GENT
by Honeywell

# Installation Instructions

## Vigilon Compact Control panel based system

### Fire detection and alarm system

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## Preface

This is the third issue of the Installation instructions for the **Vigilon Compact system** based on networkable Vigilon Compact panel. The manual covers information on how to install the panel and external wiring to loop devices and networked panels.

These instructions must be read in conjunction with the recommendations in *BS5839:Part 1,* which is the *code of practice for Fire detection and alarm systems for buildings.*

### Associated Documents

Vigilon compact paned based system - Operating instructions
Log book

### Conventions

**This is a note to highlight important text that is normally hidden in the main text.**

**This is either a caution to prevent damage to the equipment or a warning to inform of dangerous conditions that may result in injury or death.**

## Abbreviations

ac - Alternating current
AS - Anti surge
C - Common
CH -Channel
dc - Direct current
DIL - Dual in line
DKC - Display keyboard card
DPCO - Double pole change over (relay contacts)
DEV - Device
EOL - End of line
EP - Environmentally protected
ESD - Electrostatic discharge
GND - Ground
HF - High frequency
I/F - Interface
IO or I/O - Input Output
IP - Ingress protection
IR - Infra Red
LCD - Liquid crystal display
LED - Light emitting diode
LPC - Loop processor card
LPCB - Loss prevention council certification board
LVD - Low voltage directive
MCB - Master control board (CARD 0)
MCP - Manual call point
MICC - Mineral insulated copper cable
MRC - Master repeat card
N/C - Normally closed
N/O - Normally open
NVM - Non Volatile Memory (NVM on MCB CARD14)
OC or O/C - Open circuit
OS - Outstation (Loop device)
PCB - Printed circuit board
PIN - Personal identification number
(Usercode, password or access code)
PSU - Power supply unit
PVC - Polyvinyl chloride
QB - Quick blow (fuse)
SC or S/C - Short circuit
SPCO - Single pole change over (relay contacts)
T - Anti-surge (fuse)
USB - Universal Serial Bus

# Notes on system installation

The power-up of the control panel and commissioning of the system is done by the Servicing organisation.

## Installation requirements

It is recommended that the installer follow the general requirements of *BS5839:Part 1:2002*, which is the *code of practice relating to fire detection and alarm systems for buildings.* The installer must follow the relevant parts of *BS7671 : 1992 Requirements for Electrical installations, IEE wiring regulations 17th edition* if installation is in the United Kingdom, UK.

## Second fix installation

To prevent the possibility of damage or dirt degrading the performance or appearance of the products, the installation of second fix items should be delayed until all major building work in the area is complete.

**The installation of all outstanding parts and panel the panel power up is usually carried out during system commissioning.**

## Fixture and fittings

It is the installers responsibility to provide adequate fixtures and fittings for the type of construction surface onto which a product is to be installed, whilst utilising the fixing points on the respective product. As an aid to this decision, the weight and overall size of each full assembly together with implications on cable entries and routing should be taken into consideration.

**All these procedures assume that the cable, gland, steel box (BESA box) and other related accessories are provided by the installer.**

## As fitted drawings

The installer should acquire site specific information from the interested parties, for details on the location of products for installation. The acquired information together with this guide and the relevant standards should be used to assist the work.

Each product assembly can be identified from its package label. The contents of all packages should be checked for any discrepancies.

## Cable type and routing

Appropriate attention must be given to ensure the correct cable type is installed in accordance with as fitted drawings, site specific information and recommendations of *BS5839 Part 1 : 2002*. The cables must be installed using cable manufacturers recommended fixing and accessories.

## Fire sensor covers

Each fire sensor may be supplied with a plastic dust cover. If supplied, the cover must be fitted to prevent dust and dirt from the building work contaminating the fire sensor.

## Earth continuity

All earth connection points should be **clean to provide a good electrical conductivity path. To maintain the earth continuity: all earth leads and fittings** provided should be installed. The **loop cable** screen must be continued through each system device on the loop circuit, whether the earth is connected to the device or not.

**Do not use any part of building structure for earthing.**

Some of the system products having metal enclosures have a **zinc coating** around the cable termination points, the coating provides a good electrical conductivity path for cable earth termination. The zinc coating on metal enclosures should not be damaged. Any damage will expose bare metal, which can corrode and make a poor earth connection.

## Power supply

The power to the system is derived from the mains and battery supplies. Before removal of a card or disconnection of cable from the panel ensure both mains and battery supplies are disconnected.

## Mains supply

Mains supply to any fire alarm control and indicating equipment must be via an unswitched 5A fused spur unit. A disconnect device must be provided to disconnect both poles and must have a minimum gap of 3mm. The disconnect device should be available as part of the building installation and must be easily accessible after installation is complete.

**All mains powered equipment must be earthed.**

## Local Manual Call Point

To comply with the requirements of EN54-2 : 1997 a conventional manual call point must be installed near the main control panel. The call point must be wired to the monitored line input of the control panel. **During commissioning of the system the Command Build No 250 associated with the monitored line input must be set up to evacuate all sectors without delay.**

**Failure to install and configure a local manual call point in the manner described above when delays are set up on the system will result in the panel not complying to EN54- 2 : 1997.**

# EN54 information

## Optional functions with requirements of this European standard

The Control panel complies with the requirements of EN54 : Part 2 : 1997. In addition to the basic requirements of the standard the panel conforms to the following optional clauses:

| Clause | Description |
|---|---|
| 7.8 | Output to fire alarm devices |
| 7.11 | Delays to action outputs |
| 8.3 | Fault signals from point |
| 9.5 | Disablement of each addressable point |
| 10 | Test condition |

# System wiring

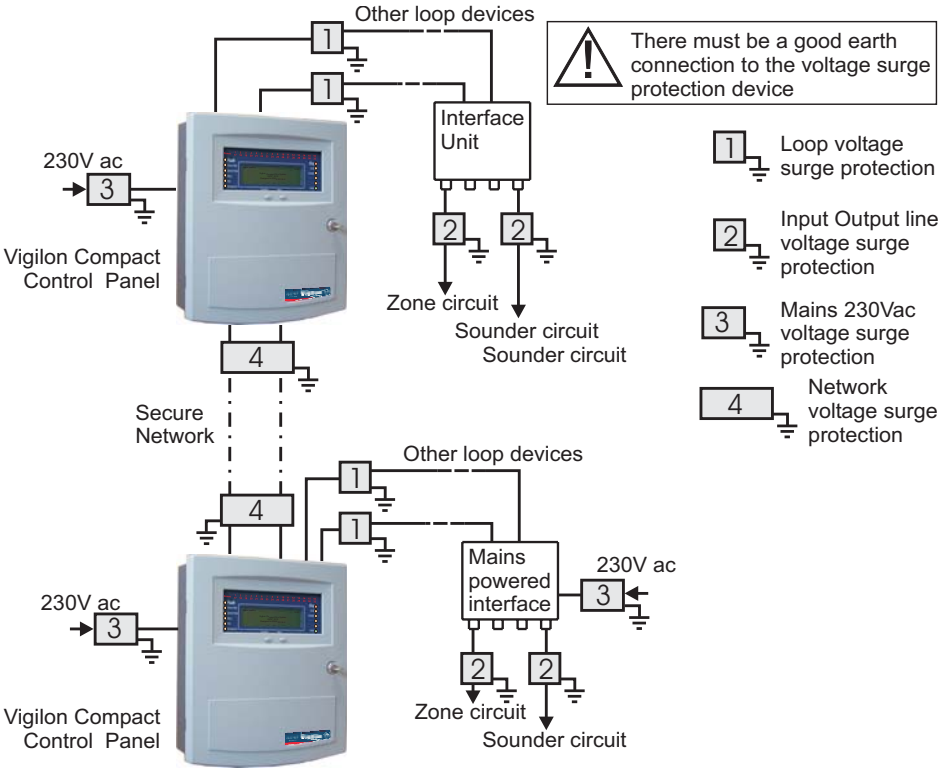
**If instructed, the installer may need to terminate as well as connect the cables to the appropriate terminal blocks.**

## Cable separation

Where the outgoing and return cables of a loop circuit covers more than the equivalent of one zone they must **not** run together, for example, either close to the **Control Panel** or in a **service duct**. There should be as much physical separation as possible between the cables and the mechanical protection of the cable should be to a particularly high standard. This is to minimise the risk of accidental damage to both cables.

### Lightning protection

Where a loop cable is mounted to an external wall or between two buildings then consideration should be given to the use of lightning protection devices.



## Requirements of cables

The *British Standard BS5839 Part 1 : 2002 Code of practice for system design, installation, commissioning and maintenance* states the requirements for standard and fire resisting cables in Clause 26.2 section d and e.

"d) **Standard fire resisting cables** should meet PH 30 classification when tested in accordance with EN50200 and maintain circuit integrity if exposed to the following test:

- a sample of the cable is simultaneously exposed to flame at a temperature of 830ºC- 0+40ºC and mechanical shock for 15min, followed by simultaneous exposure to water spray and mechanical shock for a further 15min.

e) **Enhanced fire resisting cables** should meet the PH120 classification when tested in accordance with EN 50200 and maintain circuit integrity if exposed to the following test:

- a single sample of the cable is simultaneously exposed to flame at a temperature of 930ºC - 0+40ºC and mechanical shock for a period of 60min, followed by simultaneous exposure to water spray and mechanical shock for a further 60min."

**The cables listed in this manual are those that have been tested for EMC compliance with the system products.**

### Loop Cable usage

**There is a maximum limit of 1Km loop cable usage allowed per loop circuit. This maximum limit is the sum of the cable used on main loop circuit, spurs off main loop circuit, plus cable runs to all input / output lines off loop powered interface units installed on the same loop.**

**There is a further maximum limit of 100m cable run allowed per input/output line off loop powered interface unit.**

## Mains Supply cable

The mains supply cable must be a standard fire resisting type and should meet PH30 classification, such as any of the standard and enhanced cables listed above.

## Repeat indicator to Control panel cable

A maximum of 1Km cable distance is allowed between Control Panel and Repeat indicator panel

- ☐ Belden No. 9842 EIA RS485 Applications, O/A Beldfoil® Braid having two twisted pairs

## Loop cable

The device loop cable carries both data and power, therefore its selection is important. Note the following:

- ☐ In countries where the European EMC directive is in force, only ***EMC Compliant*** cables are to be used.
- ☐ The loop cable usage must not exceed **1Km**. This includes the cable used on main loop and spur circuits.
- ☐ Single pair cable must be used. It is **NOT** permissible to run mixed loops or outgoing and return pairs in a multi core cable, due to inadequate separation and possible electrical interference problems.
- ☐ Each core of the loop cable must be **1.5mm$^2$** cross section area.
- ☐ the cable screen must be **capable** of being earthed at each system device (outstation).
- ☐ **Red** is the preferred cover sheath for fire applications.
- ☐ The specified loop circuit cables are **also suitable** for wiring master alarm, auxiliary relay, input/output lines and mains supply.

### Enhanced cables

- ☐ Mineral insulated cable (MICC) to BS6207:Part 1
- ☐ Approved Enhanced cable:
  Draka Firetuf Plus Enhanced **FTPLUS2EH1.5RD**
- ☐ Prysmian (formally Pirelli) **FP PLUS ***

### Standard cables

*Approved EMC cables for loop wiring*

- ☐ Draka Firetuf EMC Standard 1.5mm$^2$
  **FTEMC2EH1.5RDR**
- ☐ Draka Firetuf **FTZ2E1.5 FIRETUF OHLS ***
  fire resistant data cable
- ☐ Raydex CDT **FG950 ***
- ☐ Cavicel SpA **FIRECEL SR 114H ***
  distributed by Cables Britain
- ☐ AEI Cables **FIRETEC ***
- ☐ BICC Pyrotenax **FLAMESIL FRC ***
- ☐ Datwyler **LIFELINE ***
- ☐ Alcatel cable **PYROLON E *** distributed by Winstonlead
- ☐ Huber & Suhner **RADOX FR ***
- ☐ Prysmian (formally Pirelli) **FP200 FLEX ***
- ☐ Prysmian (formally Pirelli) **FP200 GOLD ***

**The cables marked * utilise laminated aluminium tape with a tinned drain wire for electrostatic screening. Under certain environmental conditions *galvanic action* may take place between the aluminium and the drain wire. This will severely *degrade EMC performance* as the foil to drain wire *impedance will increase*. Armoured variants of these can also be used for wiring a loop circuit.**

## Network cables

### Enhanced Network cables

☐ **Mineral insulated copper cable (EMC Compliant)**
800m maximum Panel to Panel or Panel to network node cable distance.

- BS6207: Part 1
- 3 parallel cores having continuous metal sheath encapsulating each core having 1.5mm$^2$ csa
- a **red** cover sheath (preferred for alarm applications)

☐ **Fireshield Enhanced FSN G2000**
1.2Km maximum Panel to Panel or Panel to Network node cable distance

- 3 Core (1 pair + 1 and earth, each core having 1mm$^2$ cross section area

### Standard Network cables

☐ **Delta Crompton Firetuf FDZ1000***
1200m maximum Panel to Panel or Panel to Network node cable distance

- Three core

☐ **Huber & Schner Radox series FR communication cable***
1200m maximum Panel to Panel or Panel to Network node cable distance

- Three core twisted triad screened
- 1.5mm$^2$ (7/0.42 stranded) conductors
- Nominal impedance 200 ohms (1KHz)
- Capacitance between conductors 110pF/m (1KHz)
- Capacitance between screen to core 210pF/m (1KHz)
- Fire resistance tested to BS6387 category CWZ and IEC 331.

☐ **Belden No 9729 (UL Style 2493) (EMC Compliant)**
1200m maximum Panel to Panel or Panel to Network node cable distance

- Two twisted pairs
- Each pair individually screened 24AWG (7 strands x 32 AWG)
- Low capacitance between conductors - 39.4pF/m at 1kHz
- Low capacitance conductor to screen - 72.2pF/m at 1kHz
- Temperature range -30°C to +60°C .

☐ **Teflon jacketed Belden TR No. 89729**
1200m maximum Panel to Panel or Panel to Network node cable distance

- Two twisted pairs
- Each pair individually screened 24AWG (7 strands x 32 AWG)
- Low capacitance between conductors - 39.4pF/m at 1kHz
- Low capacitance conductor to screen - 72.2pF/m at 1kHz
- Temperature range up to 200°C

☐ **Belden Armoured equivalent (EMC Compliant)**
This cable being a two-pair cable to BS5308:Part 1 (type 2) 0.5mm$^2$ (16/0.2mm).
600m maximum Panel to Panel or Panel to Network node cable distance.
**Belden No. 9842 EIA RS485 Applications, O/A Beldfoil® Braid**
1200m maximum Panel to Panel or Panel to Network node cable distance

- Must have following characteristics:
- Two twisted pairs
- 24AWG (7 strands x 32 AWG) conductors
- Low characteristic impedance - 120 ohms
- Low capacitance between conductors - 42pF/m at 1kHz
- Low capacitance conductor to screen - 75.5pF/m at 1kHz

☐ **Prysmian (formally Pirelli) FP200 Flex* (EMC Compliant)**
800m maximum Panel to Panel or Panel to Network node cable distance

- 3 Core
- each core having 1.5mm$^2$ cross section area

☐ **Prysmian (formally Pirelli) FP200 Gold* (EMC Compliant)**
1.2Km maximum Panel to Panel or Panel to Network node cable distance

- 3 Core
- each core having 1.5mm$^2$ cross section area

☐ **Prysmian (formally Pirelli) FP Plus* (EMC Compliant)**
1.2Km maximum Panel to Panel or Panel to Network node cable distance

- 3 Core
- each core having 1.5mm$^2$ cross section area

☐ **Draka FT Plus (EMC Compliant)**
1.2Km maximum Panel to Panel or Panel to Network node cable distance

- 3 Core
- each core having 1.5mm$^2$ cross section area

☐ **Doncaster Cables Firesure Plus**

- 1.2Km maximum Panel to Panel or Panel to Network node cable distance
- 4 Core (2- pair plus earth)

☐ each core having 1.5mm$^2$ cross section area

**The cables marked * utilise laminated aluminium tape with a tinned drain wire for electrostatic screening. Under certain environmental conditions *galvanic action* may take place between the aluminium and the drain wire. This will severely *degrade EMC performance* as the foil to drain wire *impedance will increase.***

## Devices per Device loop

**It is important that redundancy is built into the system to accommodate future expansions.**

The number of devices on one loop circuit can be limited by the total number of addresses available, the electrical load on the circuit, the maximum cable length and other geographical considerations.

- ☐ A loop circuit must not cover more than **10,000m²** of floor area of a protected site.
- ☐ In total a maximum of **200** devices are allowed per loop circuit.
- ☐ As a general rule allow **1000** load factor per loop circuit.

### The following table can be used as a rough guide only to determine the loop load.

**For a precise battery standby value use the Battery Standby Calculator. The Battery Standby Calculator tool should be used during system design stage to determine the loop loading. The tool can be downloaded from the Gent Expert forum (www.gentexpert.co.uk), which is accessible to registered users.**

| Device code number | Description | Load factor per device | Maximum devices per loop |
|---|---|---|---|
| VIG-RPT-72 or VIG-RPT | Repeat panel (loop powered) | 3 | 4 |
| VIG-MIM-A3 | A3 Zonal and Mimic Panel | 3 | 4 |
| S4-720 | Heat Sensor | 0.5 | 200 |
| S4-780 | Heat Sensor & Sounder | 7 - 13* | 140 - 60* |
| S4-720-ST-VO | Heat Sensor, Speech & Strobe | 17 - 25* | 60 - 40* |
| S4-710 | Optical Heat Sensor | 0.5 | 200 |
| S4-770 | Optical Heat Sensor & Sounder | 6 - 12* | 150 - 60* |
| S4-711-VO | Dual Optical + Heat Sensor & Speech | 8 - 15* | 120 - 65* |
| S4-711 | Dual Optical Heat Sensor | 0.5 | 200 |
| S4-711-ST | Dual Optical Heat Sensor & Strobe | 10 | 100 |
| S4-771 | Dual Optical Heat Sensor & Sounder | 7-12* | 150 - 15* |
| S4-711-ST-VO | Dual Optical Heat Sensor, Speech & Strobe | 16-24* | 55 - 40* |
| S4-911 | Dual Optical Heat Sensor & CO | 0.5 | 200 |
| S4-911-ST-VO | Dual Optical Heat Sensor CO, Speech & Strobe | 16-24* | 55 - 40* |
| 34729 | EP heat sensor | 0.5 | 200 |
| S4-34410<br>S4-34450<br>S4-34420 | 1 - LV Input interface (IZ - EZ)<br>4 - LV Input/Output interface (IZ - EZ)<br>1 - LV Output Interface<br>IZ = Value Including Zone<br>EZ = Value Excluding Zone | 1 - 24<br>5 - 28<br>1 | 24 - 32<br>28 - 32<br>170 |
| | Switch Input | 1 | 170 |
| | Relay Output | 2 | 170 |
| | Zone Input | 26 | 32 |
| | Every LED Output | 5 | 100 |
| S4-3441 or S4-34415 | 1 - MV Output Interface module | 5 | 200 |
| S4-34440 | Mains powered interface | 4 | 8~ |
| S4-34418 | Keyswitch interface | 4 | 170 |
| S4-34800 | Manual call point | 4 | 200 |
| S4-34760 | Venturi-Air Duct Kit | 0.5 | 200 |

| Device code number | Description | Load factor per device | Maximum devices per loop |
|---|---|---|---|
| S4-34740 | Beam sensor pair | 3 -per pair | 16 (ie 8 pair) |
| 34701 | Tee breaker | 0.4 | 127 |
| S2IP-ST-XR<br>S2IP-ST-XW | Strobe Red<br>Strobe White | 9<br>22 | 100<br>40 |
| S3-SN-X<br>S3IP-SN-X<br>S2IP-SN-X/XX | Sounder (standard tone) | 5 | 200 |
| S3-VP-X<br>S3IP-VP-X | Sounder (standard tone) - with speech | 5 - 17 | 200 - 55 |
| S3-VP-ST-XR<br>S3IP-VP-ST-XR | Sounder (standard tone) with red strobe<br>- Speech complex tone with red strobe | 13 - 25 | 80 - 40 |
| S3-VP-ST-XW<br>S3IP-VP-ST-XW | Sounder/speech with white strobe | 37 | 25 |
| S3IP-SN-ST-XR | Sounder standard tone with red strobe | 13 | 80 |
| **Supported products** | | | |
| 34415 or<br>34410 | Single Channel Interface or<br>Loop powered zone module | 10 | 100 ~ |
| 34450 | Loop powered interface | 4 | 30~ |

The load factors and maximum devices stated in the table above are revised due to changes in product specification

~ - A maximum of up to 100 input channels are allowed per loop.

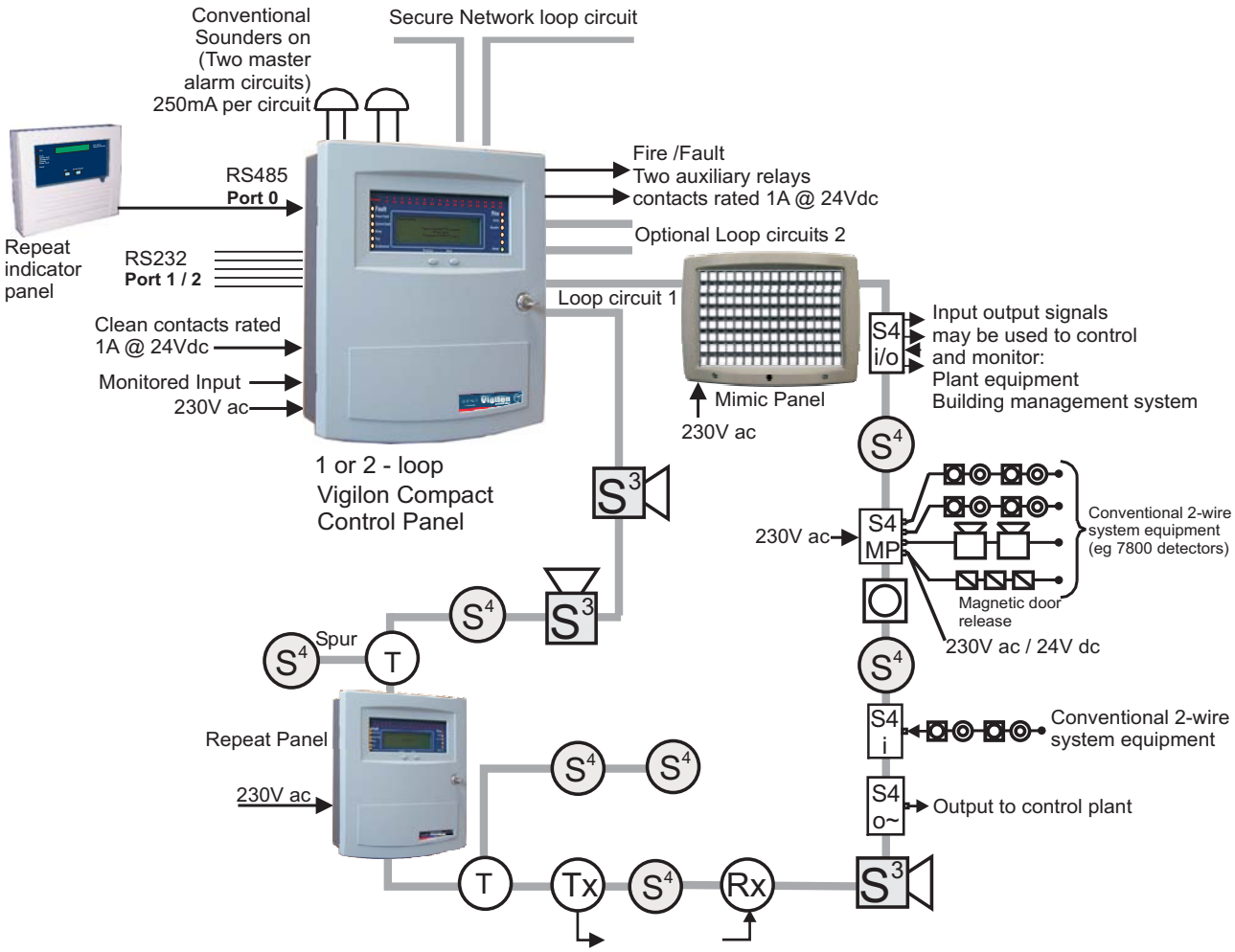
* - These values are applicable when sounder is operating in turbo mode or with bell tone.

LV - Low voltage

MV - Medium voltage

## Vigilon Compact System

The loop allows wiring of addressable devices like **fire sensors, alarm sounders, call points, interface units, mimic** and **repeat panels,** a combined maximum of up to **200** devices are allowed per loop circuit.




### Addressable System Devices

- S-Quad Sensor Speech Sounder & Strobe
- S-Cubed Voice enhanced Speech, Sounder, Strobe Unit
- Manual Call Point
- T Breaker
- Beam sensor Transmitter and receiver
- S4 4-Input/Output loop powered interface
- S4 1-Input loop powered interface
- S4 1-Output + Confirmation input loop powered interface
- S4 Mains switching output loop powered interface
- S4 - Input/Output mains powered interface unit

### Conventional Products off interface inputs

- Magnetic door release
- Alarm sounder
- Conventional Fire Detector
- Manual Call Point
- End of Line Unit

### LED off S⁴ sensor

- Remote LED

# Vigilon Compact panel

042bc

The Vigilon Compact panel is designed to meet the requirements of EN54-2 : 1997 and EN54-4 :1997. The panel can accommodate up to 2 loop circuits of Vigilon analogue addressable devices, like fire sensors, manual call points, interface units and repeat panels. A number of panels can be connected together on a secure network loop to give control and indication of network system events at any panel. A panel gives local visual and audible indications of system events, via indicators and message display. An integral mains derived power supply provides power to the panel and loops in normal conditions and the integral batteries provides a standby supply for up to 24 hours plus 0.5 hour alarm. A lockable front door prevents unauthorised access to the fire alarm controls. The panel is designed for both flush and surface mounting and facilitates both rear and top cable entry points.

## Features

- ☐ Analogue addressable fire alarm control panel.
- ☐ Supports up to two loop circuits that accommodate analogue devices.
- ☐ Up to 200 addressable devices can be connected to a loop circuit, devices like sensors, call point, interface units, repeat and mimic panels.
- ☐ Support connection of up to 31 panels in a secure network loop.
- ☐ Two master alarm circuits.
- ☐ RS485 (Port 0) to connect to repeat indicator panel(s).
- ☐ RS232 (Ports 1 and 2) to connect to external printer
- ☐ USB (Port 0) to connect to a Commissioning computer.
- ☐ Two sets of auxiliary relay change over contacts configurable to operate with fire, fault or disablement.
- ☐ One set of clean voltage-free change over contacts that operate with master alarms.
- ☐ Monitored input that actions a command build 250.
- ☐ Standby supply to power the system via batteries for 24 hours plus 0.5 hour alarm load.
- ☐ Alphanumeric LCD with back light to display event information.
- ☐ Integral 32 zone LEDs (with First fire flashing/steady options and an option to disable the integral zone indicators).
- ☐ LED lights for event indication.
- ☐ Local audible buzzer for event announcement.
- ☐ Push buttons for essential controls and menu driven commands.
- ☐ Two programmable LED indications **CB253** and **CB254**.
- ☐ Two programmable control buttons **U1** and **U2**.

## Technical data

### Control panel

| | |
|---|---|
| Standard | Designed to EN54 Part 2:1997 + AMD 1:2006 (and include optional clauses 7.8, 7.10, 7.11, 8.3, 9.5 and 10) |
| Approval | LPCB approved |
| Panel dimensions in mm | height 403 x width 338 x depth 101 |
| Panel weight | 8.6Kg approx. without batteries<br>1 - 12V 12Ah battery - 4Kg<br>2 batteries are required |
| Storage temperature | -10ºC to 55ºC |
| Operating temperature | 0ºC to 45ºC |
| Relative Humidity (Non condensing) Temperature 5ºC to 45°C | up to 90% |
| Emission | BS EN 6100-6-3:2001 Residential, Commercial & Light Industry<br>**Class B limits** |
| Immunity | BS EN50130-4: 1996: Part 4 Alarm systems:<br>*Electromagnetic compatibility*<br>Product family standard:<br>*Immunity requirements for components of fire, intruder and social alarm systems* |
| Ingress Protection | IP31 |
| Colour | Door: Grey (Pantone 422)<br>Backbox: Graphite Grey (RAL 7024) |
| Plug in Card<br>Card 1<br><br>Card 2 | <br>Loop processor card LPC (supplied)<br><br>Loop processor card LPC (optional)<br>Network card (optional) |
| Devices per loop | A maximum of up to 200 addressable devices (outstations) per loop |
| Device labels | Each device can be given a 32 character label for identification to locate events in the system. Each MCP is restricted to 28 character label. |
| Network Card | Supports connection of up to 31 panels in a secure network loop |
| Clean contacts | 1 set of voltage free change over contacts rated 1A @ 24Vdc, active with master alarms |
| Auxiliary relays | Voltage-free contacts rated 1A @ 24Vdc |
| Aux relay 1 | 2 sets of change over contacts configured to operate immediately on a Fire event. The relay is normally de-energised |
| Aux relay 2 | 1 set of change over contacts configured to operate immediately on a Fault event. The relay is normally energised<br><br>The relays can be re-configured to operate with Fire, Fault or Disablement event, with a maximum delay of up to 10 minutes and can operate in a normally energised or de-energised state. |
| Master alarm circuits and fuses | 2 - (24 V nominal)<br>250 mA max per circuit<br>MA1 - FS1 T250mAH250V<br>MA2 - FS2 T250mAH250V<br>(20 x 5mm) on MCB board |
| Monitored input | A closed input triggers a command build number 250. The input is normally open. |
| Ports Port 0 and fuse | RS485 -Repeat indicator panel (PB15) (Mode: **Repeat**)<br>Includes a 24V supply protected by<br>FS3 Fuse 200mA TE5 on MCB |
| Port 1 and 2 | RS232 -Printer (PB6)<br>(Mode: **Std,** Printer, Universal or Ascom) |
| Port 3 | USB - (P16) Commissioning tool<br><br>The factory set baud rate for Port 0 it is **1200** and for Ports 1 & 2 it is **38400**. Baud rate can be software reconfigured to another setting. |
| Display | Alpha-numeric display - 8 lines by 40 character per line, back-lit, (Black characters on green background, liquid crystal display) |
| Internal sounder | To announce Fire and Fault events, and a key press confirmation beep. |

| | |
|---|---|
| Indicators | Fire (red)<br>32 - Zones (red) - hidden till lit<br>Verify (amber)<br>CB253 (amber)<br>CB254 (amber)<br>Power (green)<br>Fault (amber)<br>Disablement (amber)<br>System fault (amber)<br>Power fault (amber)<br>Sounder (amber)<br>Test (amber)<br>Delay (amber) |
| Controls (with door closed) Access level 1 | Next and Previous buttons operable during Fire condition only |
| Controls (with door open) Access level 2 | Sound Alarms, Silence Alarms, Reset, Cancel Buzzer, Verify, F1-F4 keys, Menu On/Off key, Numeric keys, U1-U2 keys available if configured to perform site specific actions by triggering of CB251 and CB252 |
| Access level 2a | Customer (Customer PIN) |
| Access level 3 | Engineering (Engineers PIN) |
| Menus | [Control], [Setup], [Information] and [Test Engineering] menus. |
| Logs | **Active Logs:** Fire, Fault and Disablement<br>**Historic log**: All events<br>**Event logs:** Fault, Disablement, Warning, Supervisory, Exceptions and Historic fires.(up to 255 events)<br>**Fire Log** (up to 100 events) |
| 24V supply | FS3 T200mA (TE5) on MCB board |

**Always use the recommended replacement battery, as there is a risk of an explosion if incorrect battery is used.**

## Power supply

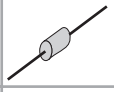
| | |
|---|---|
| Standard | Designed to EN54 Part 4:1997 + AMD 1:2002 and AMD 2:2006 |
| Mains supply voltage and fuses | 230V +10% -6% 50Hz protected by:<br>FS3 T3.15AH250V Ceramic (20 x 5 mm) on PSU<br>Input current - 0.6A |
| Nominal supply voltage for master alarm circuits | 24V ± 4V |
| Battery circuit 'BAT1' and fuse | FS1 T3.15A (TE5) on PSU board |
| PSU volts & fuses<br>43V (quiescent)<br>24V | On PSU board:<br>FS6 T1A (TE5)<br>FS4 T1A (TE5) |
| Battery | 2- 12V 12Ah sealed lead acid batteries to provide 24 hours standby and 30 minutes alarm, determined by loop loading, refer to the Battery Standby Calculator |
| Lithium Battery | BAT1 on MCB. Type CR2032 3V cell. Replace only with the same or equivalent type battery. Dispose of used batteries according to the manufacturer's instructions. |
| Storage temperature | -10 to 55ºC |
| Operating temperature | 0 to 45ºC |
| Relative Humidity (Non condensing) Temperature 5 - 45°C | up to 90% |
| Indicators | **Left LED (yellow)**: Indication of battery circuit 2 or 43V supply fault<br>**Centre LED (yellow)**: Indication of battery circuit 1, 24V supply<br>**Right LED (green)**: Indication of mains supply fault. |
| Maximum current from battery without mains connected | 2.3A |
| EN54 Part 4 data | |
| I max a | 126mA -> O/P 1 (43V)<br>43mA -> O/P 2 (27.5V)<br>29mA -> O/P 3 (5V) |
| I max b | 850mA -> O/P 1 (43V)<br>570mA -> O/P 2 (27.5V)<br>290mA -> O/P 3 (5V) |
| I min | 28mA -> O/P 1 (43V)<br>43mA -> O/P 2 (27.5V)<br>25mA -> O/P 3 (5V) |
| UVLO | 20.7V ± 0.4V |
| Ri max | 1.3R |

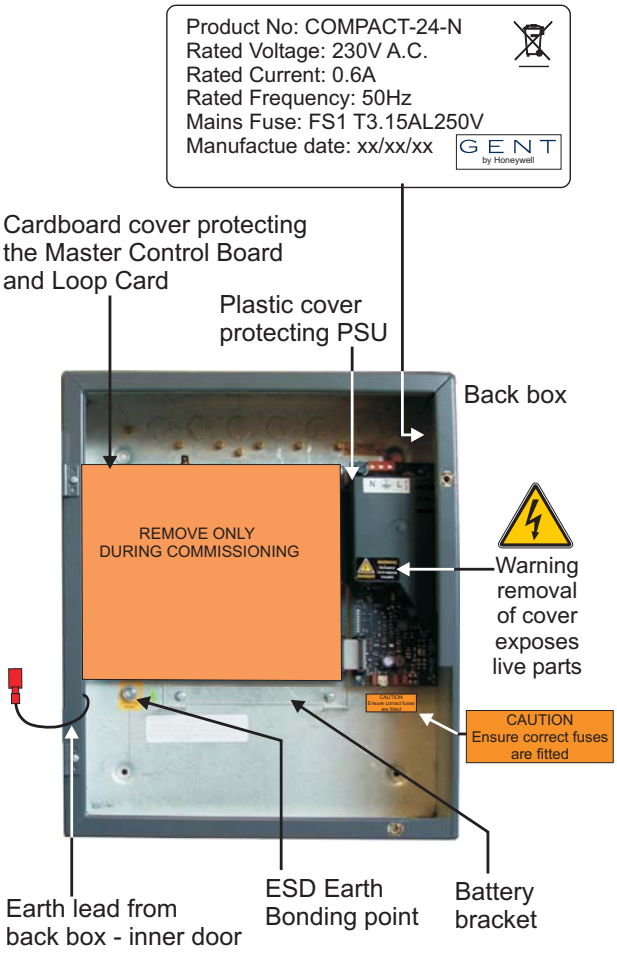
**After power down hazardous voltages may still be present even if indications are extinguished.**

## Panel installation

The Vigilon Compact Panel is supplied in parts, it is important to check the contents of each package:

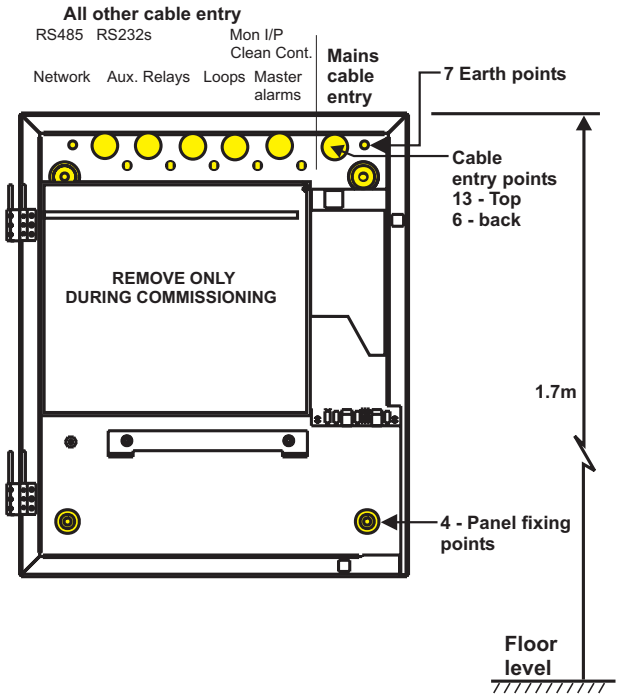
- ☐ Back box assembly
- ☐ Inner door assembly (fits on to back box assembly)
- ☐ Outer door assembly (fits on to back box assembly)
- ☐ 2 x 12V 12Ah Batteries

| Parts in the Spares pack | | Quantity |
|---|---|---|
| Fuse T3.15AL250V 20mm x 5mm | | 1 |
| Fuse T3.15A (TE5) | | 2 |
| Fuse T1A (TE5) | | 2 |
| Fuse T200mA (TE5) | | 2 |
| 10K Ohms Resistor |  | 4 |
| Battery Link | | 1 |
| Battery Lead | | 1 |



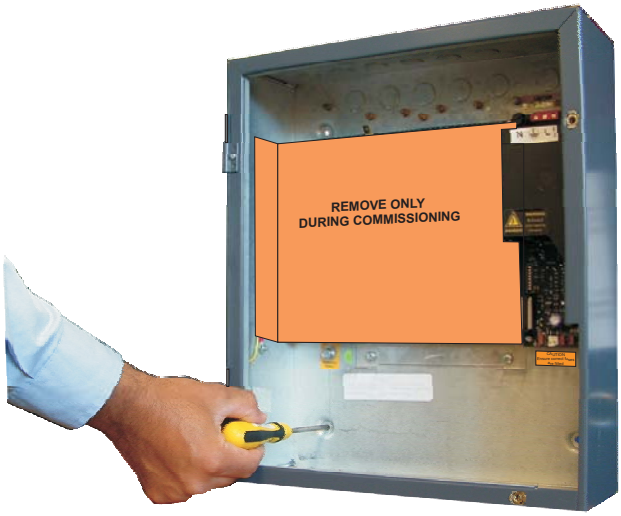

## Mounting height and dedicated cable entry points

**Any unused knockouts that have been removed should not be left open.**




## How to surface mount the panel

Using the four fixing points mount the backbox onto a flat wall using suitable fixings.



## How to flush mount the control panel

The control panel may be flush mounted using a flush surround COMPACT-FLUSH. A stainless steel flush surround variant COMPACT-FLUSH-SS may be fitted, which will require a stainless steel door VIG-RPT-DOOR-SS.

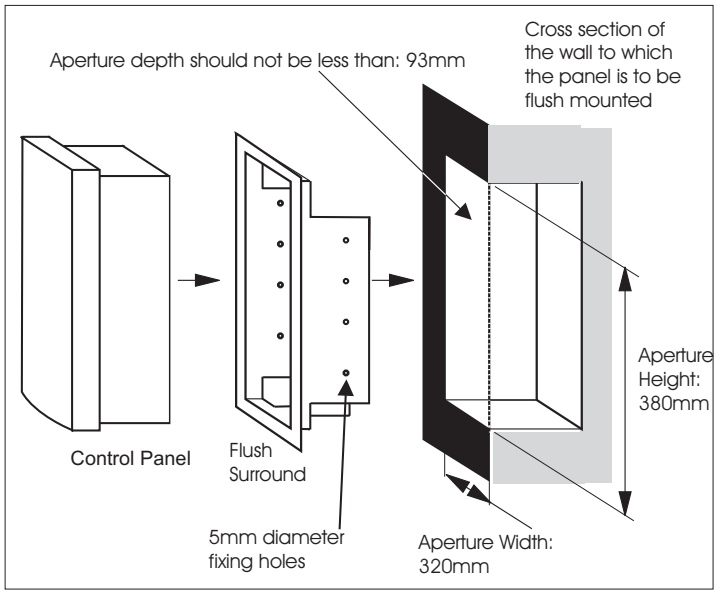
a Cut out an aperture in the wall to allow the flush surround to be fitted, see diagram for dimension of the aperture.

b Using the fixing holes on the flush surround, secure it into the aperture side walls.

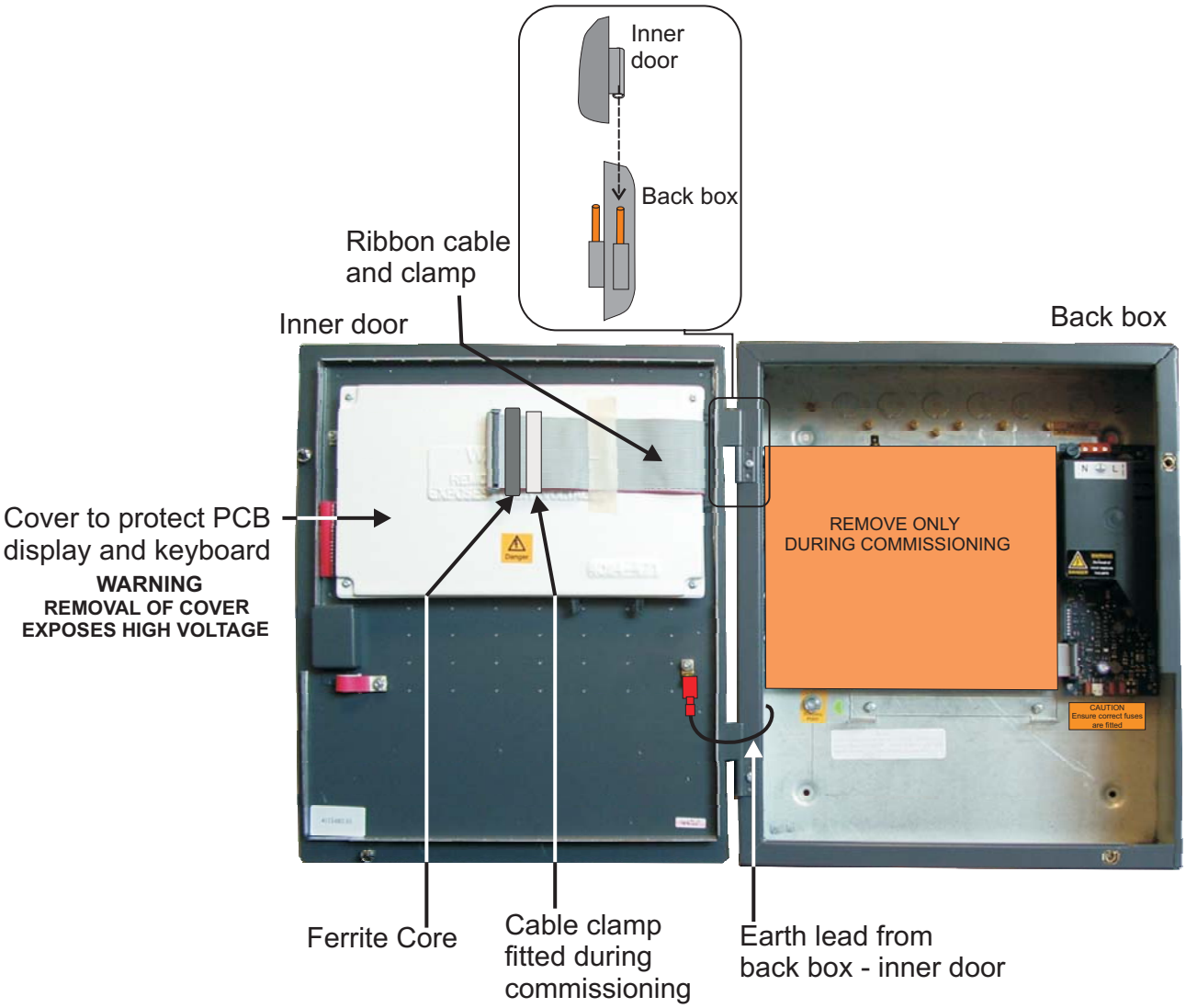
c Knock out the appropriate top or rear cable points on the panel enclosure.

d Route the cables through the cable entry points into the panel and at the same time insert the panel into the flush surround.

e Fit the panel back box to the flush surround using the 4-off 5mm screws supplied with the flush surround.

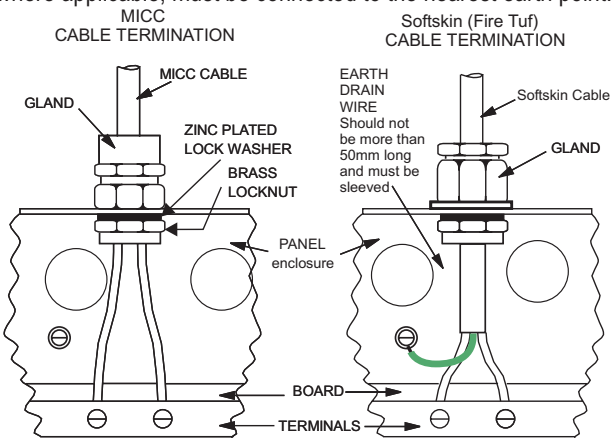


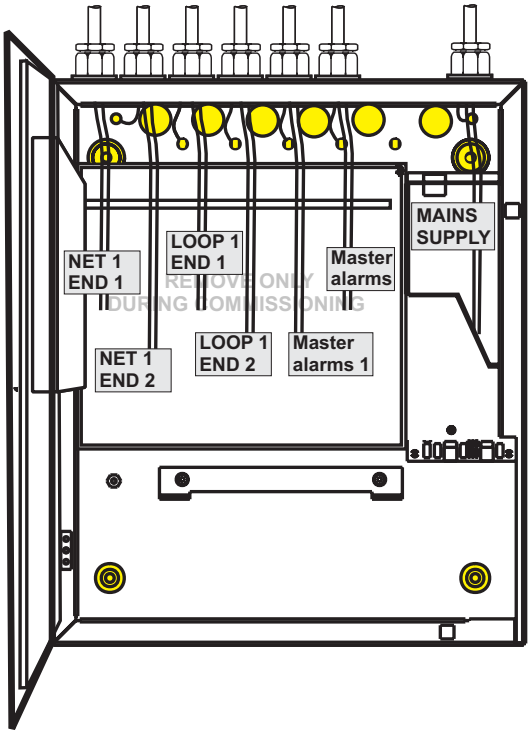

## Fitting the inner door



## Cable termination on enclosure

The wire length between the cable termination and point of connection must be as short as possible. Cable earth drain wire, where applicable, must be connected to the nearest earth point.




Terminate each cable at the dedicated entry point on the enclosure, using the cable manufacturers recommended techniques.

Where the cable are not required to be connected, leave **400mm** (unless otherwise specified) tail wire length and mark each **core** identifying its final point of connection. Where the cable is required to be connected, ensure it is secure to the respective terminal.

### Wiring test

**DO NOT undertake high voltage insulation tests WITH THE CABLES CONNECTED to the panel and system device terminals. Such a test may damage the electronics circuitry in loop devices and at the panel.**

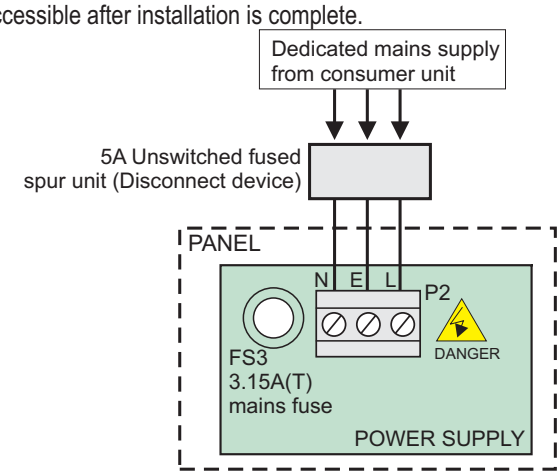
## Mains supply

**Ensure that the mains supply cable enters the panel through a dedicated cable entry, located adjacent to the mains terminal block and also segregated from loop wiring.**

**These fire alarm system products are not designed to be powered from IT Power systems.**

All mains powered equipment must be earthed.

Mains supply to any fire alarm control and indicating equipment must be via an unswitched 5A fused spur unit. A disconnect device must be provided to disconnect both poles and must have a minimum gap of 3mm. The **disconnect device** should be available as part of the building installation and must be easily accessible after installation is complete.




The fused spur isolator cover should be marked:

**FIRE ALARM - DO NOT SWITCH OFF**

**The fire alarm equipment's fused spur unit must be fed from a dedicated switch or protective device at the local mains supply distribution board.**

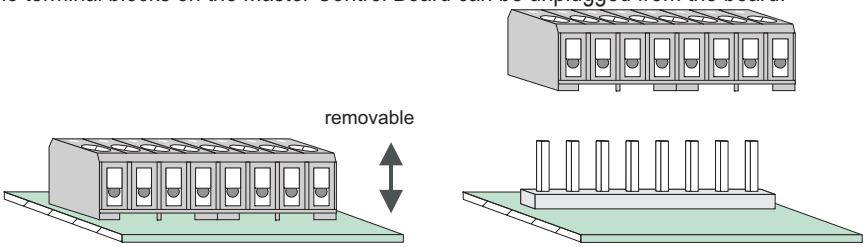
### Mains and battery supply connections

The mains and battery supply cables must be installed to the stage to **facilitate the power up** for commissioning, which is carried out by the Servicing organisation.

**Where mains cable is to remain disconnected, its tail ends must be insulated to prevent dangerous conditions arising in the event of accidental switching On of the mains supply.**

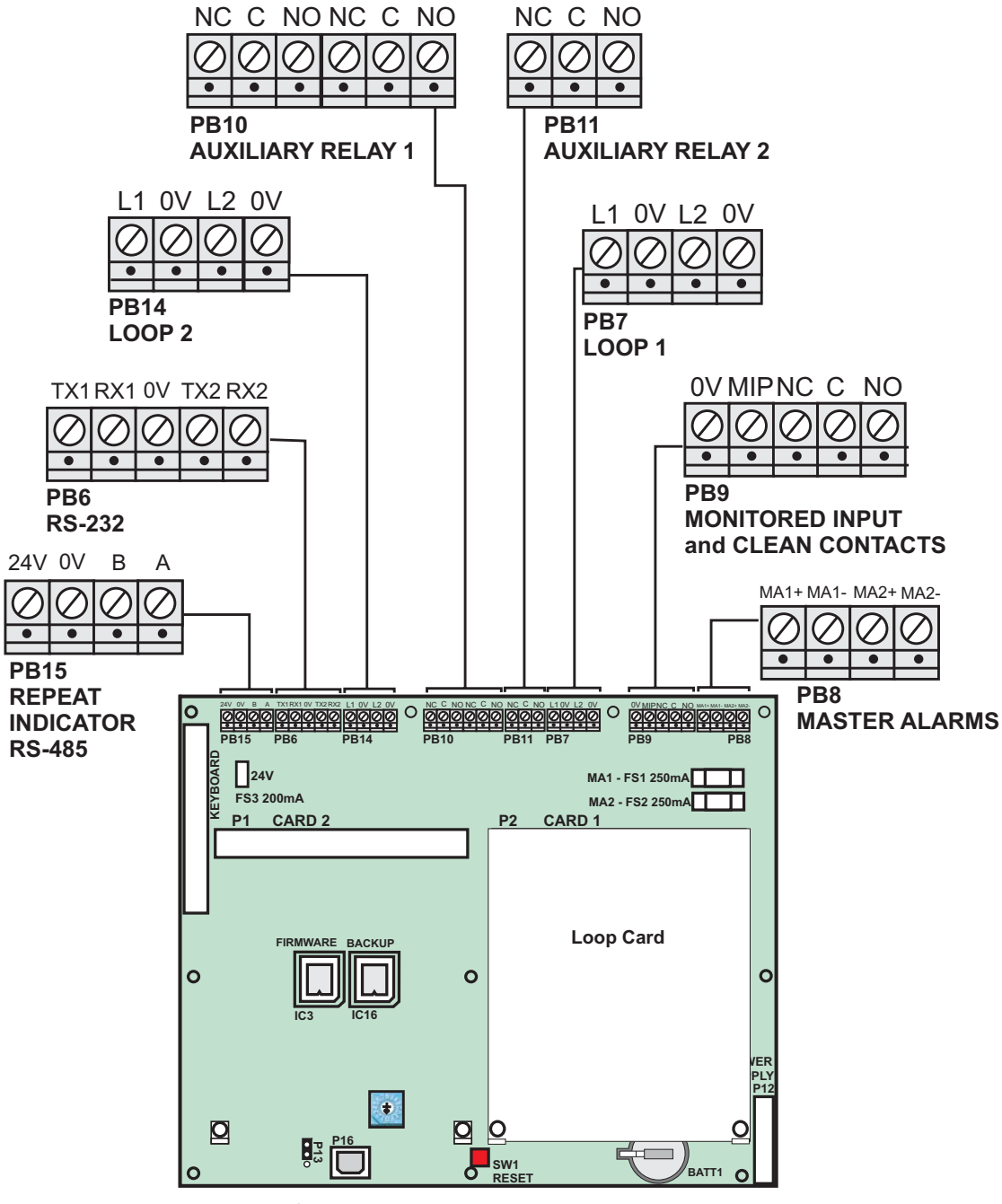
## Removable terminal block

To ease installation the terminal blocks on the Master Control Board can be unplugged from the board.




## Terminals for external circuits on Master Control Board

The Master Control Board (MCB) holds all the terminals for the connection of fire alarm loop circuits, master alarms, auxiliary relays, clean contacts, repeat indicator panel and monitored input.

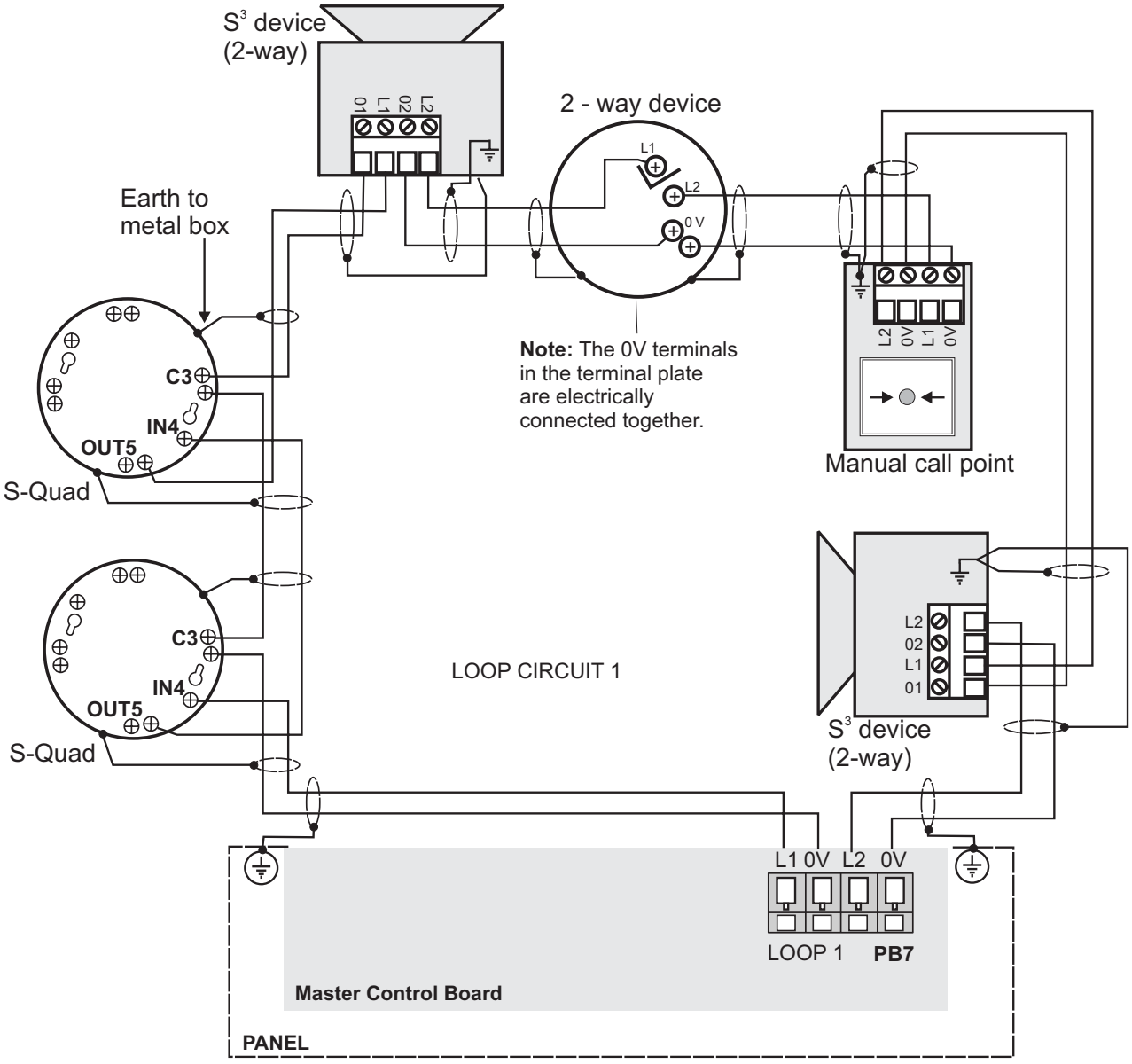



**Master Control Board**

## Device loop circuits

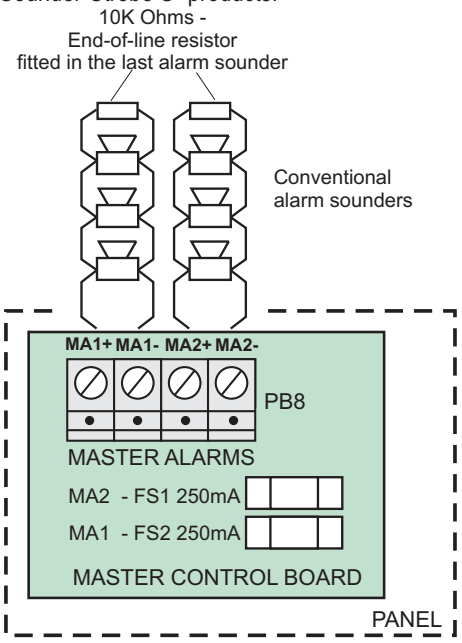
The two device loop circuits can each accept connection of addressable devices / outstations, up to 200 maximum per circuit. To maintain earth continuity on a loop, the **loop cable screen** must be continued through each system device, whether the earth is connected to a device or not.

**A loop circuit must not cover more than 10,000m² of floor area of a protected site.**
**A spur circuit must always be taken from the "line common" terminals of a 3 ways device.**
**A spur must not cover more than the equivalent of one zone as defined in BS5839 Part 1.**
**As every device has a loop isolator, the application of more than 32 devices does not require any special consideration.**



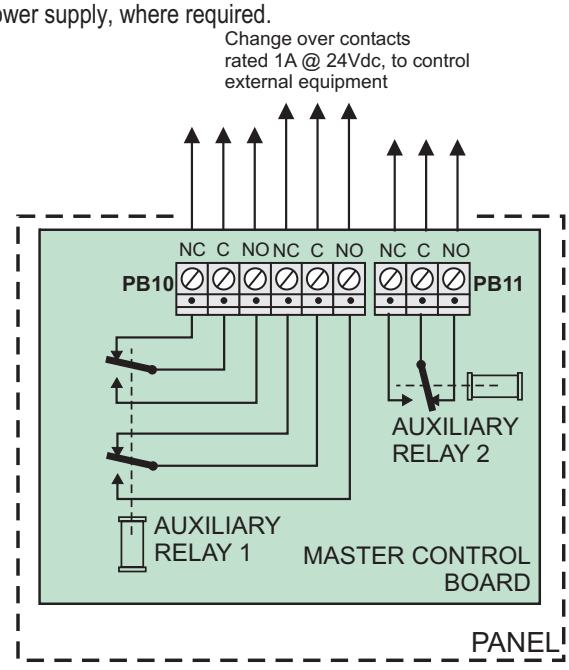
## Master alarm circuits

The two master alarm circuits accept the connection of conventional alarm sounders including the conventional Speech-Sounder-Strobe $S^3$ products.




## Auxiliary relay circuits

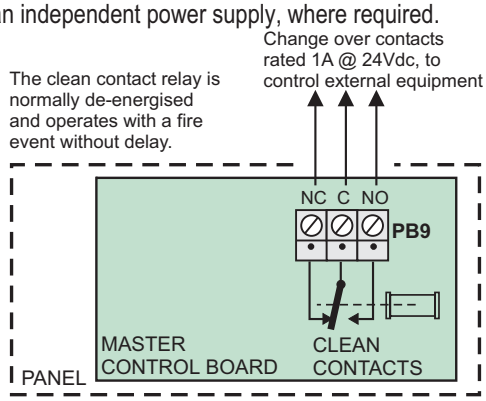
The control panel operates the auxiliary contacts when the configured event is received from the system. The auxiliary relays 1 and 2 contacts can be used to control external equipment, such as an automatic dialler that makes the call for fire fighting action. The relays can be individually re-configured to operate with either fire, fault or disablement event in the system. The relay operation can also be delayed by up to 10 minutes and can be set up to operate in a normally energised or de-energised state. The contacts should be powered from an independent power supply, where required.




Factory default:
Aux relay 1 is normally de-energised and operates with a fire event without delay.
Aux relay 2 is normally energised and operates with fault event without delay.

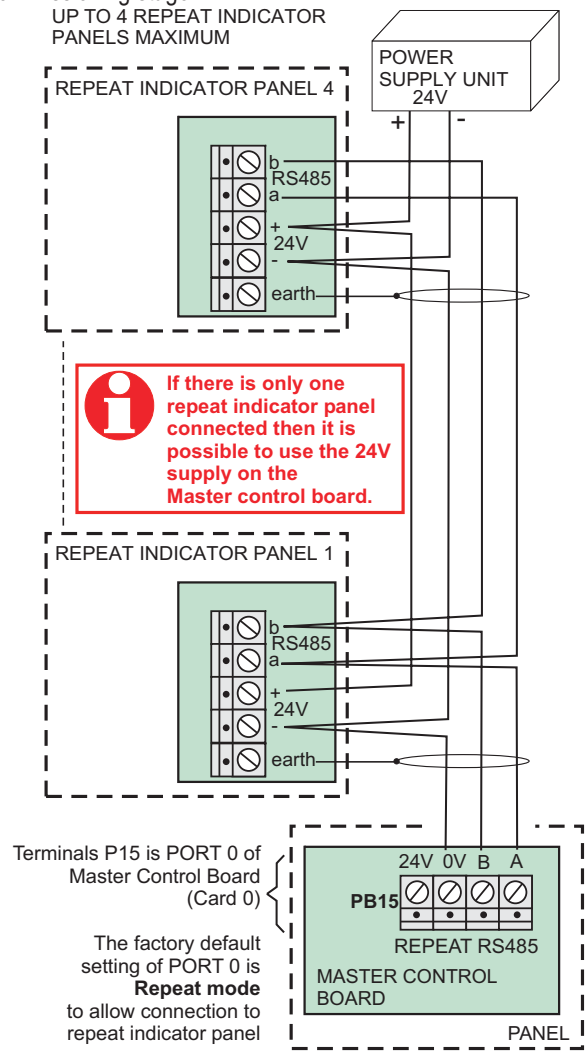
## Clean contacts

The control panel operates the clean contacts when a fire event is received from the system. The clean contacts can be used to switch plant equipment, such as lift control system. The relay operates in the event of a fire. The contacts should be powered from an independent power supply, where required.



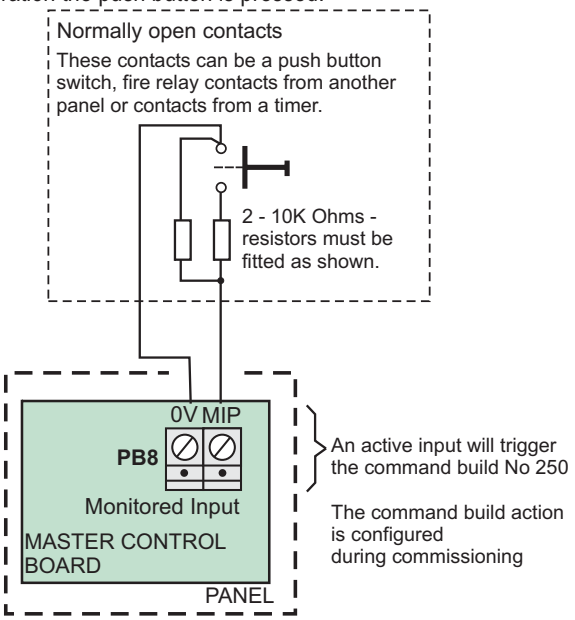

## Repeat indicator panel

Up to four repeat indicator panels can be connected directly to the fire panel at Port 0. The furthest repeat indicator panel can be installed a maximum of 1Km cable distance away from the fire panel. The Port 0 is configured for Repeat mode and set up for RS485 communication and the baud rate is selected during the commissioning stage.



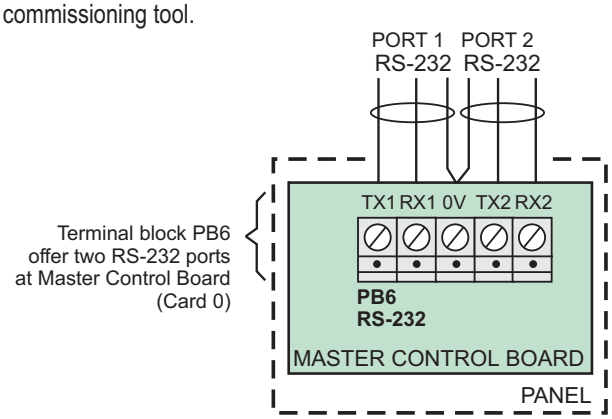
## Monitored input circuit

This may be used for class change application in schools. The monitored input at the fire panel is activated by an external switch installed a maximum of up to 100m cable distance away from the fire panel. The input is monitored for both short and open circuit fault. When the input is active it triggers a command build number 250 of the fire panel. The command build action is configured during the commissioning of the system. For example the action can be to sound the alarms of the system for the duration the push button is pressed.



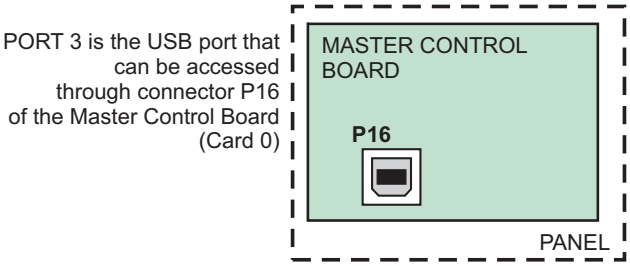

## RS232 Ports

The ports 1 and 2 of the fire panel offer RS232 communication, having configurable modes of operation and baud rate which are set during the commissioning of the system. The configurable modes include, standard (default), printer, universal or Ascom. The ports can be used to connect an external printer or commissioning tool.



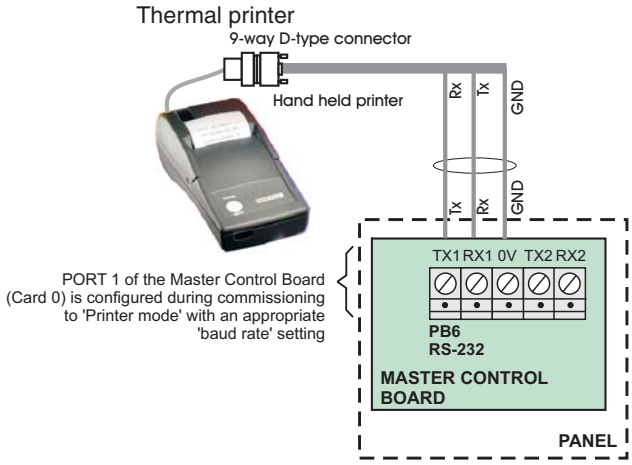

## USB Port

The Port 3 is a USB port that is used to connect to the commissioning tool. Ths tools allows ease of configuring the system.




## Connecting a thermal printer

An external serial printer can be connected to the RS232 Port.



## Network wiring

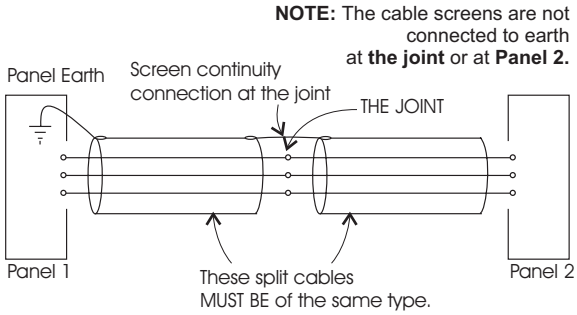
**In countries where the European EMC directive is in force use only those cables that are EMC Compliant, see list under the heading Network cables.**

**When terminating the cables and wiring the panel ensure the Network cables are physically separate from Loop circuit cables, this is to prevent interferences that may cause possible communication failure.**

## Network cable screen continuity

Ensure a good screen continuity joint exist where there is a split cable.

**DO NOT mix cables of different types on the same leg of a network, as this will create impedance imbalance and disruption to data communication.**




## How to minimise cross talk

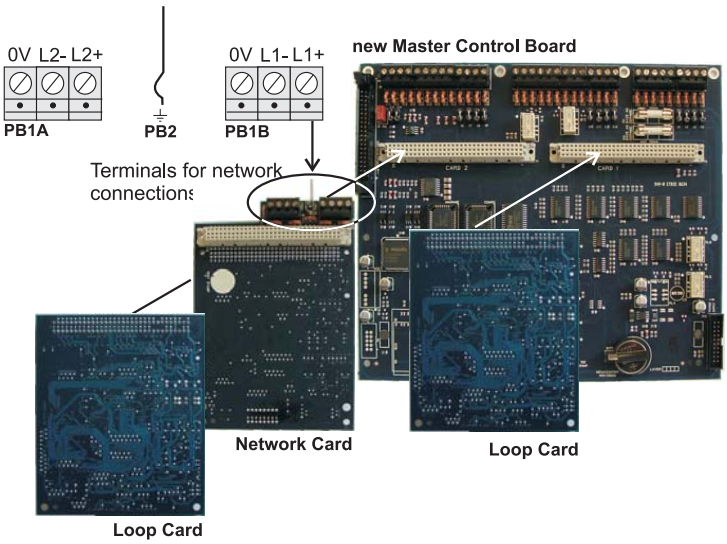
**When using standard MICC cable in a network, the different legs of the cable must not be closely placed together, as this will cause signal crosstalk which results in communication failure.**

There are three practical way of overcoming the crosstalk problem:

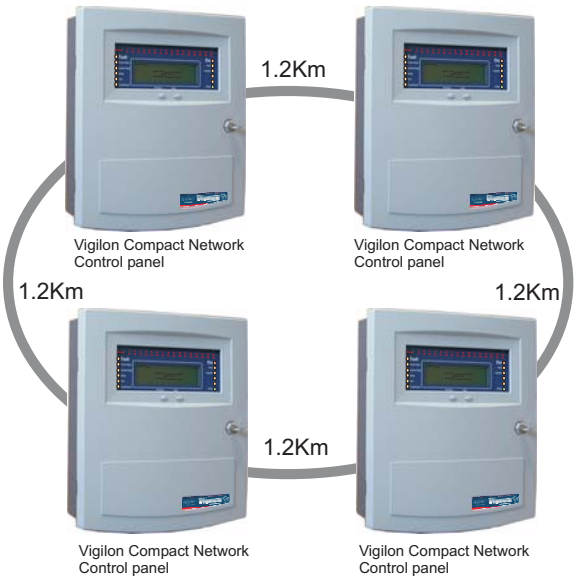
- ☐ use a twisted-core MICC cable
- ☐ put a ferrous screen between the cables (ie in the two runs of steel conduit)
- ☐ maintain a distance between the network cables of at least 50mm

## Network card

The network cable is connected directly to the Network card, which is fitted during system commissioning.

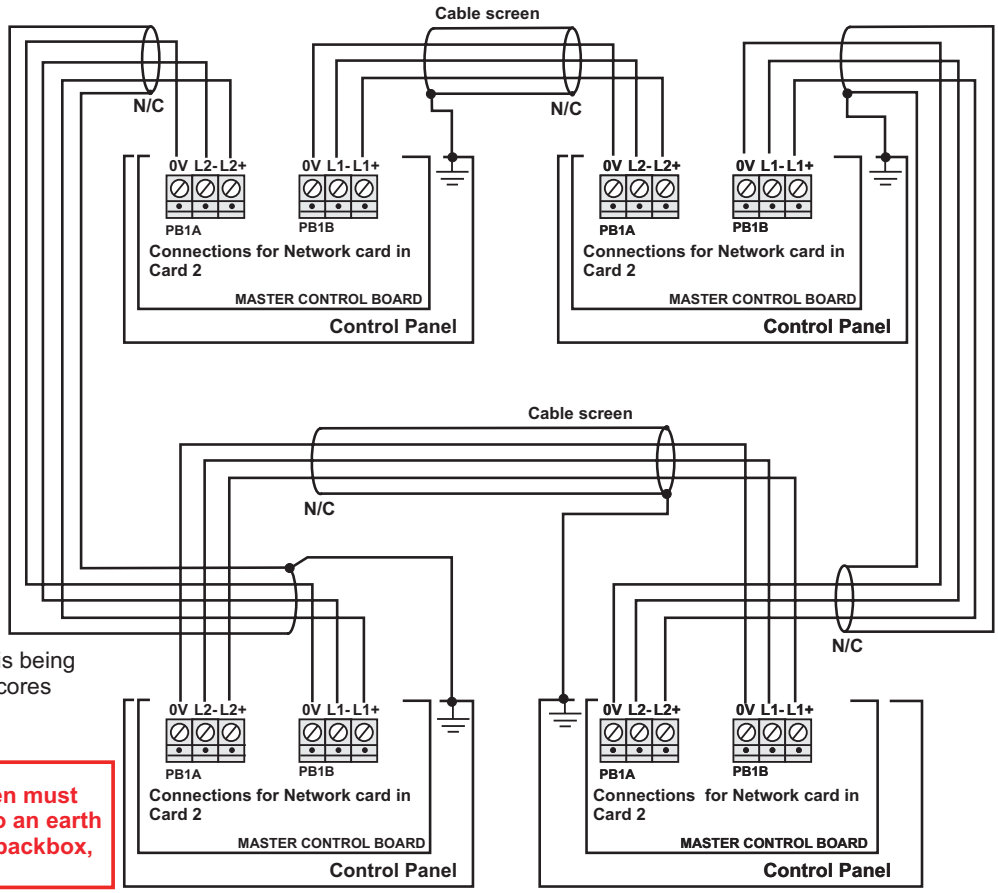


## Network Connections




A secure network can have up to 31 control panels connected in a loop using any one of the recommended network cable. The network cable is connected directly to the network card.

N/C = No connection




Where a multicore cable is being used ensure the unused cores (cores without signal) are connected to 0V.

**The cable screen must be connected to an earth terminal in the backbox, as shown.**

**When using a cable having 2 pair with screen, use 1 pair for 0V and use the other pair for L - and L+ connections.**

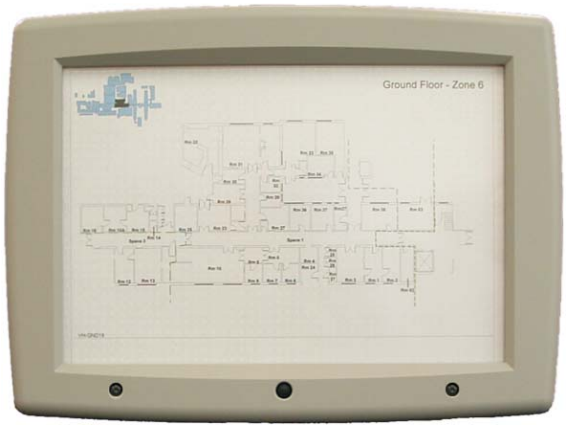
## On completion of panel installation

On completion of cable installation ensure the earth lead that connected between the backbox and inner door is fitted and both inner and outer doors are closed.

a Close the inner door using a screw driver.
b Fit the outer door on to the main enclosure.
c Close and lock the outer door.

# Mimic panel

Customised Mimic




Zonal Mimic

An A3 Mimic or Zonal panel must be connected to a loop circuit of the fire detection and alarm system. It is used to provide indication of fire events in the system. However it can also be used to provide indication of fault and supervisory events in the system. The panel can be mounted in landscape or portrait orientation.

A Customised Mimic holds a pictorial overlay that represents the protected building or an area within. A fire event is indicated by the illumination of appropriate red LEDs behind the overlay to show the location of the fire.

A Zonal Mimic provides a traditional zone by zone indication of a fire. Each zone is given a location label to identify the area within a building.

The panel illumination defaults to a Zonal Mimic but can be reprogrammed during commissioning to be a Customised Mimic. An array of red lights illuminates individually or in groups. Illuminations may be applied to include custom shapes, text and digital clock in small or large size. A site specific 'welcome message' may be configured for display during quiescent conditions that can scroll if it is too long to fit the display area. First or last fire flashing option, with in phase or anti phase flash.

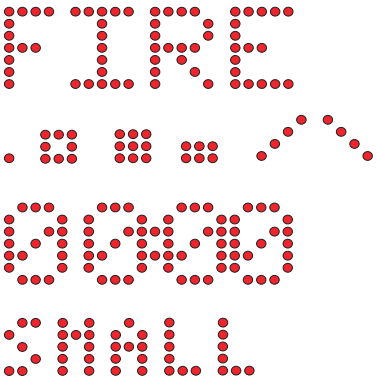
The panel has its own mains derived power supply with battery for standby power in the event of mains supply failure.

## Technical Data

| | |
|---|---|
| Panel dimensions | height 403mm, width 338mm, depth 101mm |
| Weight | 7.9Kg without batteries<br>10.5Kg with batteries |
| Storage temperature | -10 to 55ºC |
| Operating temperature | 0 to 45ºC |
| Relative humidity (Non condensing) | Up to 90% temperature<br>5 - 45°C |
| Battery | 2 x 6V 7Ah sealed lead acid (weight 1.3Kg each)<br>The integral battery provides power for 72 hours in standby condition and a further 30 minutes in alarm. |
| Mains operating voltage | 230V 50Hz +10% -6% |
| Emission | BS EN61000-6-3 : 2001 |
| Immunity | BS EN50130-4 : 1996 : Part 4 |
| LVD | BS EN 60950-2006 |
| Ingress protection | IP30 (estimated) |
| Colour | Door - Pantone 422<br>Back box - Graphite Grey (RAL 7024) |
| Control | Cancel fault buzzer / lamp test button |
| Indicators | 1536 high intensity RED LEDs |
| Loop connection | 3-way connection to a loop circuit |

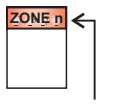
## Typical Mimic illuminations

Customised Mimic




Flashing in phase or anti phase

Zonal Mimic




Zone in fire
- steady indication

Latest zone in fire
- flashing indication

## Compatibility

As a **Zonal Mimic panel** the system control panel must have the following card software:

| Control panel CARD | EN54 Control Panel software |
|---|---|
| LPC Shorter Card ONLY | ≥ V4.19 |

≥ means equal to or greater than

As a **Customised Mimic panel** the system control panel must have the latest card software.

## Installation

*Fuses on Master Repeat Card*

| Fuses | Rating | |
|---|---|---|
| FS4 | 3.15A AB Ceramic | 20mm x 5mm |
| FS2 | 3.15A AB Ceramic | 20mm x 5mm |
| FS3 | 2AQB | 20mm x 5mm |

The Mimic Panel set consists of:

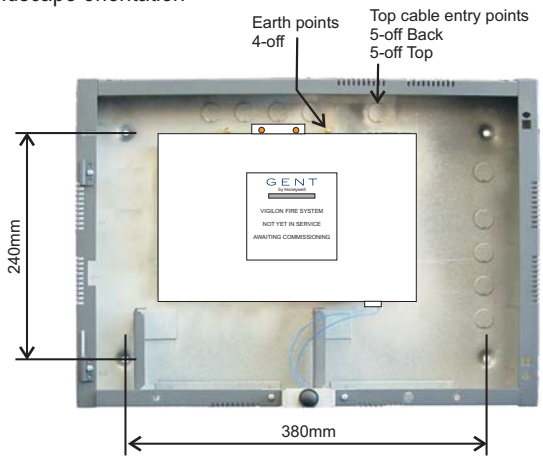
| Component | Qty |
|---|---|
| ❶ Backbox assembly | 1 |
| ❷ Inner door assembly | 1 |
| ❸ Outer cover assembly | 1 |
| ❹ Key for Outer cover | 1 |
| ❺ 3.15A 20mm x 5mm AB Ceramic | 2 |
| ❻ 2A 20mm x 5mm Quick Blow Fuse | 1 |
| ❼ Battery lead | 1 |
| ❽ Link lead | 1 |
| ❾ 6V 7Ah Battery | 2 |
| ❿ Overlay pack for A3 Mimic panel<br>1 x pre-printed Zonal sheet<br>2 x blank A3 sheets for printing a Mimic or Zonal overlay<br>1 x LED spacing sheet<br>**The overlays in the pack are high quality UV protected A3 paper.** A **magnetic strip** used to hold an overlay in place is fitted to the top side of the inner door. | 1 Set |

## Mounting the backbox

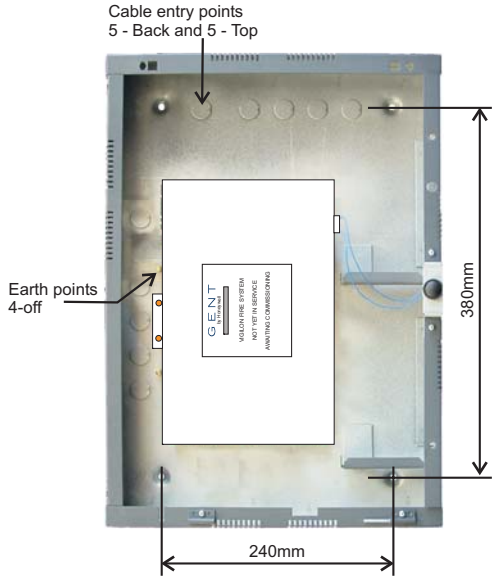
The A3 Customised Mimic panel can be mounted either landscape or portrait, while an A3 Zonal mimic panel must only be mounted landscape when using the overlay supplied.

a. Locate the package Back box assembly ❶.

Landscape orientation




Portrait orientation




b. Knock out the required cable entry points from the back box.

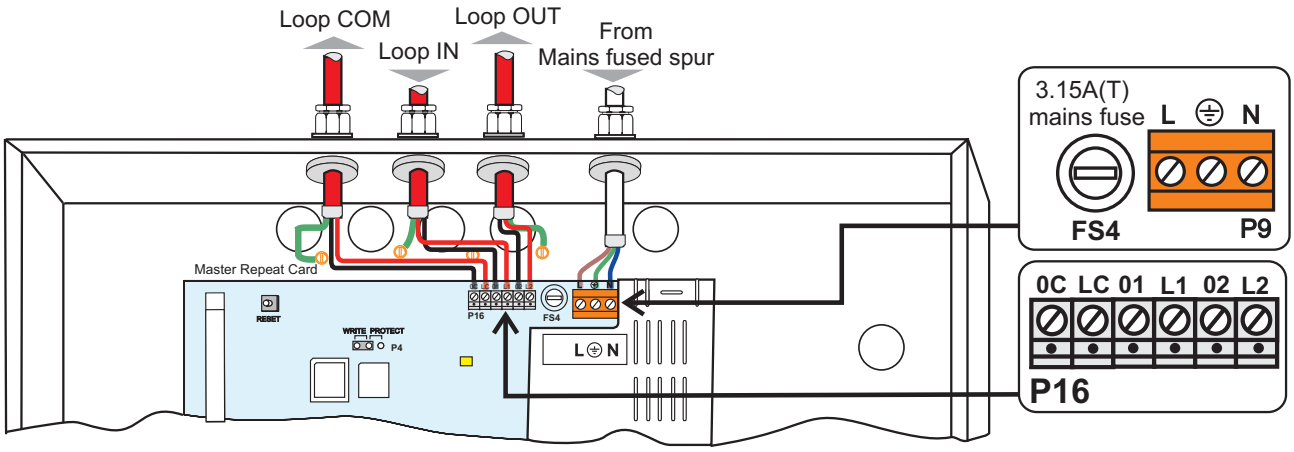
c. Mark out the 4-back box fixing positions on the wall to which the panel is to be mounted and secure it with suitable fixings.

**Ensure the mains power is isolated to from the panel.**

d. Terminate the loop and mains cables at the entry points and if required connect the cables to the appropriate terminals.

e. All the other parts are installed during commissioning.

## External wiring

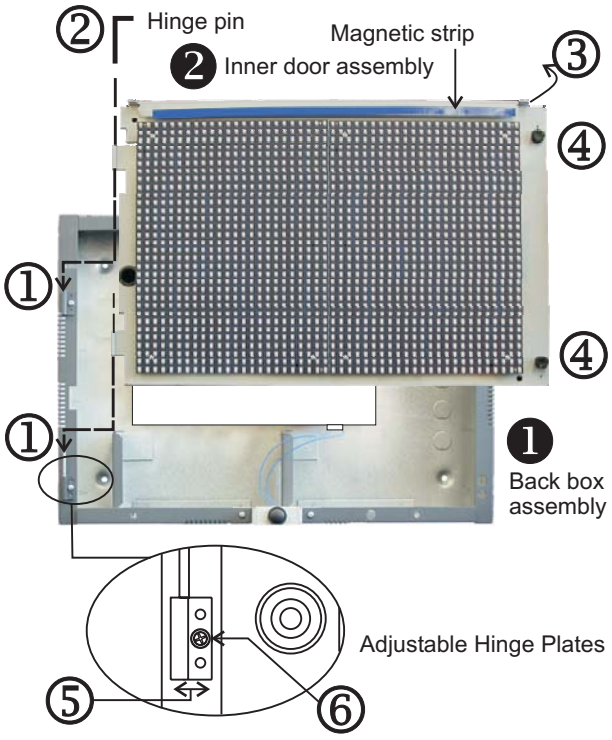



The external cables are routed into the back box using the cable entry points on the back box. The left 4 entry points are for the loop cables that connects to terminal block P16. The right cable entry point is for the mains cable which is connects to the terminal block P9.

**All the other parts supplied with the A3 mimic panel are fitted during the commissioning stage, however the procedures are described here for completeness.**

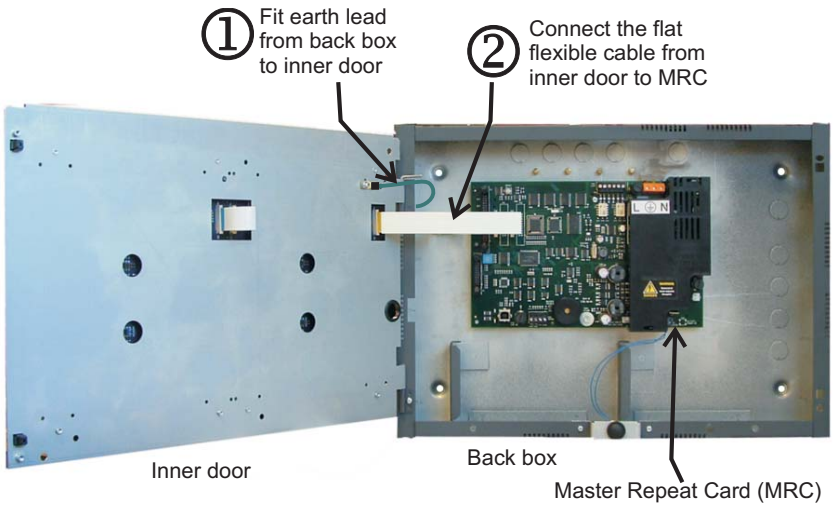
## How to fit the inner door assembly

The following procedures describe how to fit the inner door assembly to the backbox.



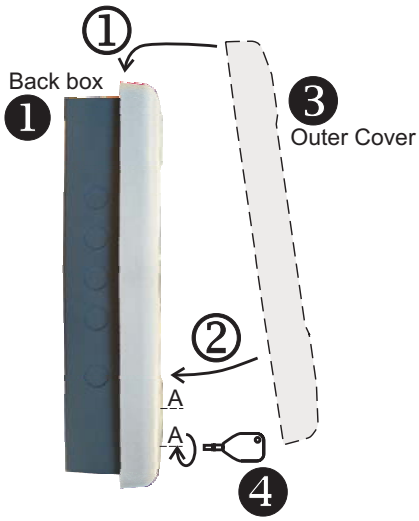

Align the inner door assembly ❷ to the two hinge pin positions ① on the back box ❶ and slide the door down until it is seated correctly. Insert the top (removable) hinge pin ② and secure it by rotating the pin into the back box. Close the inner door assembly ③ and lock it using the fastners at position ④. For minor adjustment of the inner door, open the fixing screw ⑥ and adjust the hinge plate⑤ to a required position and then secure the plate to the backbox by tightening the screw ⑥.

## Where to connect the internal cables




Remove the protective cardboard cover from the Master Repeat Card. Connect the earth lead ① from the back box to the inner door assembly. Connect the flat flexible cable ② to socket P13 on the Master Repeat Card , see details on fitting and remove of flat flexible cable.

## How to fit the outer cover




Hook ① the Outer Cover ❸ over the top edge of the Back Box ❶. Close ② the bottom of the Outer Cover onto the Back box and secure the Outer Cover by the two captive screws on the cover using the key ❹ supplied.
**Ensure the zonal mimic or customised mimic plan is located centrally within the anti glare window of the outer cover.**

For full information see the leaflet supplied with the product.

# Repeat Panel (loop connectable)

The repeat panel duplicates all of the control panel indications and the essential controls.

The repeat panel has its own mains derived power supply with battery for standby power in the event of mains supply failure. A lockable front door prevents unauthorised access to fire alarm controls but allows all of the indicators to be seen. The panel is designed for semi-flush or surface mounting and facilitates both rear and top cable entry points.

This repeat panel can be installed on a loop circuit of the Gent Vigilon fire detection and alarm system. It can be sited near an entry or exit point of a building and fit in with the loop cable routing.

## Compatibility

The new repeat panel is compatible with system control panel having card and software listed below:

| Control panel CARD | Control Panel Software | |
|---|---|---|
| | EN54 | BS5839 |
| LPC **Shorter Card ONLY** | ≥ V4.19 | ≥ 3.90 |

≥ means equal to or greater than

## Technical Data

| | |
|---|---|
| Panel dimensions | height 403mm, width 338mm, depth 101mm |
| Weight | 9Kg with batteries (approximate) |
| Storage temperature | -10 to 55ºC |
| Operating temperature | 0 to 45ºC |
| Relative humidity (Non condensing) | Up to 90% temperature 5 to 45°C |
| Battery | 12V 7Ah sealed lead acid |
| Mains operating voltage | 230V +10% -6% 50Hz |
| Emission | BS EN61000-6-3 : 2001 |
| Immunity | BS EN50130-4 : 1996 : Part 4 |
| LVD | BS EN 60950-2006 |
| Ingress protection | IP31 (estimated) |
| Colour | Door - Pantone 422<br>Back box - Graphite Grey (RAL 7024) |
| Controls (with door closed) Access level 1 | Next and Previous buttons operable during fire condition only. |
| Control buttons (with door open) Access level 2 | Sound Alarms, Silence Alarms, Reset Fire, Cancel Fault Buzzer, Verify, F1-F4, Menu On/Off and U1-U4. |
| Indicators | Fire, Verify, Power, Fault, Power Fault, System Fault, Delay and CB253/254.<br>***EN panel only:*** Sounder, Sounder, Delay, Disablement Test and 32-Fire Zone LEDs.<br>***BS panel only:*** Commission and Warning.<br>***Display:*** 8 lines 40 characters per line, back-lit LCD. |
| Loop connection | 3-way connection to a loop circuit |
| EN54-17 data Fire detection and fire alarm system short circuit isolators | $V_{max}$ 42V $V_{nom}$ 40V<br>$V_{min}$ 24V $V_{SO\ max}$ 16V<br>$V_{SO\ min}$ 8V $I_{C\ max}$ 0.4A<br>$I_{S\ max}$ 1A $I_{L\ max}$ 20μA<br>$Z_{C\ max}$ 0.1Ω |

## Installation

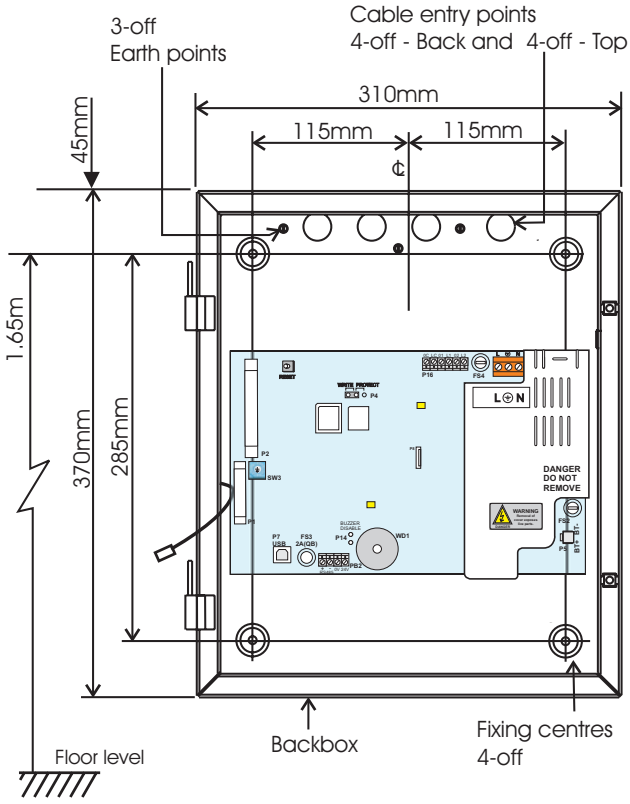
The Repeat Panel Set consists of:

| | Parts | Quantity |
|---|---|---|
| ① | Backbox assembly | 1 |
| ② | Outer door assembly | 1 |
| ③ | Inner door assembly | 1 |
| ④ | 20 Way ribbon cable | 1 |
| ⑤ | 40 Way ribbon cable | 1 |
| ⑥ | Spares pack (includes battery leads and membrane labels for BS panel ) | 1 |
| ⑦ | Battery 12V 7Ahr | 1 |

**Fuses on the Master Repeat Card**

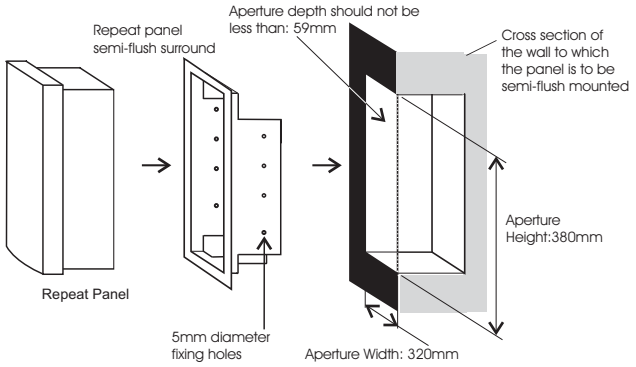
| Fuse | Rating |
|---|---|
| FS4 | 3.15A AS 20mm x 5mm |
| FS2 | 3.15A AS 20mm x 5mm |
| FS3 | 2A QB 20mm x 5mm |

## Back box mounting




a. Find the Repeat panel Back box ① package and remove the temporary cover.

b. Secure the back box to the wall with suitable fixings. If the backbox is to be semi-flushed then use the optional semi-flush surround.




c. Terminate the cable at the entry point leaving **400mm** tail wire length.

**If mains supply cable ends are not required to be connected then ensure the ends are insulated for safety.**

d. Refit the temporary cover to protect the panel until all building work is complete.

## Doors, Cables and Power up

The doors and cables are installed after building work is finished.

a. Remove the protective cover from the backbox.

b. Fit the inner door ③ to the panel enclosure remembering to connect the earth lead from the backbox to the inner door. Fit the outer moulded door ② to the backbox.

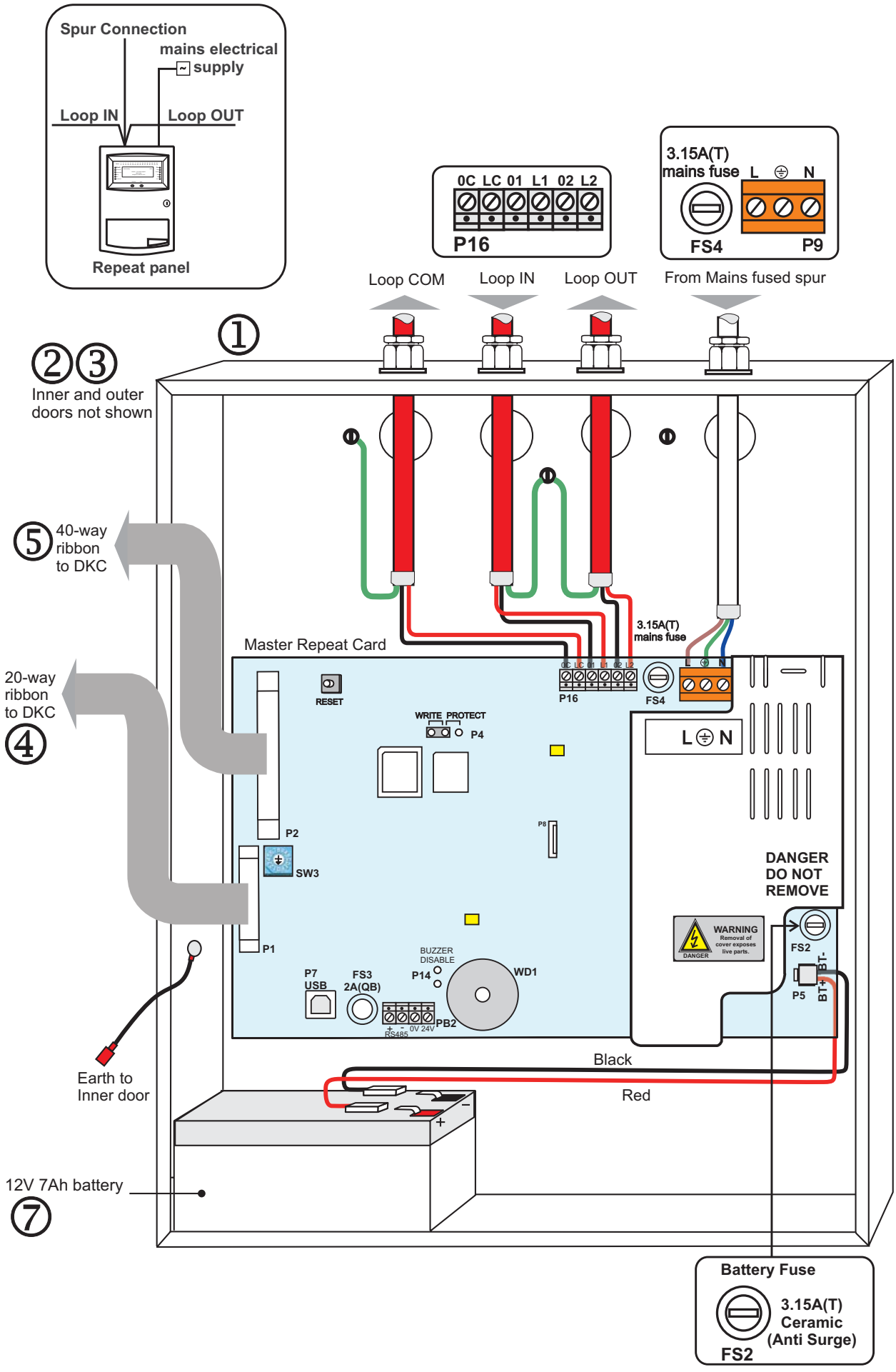
c. Wiring the panel:

**Ensure the mains supply is completely powered down before wiring the mains cable ends.**

- connect the mains cable to terminal block P9 on the Master Repeat Card.
- fit battery lead ⑥ supplied in the spares to connector P5 on Master Repeat Card.
- connect the loop cables to terminal block P16 on the Master Repeat Card.
- connect the 40 way ribbon cable ⑤ to the Master Repeat Card connector P2 and the other end to Display Key Card on the top right edge connector - P1.
- connect the 20 way ribbon cable ④ to the Master Repeat Card connector P1 and the other end to Display Key Card on the top right connector - P6.

d. Power-up is done during commissioning by the service organisation and it involves switching ON the mains supply and connection of battery leads. The Power up indications:

- all the LEDs on the panel are lit for a short duration and a power up message displayed.
- the local buzzer sounds
- the display reads: **Main panel is off Line**
- the **Fault** and **System Fault** LEDs are lit.


Spur Connection
mains electrical supply
Loop IN
Loop OUT
Repeat panel
0C LC 01 L1 02 L2
P16
3.15A(T) mains fuse
L N
FS4
P9
Loop COM
Loop IN
Loop OUT
From Mains fused spur
①
②③
Inner and outer doors not shown
⑤ 40-way ribbon to DKC
20-way ribbon to DKC ④
Master Repeat Card
3.15A(T) mains fuse
RESET
WRITE PROTECT
P4
P2
SW3
P1
P8
L N
DANGER DO NOT REMOVE
WARNING Removal of cover exposes live parts.
DANGER
FS2
BT+ BT-
P5
BUZZER DISABLE
P7 USB
FS3 2A(QB)
P14
WD1
PB2
RS485
0V 24V
Earth to Inner door
Black
Red
12V 7Ah battery
⑦
Battery Fuse
3.15A(T) Ceramic (Anti Surge)
FS2

# Repeat Indicator panel

The repeat indicator panel provides messages and indications of system events and it connects directly to the fire panel.

## Technical data

| | |
|---|---|
| Dimensions in mm | height 177 x width 206 x depth 48.5 |
| Full assembly weight | 750g |
| Storage temperature | 0 to 60ºC |
| Operating temperature | 0 to 45ºC |
| Relative humidity (Non condensing) | up to 90% Temperature 5 to 45°C |
| Ingress protection | IP30 estimated |
| Colour | White |
| Indicators | Fire, Fault, Disablement, Power On, System fault, Sounder 2 line 20 character per line, back-lit, display. |
| Controls (with flap closed) | Test and Cancel buzzer |
| Controls (with flap open) | Fire, Fault, Disablement, Warning, Display Mode and Numeric keypad. |

**If only one repeat indicator panel is to be connected to the control panel then make use of the 24V supply at the panel, there is no need to use an external power supply**

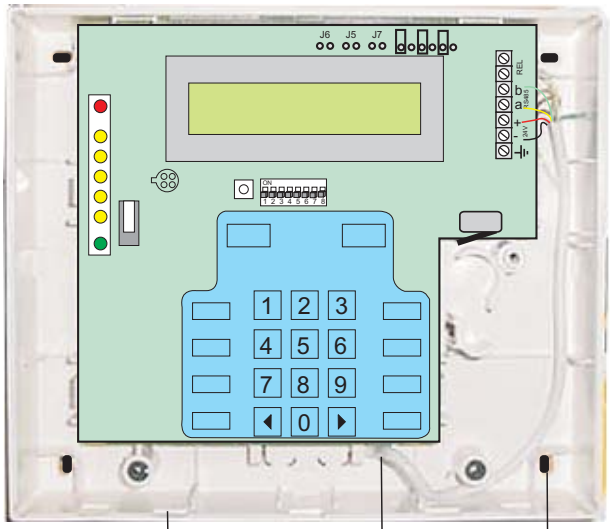
## Cable

☐ Belden No. 9842 EIA RS485 Applications, O/A Beldfoil® Braid **1Km** maximum cable distance ***from the control panel to the last repeat indicator panel*** must have following characteristics:

- Two twisted pairs
- 24AWG (7 strands x 32 AWG) conductors

## Installation

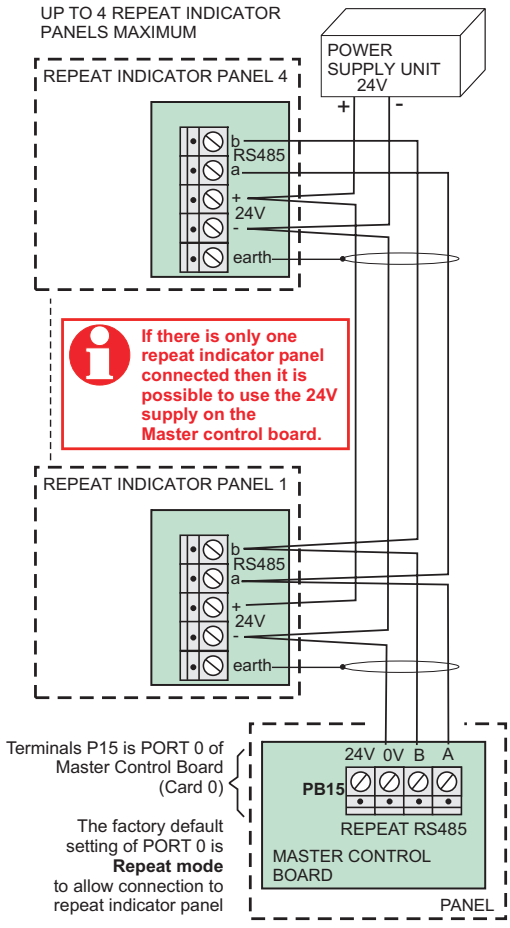
a. Open the outer cover.




b. Insert the external cable into the backbox assembly at the required entry point.

c. Mark the fixing points and secure the backbox to the wall.

d. Connect the cable to terminals.




e. Refit the front cover and flap.

# S-Quad Sensors

This following is information on the S-Quad product range. The S-Quad product integrates dual angle smoke, heat and carbon monoxide gas detection with electronic sounder, speech and LED flasher (Strobe) in one assembly.

## General specification

| | |
|---|---|
| Operating voltage | 35V - 41V |
| Weight | 110g with base - 170g |
| Dimensions | 117mm diameter by 49.6mm height<br>With base the height increases to 63.8mm |
| IP rating | IP30<br>IP20 when mounted on a metal back box |
| Enclosure | ABS |
| Colour | RAL 9010 |
| Approval | LPCB approved |
| Storage Temperature | -20°C to 70°C<br>(for S-Quad with CO -20°C to 50°C) |
| Ambient operating temperature | -10°C to 50°C |
| Relative Humidity | 95% non condensing (5°C to 45°C) |
| **Heat (H)** Standard | EN54 : Part 5 |
| **Optical (O)** Standard | EN54 : Part 7 |
| **Dual Optical ($O^2$)** Standard | EN54 : Part 7 |
| **Sounder (S)** Standard | EN54 : Part 3 |
| **Gas (CO)** Standard * | LPS 1274 |
| **Multi sensor** standard | CEA 4012 |

* The 'Gas' sensing is designed to meet the requirements of LPS 1274. Information on minimum sound output levels to include polar dispersion is covered in a technical note TECH7018.033, available on request from manufacturer. Information on minimum sound output levels to include polar dispersion is covered in a technical note TECH7018.033, available on request from manufacturer.

## Base

The base has terminals for external cables to allow it to be electrically connected to the panel loop circuit and to the monitored input or output circuit. Any S-Quad device can be plugged into an S-Quad base.

## Base Gasket

The optional foam rubber base gasket S4-BASE-GASKET can be fitted to the base to prevent water damage from dripping water from the ceiling.

## Base labels

An optional label S4-BASE-LABEL can be fitted to the base. The label can be marked up with device location information.

## Indicators

The S-Quad has a red LED that gives an indication in the event of a fire. The LED can be configured to flash periodically, as an 'in operation' confirmation, this indication is given system-wide at all S-Quads. The S-Quad with a CO sensor also has a blue LED to indicate when a fire signal senses the presence of CO.

## Dust Cover

A dust cover is supplied with the S-Quad, to prevent dust from building work contaminating the sensor. The cover is removed prior to the commissioning of the fire alarm system.

## Do's and Don't

**DO NOT locate smoke detectors where products of combustion may be present such as kitchens, garages, furnace rooms, welding bay etc.**

**DO NOT locate heat detectors above boilers or heaters or where the temperature is normally very high or liable to sudden fluctuations.**

**DO NOT locate smoke or heat detectors: -**

- **In dusty or dirty environment.**
- **Near heating or air-conditioning grilles.**
- **Outdoors in stables, sheds etc.**
- **In excessively damp areas.**
- **In dead air spaces at the junctions of ceilings and walls.**
- **At ceiling locations where a 'thermal barrier' may exist.**

**DO NOT locate a CO detector: -**

- **In buildings where farm animals are kept.**
- **In excessive damp areas.**
- **In battery room where non sealed battery are kept.**
- **In a Car park where exhaust fumes will be present.**

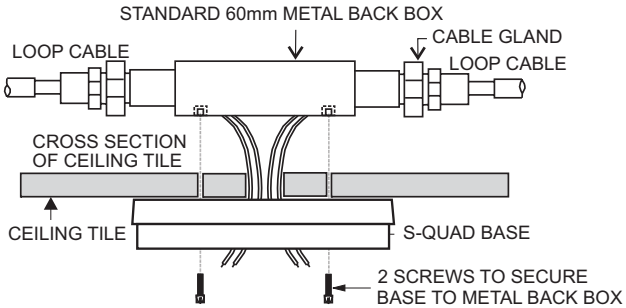
**Follow recommendations detailed in section 22 of BS5839 : Part 1 : 2002**

## Siting

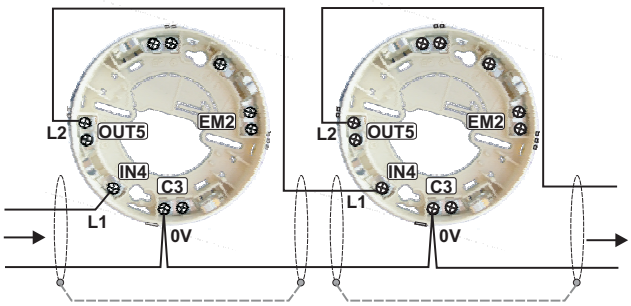
A S-Quad device plugs into a dedicated Base that is installed in the protected premises. The Bases should be sited in locations as defined by the project plans and by BS5839 : Part 1 : 2002.

## Metal back box

A metal back box must be used for base or semi-flush mounting. The earth continuity must be maintained throughout the whole loop. The earth must be securely connected to the back box.




## In - Out wiring to S-Quad bases

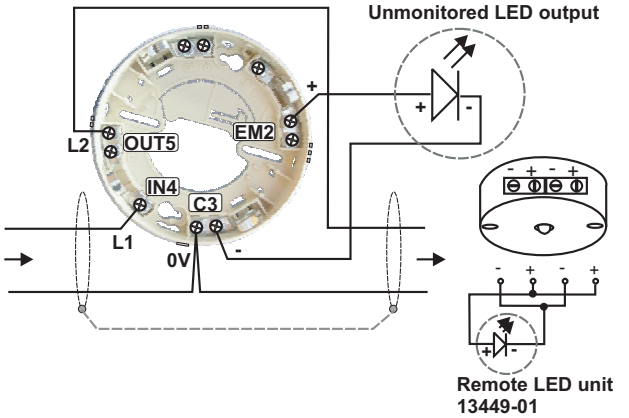


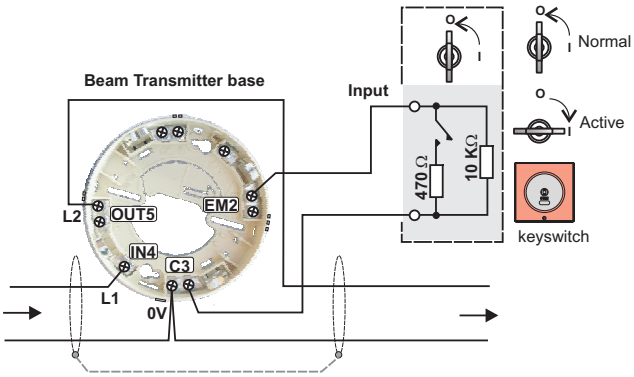

## Programmable input/output

**The 34703 Slave Relay unit and 34703 Slave LED indicator unit are NOT supported for use with S-Quad fire sensors. The Slave units are only compatible with 34xxx range of fire sensors.**

All S-Quad devices can be configured as either monitored input or unmonitored output. The factory setting of the programmable input / output is unmonitored output, to drive an external repeat LED without a series resistor.

There is a maximum cable length limit of 15 metres from the S-Quad base to the external I/O Unit.




The input can accept signals such as fire, non fire or fault, these are configured during commissioning. As a fire input it is possible to connect a conventional Manual Call Point (non UK application only) with a series resistor of value 470 Ohms coupled with an end-of-line 10Kohms resistor. In this case the fire input is fully monitored for open or short circuit faults.

The input can be setup as a non-fire or fault input using a similar arrangement with series and parallel resistors as shown. It is possible for such an input to trigger a command that is configured to action an output elsewhere in the system to control plant equipment such as the ventilation system.

## Tools for S-Quad

An extractor tool allows removal and fitting of the S-Quad device head into the base. By fitting a screw-on adaptor, the tool can be used to remove the sensor dust cover.

## To remove an S-Quad

Fit the tool onto the S-Quad. Turn S-Quad anticlockwise until it stops and remove the S-Quad from the base.

## To fit an S-Quad

Fit the S-Quad on to the tool. Offer S-Quad to base and rotate clockwise until it moves upwards on to the base and rotate it again until it clicks and goes no further, the lines on the base and S-Quad will align.

## To fit a dust cover

Place the dust cover onto the tool inside the cradle. Offer the cover to the S-Quad, locate and push to fit it onto the assembly. Withdraw the tool when the dust cover is in place.

## To remove a dust cover

A dust cover remover tool must be fitted to the main tool to extract the dust cover. Press the pad of the dust cover remover tool onto the dust cover, this creates an air tight grip, to allow the cover to be pulled off from the S-Quad.

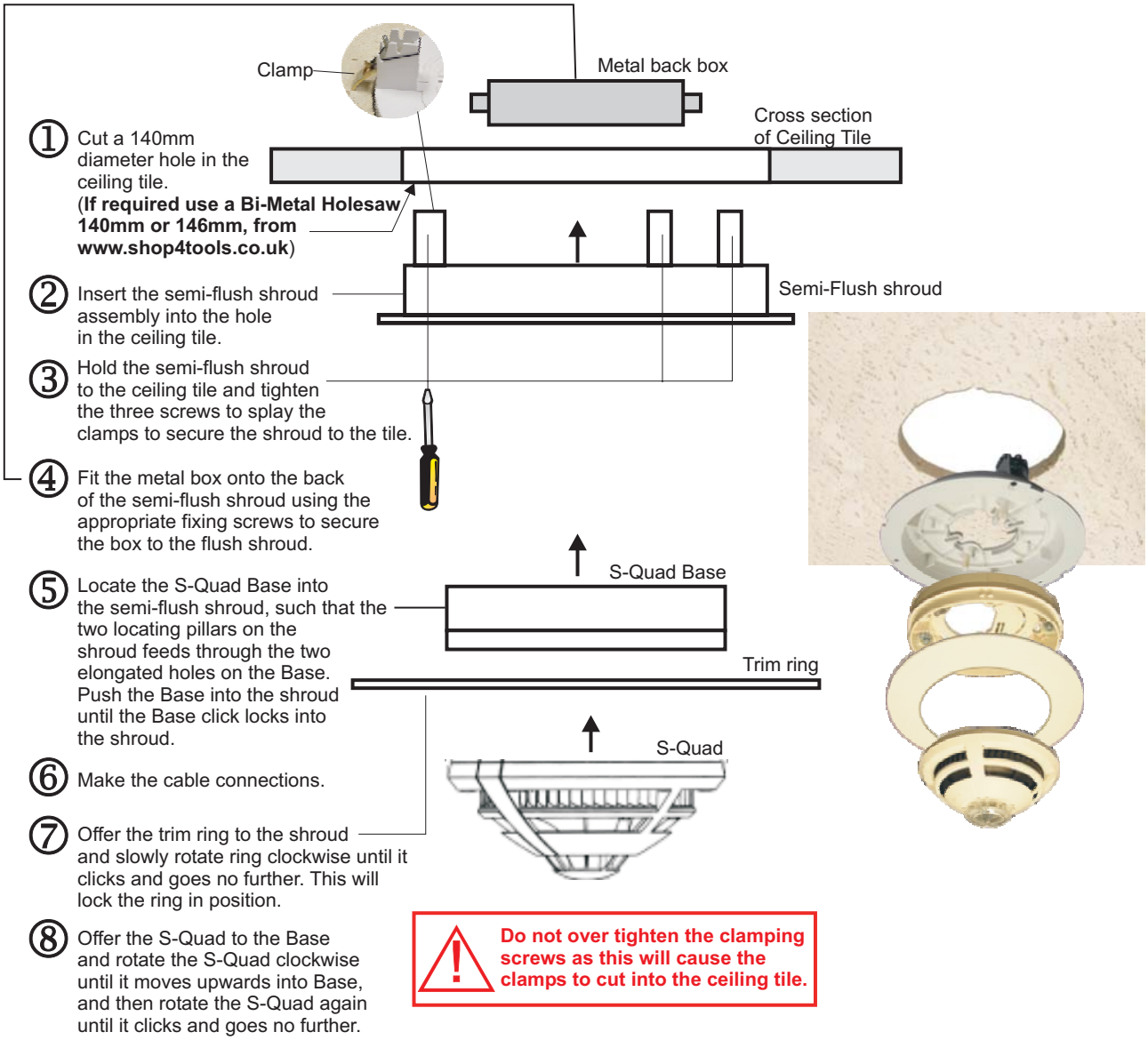
# S-Quad Semi-flush fixing kit (S4-FLUSH)

An S-Quad device can be semi-flush mounted to a ceiling tile to a depth of the approximate 20mm, which is slightly deeper than the base assembly. To semi-flush mount a special housing must be used, which consists of a main assembly and a trim ring.

**There is an enhanced volume output of sound and speech from a semi flush mounted S-Quad.**

## Technical data

| | |
|---|---|
| Weight | 164g with trim ring |
| Dimensions | 174mm diameter by 50mm depth |
| Enclosure | ABS |
| Colour | RAL 9010 |
| Storage Temperature | -20°C to 70°C |
| Ambient temperature | -10°C to 50°C |
| Relative Humidity | 95% non condensing (5 to 45°C) |




① Cut a 140mm diameter hole in the ceiling tile. (**If required use a Bi-Metal Holesaw 140mm or 146mm, from www.shop4tools.co.uk**)

② Insert the semi-flush shroud assembly into the hole in the ceiling tile.

③ Hold the semi-flush shroud to the ceiling tile and tighten the three screws to splay the clamps to secure the shroud to the tile.

④ Fit the metal box onto the back of the semi-flush shroud using the appropriate fixing screws to secure the box to the flush shroud.

⑤ Locate the S-Quad Base into the semi-flush shroud, such that the two locating pillars on the shroud feeds through the two elongated holes on the Base. Push the Base into the shroud until the Base click locks into the shroud.

⑥ Make the cable connections.

⑦ Offer the trim ring to the shroud and slowly rotate ring clockwise until it clicks and goes no further. This will lock the ring in position.

⑧ Offer the S-Quad to the Base and rotate the S-Quad clockwise until it moves upwards into Base, and then rotate the S-Quad again until it clicks and goes no further.



**Do not over tighten the clamping screws as this will cause the clamps to cut into the ceiling tile.**

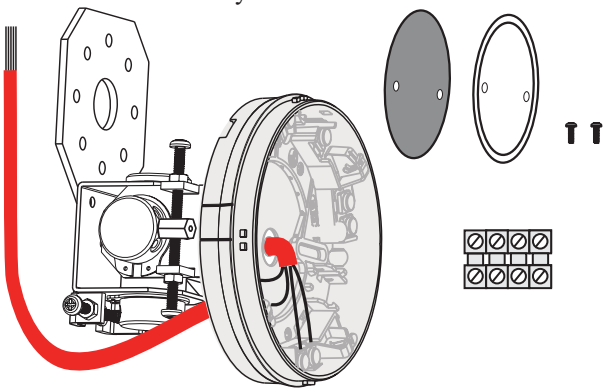
# Beam Sensor

*Transmitter (red retainer) Receiver (black retainer)*

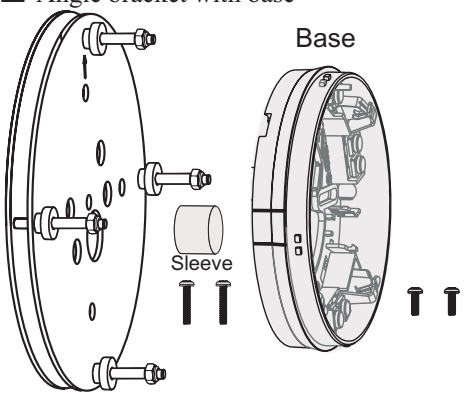
☐ Beam sensor pair (Transmitter & Receiver)

☐ Beam Transmitter only

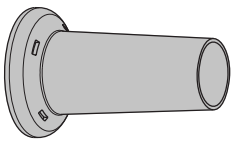
☐ Beam Receiver only

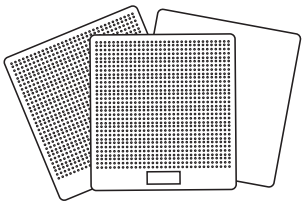


☐ Angle bracket with base




☐ Parallel bracket with base





☐ Light Shield (5 per pack) Test Cards

The Beam Sensor pair allows the detection of smoke over distances from 2 m to 100 m, using a 'beam transmitter' and a 'beam receiver', each mounted on a base fixed to either bracket.

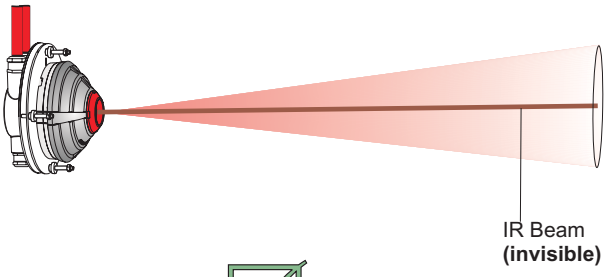
## Technical Data

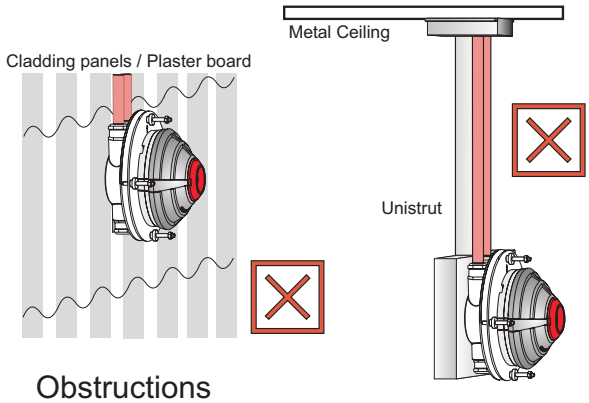
| | |
|---|---|
| Standards - designed to meet | EN54 : Part 12 : 2002<br>EN54 : Part 17 : 2005 |
| Approvals | LPCB Approval pending<br>STATES 0, 1, 2 and 3 |
| Overall assembled dimensions in mm | **Transmitter or receiver**:<br>∅ 117 x d 54<br>**Angle bracket with base**:<br>h 145 x w 106 x d 130<br>**Parallel bracket with base**:<br>∅ 152 x d 27<br>**Light shield**: ∅ 50 x 75 |
| Assembled weight (approximate) | Transmitter or receiver:105g<br>Angle bracket + base: 620g<br>Parallel bracket + base: 600g<br>Light shield: 14g |
| Enclosure | ABS |
| Colour (Sensor) | RAL9010 |
| Storage temperature | -20 to 70ºC |
| Ambient operating temperature | -10 to 50°C |
| Relative Humidity (Non condensing) | up to 95%<br>Temperature 5 - 45°C |
| Emission | BS EN61000-6-3: 2007 EMC for residential, commercial & light Industry. |
| Immunity | BS EN50130-4: 1996 + A1:1998 +A2 2003 for alarm systems |
| Ingress Protection (estimated) | IP30<br>IP20 mounted on bracket |
| Operating voltage | 35-41V |
| Indicators | Two Red and Seven Green LEDs visible at 500LUX ambient light levels 5m |
| EN54-17 : 2005 (section 4.8) data: | $V_{max}$ 42V $I_{C\ max}$ 0.4A<br>$V_{nom}$ 40V $I_{S\ max}$ 1A<br>$V_{min}$ 24V $I_{L\ max}$ 20µA<br>$V_{SO\ max}$ 16V $V_{SO\ min}$ 8V<br>$Z_{C\ max}$ 0.130Ω |
| Compatible | Panel: MCB ≥ V4.41<br>LPC ≥ V4.39 |

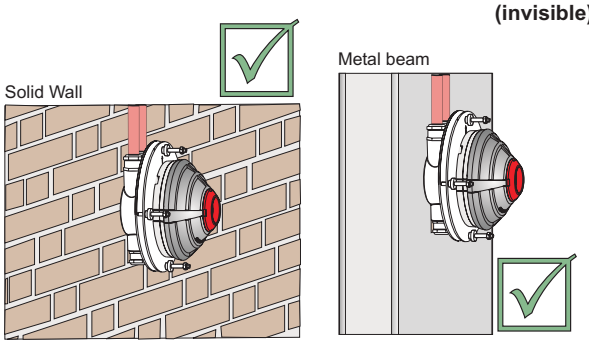
## Do's and Dont's

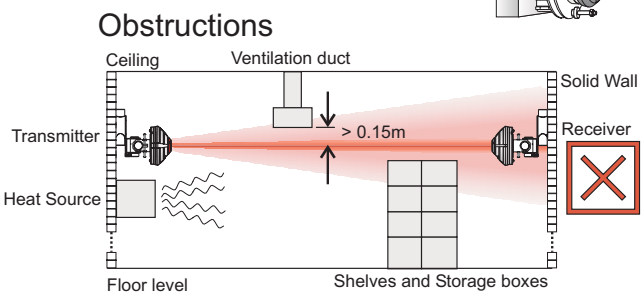
A general guidance on Do's and Dont's is illustrated here, however for full information on siting beam sensor pair refer to BS5839 Part 1.

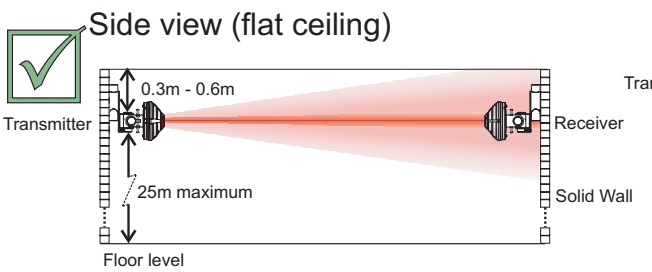
**IR Beam projection**

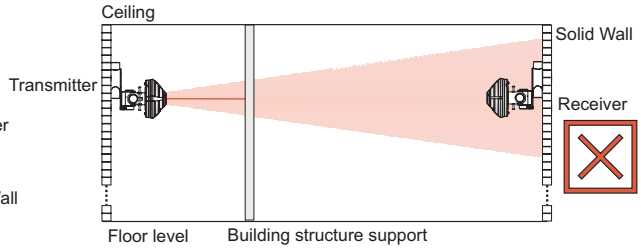


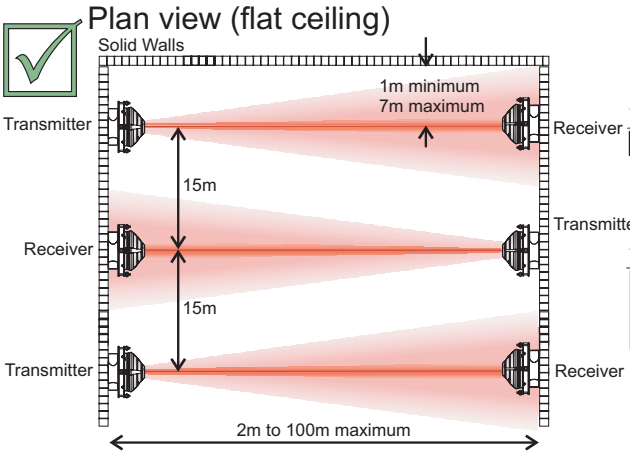



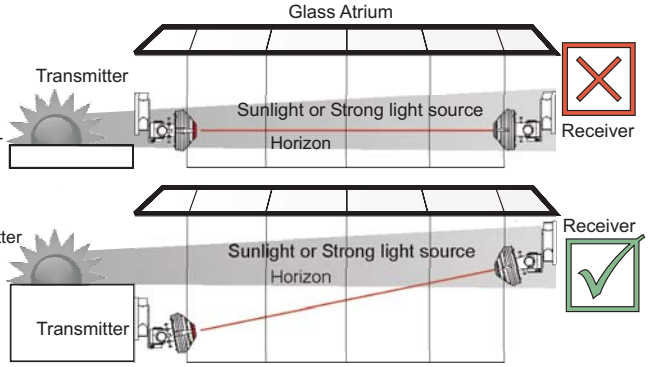



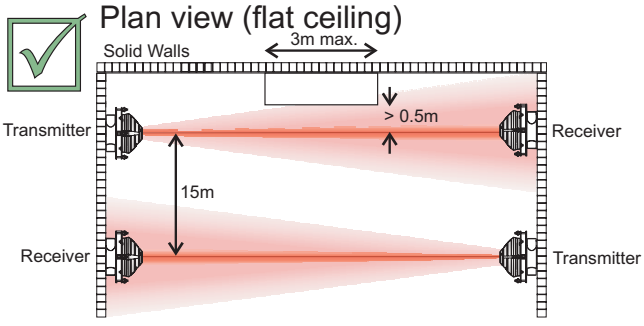



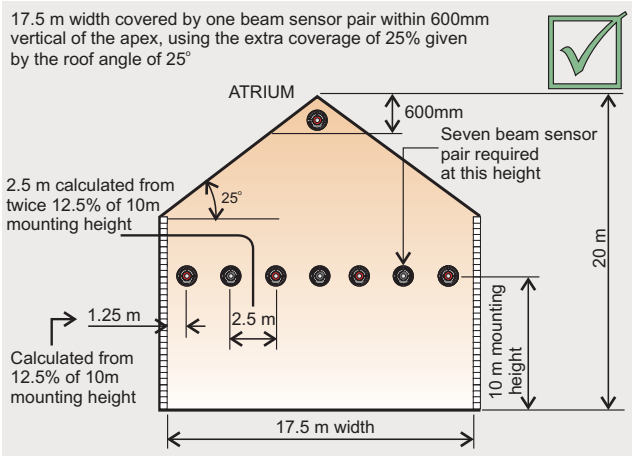



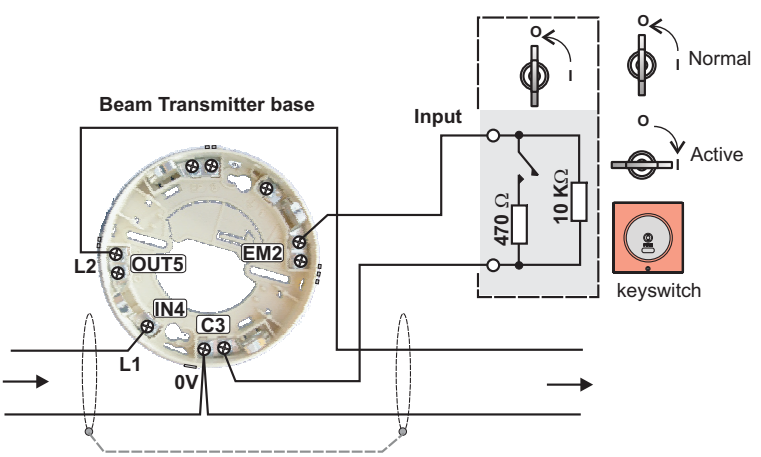



## Test Keyswitch

A test keyswitch unit can be connected to the 'beam transmitter' to facilitate simulation of a test fire condition. The keyswitch unit is required to have a series resistor of value 470Ω coupled with an end-of-line 10KΩ resistor wired as illustrated below.




There is a maximum cable length limit of 15 metres from the 'beam transmitter' base to the external Keyswitch Unit.

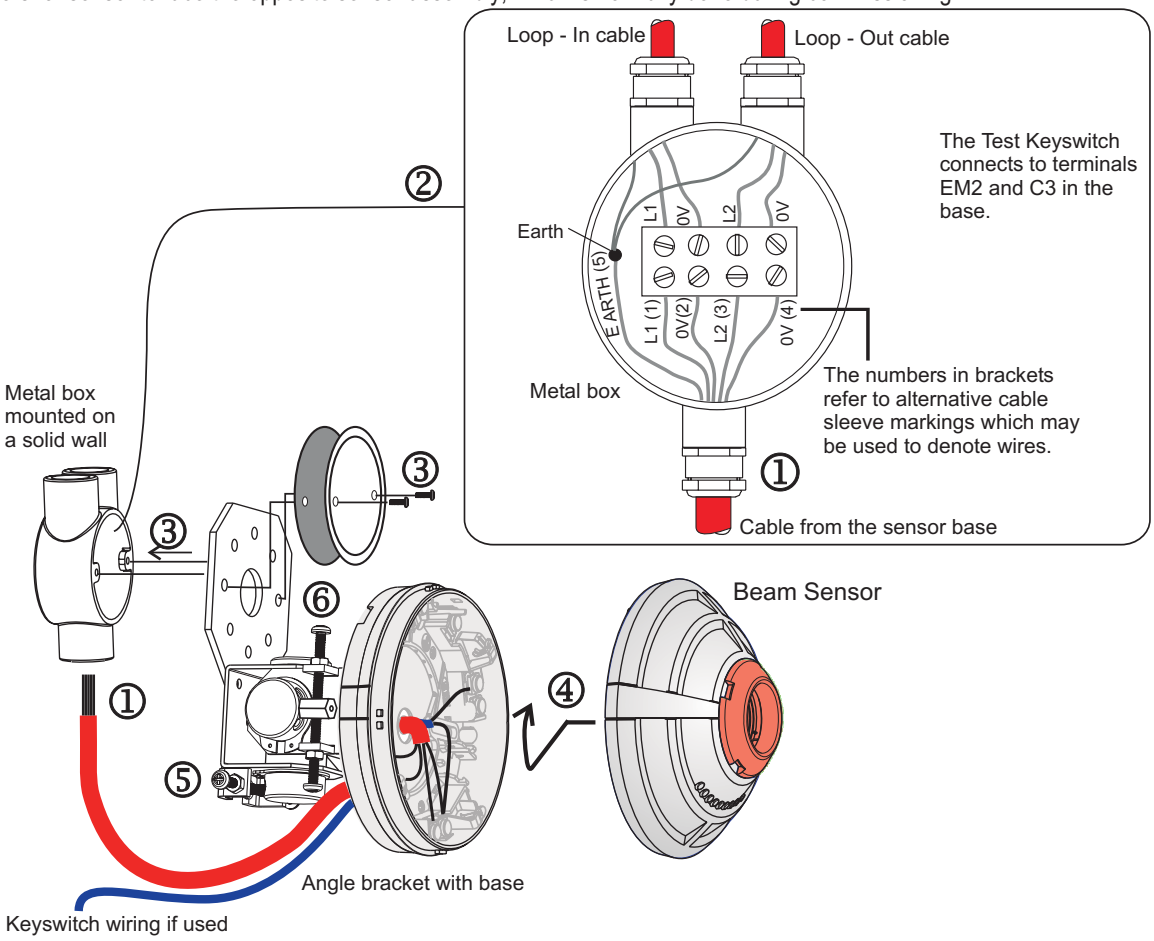
A keyswitch input at the 'beam transmitter' must be enabled during commissioning.

The wiring is monitored for open and short circuit failure.

On operating the keyswitch it will cause a ramp down signal to generate a test fire condition.

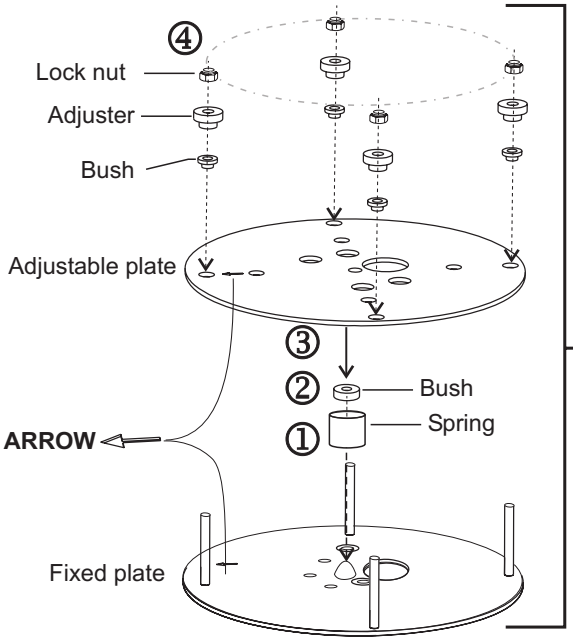
## How to install an Angle bracket and fit a Beam sensor

The installation of the angle bracket and beam sensor are illustrated by steps ① to ⑥. Note steps ⑤ and ⑥ require setting of adjusters for sensor to face the opposite sensor assembly, which is normally done during commissioning.

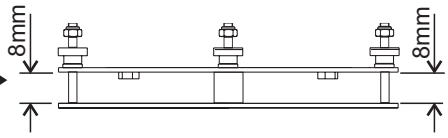


## How to pre-assemble the parallel bracket

The parallel bracket may be pre-assembled as illustrated by steps ① to ④.

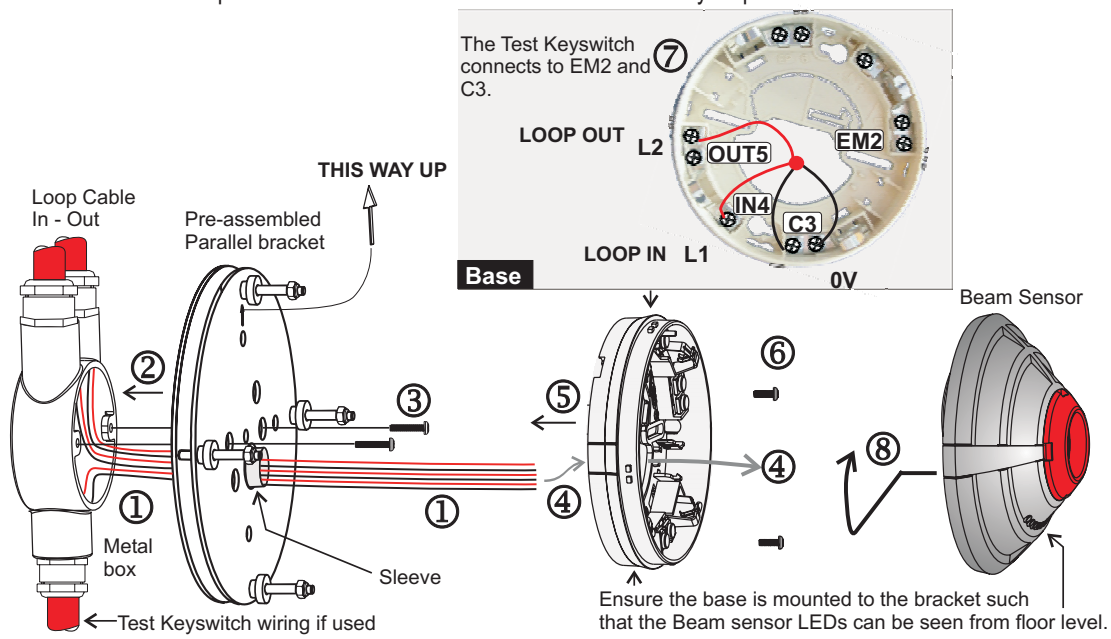



Ensure the adjusters are set to provide an 8mm gap all around between the adjustable and fixed plates.




## How to install a Parallel Bracket and fit a Beam sensor

The installation of the parallel bracket and beam sensor are illustrated by steps ① to ⑧.




Further information about this product can be found in Part 2 of this document available form your supplier.

# Duct kit

The air duct kit is used in combination with different Venturi tubes and special S-Quad fire detector for the surveillance of air ducts in buildings.

The kit is fastened to the outside of the air duct. The Venturi tube is lead into the duct through a hole drilled for this purpose. The air streaming through the air duct is picked up by the Venturi tube and led via the deflecting unit inside the housing directly to the detector for subsequent evaluation.

The inserted fire detector is directly connected to the analog loop of the Fire Alarm System. The operation and indication of alarm and fault messages is given at the connected fire alarm panel.

### Venturi tube

The Venturi tube are available in various lengths.

| Length (mm) | 600 | 1500 | 2800 |
|---|---|---|---|
| Weight | 0.2Kg | 0.6Kg | 1.2Kg |

## Technical date

### Sensor and base

| | |
|---|---|
| Operating voltage | 35V - 41V |
| Weight | S4-720 sensor :88g (with base - 148g) |
| Dimensions | 117mm diameter by 49.6mm height (With base the height increases to 63.8mm) |
| IP rating | IP30<br>IP20 when mounted on a metal back box |
| Enclosure | ABS |
| Colour | RAL 9010 |
| Approval | LPCB approved |
| Storage Temperature | -20°C to 70°C |
| Ambient operating temperature | -10°C to 50°C |
| Relative Humidity | 95% non condensing (5°C to 45°C) |
| **Optical sensor (O)** Standard | EN54 : Part 7 : 2000 |

EN54-18 : 2005

EN54-17 : 2005 (section 4.8) data:

| | | | |
|---|---|---|---|
| $V_{max}$ | 42V | $I_{C\ max}$ | 0.4A |
| $V_{nom}$ | 40V | $I_{S\ max}$ | 1A |
| $V_{min}$ | 24V | $I_{L\ max}$ | 20μA |
| $V_{SO\ max}$ | 16V | $Z_{C\ max}$ | 0.1Ω |
| $V_{SO\ min}$ | 8V | | |

### Housing

| | |
|---|---|
| Dimensions (W x H x D) in mm | 180 x 235 x 183 |
| Terminals | 1.5 mm² max. |
| Air velocity | 1 m/s to 20 m/s |
| Full Assembly weight | Approx. 800g (without sensor and base) |
| Storage temperature | -15 °C to +65 °C |
| Operating temperature | -10 °C to +60 °C |
| Housing | ABS plastic |
| Colour | grey (with transparent cover) |
| Immunity | BS EN50130-4: 1996: Part 4 Alarm systems |
| Ingress Protection | IP54 |
| Colour | White |

For full instructions see the leaflet supplied with the product.

# S³ Speech, Sounder Strobe mark II

The low power addressable **Voice Enhanced Sounder** and **combined Strobe** products provide audible and visual alarm signals, and are designed for use in **Gent** analogue and addressable fire alarm systems.

The S³ devices are supplied with standard speech messages along with sounder and strobe option. The devices are configured during commissioning to operate to site specific requirements. The devices are supplied with either a deep base (40mm) or a shallow base (25mm), offering IP55C and IP31C ratings respectively, with the exception of the system range (see diagram below) which is available with deep base only.

**The S³ product range incorporates innovative design features protected by Patents GB2388994, GB2388995 and GB2388916. The product design has also been registered.**

Low profile S³
Available in deep or shallow base

System S³
Available in deep base only

**If you have a speech/sounder only product then ignore the strobe information given.**

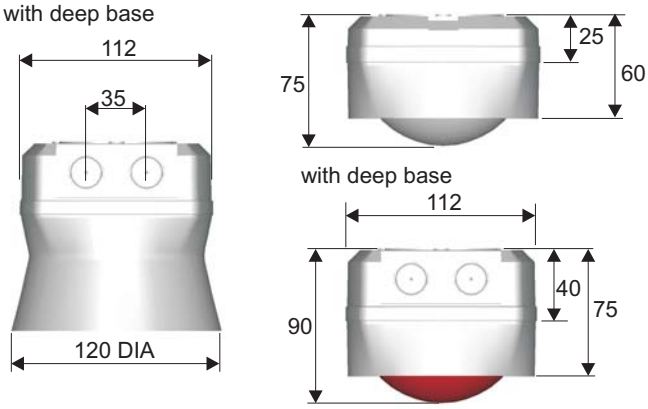
## Speech messages

| Message No | Speech message |
|---|---|
| Message 2 | *Attention please this is an emergency please leave the building by the nearest available exit.* (female voice). |
| Message 3 | *An incident has been reported in this building please await further instructions.* (female voice). |
| Message 4 | *This is a test message no action is required.* (female voice). |
| Message 5 | *This is a fire alarm! Please leave the building immediately by the nearest available exit.* (male voice). |

| Tone No. | Description of tone. |
|---|---|
| Message 1 | **Alarm Bell** (equivalent to 8" Solenoid Bell) **106dBA @ 1m.** |

**The addressable S³ products are fully synchronised on the same fire panel.**

## Technical data



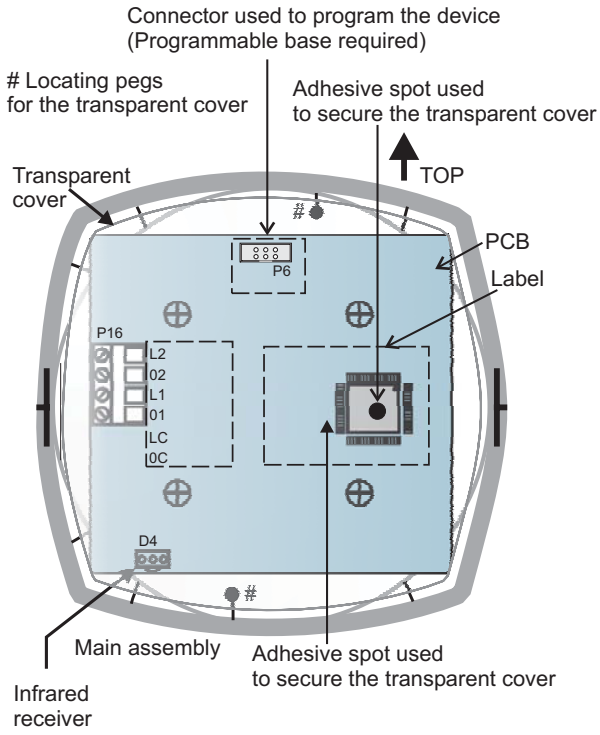

| | |
|---|---|
| Sound output for standard tone (levels given are **typical values** with measurement taken at 90° anechoic - fast response) | Low profile S³ - 100dBA +/-3dBA<br>System S³ - 103dBA +/-3dBA |
| Standard (sounder only) | EN54 : Part 3 |
| Messages, Tones and Strobe flash rate | see instructions supplied with the product |
| Strobe light output with red lens | equivalent to 3W Xenon flasher |
| Operating voltage | range 35V to 41V |
| Terminal size | 2.5mm² maximum |
| IP rating with deep base<br>with shallow base | IP55C<br>IP31C |
| Enclosure colour | White and Red (with red translucent lens cover fitted to unit with Strobe). |
| Enclosure material | Flame retardant ABS (Strobe cover is polycarbonate) The plastic enclosures meet the flammability requirements of ISO 1210:1992 Class FH-2. |
| Weight | 0.3Kg (approximate). |
| Operating temperature | -10°C to 50°C |
| Storage temperature | -20°C to 70°C |
| Relative humidity (non condensing) | up to 90% |
| IR operating distance (to select volume level) | 3m |
| Message and attention Tone period | 10 seconds default Configurable up to 60seconds |

## Installation

a. Drill or knockout the required cable entry points on the **base**.

b. If using the deep **base** option and IP55C protection is required, then stick the circular **wall gasket** on to the centre back of the **base.**

c. Secure the **base** to the wall whilst ensuring Top of the base is in correct orientation.



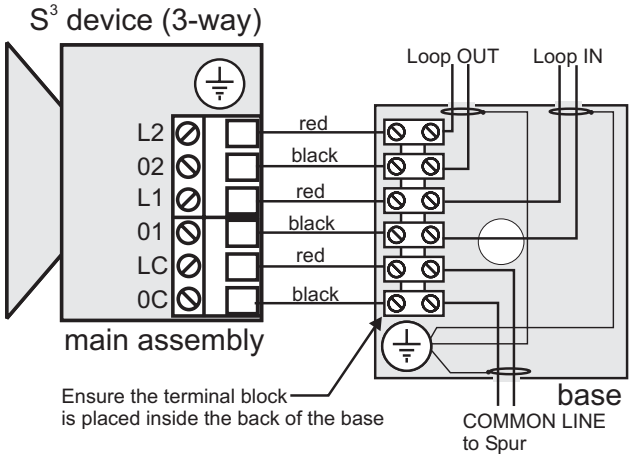

d. Terminate the cable at the entry point leaving no more than 10cm (4") tail wire length for connection.

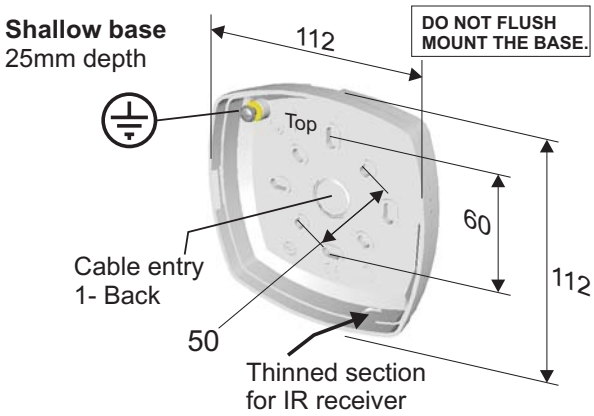
e. Ensure the **transparent cover** is in place over the **PCB**. Connect the wires to the terminal block.

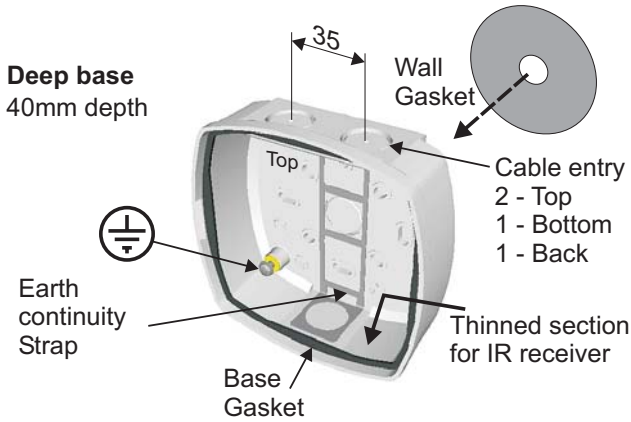
f. Close the **main assembly** to the base.

## Retrofitting a System S$^3$ device

A system S$^3$ Mark I device can be retrofitted to an alarm sounder base. The existing base having a terminal block to which loop cables are connected.



# Environmentally protected Heat Sensor

This unis has **IP55** rating as specified in the *British Standard* BS 5490:1977 which is the *specification for classification of degree of protection provided by enclosures.*

a. Remove the front cover of the unit disconnecting any flying leads attached to the terminal block.

b. Place the unit in the desired position and mark the four fixing holes. When the product is mounted ensure the pre-machined cable entries are at the bottom.

c. Drill the four fixing holes and mount the unit.

**When using PYROTENAX cable, the cables MUST be terminated using PYROTENAX glands (Code No. RGM 2L1.5), screw-on seals (Code No. RPS 2L1.5) or equivalent and a standard M20 locknut.**

d. Feed the cables into the unit. Ensure that the sealing washer supplied is fitted between the cable gland and the unit (rubber part of the washer against the unit). Use the earth continuity straps provided to maintain loop cable earth continuity.

e. Connect the earth tails into the earth termination point.

f. Terminate the cable at the entry point and connect ends into the appropriate terminals on the sealed printed circuit board module, see connection diagram.

**Failure to promptly replace the cover will result in environmental damage.**

g. Reconnect the flying leads from the cover into the appropriate terminals on the sealed printed circuit board module. Refit the cover to the unit. For maximum protection ensure that the cover screws are tight and secure.

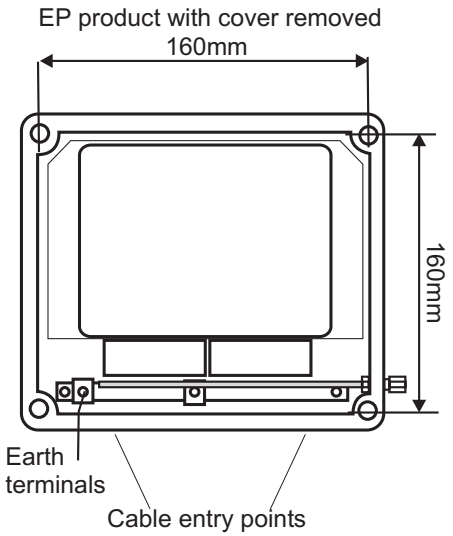
**Forcing the cover to fit the wrong way round will damage the unit.**

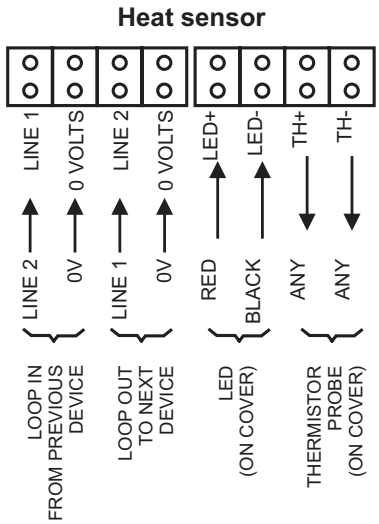
*Heat Probe*

For carriage purposes the probe on the heat sensor is fully retracted. It is important that the heat probe is positioned correctly. There should be a minimum of 20mm of the probe protruding from the front face of the probe gland. The probe gland can only be tightened up once, as the gland uses an olive joint which should be replaced rather than re-tightened. Once the probe is in the correct position the gland has to be tightened finger tight plus $1\frac{1}{2}$ turns.

## General data

| | |
|---|---|
| Dimensions | height 180 mm x width 180 mm x depth 130 mm. |
| Storage temperature | -30 to 70ºC |
| Operating temperature | 0 to 50°C |
| Ingress Protection | IP55 estimated |
| Case | ABS engineering plastic. |
| Indication | Red LED that illuminates when the active. |
| Operating voltage | 20 to 50V |

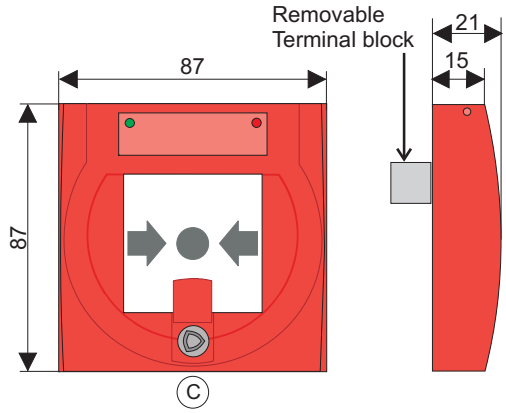


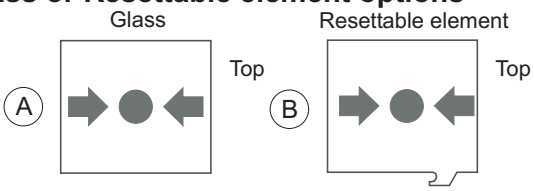
# Manual Call Points

Options

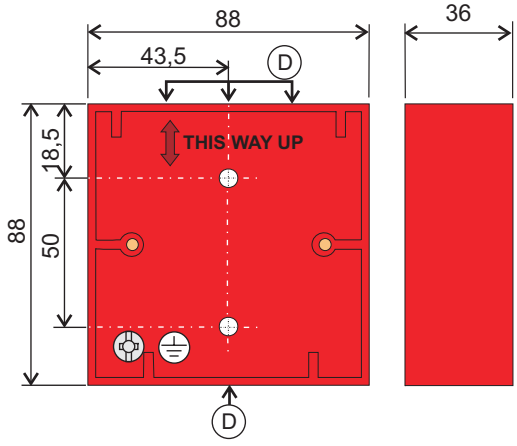
- ☐ Manual Call Point (Glass)
- ☐ Manual Call Point (Glass) with Protective cover
- ☐ Manual Call Point (Resettable element)
- ☐ Manual Call Point (Resettable element) with Protective cover




## Glass or Resettable element options




## Optional Back box




The optional back box has recessed centres 'D', 3 at the top and 1 at the bottom, a maximum of 2 are usable.

## Technical data

| | |
|---|---|
| Standard | EN54: Part 11: 2001 |
| Dimensions | height 88 mm x width 88 mm depth 21 mm or 57 mm when surface mounted |
| Full assembly weight | 110g - approximate |
| Storage temperature | -30 to 70ºC |
| Operating temperature | -25 to 70°C |
| Relative Humidity (Non condensing) | up to 95% Temperature 25 to 55°C |
| Emission | BS EN61000-6-3:2001 Residential, Commercial & Light Industry **Class B limits** |
| Immunity | BS EN50130-4: Part 4 :1996 |
| Ingress Protection | IP43 estimated standard type IP55 estimated with protective cover and backbox |
| Colour | Red (similar to RAL3020) |
| Case | ABS engineering plastic |
| Indicators | |
| Normal | Green LED for status and find device application |
| Active | Red LED and Yellow tab for active or Fire indication |
| Testing | The operation of the MCP is tested by using a test key |
| Terminals | 2.5mm$^2$ maximum |
| Approval | LPCB Approved products: S4-34842 and S4-34800 |
| Operating voltage | 35V to 41V |

## Installation

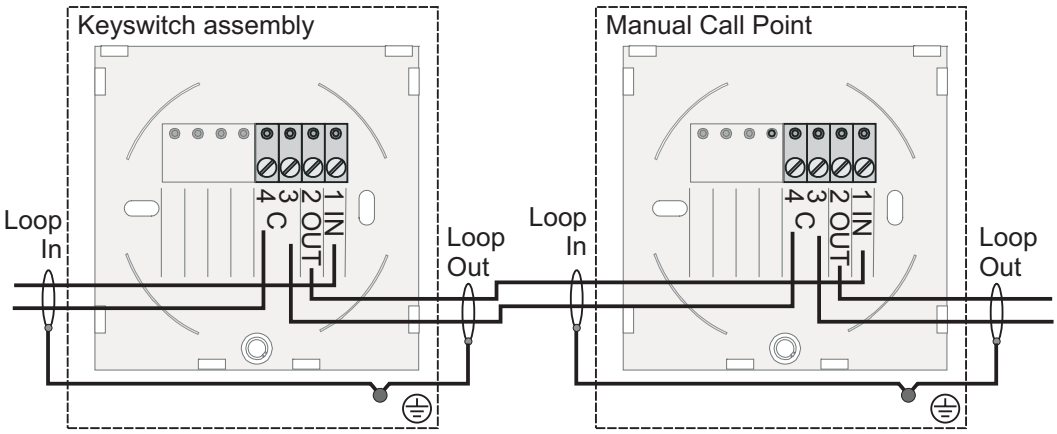
a. Check the contents of the package:

| | Component | Quantity |
|---|---|---|
| | Call point assembly | 1 |
| | Earth Strap | 1 |
| | Test Key | 1 |
| | Long Screw | 2 |

b. The call point assembly may be mounted on a standard electrical box or on the optional red back box S4-34895.

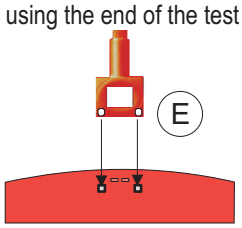
c. Feed the fire rated cables through the entry holes and mount an electrical box or the red optional back box to an even wall surface using suitable fixing.

**When semi flush fixing the call point assembly a standard electrical box must first be flushed into the wall before the call point assembly is fitted.**



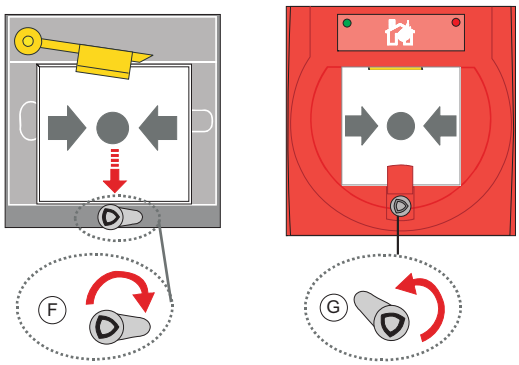

d. Terminate each cable entry at the back box. Use the *earth strap* or the *earth point* in the back box to maintain loop cable earth continuity. Connect the loop cable to the terminals.

e. Disengage front cover from the call point assembly using the end of the test key 'E' and lift out the cover from the bottom edge.




f. Secure the call point assembly to the back box using the 2 long screws supplied.

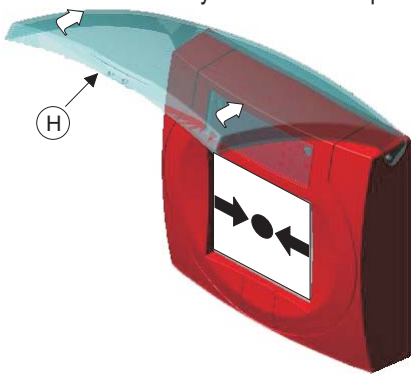
g. To re-assemble the glass or resettable element, using the test key turn the tab to position 'F' and insert the glass 'A' or optional resettable element 'B'.



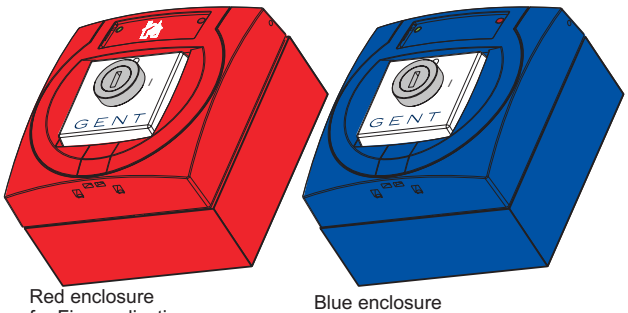

h. Hook the front cover onto the top edge of the call point assembly and then push the bottom edge down until it click shut. Check both hooks on the top of the front cover are locked onto the call point assembly.

i. Turn the test key anticlockwise to position 'G' (not visible) such that the glass or optional resettable element is held under the yellow arm.

j. Where applicable, ensure the protective cover 'H' is securely fitted to the call point assembly.



# Keyswitch Interface / MCP



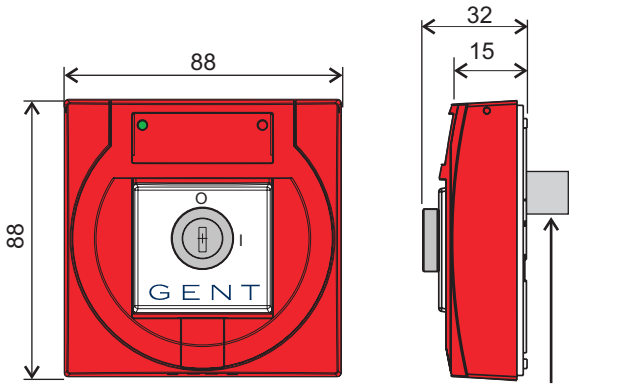

Red enclosure
for Fire applications
(supplied with backbox)

Blue enclosure
for Plant interface applications
(supplied with backbox)

The keyswitch units covered in this leaflet are suitable for installation in GENT analogue addressable fire alarm system. The product range covered here include:

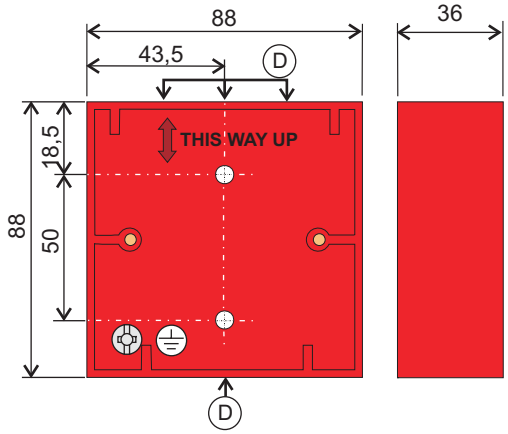
- ☐ Keyswitch MCP (Red)
- ☐ Keyswitch Interface (Blue)
- ☐ Spare Keys (Pack of 2)
- ☐ Surface Back Box for Interface Red Plastic (Pack of 10)

## Keyswitch assembly




Removable
Terminal block

## Back box




The back box has recessed centres 'D', 3 at the top and 1- at the bottom, a maximum of 2 are usable.

## Technical data

| | |
|---|---|
| Standard | EN54: Part 17<br>EN54: Part 18 |
| Dimensions | height 88 mm x width 88 mm<br>depth 32mm or 66mm when surface mounted |
| Full assembly weight | 128g - without backbox<br>192g - with backbox |
| Storage temperature | -30 to 70ºC |
| Operating temperature | -25 to 70°C |
| Relative Humidity (Non condensing) Temperature 25 - 55°C | up to 95% |
| Emission | BS EN61000-6-3:2001<br>Residential, Commercial & Light Industry<br>**Class B limits** |
| Immunity | BS EN50130-4: Part 4 :1996 |
| Ingress Protection | IP43 estimated standard type |
| Colour | Red (similar to RAL3020)<br>Blue (similar to RAL5015) |
| Case | ABS engineering plastic |
| Indicators Normal | Green LED for status and find device application |
| Active | Red LED for active or Fire indication |
| Terminals | 2.5mm$^2$ maximum |
| Operating voltage | 35V to 41V |
| EN54-17 data | $V_{max}$ 42V<br>$V_{nom}$ 40V<br>$V_{min}$ 24V<br>$V_{SO\ max}$ 16V<br>$V_{SO\ min}$ 8V<br>$I_{C\ max}$ 0.4A<br>$I_{S\ max}$ 1A<br>$I_{L\ max}$ 20µA<br>$Z_{C\ max}$ 0.1Ω |

## Installation

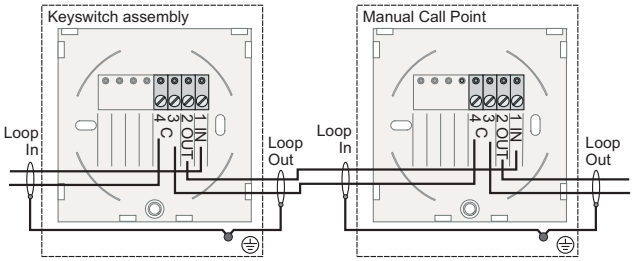
a) Check the contents of the package:

| | Component | Quantity |
|---|---|---|
| | Keyswitch Interface assembly (red / blue) | 1 |
| | Earth Strap | 1 |
| | Operating Key | 2 |
| | Opening Key | 1 |
|  | Long Screw | 2 |
| | Instruction leaflet | 1 |
| | Blue Back box supplied with Blue keyswitch interface assembly | 1 |

b) The keyswitch assembly may be mounted on a standard electrical box or on the backbox.

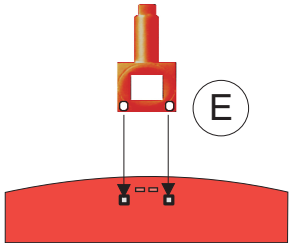
c) Feed the fire rated cables through the entry holes and mount an electrical box or the red/blue back box to an even wall surface using suitable fixing.

**When semi flush fixing the keyswitch assembly a standard electrical box must first be flushed into the wall before the keyswitch assembly is fitted.**




d) Terminate each cable entry at the back box. Use the *earth strap* or the *earth point* in the back box to maintain loop cable earth continuity. Connect the loop cable to the terminals.

e) Disengage front cover from the keyswitch assembly using the end of the opening key 'E' and lift out the cover from the bottom edge.



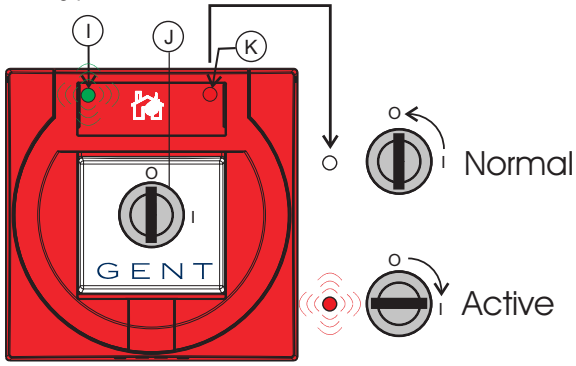

f) Secure the keyswitch assembly to the back box using the 2 long screws supplied.

g) Hook the front cover onto the top edge of the keyswitch unit and then push the bottom edge down until it click shut. Check both hooks on the top of the front cover are locked onto the keyswitch assembly.

## Operation

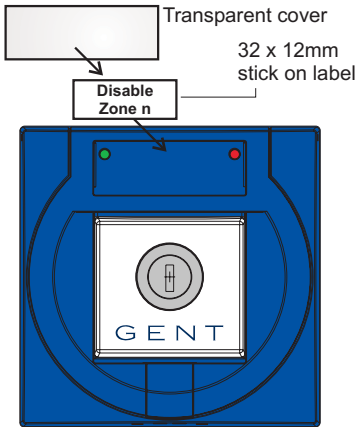
To operate the keyswitch insert the operating key into the keyhole 'J' and turn clockwise to the stop position, the red LED 'K' is flashing. The green LED 'I' gives an operating indication.

Apply the reverse procedure to return the keyswitch to a normal operating position.




## Label

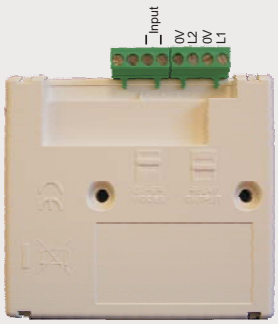
When using the blue keyswitch interface to control plant ensure the unit is labelled to describe what is being controlled by the keyswitch.




It is suggested that an A4 sheet white paper label 32 x 12mm is used, such as the one from RS, part number RS495 385. The required text can be printed onto the label. The label is stuck centrally inside the aperture behind the transparent cover. Ensure LEDs remain visible and are not covered by the label.

# Interface Modules for Vigilon - Low voltage (LV) Input/Output

**S4-34410**
S4 1-Input Interface Module (low voltage)




1- End-of-line Capacitor unit

2- 10K Resistors

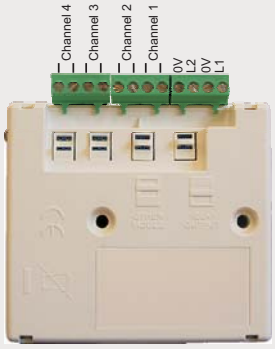


**S4-34420**
S4 1-Output & 1-Input Interface Module (low voltage)

2- 10K Resistors



**S4-34450**
# S4 4-Input / Output Interface Module (low voltage)




1- End-of-line Capacitor unit

8- 10K Resistors



**S4-34490**
Plastic box

1- Allen key 2 - M4 Screws
2 - M4 Posi Pan Screws
7 - Hole plugs

**S4-34492**
Metal box

**S4-34491**
DIN rail mount bracket

# Now supplied fully assembled

These instructions cover the above interface modules and accessories. The S4 interface modules are designed for use with any Vigilon fire alarm control panel. Each module includes a loop isolator for device isolation. Each module use one of 200 available device addresses on a loop and responds to regular polls from the control panel reporting the type of device and the status (open/normal/short) of its supervised input circuit(s).

## Features

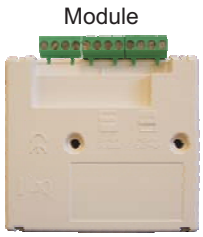
- ☐ Analogue addressable communications
- ☐ Built-in type identification automatically identifies these devices to the control panel
- ☐ Reliable communication technique with high noise immunity
- ☐ Soft or SAFE addressing
- ☐ Common mounting options including surface mount, panel mount and DIN rail mount
- ☐ Dual-colour LEDs
- ☐ Plug-in terminal connections for ease of wiring
- ☐ EN54-17:2005 and EN54-18:2005

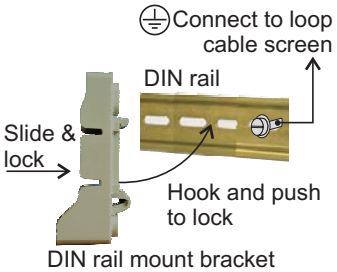
## Cables

The cables recommended for wiring the input / output lines are the same as those used for loop wiring, see instructions supplied with the fire control panel.

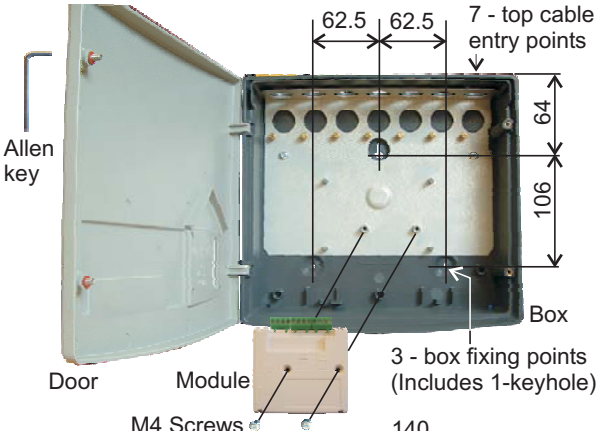
## Installation

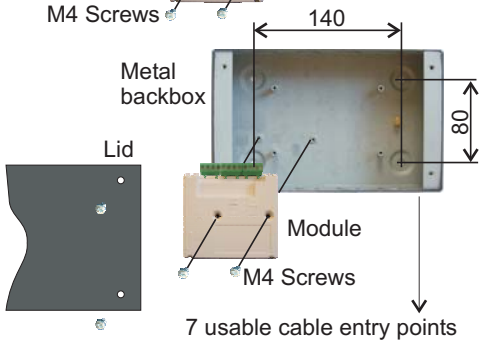
The S4 interface modules can be mounted in other equipment housings using the DIN rail mount brackets (S4-34491). A module can also be fitted into a plastic box (S4-34490) or metal box (S4-34492). The boxes have cable termination points on the enclosure.




DIN rail mount bracket

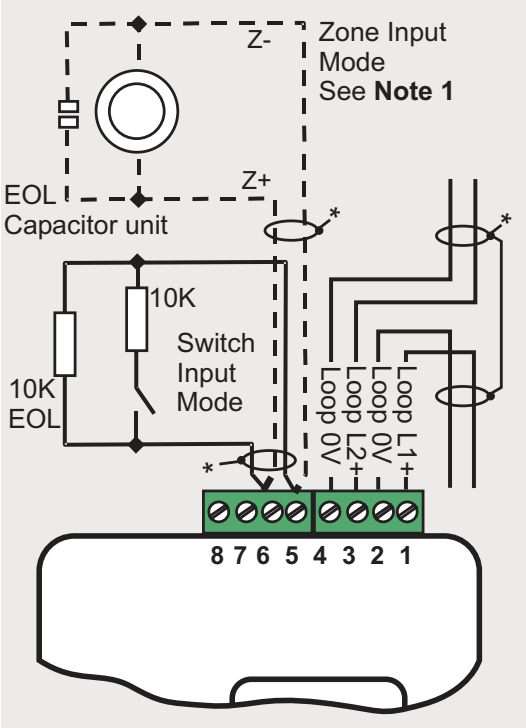


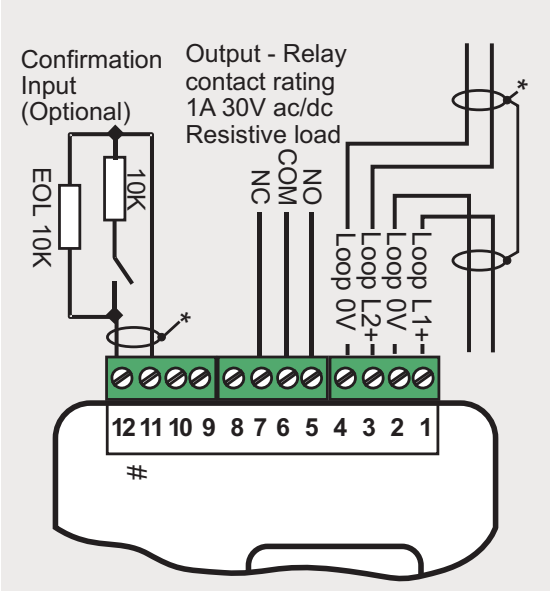
## Wiring diagrams

**The loop cable screen must be continued through each interface module. The loop, switch input, zone input and LED output cable screens where used must connect to an earth terminal.**

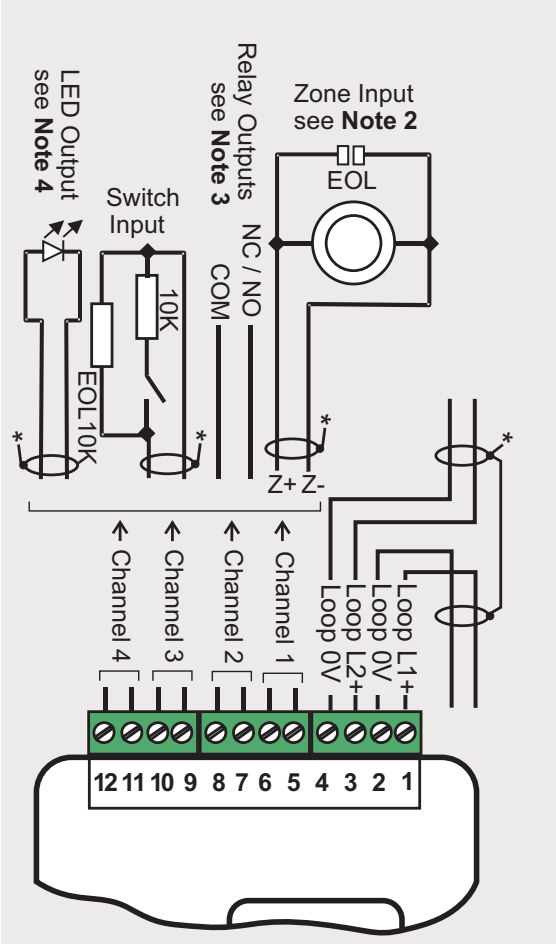
### S4 1-Input module connection details




### S4 1-Output & 1-input module connection details




### S4 4-Input/Output module connection details




Note 1 - When the input is configured as a Zone input it is possible to attach conventional detectors and MCPs (with 470 Ohms or 3V9 zener diode in series with normally open contacts), maximum load is 2mA @ 24V nominal (18V minimum) with End-of-line capacitor.

Note 2 - Only channel 1 (terminals 5 & 6) can be configured as an zone input.

Note 3 - Contact rating 1A 30V ac/dc Resistive load.

Note 4 - Output is 1.5mA @ 24V dc.

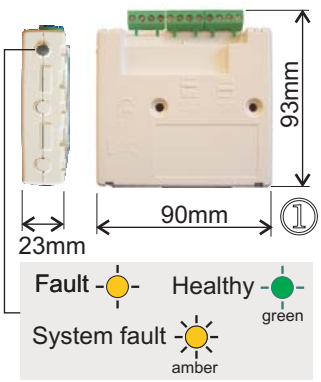
# Can be configured as LED output

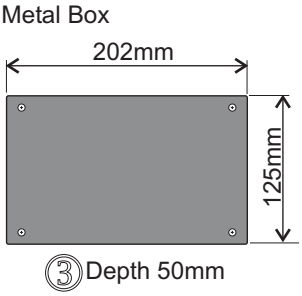
* The cable screens must be connected to an **earth terminal** on the chassis or in the metal box.

If a module is mounted on a **DIN rail** then the DIN rail must electrically connected to the **loop cable screen via the earth terminal.**

## Technical data

| | **S4-34410**<br>S4 1- Input | **S4-34450**<br>S4 4-Input /Output | **S4-34420**<br>S4 1-Output & 1-Input |
|---|---|---|---|
| Approval | EN54-17:2005 and EN54-18:2005 (Approved) | | |
| Weight-dimen. module<br>module in plastic box<br>module in metal box | 92g ①<br>1047g ②<br>782g③ | 100g ①<br>1055g ②<br>790g ③ | 100g ①<br>1055g ②<br>790g ③ |
| Storage temperature | -30ºC to 70ºC | | |
| Operating temperature | -10ºC to 60ºC | | |
| Relative Humidity | Up to 95% - Temperature 5ºC to 45°C (Non condensing) | | |
| Emission | BS EN 61000-6-3:2001 Residential, Commercial & Light Industry **Class B limits** | | |
| Immunity | BS EN50130-4: 1996: Part 4 | | |
| LVD | BS EN 60950-2002 | | |
| Ingress Protection | IP31 for plastic box S4-34490 & IP40 estimated for metal box S4-34492 | | |
| Colour | Module-white / Plastic box-dark grey (Lid-light grey) / Metal box-dark grey | | |
| Input mode | Input channel-1 only can be configured as a zone input to accept conventional devices, with a load of 2mA quiescent and 9mA alarm maximum at 24V nominal (18V minimum). With configurable 2s to 5s reset period and 5s to 40s alarm validation delay. | | |
| Switch input can work with or without a delay. | Input channel can be configured as a **switch input** of Fire*, Fault*, Supervisory* (non fire) or Confirmation# signal. * with input acceptance delay of up to 10 seconds for a Fire input and up to 300s for Fault or Supervisory input. # A fault is generated if confirmation input is not seen within predefined period of the output action (Confirmation function is not a feature of the single input module). | | |
| Output mode | - | A relay output of either NO or NC set of contacts rated 1A - 30Vac/dc resistive load. | A relay output of change over contacts NC, COM and NO rated 1A - 30Vac/dc resistive load. |
| LED output | 1.5mA at 24Vdc (Normally On or Normally Off) | | |
| EN54-17 data | **Vmax** Vnom **Vmin** VSO max **VSO min** *I*C max **I**S max *I*L max **ZC max**<br>**42V** 40V **24V** 16V **8V** 0.4A **1A** 20µA **0.1OΩ** | | |
| Panel compatibility | Fully compatible with LPC ≥ V4.35 & MCB ≥ V4.37.<br>For further information on upgrade requirements contact Gent by Honeywell | | |

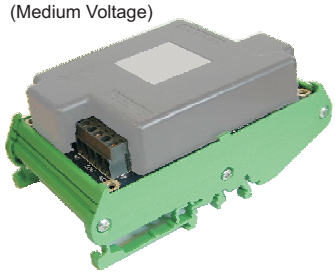




# Interface Module for Vigilon Medium Voltage (MV) Output

These instructions cover the above interface options and accessories.

**S4-34411**
Single Output Interface Module
DIN rail mountable
(Medium Voltage)



**S4-34415**
Single Output Interface PCB with cover
(Medium Voltage) in a metal box

These S4 Single Output Interfaces are designed for use with any Vigilon fire alarm control panel. Each module includes loop isolators for device isolation.

The S4 Single Output Interfaces are suitable for mains switching, they provide normally closed and normally open contacts rated at 13A 250Vac (nominal 230Vac) resistive load.

The S4 interfaces use one of 200 available device addresses on a loop and respond to regular polls from the control panel reporting the type of device.

## Features

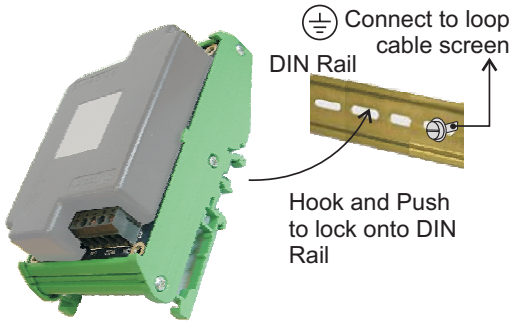
- ☐ Analogue addressable communications
- ☐ Built-in type identification automatically identifies these devices to the control panel
- ☐ Reliable communication technique with high noise immunity
- ☐ Soft or SAFE addressing
- ☐ Common mounting options including surface mount and DIN rail mount
- ☐ EN54-17:2005 and EN54-18:2005

## Cables

Any suitably rated cable may be used for wiring the output lines to drive the required load. For information on cables recommended for wiring the loop circuits see instructions supplied with the fire control panel.

## Installation

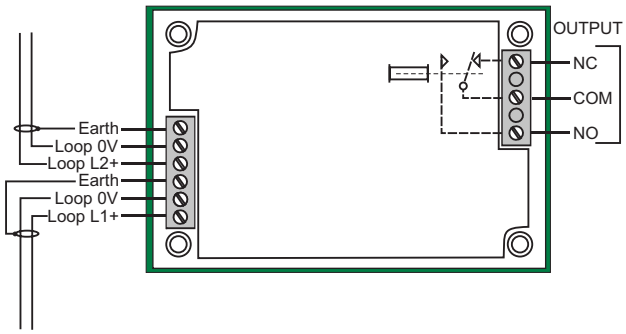
The S4 Single Output Interface module - DIN rail mountable (S4-34411) can be mounted in other equipment housing using a DIN rail.




The S4 Single Output Interface is available in a metal box (S4-34415). The box provides cable termination points on the enclosure.

## Wiring

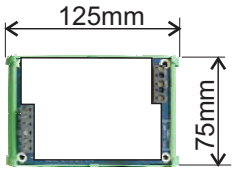
The loop cable screen must be continued through each interface module.
If a module is mounted on a DIN rail, then the DIN rail must be electrically connected to the loop cable screen.



**The output contacts are rated at 13A 230V ac resistive load. In order to meet the requirements of European Safety Standards, ensure that all cables carrying voltages in excess of 48V (Live and Neutral) are suitably fused.**

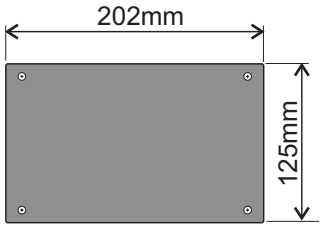
## Technical data

| | |
|---|---|
| Approval | EN54-17:2005 & EN54-18:2005 (Approved) |
| Dimensions in mm | See illustrations |
| Weight | DIN mountable:138g<br>PCB with cover in metal box:800g |
| Storage temperature | -30ºC to 70ºC |
| Operating temperature | -10ºC to 60ºC |
| Relative Humidity | Up to 95% - Temperature 5ºC to 45°C(Non condensing) |
| Emission | BS EN 61000-6-3:2001 Residential, Commercial & Light Industry **Class B limits** |
| Immunity | BS EN50130-4: 1996: Part 4 |
| LVD | BS EN 60950-2002 |
| Ingress Protection | Metal box - IP40 estimated |
| Colour - Metal Box | Dark Grey |
| Output<br><br>Contact ratings<br>Type<br>Cycle | Single pole change over contacts rated at 13A 230V ac Resistive load.<br><br><br>1hp @ 240V ac, 1/2hp @ 120V ac (UL508)<br>$6x10^3$ |
| Terminals | $2.5mm^2$ |
| EN54-17 data | $V_{max}$ 42V<br>$V_{nom}$ 40V<br>$V_{min}$ 24V<br>$V_{SO\ max}$ 16V<br>$V_{SO\ min}$ 8V<br>$I_{C\ max}$ 0.4A<br>$I_{S\ max}$ 1A<br>$I_{L\ max}$ 20µA<br>$Z_{C\ max}$ 0.1Ω |
| Compatibility | Compatible with panel having:<br>MCB ≥ V4.31 &<br>LPC ≥ V4.33 |




Depth 48mm

PCB on DIN rail mountable module




Depth 50mm

PCB in metal box

# Mains Powered Interface (from Qtr 3 2010)

The S4 Mains powered interface units (S4-34440-02 and S4-34440-12) are EN54-4 compliant battery backed power supplies that can be directly connected to the loop and also have highly flexible interfacing capability.

The 4 channels can be individually configured to provide Output and Input interface in various configuration modes, to control external equipment and receive input to allow the fire system to make decisions and take actions. It is now possible to have combined inputs and outputs giving a total of 8 external circuits connected (e.g. 4 sector outputs and 4 confirmation inputs). The units have room to accommodate optional modules on to DIN rails. It has a configurable auxiliary power output that is derived from its self contained mains power supply unit, which is battery backed to continue to deliver power in the event of mains supply failure.

## Technical Data

| | |
|---|---|
| Standards - designed to meet | EN54:part 4:1998<br>EN54:part 17:2005<br>EN54:part 18:2005 |
| Overall dimensions | 478mm x 322mm x 128mm |
| Assembled weight (approximate) | 7Kg (excluding batteries and optional components fitted) |
| Enclosure | Steel |
| Colour | RAL7024 Graphite Grey (fine textured) |
| Storage temperature | -20 to 70ºC |
| Ambient operating temperature | -10 to 45°C |
| Relative Humidity (Non condensing) | up to 95%<br>Temperature 5 - 45°C |
| Ingress Protection | IP31(estimated) |

| | |
|---|---|
| Operating voltage<br>Rated current | 230V 50Hz +10% -6%<br>0.7A |
| Input modes | Input can be fault monitored, voltage free, contacts OR conventional detection zone circuit. Refer to the commissioning information for more details. |
| Zone<br>Nominal voltage<br>Quiescent current | <br>16V or 22.5V (default) ±15%<br>20mA per zone (default)<br><br>Zone short circuit current limited to < 30mA<br>**EN54 compliance limitation: 32 devices OR Maximum of 20 diode bases per zone** |
| Output modes | Outputs are monitored 24V (nominal) 0.5A OR LED drive. Refer to the commissioning information for more details |
| Confirmation modes | It is possible to configure all Inputs and Outputs as confirmation channels |
| Sector and Auxiliary Outputs | Sector and Auxiliary Outputs 0.5A max each @ 24V +/-3V, electronically current limited to approximately 1A at 25°C<br><br>Maximum total output current:<br>S4-34440-02 = 1.5A<br>S4-34440-12 = 2.5A<br><br>Auxiliary power output:<br>12V / 24V ±0.5V (S4-34440-12)<br>or 24V ±3V (S4-34440-02) |
| Batteries | Two types:<br>2 x 12V 2.1Ahr (1Kg each) for S4-34440-02<br>2 x 12V 12Ahr (4.31Kg each) for S4-34440-12 |
| Compatibility | Compatible with panel having:<br>MCB ≥ V4.41 & LPC ≥ V4.39 |
| EN54-17 : 2005 (section 4.8) data: | $V_{max}$ 42V $I_{C\ max}$ 0.4A<br>$V_{nom}$ 40V $I_{S\ max}$ 1A<br>$V_{min}$ 24V $I_{L\ max}$ 20µA<br>$V_{SO\ max}$ 16V $Z_{C\ max}$ 0.1Ω<br>$V_{SO\ min}$ 8V |
| Emission | BS EN61000-6-3: 2007 EMC for residential, commercial & light Industry. |
| Immunity | BS EN50130-4: 1996 + A1:1998 +A2 2003 for alarm systems |
| Terminals | 3-way device (terminals provided for spur or sub-loop) |

**Repetitive switching of capacitive loads greater than 1500uF is not possible and will result in the thermal protection circuit automatically reducing the output voltage.**

## Features

### ☐ Fail-safe operation

A fail-safe operation is available on all sectored outputs, if loop communications are lost for a defined duration then the sector outputs will be turned ON. Sector outputs will turn OFF immediately when communication is restored.

### ☐ Synchronisation

Adjustable synchronisation pulses can be selected for all sector outputs to synchronise the operation of devices such as xenon strobes or speech sounders.

### ☐ Auxiliary Output

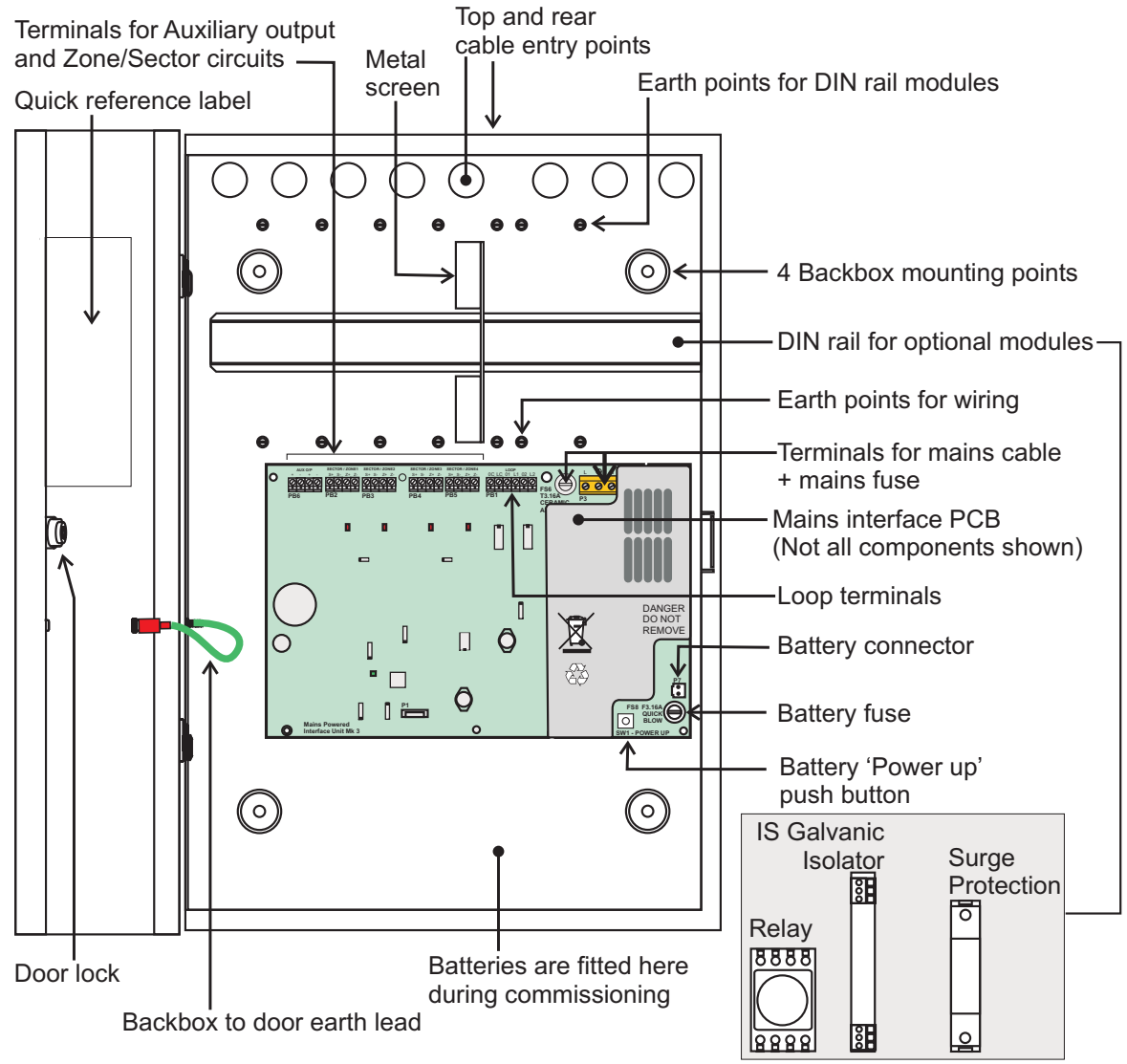
The Auxiliary output can be programmed to automatically turn OFF when a mains failure occurs to preserve battery capacity. The output can also be programmed to provide a reset pulse when a fire reset occurs.

## Installation

The batteries are supplied in a separate pack.

| | Spare Parts packages | Qty |
|---|---|---|
| | Fuse 3.15A AS Ceramic (20mm x 5mm) | 1 |
| | Fuse 3.15A QB Glass (20mm x 5mm) | 1 |
| | Resistor 5.6K 0.6W | 4 |
| | Resistor 470R 0.6W | 8 |
| | Resistor 10K 0.5W | 4 |
| | Battery Link | 1 |
| | Battery Lead | 1 |
| | Capacitor 22uF 35V | 4 |
| | Instructions | 1 |

keys are supplied in a plastic bag fitted to the enclosure.

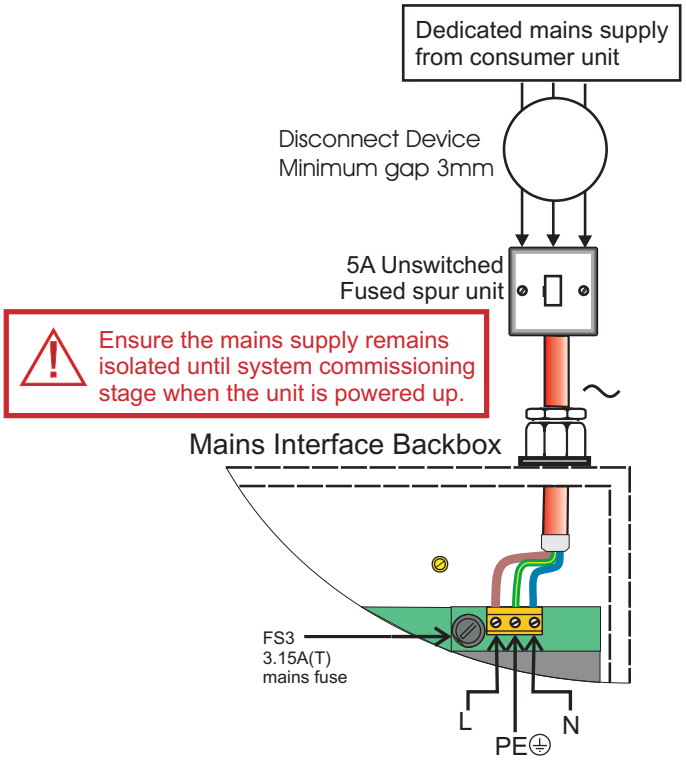


## Mains supply

The mains supply cable must be a standard fire resisting type and should meet PH30 classification, such as any of the standard and enhanced loop cable. Requires a minimum conductor cross sectional area of 0.75mm².

**Ensure that the mains supply cable enters the enclosure through a dedicated cable entry, located adjacent to the mains terminal block and that is also segregated from loop wiring.**

**These fire alarm system products are not designed to be powered from IT Power systems.**

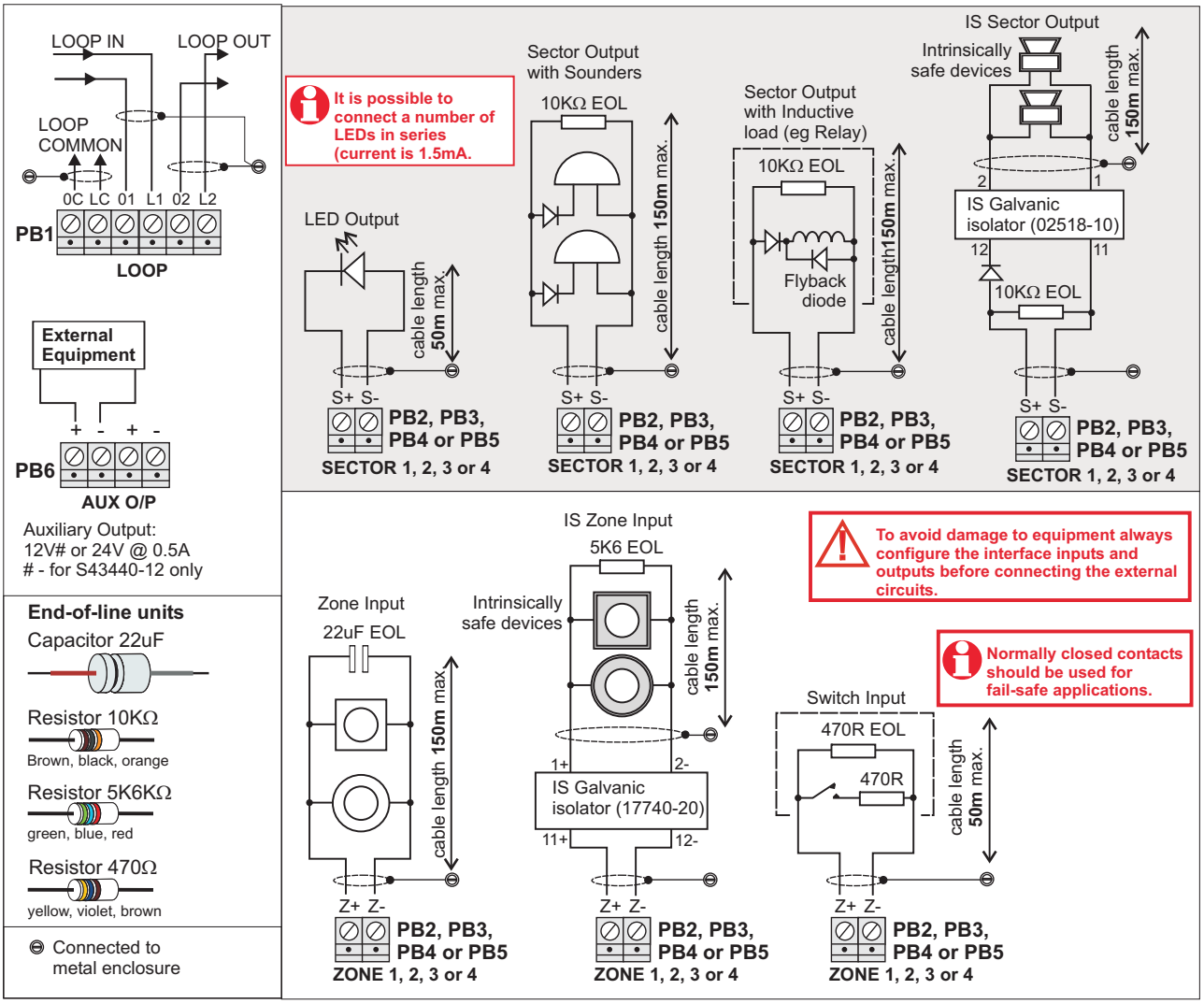



All mains powered equipment must be earthed. Mains supply to any fire alarm control and indicating equipment must be via an unswitched 5A fused spur unit. A disconnect device must be provided to disconnect both poles and must have a minimum gap of 3mm. The **disconnect device** should be available as part of the building installation and must be easily accessible after installation is complete.

## Wiring test

**DO NOT undertake high voltage insulation tests WITH THE CABLES CONNECTED to the Mains Interface unit and external equipment. Such a test may damage the electronics circuitry in external equipment and in the Mains Interface unit.**

## External wiring




## Options

These optional products should be mounted on the DIN rail.

**The relays and intrinsically safe products listed below should be mounted apart, a metal screen is provided inside the enclosure.**

- ☐ Low voltage power relay
- ☐ Intrinsically safe galvanic isolator for IS detectors and call points
- ☐ Intrinsically safe galvanic isolator for IS sounders

For fully information see the leaflet supplied with the product.

# Vigilon compact system parts

This section lists parts that can be used in the Vigilon compact system. For further details on the availability of the parts, contact your supplier.

## Control Panels

| | |
|---|---|
| COMPACT-24-N | Vigilon Compact control panel (networkable) c/w 1 - Loop card (2-12V 12Ah batteries for 24hr standby - supplied) |

## Accessories

| | |
|---|---|
| COMPACT-NC | Network card for Vigilon compact panel (networkable) |
| COMPACT-FLUSH | Flush surround (for Vigilon Compact control panel) |
| COMPACT-FLUSH-SS | Flush surround stainless steel (for Vigilon Compact control panel) |
| VIG-RPT-DOOR-SS | Stainless steel door (for Vigilon Compact control panel) |
| VCS-ODOOR | Compact 24hr outer door assembly |
| VCS-IDOOR | Compact 24hr inner door assembly |
| VCS-BATT | Battery pack for Vigilon Compact |
| VIG-RPT-WR-CASE | Panel weather resistant case IP55 |
| COMPACT-LPC | Loop Card (EN54) |
| VCS-PSU-N | PSU (for Compact-24 and COMPACT-24-N) |
| VCS-MCB-N | Master Control board networkable (for Compact-24 and COMPACT-24-N) |

## Printer

| | |
|---|---|
| PRINTER-HAND | Handheld serial thermal printer |
| PRINTER-H-PAPER | Thermal paper for handheld printer |

## Repeat panels

| | |
|---|---|
| VIG-RPT -72 | Vigilon Repeat panel for EN and BS (lloop connectable) |
| VSRPT-BATT | Battery pack from Repeat panel |
| COMPACT-RPT | Repeat indicator panel RS485 (connects directly to the panel) |

## Mimic panels

| | |
|---|---|
| VIG-MIM -A3 | Zonal and Mimic panel (EN54) |
| VSRPT-BATT-A3 | Battery back from A3 Mimic (2 x 6V 7Ah) |

## Manual call points

| | |
|---|---|
| S4-34800 | Manual Call Point (Glass) |
| S4-34842 | Manual Call Point (Glass) with Protective cover |
| S4-34845 | Manual Call Point with resettable element |
| S4-34805 | Manual Call Point with resettable element and protective cover |
| S4-34890 | Resettable Element for MCP (Pack of 10) |
| S4-34891 | Glass for MCP (Pack of 10) |
| S4-34892 | Protective cover for MCP (Pack of 10) |
| S4-34895 | Surface Back Box for MCP red plastic - (Pack of 10) |
| S4-34898 | Manual Call Point weather resistant kit |
| S4-34899 | Test Key (Pack of 10) |
| S4-34895 | Keyswitch call point (Red) |

*Keyswitch MCP*

| | |
|---|---|
| S4-34807 | Keyswitch MCP (Red) with back box |
| S4-34499 | Spare Keys (Pack of 2) |
| S4-34895 | Surface Back Box for Interface Red Plastic (Pk of 10) |

*Environmentally protected enclosure for MCP*

| | |
|---|---|
| S4-34896 | MCP Weatherproof box - S4-34805& S4-34800 |

## S-Quad Sensors / Sounder / Strobe / Speech

| | |
|---|---|
| S4-710 | Optical Heat Sensor (OH) |
| S4-715 | Optical Sensor (O) |
| S4-720 | Heat Sensor (H) |
| S4-720-ST-VO | Heat Sensor Strobe Speech (HStSp) |
| S4-780 | Heat Sensor Sounder (HS) |
| S4-770 | Optical Heat Sounder (OHS) |
| S4-711 | Dual Optical Heat Sensor ($O^2H$) |
| S4-711-ST | Dual Optical Heat Sensor Strobe ($O^2HSt$) |
| S4-771 | Dual Optical Heat Sensor Sounder($O^2HS$) |
| S4-711-ST-VO | Dual Optical Heat Sensor Speech Strobe ($O^2HSpSt$) |
| S4-711-VO | Dual Optical Heat Sensor Speech ($O^2HSp$) |
| S4-911 | Dual Optical Heat CO Sensor ($O^2HCO$) |
| S4-911-ST-VO | Dual Optical Heat CO Sensor Speech Strobe ($O^2HCOSpSt$) |

*Associated products*

| | |
|---|---|
| S4-700 | S-Quad Base |
| 13449-01 | Remote LED for use with S4-700 |
| S4-FLUSH | Semi-Flush fixing kit |
| S4-COVER-DUST | Sensor dust cover (50 pack) |
| S4-COVER-BASE | Base dust cover (50 Pack) |
| S4-EXTRACTOR | Removal tool |
| S4-BASE-LABEL | Label plate (50 pack) |
| S4-BASE-GASKET | Base IP Gasket (50 pack) |
| S4-COVER-REMOVER | Dust cover remover tool (spare adaptor) |

*Environmentally protected sensor*

| | |
|---|---|
| 34729 | Environmentally protected Heat sensor |

## Duct Sensor

| | |
|---|---|
| S4-34760 | Venturi-Air Duct Kit |

## Beam Sensors

| | |
|---|---|
| S4-34740 | Beam sensor pair |
| S4-34741-01 | Angle bracket with base |
| S4-34741-03 | Parallel bracket with base |
| S4-34741-99 | Light shield for beams (5 per pack) |
| S4-34741-50 | Test Cards |

## T Breaker

| | |
|---|---|
| 34701 | T breaker Unit |

## LV & MV Interfaces

*Keyswitch Interface*

| | |
|---|---|
| S4-34418 | Keyswitch Interface (Blue) with back box |
| S4-34499 | Spare Keys (Pack of 2) |

*Low voltage interface range*

| | |
|---|---|
| S4-34410 | 1-Input Interface module (low voltage) |
| S4-34420 | 1-Output & 1-Input Interface module (low voltage) |
| S4-34450 | 4-Input / Output Interface module (low voltage) |

*Options*

The above interface modules can be mounted in any of the following optional enclosure or DIN rail mount bracket.

| | |
|---|---|
| S4-34490 | Interface enclosure Large Plastic box |
| S4-34492 | Interface enclosure Metal box |
| S4-34491 | DIN rail mount bracket |
| S4-34493 | Interface enclosure Small Plastic box |
| S4-34496 | Interface enclosure (plastic) houses 6 interfaces |

*Medium voltage interface range*

| | |
|---|---|
| S4-34411 | Single Output Interface Module DIN rail mountable (Medium Voltage) |
| S4-34415 | Single Output Interface PCB with cover (Medium Voltage) in a metal box |

*12 input interface*

| | |
|---|---|
| S4-34412 | 12 input interface module (Supervisory inputs only) |
| S4-34494 | Connection Converter for S4-34412 |

## Mains powered interfaces (from Qtr 3 2010)

| | |
|---|---|
| S4-34440-02 | Mains powered fire alarm interface 24V only |
| S4-34440-12 | Mains powered fire alarm interface 12V / 24V |
| 19104-52 | Low voltage power relay |
| 17740-20 | Intrinsically safe galvanic isolator for IS detectors and call points |
| 02518-10 | Intrinsically safe galvanic isolator for IS sounders |

## S$^3$ Addressable Speech, Sounder Strobe

*Strobe*

| Low profile range | | |
|---|---|---|
| Body | Strobe - Deep base | |
| White | S2IP-ST-WR (red lens) | S2IP-ST-WA (amber lens) |
| Red | S2IP-ST-RR (red lens) | S2IP-ST-RW (white lens) |

*Sounder Strobe*

| Low profile range | | | | |
|---|---|---|---|---|
| | Sounder | | Sounder Strobe (red lens) | |
| Body | Deep base | Shallow base | Deep base | Shallow base |
| White | S3IP-SN-W | S3-SN-W | S3IP-SN-ST-WR | S3-SN-ST-WR |
| Red | S3IP-SN-R | S3-SN-R | S3IP-SN-ST-RR | S3-SN-ST-RR |

| Low profile variants | |
|---|---|
| | Sounder Strobe |
| Red | S3IP-SN-ST-RW (white lens) |
| White | S3IP-SN-ST-WA (amber lens) |

| System range | | |
|---|---|---|
| | Sounder | |
| Red | S2IP-SN-R (2-way) | S2IP-SN-R3 (3-way) |
| White | S2IP-SN-W (2-way) | S2IP-SN-W3 (3-way) |

The S2IP-SN-R3 and S2IP-SN-W3 products are suitable for retrofitting and are supplied with a 6-way terminal block to ease cable connection.

Note: The system range of products do not support strobe options.

*Speech Sounder Strobe*

| Low profile range | | | | |
|---|---|---|---|---|
| | Speech Sounder | | Speech Sounder Strobe (red lens) | |
| | Deep base | Shallow base | Deep base | Shallow base |
| White | S3IP-VP-W | S3-VP-W | S3IP-VP-ST-WR | S3-VP-ST-WR |
| Red | S3IP-VP-R | S3-VP-R | S3IP-VP-ST-RR | S3-VP-ST-RR |

*Remote Control*

S3-CONTROL Remote control for the S$^3$

## Surge protection

| | |
|---|---|
| 5530440 | 1 x Mains, 1 x Loop & 1 x Zone/Sector suppression (enclosure has space for 1 extra loop (2 x 2817958) |
| 5530452 | 1 x Mains, 1 x Network, 1 x Loop & Zone / Sector suppression (enclosure has space for 1 extra loop (2 x 2817958) |
| 5530465 | 1 x Mains, 1 x Network suppression |
| 5530478 | 1 x Mains suppressor |
| 2817958 | 1 x Additional Loop suppressor (module only) |

Replacement Plug ins

| | |
|---|---|
| 2798844 | Mains suppressor |
| 2838762 | Network suppressor |
| 2839648 | Loop suppressor |
| 2838351 | Zone / Sector suppressor |

## Manuals

| | |
|---|---|
| 4188-900 | Vigilon Compact system Installation instructions |
| 4188-899 | Vigilon Compact system Operating instructions |
| 4188-749 | Log book |

## Supported products

*Sensors (Supported)*

| | |
|---|---|
| 34710 | Optical heat sensor |
| 34710-RL | Optical heat sensor for remote LED connection |
| 13449-01 | Remote LED |
| 34770 | Optical heat sensor sounder |
| 34780 | Heat sounder |
| 34720 | Heat sensor |
| 34760 | Duct sensor (inc 17908-05 Probes & 34702 Slave LED unit) |

*Spares*

| | |
|---|---|
| 19271-01 | Replacement Optical chamber |

*Terminal Plate*

| | |
|---|---|
| 34700 | 3-way terminal plate |
| 34704 | 4-way terminal plate |
| 19279-01 | Semi-flush sensor mounting kit |
| 19270-50 | Sensor dust cover (50 pack) |

*Tools*

| | |
|---|---|
| 17918-26 | Sensor removal tool kit |

*Manual call points (Supported)*

| | |
|---|---|
| 34800-EN | Surface mounted MCP |
| 34807 | Surface mounted keyswitch MCP |
| 19289-01 | MCP flush fixing plate |
| 34829-EN | Environmentally protected surface mounted MCP |
| 14112-09EN | Spare MCP glasses 10 pack non LPCB approved |
| 14112-49EN | Hinged cover with drilled from moulding |
| 14112-EN-KIT | BS to EN Front conversion kit with glass |

*Interfaces (Supported)*

| | |
|---|---|
| 34415 | Single Channel loop powered interface |
| 19245-05 | Interface line module |

CE
0832

Gent by Honeywell
Hamilton Industrial Park, 140 Waterside Road, Leicester LE5 1TN, UK

0832-CPD-1260

Vigilon Compact

**EN54-2: 1997, A1:2006**
Control and Indicating equipment for fire detection and fire alarm systems in buildings.

7.8 Output to fire alarm devices
7.11 Delays to action outputs
8.3 Fault signals from point
9.5 Disablement of each addressable point
10 Test condition

**EN54-4: 1997, A1:2002, A2:2006**
Power supply equipment for fire detection and fire alarm systems in buildings.

Other technical data: see documents in project file 7032, held by the manufacturer.

**At the end of their useful life, the packaging, product and batteries should be disposed of via a suitable recycling centre and in accordance with national or local legislation.**

**WEEE Directive:**
At the end of their useful life, the packaging, product and batteries should be disposed of via a suitable recycling centre.
Do not dispose of with your normal household waste. Do not burn.

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