire Alarm Kit

A range of intelligent fire alarm panels designed around proven and reliable microprocessor technology, which has produced a modular, scalable fire alarm platform for protecting all types of premises.

Intuitive to use and easy to install, network, configure, maintain and expand.



### 1 & 2 Loop Panel ZXSe

- EN54 Part 2, 4 and 13 Approved
- 1 or 2 loops
- 2 sounder circuits
- 4 line display and networking capability
- Maximum 2 x 12V 12Ah batteries
- Compatible with Apollo XP95, Discovery, Hochiki ESP, System Sensor and Nittan Sensortec



### 5 Loop Panel ZXSe

- EN54 Part 2, 4 and 13 Approved
- 5 loops
- 4 sounder circuits
- 4 line display and networking capability
- Maximum 2 x 12V 24Ah batteries
- Compatible with Apollo XP95, Discovery, Hochiki ESP, System Sensor and Nittan Sensortec



### 1 Loop Panel DXc

- EN54 Part 2, 4 and 13 Approved
- 1 loop
- 2 sounder circuits
- 2 onboard monitored inputs
- Maximum 2 x 12V 7Ah batteries
- Compatible with Apollo XP95, Discovery, Hochiki ESP and System Sensor



### 2 & 4 Loop Panel DXc

- EN54 Part 2, 4 and 13 Approved
- 2 or 4 loops available
- 2 sounders circuits
- 2 onboard monitored inputs
- Maximum 2 x 17Ah batteries
- Compatible with Apollo XP95, Discovery, Hochiki ESP and System Sensor



### Repeater Panel

- Compatible with all Morley-IAS intelligent multi-protocol fire alarm control panels
- Connects to RS485 peripheral bus
- Active or Passive options
- General status LEDs
- Access Enable key-switch on active repeater

### Part No.

MO8501SE	722-001-301
MO8502SE	720-001-301
MO8505SE	721-001-301

### ZXSe Addressable Panels

ZX1Se 1 Loop Panel*
ZX2Se 2 Loop Panel*
ZX5Se 5 Loop Panel*

\*also available in stainless steel

### Part No.

MO8307A	795-066-100
MO8307H	795-058-105
MO8307N	795-044-001
MO8307S	795-068-100
MO831020	795-077-020
MO831060	795-077-060
MO8308	795-004-001
MO8309	795-005
MO8881	795-060-002
MO8408	797-076
MO8880	795-051-001

### ZXSe Peripherals

Apollo Loop Card, ZXSe
Hochiki Loop Card, ZXSe
Nittan Loop Card, ZXSe
System Sensor Loop Card, ZXSe
20 Zone LED Card, for ZXSe Panels
60 Zone LED Card, for ZXSe Panels
RS485 Communication Module
RS232 Communication Module
External Printer
L-Shaped Mounting Bracket
Internal Printer Module for ZX5Se Panel

### Part No.

MO840912	797-061
MO841012	797-063
MO84095	797-062
MO84105	797-064

### ZXSe Bezels & Door Kits

ZX1Se/ZX2Se Bezel Kit
ZX1Se/ZX2Se Glass Door Kit
ZX5Se Bezel Kit
ZX5Se Glass Door Kit

### Part No.

MO8501DXC	714-001-111
MO8502DXC	714-001-221
MO8504DXC	714-001-241

### DXc Addressable Panels

DXc1 1 Loop Control Panel
DXc2 2 Loop Control Panel
DXc4 4 Loop Control Panel

### Part No.

MO8300	795-102
MO8301	795-124
MO8302	795-099
MO8303	795-122
MO8304	020-909
MO8305	020-910
MO8870	795-118
MO8840	020-891

### DXc Peripherals

40 Zone LED Card
80 Zone LED Card
DXc Network Card
DXc RS232 Card
DXc Compact Mimic Driver
DXc Expansion Mimic PCB
DXc Key Switch Kit
USB Upload/Download Lead

### Part No.

MO83114R	795-014
MO83114S	795-015
MO8312	795-038-001

### Morley Modules

4 Way, Programmable Relay
4 Way, Programmable Sounder
Hi-485 Communication

### Part No.

MO8701A	709-601-001
MO8701P	709-701-001
MO8411	020-600-002

### Repeaters & Ancillaries

Active Repeater
Passive Repeater
Bezel Kit for Repeaters



The CIE-A-200 Addressable Fire Alarm Control Panel is a one loop panel capable of supporting up to 200 devices\* with a maximum loop length of 2KM, the panel also provides two configurable monitored input circuits, 2 configurable monitored output circuits, 2 configurable + 1 fault relay and also a Peripheral bus circuit to add up to 8 repeater panels.



**CIE-A-200 I Loop Panel**

- EN54 Part 2, 4 and 13 Approved
- 1 loop
- IP30
- 2000m Loop Length
- Maximum 2 x 12V 7Ah batteries
- 500mA Loop Current
- 1000 Event Log



**Sita Detectors**

- Multi mode detection
- Self calibrating
- Short circuit isolator
- Auxiliary input facility



- 24-42Vdc
- 8mA
- 85dB
- IP21C

**Sita Detectors**

- Multi mode detection
- Self calibrating
- Short circuit isolator
- Auxiliary input facility



**Sita Sounders**

- EN54-3
- Red/White
- 95dB(A)
- W 87mm, D 78mm, H 87mm



**Sita Sounder/Strobe**

- 24-42Vdc
- 14mA
- 88dB
- IP21C

- 88dB(A)
- 3 sound patterns
- Red Les Visual Indicator
- Includes low profile base

The system may be configured utilising 3 alarm stages with full 'Zone to Zone' Cause and Effect across all 32 panel zones with provision to include alarm confirmation and delay timers. An additional 32 output zones are also provided for more complex Cause and Effect programming.

Part No.	CIE-A-200 Panel	
FK850ICIE	520-0001	Single Loop Addressable panel, requires 2 x 7ah batt

The CIE-A-200 control panel is compatible with Fike's addressable range of devices and utilizes soft addressing principles eliminating the need for the installer to physically address each device whilst also eradicating time spent on faults caused by duplicate addressing. The operating parameters of the devices are configured either from the panel or via the OSP programming software and are then stored within the Flash memory of the device itself. This enhanced digital protocol means less information is needed to be sent between the detector and the host control panel, resulting in faster, more reliable communication.

Part No.	Sita Detectors	
FK2502WB	205-0003	ASD detector
FK2502SWB	205-0001	ASD Detector with Sounder
FK2502SBWB	205-0012	ASD Detector with Sounder/Strobe
FK2506	905-0001	ASD Detector Mounting Base

Part No.	Sita Sounders & Sounder/Strobe	
FK3500R	313-0001	Sita Sound Point, Red
FK3500VW	313-0002	Sita Sound Point, White
FK3501RD	326-0003	Sita Sounder, Deep Base, Red
FK9520RLP	326-0021R	Sita Sounder/Strobe Low Profile

Part No.	Sita Manual Call Point	
FK450ICC	403-0006	Sita Manual Call Point c/w Cover

Part No.	Sita Interfaces	
FK2518	803-0005	Sita I/O Interface Boxed
FK2517	803-0006	Sita Loop I/O Mains Rated
FK2510	803-0022	Sita Monitored Output Module

The G-One is a versatile addressable single loop fire control panel with advanced connectivity and is fully CPR certified to EN54-2 and EN54-4. Designed with affordability and flexibility in mind, the G-One combines sophisticated design with easy installation and intuitive commissioning, making it the ideal solution for a wide range of single loop applications.



**G-One**

- EN54-2 & 4
- 2 x 9Ah 12v batteries
- 1 Loop
- 2 x Conventional Sounder Circuits
- 2 x Aux Fire Relays
- 1 x Aux Fault Relay
- 273mm L x 404mm H x 107mm W

**Part Code**

GF8501GN G-ONE

**G-One**

1 Loop Non Expandable

The Gekko Fire Alarm Control Panel is the successor the the JUNIOR-V4 panel. Available as a 1-4 loop panel it is housed in a ABS plastic enclosure and has a graphic backlit LCD display.



**Gekko**

- EN542 & 4
- 2 x 9Ah 12V batteries
- 1-4 Loops
- White
- 2 x Conventional Sounder Circuits
- 2 x Aux Fire Relays
- 1 x Aux Fault Relay
- 273mm L x 404mm H x 107mm W

**Part Code**

GF8501GEK GEKKO-1L  
 GF8502GEK GEKKO-2L  
 GF8503GEK GEKKO-3L  
 GF8504GEK GEKKO-4L

**Gekko**

1 Loop Panel  
 2 Loop Panel  
 3 Loop Panel  
 4 Loop Panel



**Zeos-AD**

- Dual LEDs for 360° visibility
- Advanced detection and communication protocols
- Easy installation and maintenance
- Sleek low profile housing
- White ABS
- EN54-5 & 7

The Zeos AD series of analogue addressable detectors are fully compatible with GFE's range of control panels. Certified to EN54-5 & 7, available as optical, heat and combined smoke/heat and short circuit loop isolator versions.

**Part Code**

GF2502 ZEOS-AD-S  
 GF2503 ZEOS-AD-H  
 GF2507 ZEOS-AD-SH  
 GF2506 ZEOS-BASE

**Zeos Addressable Devices**

Photoelectric Smoke  
 Heat  
 Combined Smoke and Heat  
 Detector Base



**GFE-MCPE-A**

- EN54-11
- P24D - Type A - Indoor Use
- Red, ABS
- 92.6mm W x 92.6mm H x 60.1mm L
- 152g

**Part Code**

GF4501 GFE-MCPE-AI  
 GF4501IW GFE-MCPE-AI-IP67

**Manual Call Point**

Manual Call Point, c/w Isolator  
 Manual Call Point, C/w Isolator, Weatherproof



**Audio/Visual**

- Red or White Available
- ABS and PC
- IP21C and IP65 available
- 100dB(A) Max sounder output

**Part Code**

GF3500R VALKYRIE AS  
 GF3580R VALKYRIE ASI IP65  
 GF9500R VALKYRIE ASB  
 GF9501R VALKYRIE AB

**Valkyrie**

Wall Sounder, Red  
 Wall Sounder, Red, IP65  
 Wall Mount Sounder Beacon, Red  
 Wall Mount Beacon, Red

**Part Code**

GF3500IW VULCAN2 ASI  
 GF9510 VULCAN 2 ASBI

**Vulcan**

Base Sounder, c/w Isolator  
 Base Sounder Beacon, c/w Isolator

Ziton ZP3 fire panels are packed with innovative features and practical benefits which makes the ZP3 reliable, effective and easy to use. Ziton ZP3 fire panels combine advanced panel design with high sensitivity smoke and fire sensing which enables them to not only identify and disregard conditions, which would result in false or unwanted alarms, but to recognise real fires sooner. Available in 1, 2 or 4 loop sizes, accommodating up to 508 sensing addresses.



**Part Code** **ZP2 Panels & Repeaters**

1	ZI852IL ZI852IS ZI8522L	ZP2-FI-99 ZP2-FI-S-99 ZP2-F2-99	1 Loop, Large Cabinet, No Zone LED's 1 Loop, Small Cabinet, No Zone LED's 2 Loop, Large Cabinet, No Zone LED's
2	ZI8522S ZI8700S	ZP2-F2-S-99 ZP2-FR-S-99	2 Loop, Small Cabinet, No Zone LED's Repeater, Small Cabinet, No Zone LED's

- ZP analogue addressable system
- Complies fully with EN54 parts 2 & 4
- Extensive networking ability
- Loop powered sounders
- Automatic self test
- Day/night control
- Automatic contamination adjustment for each sensor
- Self test sounder
- Event Log

**Part Code** **ZP2 Panels & Repeaters**

	ZI8532	71401	2 Loop, 230V, EN54 Approved
3	ZI8534 ZI8701	71501 71601	4 Loop, 230V, EN54 Approved Repeater, 24V (LCD & Controls)

**Part Code** **Ziton Devices - Polar White**

5	ZI2502	ZP730-2P	Optical Sensor
6	ZI2503	ZP720-3P	Heat Sensor
7	ZI2507	ZP732-2P	Combination Sensor
8	ZI2508	ZX832-3P	Intelligent Multisensor
9	ZI2506	ZP7-SBI-P	Surface Mounting Sensor Base

**Part Code** **Ziton Manual Call Point**

4	ZI4501 ZI4580	ZP785-3 ZP787-3	Flush, Red c/w EN54 Marking Weatherproof, Red, IP67
---	------------------	--------------------	--

**Part Code** **Ziton A Series Interfaces**

	ZI2512	99202	Mini Interface Unit
13	ZI2518	99102	Mini Relay Unit
14	ZI2518M ZI2519I	20130I SMB-DINI	Mini Relay Unit, Mains Switching Surface Box for A Series Module, IP66

**Part Code** **Ziton Audio/Visual**

11	ZI9530 ZI3510	ZP755BV-4P ZP755B-2P	Base Sounder Beacon, Polar White Base Sounder, Polar White
	ZI3703W	SPB-2P	Pluggable Base, Polar White
10	ZI3703R	SPB-2R	Pluggable Base, Red
	ZI9530R	17800I	Omni directional Sounder Beacon, Red
12	ZI9510C	ZP755V-P	Beacon, Polar White with Clear Lens
	ZI3580R	17860I	Weatherproof Horn Sounder, Red
	ZI9580	17870I	Weatherproof Horn Sounder Beacon
	ZI2506I	ZP7-IB2-P	Isolator Base, Polar White







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. The detectors are addressed using an Xpert Card supplied with all bases. Using a coding guide, pips are removed to set the address of the inserted detector.



**Part No.**

**XP95 Detectors**

2	AP2502	55000-600APO	Optical Smoke Detector
1	AP2503	55000-400APO	Heat Detector
	AP2504	55000-401APO	High Temperature Heat Detector
3	AP2507	55000-885APO	Multisensor Detector
2	AP2508	45681-211APO	Isolator Base
1	AP2509	55000-720APO	Isolator
4	AP2810	SA7100-100APO	Auto Aligning Beam Detector 50m
	AP2804	29600-526	Extension Kit 100m

**Part No.**

**XP95 Sounder Beacons VID**

	AP9560	45681-331APO	Sounder Beacon Base
6	AP9560I	45681-330APO	Sounder Beacon Base, c/w Isolator
5	AP9561R	55000-005APO	Red, Open-Area Sounder Beacon
	AP9580RI	55000-298APO	Red, Open-Area Sounder Beacon, IP66

**Part No.**

**XP95 Beacons VID**

	AP9550I	45681-333APO	Beacon Base, c/w Isolator
7	AP9551R	55000-877APO	Red, Loop Powered Visual Indicator

**Part No.**

**XP95 Bases**

4	AP2506	45681-210APO	Detector Mounting Base
	AP2506D	45681-209APO	Intelligent Deep Base
	AP2506LR	45681-242APO	Intelligent Low Power Relay Base
	AP2506H	45681-210APO	Intelligent Heater Base
	AP2506XCN	38532-137	Blank Xpert Card
10	AP2506I	45681-284APO	Isolating Base



**Part No.**

**XP95 Sounders**

9	AP3510	45681-278APO	Integrated Base Sounder
	AP3510I	45681-277APO	Integrated Base Sounder c/w Isolator
	AP3511	45681-276APO	Ancillary Base Sounder
	AP3501R	55000-001APO	Red, Open-Area Sonos Sounder
	AP3501W	55000-002APO	White, Open-Area Sonos Sounder
8	AP3580R	55000-274APO	Red, Open-Area Sounder, IP66



**Part No.**

**XP95 Manual Call Points**

13	AP4501NI	SA5900-908APO	XP95/Discovery c/w Isolator
	AP4583	58200-950APO	Weatherproof
	AP4583I	58200-951APO	Weatherproof c/w Isolator
	AP4700	44251-189APO	Transparent Hinged Cover
	AP4701	44251-176APO	Call Point Reset Key (Pack of 10)





Key features of Discovery include:

- Five operating modes approved and certified to CPD and EN54
- Rejection of transient signals
- Automatic drift compensation to ensure constant sensitivity

- Advanced features for audio visual devices
- 360 degree LED visibility in alarm
- Compatible with XP95 systems



**Part No. Discovery Detectors**

1	AP2532	58000-600APO	Optical Smoke Detector
2	AP2533	58000-400APO	Heat Detector
	AP2537	58000-700APO	Multisensor Detector
4	AP2535	58000-300APO	CO Fire Detector
	AP2534	58000-305APO	CO/Heat Multisensor Detector
	AP3530	45681-702APO	Integrated Sounder Base
	AP450INI	SA5900-908APO	Manual Call Point
3	AP9563I	45681-393APO	Sounder Visual Indicator Base c/w Isolator
	AP9564R	58000-005APO	Open Area Sounder Visual Indicator, Red

EN54-23 is the European standard which specifies the light output performance requirements and test criteria for VADs. Apollo has designed and manufactured a new range of devices which are approved to the new EN54-23 standard.

**Part No. Visual Alarm Devices VAD**

7	AP9523IW	45681-700APO	Discovery Sounder VAD base c/w Isolator
	AP9520IW	45681-705APO	XP95 Sounder VAD Base c/w Isolator
8	AP9510IW	45681-709APO	XP95 VAD Base c/w Isolator

**Part No. Cat W VAD Devices**

5	AP95116R	55000-741APO	Loop Powered, White Flash, Red Body
	AP95116W	55000-744APO	Loop Powered, White Flash, White Body

**Part No. Cat C VAD Devices**

6	AP95128R	55000-742APO	Loop Powered, White Flash, Red Body
	AP95128W	55000-745APO	Loop Powered, White Flash, White Body



Key features of Xpander include:

- Easy to install
- Self-monitoring
- Up to 5 interfaces per loop
- All detectors within the Xpander range are sold with mounting bases
- Xpert card addressing
- 868MHz radio signalling
- Up to 31 devices per interface
- Compatible with most XP95/Discovery systems

**Part No. Xpander Detectors**

10	AP2602	XPA-CB-12034-APO	Optical Smoke & Base
11	AP2602S	XPA-CB-14016-APO	Optical Smoke & Sounder Base
12	AP2603	XPA-CB-11170-APO	AIR Heat & Base
	AP2607	XPA-CB-13032-APO	Multisensor & Base

**Part No. Xpander Devices**

9	AP2610	XPA-IN-14050-APO	Interface Module with Isolator
	AP2702	XPA-TE-14075-APO	Xpander Survey Kit
13	AP3600R	XPA-CB-14001-APO	Sounder with Base, Red
14	AP4601	XPA-MC-14006-APO	Manual Call Point
	AP9660RR	XPA-CB-14003-APO	Sounder Beacon, Red c/w Red Base







# SOTERIA™

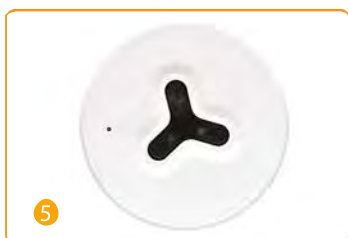
SOTERIA is a groundbreaking new range from Apollo that will introduce a step change improvement in fire detection, notification and interfacing technology.

SOTERIA detectors have been designed to operate on legacy XP95 and Discovery loops. This allows for SOTERIA detectors and bases to operate on legacy systems and for SOTERIA detectors to operate on Discovery and XP95 bases.

A universal 8 bit XPERT address card is supplied with all XPERT 8 bases. Using a coding guide, pips on the card are removed to set the address of the inserted detector. Alternatively, if the panel is CoreProtocol enabled, SOTERIA devices may be auto-addressed from the fire control panel.

Key features of the SOTERIA detectors:

- Utilises digital CoreProtocol communications
- Compatible with XP95 and Discovery systems\*
- Compatible with existing fire control panels\*
- Mechanically compatible with existing bases
- Available with or without integrated switchable isolator
- Drift compensation
- Tri-coloured LED status indicator
- Polycarbonate moulding for colour stability and strength
- Comprehensively tested to exceed EN54-7 standard
- FasTest® for quicker testing of detectors
- XPERT card addressing or auto addressing
- Locking mechanism (grub screw)



**Part No. SOTERIA Detectors**

1	AP2552	SA5000-600APO	Optical Smoke Detector
2	AP2557	SA5000-700APO	Optical/Heat Multisensor Detector
3	AP2553	SA5000-400APO	Heat Detector
4	AP2556	SA5000-200APO	XPERT 8 Intelligent Mounting Base

**Part No. SOTERIA Detectors c/w Isolator**

	AP2552I	SA5100-600APO	Optical Smoke Detector
	AP2557I	SA5100-700APO	Optical/Heat Multisensor Detector
	AP2553I	SA5100-400APO	Heat Detector

SOTERIA Dimension is a range of sleek, flat optical fire detectors for flush mounting, using chamberless fire detection technology. The new range consists of an Optical Detector designed for commercial environments with high aesthetic requirements and a Specialist Optical Detector, designed for custodial and care environments. Both detectors are flush mounted with a Mounting Box

**Part No. SOTERIA Dimension**

5	AP2542	FL5100-600APO	Dimension Optical Detector
6	AP2542S	FL6100-600APO	Dimension Specialist Optical Detector
	AP2546	FL5000-200APO	Dimension Mounting Box

Intelligent Interfaces are the latest addition to the range of CoreProtocol enabled devices launched, following the recent launch of the new Apollo SOTERIA detectors. All devices are backwards compatible with Discovery and XP95 digital communication protocols, but when used with CoreProtocol, provide enhanced functionality and individual module configurability to enable advanced programmable features.

**Part No. Intelligent Interfaces**

7	AP2518N	SA4700-102APO	Input/Output Unit
8	AP2518T	SA4700-104APO	Twin Input/Output Unit
	AP2518MN	SA4700-103APO	Mains Switching Input/Output Unit
	AP2510SN	SA4700-100APO	Switch Monitor Unit
	AP2510ST	SA6700-100APO	Twin Switch Monitor Unit
9	AP2519	55000-588APO	Three Channel Input/Output Unit
10	AP2518DN	SA4700-302APO	DIN-Rail Input/Output Unit
	AP2510DN	SA4700-300APO	DIN-Rail Switch Monitor





Hochiki's ESP intelligent Analogue Addressable range incorporates high performance sensors, a wide selection of input and output modules and ancillaries. Detectors, sounders, beacons and call points require the handheld programmer to address the device.



**Part No.**

**Modules & Enclosures**

HO2512	CHQ-DIM2(SCI)	Dual Input Module
HO2513	CHQ-DZM(SCI)	Dual Zone Monitor
HO2514	CHQ-DSC2(SCI)	Dual Sounder Controller
HO2516	CHQ-POM	Powered Output Module
HO2517	CHQ-SIM	Single Input Module
10 HO2518	CHQ-DRC2(SCI)	Dual Relay Controller
HO2518M	CHQ-MRC2(SCI)	Mains Relay Controller
7 HO2519	CHQ-SOM	Single Output Module
3 HO2570	TCH-B200	ASX Programmer
HO2900	CHQ BACKBOX	Module Back Box
HO2901	CHQ-ADAPTOR	Adapter for New Modules
HO2902W	CHQ-BOX LID(WHT)	White Module Lid
HO2903	CHQ-SUB	Sub Box Assembly

**Part No.**

**Detectors & Bases Ivory**

HO2502	ALN-EN	Optical Smoke Detector
2 HO2503	ATJ-EN	Heat Detector
HO2503WP	ACB-EW	Weatherproof Heat Detector
3 HO2507	ACC-EN	Multisensor Detector
HO2506	YBN-R/3	Detector Mounting Base

**Part No.**

**Detectors & Bases White**

1 HO2502W	ALN-EN(WHT)	Optical Smoke Detector
HO2503W	ATJ-EN(WHT)	Heat Detector
HO2507W	ACC-EN(WHT)	Multisensor Detector
HO2506W	YBN-R/3(WHT)	Detector Mounting Base

**Part No.**

**Call Points**

HO2571	PL-3	3-Way Programming Lead
14 HO4501	HCP-E(SCI)	Red, c/w SCI
HO4581R	HCP-W(SCI)	Red, c/w SCI, Weatherproof

**Part No.**

**Din Rail Modules**

HO2512D	CHQ-DIM2/DIN(SCI)	Dual Input Module
HO2513D	CHQ-DZM/DIN(SCI)	Dual Zone Monitor
HO2514D	CHQ-DSC2/DIN(SCI)	Dual Sounder Controller
9 HO2518D	CHQ-DRC2/DIN(SCI)	Dual Relay Controller
HO2518MD	CHQ-MRC2/DIN(SCI)	Mains Relay Controller

**Part No.**

**Sounders**

6 HO3500R	CHQ-WS2	Wall Sounder, Red
HO3500W	CHQ-WS2(WHT)	Wall Sounder, White
4 HO3510	YBO-BS	Base Sounder, Ivory
HO3510W	YBO-BS(WHT)	Base Sounder, White
8 HO3701	WS2-WPK	Weatherproof Kit, Red
HO2506R	YBO-R/3(RED)	Sounder Base, Red

**Part No.**

**Base Sounder VAD**

HO9531WL	YBO-BSB2(WHT)/RL	White, Red LED
HO9570WWL	YBO-BSB2/WL	White, White LED
HO9560WRL	YBO-BSB2(WHT)/WL	White, White LED
5 HO9531	YBO-BSB2/RL	Ivory, Red LED

**Part No.**

**Sounder VAD**

1 HO9560REN	CHQ-WSB2/RL	Red Flash, Red
HO9560RCLEN	CHQ-WSB2/WL	White Flash, Red
HO9570WRL	CHQ-WSB2(WHT)/RL	Red Flash, White

**Part No.**

**VAD Devices**

12 HO9550CRW	CHQ-CB/RL(WHT)	Ceiling VAD, Red Flash
HO9554	CHQ-CB/WL(WHT)	Ceiling VAD, White Lens
HO9552	CHQ-CB/RL	VAD, Red Lens



Nittan & System Sensor Addressable Devices



Evolution combines extremely reliable fire detection with a very high degree of protection against unwanted false alarms.



Established for over 25 years, the Sensortec AS range has gained an excellent reputation for reliability and ease of installation.



- STI Reset IP24 Housing
- IP24 Rating
- Dil Switched Addressed



- STI Reset IP24 Housing
- IP24 Rating
- Dil Switched Addressed



Part No.	Nittan Evolution Addressable	
6	NI2502E	EV-P Optical Detector
	NI2502ED	EV-DP Dual Optical Detector
	NI2507E	EV-PH Optical Smoke & Heat Detector
2	NI2503E	EV-H-AIR 54°C Rate of Rise Heat Detector
	NI2504E	EV-H-CS 92°C Heat Detector
	NI2502ES	EV-PYS Optical Detector with built in Sounder
3	NI2506E	UB-6-EV Detector Mounting Base
1	NI3510E	EV-SDR Base Sounder
5	NI4502E	EV-MCP2-IP24 Surface Mounting Manual Call Point
	NI2518E	EV-SIO Single Input/Output Module

Part No.	Nittan Sensortec Addressable	
8	NI2502SY	ST-PY-AS Optical Smoke Detector
4	NI2503SN	ST-H2-AS Heat Detector
	NI2700S	MTM PROGRAMMER MTM AS Programmer
7	NI4501S	AS-MCP-IP24 Manual Call Point
	NI3510S	AS-ABS Base Sounder
	NI2515S	I1ASBOX Input Monitor Module
	NI2514S	I0ASBOX Output Module
3	NI2506E	UB-6-EV Detector Mounting Base

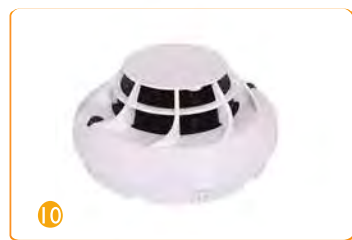


System Sensor protocol delivers more devices on the loop and gives greater control, configurability and device management.

Part No.	System Sensor Detectors & Bases	
12	SY2502W	2205IE-26 White Optical Smoke
	SY2503W	5205IRE-26 White 58°C Rate of Rise Heat
10	SY2504W	5205IHTE-26 White 78°C High Temperature Heat
9	SY2506W	B501AP White Analogue Sensor Base

Part No.	System Sensor Call Points	
1	SY400IFI	M5A-RP02FF-K013-01 MCP c/w Isolator
	SY4080	W5A-RP01SG-K013-01 MCP, c/w Isolator, IP67

Part No.	System Sensor Modules	
	SY2514S	M210E Single Input
	SY2518	M221E Dual Input, Single Control Output
	SY2521	M201E Output Control
	SY2521M	M201E-240 Output Control, 240V
	SY2901	M200E-SMB Mounting Box for Modules



Part No.	System Sensor Audio/Visual	
	SY3500R	WSO-PR-N00 Red, Wall Mounted Sounder
	SY3510W	BSO-PP-N00 Integrated Detector Base Sounder
	SY9510WC	WST-PC-N00 Wall VAD, White c/w Clear Lens Red Flash
	SY9560WR	WSS-PR-N00 Wall Sounder VID, Red, Red Flash
	SY9561WC	DSS-PC-N00 Integrated Detector Base Sounder VID

- 15-30 Vdc
- 6mA
- IP24D



The EN54 Certified Zerio Plus Radio Fire Alarm System has been designed to be engineer friendly. It is based on the highly regarded Zerio system that has been manufactured for over half a decade. With all of the popular features of its predecessor, many new features have been added to enable the system to be even more user friendly with enhanced options to help the engineers install with the minimum of inconvenience.



Part Code	Zerio Plus Panels	
1 ED8600ZP	Z5008	8 Zone Panel
ED860020ZP	Z5020	20 Zone Panel
ED860010ZP	Z5100	100 Zone Panel

Part Code	Zerio Plus Interfaces	
ED2690	TS100	Silence Button
ED2512ZP	T6080	Clean Contact Input/Output Unit

Part Code	Zerio Plus Detectors	
ED2602ZP	R5000	Optical Smoke
6 ED2602SZP	R6000	Optical Smoke with Sounder
5 ED2602SBZP	R6030	Optical Smoke with Sounder Beacon
3 ED2603ZP	D5000	Heat Detector
8 ED2603SZP	D6000	Heat Detector with Sounder
ED2603SBZP	D6030	Heat Detector with Sounder Beacon
ED2607	R5100	Enhanced Multisensor
ED2607S	R6100	Enhanced Multisensor with Sounder

**Technical Information**

- Fully addressable for 240 devices in up to 20 zones
- High visibility 4 line liquid crystal display with LED backlight
- Separate LED indication for zone of alarm
- Programmed via - Panel I2 button keypad  
- PC interface via USB memory stick  
- USB QWERTY keyboard
- Built in power supply and charger for 12V
- 72 hr standby as standard
- Programmable Fire / Fault Relay
- Programmable Sounder Circuits
- 2x Hardwired Programmable Monitored Inputs
- Compact enclosure permitting siting in restricted spaces
- Internal memory can be backed up to PC or proprietary memory card
- Programmable Function Key
- Sophisticated configuration settings allow complete user flexibility
- Complies with all applicable requirements of BS5839 and EN54

Part Code	Zerio Plus Manual Call Point	
7 ED4000ZP	C5000	Red Manual Call Point
ED4681ZP	C5040	Red Weatherproof Manual Call Point
ED4701	Q591	Manual Call Point Magnetic Reset Keys

Part Code	Zerio Plus Sounders & Beacons	
2 ED3000ZP	A6000	White Sounder
ED3000ZPC	A6001	White Sounder with Call Point Link
ED3680ZP	A6070	White Weatherproof Sounder
ED9610ZP	A6060	Red LED Beacon
4 ED9620ZP	A6030	White Sounder with Beacon
ED9682	A6072	White Weatherproof Sounder with Beacon

Part Code	Zerio Plus Sounders & Beacons	
ED1002ZP	T5100	Silence Alarm Button
ED1014ZP	Z6010	Wired Intelligent Antenna
ED1011M	Y200	Millennium 3m External Antenna
10 ED1032M	Q620	Sounder Main Battery
ED1033M	Q630	Sounder Standby Battery
9 ED1037M	Q670	Callpoint Battery Assembly
ED1039	Q690	Zerio Plus Device Battery
ED1035M	Q650	Old Callpoint Battery Assembly
ED1036M	Q660	Millennium Detector Battery Assembly

**With all radio equipment, a site survey must be completed before any installation to check suitability.**





Ziton Wireless products are EN54 certified products with 3rd party approval. They provide full wireless capability and the option for a hybrid system. Up to 127 wireless devices can be used on a 1 loop panel, with the diversity aerials giving a greater coverage.



**Part Code** **Wireless Integration Equipment**

1	ZI8602	ZPR868	Radio Loop Module
	ZI8600	ZPR868-H	Radio Hub
	ZI8601M	ZPR868-CM	Radio Cluster Communicator Mains

**Part Code** **Fire Alarm Devices 868Mhz**

2	ZI2607W	ZR432-2P	Dual Optical/Heat
3	ZI2607WS	ZR432-2PA	Dual Optical/Heat c/w Sounder Base
4	ZI2607WSB	ZR432-2PAV	Dual Optical/Heat c/w Sounder Base with Visual Indicator
5	ZI4600	ZR485-3	Manual Call Point
6	ZI2618	ZR451-3	Input/Output Unit
7	ZI3601	ZR455-3W	White Sounder
8	ZI3601R	ZR455-3R	Red Sounder

**Part Code** **Ceiling Sounder EN54-23 VADs**

11	ZI9600C	ZRC466-3C	C-3-15, Red Body, Clear Flash
----	---------	-----------	-------------------------------

**Part Code** **Wall Sounder EN54-23 VADs**

	ZI9600	ZRW466-3C	W-3.1-11.3, Red Body, Clear Flash
12	ZI9600WW	ZRW466-3WC	W-3.1-11.3, White Body, Clear Flash

**Part Code** **Wall EN54-23 VADs**

13	ZI9602RW	ZRW460-3C	W-3.1-11.3, Red Body, Clear Flash
14	ZI9602	ZRW460-3WC	W-3.1-11.3, White Body, Clear Flash

**With all radio equipment, a site survey must be completed before any installation to check suitability.**

The ZCR45 is an interface between a conventional fire detection zone and a range of wireless, 868MHz field devices. It provides a method of interfacing any conventional or closed/managed protocol fire alarm system with a zone of wireless field devices in areas where the installation of wiring is not an option.

**Part Code** **Conventional Wireless Interface**

9	ZI2800	ZRW460-3C	Conventional Wireless Interface
10	ZI28001	ZRW460-3WC	Conventional Wireless Communicator



EMS have a number of wireless / hybrid solutions available that can be utilised to meet almost any application. All are fully EN54-25 third part approved products meeting all current standards and carry the CE Mark confirming compliance with all applicable EU directives. EMS wireless solutions are based on 868MHz wireless technology.



**Syncro AS Control Panel**

- 1 or 2 Loops
- Capable to host up to 126 wireless devices per loop
- Mix of 252 wireless and wired field devices per panel

**Part No.**

EM8510LASK	FC-LA80161M2
EM8510ASK	FC-A80161M2
EM8520ASK	FC-A80162M2

**Syncro AS Control Panels**

AS Lite, 1 Loop, 16 Zone & Enable Key*
AS, 1 Loop, 16 Zone & Enable Key
AS 2 Loop, 16 Zone & Enable Key

\*Non Networkable



**Wireless Infrastructure**

- Loop or 230Vac powered
- Smart Cluster Technology
- Dual Band 868MHz
- 32 radio channel selection
- Up to 31 Firecell devices per RCC
- IP54

**Part No.**

EM8604D	FCX-500-004-V3
EM8611PO	FCX-500-444-V3
EM8701	FC-555-001-V3
EM86123	FC-555-331-V3
EM8610	FCX-532-001

**Wireless Infrastructure**

Hub, 4 Loop V3
Hub, 4 Loop w/Remote Aerial Facility V3
RCC, 230VAC, require 1x 6V 4Ah
RCC, 230VAC, w/Remote Aerial Facility, V3, require 1 x 6v 4Ah
Fusion Radio Loop Module



**Aerials**

- Quick and easy to install
- Compact enclosure
- Includes protective transparent cover
- Unique design
- Inbuilt locking mechanism

**Part No.**

EM2611	FC-868-A03
EM2611W	FC-868-D03
EM2613	FC-7329
EM1018	7325
EM2613C	RG213/30

**Aerials**

Vertically Mounted Dipole c/w 3m Coax W/Resistant Vertically Mounted Dipole c/w 3m Coax
ExternalUHF Dipole Unity Gain, c/w 5m RG58 Cable
Pole Mounting Kit
30m RG213 Cable c/w BNC Connector



**Detectors**

- Dual band 868MHz
- Fire indication LED
- Anti tamper locking mechanism
- FasTest maintenance feature
- Third party EN certified

**Part No.**

EM2603SEN	FCX-175-001
EM2604SEN	FCX-176-001
EM2602SEN	FCX-177-001
EM2606	FCX-170-001
EM9622R	FCX-191-200
EM4601	FC-20-002

**Wireless Detectors**

AIR Heat Detector, Only
CS Heat Detector, Only
Optical Smoke Detector, Only
Detector Base, Only
Sounder, Red Visual Indicator & Detector Base, Only
Red Manual Call Point, KAC front



**Audio Visual Alarm Devices**

- Dual band 868MHz operation
- 32 selectable tones
- Sounder Volume Control
- Integrated audio monitoring
- Third party EN approved
- 0.5Hz/1Hz beacon flash selection

**Part No.**

EM3610R	FC-171-002
EM3610W	FC-171-001
EM3602R	FC-172-002
EM3602W	FC-172-001
EM9631R	FC-323-CA2
EM9630R	FC-323-WA2
EM9601R	FC-315-WA2
EM9601CW	FC-315-CA1
EM9601W	FC-315-WA1

**Audio Visual Alarm Devices**

Red Base for Sounder, Only
White Base for Sounder, Only
Red Sounder, Only
White Sounder, Only
Red Ceiling Mount Beacon, Only
Red Wall Mount Beacon, Only
Red Wall Mount Sounder Beacon, Only
White Ceiling Mount Sounder Beacon, Only
White Wall Mount Sounder Beacon, Only

Iris+ is a state of the art wireless panic alarm system. Iris+ focuses on wireless safety and security. It offers flexible protection for people and property, a configurable and flexible solution.. With a comprehensive range of devices to suit a variety of applications including financial institutions, retail, healthcare, spas and gyms, education, museums and galleries, lone workers and remote building monitoring.



**Iris+ Wireless Receiver**

- Compliant to EN50131 Grade 2 & BS8243
- Up to 256 wireless transmitters
- 80 character LCD display
- Fully programmable relay outputs
- Requires 12vdc operation

**Part No. Wireless Receiver**

EM2616	7256	Wireless Receiver
--------	------	-------------------



**Handheld Panic Alarms**

- 7500/2 is fully approved for use with BS8243 Grade 2 security systems where Police response is required
- 7500/2/T and 7500/3/T are ideal where a “man down” alert is needed to protect lone workers

**Part No. Wireless Handheld Panic Alarms**

EM1021H	7500/2	2 button
EM1021HMD	7500/2/T	2 button w/man down facility
EM1022H	7500/3	3 button
EM1023HMD	7500/3/T	3 button w/man down facility

**Part No. Wireless Pendant Panic Alarms**

EM1023P	7970	2 button, includes lanyard
---------	------	----------------------------



**Police Response Equipment**

- BS8243
- Summon Police assistance via an accredited Alarm Receiving Centre or ARC
- BS8243 handset
- BS8243 Pendant

**Part No. Police Response Equipment**

EM2616	7256	Wireless Receiver
EM1021H	7500/2	Handheld Panic Alarm 2 button
EM1021P	7972	Pendant Panic Alarm 2 button for Police response



**Spa & Gym Panic Alarms**

- Environmental protected transmitters for use as:
  - Poolside Alarms
  - Staff assistance/protection
  - Late night or early morning lone operation
  - WC Alarms
  - Sauna Alarms

**Part No. Spa & Gym Panic Alarms**

EM1011	7920/PB	Wireless Push Button
EM1011PC	7920/PC	Wireless Pull Cord
EM1011AS	7920/AS	Wireless Push Button c/w Air Switch



**Asset Protection**

- Wireless technology ensures protection without taking away the enjoyment of viewing interesting historical objects.
- Movement of the protected item immediately alerts staff or management ensuring swift and effective action minimising risk
- Transmitters can be discreetly and sympathetically placed.

**Part No. Asset Protection**

EM1030	7930	Wireless Asset Protection TX
--------	------	------------------------------

**Part No. Remote Monitoring**

EM1040	7943/P	Wireless Eight Input Half Watt TXER
--------	--------	-------------------------------------

**Part No. Wireless Range Extension**

EM1050	7723	Wireless Transponder
EM2613	7329	UHT Dipole Unity Gain External Aerial c/w 5m RG58 Cable
EM1018	7325	Pole Mounting Kit
EM2613IC	RG213/10	10m of RG213 Cable c/w BNC Connector



SmartCell is the latest wireless fire detection platform developed by EMS. An innovative and flexible system for small to medium size applications developed with simplicity in mind. SmartCell can support up to 32 wireless fire devices, 32 information devices and an optional plug in communications PCB module that includes an on board SIM as well as Ethernet connectivity. An annual subscription gives access to the SmartCell Remote Services.



**Wireless Control Panel**

- Fully Wireless
- Quick and easy to install
- Compact enclosure
- 80 character OLED display
- Accommodates internal communications card for SmartCell Services connection



**Dual Smoke/Heat**

- Fully wireless
- Quick and easy to install
- Compact profile
- Flexible detection; smoke and/or heat
- Unique design
- 32 tones on sounder variant
- EN54-23 beacon on sounder beacon variant



**Manual Call Points**

- Quick and easy to install
- Compact enclosure
- Includes protective transparent cover
- Unique design
- Inbuilt locking mechanism



**Sounder/Sounder VAD**

- Fully wireless
- Quick and easy to install
- 32 sounder tones
- Unique design
- Inbuilt locking mechanism
- Part 23 VAD
- Wall/Ceiling variants



**Information Devices**

Typical Monitoring Applications

- Flood Detection
- Emergency Lighting
- Mains Loss
- Humidity Sensing
- Boiler Faults
- Assistance

**Part No.**

**SmartCell Control Panels**

UT8600AC	SC-11-1201-0001-99	Control Panel 230Vac, battery inc.
UT8600DC	SC-11-2201-0001-99	Control Panel, 24VDC, requires PSU

The SmartCell Dual Smoke/Heat detector is quick and easy to install and offers individual addressing at the SmartCell Control Panel. Feature include dual smoke and/or heat detection, bidirectional 868Mhz communication, fire indication LED, anti taper locking mechanism. 32 sounder tones and an EN54-23 beacon are available on certain models.

**Part No.**

**SmartCell Detectors**

UT2607	SC-21-0200-0001-99	Dual Smoke/Heat
UT2607S	SC-22-0200-0001-99	Dual Smoke/Heat, c/w Sounder
UT2607SB	SC-23-0220-0001-99	Dual Smoke/Heat c/w Sounder VAD

The SmartCell Call point is quick and easy to install and offers individual addressing at the SmartCell Control Panel. Features include a protective transparent cover, bidirectional 868MHz communication, fire LED and an anti taper locking mechanism.

**Part No.**

**SmartCell Manual Call Point**

UT4601	SC-51-0100-0001-99	Manual Call Point c/w Cover
--------	--------------------	-----------------------------

The SmartCell Sounder Beacon is quick and easy to install and offers individual addressing at the SmartCell Control Panel. Features include a part 23 VAD, 32 sounder tones, bidirectional 868 MHz communication and an anti tamper locking mechanism.

**Part No.**

**SmartCell Sounder/Sounder VAD**

UT3601R	SC-31-0100-0001-99	Sounder, Red
UT3601W	SC-31-0200-0001-99	Sounder, White
UT9601R	SC-33-0120-0001-99	Sounder Ceiling VAD, Red, White Flash
UT9601W	SC-33-0220-0001-99	Sounder Ceiling VAD, White, White Flash
UT9602R	SC-32-0120-0001-99	Sounder Wall VAD, Red, White Flash
UT9602W	SC-32-0220-0001-99	Sounder Wall VAD, White, White Flash

Totally independent and secondary to the fire detection system, SmartCell has been developed to incorporate functionality to monitor 3rd party equipment across the protected property.

**Part No.**

**SmartCell Information Devices**

UT1600	SC-33-0230-0001-99	White Sounder, Ceiling VID, Blue Flash
UT1601	SC-43-0200-0001-99	Contact Transmitter and Input Device
UT4601W	SC-52-0200-0001-99	White Information MCP

Ekho is a wireless based family of products which can be fully integrated into Hochiki's ESP intelligent hardwired system. At the core of the system is the wireless Translator module. It is hard wired to the fire alarm control panel loop and communicates continuously with the wireless devices. Wireless Expander modules are used to extend the radio mesh network, increasing the reach and capacity of the overall system.



Part Code	Translator Module
1 HO2617EK EK-WL8-TRH	Hybrid Wireless Translator Module

Part Code	Expander Module
2 HO2613EK EK-WL8-EXP	Wireless Expander Module

Part Code	Wireless Module
HO2614EK EK-WL8-IN	Hybrid Wireless Single Input
3 HO2616EK EK-WL8-OUT	Hybrid Wireless Single Output
4 HO2913 EK-BOX-02	Back Box for EK-WL8-IN
5 HO2912 EK-BOX-01	Back Box for EK-WL8-TRH/EXP/OUT

Part Code	Ekho Detectors
6 HO2603EK EK-WL8-H	Hybrid Wireless Heat
7 HO2602EK EK-WL8-O	Hybrid Wireless Optical Smoke
8 HO2607EK EK-WL8-OH	Hybrid Wireless Multi-Sensor
9 HO2602SVEK EK-WL8-OV	Hybrid Wireless Optical Smoke c/w Built in Voice Alarm and VAD

Part Code	Manual Call Point
10 HO4601EK EK-WL8-CP	Hybrid Wireless Resettable MCP

Part Code	Sounder
11 HO3601EK EK-WL8-SND	Hybrid Wireless Red Wall Sounder

Part Code	Survey Kit
12 HO2670EK EK-WL8-SK	Hybrid Wireless Survey Kit

The Ekho Expander modules create a self configuring mesh network, which constantly relays field device signals back to the Translator module. Each wireless device determines which Expander has the strongest signal path and automatically connects to it. The Expander mesh network guarantees an always on connection between the wireless devices and the Translator/fire control panel.

Part Code	Spare Batteries
HO2690EKM Primary Battery	Primary Battery
HO2690EKS Secondary Battery	Secondary Battery



**With all radio equipment, a site survey must be completed before any installation to check suitability.**

Solo 365 is an exciting, new innovation for testing smoke detectors. It offers everything the industry expects from the popular Solo brand, pairing it with the very latest technology and wrapping it in a new modern slim-line design.



**Solo 365 Smoke Detector Tester**

- ‘Auto-LED’ – for testing in dark areas
- ‘Auto-Start’ proximity sensor to automatically initiate test
- Flexible head – easier testing of hard to access detectors



**Solo 365 Smoke Generator**

- Field replaceable part
- Fits simply into rear of Solo 365



**Solo 365 Smoke Cartridge**

- Non-flammable
- Non-pressurised
- Provides same number of tests as Solo A3



**Solo 365 Battery Pack**

- Rechargeable Lithium Ion Battery
- Available as single unit



**Solo 365 Test Cup**

- Field replaceable part
- Simple to fit

**Part No.**

**Solo 365**

SO67365001	365-001	Smoke Detector Tester
SO361200IPK	ES3-PACK-001	Smoke Cartridge
SO673701	370-IPACK-001	Battery Pack
SO673711001	371-IPACK-001	Smoke Generator

Solo 365 is approved by leading detector manufactures. The detector friendly smoke, generated via non-pressurised capsules, is compatible with the widest range of detectors and offers improved performance at low temperatures. Solo 365 is 15% lighter than the traditional Solo dispenser, supporting easier movement around site and when testing.

**Part No.**

**Solo 365 Test Kits**

SO67908001	908-001	Test Kit, 4 Metres
SO67909001	909-001	Test Kit, 6 Metres
SO67911001	911-001	Test Kit, 6 Metres c/w Removal Tool
SO67900001	900-001	Test Kit, 9 Metres

Key features of the Solo 365 are:

- ‘Auto-start’ proximity sensor - faster testing, less smoke waste
- Auto -LED torch - allows simple testing of detectors in dark areas
- Slim-line design - easier access to detectors in confined spaces
- Clearing mode - eliminates re-alarms, increasing productivity
- Delayed start mode - for non-standard detectors and ASD systems

**Part No.**

**Solo 365 Test Kits**

SO671058001	1058-001	Solo 365 Test Cup
SO671059001	1059-001	Solo 365 Membrane
SO671060001	1060-001	Solo 365 Charger & USB Lead
SO67360001	360-001	Solo 365 Service Pack



Solo is the industry's most popular range of detector test equipment. Used by thousands of fire system maintenance companies and individuals worldwide to ensure smoke, heat and CO detectors are fit for purpose, ready to activate in the event of a fire.



Part No.	Detector Tester Aerosols
3 SO6700SS	SMOKESABRE-01-001 SmokeSabre Smoke, 150ml
4 SO67005ST	A5-001 A5-001 Smoke, 250ml
6 SO6700CO	C3-001 C3-001 CO, 250ml

Part No.	Telescopic Extension Poles
SO67100001	100-001 Fibreglass Pole 4.5 Metres
7 SO67108001	108-001 Fibreglass Pole 2.2 Metres
SO67101001	101-001 Fibreglass Pole 1.13 Metres

Part No.	Smoke Test Set
SO67810001	810-001 Starter Pack, 2.5M
SO67808001	808-001 Starter Pack, 4M
SO67809001	809-001 Starter Pack, 6M
SO67811001	811-001 Test & Removal Set, 6M
SO67812001	812-001 Test & Removal Set, 8.2M

Part No.	Heat Test Set
SO67461001	461-001 Cordless Heat Detector

Part No.	Smoke Test Set
SO67814001	814-001 Smoke & Mains Heat, 6M
5 SO67822001	822-001 Smoke & Cordless Heat, 6M*
SO67823001	823-001 Smoke & Cordless Heat, 9.3M*

Part No.	Smoke & CO Testers
1 SO67330001	330-001 Aerosol Smoke & CO Dispenser

Part No.	Heat Testers
2 SO67460001	460-001 Cordless, Head Unit Only
8 SO67423001	423-001 Heat Detector, 110/120 Volt
SO67424001	424-001 Heat Detector, 220/240 Volt

Part No.	Removal Tool
3 SO67200001	200-001 Detector Removal Tool

The all in one test solution, Testifire allows for compliant functional testing of heat, smoke and CO fire detectors, whether they are single or multi-sensor detectors.

Part No.	Testifire
9 TE68100001	1000-001 Smoke/Heat Head Unit
TE68100101	1001-001 Smoke/Heat Kit
TE68600101	6001-001 Smoke/Heat Kit to 6 Metres*
TE68900101	9001-001 Smoke/Heat Kit to 9 Metres*
10 TE68200001	2000-001 Smoke/Heat/CO Head Unit
TE68200101	2001-001 Smoke/Heat/CO Kit*
TE68920101	9201-001 Smoke/Heat/CO Kit, 9M*
TE6825001	TF25-001 Remote Control for Testifire



Part No.	Testifire
TE6806P	TS3-6PACK-001 6 Pack, Smoke
12 TE6803P	TS3-3PACK-001 3 Pack, Smoke
TE6806COP	TC3-6PACK-001 6 Pack, CO
11 TE6803COP	TC3-3PACK-001 3 Pack, CO



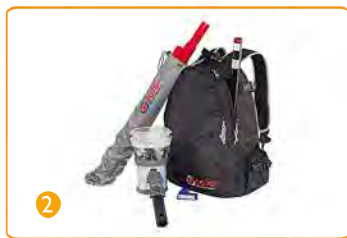
\* Complete with 2 battery batons



Designed with portability in mind, the new range of Urban fire detector test kits allow engineers to move easily around towns, large sites, or buildings without the need to carry bulky poles and bags. Urban telescopic and extension poles are half the length of conventional poles. Engineers are able to test smoke, heat, CO, or multi-sensor detectors at heights up to 5 metres.



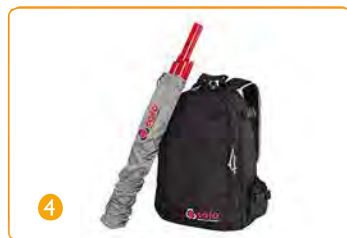
- 1 x Urban Backpack (inc. Pole Bag)
- 1 x Urban 4- section Telescopic pole 1.75m
- 3 x Urban Extension Pole 0.5m
- 1 x Solo 365 Smoke Kit



- 1 x Urban Backpack (inc. Pole Bag)
- 1 x Urban 4- section Telescopic pole 1.75m
- 3 x Urban Extension Pole 0.5m
- 1 x Testifire 1001-I Smoke/Heat Detector Tester



- 1 x Urban Backpack (inc. Pole Bag)
- 1 x Urban 4- section Telescopic pole 1.75m
- 3 x Urban Extension Pole 0.5m
- 1 x Testifire 1001-I Smoke/Heat/CO Detector Tester



- 1 x Urban Backpack (inc. Pole Bag)
- 1 x Urban 4- section Telescopic pole 1.75m
- 3 x Urban Extension Pole 0.5m

**Part No.**

**Urban Test Kits**

1	SO6736500IU	Urban365-001	Smoke Test Kit to 5 metres
2	SO671001100IU	Urban1001-I-001	Smoke/Heat Test Kit to 5 metres
3	SO6720001100IU	Urban2001-I-001	Smoke/Heat/CO Test Kit to 5 metres
4	SO67613001	URBAN613-001	Backpack & Poles Kit



Scorpion is the solution for buildings with hard to access detectors. Suitable for both point and aspirating smoke detection (ASD) systems, Scorpion ensures all smoke detectors can be tested, regardless of location.

The Scorpion head unit is permanently installed adjacent to a point detector or sampling hole on an Aspirating Smoke Detection pipe (typically the furthest sampling hole).

The smoke generator is connected to an access point mounted at a convenient, easy to access location at ground level. Functional testing of the detector is then easily and safely achieved by connecting a portable controller (carried by the engineer) to the access point.

Scorpion can be retrofitted to existing system or installed with new systems. The time and effort to install Scorpion to an existing system is quickly absorbed by the time and effort taken to test the system without Scorpion.

**Part No.**

**Scorpion Smoke Detection**

6	SO671001	SCORP 1001-01	Scorpion Point Head Unit Kit
5	SO2011001	SCORP 2011-001	Scorpion ASD Head Unit Kit
	SO6725001	SCORP 25-001	Scorpion Access Point
7	SO6745	SCORP 45	Scorpion Portable Control Unit
	SO6750	SCORP 50	Scorpion Battery Pack
8	SO678000	SCORP 8000-001	Scorpion Control Unit

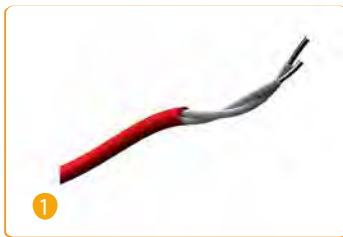




Linear heat detection provides early detection of fire conditions or overheating of equipment, plant or the surrounding area. Signaline linear heat detection cables are conventional heat detectors in a linear form. They sense heat anywhere along their length and are designed to be used in commercial and industrial applications. Heat sensing cables can be used with or in place of conventional heat detectors or where conventional heat detection is expensive or difficult to install and maintain.

Available in three different alarm temperatures, 68°C, 88°C or 105°C which are UL Listed and FM approved and two cover options for the 68°C and 105°C cables. A high temperature cable of 185248C is also available to provide a full range of fixed temperature heat sensing cables.

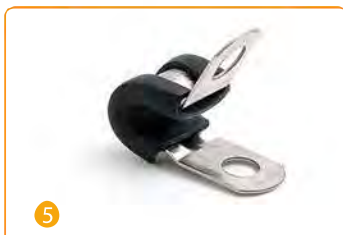
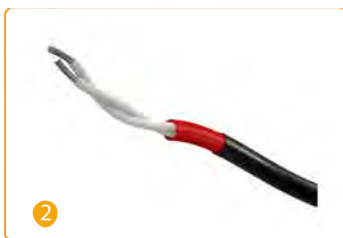
Signaline FT heat sensing cables can be used as a standalone system or connected to any conventional control panel and can cover up to 3km in a single zone.



- Conductor Resistance: 0.100 Ω/m at 20°C
- Max Voltage: 42Vdc/30Vac
- Dielectrical Withstand (UL): 500Vdc
- Tensile Strength: 1700N/mm<sup>2</sup>
- Minimum Bend Radius: 75mm
- Weight: 12Kg per 500m

**Part No.****Signaline FT Cable**

1	SL8768R	FT68	68°C, Red, per metre
2	SL8768B	FT68R	68°C, Black Nylon, per metre
	SL8788W	FT88	88°C, White PVC, per metre
3	SL87105W	FT105	105°C, White PVC, per metre
	SL87105B	FT105R	105°C, Black Nylon, per metre
	SL87185R	FT185R	185°C, Red Nylon, per metre



Part Ref.	Alarm Temp. (°C)	Max. Ambient Temp. (°C)	Outer Sheath Material	Colour	Overall Dia. (mm)	Approval
FT68	68	45	PVC	Red	3.5	FM/UL
FT68R	68	45	Chemical Resistant Nylon	Black	4.5	UL
FT88	88	70	PVC	White	3.5	FM/UL
FT105	105	85	PVC	White	3.5	FM/UL
FT105R	105	85	Chemical Resistant Nylon	Black	4.5	UL
FT185R	185	125	Chemical Resistant Nylon	Red	3.6	UL

The Signaline Universal Connector Box can be used as an end of line unit, junction box or an interposing line unit. It is supplied with appropriately sized cable glands, terminal block and 470Ω and 680Ω resistors. These resistors allow Signaline FT cable to be connected directly to the zone terminals of most conventional fire control panels.

The IP66 rated enclosure provides a quick and efficient method to interconnect, terminate and join lengths of any Signaline heat sensing cable.

It can also be used for connecting the incoming leader cable to the start of a length of heat sensing cable.

Note: It cannot be used with the 185°C cable.

**Part No.****Signaline Connector Box**

4	SL8300	SL-UCB	Universal Connector Box
---	--------	--------	-------------------------

**Part No.****Signaline FT Cable**

	SL8301A	A Clip	A Clip - Nylon, per 100
	SL8301	J Clip	J Clip - per 100
	SL8301K	K Clip	K Clip - Nylon, per 100
5	SL8301P	P Clip	P Clip - Stainless Steel, per 100
	SL8301T	T Clip	T Clip - Nylon, per 100



Hydrosense leak detection systems are designed to protect areas where water ingress could seriously damage electrical, communication and computer networks. It continuously monitors for water leaks and has the facility for 72 hour battery standby in the event of power failure.



**Hydrosense Panel**

- Fully monitored alarm and detection circuits
- Up to 72 hour battery standby
- Common fault and alarm relay contacts available
- 385 x 310 x 90mm



**Leak Detection Probe Junction Box**

- 160 x 115 x 45mm (inc Housing)
- 200g (inc Housing)
- 1 probe per junction box



**End of Line Device**

- Blue
- 6,800 Ohms Resistor Value
- 0.50W Power Rating
- 20g



**Hydrowire Connection Interface**

- 160 x 115 x 45mm (inc Housing)
- 200g (inc Housing)
- 50 metres (max) Hydrowire Acceptance



**Leak Detection Probe**

- Blue
- 1m (+/- 50mm) Lead-in Cable
- Blue LED when in alarm
- 120g

**Part No. Conventional HS Panels**

VI8092	HSCP-S-2-230	Leak Detection Panel 2 Zones
VI8094	HSCP-S-4-230	Leak Detection Panel 4 Zones
VI8098	HSCP-S-8-230	Leak Detection Panel 8 Zones
VI870224	HSRP-S-2-24	Repeater Panel 2 Zones, 24V
VI870424	HSRP-S-4-24	Repeater Panel 4 Zones, 24V
VI870824	HSRP-S-8-24	Repeater Panel 8 Zones, 24V

**Part No. HS Detection Components**

VI2915	HS-WLDP	HS Leak Detection Probe
VI8902HJB	HS-WLJB	Leak Detection Probe Junction Box
VI8910	HS-HWCI-EOL	Hydrowire HS End of Line Device
VI8909	HS-HWCI	Hydrowire Connection Interface
VI2917	HSCP-AP	Ancillary PCB for Hydrosense HS Panel
VI2901	HYDW-05	Hydrowire 5m

When the panel detects a leak it sounds an alarm which can be extended to a remote location. When an alarm is raised, Hydro-Cryer voice sounders can be used to broadcast an unambiguous message, avoiding confusion with other sounders on site.

Point detection is provided by Hydrosense floor or drip tray probes, these are fixed to the floor or drip tray and adjusted to give the required detection level and connected to the control panel via a Hydrosense water leak detection module.

**Part No. Addressable ID Panels**

VI85901	IDAP-S-1-230	Leak Detection Panel 1 Loop
VI85902	IDAP-S-2-230	Leak Detection Panel 2 Loop
VI87024	IDAP-S-R-24	Leak Detection Repeater Panel 24V
VI870230	IDAP-S-R-230	Leak Detection Repeater Panel 230V

**Part No. ID Detection Components**

VI2910	ID-WLDM	Addressable Interface Module
VI2911	ID-WLDP	ID Leak Detection Probe - 1m cable
VI2901	HYDW-05	Hydrowire 5m
VI2902	ID-WLDM-EOL	Hydrowire ID End of Line Device
VI2918M	ID-WLMRC	Hydrosense ID Mains Relay Controller
VI2912	ID-SIO-016	Serial I/O Module, 16 Channel I/O
VI2913	ID-SIO-08R	Serial I/O Module, 8 way relay
VI2914	ID-SIO-4S	Serial I/O module, 4 way monitored input

The new Hydrosense systems provide both linear detection using Hydrowire and point detection using probes. Linear detection Hydrowire is a flexible cable which will continuously monitor large areas. Even small amounts of water or moisture coming into contact with Hydrowire will trigger an alarm.

The Standard Fire Beam Xtra package comes complete with the head unit, the low level controller, a single reflector, a user manual and a 3mm allen key. It covers distances from 7-70metres and with a range kit can cover up to 160metres. With revised optics, multi language support, Auto-Align On/off and Time Delay, Beam Phasing and Hysteresis, the Firebeam Xtra is the most advanced fire beam produced by the Firebeam Company.



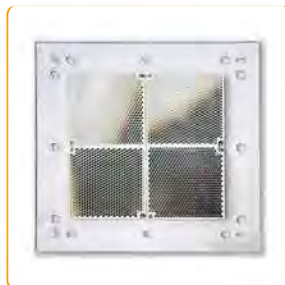
**Low Level Controller**

- Commission the beam from ground level
- View the air quality
- View the status of the beam
- Change sensitivity thresholds
- See fire and fault counts
- Complete a self test



**Firebeam 7m - 70m Detector**

- Utilises high quality stepper motors to make micro adjustments of 1/40 of 1 degree to beam head
- Continually monitors any movement and re-aligns automatically.



**70-140 Metre Extension kit**

- Cover distances between 70 and 140 metres
- Pre drilled to suit Unistrut system



**FireBeam Mounting Plate**

- Clear acrylic plate allows easy mounting of the FireBeam Head unit to Unistrut fabrication



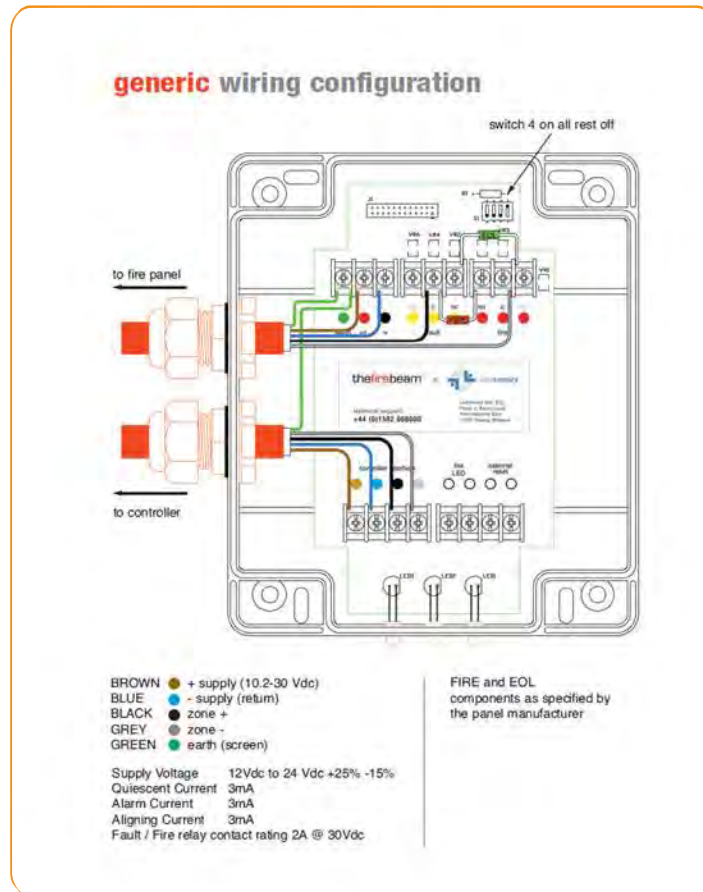
**Spare Anti Fog Reflector**

- Kit consists of Retro Fit Lens that is fitted to the front of the beam face and a single reflector. Featuring a nano coating that prevents condensation from forming.

Part No.	FIREBEAM	FireBeam Xtra
FB2840X	FIREBEAM	Firebeam Xtra including controller

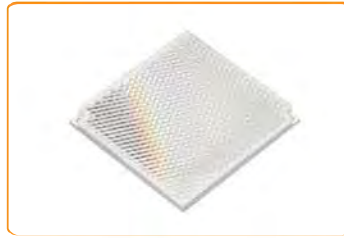
Part No.		FireBeam Extension Kits
FB284140	70KIT140	Range extension kit 70-140 metres
FB284160	140KIT160	Range extension kit 140-160 metres
FB2841X	REFLECTOR	Single Reflector for Firebeam XTRA

Part No.		FireBeam Extension Kits
FB2840FX	FIREBEAM XTRA-AF	Firebeam Xtra Anti Fog
FB2842X	FOGKIT	Anti-Fog Window for head and single anti-fog reflector
FB2842140	70KIT140-AF	Anti fog extension kit 70-140 metres
FB2842160	140KIT160-AF	Anti fog extension kit 140-160 metres



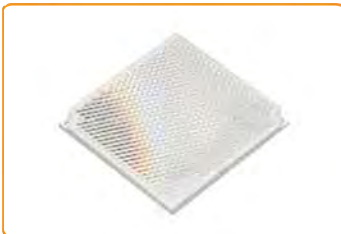


With no specialist tool or knowledge needed for installation and operation, the Fireray One is a standalone beam detector that prioritises ease of installation. Using the Fireray One, it couldn't be easier to bring the benefits of beam detection to your application.



Part No.		Fireray One
FF2810	6010-100	Fireray One Beam Detector
FF2810C	1100-000	Fireray One Protective Cage
FF2811	1010-000	Fireray One Long Range Kit (for 50 to 120 metres)
FF2812	1260-000	Fireray One Backbox

The Fireray® 5000 motorised reflective auto aligning infrared optical beam smoke detector can be installed with up to two detector heads per system, thus saving on installation time and costs. In addition, each system controller houses two pairs of fire and fault relays, one per detector. The Fireray® 5000 combines an infrared transmitter and receiver in the same discrete unit and operates by projecting a well-defined beam to a reflective prism, which returns the beam to the receiver for analysis.



Part No.		Fireray 5000 Beam Detectors
FF2850C	5000-003	Controller Only
FF2851P	5000-002	Detector with 50m Prism
FF2851PC	5000-101	System with Controller & 50m Prism
FF2852P	5000-039	Single Detector with 100m Prism
FF2852PC	5000-102	System with Controller & 100m Prism
FF2852UB	5000-005	Universal Bracket for Fireray 5000
FF2852IPP	5000-008	Single Prism Plate (Requires FF2852UB)
FF28524PP	5000-007	Four Prism Plate (Requires FF2852UB)
FF2851C	1000-018	Protective Cage for Fireray 5000



Talentum flame detectors are ideal for applications where fast acting and accurate detection of fire is essential. Using infra-red(IR) sensing technology, they can detect flames from all fuel types, from hydrocarbon fires with 4.3µm emissions through to invisible fires such as hydrogen. Talentum detectors can detect flames 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 Talentum detectors are highly immune to false signals such as sunlight.



Part No.		Talentum Flame Detectors & Accessories
FF2820	16581	Dual IR² Flame Detector
FF2820FP	16511	Dual IR² Flame Detector Flameproof
FF2821	16589	Triple IR³ Flame Detector
FF2821IS	16579	Triple IR³ Flame Detector Intrinsically Safe
FF2822	16591	UV/IR² Flame Detector
FF2822FP	16521	UV/IR² Flame Detector Flameproof
FF2823	16580	Single IR Spark Detector
FF2823IS	16570	Single IR Intrinsically Safe Spark Detector
FF2890TB	07127	Adjustable Mounting Bracket
FF2891TWS	12545	Stainless Steel Weather Shield for alloy housing
FF2891TWSE	7279	Stainless Steel Weather Shield for EXD housing
FF2892	16091	Flame Detector Test Unit



HSSD Systems work by drawing air continually from the protected area into a pipe network and transporting it to a detector unit. Unique laser technology detects any smoke and measures it against alert and alarm thresholds programmed into a fire control panel.



Part No.	Airsense Pipe, Fittings & Accessories	
3 AS7701	9-10900	Red, Pipe, 3m Lengths
AS7705	9-10908	Red, Socket
5 AS7703	9-10906	Red, 90° Bend
6 AS7704	9-10905	Red, 45° Bend
4 AS7707	9-10927	Red, End Cap
AS7710	9-10915	Red, Socket Union
AS7709	9-10909	Red, T Piece
AS7706	9-10954-25	Red, Pipe Clip
8 AS7902	9-10950	Solvent Cement
AS7906	9-30072-P	HSSD Replacement Cartridge
AS7905	9-30095	Stratos Quadra Replacement Filter
7 AS7904	9-30699N-P	HSSD Dust Filter (mark 2)

Part No.	Airsense Detectors	
1 AS7802	9-30621	Stratos HSSD-2
2 AS7804	9-30671	Stratos Micra 25
AS7804DR	9-30760	Stratos Micra 25 & Relay Input Card
AS7803	9-30672	Stratos Micra 100

ModuLaser is a scalable aspirating smoke detection solution that makes installation easier, maintenance quicker, and takes applications further than traditional air sampling detectors. Two basic module types comprise the ModuLaser solution: a display module, and a detector module. Each detector module can accommodate up to 250 meters combined sampling pipe. Display modules and detector modules communicate by RS-485 interconnections.

Thanks to advanced features that make it virtually impervious to dust and dirt, ModuLaser is ideal for use in hostile environments that would disable other kinds of smoke detectors. Forward scattering optical detection adds early warning capability without the risk of nuisance alarms normally associated with high sensitivity smoke detection, while exclusive environmental compensation technology adds a high degree of reliability to an already solid detection solution.

Part No.	ModuLaser	
13 AS7230	9-30783	Modulaser detection module, must be used with either 9-30780 or 9-30781
12 AS7232	9-30782	AirSense Stratos ModuLaser, Command display module
11 AS7231M	9-30780	Modulaser Minimum Display Module
AS7231	9-30781	Modulaser Standard Display Module
14 AS1004	9-30795	Spare part -ModuLaser pipe adaptor



FAAST LT serves a wide variety of EN54-20 Class C applications where maintenance is difficult, other smoke detection methods are inappropriate, due to harsh environments, or areas where aesthetics matter.

FAAST LT Devices are available as single or dual channel, offering flexibility for different strategies. A range of customisable settings are geared towards maximising device performance and meeting different application needs.



**Single Channel Single Detector**

- Up to 2000m<sup>2</sup> Coverage Area
- 100m max pipe length
- IP65
- 3 relays, 1 Alarm, 1 Fault, 1 Pre Alarm

**Part No.**

**FAAST LT Detector**

SY720IS	FL0111E-HS-EB	Single channel, single detector
SY720ID	FL0112E-HS-EB	Single channel, dual detector
SY7202D	FL0122E-HS-EB	Dual channel, dual detector
SY7902	F-LT-EB	Earth Bar
SY79012	FL-IF-2	FAAST LT Replacement internal filter (per 2)



**FAAST Internal Filter**

- For different detection strategies choose from single, dual channel or double knock detectors
- A single device protects up to 2000m<sup>2</sup>
- High sensitivity laser optics
- Microprocessor controlled laser based optics delivering highest stability
- Ultrasonic flow detection for pipe flow measurement
- PipeIQ™ LT software provides intuitive system layout and configuration, all in one package
- Fault indicators provide a broad spectrum of events
- Dual channel units have two completely independent chambers with individual fans, filters, sensors and monitors
- Unique air flow pendulum graph verifies pipe network functionality
- USB interface
- IP65 rating
- Efficient maintenance - filters and optics
- Interface in 12 languages



**Dual Channel Dual Detector**

- Alarm Level; Alarm, Pre-Alarm
- Particulate Levels; 1-9
- Fault Status
- Flow Level
- Test, Reset and Disable Buttons



**FAAST LT Internal Filter**

**Part No.**

**FAAST Accessories and Parts**

SY7210	F-BO-AFE70-2	FAAST Automatic Purging Unit
SY7210F	F-BO-AFE70-3	FAAST Automatic Purging Unit-Freezer Applications
SY7900	F-A3384-000	AIR FILTER FOR FAAST 7100E, 8100E & 9400X
SY2303	F-SEN-SSE	Replacement sensor for FAAST LT200 - Standalone
SY7302	FLT2-AB-SAI	FAAST LT200 Standalone single channel accessories box
SY7303	FLT2-AB-SA2	FAAST LT200 Standalone dual channel accessories box
SY7903	G07-0199-000	FAAST LT Replacement Fan Gasket
SY7904	P87-0511-011	FAAST LT Replacement Fan Assembly



**FAAST Automatic Purging Unit**

- A fully integrated and compact system designed for larger pipe networks
- 6 user selectable preventative or event triggered purging programs.

VESDA 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. VESDA detectors have multi level warnings and a wide range of sensitivity that does not degrade or change over time, so even minute levels of smoke can be detected before a fire has time to escalate.



### VESDA-EVEP

- One of four pipe models
- Flair detection technology delivers reliable very early warning in a wide range of environments with minimal nuisance alarms
- Extensive 20,000 event log
- Fully backward compatible with VLP and VESDAnet



### Vesda LaserFocus

- Out of the box installation and commissioning
- Laser based absolute smoke detection
- Clean air barrier optics protections
- Instant Fault Finder™
- AutoLearn™ Smoke
- AutoLearn™ Flow



### VESDA Pipe

- Red ABS
- BS EN ISO 9001
- EN54-20
- EN61386-1 Class I131 ABS
- Easy to join using ABS Solvent
- Lightweight



### VESDA Filter

- Easy swap replacement filter
- Fits VLC, VLF, VLP and VLS VESDA detectors
- Two stage Filtration
  - First stage removes particles in excess of 20 microns
  - Second stage is ultra fine and removes more than 99% of particles of 0.3 microns or larger to provide a clean air barrier for optics protection



### VESDA-EVEA Tube

- Plenum rated
- Flame retardant
- High quality polyethylene material
- Stress crack resistant
- Unique ID
- Distance marking at regular intervals
- Meets requirements of global installation codes

### Part No.

VE79401AP	VEP-A00-IP
VE79400AP	VEP-A00-P
VE7940AP	VEP-A10-P

### VESDA-EVEP Detector

1 pipe, with FOK LED's
4 pipe, with FOK LED's
4 pipe, with 3.5" Display

### Part No.

VE79401P	VES-A00-P
VE79401IP	VES-A10-P

### VESDA-EVES Detector

VES with LED's
VES with 3.5" Display

### Part No.

VE7940A	VEU-A00
VE7940AI	VEU-A10

### VESDA-EVEU Detector

VEU 4 Pipe with LED's
VEU 4 Pipe with 3.5" Display

### Part No.

VE7804	VLF-250
VE7805	VLF-500

### VESDA VLF Detector

VLF, 250m <sup>2</sup> coverage
VLF, 500m <sup>2</sup> coverage

### Part No.

VE7702	PIP-001
VE7705	PIP-002
VE7212	PIP-003
VE7703	PIP-005
VE7709	PIP-006
VE7704	PIP-007
VE7708T	PIP-008
VE7700	PIP-009
VE7903	PIP-012
VE7203F	059-001
VE7203W	059-007
VE7904	128-014

### VESDA Pipe & fittings, Red

Pipe, 3m length
Joining Socket
Socket Union
90° Long Radius Bend
45° Elbow
End Cap
Equal Tee
End Cap
Solvent Cement
Flush Sample Point Kit
Conical Sample Point Kit
Sample Point Labels

### Part No.

VE7901	VSP-005
--------	---------

### VESDA Filter

VESDA Replacement Filter
--------------------------

### Part No.

VE78852	VSP-979
VE7871100	VSP-990-330

### VESDA-EVEA Tubes & Fittings

VE7878	VSP-991
--------	---------

VE78851	VSP-998
VE7879R	VSP-1000
VE78744	VSP-1001
VE7874	VSP-1002
VE7873	VSP-1003
VE78734	VSP-1004

Microbore Tube Cutter, 3 Pack
6mm Microbore Tube, UL compliant Plenum rated (330ft)
4mm Microbore Tube, UL compliant Plenum rated (500ft)
6mm Blanking Plug (50pk)
6mm to 4mm Reducer (10pk)
6mm to 6mm Straight Union (10pk)
4mm to 4mm Straight Union (10pk)
6mm to 6mm RA Joiner (10pk)
4mm to 4mm RA Joiner (10pk)



## Disabled Refuge

Current building regulations insist all new non-domestic buildings with more than one storey provide 'refuge' areas - relatively safe places where people who cannot easily use fire escapes and evacuation lifts can call for assistance and wait until help arrives.



Disabled Refuge

Simple, effective two way communication in these areas is essential, firstly to assist rescue teams in determining where assistance is required and secondly to reassure people help is on the way. C-TEC's SigTEL Emergency Voice Communication (EVC) Systems have been specifically designed to meet the rising demands for fully compliant BS 5839 Part 9 disabled refuge systems.



Part No.	SigTEL Controllers	
1	CTI804	ECU-4
	CTI808	ECU-8
5	CTI808NT	ECU-8NT
2	CTI8016	ECU-16
6	CTI80224	ECU-224
	CT831522	ECU722

Part No.	SigTEL Outstations	
	CTI810GF	EVC302GF
4	CTI810GS	EVC302GS
3	CTI811RP	EVC301RPO
	CTI811RL	EVC301RLK
7	CTI810SSS	EVC302S
8	CTI810WE	BF359/I



The VoCall range of Emergency Voice Communications equipment is designed to fully comply with BS 5839-Part 9 (abb. Pt9) for use as a fire telephone system, disabled refuge call system or as a combined system when both fire telephones and disabled refuge points are required.

Part No.	VoCALL Controllers	
	COI805	EFVCC5
9	COI806	CFVCCM9
12	COI815	CFVCX8
	COI807	CFVCM
10	COI808	CFVCWM

Part No.	VoCALL Outstations & Accessories	
11	COI809	CFVCSHP
	COI810	CFVCFHP
14	COI811	CFVCSHF
13	COI812	CFVCSHFG
	COI813	CFVCRJP
	COI814	FVCRHS

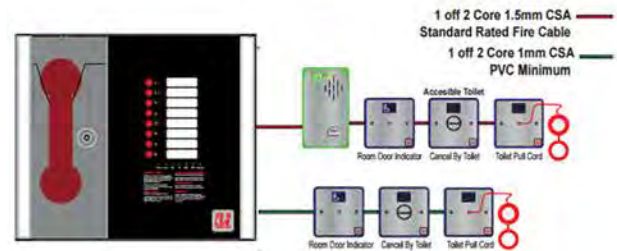




The Lexicomm EVCS concept covers Fire Telephone and Disabled Refuge Systems, as well as integrating Emergency Assist Alarm systems in a single solution. The use of networking in every controller ensures scalability and removes redundancy on sites allowing them to evolve from single stand alone systems to complex site wide campus scenarios. The networking allows 64 panels to be connected on a simple network ring of 2 off 2 core 1.5mm enhanced fire rated cables, with a perimeter of 2km, and each outstation can be 500m from a controller, allowing up to 512 lines per system.



Part No.	Lexicomm Controllers	
VOI802	ViLX-228-2	2 Line Master Station
VOI804	ViLX-228-4	4 Line Master Station
1 VOI808	ViLX-228-8	2-8 Line Master Station
2 VOI808T	ViLX-TMS-W-8	Touchscreen Master Station
3 VOI808S	ViLX-EX8-8	8 Line System Expander Panel
4 VOI809FSS	ViLX-OSA	Surface Type A Fire Telephone Handset
5 VOI810FSS	ViLX-OSB	Type B Refuge Point
6 VOI817	ViLX-OSC	Combined Type A telephone and Type B refuge point
7 VOI811	ViLX-ILB-S	Induction Loop Type B Outstation
VOI8102IPB	ViLX-IPB2	IP65 Weatherproof Type B Refuge Point



Requires Lexicomm EVCS main panel



Under the Equality Act, building owners have a duty of care to ensure the safety of all building occupants, especially those less able. The Assist call system is designed to provide a fully compliant and scalable solution to building owners with many unique benefits, including clear indication, acoustic and visual feedback and high quality stainless steel finish to blend into all locations.

In simple systems where the accessible room is in a permanently staffed area, a basic kit can be used. However where the accessible room is in a remote location a means of signalling that help is on the way is required; Assist call provides this by switching from the two tone alarm signal to a short period of beeps every 15 seconds, the visual indication also changes from flashing to steady; indicating to the occupant that help is on the way. If the call is not canceled within two minutes of acceptance the system reverts to full alarm again. In line with BS8300 the alarm call should only be canceled from the location the call was generated from.

Part No.	Assist Call	
8 VO0800	ViLX-ACA	Lexicomm Alarm WC System
VO0800B	VILX-ACB	Accessible Bedroom Zone Kit
VO0801S	ViAC-STK	Standard Kit
VO0801R	ViAC-RTK	Remote Kit
VO080930	ViAC-PSC	Power Supply with integrated over door indicator
VO080910	VILX-ODP	Over Door Plate
VO08026B	VILX-CNP	Cancel Plate
VO08074	ViAC-4ZC	4 Zone Controller
VO0807PSU	ViAC-PSU	Assist Call Power Supply unit for with VO08074

Unicorn Voice offers PAVA, BGM, VADs, Fire Telephone, Disabled Refuge and Emergency Assistance Alarms in a single solution. Unicorn voice simplifies the specification and installation of these systems by offering a one cabinet solution with a range of amplifiers, displays, switch modules and integrated EVCS.



**Master Amplifier Panel**

- The Master Amplifier Panel (MAP) is the control for the distributed system, based on the DAP, but with a 7" touch screen to give full control over the PACA, displaying zone status, EVCS calls, faults, Emergency Assistant Calls and all configuration.
- Multiple MAP's can be used on a single system, with the operational priorities set on commissioning and based on the user login.
- A close coupled fist microphone allows live messages to be broadcast to selected zones either on the local MAP or and remote MAP/DAP.
- An optional integrated handset is provided on the MAP/T variant to answer Fire and Disabled Refuge Calls.
- Messages are stored on a SD Card and can be broadcast locally or globally, with multiple message stores allowing greater redundancy.
- Optional banks of 8 buttons are available, up to 16 banks per MAP. These are fully programmable, and can be zone selects (both PAVA and EVCS), message selects, Emergency Assist Acknowledge, BGM routing.
- MAPs are housed in a compact wall cabinet, 740mm H, 500mmW and 220mm D.



**Distributed Amplifier Panel**

- The Distributed Amplifier Panel (DAP) is designed as a repeatable 4 zone box, distributed in riser cupboards. It has a 2.8" touch screen for local configuration and diagnostics.
- Four amplifier slots are available, with an optional hot swap slot. The amplifiers are available in 25W, 50W and 100W variants at 100V or 70V line level.
- Every amplifier has a fully monitored fire alarm output driver, rated at 1A to drive VADs for the hearing impaired, but can also be used for relays and overrides.
- Connection to the Fire Alarm CIE is by 4 sounder circuits and a separate reset volt free contact. Additionally a dedicated Serial port is available.
- Each DAP has a Background Music input which can be used locally or routed through the network
- 4 monitored AUX inputs are provided for additional alarm inputs or the connection of Volume Controls or Ambient noise Sensors.
- Each DAP contains a 500W EN54-4 PSU and battery charger for 7, 12, 17 or 24Ah batteries.



**ViLX-OSA**

- Type A Fire Telephone
- Compact Design, Ruggedised Handset
- High Volume Ringer
- Status LED
- Full Duplex Operation
- Fully Compliant to BS5839-9:2011
- Stainless steel as standard

**ViLX-OSB**

- Type B Refuge Outstation
- Fits standard double Socket Back Box
- Hands free full duplex operation
- High Volume Ringer
- Red status LEDs in Call Button
- Green flashing Call Button for location
- Flush or surface mount

**ViLX-OSC**

- Type A and B outstation
- Compact design
- Ruggedised Handset
- High Volume Ringer
- Status LED
- Telecoil for hearing impaired users
- Full Duplex operation



**ViLX-ACA**

- Compact Design
- BS8300 Acknowledge Feature
- High volume sounder
- Blue Halo
- Flush or surface mounting
- Braille enhanced Cancel Button
- Stainless steel as standard

**ViLX-ACB**

- "Assist Call" Accessible Bedroom kit
- Comprises of 1x Overdoor plate for the corridor, 2 x Cancel plates, 3 x pull cord, WC alarm fitted sticker, and operating instructions sticker.
- Brushed stainless steel plates with blue Halo indication

**ViLX-CLP**

- Compatible with all Lexicomm master stations
- High volume sounder with volume control
- Fits standard double socket box
- Flush or surface mounting
- Stainless steel as standard



**Configuration**

- The basic set up of the complete Unicorn Voice system can be simply done with a series of spreadsheets.
- This eliminates the need for custom software and the associated problems with version control and installation of software on site laptops.
- It only needs to be loaded to one panel. The information is sent to all panels on the network.
- The PAVA spreadsheet sets the fire cause and effects, basic volumes, network, strobe settings, zone names, fault text, music names, whether the EVC is present and if external microphones are present.
- Additional spreadsheets also cover message settings, zone settings for the PAVA, and the programming of the optional front panel buttons.
- The EVCS spreadsheet allows configuration of the optional fire telephones, disabled refuge system and Emergency Assist Call system.
- The Acoustics Module is a separate programme for engineers who have been trained and gives access to the DSP parametric equalisation on the inputs and outputs.



Omicare is a loop wired addressable emergency voice communication system that allows disabled refuge, fire telephones, steward telephones and disabled toilet alarms to be connected to one panel. Omnicare can be easily networked with the ability to add multiple control panels on a system. This enables local zone/area control with “gatehouse/management” control on a master panel. Omnicare has been designed and built to meet BS9999:2008, BS5839-9:2011 and BS8300:2009.



**Omicare Control Panel**

- Digital audio - full duplex or speech steered (remote dependent)
- One master and multiple slaves can be networked on one system
- Lockable glazed door
- Remote units are connected to the master panel in a loop configuration
- 4-128 way Control Panels available

**Part Code**

BB1804M	BVOC4M
BB1808M	BVOC8M
BB1816M	BVOC16M
BB1832M	BVOC32M
BB1848	BVOC48
BB1864	BVOC64
BB1880	BVOC80

**Omicare Control Panel**

4-way Control Panel
8-way Control Panel
16-way Control Panel
32-way Control Panel
48-way Control Panel
64-way Control Panel
80-way Control Panel



**Omicare Outstations**

- Provide two way communication with the control panel
- Type A or B outstations
- Available in stainless steel
- Advance unit has integral induction loop, luminescent and Braille

**Part Code**

BB1810G	BVOCECPG
BB1812	BVOCA2G
BB1805BG	BVCRIIPBG

**Disabled Refuge**

Refuge Remote Standard, Green
Refuge Remote Advance, Green
IP65 Rated Enclosure

**Part Code**

BB1875	BVOCF
BB1875LD	BVOCFB
BB1875B	BVOCFB
BB1875LDB	BVOCFB

**Fire Telephone**

Push Door, Red
Lock Door, Red
Push Door & Beacon, Red
Lock Door & Beacon, Red



**Disabled Toilet Alarm**

- Pull switch: ceiling mounted pull with two “G” pulls
- Reset point: reset button (and LED) to reset calls locally
- Light/sounder: Overdoor triangular lens with integral sounder to attract attention
- WC Sign: Self adhesive, vinyl, disabled toilet alarm sign

**Part Code**

BB0801	DTAKIT
BB0807	DTACP
BB0804	DTAODL
BB0814	DTARP
BB0815	DTACB
BB0816	DTACBRP
BB0817	DTACPW

**Toilet Alarm**

Full Kit
Ceiling Pull
Overdoor Light
Reset Point
Call Button
Call Button & Reset Point
Call Point Red Cord, Wall Mount

Also available in Stainless steel, and IP65 rated.

The Care2 EVC system is a radial-wired EVC System. The Care2 control console has a bright and clear LCD screen and is operated by a rotary encoder. The 4-way panel can be expanded to 8, 12 or 16-way by means of an optional expansion kit. Larger systems are possible by adding a second control panel and/or network expansion panels.



**Care2 Control Panel**

- Black or stainless steel finish
- Unique design, easy to operate
- Clear LCD screen with rotary encoder/control
- Rugged red handset with hearing aid compatible earpiece
- Handset is mounted in lockable compartment
- Can be networked with network expansion panels (C2CN card required in control console(s))

**Part Code**

BB1854B	C2CB4
BB1863	C2CBNEP
BB1861	C2CEK4
BB1860	C2CFPE
BB1862	C2CN

**Care2 System Control**

4-way Control Panel, Black
4-way Network Expansion Panel
4-way Line Card
Fire Panel Interface
Network Expansion Card

**Part Code**

BB1850G	C2RRG
BB1850GIPE	C2RRBIP

**Disabled Refuge**

Refuge Remote, Green
IP65 Rated Enclosure

**Part Code**

BB1850R	C2FTRP
BB1850RL	C2FTRL

**Fire Telephone**

Push Door, Red
Slot Lock Door, Red

**Part Code**

BB0801	DTAKIT
BB0807	DTACP
BB0804	DTAODL
BB0814	DTARP
BB0815	DTACB
BB0816	DTACBRP
BB0817	DTACPW

**Toilet Alarm**

Full Kit
Ceiling Pull
Overdoor Light
Reset Point
Call Button
Call Button & Reset Point
Call Point Red Cord, Wall Mount

Also available in Stainless steel, and IP65 rated.



**Care2 Outstations**

- Type A & B Outstations
- Provides clear communication with the control panel
- Available in stainless steel

Public address systems are used for public and staff announcements. The Eclipse range offers two options, the Eclipse5, employing VIGIL3 technology, and the Eclipse4, employing VIGIL2 EVAS routing with VIGIL3 amplification. An overview of the products available is below. For more information contact your Account Manager.



**VIGIL Eclipse5**

- A fully integrated voice evacuation system, the Eclipse5 takes up minimal floor space and is secured by bolting to a wall or suitable solid upright
- Each Eclipse is capable of up to 16 zones
- Connect up to 8 inputs to each Eclipse5
- Ideal for fitting in risers of towers, and other similar style buildings or small spaces
- Accepts VIGIL3 2 or 4 way input modules
- Modular system with a choice of amplification using VIGIL3 Ethernet routing backbone and VIGIL3 transformerless amplifiers
- Message synchronisation - even on decentralised systems - with the ability to store up to 254 monitored messages
- Fully monitored via selectable surveillance using either AC or DC line monitoring methods
- Network up to 100 Eclipse5 together offering 400 inputs and 800 outputs
- 1125H x 500W x 200D (mm)
- Separate battery enclosure required if over two amplifier modules are fitted. Must be floor mounted and fitted directly beneath Eclipse5 enclosure



**VIGIL Eclipse4**

- A fully integrated voice evacuation system, the Eclipse4 takes up minimal floor space and is secured by bolting to a wall or suitable solid upright
- Modular system with a choice of amplification using the BVRD2M4 router and VIGIL3 transformerless amplifiers
- Up to 126 units can be networked
- Fully monitored surveillance at either 30Hz or 20kHz
- An optional BVRDIP module is available for remote monitoring facilities and email notifications of faults
- Compatible with and VIGIL2 installation
- Electronically balanced (0dBm) with ten band parametric equalisation and audio delay of up to one second
- Message synchronisation - even on decentralised systems - with the ability to store up to 6 monitored messages.
- 500W x 900H x 200D (mm)
- Separate battery enclosure required if over two amplifier modules are fitted. Must be floor mounted and fitted directly beneath Eclipse4 enclosure



**Transformerless Amplifiers**

- New floating transformerless technology which negates the need for cumbersome transformer
- VIGIL3 amplifiers fit up to 1800 Watts of power in one 2U rack space.
- Each amplifier has a built in power supply.
- Up to 3 amplifier units - providing up to 12 zones can be housed in one 2U rack space
- Amplifier units options available:
  - Dual 75 Watt (BVO75D)
  - Quad 75 Watt (BVO75Q)
  - Dual 150 Watt (BV150D)
  - Quad 150 Watt (BV150Q)
  - Dual 300 Watt (BV300D)

**Battery Charger Module**

- Fits alongside the VIGIL3 amplifiers in a mainframe
- Half the size of the amplifier and VIGIL2 power supply charger
- One charger module can continually monitor the power supplies in 5 VIGIL3 amplifiers
- Continually monitors batteries and charges them when needed



**BV3AIM2/4 Input Module**

- Available in either 2 or 4 input variations
- DIN rail mounted within the rack
- Each input has 6 band parametric EQ
- All inputs have programmable prioritisation
- All inputs consist of a transformer isolated audio input and have a RS485 connection for control data
- Each unit is connected to the Ethernet network ring
- It is possible to configure each audio input from any location on the network
- Each module incorporates a VOX to allow for automatic audio broadcast when present

**BV3AOM8 Output Module**

- Fits alongside the BVMB battery charge module
- 8 individual audio outputs
- 2 hard wired bypass inputs
- Up to 24 band parametric EQ
- Up to 1 second audio delay
- All EN54 mandatory fault indications
- 5 fire panel inputs
- Up to 100 modules per system



**Emergency Fire Microphones**

- Available as 1, 4 or 8 Zone
- Single Zone BFM401 can be set to connect via RS485 or a parallel hard wired connection
- BFM404 and BFM408 multi zone microphones communicate with the main control system via an RS485 communications link

**Touch Screen Microphone**

- The ability to record, store messages, play back and even schedule (non-critical) messages
- Zone or "all call" selection
- Live speech for general paging announcements
- A third party music audio feed can be connected to the microphone. The output can then be routed by the user to a single, or combination of zones

**Paging Microphone**

- Available as 1, 4, 8, 16, 24 or 32 Zone
- Standard RJ45 (CAT 5 network) cable is used to carry both audio and serial data
- Can be linked together and connected to a single input at the control rack
- BDM401 can also be operated as a parallel microphone



EST VES is a scalable Public Address & Voice Alarm unit suitable for multi purpose architectures. The system is based on the high quality audio network distribution nodes equipped either with two independent 160W and 320W class D amplifiers, which distribute 100V signals to 4 or 8 speaker lines depending on the type. The system also ensure operation of a back up amplifier for the Emergency priority type of signals. EST VES support up to 45 high quality audio signals distributed over 254 devices in the network.



**Mini PA/VA unit**

- Stand alone or TCP/IP network architecture
- All in one - independent wall mount EN54-4/16 PA/VA unit
- Impedance speaker monitoring
- Remote management
- Up to 254 devices can be connected on the network (inc. fireman and zone microphones)
- Ability to connect standalone EST VES units via fiber optic / copper or both cables. Compatibility with RACK mounted modular EST ENT VES
- DSP audio processing on board
- Professional Sound Quality
- Evacuation, paging message and background music feature
- Simple installation
- User friendly and intuitive programming software
- Available as 2 (4 lines) or 4 (8 lines) AB
- LCD Screen

Flexible, multifunctional and modular Control Units are the key elements of the EST ENT VES system. They are central units managing all other elements of the system to enable flexible configuration of routes for audio signals received from various sources to any outlet.



**EST-CU-8LCD**

- Network based system allowing configuration, diagnostics and management via Ethernet
- Managing up to 254 devices on the network
- 7 slots available for any configuration of loudspeaker control cards, control input and output cards
- Additional 2 slots designated for audio input/output cards and control input/output cards
- Up to 8 messages played simultaneously in different zones

**EST-CU-11LCD/LT**

- Network based system allowing configuration, diagnostics and management via Ethernet
- Managing up to 254 devices on the network
- 11 slots available for any configuration of loudspeaker control cards, and control input/output cards
- Built in audio card with 4 inputs and 12 audio output.



**EST-xCtrLine-4**

- 4 independent speaker line outputs (A, B, C, D)
- Card allows to switch between main and spare amplifiers
- Line measurement methods can be made by: Impedance, Loop or End of Line Module (EOL)
- Fault detection, opening ground leakage & surveillance amplifiers on common 100V Buses

**EST-xAudio-4/8-RS**

- Function slot of EST-CU-8LCD
- 4 line audio inputs and 8 symmetrical outputs via an RJ45 connector for leading out audio signals to the external devices or amplifiers
- RS485 interface to allow control of the EST ENT VES system or integrated with devices offered by other producers.

**EST-xAudi-8**

- 8 Symmetrical line audio inputs via an RJ45 connector
- Function slot of EST-CU-8LCD



**EST-XLOGIN-8F**

- 8 logical inputs card (function slot)
- Two modes of operation:
  - contact mode (short/open contact)
  - monitor mode, in addition to contact mode function, short circuit and opening of the cables connected to the card are detected

**EST-XLOGIN-8C**

- 8 logical inputs card (control slot)
- Two modes of operation:
  - contact mode (short/open contact)
  - monitor mode, in addition to contact mode function, short circuit and opening of the cables connected to the card are detected

**EST-XLOGOUT-8C**

- 8 logical outputs card (control slot)
- Channels 1-4 NC relays
- Channels 5-8 NO relays

**EST-XLOGOUT-8F**

- 8 logical outputs card (function slot)
- Channels 1-4 NC relays
- Channels 5-8 NO relays



**Power Amplifier D-Class**

- Front panel indicators include: Supply/Active/Fault
- 100/50 Volt available via terminal blocks at the rear
- Combines with the EST-PSM48 Power Supply Manager (charger and back up supply)

Amplifier Options:

- EST-PA8080B - 8 x 80 Watt
- EST-PA8160B - 8 x 160 Watt
- EST-PA4160B - 4 x 160 Watt
- EST-PA2650B - 2 x 650 Watt
- EST-PA1650B - 1 x 650 Watt

**EST-PSM48**

- Power Supply Manager is designed for distribution of DC Power Supply from Power Supply Units and a back up battery
- The unit controls battery charging and distributes power supply to all Voice Evacuation System equipment at max 60A. When the system uses battery back up the power supplied is 3.2kW
- EN12101-10 & EN54-4





**EST-DFMS**

- Monitored microphone and connection of the microphone module to the system
- A dedicated evacuation key
- 3 fully-programmable keys with a possibility of connecting up to five 20-key extensions
- Built in 2 contact inputs and 2 relay outputs
- POE or external feeder based power supply

**EST-DMS**

- Monitored connection of the unit to the system
- 9 fully programmable keys with a possibility of connecting up to five 20 key extensions
- 4 non symmetrical audio inputs (1/8") stereo jack connector
- Built in speaker
- Stereo jack sockets for a headset

**EST-M01/4**

- Solid Construction
- Zone configuration buttons at front panel with LED
- Microphone on/off button with LED
- Flexible microphone neck
- Microphone volume control at rear panel
- 1 or 4 button



**ABT-SI06**

- Fire Ceiling Speaker 6W, 100V Dia 10cm
- EN54-24
- I438-CPR-0635
- A and C working environment, ideal for bathrooms
- Highest level of verbal communication understanding
- IP32
- White RAL 9003

**EST-SI36/SI86**

- Ceiling Mounted Loudspeaker
- Dia - SI38 - 13cm/ SI86 - 17.5 cm
- EN54-24
- I438-CPR-0671/I438-CPR-0605
- BS5839-8 Standard Thermal Protection
- Highest level of verbal communication understanding
- Available in ABS and Steel
- IP32C
- White RAL 9003

**EST-S206B**

- Ceiling Mounted Loudspeaker
- Dia 20 cm
- EN54-24
- I438-CPR-0605
- BS5839-8 Standard Thermal Protection
- IP32C
- White RAL 9003



**ABT-P10/ABT-P20**

- Designed to achieve directional characteristics of sounder emission 10W/20W transformer with multiple branches ensuring accurate selection of output power.
- ABS/Extruded Aluminium
- White RAL 9003

**ABT-P10P/ABT-P20P**

- Designed to achieve directional characteristics of sounder emission 10W/20W transformer with multiple branches ensuring accurate selection of output power.
- ABS/Extruded Aluminium
- White RAL 9003
- Pendant mounting

**MCR-SMSP20**

- Designed to achieve directional characteristic of sound emission 20W transformer with multiple branches ensuring accurate selection of output power.
- Extruded aluminium
- IP66
- Grey RAL 7035



**ABT-W6/AB**

- Fire Wall aesthetic speaker
- A/B Power: 6W, 100V
- BS5839-8 Standard Thermal Protection
- Exceptionally easy and quick to mount
- Modern and elegant design
- High quality sound of both speech and music

**EST-W6**

- Fire Wall aesthetic speaker
- Power: 6W, 100V
- BS5839-8 Standard Thermal Protection
- Exceptionally easy and quick to mount
- Modern and elegant design
- High quality sound of both speech and music

**EST-T1510**

- Horn Type Loudspeaker
- Power: 10W, 100V
- EN54-24
- Directional characteristic of sound emission and the highest verbal communication understanding
- High efficiency - 103dB/IW
- A, B and C working environments



**Fire High Power Loudspeaker**

- High Power Loudspeaker Compliance with EN 54-24. Certificate of Conformity issued by CNBOP: I438-CPR-0482.
- 240W and 120W transformers.
- 100V Highest level of speech intelligibility
- Waterproof housing IP65
- Wide frequency range suitable for music
- Compliance with BS5839-8 standard thermal protection.

- High Power Loudspeaker Options:
- ABT-HP240EN66 - 240W, 100V, 60x60°
  - ABT-HP240EN94 - 240W, 100V, 90x40°
  - ABT-HP120EN66 - 120W, 100V, 60x60°
  - ABT-HP120EN94 - 120W, 100V, 90x40°



F-Link is housed in a larger case with plenty of cable entry points and an informative text display which provides status information and gives details of alarm messages. A system of two or more F-Link units working together to form a mesh network with each unit operating as both a transmitter and receiver. The radio link between units is monitored for faults in accordance with the relevant sections of BS5839-1:2017 (24.2b) and BSEN54-25:2008 (4.2.6). There is an additional output on the Master unit for connection to an optional paging transmitter, which sends alarm and fault messages to pocket pagers.



**F-Link 4**

- 4 Volt-free inputs and 4 relay outputs configured by DIP switches
- LINK FAIL and SIGNAL JAM indicators
- LBT (listen before talk) for reliable communications
- Can be powered from 12V or 24V
- Up to 16 units per network (15 x nodes, 1 x master)

Part No.		F-Link
SC09134	FLINK4	F-Link Transceiver Unit inc. Aerial
SC09134K	FLINK4KIT	Pair of F-Link Transceivers inc. Aerial

Scope Connexions Systems, with its modular high performance interfaces enabling robust connectivity to many host devices. They include connection to internal telephone, PC network, RS232, RS485, USB, dry-contacts and voltage triggers. There is also an internal protocol conversion option, which enables the translation of incoming RS232 data from host hardware into paging data, providing paging from various fire, intruder, nurse call, Building Management Systems.



**Connexions**

- UHF radio paging system
- Available with 2 or 3 serial ports
- 8 on-board volt free trigger contacts
- Optional telephone interface
- Optional Ethernet card
- Mains or DC powered
- Ranges of up to 2 kilometres from 1 watt transmitter with 1/4 wave aerial

Part No.		Connexions
SC09106IC	CX6	Internal PSU, 1 watt RF Output
SC09105	CX5	Internal PSU, 5 watt RF Output
SC09106I2	CX6DC	No PSU, 1 watt RF Output
SC0910I2	CX5DC	No PSU, 5 watt RF Output



**PageTek Pro**

- UHF Radio link for maximum licensable protection
- Unique coding avoids neighbouring system clashes
- RS232 serial input for other messaging
- Optional Ethernet card and additional RS232 input

Part No.		PageTek Pro 2
SC09002	PTPRO/2	PageTek Pro 2

Self-monitoring paging system designed for use with professional Fire and Security systems installed in commercial/industrial premises. The system is primarily designed to alert the hearing impaired in the event of a fire or other emergency where an audible sounder is the normal means of indication. The incorporation of a dedicated Lockdown zone makes it particularly suitable for use in schools.



**GEO 40A10**

- 40 character POCSAG alphanumeric pager
- Bright 20 character x 2 line display
- 8 addresses (selectable OFF/TONE/NUMERICAL/ALPHA)
- Lockable alert modes
- Pulsed vibrate modes
- Urgent call alert mode
- Address and frequency hand programmable

Part No.		Pagers
SC0906	GEO40A10	40 Character Alphanumeric Pager
SC09127	GEO87Z	8/4 Line Alphanumeric Pager
SC0935M	GEO28V2	2/4 Line Alphanumeric Pager



**Mini Dipole Aerial**

- Lightweight centre fed half wave dipole aerial
- Wall Mounting
- Approx 5 metre pre-terminated cable

Part No.		Antennas
SC0915MD	LUHFDP	Mini Dipole Aerial with approx. 5M pre terminated cable
SC0901	3/4UHF	PageTek Pro 3/4 wave fixed antenna
SC0915FD	FUHFDP	PageTek Pro folded dipole antenna



Audio-frequency induction loop systems allow hearing impaired people to hear more clearly. Most hearing aids have '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. It is designed to meet and exceed the requirements of BS7594 and BS-EN60118-4 when correctly installed.



**Portable Induction Loop**

- Ready for use within seconds
- Generates a loop listening field of approximately 1.2m<sup>2</sup>
- Free standing lightweight design
- Simple one button operation
- Excellent sound quality
- Ideal for schools, shops, nursing homes, leisure centres, hotels and more

Part No.	Portable Hearing Loop Systems	
CT080900	PLI/KI	1.2m <sup>2</sup> , c/w wall mounting storage shelf
CT080901	PLI/K3	1.2m <sup>2</sup> , c/w plastic storage case

**Part No. Refuge, Door Entry & Intercom Loop System**

CT080908I	PDAI03i	1.2m <sup>2</sup> , Self contained for use with Disabled refuge, door entry & intercom help points
-----------	---------	--



**Counter Induction Loop**

- Ideal for post offices, banks, ticket offices and reception areas
- Compatible with all NHS hearing aids
- Can be used to help service providers and building managers to comply with DDA & BS8300
- Fully compliant with AFILS standards EN60118-4 & BS7594

**Part No. Counter Hearing Loop Systems**

CT080908C	PDAI03C	Wall Mounting, 1.2m <sup>2</sup>
CT080904	MLI/K	Double Gang Fixed, 1.2m <sup>2</sup>



**Small Room/Domestic Hearing Loop Systems**

- Ideal for small meeting rooms, council chambers, doctors surgeries.
- Free standing version suitable for bedrooms, living rooms, TV lounges, studies
- Wall mounting or free standing options
- 50m<sup>2</sup> coverage
- Fully compliant to BS7594 & EN60118-4

**Part No. Small Room/Domestic Hearing Loop Systems**

CT080908	PDAI03L	Small Room tie/desk mic version, 50m <sup>2</sup>
CT080909	PDAI03R	Small Room plated mic version, 50m <sup>2</sup>
CT080908S	PDAI03S	Domestic TV Lounge, 50m <sup>2</sup>
CT080907	DL50/K	Free Standing Domestic system, 50m <sup>2</sup>



**Induction Loop**

- Works by transmitting amplified sound to any hearing aid fitted with a telecoil
- Excellent sound quality
- Covers rooms up to 120m<sup>2</sup> (11m x 11m)
- Optional 'outreach' plate audio input extension system allows a greater variety of audio inputs to suit virtually any application
- Loop fitted sticker included in all kits

**Part No. PDA200E Hearing Loop Systems AK Range, 200m<sup>2</sup>**

CT080912	AKMI	Meeting/Seminar Room Kit
CT080913	AKM3	Professions Meeting/Seminar Kit
CT080914	AKLI	Lecture Room Kit
CT080915	AKTI	TV/Music Lounge Kit
CT080916	AKRI	Waiting Room Kit
CT080918	AKWI	Place of Worship Kit
CT080919	AKW2/L	Place of Worship Kit, Lavalier mic.
CT080920	AKW2/H	Place of Worship Kit, Handheld mic.
CT080921	AKHI/L	Health & Fitness Club Kit, lavalier mic.
CT080911	PDA200E	Hearing Loop Amplifier



**Loop Cable**

- White Loop Cable available in a range of sizes
- Ideal for use as a floor or ceiling loop in audio-frequency induction loop systems
- Flat copper foil tape also available for floor loops

**Part No. Loop Cable & Ancillaries**

CT080958	LOOP1/W	0.5mm <sup>2</sup> Single Core Cable
CT080959	LOOP2/W	1mm <sup>2</sup> Single Core Cable
CT080960	LOOP3/W	1.5mm <sup>2</sup> Single Core Cable
CT080961	LOOP4/W	2.5mm <sup>2</sup> Single Core Cable
CT080963	FLAT2005	1mm <sup>2</sup> Insulated Flat Copper Foil Tape
CT080964	FLAT3005	1.5mm <sup>2</sup> Insulated Flat Copper Foil Tape
CT080965P	TAPE/P	50m printed "INDUCTION LOOP" foil tape





Tried, trusted and respected by users and installers alike, C-TEC's 800 Series Call System is ideal for use in all types of private, commercial, residential and public sector buildings. 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, stainless steel call points, overdoor lights, remote sounders, relays and call latch modules), it is without doubt, one of the most versatile and reliable conventional call systems on the market.



**Part No.**

**Indicator Panels & Call Controllers**

8	CT080813B	NC943B	1 Zone, c/w 12V 140mA PSU
	CT08081R	NC941	1 Zone, c/w 12V 250mA PSU
3	CT08084	NC944	4 Zone, requires NC930 12v 250mA PSU
12	CT6010	NC930	12V 250mA Double Gang PSU
	CT080810S	NC910S	10 Zone, c/w 300mA PSU, Surface
	CT080820S	NC920S	20 Zone, c/w 300mA PSU, Surface
	CT080810ES	NC910ES	10 Zone Expansion Unit for NC910/20S
	CT080820ES	NC920ES	20 Zone Expansion Unit for NC910/20S
2	CT080810F	NC910F	10 Zone, c/w 300mA PSU, Flush
	CT080820F	NC920F	20 Zone, c/w 300mA PSU, Flush
	CT080810EF	NC910EF	10 Zone Expansion Unit for NC910/20F
	CT080820EF	NC920EF	20 Zone Expansion Unit for NC910/20F

**Part No.**

**Overdoor Lights & Sounders**

	CT080930L	NC806CS	Overdoor Light c/w Sounder
4	CT080910L	NC806C	Overdoor Light
	CT080310	N887D	Switchable Sounder
11	CT080311	NC888D	Remote Sounder

**Part No.**

**Ceiling Pulls**

6	CT080200	NC807C	Ceiling Pull Unit
	CT0802	NCP-13	Anti-Bacterial Wipe Clean Pull Cord

**Part No.**

**Call Points c/w Remote Socket**

1	CT080400	NC802DB	Button Reset
7	CT080400M	NC802DM	Magnetic Reset
	CT080202M	NC802DERM	Emergency Infrared, Magnetic

**Part No.**

**Reset Points**

9	CT080206	NC809DB	Button Reset Point
	CT080206M	NC809DM	Magnetic Reset Point
	CT080206K	NC899IRR	Keyswitch Reset Point

**Part No.**

**Slave Calling Devices**

5	CT080207S	NC805C/6	1.8m (6ft) Tail Call Lead
10	CT080207L	NC805C/14	4.2m (14ft) Tail Call Lead
	CT080207M	NC805D	1.2-3.6m (4-12ft) Tail Call Lead

**Part No.**

**Accessible Toilet Alarm Kit**

14	CT0800	NC951	Toilet Alarm Kit to BS8300
	CT0800SS	NC951/SS	Toilet Alarm Kit to BS8300, Stainless Steel

**Part No.**

**Magnetic Reset Keys**

13	CT080410T	NC803M/10	10 x magnetic reset keys
----	-----------	-----------	--------------------------

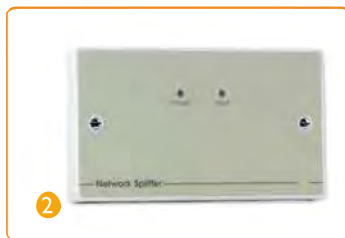
In its simplest form, an 800 Series Call System:

- Allows the general public, a member of staff or a patient to call for assistance;
- Confirms that the call has got through;
- Makes sure the caller is visited; and, if required;
- Allows extra or more urgent assistance to be summoned using an optional 'emergency' call facility.





Quantec is a powerful yet easy to use call system that helps ensure vital communication throughout a building. In environments where efficiency is paramount, Quantec delivers, helping save staff time, minimising disturbance and improving the quality of patient, customer and/or employee care. Ideal for nursecall, dementia, staff protection, emergency assistance and affray applications.



**Part No. Controllers & Enclosures**

1	CT080850	QT601-2	Controller
	CT8411	QT385	Flush Mounting Bezel for Controller
	CT8401	BF359/3S	Glazed Stainless Steel Enclosure
2	CT080831	QT603	Network Splitter

**Part No. Ceiling Pulls**

	CT080521	QT607	Ceiling Pull Unit
	CT0802	NCP-13	Anti-bacterial Wipe Clean Pull Cord

**Part No. Addressable Call Points**

10	CT080451	QT602	Button Reset c/w Remote Socket
	CT080452	QT602E	Button Reset, c/w Iconised Label & Remote Socket
	CT080453	QT609	Button Reset, No Remote
	CT08046	QT605S	Accessible Toilet Reset Point c/w Confidence Sounder

**Part No. Infrared Devices**

	CT080528M	QT302RX	Master Ceiling Receiver - Square
	CT080528R	QT302R XR	Master Ceiling Receiver - Round
4	CT080528S	QT302R XS	Slave Ceiling Receiver - Square
	CT080528RS	QT302R XRS	Slave Ceiling Receiver - Round
	CT080451RS	QT602RS	Addressable Call Point, Button Reset, c/w Sounder & Remote Socket
	CT080453RS	QT609RS	Addressable Call Point, Button Reset, c/w Sounder No remote
9	CT080860	QT422RX	Radio Receiver

**Part No. Dementia Care Solutions**

11	CT080230	QT630	Dementia Care Controller
13	CT080234	QT637	Enuresis/General Purpose Interface Socket
12	CT080239	QT635	Enuresis/Bed Wet Sensor
	CT080237	QT633	Bed Exit Mat
	CT080238	QT634	Chair Exit Mat
	CT080233	QT636	Interface Unit c/w Remote Socket
14	CT080210	QT644	Floor Pressure Mat

**Part No. Corridor Displays**

3	CT080250C	QT608C	Corridor Display
	CT080250	QT608CD	Corridor Display (No Controls)
	CT080250L	QT608CDIS	Large Corridor Display
	CT080250LD	QT615S	Display Interface

**Part No. Overdoor Lights & Sounders**

8	CT080952LSS	QT606S	Slave Overdoor Light c/w Sounder
7	CT080950L	QT606	Slave Overdoor Light
	CT080952LS	QT606A	Addressable Overdoor Light c/w Sounder
	CT080931S	QT688	Addressable Sounder
5	CT080931H	QT688/2	Hi-Output Addressable Sounder
6	CT080841	QT423	Quantec Configurator

**Part No. Accessible Toilet Alarm Kits**

CT0800QT	QT951	Disabled Persons Toilet Alarm Kit
----------	-------	-----------------------------------





### Dorgard SmartSound

- Improved sound recognition with new SmartSound technology
- Installed in under 5 minutes
- Assist with germ control

Dorgard SmartSound is a wireless solution for legally holding open fire doors, automatically releasing them to close when a fire alarm sounds. Dorgard SmartSound contains noise-filtering technology which allows it to identify sounds more accurately.

Part No.	Dorgard SmartSound	
FCI500BSS	728-7133	Dorgard SmartSound, Black
FCI500WSS	XDX230082SS	Dorgard SmartSound, White

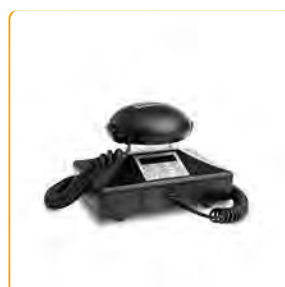


### Freedor SmartSound

- Hold fire doors open at any angle
- Wire free technology - no costly hard wiring required
- Assists with germ control

Freedor SmartSound is an overhead door closer which makes opening and closing a fire door effortless. A wireless device, it allows you to place your door open in any position and closes on the sound of the alarm. As it is a free swing closer, the door is easy to push open without the usual resistance presented by a door closer.

Part No.	Freedor SmartSound	
FCI50I	504-7754	Freedor SmartSound, Silver



### Deafgard

- Portable device, requiring no installation
- Peace of mind for family & friends
- Ensures you comply with elements of the Equality Act 2010

Deafgard is a portable device which alerts people in an emergency. Designed for the deaf and hard of hearing, Deafgard has a vibration pad and flashing light which wakes people upon the sound of the alarm.

Part No.	Deafgard	
FCI505	DF2000	Deafgard Vibrating Pillow Unit



### Germgard

- Promote hygiene best practices
- Easy integration with access control & electronic locks
- Automatic door activation
- Reactive digital display
- Customisable home screen
- Bespoke sanitiser with bladder refill
- Suitable for high risk hygiene areas
- Energy harvesting technology

Germgard is a smart sanitising system, designed to promote good hygiene practices to building users. Using digital signage, it alerts users to sanitise their hands before gaining entry. Germgard can be used as a stand alone system or it can be integrated with electronic door locks, automatic doors and access control systems.

Part No.	Germgard	
FCI520S	872-7202	Germgard consists of: <ul style="list-style-type: none"> <li>• Germgard Controller</li> <li>• Germgard Sanitiser Unit</li> <li>• Germgard PIR Sensor</li> <li>• Germgard Screen</li> </ul>
FCI52IS	STATION	Germgard Station consists of: <ul style="list-style-type: none"> <li>• Germgard Sanitiser unit</li> <li>• Germgard PIR Sensor</li> <li>• Germgard Screen</li> <li>• Germgard Stand</li> </ul>
FCI520	LITE	Germgard LITE consists of: <ul style="list-style-type: none"> <li>• Germgard Controller</li> <li>• Germgard Sanitiser Unit</li> <li>• Magnetic Lock</li> <li>• Request to exit button, dual</li> </ul>



### Germgard LITE

- Promote hygiene best practices
- Easy integration with access control & electronic locks
- Works as an access control system
- Wire free Bluetooth sanitising unit
- Suitable to use with all sanitising liquids
- Energy harvesting technology





**Dorgard Pro**

- Hassle free installation
- Connects to an alarm or security panel
- Easily check all units with InSite software\*
- Controlled by ProHub, not affected by background noise

Dorgard Pro is a fire door retainer which holds open fire doors legally, allowing them to automatically closer when an alarm is activated. Dorgard Pro is controlled by ProHub, which is directly connected to the fire alarm panel and allows you to monitor all door units from a central hub.

Part No.	Dorgard Pro	
FCI500PRO	360-1551	Dorgard Pro, Black
FCI500WPRO	956-8278	Dorgard Pro, White



**Freedor Pro**

- Place doors open at any angle with free swing
- Control panel will be connected to a fire alarm relay which connects to Freedor Pro through a radio signal
- Easily check all units with InSite software\*
- Hassle free installation

Freedor Pro takes the weight out of heavy fire doors and allows you to hold them open at any angle with its free swing feature. Freedor Pro is controlled by radio signal from the ProHub, meaning that in the event of a fire Freedor Pro will allow the doors to close, preventing the spread of smoke and fire.

Part No.	Freedor Pro	
FCI501PRO	338-0604	Freedor Pro, Silver
FCI501BPRO	170-2053	Freedor Pro, Brass



**ProHub**

- Simple to install using a standard internet connection using WIFI or ethernet connection
- Available in POE, 24V & 240V mains with battery backup
- Optional activation to notification system (DMS)
- 3 x InSite Device licenses included\*

ProHub manages the wire free connection of all devices in the Pro Range. ProHub is also the gateway to the Fireco cloud based remote management software - InSite.

Part No.	ProHub	
FCI600POE	198-1593	ProHub Midi, PoE
FCI600M	649-4204	ProHub Maxi, Mains Powered
FCI601MD	700-9825	ProExtender Midi, PoE
FCI601MX	550-7411	Pro Extender Maxi, Mains Powered



**InSite**

- Real time device monitoring
- Intuitive Graphical User Interface
- Cloud based software
- REST API integration to 3rd party software
- Optimised software for any mobile device
- Soft/hardware driven inputs/outputs
- Turnkey solution.

InSite is a remote cloud based software that allows you to remotely monitor your Pro Range installations. Manage your Pro devices in real time from any location and gain control over compliance in your building. There is no software installation required, nor complicated network setting to manage, simply install the ProHub system controller and connect it to the internet. ProHub will connect to the cloud and report system functionality straight through to your internet device.

\*Subscription to InSite/DMS required. Check with your Account Manager for details.



**DMS**

- Fire or other emergency messages to subscribers
- 2 input channels fire and alert triggered by voltage free contacts
- Firewall port forwarding not required
- TCP/IP Protocol used is (https) on port 443
- Internet connection 100m/1Gbit ethernet or WIFI with WPA2 security (back up connections options available.)

DMS is a mass notification system which can send text, email Whatsapp or voice messages to unlimited users subscribed to the service. DMS is ideal for building management systems, such as fire alarms, lockdown messages or return messages after evacuate and disperse notifications

Part No.	ProHub	
FCI700POE	160-1533	DMS Power Over Ethernet
FCI700	735-7129	DMS Low Voltage
FCI70012	204-1291	DMS 12VDC with Backup PSU

A wide range of magnetic door holders and closers, both floor and wall mounted. Decorative finishes are available for certain door holders. Wireless acoustic door holders and closers are also available, for applications where wires are not practical.



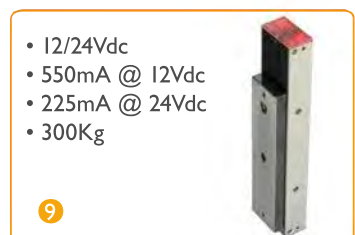
Part No.	Cranford Controls Door Retainers
1 CRI9002	302-019 Wall Mounted, 24V, 200N, Plastic
CRI9002M	302-020 Wall Mounted, 230V, 200N, Plastic
2 CRI9012	302-014 Floor Mounted, 24V, 200N, Metal
4 CRI900M	302-069 Wall Mounted, 24V, 200N, Metal
5 CRI906	302-007 Keeper Plate
3 CRI90312	302-030 Pole Mounted, 24V, 1000N

Part No.	Agrippa Acoustic Range
2 CRI907	3-80-0060 Agrippa Acoustic Door Retainer, White
CRI913	3-80-0066 Agrippa Acoustic Door Retainer, Black
CRI907B	3-80-0062 Agrippa Acoustic Door Retainer, Brass
3 CRI908	3-80-0070 Acoustic Overhead Door Closer
4 CRI920H	3-80-0013 Salamander Door Holder
CRI920C	3-80-0012 Salamander Door Holder Controller

Part No.	Geze Door Closers
6 GZI922	105211 TS4000E Body Only
GZI922A	102421 TS4000V Arm Only
GZI922ASF	106460 TS4000 Swing Free Arm
GZI925	026261 TS4000E Silver Face Plate
GZI926	102732 TS4000E Body Fixing Pack

Part No.	Cooper Fulleon Door Release
7 FUI914	1380-30-D Arm Mounted MDR 24V, 980N
8 FUI916	1320-24 Wall MDR, 24V, 390N
FUI916M	1320-240 Wall MDR, 240V, 390N
FUI915	1369-CSA Floor MDR, 24V, 490N
FUI900B	Floor Bracket FSMD Floor Bracket

Part No.	CDVI Door Retainers
9 CD07533CM	C3S11 Surface Mount, 300KG, Monitored
CD07533	V3S Surface Mount, 300KG
CD07533ZL	300-ZL Z & L Kit for 300KG & 400KG Magnets
10 CD07535M	V5SR Surface Magnet, 500KG, Monitored
11 CD07535ZL	500-ZL Z&L Kit for 500KG Magnets
CD07534M	V4SR Surface Magnet, Monitored, 400KG,



Fully certified to EN54-4, these PSUs provide a stable and fully regulated, true 24Vdc output for fire alarm system applications under all power conditions.



**Kentec PSU**

- 2.5 & 5.25A versions
- 110V or 230V input
- House up to 26Ah batteries
- Dual output option for powering fire alarm control panels remotely
- Regulated, true 24V output
- Status indicators for monitored faults

**Part Code**

KE6122SI	K25250M2
KE6122SY	K2525003
KE6152SY	K2540003
KE6152LSY	K2540015
KE6122DLSI	K25250M3
KE6152DSI	K25400M3

**Kentec EN54-4 24V PSU**

Syncro Style 2.5A, 385W x 310H x 90D
Syncro Style 2.5A, 500W x 355H x 117D
Syncro Style 5.25A, 500W x 355H x 117D
Syncro Style 5.25A, 500W x 460H x 190D
Sigma Style 2.5A, 385W x 520H x 110D
Sigma Style 5.25A, 385W x 520H x 110D

Ideal for controlling beam detectors, auto dial communicators, aspirating smoke detectors, electromagnetic door holders, ventilation systems and more the range comprises of 1.5, 3 and 5A 24V units and a 12V unit.



**C-TEC PSU**

- EN54-4/A2 by LPCB and VdS
- Single volt free changeover relay that switches for any fault condition
- Multiple indicators - supply present, general fault, fault type & aux. equipment fault
- Mains fail simulation mode

**Part Code**

CT611525	BF560-24
CT61325	BF562-3
CT61525	BF562-5
CT61152NC	BF560-24/E
CT61325C	BF562-3/E
CT6152NC	BF562-5/E

**C-TEC EN54-4 24V PSU**

1.5A, 380W x 235H x 96D
3A, 404W x 404H x 110D
5A, 404W x 404H x 110D
1.5A Encased Switch Mode
3A Encased Switch Mode
5A Encased Switch Mode

RGL 24V Transformer Rectifier Switchmode Power Supply Units. They allow a full current load on the PSU.



**RGL PSU**

- Ideal for hold open magnets & door closers
- Dual inputs, external voltage or volt free
- Full current to load
- LED indicators for O/P, fault and mains
- Back EMF protection

**Part Code**

RG6022R	2402/4TRS
RG60428	2404/8TRS

**RGL Transformer Rectifier**

2A Reg PSU, (No Battery Back-up)
4A Reg PSU, (No Battery Back-up)

The STX range of power supplies has been specifically designed for Fire System Installations and features intelligent battery charging and monitoring with remote fault signalling.



**Elmdene STX PSU**

- 27.6V dc output
- Deep discharge protection
- Remote fault signalling
- LED indication: Mains status, output, battery and charger fault
- Mains transient protection

**Part Code**

EL6112EC	STX2401-C
EL6122E	STX2402-C
EL6122EE	STX2402-E
EL6152CC	STX2405-C
EL6152E	STX2405-E
EL6110E	STX2410-E
EL61032	STX2410-H

**EN54 24V STX PSU**

1 Amp Regulated, Fits 2 x 7Ah Max
2 Amp Regulated, Fits 2 x 7Ah Max
2 Amp Regulated, Fits 2 x 17Ah Max
5 Amp Regulated, Fits 2 x 7Ah Max
5 Amp Regulated, Fits 2 x 17Ah Max
10Amp Regulated, Fits 2 x 17Ah Max
10Amp Regulated, Fits 2 x 38Ah Max

The NGI (Next Generation Intelligence) technology PSU offer a whole host of new features that radically improve the way a fire system power supply should operate.



**Dycon EN54**

- Micro processor and monitored and controlled
- On demand battery charging
- Constant battery impedance and on board & remote temp. monitoring
- 3 x opto relay fault outputs
- 2 x separately fused 24VDC outputs
- 1 x external and 3 x internal status LED's

**Part Code**

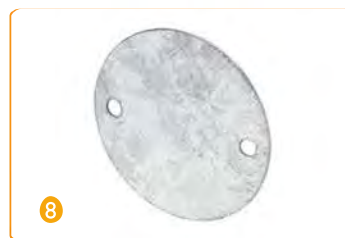
DY6115D	D2431
DY6130D	D2433
DY6150D	D2435

**Dycon EN54-4 PSU**

24VDC, 1.5A PSU, Fits 2 x 7Ah Max
24VDC, 3A PSU, Fits 2 x 7Ah Max
24VDC, 5A PSU, Fits 2 x 17Ah Max



Now one of the leading brands of fire cable, NoBurn Platinum fire cable is manufactured in the UK using the latest technology. It is approved by LPCB and BASEC to meet with BS 5839-1:2013 Clause 26.2d Standard. Our range includes a variety of cable sizes, cores and colours with 1.5mm, 2 Core Red and White available from stock. We also stock clips and all types of cable accessories, trunking and galvanised conduit boxes.



Part Code	Cable Trunking 25 x 16mm	
3 TR0200	MMT2 WHI	MMT2 White Trunking
TR02000IB	TIB2 WHI	MMT2 White Internal Bend
TR0200C	TC2 WHI	MMT2 White Coupler
TR0200EB	TEB2 WHI	MMT2 White External Bend
TR0200FB	TFB2 WHI	MMT2 White Flat Bend
TR0200RSA	MMT2SFRED	MMT2 Red Trunking, Self Adhesive
TR0200T	TT2-2 WHI	MMT2 White Equal Tee,
TR0201	MMT2SF WHI	MMT2 White Trunking, Self Adhesive

Part Code	Cable Trunking 38 x 25mm	
TR0204	MMT4 WHI	MMT4 White Trunking
TR0204SA	MMT4SF WHI	MMT4 White Trunking Self Adhesive
TR0205	TIB4 WHI	MMT4 White Internal Bend
TR0206	TT4-4	MMT4 White Equal Tee
TR0207	TFB4 WHI	MMT4 White Flat Bend

Part Code	Galvanised Conduit Boxes	
1 CA0110	CF203G	20mm Tee Box
2 CA0111	CF20U/G	20mm U Box
4 CA0112	CF20A/G	20mm Angle Box
10 CA0113	CF20IG	20mm Terminal Box
9 CA0114	CF202G	20mm Through Box
3 CA0122	CF20Y/G	20mm Y Box
8 CA0116	GALV LIDS	Lid
7 CA0117	GALV GASKET	Box Gasket
CA0210GC	CF20CG	20mm Coupler
CA0118	M4x12 Galv	Screws for Conduit Box Per 100

Part Code	Cable Ties	
6 CA0250	SST300-6	Stainless Steel 300mm, per 100
5 CA0252	KCT200-4.8B	4.8 Black Plastic, 200mm, per 100
CA0254	KCT300-4.8B	4.8 Black Plastic, 300mm, per 100

Part Code	D-Line Clips	
4 TR0200FC	D30 Clips	Safe-D30 Clips 100 per Bag
TR02004FC	D40 Clips	Safe-D40 Clips 50 per Bag
TR02005FC	D50 Clips	Safe-D50 Clips 50 per Bag

Part Code	Ventcroft 2 Core, 100m	
1 VC7215R	VFP-215ERD	Red, 1.5mm
2 VC7215W	VFP-215EWT	White, 1.5mm
VC7215RE	VNP-215ERD	Red, 1.5mm Enhanced
VC7215WE	VNP-215EWH	White, 1.5mm Enhanced
VC7225R	VFP-225ERD	Red, 2.5mm
VC7225W	VFP-225EWT	White, 2.5mm

Part Code	Ventcroft 4 Core, 100m	
VC7415R	VFP-415ERD	Red, 1.5mm
VC7415W	VFP-415EWT	White, 1.5mm
VC7415RE	VNP-415ERD	Red, 1.5mm Enhanced
VC7425W	VFP-425EWT	White 2.5mm

Other cores and colours available by request.





**FireClip**

- Round cables and PVC trunking
- For single and double cables
- 24kg Tensile Load
- Anchor fixings for wire etc
- Corrosion Resistant - UV Stable
- 18th Edition Compliant
- Fire resistant > 1000°C
- Available in Red/Black/White
- Other colours and sizes available

**Part Code**

XSI040S	ILCR608
XSI040SL	ILCR911
XSI040WS	ILCW608
XSI040BS	ILCB608
XSI04ID	ILCR682
XSI04IDL	ILCR9112
XSI04IDW	ILCW682
XSI04IDB	ILCB682

**FireClip**

Single, Red, 6-8mm
Single, Red, 9-11mm
Single, White, 6-8mm
Single, Black, 6-8mm
Double, Red, 6-8mm
Double, Red, 9-11mm
Double, White, 6-8mm
Double, Black, 6-8mm



**Part Code**

XSI040SCR	ILCC608
XSI040SCO	ILCCP406
XSI040SP	ILCP406
XSI04IDCR	ILCC682
XSI04IDCO	ILCCP682
XSI040SXL	ILCR1114
XSI040SXLW	ILCW1114
XSI040SXLB	ILCB1114

**FireClip**

Single, Cream, 6-8mm
Single, Copper, 6-8mm
Single, Purple, 6-8mm
Double, Cream, 6-8mm
Double, Copper, 6-8mm
Single, Red, 11-14mm
Single, White, 11-14mm
Single, Black, 11-14mm



**SuperClip**

- Suitable for SWA Cable, PVC/metal conduct
- For bunched cables
- 44kg Tensile Load
- Anchor fixings for wire etc
- Corrosion resistant - UV Stable
- 18th Edition Compliant
- Fire resistant > 1000°C
- Other colours and sizes available

**Part Code**

XSI042B	ILSB1214
XSI042R	ILSR1214
XSI042W	ILSW1214
XSI042BL	ILSB1518
XSI042RL	ILSR1518
XSI042WL	ILSW1518

**SuperClip**

Black, 12-14mm
Red, 12-14mm
White, 12-14mm
Black, 15-18mm
Red, 15-18mm
White, 15-18mm



**T&E Clip**

- Suitable for Twin, CPC cabling and PVC trunking
- Anchor fixings for wire etc
- White/Grey
- Corrosion resistant - UV Stable
- Fire resistant > 1000°C
- 24kg Tensile Load
- Other sizes available

**Part Code**

XSI0431G	ILTEG001
XSI0431W	ILTEW001
XSI04315G	ILTEG001.5
XSI04315W	ILTEW001.5
XSI04325G	ILTEG002.5
XSI04325W	ILTEW002.5
XSI04310G	ILTEG010
XSI04310W	ILTEW010

**T&E Clip**

Grey, 1mm
White, 1mm
Grey, 1.5mm
White, 1.5mm
Grey, 2.5mm
White, 2.5mm
Grey, 10mm
White, 10mm



**Coaxial Clip**

- For CCTV and AV installations
- Suitable for RG59 Coaxial Cabling
- Corrosion resistant - UV Stable
- Fire Rated
- For indoor and Outdoor Use
- 18th Edition Compliant

**Part Code**

XSI044B	ILCABT004
XSI044W	ILCAWT004

**Coaxial Clip**

Black, 4mm
White, 4mm



Howler manufacture a range of wireless, hard wired and stand alone alarm systems. With reliability, simplicity and toughness at the core of their products, they will ensure that the site has the right fire safety equipment to make it as safe as can be.



**Part No.**

**HO Alarms**

2	HW4000P	HOI	Site Alarm, Push On/Off Button
3	HW4001S	HOCP	Site Alarm, Call Point
4	HW4000K	HO3	Site Alarm, Push On/Key Off Switch
5	HW4001LP	HO2	Site Alarm, Large Palm Push Switch

**Part No.**

**HO Alarms - MultiLink**

HW4000PML	HOI/ML	Site Alarm, Push On/Off Button
HW4001P	HOCP/ML	Site Alarm, Call Point
HW4000KML	HO3/ML	Site Alarm, Push On/Key Off Switch
HW4001LPML	HO2/ML	Site Alarm, Large Palm Push Switch

**Part No.**

**Wireless GoLink Site Alarms**

6	HW4801GL	HOI/GL	Recessed Push Switch
7	HW4802GL	HO2/GL	Push On/Twist Off Switch
8	HW4803GL	HO3/GL	Push On/Key Reset Switch
9	HW4006	HOCP/GL	Call Point
10	HW4811	HO5/GL/XS	First Aid Assistance
	HW8010	GLCP	Control Panel

**Part No.**

**Site Alert**

1	HW4002	SA01	Site Alert with Strobe
---	--------	------	------------------------

**Part No.**

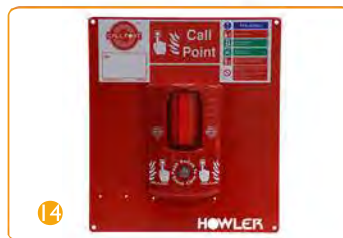
**FirePost**

1	HW4702	TR02A	Inc. Signage & Extinguisher brackets
2	HW4702B	TR02/BST	Inc. Signage & Extinguisher basket
	HW4704	FP04	Inc Signage, Extinguisher basket, removable backboard with A3 site plan holder
	HW4703	FP03A	Inc. Signage, extinguisher brackets, removable backboard with A3 site plan holder
3	HW4705	FP05	Inc Signage, Lockable cabinet, removable backboard with A3 site plan holder

**Part No.**

**Call Post**

14	HW4003	CPOST/01	Call Post c/w Fire Action Notice, call point symbol and space to number posts
----	--------	----------	---







**Part No. PowerX Water**

- 1 EXI2046ATG 201F81/03403 6ltr with Additive - Stored Pressure
- 2 EXI2049TG 201F81/02905 9ltr Stored Pressure
- 3 EXI2046TG 201F81/03404 6ltr Stored Pressure, Spray

**Part No. PowerX Foam**

- 4 EXI2252FTG 201F81/03403 2ltr Afff Stored Pressure Foam
- 5 EXI2253FTG 201F81/02905 3ltr Afff Stored Pressure Foam
- 6 EXI2256FTG 201F81/03404 6ltr Afff Stored Pressure Foam

**Part No. PowerX CO2**

- 11 EXI203TGS 201F81/02906 2kg Co2 Steel S/H
- 12 EXI2035TGS 201F81/02907 5kg Co2 Steel S/H

**Part No. PowerX Foam**

- EXI2081TG 201F81/03403 1kg ABC Stored Pressure Powder
- 8 EXI2082TG 201F81/02905 2kg ABC Stored Pressure Powder
- 9 EXI2084TG 201F81/03404 4kg ABC Stored Pressure Powder
- 10 EXI2086TG 201F81/02901 6kg ABC Stored Pressure Powder
- EXI2089TG 201F81/02902 9kg ABC Stored Pressure Powder

**Part No. PowerX Wet Chemical**

- 7 EXI3002TG 81/03409 2ltr Wet Chemical
- EXI30026TG 201F81/03408 6ltr Wet Chemical

**Part No. Firepower CO2**

- EXI203TGA 201F9705/00 FPC2C 2kg Co2 Alloy Body
- EXI2035TGA 201F9706/00 FPC5C 5kg Co2 Alloy Body

**Part No. Firepower Stainless Steel**

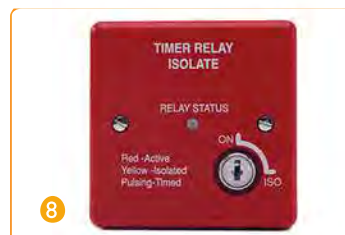
- EXI6406WTG 201F9913/00 FPW6S 6ltr Stored Pressure Water
- EXI6409WTG 201F9914/00 FPW9S 9ltr Stored Pressure Water
- EXI6406FTG 9221/00 FPF6S 6ltr Afff Stored Pressure Foam
- EXI6409FTG 201F9222/00 FPF9S 9ltr Afff Stored Pressure Foam
- EXI6402CTG 201F9705/06 FPC2SC 2kg Co2 Al S/H

**Part No. Frost Free Horn & Stands**

- EX4511TG 201F47/95109 Swivel Horn - 2kg (frost free)
- EXI903S 201F81/02531 Rotationally Moulded Single Stand
- 13 EXI903D 201F81/02532 Rotationally Moulded Double Stand
- EXI901SC 201F81/03007 Single Chrome Stand
- 14 EXI901DC 201F81/03008 Double Chrome Stand



A wide range of ancillary devices, from Mains Isolation boxes, Remote LED indicators to RAWL plugs, screws, printer paper, log books and document boxes.



**Part No. Remote LED Indicators**

1	CR2007TF	502-003	'Fire Detector Operated' Text, Flush
	CR2007TS	502-004	'Fire Detector Operated' Text, Surface
	FUI1000	REM/C	Fulleon Remote Indicator

**Part No. Log Books**

2	XS7000	HSFLB	Log Book A4
	XS7001	HSFLB2	Log Book A5

**Part No. Firemans Switch**

	XSI050F	FMS-FLUSH	Stainless Steel, Flush
4	XSI050S	FMS-SURF	Stainless Steel, Surface
5	XSI050K	FMS-KEY	Drop Key for Firemans Switch

**Part No. Relay Cards, 24V**

7	HA1009	RECARD24-8F	8 Amp Relay Card
	HA1007	BRISOL-R	Boxed Isolate Switch Relay, Red
8	HA1019	BRTIMER	Boxed Timer/Pulsing Relay, Red
	HA1005B	REBOX24-5	5 Amp Relay, Boxed
	HA1015	BRLDA	Lockdown Alarm Pulsing Relay
	CRI001M	503-003	24V, Ancillary Relay Unit Boxed
9	CRI001TS	503-001	24V, Ancillary Relay Unit, 'Operated' Text
	CT1003	BF366	24V, 5A Isolatable Relay, c/w Buzzer
10	CT1005	BF376	24V, 5A Relay on Single Gang Plate
	XSI200	ER 301	ERL Timer Relay PCB

**Part No. Mains Isolation Box**

6	HA1252	FAIS-R-B	Haes, Red Switch with Back Box
	CT1252W	BF319	Mains Double Pole Keyswitch, White

**Part No. Plugs & Screws**

13	XS3000	2491015	Red Wall Plug, Per 100
	XS3004	5081000	6x45mm Multi-Purpose 200 Plugs & Screws
14	XS4000	775-8107	Back Box 1G PVC White
	XS3001	1521190	8 x 1" Screws Per 200
	XS3002	40040CLAF	8 x 1.5" Screws Per 200

**Part No. Document Box**

3	EL6900R	A4-DOC-BOX-R-FIRE	A4 Red with Fire Logo & Text
	EL6900S	A4-DOC-BOX	Standard Plain White A4

**Part No. Printer Roll & Ribbon**

	GE8881	VS-PROLL	Gent Vigilon Roll
	GF1001	PR/EXT	Juno Thermal Roll
	KE8900PTT	TRW026	Thermal Roll 58 x 30 x 12.7mm
12	XSI213	TWI86	Thermal Roll 57mm Wide
	XSI214	TRW184	Morley Printer Paper Roll 55mm
	ZI8342	23701	ZP-PRR Replacement Roll
11	XS9000	TRWR0021	Ribbon for Morley Printer



Having excellent deep discharge recovery characteristics, coupled with long life on float standby, Yuasa NP valve regulated lead acid batteries are ideal for numerous applications in both cyclic and standby modes. They are the ideal security battery for alarm systems, fire systems and emergency lighting.



**Part No. Yuasa VRLA Batteries (mm)**

1	YU5012	NP1.2-12	12V 1.2Ah, 97 x 48 x 54.5
2	YU5021	NP2.1-12	12V 2.1Ah, 178 x 34 x 64
	YU5023	NP2.3-12	12V 2.3Ah, 177 x 33 x 60
3	YU5028	NP2.8-12	12V 2.8Ah, 133 x 68 x 59
4	YU5032	NP3.2-12	12V 3.2Ah, 134 x 67 x 64
	YU5040	NP4-12	12V 4Ah, 90 x 70 x 106
	YU5050	NPH5-12	12V 5Ah, 90 x 70 x 106
5	YU5070	NP7-12	12V 7Ah, 151 x 65 x 97.5
	YU5100	REC10-12	12V 10Ah, 151 x 65 x 110
6	YU5120	NP12-12	12V 12Ah, 151 x 98 x 97.5
7	YU5170	NP17-12	12V 17Ah, 180 x 70 x 165
8	YU5240	NP24-12	12V 24Ah, 166 x 175 x 125
9	YU5380	NP38-12	12V 38Ah, 197 x 165 x 170
10	YU5650	NP65-12	12V 65Ah, 350 x 166 x 174

Yuasa NP Series valve regulated lead-acid batteries utilises the latest advanced design Oxygen Recombination Technology.

The features include:

- Superb recovery from deep discharge
- Electrolyte suspension system
- Gas Recombination
- Multipurpose: Float or Cyclic use
- Usable in any orientation (except continuous inverted)
- Superior energy density
- Lead calcium grids for extended life

**Part No. Yuasa FRVRLA Batteries (mm)**

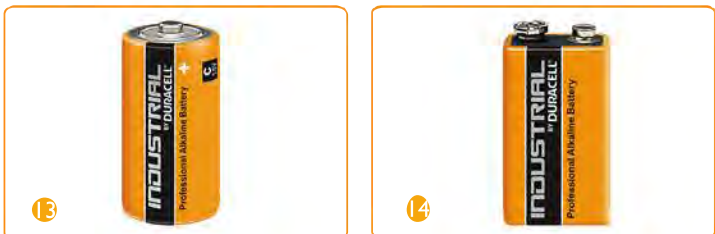
YU5012FR	NP1.2-12FR	12V, 1.2Ah FR, 97 x 48 x 54.5
YU5032FR	NP3.2-12FR	12V, 3.2Ah FR, 134 x 67 x 64
YU5070FR	NP7-12FR	12V, 7Ah FR, 151 x 65 x 97.5
YU5012FR	NP12-12FR	12V, 12Ah FR, 151 x 98 x 97.5
YU5170FR	NP17-12FR	12V, 17Ah FR, 181 x 76 x 167



As well as supplying batteries for fire alarm panels and PSU's, Firesense also supply spare batteries for detectors, call points and other ancillary products.

**Part No. Spare Batteries**

1	XS5000AA	DURIND-AA	Duracell Industrial AA
2	XS5000AAA	DURIND-AAA	Duracell Industrial AAA
3	XS5000C	DURIND-C	Duracell Industrial C
	XS5000D	DURIND-D	Duracell Industrial D
4	XS50009V	DURIND-9V	Duracell Industrial 9V
	XS5000DI23A	DLI23A	Duracell Ultra 123 Lithium
	XS5000D2032	DL2032	Duracell 3V Lithium





Kidde Safety produce a range of smoke and carbon monoxide detectors to protect your family and home. All Kidde smoke alarms are fully certified to the latest European standard, EN14605, and all carbon monoxide alarms meet the BS 50291 standards.



Part No.	Battery Alarms
1 KI2834	I0Y29-UK 10 Year Optical Smoke Alarm

Part No.	Firex Alarms
11 KI2804F	KF30 Heat Alarm, Mains
10 KI2802F	KF10 Ionisation Smoke Alarm, Mains
12 KI2803F	KF20 Optical Smoke Alarm, Mains

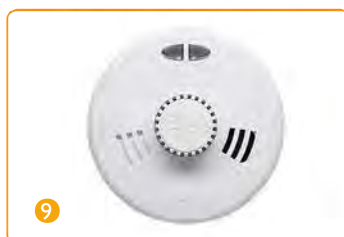
Part No.	Fire Blankets
14 KI11007	FBIX6 Fire Blanket with Premium Cloth

Part No.	Firex Alarms Rechargeable
13 KI2804FR	KF30R Heat Alarm
KI2802FR	KF30R Ionisation Smoke Alarm
KI2803FR	KF20R Optical Smoke Alarm

Part No.	Carbon Monoxide Alarms
5 KI2841	I0LLCOB 10 Year Alarm
3 KI2845	7COB 7 Year Alarm
6 KI2842	I0LLDCOB 10 Year, with Digital Display
4 KI2846	7DCOC 7 Year, with Digital Display
KI2850	5COLSB 5 Year Alarm
2 KI2840	900-0122 Smoke & CO Alarm with Speech

Part No.	Slick Mains Alarm Wireless
9 KI2812	3SFW Heat Alarm
KI2832	3SFWR Heat Alarm, Rechargeable
KI2810	ISFW Ionisation Alarm
7 KI2830	ISFWR Ionisation Alarm, Rechargeable
KI2811	2SFW Optical Alarm
8 KI2831	2SFWR Optical Alarm, Rechargeable

Part No.	Spare Batteries
KI2901	SMK4896 Firex Deep Pattress
KI2816	RF-SFTP Mains Alarm Trimplate with Wireless Capability





**Part No.**

**RadioLINK Module**

8	AI2027MRF	Ei100MRF	RadioLINK Module
---	-----------	----------	------------------

**Part No.**

**Hard Wired Accessories**

1	AI2009RC	Ei1529RC	Alarm Control Switch
	AI4002	MCP401RC	Manual Call Point
10	AI20062R	Ei128R	Relay Module with 5A Relay
	AI2006RBU	Ei128RBU	Relay Module with Back-up
	AI2903	Ei1516	10 Year Signal Repeater Module
	AI2901	Ei127	Surface Mount Kit for 2100, I60RC & I40RC

**Part No.**

**RadioLINK Accessories**

12	AI2019	Ei450	Alarm Controller
	AI2011	Ei412	Alarm Control Switch
4	AI4001	Ei407	Manual Call Point
	AI2017	Ei428	Relay Module with 5A Relay
13	AI2015	Ei413	RadioLINK Panel Interface

**Part No.**

**Carbon Monoxide Alarms**

14	AI2040	Ei208	7 Year Battery Only CO Alarm
	AI2040W	Ei208W	Battery CO Alarm RadioLINK Upgradeable
	AI2026MRF	Ei200MRF	Plug in RadioLINK Module

**Part No.**

**Battery Only Alarms**

	AI2050E	Ei603	Heat, Lithium Battery
6	AI2053	Ei650	Optical Smoke, Lithium Battery

**Part No.**

**RadioLINK Battery Alarms**

5	AI2050CRF	Ei603CRF	Heat, 9V Alkaline Battery
	AI2050ERF	Ei603RF	Heat, Lithium Battery
7	AI2053TYWR	Ei650RF	Optical Smoke, Lithium Battery

**Part No.**

**10 Year Mains Powered Detectors**

	AI2707	Ei3024	3000 Series MultiSensor
9	AI2707CO	Ei3028	3000 Series MultiSensor Heat & CO
	AI2708	Ei3000MRF	3000 Series SmartLINK Module
	AI2702	Ei3016	3000 Series Optical Smoke
	AI2703	Ei3014	3000 Series Heat
	AI2705	Ei3018	3000 Series Carbon Monoxide

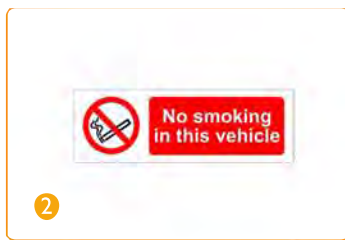
**Part No.**

**5 Year Mains Powered Detectors**

2	AI2002RC	Ei146RC	Optical Smoke, Rechargeable Back Up
3	AI2003RC	Ei144RC	Heat, Rechargeable Back Up
1	AI2000RC	Ei141RC	Ionisation, Rechargeable Back Up
	AI2006RC	Ei168RC	RadioLINK Base



A range of signage including general information or identifying signs, fire signs, fire exit signs and others to suit most applications. Available in self adhesive, rigid plastic and photoluminescent. Signs come in a variety of sizes to suit application and viewing distance, more are available on request.



**Part No.**

**No Smoking**

1	SI0069	PRS.02C	"No Smoking", 300W x 400H
2	SI0070	PRS.88	"In this Vehicle", 150 W x 50H

**Part No.**

**First Aid**

3	SI0400	FA.06F	First Aid
4	SI0401	FA.13F	Eye Wash
	SI0402	FA.08F	First Aid Event
	SI0404	FA.24F	AED Emergency Defibrillator

Signs 200W x 300H (mm) unless stated. Other sizes available. Available in Self Adhesive Vinyl & Self Adhesive Rigid Plastic

**Part No.**

**Fire Exit**

5	SI0005	FE.03L	Arrow Left
6	SI0006	FE.04L	Arrow Right
	SI0007	FE.05L	Arrow Up
	SI0008	FE.06L	Arrow Down
8	SI0002	FE.13L	Fire Exit Keep Clear
	SI0091	FER.01L	Refuge Arrow Right
7	SI0092	FER.11F	Refuge Keep Clear, 300W x 200H

Signs 400W x 150H (mm) unless stated. Other sizes available. Available in Self Adhesive Vinyl & Self Adhesive Rigid Plastic

**Part No.**

**Fire Extinguisher Identification**

9	SI0018	FI 05N	Foam Spray Sign
	SI0019	FI 06N	Carbon Dioxide Sign
	SI0020	FI 07N	Water Sign
10	SI0021	FI 08N	ABC Powder Sign
	SI0022	FI 10N	Wet Chemical Sign
	SI0023	FI 09N	Fire Hose Reel Sign
11	SI0024	FI 18N	Fire Blanket Sign

Signs 80W x 200H (mm) unless stated. Other sizes available. Available in Self Adhesive Vinyl & Self Adhesive Rigid Plastic

**Photoluminescent Signs**

**Part No.**

**Fire Exit**

SI0008PLL	PP.03L	Arrow Left 400 W x 150 H
SI0002P	PP.18L	Fire Exit Keep Clear 400 W x 150 H
SI0092P	PP369F	Refuge Keep Clear 300 W x 200 H
SI0071	PP889G	Keep Clear Door 100 W x 100 H
13 SI0028	PPP.66G	Call Point Sign 100 W x 100 H
14 SI0039	PP 71W	Fire Action Instruction 150 W x 200 H

**Fire Extinguisher Identification**

SI0300	PRS.02C	Foam Spray 80 W x 200 H
12 SI0302	PRS.88	Water 80 W x 200 H
SI0066	PP564N	Fire Blanket 80 W x 200 H





EACIE (Evacuation Alert Control & Indicating Equipment) is now strongly recommended in England for all tall building containing flats with a storey located at a height of 18 metres or more - and is mandatory in Scotland. The EACIE must operate completely independently of the fire detection systems and be designed to support any evacuation strategy chosen by the fire and rescue service.



**EACIE Panel**

- Modular construction
- Can be customised on site if required
- Fully expandable from 1-4 loops
- Supplied with 8, 16, 24 or 32 fire fighter evacuation alert areas as standard
- Control panel with latest dual flash based microprocessor technology
- Robust steel enclosure
- Virtual screen for simple ease of use and remote programming and servicing

The panel is modular in construction and should be sited at an appropriate location suitable for firefighter access.

The panel is supplied with 8, 16, 24 or 32 fire fighter evacuation alert areas as standard, and is fully expandable from 1 to 4 loops. The panel provides a simple 'at a glance' overview of which evacuation zones are operating.

A virtual display enable maintenance engineers to work remotely on it and all programming and servicing can be undertaken on a laptop connected to the panel using DynamixTools PC software.



**GERDA Enclosure**

- Inner box has space for back up batteries
- Maximum battery size is 2 x 17Ah
- Protected access by fire and rescue service
- 'EACIE: For Fire and Rescue Service Use Only' sign fixed to cabinet door
- Lock cylinder is compliant with BS EN 1303

The enclosure box is a locked cabinet which is purpose made to accommodate the EvacGo panel and to house the necessary equipment. It meets the enclosure security rating STS 205 B3 (4mm steel)

The enclosure has a patented key lock with the fire and rescue service holding one key and the other key held by the building owner or other responsible person.



**Alert Sounder/Sounder VAD**

- Max sound output 100dB(A)
- Audible frequency range 440Hz - 2900Hz (dependent upon tone selected)
- 32 tone settings
- IP65
- High sound output capability
- Four adjustable volume settings
- Visual alarm device frequency 0.5Hz
- Embedded microphone for self test facility

Conventional Open area wall sounder available in red (Axis-CWS) or white (Axis CWS/W) and a sounder VAD (Axis-CWSV) or white (Axis-CWSV/W).

They can be used as a standalone conventional device or as an intelligent unit with the addition of the addressable sounder interface module.



**Sounder Interface Module**

- Flexible modular design
- Easy to install
- Manual and auto addressing options
- Built in short circuit isolators
- Microphone self test facility
- Fits the open area conventional wall sounder and sounder beacon, making them addressable and loop powered

The sounder interface module (Axis-WSM) is designed to make the conventional wall sounder and wall sounder beacon addressable and to allow their use on an intelligent loop.

The well proven adaptive radio signal processing algorithms ensure the highest levels of life safety and reliability. Simply mount the back box onto the wall, insert the module into the back box and then fit the sounder on top.



**Standalone Isolator Module**

- Designed to operate with Axis EN control panels
- Provides short circuit isolation for analogue intelligent loops
- Passive device and does not need to be addressed
- Isolates the adjacent loop section where the short circuit occurs
- Restores power to the isolated loop section when short circuit is removed

**Single Relay Output Module**

- Built in short circuit isolators
- EN54-17
- Auto addressing capability (by the control panel) or manually using the handheld programming unit
- Digital checking of double address
- Bicolour (red/green) LED driven by the control panel
- Also available as a wall mounting unit

**Handheld Programming Unit**

- Easy to use for all programmable variables from the device range including the loop address
- Select the required device number to program or adjust the device parameters if required
- Built in keypad and display
- Clear device data
- Displays the sensor analogue values
- Change the heat detector setting from rate of rise to high temperature



EVAC-ALERT is C-TEC's new BS 8629:2019 compliant evacuation alert system specifically designed to assist the fire and rescue services in evacuating high residential buildings in fire emergencies. Comprising of evacuation alert panels, single and multi way flat interface units, self testing evacuation alert sounders and Equality Act compliant visual indicators and vibrating pillow pads, EVAC-ALERT facilitates the safe and orderly evacuation of buildings containing flats.



### EACIE Panel

- 1-48 zone, 1-4 loop BS8629 panels
- 450mA loop drivers
- User customisable slide in floor zone labelling system
- 2 x 12V 17/22Ah batteries
- 741W x 700H x 200D
- 5A EN54-4 PSU fully compliant with EN62368-1

A range of robust 1 to 48 zone, 1 to 4 loop BS 8629 compliant evacuation alert panels. Each evacuation panel comprises a chassis and an IP30 rated 'GERDA' manufactured vandal resistant locking cabinet to STS 205 Issue 3 and EN 1303 (chassis and GERDA cabinet are ordered separately to assist with first fix and transportation). Bright LED indicators, easy to operate evacuation toggle switches and a concealed but intuitive touchscreen powered maintenance interface. Can be connected to multiple evacuation alert sounders, visual indicators and vibrating pillow pads via a CAST Flat Interface. Multiple version available and can also be interconnected on larger installations to provide considerable cost savings on system wiring.



### Flat Interface

- Single loop powered interface
- Fits a 35mm Double gang back box
- 50mA alarm current
- 530uA quiescent
- 144W x 84H x 25mmD

Designed to control one or more evacuation alert devices located inside a flat. Fitted outside a flat in compliance with the requirements of BS 8629 Clause 8. Can power up to 8 evacuation alert sounders and the sounder activation and de-activation is controlled by the FRS at the panel. Includes an onboard short circuit loop isolator.



### Flat Interface

- 4-8 way loop powered interface
- Uses one loop address per 4 sounder circuits
- Ideally mounted in a riser on each floor
- 380W x 235H x 95mmD

Supplied as a 4 circuit unit extendable to 8 circuits using a CA737PCB extension card. Provides 4 or 8 monitored 12.5mA sounder circuits to power up 2 self testing evacuation alert sounders per flat. With an onboard short circuit loop isolator and has a sounder circuit test facility per circuit.



### Alert Sounder

- Red or White IP21C ABS
- Self testing wall sounder
- 100dB(A)
- 5.5mA alarm current
- 108mm diameter x 99mm depth

Highly efficient self testing wall sounders for use on the EVAC-ALERT system. Available in white or red ABS IP21C. Self test functionality means access to a flat is only required when a fault is detected alleviating access issues and substantially reducing service and maintenance costs. 100dB(A) peak sound output at 500-1000Hz means a single sounder mounted over an entrance door will be all that is required in most flats.



### Alert Sounder VAD

- Red or White IP21C ABS
- Self testing wall sounder
- 100dB(A)
- 5.5mA alarm current
- 108mm diameter x 99mm depth
- W-2.75-9 rated VAD functionality
- Low 12.2mA (0.5Hz) or 19.5A (1Hz) alarm current with the visual indicator lit and sounder on max

Highly efficient self testing wall sounders for use on the EVAC-ALERT system. Available in white or red ABS IP21C. Self test functionality (not available for the visual alarm indicator) means access to a flat is only required when a fault is detected alleviating access issues and substantially reducing service and maintenance costs. 100dB(A) peak sound output at 500-1000Hz means a single sounder mounted over an entrance door will be all that is required in most flats.

LuxIntelligent is the latest version of Advanced’s emergency lighting test system. With easy installation, management, testing and monitoring of emergency lighting to BS 5266-1 and EN 50172. A single panel can support up to 996 devices and be locally networked with up to 200 panels or an unlimited number via the LuxCloud service. As an analogue addressable system it ensures all the emergency lights work and are regularly tested to standards. As this is automatic there is no intervention or engineer time required. Panels and systems can be monitored and maintenance managed on mobile phone, table or remote computer.



**Part No.**

**Lux Intelligent Panels**

1	AD9801	LX-9401	Panel c/w, 1 Loop Driver Card
	AD9802	LX-9402	Panel c/w, 2 Loop Driver Cards
	AD9803	LX-9403	Panel c/w, 3 Loop Driver Cards
	AD9804	LX-9404	Panel c/w, 4 Loop Driver Cards
	AD9805	LX-9805	Panel c/w, 5 Loop Driver Cards
	AD9806	LX-9806	Panel c/w, 6 Loop Driver Cards
	AD9807	LX-9807	Panel c/w, 7 Loop Driver Cards
	AD9808	LX-9808	Panel c/w, 8 Loop Driver Cards
	AD9810	LXP-901	Line Driver Module (Pulse Protocol)

**Part No.**

**Pulse Light Modules (PLU)**

	AD9820	LXP-302	Standard c/w 250mm fibre optic
2	AD9821	LXP-302L	Standard c/w 1000mm fibre optic
	AD9823	LXP-110	Central Battery control unit

**Part No.**

**Serial to Ethernet Converter**

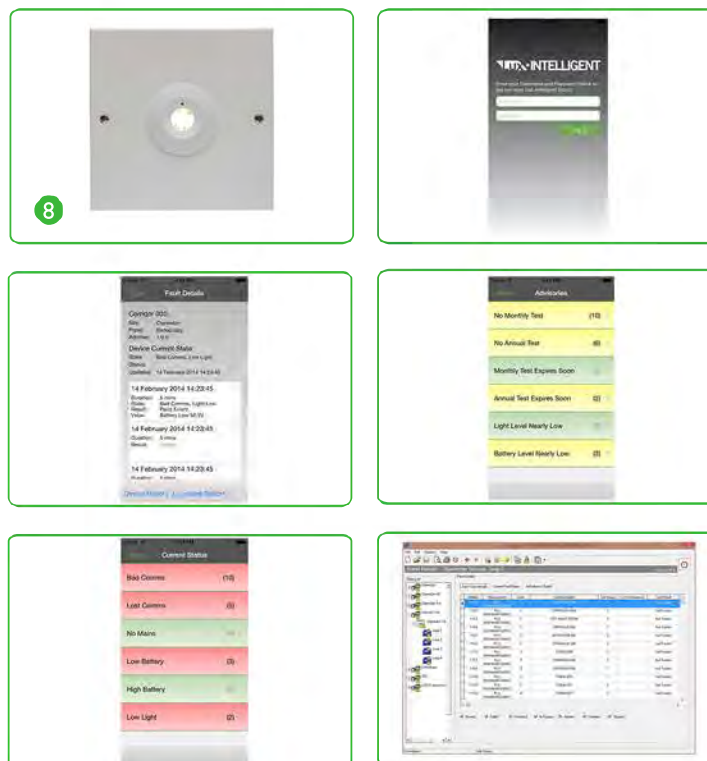
	AD8843	UP-017	Serial to ethernet converter (Moxa-5150) with appropriate connection leads
--	--------	--------	--

Lux intelligent will work with almost any light from almost any manufacturer giving more choice, flexibility and security. Existing luminaires can be converted using one of the addressable modules.

**Part No.**

**LED Emergency Lights**

4	AD9850M	BLED/M3/P	Surface BLADE-LED 3 hour maintained double sided emergency
3	AD9840SL	ULED/M3/P/SL	Circu-LED 3 hour maintained emergency addressable
	AD9840M	ULED/230	Circu-LED mains only
5	AD9844W	ELED/M3/P	Exi-LED wall mounted 3 hour exit sign, arrow down, white finish
6	AD9842	RLED/M3/P	Mor-LED 3 hour maintained addressable
7	AD9841	PLED/M3/P	Panel-LED 3 hour maintained
	AD9841M	PLED/230	Panel-LED mains only
8	AD9845	LLED3/NM3/P/SUR	Surface mount addressable LED-Lite, 3 hour non maintained 3W LED in white
	AD9843	LLED3/NM3/P/REM	Recessed addressable LED-Lite 3 hour non maintained 3W LED in white trim





Eaton's self contained emergency lighting is optimised for different building types, the 3rd party certified luminaires and technologies provide reliable solutions to improve safety whilst saving time and money during maintenance. A large portfolio of exit signs, escape route and anti panic self contained luminaires are available in maintained, non maintained or switchable operation for a wide range of applications.



#### Zeta 4

- 20 and 30m viewing distance
- 150lm light output
- 3h duration
- BESA box entry on base
- IP65
- Surface or recessed installation

#### Part No.

#### Zeta 4 Luminaire

EML9080	ZE42ML3	Small, MNM, IP65, 150lm, 3h
EML9080L	ZE43ML3	Large, MNM, IP65, 150lm, 3h



#### VIA8 Exit Sign

- 24m viewing distance
- 3h duration
- 50,000 hours LED source for minimum maintenance
- Suitable for ceiling mounting
- Luminaire and legend supplied as one unit

#### Part No.

#### VIA8 Exit Sign

EML9025EU	VIA8U	3h, Up/Up, EURO
EML9025U	VIA8U-ISO	3h, Up/Up, ISO
EML9025D	VIA8D	3h, Down/Down, EURO
EML9025DI	VIA8D-ISO	3h, Down/Down, ISO
EML9025LRE	VIA8LR	3h, Left/Right, EURO
EML9025LR	VIA8LR-ISO	3h, Left/Right, ISO



#### Micropoint 2 Surface

- High Efficiency LED and lens
- Up to 145lm light output
- Maximum spacing of up to 19, 1m at a height of 3m
- 3h duration
- IP44
- First fix base for ease of installation
- Versatile multi functional use

#### Part No.

#### Micropoint 2 Surface

EML9300E	MP2SE3H	Escape Route, 3h
EML9300EAT	MP2SE3HIS	Escape Route, 3h, Autotest
EML9300	MP2S03H	Open Area, 3h
EML9300AT	MP2S03HIS	Open Area, 3h, Autotest



#### BeamLite II

- Variants of 200lm, 400lm & 800lm light output
- 12 dedicated LEDs in each light head
- 3h duration
- Suitable for use in large areas
- IP65 and IK07
- Locking mechanism of light head preventing accidental change of light head configuration

#### Part No.

#### BeamLite II

EML9152I	BL2MC-A3	2x100lm, 3h 200lm, 2.28VA/1.6W
EML9152BLTS	BL2MD-C3UK	2x200lm, 3h, 400lm, 3VA/2.4W
EML9152AT	BLM2MD-C3-AT	2x200lm, 3h, AT, 400lm, 5VA/4.5W
EML91524	BL2MD-E3	2x400lm, 3h, 800lm, 5VA/4.5W



#### Halo Pack 2

- 170lm light output
- Maximum spacing of up to 12.5m
- 3h duration
- Environmental friendly NiMH battery
- Non Maintained operation
- Ceiling flush mounting
- Suitable for both solid and exposed grid ceilings

#### Part No.

#### Halo Pack 2

EML9302	HPLED3H	Non-Maintained 3h
---------	---------	-------------------



**Sight Plus**

- Complete with LED Driver
- 4.5W LED Module Daylight White
- K: 6500, LM:220, Lm/W: 49
- IP65
- H 70, W 110, D 355mm
- Emergency maintained & non maintained fitting
- Viewing distance 24M

**Part No.**

EML902ISB	73796
EML9050DW	72644
EML9050E	91358
EML9009SP	91146

**Sight**

Box, EM 1.5W Daylight White
4 in 1 EM 1W Daylight White
Eco IP65 3W Daylight White
Plus IP65 4.5W Daylight White



**Sight Twin Spot**

- Complete with integrated control gear
- 2 x 2W LED module Daylight White
- K: 6500, Lm: 500, Lm/W: 125
- IP65
- Proj: 74mm, H 305mm, W 305mm
- Emergency non maintained fitting
- Viewing distance 24M

**Part No.**

EML905ITS	72642
EML9050TS	72643

**Sight Twin Spot**

ENM 3W Daylight White
ENM IP65 2W Daylight White



**Vigor LED IP65**

- Complete with LED Driver
- 16W LED Module Cool White, & 2W LED Module Cool White
- K: 4000, Lm: 1200, Lm/W: 75
- Proj: 110mm, Dia 325mm
- Emergency maintained fitting

**Part No.**

EML9039	46429
EML9053MWD	50952

**Vigor Round LED Bulkhead**

EM IP65 16W & 2W Cool White
Microwave EM IP65 16W & 2W Cool White



**Cyclo 2**

- Complete with LED driver
- 3W LED module Daylight White
- K: 6500, Lm: 180, Lm/W: 60
- Proj: 3mm, Dia: 110mm, H: 127mm
- Emergency non maintained fitting
- Cut hole Dia: 95mm

**Part No.**

EML9211C	76384
EML9211O	76383

**Cyclo 2**

ENM 3W, Corridor Daylight White
ENM 3W Daylight White



**Cyclo 2**

- Complete with LED driver
- 3W LED module Daylight White
- K: 6500, Lm: 180, Lm/W: 60
- Proj: 3mm, Dia: 110mm, H: 127mm
- Emergency non maintained fitting
- Cut hole Dia: 95mm

**Part No.**

EML9410B	61646
EML9410G	61647
EML9411B	61648
EML9411G	61649
EML9412B	61650
EML9412G	61651
EML9410MW	69231
EML9411MW	69232
EML9412MW	69233

**Luik Casing**

Plain casing, IP65, Black
Plain casing, IP65, Grey
Eyelid casing, IP65, Black
Eyelid casing, IP65, Grey
Grill casing, IP65, Black
Grill casing, IP65, Grey
Plain casing, IP65, Matt White
Eyelid casing, IP65, Matt White
Grill casing, IP65, Matt White

**Part No.**

EML9400ET	61653
EML9400EMT	72181

**Luik Gear Tray**

Emergency, EM 18W Cool White
Microwave Emergency, EM, 18W Cool White

Ringtail is a leading UK manufacturer, designer and supplier of professional LED emergency and amenity lighting equipment. From traditional LED bulkheads to discrete LED emergency downlights, Ringtail offer a comprehensive range of lighting to suit most applications.



#### LED IP65 Bulkhead

- 3 Watt
- 150 Lumens in mains & emergency
- IP65
- Universal Legend Kit
- Polycarbonate diffuser/ABS Base
- 20m Viewing distance

#### Part No.

#### LED Bulkhead

EML9003L	X-CSB3M	Maintained/Non Maintained
EML9003ST	X-CS3/ST	Maintained/Non Maintained, Self Test
EML9044	X-FM3M	Maintained/Non Maintained, Recessed



#### Recessed LED Exit Sign

- High Output LED light source
- IP20
- 16m viewing distance as standard
- Switchable Maintained/Non Maintained

#### Part No.

#### LED Recessed Exit Signs

EML9024RD	X-MPR3M	Maintained/Non Maintained
EML9024RDB	X-MPR3M/BR	Maintained/Non Maintained, Brass
EML9024RDC	X-MPR3M/CR	Maintained/Non Maintained, Chrome



#### Ultra Slim LED Exit Sign

- High Output LED light source
- IP20
- 16m viewing distance as standard
- Switchable Maintained/Non Maintained

#### Part No.

#### Ultra Slim LED Exit Sign

EML9025R	X-SLM3M	3 Hour Emergency
EML9025RST	X-SLM3M/ST	3 Hour Emergency, Self Test
EML9025RM	X-SLM3M/230	3 Hour Emergency, Mains only
EML9025RCR	X-SLM3M/CR	3 Hour Emergency, Chrome



#### LED Twin Spot

- Independently adjustable heads
- 3 Hour emergency output
- Multiple mounting orientations (with modification)
- IP20
- 1093 Lumen output (both heads combined)

#### Part No.

#### LED Twin Spot

EML9006LED	X-TSE3/NM	3 Hour Non Maintained
EML9006LM	X-TSE3/M	3 Hour Maintained
EML9006LST	X-TSE3/ST	3 Hour Non Maintained, Self Test



#### LED Downlighter

- Non Maintained
- Recess or Surface Mounted
- White High Output LED light source
- Status Indicator LED
- Open Area or Corridor Lens

#### Part No.

#### LED Downlighter

EML9110	X-MRD3/NM	Non Maintained
EML9110ST	X-MRD3/ST	Self Test
EML9110M	X-MRD3/SL/230	230V AC/DC (static inverter)



FIREscape is based around an addressable, emergency lighting control panel with battery back-up and features addressable, self contained LED luminaires and exit signage connected via screened, extra low voltage (40) cabling. FIREscape is a fully self monitored and self testing system with a central point of control; making installation and maintenance quick and easy. Central to the range is an addressable emergency lighting control panel, four LED emergency lighting luminaires and BS EN ISO 7010 compliant exit signs. The luminaire range includes two high powered variants for high risk task areas and exit signs are available with up, down, left, right legends in 20m or 40m viewing distances. All devices provide the 3 hour battery back up as required by BS 5266.



**Part No. Panels**

1	HOEM9500	EL-2	Dual Line Control Panel
2	HOEM9900	EL-35V	Transformer 35V
7	HOEM2000	EL-KP	Remote Keypad Controller

**Part No. Addressable Luminaires**

3	HOEM2004	EL-DL2	Corridor Downlight
4	HOEM2003	EL-DL3	Open Area Downlight
5	HOEM2005	EL-SL	Step Luminaire
6	HOEM2006	NFW89/C	High Power Corridor Luminaire
8	HOEM2006O	NFW89/O	High Power Open Area Downlight

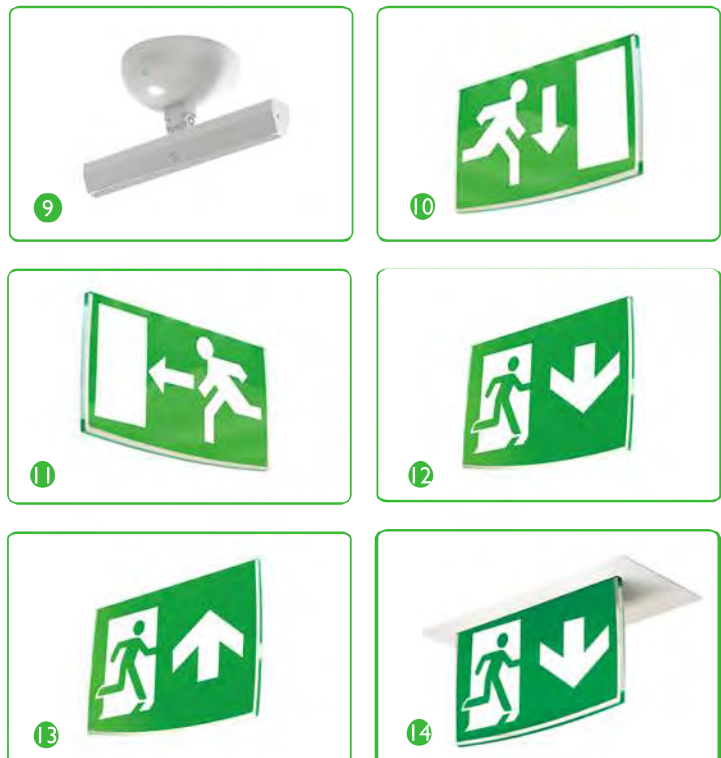
**Part No. 20m Exit Signs**

9	HOEM2020	EL-20	Exit Sign Frame Only
10	HOEM9902D	EL-20G-D	Arrow Down
	HOEM9902DI	EL-20G-D(ISO)	Arrow Down (ISO7010)
11	HOEM9902L	EL-20G-L	Arrow Left
	HOEM9902LI	EL-20G-L(ISO)	Arrow Left (ISO7010)
	HOEM9902R	EL-20G-R	Arrow Right
	HOEM9902RI	EL-20G-R(ISO)	Arrow Right (ISO7010)
	HOEM9901	EL-20G-U(ISO)	Arrow Up (ISO7010)
14	HOEM9904	EL-REC20	Recess Adaptor

**Part No. 40m Exit Signs**

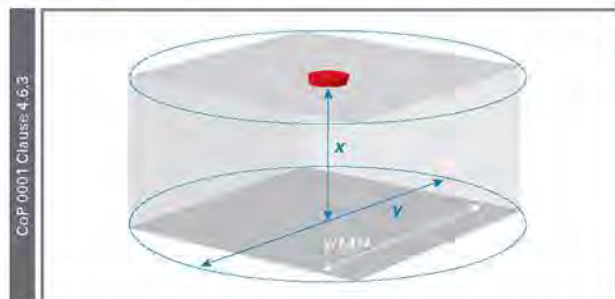
	HOEM2040W	EL-40	Exit Sign Frame Only
	HOEM9903D	EL-40G-D	Arrow Down
12	HOEM9903DI	EL-40G-D(ISO)	Arrow Down (ISO7010)
	HOEM9903L	EL-40G-L	Arrow Left
	HOEM9903LI	EL-40G-L(ISO)	Arrow Left (ISO7010)
	HOEM9903R	EL-40G-R	Arrow Right
	HOEM9903RI	EL-40G-R(ISO)	Arrow Right (ISO7010)
13	HOEM9903	EL-40G-U(ISO)	Arrow Up (ISO7010)

When used in conjunction with third party software, FIREscape can be connected to a Building Management System. Having remote central control helps building management to; increase staff productivity, manage maintenance more efficiently, and effectively monitor energy consumption. Central control is particularly beneficial when working on a large or complex site.



### Ceiling Mounted Devices - C-x-y

C – Ceiling Mounted Device



x – The maximum height of either 3, 6 or 9 m at which the VAD may be mounted  
 y – The diameter in metres of the cylindrical volume covered (to a minimum level of 0.4 lux) when the device is mounted to the ceiling at a height of 3, 6 or 9 m

**Example:**

C-3-15 corresponds to a ceiling-mounted device giving a coverage cylindrical volume of 15 m, when mounted at 3 m.

**Note:**

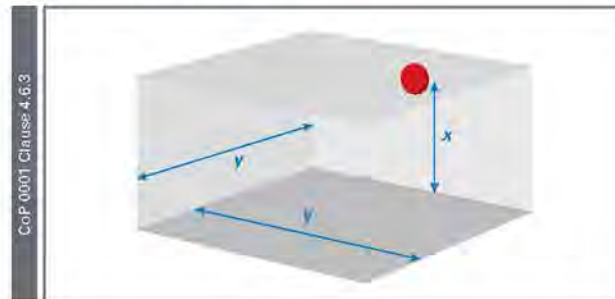
The protected space sits within the cylindrical volume and ensures that all areas meet the required illumination of 0.4 lux.

**TopTip**

To convert the coverage diameter y to the width of a square room  
 Width of square room =  $y / 1.414$  m

### Wall Mounted Devices - W-x-y

W – Wall Mounted Device



x – The maximum height of the device on the wall in metres, with a minimum value of 2.4m

y – The width in metres of the square volume covered (to a minimum level of 0.4 lux) when the device is mounted to the wall at a height x

**Example:**

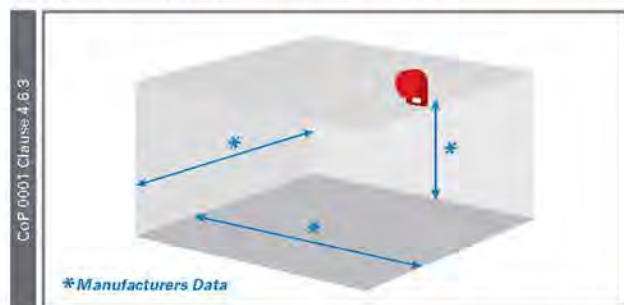
W-2.4-7.5 corresponds to a wall-mounted device giving a coverage cuboid volume of 2.4 m x 7.5 m x 7.5 m, when mounted at a height of 2.4 m.

**TopTip**

- If the area to be covered is not square, use the larger of either the length or width to ensure that the whole area is covered.
- If the distance (y) measured above is greater than the VADs rated coverage, then several devices will be required to cover the area.

### Open Class Devices

O – Open Class Device (coverage volume specified by manufacturer)



Open class devices do not conform to either the Wall or Ceiling category. However, they still need to meet the required illumination of 0.4 lux over their specified range.

**Manufacturer's specification will include:-**

- the mounting position
- the mounting orientation
- the minimum and maximum mounting height
- the shape, dimensions and orientation of the coverage volume (0.4 lux)

**Example:**

O-Corridor VAD

- Mounting position - centre of wall at end of corridor as shown above
- Orientation - with beacon at base of unit
- Mounting Height = 2.0 – 3.0 m
- Coverage volume – 0.4 lux polar dispersion data issued by manufacturer

### External Factors

External factors, such as ambient light levels or the environment can have a significant influence on the effectiveness of VADs. It is important to consider what effect these external factors may have.

**Main consideration factors:-**

- **Ambient light level**  
Will artificial light and natural light be a factor (time of day, etc)
- **Reflective surfaces**  
Are walls or other surfaces matt or shiny, etc.?
- **Field of view**  
Is the light visible from the VAD 'directly' or 'indirectly' e.g. light reflected from an adjacent surface would be indirect
- **Use of tinted eye protection**  
Is the VAD to be used in an industrial environment, where personal protective equipment (PPE) may be in use, etc.?
- **The environment**  
Indoor Type A devices – IP21C, Outdoor Type B devices – IP33C

**IP (Ingress Protection) ratings**

Eaton's Fulleon's products may have higher IP ratings than that required by EN 54-23. This can offer a device that is more flexible for a wider range of applications or uses beyond standard practice.

**IP ratings – Good Practice**

- Use a higher IP rating, if the device is to be used in high humidity or damp conditions
- Use suitable cable glands to maintain the specified IP rating
- Ensure the correct product orientation
- Ensure all base and mounting screws, or fixings are secure

Please consult the relevant Installation Guide, Product Manual and our website for further details on specific products.

**TopTip**

You may need to perform an on-site assessment or survey to assess the ambient light levels, environmental conditions and other relevant factors. A lux meter complying with BS667 will be needed to assess ambient light levels.



### General rules for selection and siting

- CoP 0001 Clause 4.6.9.2
  - Wall mounted VADs are likely to be effective in a wide range of applications**
    - Suitable for higher ambient light levels and the preferred choice for general applications
  - Ceiling mounted VADs are suitable for broad coverage in regular shaped rooms**
    - However, they are more likely to be affected by higher ambient light levels
    - Can be used as an alternative to wall mounted devices and are more practical to install in large open areas
  - Open category VADs should take into account manufacturers recommendations**
    - Care should be taken that minimum illumination level of 0.4 lux is met throughout the area
  - Applications where there is continuous surveillance of a VAD in a specific direction, may not require widespread coverage**
    - A seated auditorium or a broadcast studio may only require limited coverage
  - Where possible, site the VADs for direct viewing for all occupants in an area**
    - If this is not possible, consider the minimum illumination on adjacent reflected surfaces
  - If relying on indirect illumination, the reflecting surfaces should be within the coverage area of the VAD**
    - The 'coverage area' is that stated for the VAD, multiplied by the coverage distance multiplication factors in the table on page 11
    - The indirect illumination may be reduced, if a formal assessment determines negligible risk
  - Where an area to be covered is larger than the coverage area of a single VAD, a sufficient number of extra VADs should be sited appropriately**

### General rules for selection and siting

- CoP 0001 Clause 4.6.9.2
  - Dependence on direct line of site should not be relied upon, if the VAD is used where deaf or hard-of-hearing people may be alone for prolonged periods**
    - Applies particularly to hotel bedrooms and bathrooms
    - Also applies to people wearing ear defenders or where they may be working alone or focusing on specific activity
  - Before selecting a VAD for a specific area, the ambient light level should be determined**
    - Ambient level should be the maximum anticipated at any time
    - The ambient light level may be reduced by measures such as blinds or curtains on windows.
    - Consult the building designer when selecting VADs at the planning stage of a new build
    - A lux meter complying with BS 667 should be used to determine the average ambient light levels. (see CoP 0001 4.6.9.2. j)
  - In the case of stairwells, the illumination from a VAD should satisfy the recommendations of this CoP across the area of each landing**
    - Compliance may not be necessary throughout the stairway



### Coverage Distance Multiplication Factors



Multiplication factors should only be used after careful consideration of the application, including prevailing ambient light level and the need to rely on indirect, rather than direct illumination.

Table 1 gives multiplication factors that can be applied to the coverage distance for VADs certified to EN 54-23. These may increase, or decrease the specified coverage volume stated by the manufacturer of the device.

Table 1. Coverage Distance Multiplication Factors

Ambient light level (lux)	Ceiling mount direct view	Ceiling mount indirect view	Wall mount direct view	Wall mount indirect view
< 100	2.8	1.3	5.2	1.8
100 to 200	2.4	1.2	4.4	1.7
200 to 300	1.9	1.0	3.2	1.4
300 to 400	1.4	0.8	2.3	1.2* see below
400 to 500	1.1	0.6	1.8	1.0
500 to 600	0.9	0.5	1.3	0.9
600 to 700	0.7	0.4	1.0	0.7
700 to 800	0.5	0.3	0.7	0.6

**Example:**

A wall mounted VAD with a rating W-2.4-7.5 is to be used in a location where the ambient light level is 350 lux and the view is considered to be indirect. From the table, multiply the rated coverage distance of 7.5m, by the factor 1.2\*. The mounting height may also be multiplied by 1.2\*. This gives a final coverage of 7.5 x 1.2 = 9 m mounted up to a height of 2.4 x 1.2 = 2.88 m. The VAD can therefore be used in this location, as if it were rated W-2.88-9

**TopTip**

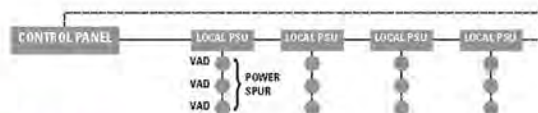
It is sometimes better to try and control the light level in a room, rather than design a solution for a room bathed in direct sun light.

### Power Supplies

- CoP 0001 Clause 4.7
  - Power supplies should be compliant with BS EN 54-4 and the recommendations of BS5839-1. In particular, the following points apply: -**
    - Both the normal and standby supply should each be independently capable of supplying the maximum alarm load imposed by the system, irrespective of the condition of the other supply
    - High peak loads which may be imposed by VADs should be taken into account
    - The high peak power requirements of any VAD connected to a system should have no effect on any other function
    - Manufacturers of VADs and power supply equipment should make available sufficient information to allow the compatibility of power supplies to be assessed
    - Data should be available on request (see below)

**Power supplies with larger installations - example**

- Power supply should be capable of providing a current of at least 1.2 x total VAD operating current.
- Power supply surge capability should be at least 1.5 x the total VAD surge current for at least 10mS.
- A suitable slow-blow fuse must be fitted to the output stage of all power supplies.
- Where a large number of units are to be wired, it is recommended to use multiple power supplies on separate spurs to avoid large voltage drops that would otherwise be encountered. See below: -



**TopTip**

Fulleon's product manuals give practical advice on what to consider when specifying power supplies for a VAD based system. The relevant product manual is referenced on the Installation Guide with each product and can be accessed via our website.



## Wiring

CoP 0001 Clause 4.8

Cables serving VADs should conform to the recommendations of BS 5839-1 clause 26.2

- ... to ensure that cables used in circuits of VADs remain operational for an adequate duration, cables with an inherent ability to resist attack by fire need to be used

### Cable resistance and run length - example

It is important that the series resistance (Rs) of a given cable is known, as this can have a significant effect on the maximum length of cable run possible. The following table gives an indication of the cable lengths that could be used with a typical setup and is based on solid core wire with a cross sectional area (CSA) of 1.0mm<sup>2</sup>. If using a different CSA, cable type or a material other than copper, the value of the series resistance of the cable (Rs) will change significantly and will need to be factored into the calculations accordingly.

Please note that all devices are assumed to be wired to the end of a spur, as this is the worst case scenario.

### Typical Wiring Calculations (Solista LX Wall) for example purposes ONLY

Number of products (N)	Typical max current consumption of product (Is) - Amps	Typical power supply steady state capability (Ia) - Amps	Max cable resistance for 10% voltage drop @ 18Vdc (Rc) - ohms	Max cable length for 10% voltage drop @ 11.18Vdc (L) - Metres
1	0.15	0.18	12	333
2	0.30	0.36	6	167
3	0.45	0.54	4	111
4	0.60	0.72	3	83
5	0.75	0.90	2.4	66

\* Note: Cable is assumed to be copper, with a resistance of 1.8Ω/100m. All calculations and advice is given for guidance ONLY. No liability is assumed for the use of these calculations or advice, or for any errors or omissions. The installer is responsible for ensuring that the product is installed and wired correctly and safely using all relevant and current wiring regulations and practices.

### TopTip

If longer cable runs are required than those given in the example above, larger gauge cables should be specified, to reduce the effects of the cable resistance.

## Installation and Commissioning

CoP 0001 Clause 5.1

### Responsibility of Installer

- Consult with all relevant parties
  - This may include user or purchaser, designer, VAD supplier, architects, fire consultants, etc.
- Report and document any variations not already identified (usually noted on the design certificate)
- Separate all metallic parts of the installation from any metalwork forming part of lightning protection
- Include VADs in any "as fitted" drawings, if this is down to the installer
- Ensure mains supplies comply with BS5839-1 Clause 25.3 and 25.4
- Supply separate electrical installation certificates (BS7671) for any separate mains supplies powering VAD's.
- Sign an installation certificate of the type recommended in BS5839-1, Annex G2.

CoP 0001 Clause 5.2 & 5.3

### Installation Practices and Workmanship (inc. Inspection and Testing of Wiring)

- Installation should comply with BS5839-1 Clause 37.1 and 37.2
- To achieve the correct light coverage, follow the VAD manufacturer's recommendations
  - This will include correct mounting height and orientation to achieve the required illumination
- Mounting bases with suitable ingress protection (IP ratings) should be selected for the location
- VADs should be sited, so that they do not form a protrusion hazard
- Wiring should be inspected and tested in accordance with BS5839-1 Clause 38.1 and 38.2

## Installation and Commissioning (continued)

CoP 0001 Clause 6

Commissioning should be carried out in accordance with BS5839-1 Clause 5, in addition: -

- The position and ratings of VADs should comply with CoP 0001 4.6.9 and system design drawings
- All VADs used for indication of a fire alarm should produce the same colour flash within the building
- VAD's must not be confused with any other visual alarm signal within the building
- Where multiple VADs are visible from any single point, they should meet the synchronisation requirements of CoP 0001 Clause 4.3.6.2 (f) and 4.5.4
- Documentation should include "as fitted" drawings showing location and light output ratings of all VADs, in addition to any documents or certificates required by BS5839-1



### TopTip

It may be wise to mark up any site plans or drawings with VAD locations and settings as they are commissioned. This may save time and effort later.

## Maintenance

CoP 0001 Clause 7.1

### Documentation

- BS 5839-1 recommends that fire detection and alarm systems are tested weekly
  - This can provide an opportunity for occupants to report any instances of poor visibility or non operation
- Instructions to occupants should be to note any instances of poor visibility and report
  - This also provides an opportunity for occupants to become familiar with the VAD signals
- Staged systems with a separate alert and alarm, should have both states tested
  - Where practical, stages should be activated sequentially in the order that they would occur at the time of a fire (i.e. 'Alert' then 'Evacuate')

CoP 0001 Clause 7.2 & 7.3

### Inspection and Servicing (inc. non-routine attention)

- Inspection and servicing of equipment and circuits serving VADs and the VADs themselves, should comply with BS 5839-1 Clause 45
  - The correct operation of all circuits serving VADs should be confirmed at this time
- The operation, and where applicable, the synchronisation of each VAD should be checked annually as a minimum
  - The lens should be cleaned to remove any dirt or deposits (where necessary)
  - Confirm that the VADs are not obstructed from view
- Non routine attention should be carried out in accordance with BS 5839-1 Clause 46
  - VADs no longer providing adequate coverage should be identified to the responsible person appointed by the user
  - After any fire, affected VADs and circuits should be inspected / tested. VADs should be checked and cleaned of any soot or other deposits.

### TopTip

Regular inspection, servicing and maintenance of VAD systems is important to help ensure the integrity and performance of the system.



This guide is intended to be an aid to designers and installers of fire detection systems. It is not to be used as a substitute for BS 5839-1 which should be read in full. In order to help identify the relevant sections, each diagram includes a reference to BS 5839-1.

**Designer Responsibilities**  
NOTES:

- (1) BS 5839-1 recommends that a fire detection system is designed by a competent person, who takes responsibility for completing the design and signing off a 'Design certificate'. This should not be confused with other certificates relating to Installation.
- (2) If the contract allows, it is suggested that the Designer witnesses testing of the completed system to ensure the original design is still appropriate; the Design certificate can then be completed after any amendments are included.

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

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

**Section 1 Clause 5**

**Fire Alarm and Detection systems are categorised in the following way:**

**Property Protection Fire Systems**

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

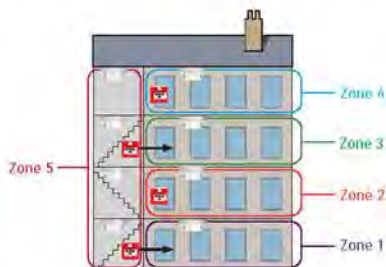
**Life Protection Fire Systems**

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

\*AFD Automatic Fire Detection

**Detection Zones**

- A detection zone should cover no more than 1 storey, unless total floor area is less than 300m<sup>2</sup>. Voids in the same fire compartment should be included in the same floor zone. The maximum floor area of a zone should not be greater than 2,000m<sup>2</sup>, except for some large open plan areas that incorporate manual call points only, which can be extended to 10,000m<sup>2</sup>. The maximum search distance for the fire fighters to see the seat of the fire within a zone should not exceed 60m assuming the route taken is the worst possible option. Vertical structures like stairwells, lift shafts etc., should be considered as separate zones.
- A manual call point within a staircase should be connected to the zone associated with that floor and ideally be mounted on the accommodation side of the corridor exit. Automatic sensors on the stairwell remain as part of the stairwell detection zone.

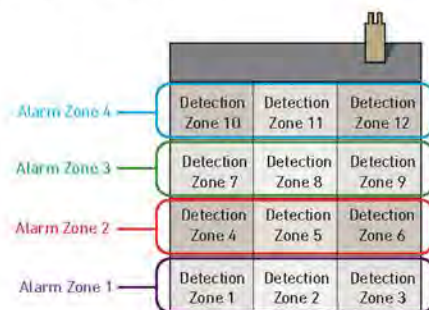


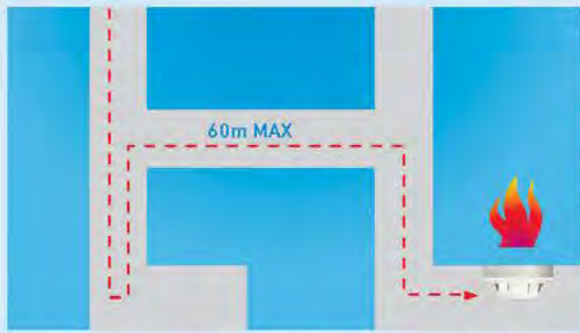
**Alarm Zones**

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

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

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





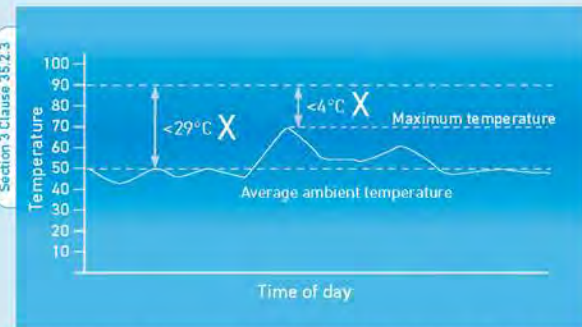
A person searching a zone for a fire in a non-addressable fire system should not have to travel more than 60m to identify the source of a fire.



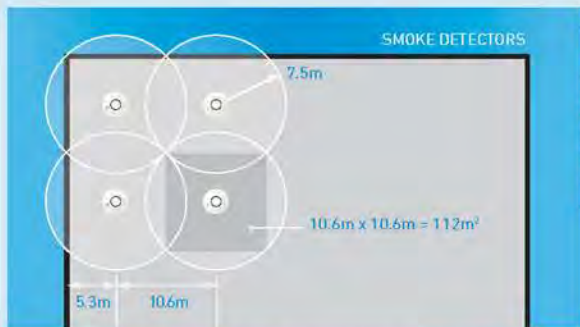
The sensing element of a smoke detection device (optical smoke or ionisation chamber) should not be less than 25mm below ceiling, and not greater than 600mm below ceiling.



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



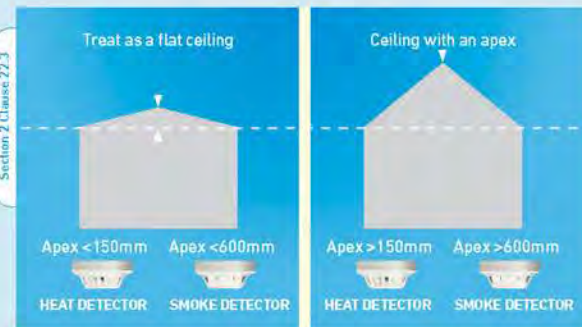
The minimum static response to heat devices should not be less than 29°C above the average ambient temperature, or less than 4°C above the highest temperature the device can expect to experience.



When mounted on a flat ceiling, smoke detection devices have an individual coverage of 7.5m radius. However these radii must overlap to ensure there are no 'blind spots'. Therefore individual coverage can be represented by a square measuring 10.6m x 10.6m giving an actual area coverage of 112m<sup>2</sup> per device.



When mounted on a flat ceiling, heat detection devices have an individual coverage of 5.3m radius. However these radii must overlap to ensure there are no 'blind spots'. Therefore individual coverage can be represented by a square measuring 7.5m x 7.5m giving an actual area coverage of 56.3m<sup>2</sup> per device.

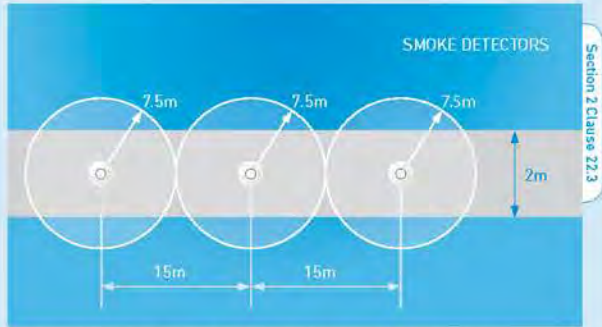


For ceilings that feature an apex: as long as the height of the apex from the rest of the ceiling is less than 150mm for heat detectors or less than 600mm for smoke detectors, then these can be treated the same as flat ceilings. For higher apexes, a device should be installed at the highest point. The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

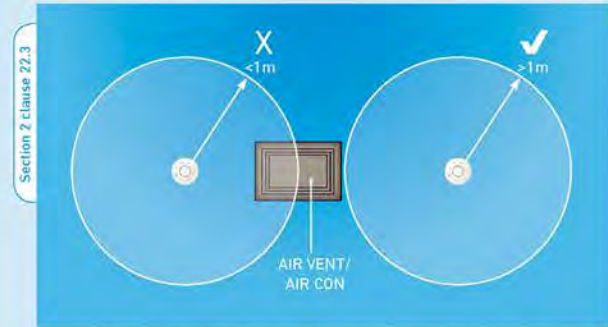
Response	All categories of system	
Max Height	General Area	10% of Area
Heat RoR	9m	10.5m
Heat Fixed	7.5m	10.5m
Smoke/CO point	10.5m	12.5m
Optical Beam Normal Sensitivity	25m	28m
Optical Beam enhanced Sensitivity	40m*	43m*
ASD General Limit	10.5m	12.5m
ASD Class C with at least 5 holes	15m	18m
ASD Class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

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

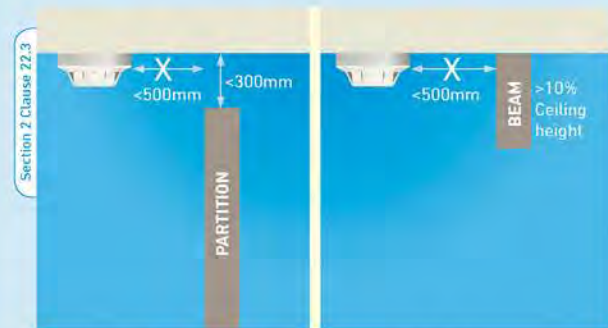




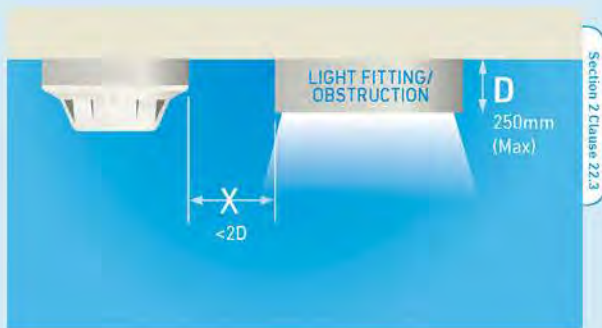
In corridors less than 2m wide the horizontal spacing of detectors may be increased, the areas of coverage need not overlap as in the case of a room. Any corridor over 2m wide is deemed a room and device spacing should follow the standard for rooms (see page 9).



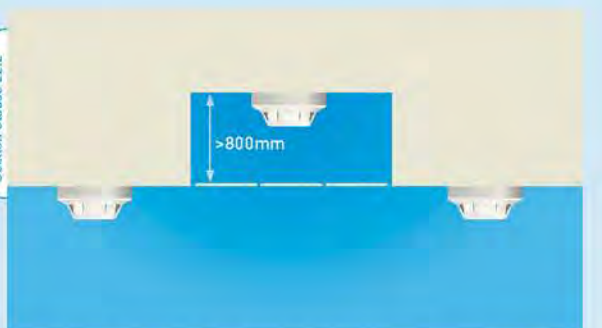
Do not site detectors less than 1m from air supply points or air circulating units.



A device should not be mounted within 500mm of any obstruction. If the top of a solid partition is less than 300mm from ceiling then treat it as a wall. Similarly, ceiling obstructions such as beams should be treated as walls if deeper than 10% of the ceiling height.



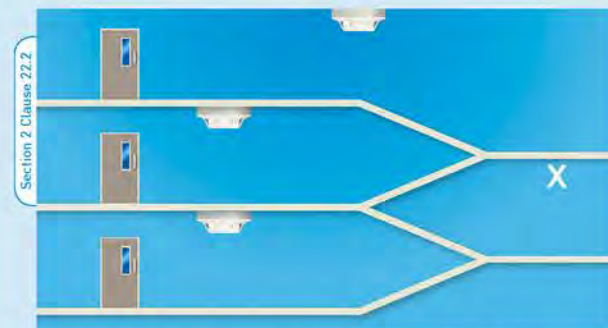
Never mount devices closer than twice the depth of light fittings or other obstructions on the ceiling.



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

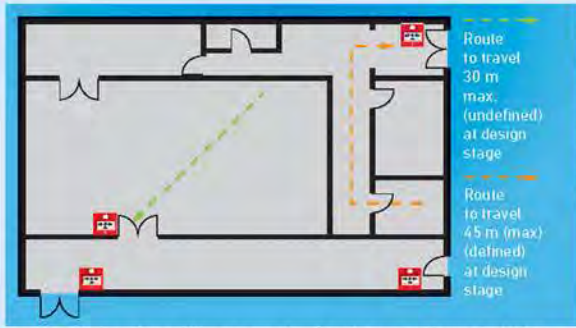


Vertical shafts like lifts and open stairways should have a device mounted within 1.5m of any opening. (This is not necessary for enclosed stairways, because as noted below, there are detectors on every landing within the stairway).



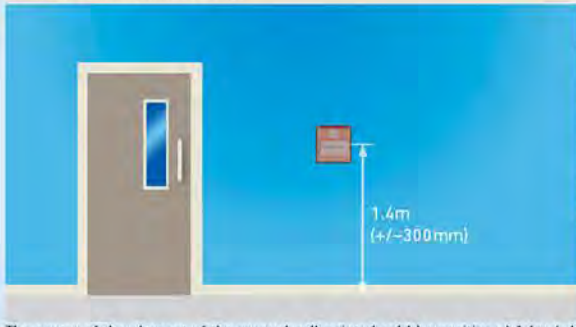
Enclosed stairways should have a detector at the top of the stairway and on each main landing.





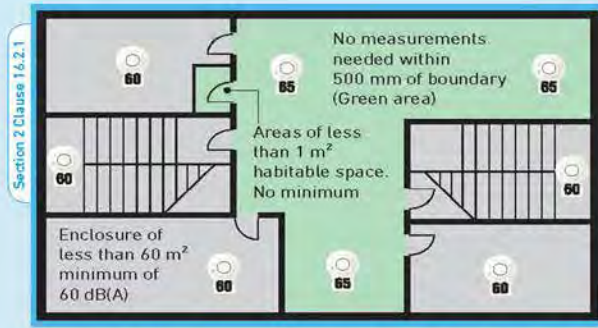
Section 2 Clause 20.2

A person should not have to travel more than 45m to reach a Manual Call Point, for a defined escape route (25m if significant proportion of occupants have limited mobility or rapid fire development is likely). For an undefined route a person should not have to travel more than 30m to reach a Manual Call Point (16m if significant proportion of occupants have limited mobility or rapid fire development is likely).



Section 2 Clause 20.2

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



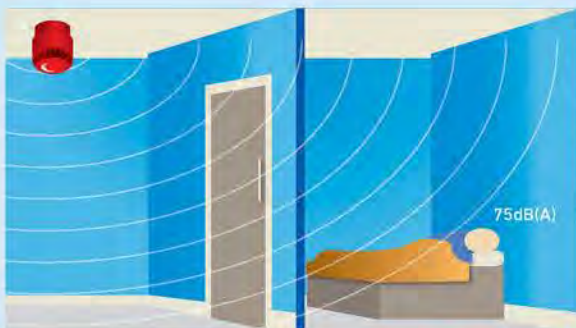
Section 2 Clause 16.2.1

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



Section 2 Clause 16.2.1

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



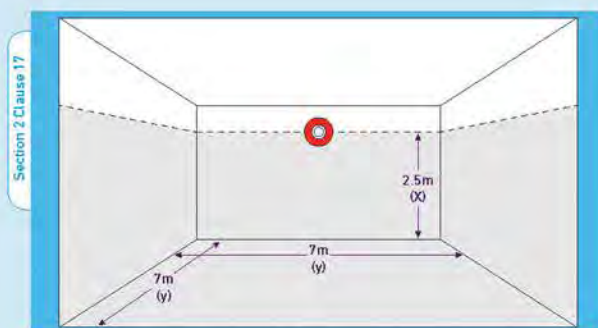
Section 2 Clause 16.2.1

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



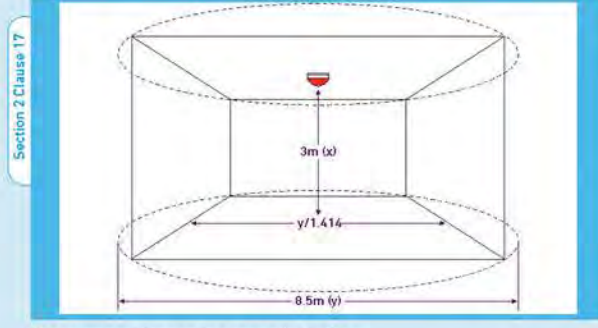
Section 2 Clause 16.2.1

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



Section 2 Clause 17

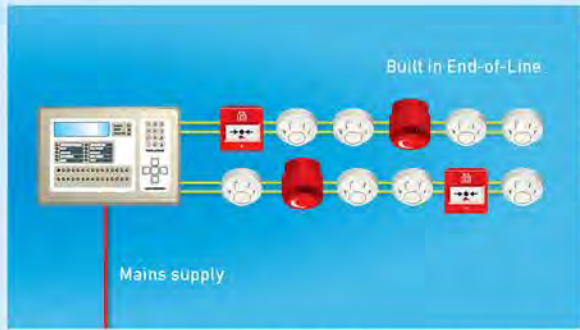
The coverage volume code is presented as W-x-y. If the wall mounted Visual Alarm Device (VAD) is installed at the height of 2.5m from floor level, and the coverage is 7m x 7m square, then it would be referred to as W-2.5-7.



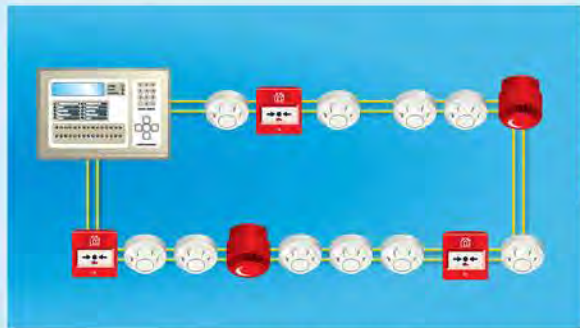
Section 2 Clause 17

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





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



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

**Installation Considerations and Key Points**

- Suitable means of local safe isolation of the low voltage supply circuit for the power supply and control equipment must be provided (see Section 2 Clause 25.2c & f).
- All cables to be fire resistant with a minimum cross-sectional area of 1mm<sup>2</sup> (see Section 2 Clause 26.2j).
- All joints 'other than those within the system components' to be fire resistant. Junction boxes to be labelled 'FIRE ALARM' (see Section 2 Clause 26.2g).
- Enhanced cable to be used where more than 4 zones of phased evacuation required, in multi-storey systems, hospitals (un-sprinklered over 30m) or risk assessment requires enhanced cable (see Section 2 Clause 26.2c).
- Cable using trunking as a means of containment must be clipped using fire resistant supports WITHIN THE TRUNKING (see Section 2 Clause 26.2h).
- Fire Alarm control panel(s) are installed at a location appropriate for staff and firefighters (see Section 2 Clause 23.2).
- Manual call points are required at all exits to the open air - whether or not the exits are specifically designed to be fire exits unless, for example, the exits lead to an enclosed courtyard from which there is no escape (see Section 2 Clause 20.2c).
- CO fire detectors should be spaced as per smoke detectors, but cannot be used without smoke detectors on escape routes (see Section 2 Clause 22.4).
- Multi-sensors, incorporating smoke detection should be spaced as smoke detectors, if used as individual types, for example heat in the day & smoke at night then detectors are spaced in this case as per heat detectors (see Section 2 Clause 21.1.6).
- Linear heat detection cable should be spaced as a point heat detector (see Section 2 Clause 22.3).
- Unusual ceilings: Cellular ceiling, perforated ceilings or ceilings with closely spaced beams have special spacing & installation requirements (see Section 2 Clause 22.3 including Tables 1 & 2).
- Bells & Electronic sounders cannot be mixed (see Section 2 Clause 16.2.1c).
- Sound levels can be reduced to 60dB(A) in stairs, small cellular rooms or enclosures of no more than APPROXIMATELY 60m<sup>2</sup>. Bedhead levels remains 75dB(A) (see Section 2 Clause 16.2.1a).
- Where applicable, all areas of the building have been fitted with Sounders and Visual Alarm/Tactile Devices in areas of high ambient noise, or where deaf people or people with impaired hearing may be alone or isolated from others i.e. bedrooms and sanitary facilities (see Sections 2 Clause 17 & 18).
- A minimum of one sounder is required in each fire compartment (see Section 2 Clause 16.2.1i).
- Full documentation required, test results as fitted drawings etc. (see Section 5 Clause 40).

- An installation certificate will be required (Section 5 Clause 41.2).
- Ensure that the installation wiring complies with the BS 5839-1 requirements and the latest edition of the IET Electrical Regulations.
- Ensure that the loop length is within the manufacturers recommendations.
- If an insulation resistance test is carried out, ensure that the field devices are disconnected. Make sure that the loop cables are grounded before field devices are reconnected.
- Once a detector has been fitted, ensure that the dust cap stays on until the system has been commissioned and the environment is clean.

**Documentation**

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

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

**✓ Installation and Handover Checklist**

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



An emergency voice communication system is a life safety intercom (or telephone) system designed to operate reliably in a fire alarm emergency. Its equipment and wiring must be monitored for faults that might occur prior to the emergency and its cabling and battery backup supply must ensure it keeps working during the emergency. According to BS5839 part 9, there are two types of EVC system; disabled refuge and fire telephone. They may be separate, or they may be combined into one system.

A disabled refuge system typically connects handsfree intercom outstations to a central control room and is used to inform management that someone needs immediate assistance to exit the building.

A fire telephone system is used by management (and marshals at a sports ground) and the fire service before, during and after a fire to communicate with fire marshals and fire fighters.

#### Regulations affecting EVC systems?

The installation of an emergency voice communication system is governed by BS5839 Part 9: Code of practice for the design, installation, commissioning and maintenance of emergency voice communication systems.

Refuge areas are called for in all non-domestic buildings with more than one storey and they should be provided at each storey exit (i.e. each protected stairway affording egress).

Examples of a refuge area include an enclosure such as a protected lobby, corridor or stairway or an area in open air such as a flat roof, balcony, podium or similar place which is sufficiently protected (or remote) from any risk of fire and has its own means of escape.

Type B outstations should be provided in all refuge areas. They should be wall mounted, in an easily accessible, well illuminated and unobstructed position 900 mm to 1.2 m above the ground. They should allow members of the evacuation team to determine how many disabled people there are, the nature of their disabilities and the refuges in which they are located.

Note that refuges are intended for temporary use only (a few minutes) whilst the building management send trained staff to deal with the evacuation and should not be confused with "places of relative safety".

In buildings which require a fire telephone system, Type A outstations should be located at every fire fighting entrance point, fire escape landing and fire fighting lobby. They should be wall mounted 1.3 m to 1.4 m above the ground in an easily accessible, well-illuminated and unobstructed position.

The following should be consulted when determining the type and function of an EVC system.

- a) Approved Document B (Fire Safety) Volume 2: Buildings other than dwelling houses;
- b) BS9999;
- c) Regulatory Reform Order (Fire Safety Order) Oct 2005
- d) Equality Act 2010 (Supersedes the Disability Discrimination Act)
- d) Fire Safety Guide No.3, Phased Evacuation from Office Buildings. London District Surveyors Association;
- e) Guide to safety at sports grounds; 16.11:Telephone communications - internal
- g) London District Surveyors Association in conjunction with LFCDA Fire Safety Guide No.3; Section 2: Fire Safety Measures

All of the cables used in an EVC system should be of enhanced fire resistance (26.2e of BS 5839-1:2002) except for underground sections of cabling at sports grounds.

In sports stadiums, emergency telephones should be located no more than 30 metres from stewards' positions or other normally manned areas such as turnstiles, public address operating booths, offices of senior officials, lighting control points, first aid rooms, police rooms, etc.

They should allow communication between management and/or fire marshals and/or the fire service before, during and after a fire.

The system's Master Controller should be located in the control room, security room or next to the main fire panel or repeater panel and it should be permanently manned in an emergency. The centre of the Controller's controls (if wall mounted) for a standing operator should be 1.4 m to 1.5 m above the floor. If the power supply to the Controller fails, the batteries provided should run the system in its quiescent state for at least 24 hours and then allow emergency voice communication for at least 3 hours. The Controller (and all Outstations) should also offer full duplex speech, i.e. the concurrent transmission and reception of speech in both directions.

Communication between the Controller and an Outstation should normally be initiated from the Outstation. However, the ability to call an Outstation from a Controller is also allowed. Indeed, standards such as BS5588 part 8 acknowledge keeping people informed during an emergency will help avoid anxiety and confusion.

We always aim to keep adequate stock of our entire product catalogue so that we can offer same day dispatch on all orders received before 2.30pm.

### How will my order be delivered?

All orders are delivered by DPD on their Express delivery service (usually next day within the UK).

Orders are dispatched on the same day, provided it has been received by 2.30pm and we have adequate stock.

Next Day Delivery Cost: £12.50

As standard this service is based on working days (Monday to Friday) and therefore does not include weekends and bank holidays. However, we can provide a timed and Saturday service if required:

Pre 12 pm Delivery Cost: £15.00

Pre 10 am Delivery Cost: £18.00

Saturday Delivery Cost: £25.00

Note: For timed and Saturday deliveries, carriers start delivering from 7.30am and someone should be available at the delivery address from that time in case a delivery attempt is made.

### Northern Ireland

We are able to ship items to Northern Ireland via our carriers.

Note: We cannot guarantee next day deliveries for shipments to Northern Ireland - as a guide 2-3 days would be normal delivery time.

Northern Ireland Cost: £25.00

If delivery is requested to a site address, goods may have to be signed for by someone other than your selected representative. Once a signature has been obtained, neither ourselves or our carrier can be held responsible for the goods. Although we will endeavour to provide proof of delivery wherever possible, no compensation can be claimed for any consequential loss

All contracts of sale by the Company shall be on and subject to these Conditions. "The Customer" is the person, firm or company ordering or receiving goods and/or services "The Goods" are the goods and or Services provided by the Company.

1.1 INFORMATION ABOUT GOODS Any description, specification or drawing published by the Company in relation to the Goods shall not form part of any contract of sale by the Company.

1.2 The Customer in assessing whether the goods are reasonably fit for any particular purpose for which it is purchasing them has not relied on the skill or judgement of the Company.

2.1 ORDERS No order shall be binding on the Company unless and until expressly accepted by the Company in writing.

2.2 No order given may be cancelled or amended unless agreed by the Company in writing.

3.1 CONTRACT The Company shall sell and the Customer shall purchase the Goods in accordance with the written order of the Customer accepted by the Company in writing ("the Order") and with these Conditions (together "the Contract").

3.2 The Contract represents the entire understanding and supersedes any previous agreement between the Company and the Customer in relation to their subject matter.

3.3 The Contract shall not in any circumstances whatsoever be or be deemed to be affected by any previous dealings with the Company and any previous terms and/or conditions issued by the Company are superceded.

3.4 Where the Order Acceptance is on terms which vary from those set out in these Conditions, those terms shall prevail, but otherwise these Conditions shall be deemed to be part of the Contract.

4.1 PRICE The Price payable for the Goods shall be the price specified in the Order, provided that the Company may at any time before delivery, without notice, increase the Price.

4.2 The Price is exclusive of Value Added Tax and the Customer shall pay Value Added Tax in respect of the Price at the standard rate prevailing at the date of delivery, together with all other taxes, duties or imports arising in connection with the sale.

5.1 PAYMENT Payment of the Price shall be made in pounds sterling at the office of the Company within 30 days from end of month. All payments shall be made in full without deduction in respect of any right of set-off or counter-claim.

5.2 If the Customer fails to make due payment under the Contract, the Company shall be entitled to interest at the rate of 4% above the base rate of Barclays Bank PLC from time to time on all outstanding sums from the date that payment fell due until payment is received.

5.3 If the Customer fails to make due payment under the Contract the Company shall be entitled to treat the Contract as repudiated by the Customer.

6.1 DELIVERY The Customer shall promptly, on request made at any time by the Company, provide the Company with any information or instruction it may require in order to supply the Goods.

6.2 Normal delivery terms are ex-works, dispatch from Company works (where applicable) shall be deemed to be delivered to the Customer unless the Contract states otherwise.

6.3 Confirmed delivery dates are subject to credit being available at the proposed date of dispatch. We will contact you if we are unable to ship because your available credit limit has been exceeded.

6.4 Where the Contract provides that delivery is the Company's responsibility:

6.4.1 Any delivery time indicated by the Company is an estimate only and not an essential term of the Contract.

6.4.2 The Company shall deliver the Goods to the agreed delivery address. Delivery shall be deemed to take place when the Goods arrive at the Delivery Address (before unloading).

6.4.3 The Company shall not be liable for any damage to, deterioration in, or partial loss of the Goods in transit if the matter should have been apparent on a reasonable examination on delivery, unless the Company receives written notice thereof from the Customer within 3 days of delivery.

6.4.4 Where the Company has made part delivery of the Goods it will not be taken under any circumstances to have agreed to waive any lien or right of retention on the remainder of the Goods or to give up possession of the whole of the Goods unless expressly so agreed in writing.

6.5 Where Customer has rejected any of the Goods or notified any damage or deterioration under this Condition 6, the Customer shall, if requested to do so by the Company, return the Goods to the Company within 7 days of such request.

6.6 The Company uses a third party courier and cannot be held responsible for any delay to delivery times due to that courier, including the loss of goods, or force majeure

7 RISK All risk in the Goods shall pass to the Customer on delivery.

8.1 TITLE -RETENTION OF TITLE CLAUSES Notwithstanding delivery and the passing of risk, property in and title to the Goods shall remain with the Company and shall not pass to the Customer until the Company has received payment of the full price of;

(a) all Goods the subject of this contract and

(b) all other Goods supplied by the Company to the Customer under any contract whatsoever. Payment of the full price shall include, without limitation, the amount of any interest or other sum payable under the terms of this and all other contract between the Company and the Customer.

8.2 During such time as the property in the Goods remain in the Company the Customer shall store the Goods separately from all other goods and in such a way as clearly to indicate at all times that the said property remains in the Company. The Company's representatives shall be allowed to enter at all reasonable times upon any land or buildings on or in which the Goods may be situated for the purpose of inspecting the way in which the Goods are being kept.

8.3 During such time as the property in the Goods remains in the Company, the Customer in possession of the Goods shall hold the Goods as bailee of the Company and shall have power to deal with the Goods in normal course of its business.

8.4 If the Customer shall sell any of the Goods it shall hold all the proceeds of sale as trustee for the Company and shall (until payment of such proceeds to the Company) place such proceeds in a separate bank account and hold the same to the order of the Company.

9.1 INTELLECTUAL PROPERTY All patent, design, trademark, service mark, copyrights and other industrial or intellectual property rights of the Company of whatever nature in respect of the Goods, any of their constituent parts, their packaging or other material supplied with the Goods shall remain the absolute property of and vested in the Company.

9.2 The Customer shall indemnify and keep indemnified the Company against any and all loss, damage, claims costs and expenses whatsoever suffered or incurred by the Company in connection with any infringement of any patent, design, trademark, service mark, copyright or other industrial or intellectual property right of any other person in connection with the Company's use or application in relation to the Goods or possession of any material or information or instruction supplied by the Customer in relation to the Goods.

10.1 WARRANTY The Company warrants that save only as provided in the Conditions the Goods will on delivery correspond with the Company's specification in respect of them current at the time of delivery.

10.2 Provided that any defect in the condition or performance of the Goods is notified to the Company by the Customer within the warranty terms of each manufacturer/supplier from the date of manufacture, the Company shall correct such defect or replace the Goods (at the Company's discretion) subject to the Customer consenting or procuring consent for access to the Goods by the Company's employees or sub-contractors to carry out any work under this clause. This undertaking is given and shall be accepted by the Customer in lieu of any other remedy.

10.3 The Company shall not be liable under clause 10.2 above if:

10.3.1 The Customer makes any further use of the Goods after giving notice in accordance with clause 10.2;

10.3.2 The defect arises because the Customer failed to follow the Company's oral or written instructions as to the installation, use, maintenance or cleaning of the Goods or (if there are none) good trade practice;

10.3.3 The Customer alters or repairs the Goods without the Company's prior written consent;

10.3.4 The defect arises as a result of fair wear and tear; willful damage, negligence or abnormal storage or working conditions. For example, the Customer will be responsible for replacing parts that are expected to have a limited working life, such as batteries and rubber seals;

10.3.5 The defect arises as a result of electrical or power supply failure;

10.4 Any notice of defect in the condition or performance of the Goods given by the Customer under clause 10.2 shall be made in writing to the Company within a reasonable time of discovery, and prior sanction has been given through the issue of a company returns reference number.

10.5 The benefit of the warranty under clause 10.2 is not transferable.

11.1 LIABILITY The implied terms in the Sale of Goods 1979 are excluded in respect of Customer's dealing otherwise than as consumer, except the implied terms about title.



11.2 Save only as provided in these conditions the company shall not be liable for any defect in the goods caused by the manufacture of goods in accordance with any material, information or instruction supplied or provided by the customer. The customer shall indemnify and keep indemnified the company against any and all loss, damage, claims, costs and expenses suffered or incurred by the company in connection with any such defect.

11.3 Save only as provided in these Conditions the Company shall not in any event be liable for any special, indirect or consequential loss, damage, costs or claims including but not limited to loss or damage resulting from negligence and loss of profit or revenue.

11.4 The Company's aggregate liability to the Customer in respect of any and all causes of action arising at any time in connection with the Goods, the Contract or its other subject-matter shall not exceed 125% of the price of the defective goods, which sum the Customer agrees is reasonable.

11.5 These Conditions shall not exclude, restrict or limit any liability the exclusion, restriction or limitation of which is for the time being prohibited by legislation or any right or remedy in respect of any such liability.

11.6 Each of the exclusions, restrictions and limitations of the Company's liability in these Conditions shall be separate and severable from every other such exclusion, restriction or limitation. If a court or competent jurisdiction finds any such exclusion, restriction or limitations to be unenforceable to any extent the exclusions, restrictions and limitations shall save to such extent remain in full force and effect.

12.1 **USE AND SAFETY** The Goods are designed only for use in accordance with the Company's operating and maintenance instructions in relation to the Goods at the time of delivery. The Company warns that use, repair or adaptation of the Goods in any other manner may result in damage to the Goods or other property and/or affect the safety of the Goods.

12.2 No undertaking is given by the Company that goods will not infringe the Letters Patent or any other industrial property rights or any third party and the Customer accepts the goods on this understanding and agrees not to pursue any claim against the Company and to hold the Company harmless in respect of any alleged or actual infringement of such third party rights.

12.3 Save only as provided in these Conditions the Company shall not be liable for any loss or damage caused wholly or partly by the fitment to the Goods or any part, accessory or item of equipment which has not been manufactured or approved by the Company or by misuse of the Goods or failure to follow operating or maintenance instructions supplied by the Company. The Customer shall indemnify and keep indemnified the Company against any and all claims whatsoever in respect of any such loss or damage.

13.1 **GOODS PURCHASED FOR RESALE** In respect of any goods which are purchased by the Customer for resale, the Customer shall not apply its own trade or other marks to the Goods or their packaging without the written consent of the Company.

13.2 In respect of any Goods which are purchased by the Customer for resale, the Customer shall not alter or interfere with the Goods and shall comply with all applicable legislative and other requirements and standards and the Company's instructions in relation to the storage, handling and safety of the Goods. The Company shall indemnify and keep indemnified the Company against any and all loss, damage, claims, costs and expenses suffered or incurred by the Company arising from any failure by the Customer to comply with this Condition.

14.1 **DEFAULT AND TERMINATION** If any of the events specified in Condition 14.2 occurs all monies accrued owing under the Contract shall become immediately due and payable and the Company shall be entitled at any time thereafter to terminate the Contract and any other contract between the Company and the Customer by notice and/or to suspend further deliveries of Goods the subject of any or all such contracts.

14.2 The events referred to in clause 14.1 are:

14.2.1 the Customer makes default in or commits a breach of the Contract;

14.2.2 any distress or execution is levied upon the Customer's property or assets;

14.2.3 the Customer makes or offers or proposes to make any arrangement or composition with its creditors, any resolution or petition to wind up the Customer is passed or presented, any petition for a bankruptcy order is made against the Customer, or a receiver or manager of the Customer's undertaking, property or assets or any part thereof is appointed; or

14.2.4 the Customer fails to provide any letter of credit, bill of exchange or other security requested by the Company.

15 **FORCE MAJEURE** Should the Company be prevented from or hindered or delayed in performing any of its obligations under the Contract by reason of strike, lock-out or trade dispute, acts of national or local government or other authority, Act of God, storm, tempest, fire, flood, explosion, accident, theft, civil disturbance, insurrection or war or by any other cause whatsoever beyond the Company's reasonable control then the Contract may be suspended and/or cancelled (whether or not while suspended) by the Company without notice and the Company shall have no liability in relation to any failure by it caused by such prevention, hinderance or delay, or any such delay, suspension or cancellation.

16.1 **ANTI-BRIBERY CLAUSE** The Customer will:

16.1.1 Comply with all applicable laws, regulations, codes and sanctions relating to anti-bribery and anti-corruption including, but not limited to:

16.1.1a Local and national laws in the territories in which it operates.

16.1.1b The UK Bribery Act 2010.

16.1.1c The US Foreign Corrupt Practices Act 1977.

16.1.1d The UN Convention Against Corruption.

16.1.2 Have in place its own policies and procedures to ensure compliance with this Clause.

16.1.3 Ensure that all parties with which it is associated or who are providing goods or services in connection with this Contract (including subcontractors, agents, consultants and other intermediaries) are aware of and comply with the requirements of this Clause.

16.1.4 Maintain complete and accurate records of all transactions and payments related to this Contract and, on reasonable request, disclose details of those transactions and payments to the Company.

16.1.5 On reasonable request confirm in writing to the Company that it has complied with the requirements of this Clause and, if so requested, allow the Company to verify this compliance by way of an audit of its records.

16.1.6 Immediately inform the Company if it suspects or becomes aware of any breach of this Clause by one of its employees, subcontractors, agents, consultants or other intermediaries and provide detailed information about the breach.

16.2 The Customer will indemnify, keep indemnified and hold harmless (on a full indemnity basis) the Company against all costs, expenses and losses that the Company incurs or suffers as the result of any breach by the Customer of any of its obligations under this Clause. This indemnity will not apply to any fine levied on the Company as a result of the Company's criminal liability.

16.3 If the Customer breaches this Clause the Company shall have the right to terminate this Contract without notice and with immediate effect and will be in no way liable to the Customer in respect of such termination for payment of damages or any other form of compensation.

17.1 **GENERAL** Each of the rights and remedies conferred on the Company by these Conditions shall be in addition and without prejudice to any other right or remedy which the Company may have under these Conditions or otherwise and in particular to any right to payment of all sums due or to become due in respect of the Goods.

17.2 No failure by the Company to enforce any of its rights under the Contract, or delay by the Company in enforcing any such rights, whether or not after knowledge of any breach of the Customer, shall constitute waiver thereof.

17.3 If any of these Conditions shall be held unenforceable, the remaining Conditions shall not be prejudiced thereby and shall continue in full force and effect.

17.4 Save only as provided in these Conditions time shall not be or be deemed to be of the essence of the Contract.

17.5 The Contract shall be personal to the Customer and the Customer shall not assign any of its rights under the Contract without the prior written consent of the Company.

17.6 Any notice under the Contract shall be given by letter or by telex, facsimile transmission or cable confirmed by letter.

17.7 Any reference in these Conditions to any provision of legislation shall be construed as a reference to that provision as amended, re-enacted or extended at the relevant time. Words in the singular include the plural and vice-versa. The headings in these Conditions are for convenience only and shall not affect their interpretation.

17.8 The Contract shall be governed by and construed in all respects in accordance with English law and the Customer shall submit to the jurisdiction of the Supreme Court of justice in England in respect of any matters which may arise in connection with the Contract.

17.9 The Contract represents the entire understanding between the parties and supersedes any previous agreement between the Company and the Customer in relation to the subject matter.

Save only as provided in these Conditions the Company shall not be liable for any defect in the Goods caused by the manufacture of the Goods in accordance with any material, information or instruction supplied or provided by the Customer. The Customer shall indemnify and keep indemnified the Company against any and all loss, damage, claims, costs and expenses suffered or incurred by the Company in connection with any such defect.

As part of a recent review of our returns process, we've made some improvements to the way we would like you to return items to us. The approach will provide you with a number to track your returned items with and is designed to help us deal with your goods more quickly and efficiently. These changes are outlined below.

Key points:

### 1. Items/Products No Longer Required

Please ensure the items you want to return are:

- a. In good re-saleable condition and still in the original, un-damaged packaging.
- b. Not de-faced in any way, damaged, including removal of knockouts, fixings, resistors etc.
- c. Not been in your possession for longer than 28 days from the shipping date.

Items returned for this reason will be subject to our standard re-stocking fee as follows:

- Items held as a standard stock item on the shelf will be subject to a handling fee of 15%
- Items specifically ordered in for a customer order and not carried on the shelf will be subject to a handling fee of 30%

No return will be accepted without a Firesense Ltd returns reference number which should be obtained by contacting us directly prior to returning the item.

The items not required should be returned to Firesense Ltd at the purchaser's expense and a proof of delivery should be obtained.  
NOTE: Items received without an approved Firesense RMA reference number will be returned to the customer without credit.

### 2. Items returned under Warranty, or incorrectly supplied.

Items returned for this reason will be collected at the expense of Firesense Ltd and a suitable replacement obtained or a full credit refund given. No return will be accepted without a Firesense Ltd Returns reference number which should be obtained by contacting us direct, prior to returning the item.

When returning faulty items a brief engineers fault report is required to pass on to the manufacturer.

Items returned under "Warranty" or "Faulty" will be returned to the manufacturer for testing and confirmation of fault. A refund credit will not be raised until a fault is confirmed. If no faults are found the item(s) will be returned to the purchaser and a credit will not be raised.

To return a product, contact Firesense Ltd on 01892 544917. We will need to get some information about the items you want to return, such as part numbers, quantity and reason for return, so please have this information to hand when you call. Before we can issue a returns number, we will need a provisional purchase order from you to cover replacement items until the original items have been returned.

If you are returning mixed products, please make sure you give us details of the quantity of each part number as this will help us to ensure a quick turnaround for you.

### 3. Stock Cleansing

Our policy is not to accept stock cleansed, unwanted or unused products back for credit unless a prior agreement exists. Where an agreement is in place, any items that are returned for credit must be:

- a. Less than 28 days old from the date of dispatch.
- b. Unopened - These items will be subject to a 15% restocking charge if held on the shelf, or 30%, if the item is not normally held on the shelf. Opened items will not be accepted and will be returned to you at your cost.

If you are returning an item under warranty, the process outlined above will still need to be followed. If the item is proven to be faulty within Firesense Ltd warranty terms and conditions an appropriate credit will be raised.

When requesting a Returns reference number, please quote either; your original purchase order number; dispatch note reference number or invoice number. We will be unable to accept return items without this information.

Firesense Ltd will not accept debit notes to customers' accounts without an appropriate Firesense Ltd returns number detailed.

Hand-held programmers, Software, Download Leads and Batteries will not be accepted for return unless damaged in transit or found to be faulty.

Any items that are found to have 'no fault found' or have been damaged because of incorrect installation, wiring, negligence or other environmental damage will incur our returns charge and the provisional purchase order will be invoiced.

If you have any questions about the above, please contact a member of our sales team. They will be happy to help you. Firesense Ltd reserve the right to refuse items for return that do not comply with the process detailed above.







[www.firesense.co.uk](http://www.firesense.co.uk)

Tel: +44 (0)1892 481 100

[sales@firesense.co.uk](mailto:sales@firesense.co.uk)  
[orders@firesense.co.uk](mailto:orders@firesense.co.uk)  
[quotes@firesense.co.uk](mailto:quotes@firesense.co.uk)

Unit 5,  
Orchard Business Centre,  
North Farm Road,  
Tunbridge Wells,  
Kent,  
TN2 3XF