GLOBAL
FIRE EQUIPMENT

The
System

GLOBAL
FIRE EQUIPMENT

The Team

What was to become Global Fire Equipment was started by João Paulo Ajami in Denmark in the spring of 1994 and went through a series of mutations in the quest to become a world player in the development and manufacture of leading edge fire alarm equipment.

Since re-locating to the outskirts of Faro, Portugal, in the summer of 2000 and establishing itself as a privately owned limited company with three partners with more than 50 years cumulative experience in the Security and Fire Protection field, Global Fire grew swiftly to its present staffing level of 40 people and a projected turnover for 2008 of 5,0 Million EUR.

In October 2006 the company outgrew its original premises and found a much more adequate haven in a brand new Industrial and Commercial Park with easy road connections to the entire region and a mere 10 min. ride from the International Faro airport.

Presently, Global Fire is a leading player in the fire detection equipment market, with both addressable analogue and conventional ranges of fire alarm control panels and ancillary devices.

Through our deep partnership with Wizmart, our detector manufacturing friends in Taiwan and NingBo, we are able to offer a complete solution to all the needs of distributors worldwide.

Luis Magalhães
Production Director

João Paulo Ajami
General Director

Pedro Coutinho
Managing Director

INDEX

JUNO NET NETWORK

J-NET-EN54-SC-013

Relays
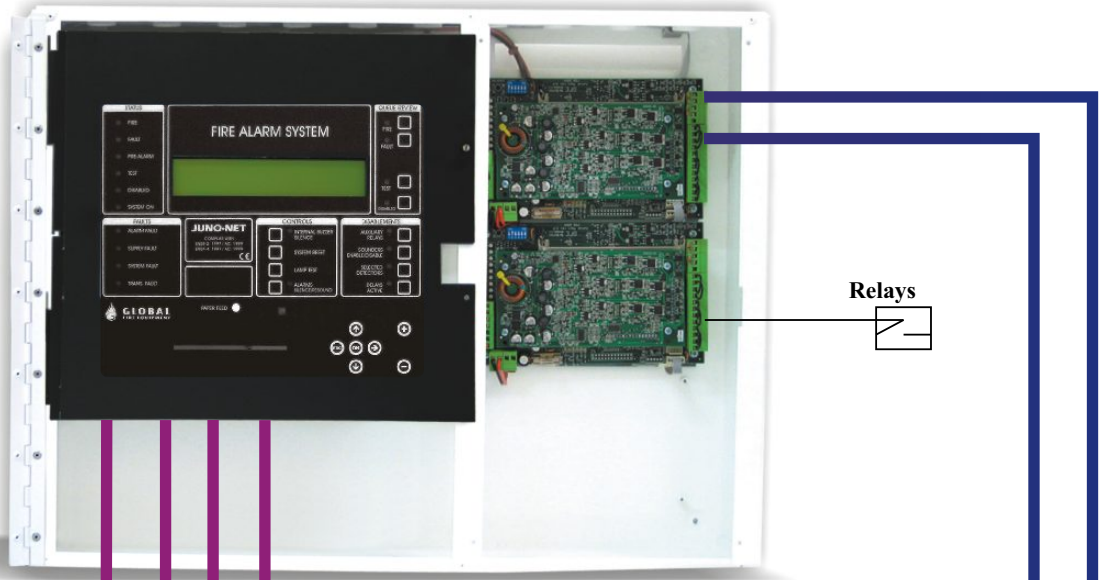
J - NET - SC - 009
Pictured

PC Graphics

ODYSSEY

Loops 1 -9

J-NET-SPX-001 –OO9

J-NET-REP

Printer

TCP-IP, RS-485
Or Fibre Optic Network

BMS

Loops 1-3

**Laptop for
programming**

J-NET-REP-003

JUNIOR-REP

Smoke/Heat Detectors

callpoints

Loop powered sounders

Conventional Detector

Zone Monitor Unit

I/O Interface

MAM

**GLOBAL
FIRE EQUIPMENT**
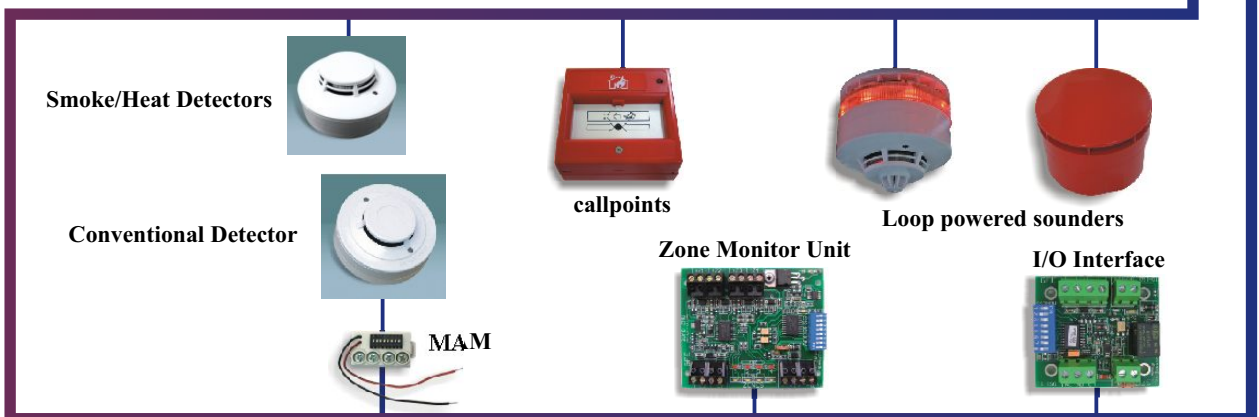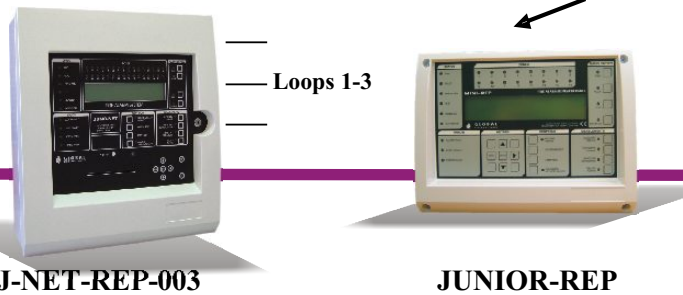
JUNO NET

Networkable
Fire Detection System

Available in 2 colours ○ ●

Juno Net 1 to 4 Loops

Juno-Net is a powerful Analogue Addressable Fire Alarm Control System with networking capabilities that facilitate the configuration of complex Wide Area Fire Detection Systems.

Modular construction and distributed intelligence allow systems of up to 96 Loops to be constructed. With a high level of built-in redundancy and emergency back-up features, the Juno-Net is fully equipped to control the most complex installations.

Using its wide array of interfacing capabilities the Juno-Net is ideally placed to provide an efficient and effective solution to the logistics of protecting large institutions. Universities, Airports, industrial complexes etc which may have many individual Fire Alarm systems but require central reporting and control can easily be accommodated by the advanced capabilities of the Juno-Net.

Juno-Net is available as a standalone system of up to 13 Loops in a single cabinet and can be expanded to up to 96 Loops via a networked array of sub-panels which can be supplied in a blank box version or combined with a repeater to allow remote display and control of the system. Networking is done by a monitored, redundant, double RS422/485 or Fibre optic loop or TCP/IP network.

The Juno-Net networking capabilities are further enhanced by a wide range of programming options which provide the capability to customise the system according to the needs of the customer. Flexible cause and effect programming of I/O devices and warning devices ensure that Fire or Fault warnings trigger the appropriate response.

An interactive Graphic representation of the system can be displayed on the users' computer via the Odyssey Graphics software(optional). All the devices on the system can be displayed on a building plan showing their status in real time. In the event of Fire or fault the customer can control the system and access all the necessary information with a few mouse-clicks.

Automatic Device detection at start up reduces time spent at the commissioning stage. In Installation mode the Juno-Net detects and recognises addressed and connected devices with the system being fully operational in less than two minutes. The default programming ensures that the system is ready to detect Fire/Fault alerts from the moment that power is applied.

Juno Net 1 to 13 Loops

Additional programming, to customise the system can be implemented via the onboard keypad, IR programmer, PS 2 Keyboard or with a laptop PC running the GFE Connector software which is available free of charge on the Global Fire website.

Key Features

✓ Fully expandable system from 1-96 Loops with distributed intelligence for added security

✓ 125 device addresses per loop

✓ Up to 96 Loop sounders with 32 individually programmable addresses per Loop

✓ Compatible with major analogue addressable communications protocols

✓ 2 Fire output changeover relays and 1 Fault output relay (NC)

✓ Open collector outputs for Fire, Fault and pre-alarm remote indication

✓ 2 fully monitored sounder outputs on main panel and each sub panel

✓ Repeaters with optional integrated Sub-Panels (J-NET-REP + Loop Card)

✓ Blank box option for Sub Panels

✓ Detector loops fully monitored for integrity

✓ 384 programmable zones

✓ 512 fully programmable sounder and I/O groups

✓ Event Log 2000 entries FIFO

✓ Backlit LCD display 4 row * 40 characters

✓ Multiple programming options, onboard keypad, Remote IR(optional), PS2 Keyboard

✓ Windows ™ based GFE CONNECTOR Software for Programming with Laptop PC

✓ Windows™ based PC Graphics package ODYSSEY for alarm management and reporting(Optional)

✓ Multiple Language support (menu selectable)

✓ MODBUS (ASCII & RTU) and BMS support

✓ Evacuate / Class Change input (optional)

Technical Specifications	1 to 4 LOOPS	4 to 13 LOOPS
LOOPS	1 to 4 loops - max 275mA per loop	4 to 13 loops - max 275mA per loop
SOUNDER OUTPUTS	2 at 28V DC/500mA each	4/6/8 24V DC/ 500mA each
AUX. RELAYS FIRE	2 rated 50 VAC/DC 1A resistive	2 rated 50 VAC/DC 1A resistive
AUX. RELAY FAULT	1 rated 50 VAC/DC 1A resistive	1 rated 50 VAC/DC 1A resistive
AUX POWER OUTPUT	28V DC 600mA	28V DC 600mA
ADDITIONAL OUTPUTS	Multiplexed up to 384 Zones	Multiplexed up to 384 Zones
PRIMARY SUPPLY	85 - 265 V AC, 50/60Hz	85 - 265 V AC, 50/60Hz
SECONDARY SUPPLY	28 V DC Nominal	28 V DC Nominal
POWER SUPPLY RATING	65 W (1-3 Loop) - 150 W (4 Loop)	150W(4-6 Loop)-200W(7-13 Loop)
QUIESCENT CURRENT (NO DEVICES)	130mA(1-3 Loop) - 180mA(4 Loop)	130mA + 90 mA/sub-panel
BATTERIES (INTERNAL)	2 x 12V 12 AH	2 x 12V 12 AH
DIMENSIONS	H: 375 W: 345 D: 139 mm	H: 420 W: 550 D: 127 mm
WEIGHT (NO BATTERIES)	5,1 Kg (no batteries)	8,1 Kg (no batteries)
OPERATING TEMPERATURE	0ºC to +40ºC	0ºC to +40ºC
STORAGE TEMPERATURE	-10 to +50ºC	-10 to +50ºC
HUMIDITY/ PROTECTION	max 85% no condensation - IP21	max 85% no condensation - IP21

Order Code	Juno Net EN54-Self Contained	Order Code	Juno Net EN54-Self Contained
J-NET-EN54-SC-001	1 Loop - PSU 2.4A	J-NET-EN54-SC-007	Large Box - 7 Loops - PSU 7.5A
J-NET-EN54-SC-002	2 Loops - PSU 2.4A	J-NET-EN54-SC-008	Large Box - 8 Loops - PSU 7.5A
J-NET-EN54-SC-003	3 Loops - PSU 2.4A	J-NET-EN54-SC-009	Large Box - 9 Loops - PSU 7.5A
J-NET-EN54-SC-004	4 Loops - PSU 5A	J-NET-EN54-SC-010	Large Box - 10 Loops - PSU 7.5A
J-NET-EN54-SC-004-L	Large Box - 4 Loops - PSU 5A	J-NET-EN54-SC-011	Large Box - 11 Loops - PSU 7.5A
J-NET-EN54-SC-005	Large Box - 5 Loops - PSU 5A	J-NET-EN54-SC-012	Large Box - 12 Loops - PSU 7.5A
J-NET-EN54-SC-006	Large Box - 6 Loops - PSU 5A	J-NET-EN54-SC-013	Large Box - 13 Loops - PSU 7.5A

J-NET-CON-SP1

Juno Net Main Connector Board including Single Loop Expansion Sub-Panel

GLOBAL FIRE EQUIPMENT

The introduction of the J-NET-CON-SP1, brings in a new level of flexibility and competitiveness to our customers.

By including a single loop sub-panel in the JUNO-NET CON board, we were able to pack 4 loops into our standard box. The new range of self contained Juno Net panels covers all variants in steps of 1 from 1 to 13 loops. Using this new board the Juno Net panel can be provided in the standard box from 1 to 4 loops and on the larger enclosure from 4 to 13 loops.

The J-NET-CON-SP1 is compatible with all models of interface cards used either when interfacing the Juno Net Main Panel to other Sub-Panels and/or Repeaters or when connecting Juno Net Systems to GFE's graphical software Odyssey, BMS or MODBUS.

Juno Net 1 to 4 Loops	Juno Net 1 to 13 Loops

Technical Specifications	
LOOPS	1 loop - max 275mA per loop
SOUNDER OUTPUTS	2 rated at 28V DC 500mA each
AUX. RELAYS FIRE	2 - Changeover C-NO-NC rated @ 50 VAC/DC 1A resistive
AUX. RELAY FAULT	1 - Normally Closed rated @ 50 VAC/DC 1A resistive
AUX POWER OUTPUT	2 rated @ 28V DC 300mA/output
ADDITIONAL OUTPUTS	Multiplexed up to 384 Zones
QUIESCENT CURRENT (NO DEVICES)	80mA
DIMENSIONS	L: 163 W: 120 H: 27 mm
WEIGHT	240 g
OPERATING TEMPERATURE	0ºC to +40ºC
STORAGE TEMPERATURE	-10 to +50ºC

Order Code	
J-NET-CON-SP1	Juno Net Main Connector Board inc. 1 Loop Exp. Sub-Panel

J-NET-SP Stand Alone

*J-NET-SP-003-SA pictured

J-NET-SP Boxed 1 to 9 Loops

*J-NET-SPX-009 pictured

J-NET-SP

Juno Net Sub Panel

Juno-Net Sub-Panels allow expansion of the system in groups of either 1 or 3 loops. When supplied in an enclosed cabinet with independent primary and secondary power supplies up to 9 Loops may be installed in each cabinet which also contains a 5A PSU/Charger unit and space for standby rechargeable batteries. One RS422/RS485, Fibre Optic or TCP/IP interface is required per cabinet to enable networking with the rest of the system.

Each sub-panel board controls up to 3 Analogue Addressable Detection Loops via its own independent processor. In the event of communications failure with the main control unit, the sub panel is capable of operating independently, detecting Fire/Fault events and activating its own sounders, relays and I/O devices.

Technical Specifications	J-NET-SP Stand Alone	J-NET-SPX (Boxed)
LOOPS	1 or 3 loops - max 275mA per loop	1 to 9 loops - max 275mA per loop
SOUNDER OUTPUTS/ sub-panel	2 at 28V DC/500mA each	4/6/8 24V DC/ 500mA each
AUX. RELAYS FIRE/ sub-panel	2 rated 50 VAC/DC 1A resistive	2 rated 50 VAC/DC 1A resistive
AUX. RELAY FAULT/ sub-panel	1 rated 50 VAC/DC 1A resistive	1 rated 50 VAC/DC 1A resistive
AUX POWER OUTPUT	28V DC 300mA	28V DC 300mA
ADDITIONAL OUTPUTS	N/A	N/A
PRIMARY SUPPLY	N/A	85 - 265 V AC, 50/60Hz
SECONDARY SUPPLY	28 V DC Nominal	28 V DC Nominal
POWER SUPPLY RATING	N/A	150W
QUIESCENT CURRENT (NO DEVICES)	90 mA	90 mA/sub-panel
BATTERIES (INTERNAL)	2 x 12V 12 AH	2 x 12V 12 AH
DIMENSIONS	L: 113 W: 180 H: 26 mm	H: 375 W: 345 D: 139 mm
WEIGHT (NO BATTERIES)	0,3 Kg	5,1 Kg (no batteries)
OPERATING TEMPERATURE	0ºC to +40ºC	0ºC to +40ºC
STORAGE TEMPERATURE	-10 to +50ºC	-10 to +50ºC
HUMIDITY/ PROTECTION	N/A	max 85% no condensation - IP21

Order Code	J-Net Sub-Panel Board
J-NET-SP	Sub-Panel Board w/o Loop Card
J-NET-SP-001-SA	Sub-Panel Board w/ 1 Loop
J-NET-SP-003-SA	Sub-Panel Board w/ 3 Loops

Order Code	Juno NET Sub-Panel Boxed
J-NET-SPX-001	1 Loop - 5.4A PSU
J-NET-SPX-003	3 Loops - 5.4A PSU
J-NET-SPX-004	4 Loops - 5.4A PSU
J-NET-SPX-006	6 Loops - 5.4A PSU
J-NET-SPX-007	7 Loops - 5.4A PSU
J-NET-SPX-009	9 Loops - 5.4A PSU

JUNIOR V4

Single Loop Analogue Addressable Control Panel Expandable to 2 Loops

GLOBAL FIRE EQUIPMENT

The Global Fire Junior V4 is a single loop Analogue addressable control panel which can be expanded to two loops. It provides a cost effective solution for small to medium sized installations. The Junior V4 can support up to 125 addressable devices on each loop which are compatible with major analogue addressable communications protocols.

Using Global Fire's advanced communications mechanism, up to 32 individually addressed Loop sounders can be connected to each of the Junior V4 detection Loops. The Junior V4 also supports Shadow and Auxiliary Sounder/Beacons together with GFE's new Vulcan 2 addressable Sounder-Beacon-Isolator along with all other GFE Interface devices.

The panel is equipped with a backlit LCD display of 4 rows each with 40 characters to give clear textual indications of Fire / Fault occurrences to the end user.

There are also 16 Zone Fire LED indicators.

Junior Repeaters and Mini-Repeaters can be connected via an RS422/RS485, Fibre Optic or TCP/IP interface to facilitate remote display and control of the system.

Automatic Device detection at start up reduces time spent at the commissioning stage. In Installation mode the Junior V4 detects and recognises addressed and connected devices with the system being fully operational in less than two minutes.

The default programming ensures that the system is ready to detect Fire / Fault alerts from the moment that power is applied. Additional programming, to customise the system can be implemented using a laptop PC running the GFE Connector software which is available free of charge on GFE's website.
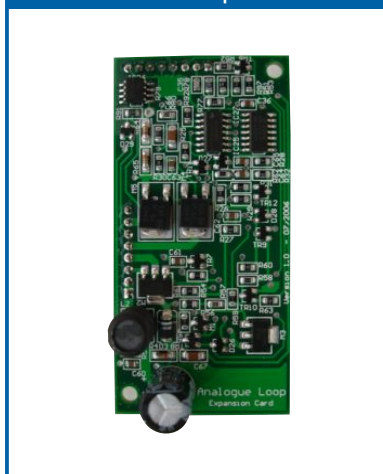
Available in 3 colours ●●●

Junior Mini-Rep	Junior Repeater	Junior Loop Card

Available in 3 colours ●●●

Key Features

✓ Single loop panel - Expandable to two Loops using JNR-V4-Card

✓ Supports connection to Mini-repeaters via RS422/485, Fibre-Optic or TCP/IP interfaces

✓ 125 device addresses per loop

✓ 32 individually programmable sounder addresses per Loop

✓ 96 VULCAN 2 (addressable) ultra low current sounders or beacons per Loop. Only 64 of these units should be installed per loop when combined sounder beacons are being used. This number includes addressable, shadow, auxiliary and detector-sounder/beacon versions of these units

✓ Full SAM (Self Addressable Module) & MAM (Manually Addressable Module) support

✓ 2 Fire output relays (change-over) and 1 Fault relay (Normally closed)

✓ 2 conventional alarm outputs (Individually programmable)

✓ Detector loops monitored for integrity

✓ 384 fully programmable zones

✓ 512 fully programmable sounder groups

✓ 512 fully programmable Input and Output groups

✓ Event log (rolling, 2000 entries)

✓ Compatible with major analogue addressable communications protocols

✓ Compatible with all our own low cost ancillary modules

✓ Backlit LCD display with 4 rows of 40 characters

✓ PC Programming using Upload/Download GFE Connector Software

✓ Multiple language support (menu selectable)

✓ Integrated 16 zone LED fire zone indication

Technical Specifications	
Primary Supply Voltage - INPUT	85-264 VAC
Primary Supply Voltage - OUTPUT	28.5 V DC nominal
Primary Supply Current - OUTPUT	2.4 A @ 28.5 V DC nominal (max.)
Secondary Supply Voltage	21.0 min. - 27.2 max.V DC -BAT charger o/p 28V DC
Secondary Supply Current Output	1.6 Amp Maximum @ 20^{0}C
Internal Battery Capacity - Maximum	2 x 12V x 7Ah Sealed VRLA Lead Acid Batteries
Loop Current Drive	275 mA (quiescent) - 800 mA (alarm) using GFE's Loop Sounders
Auxiliary Relay Outputs	2 Fire (COM-NC-NO) - 1 Fault (COM-NC) non-supervised
Conventional Sounder Circuits	2 - 400mA max. current drive per circuit - fully monitored.
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Weight	2.0 Kg - 7 Kg (inc. 2 x 7AH 12V bat.)
Dimensions	272 (W) x 404 (H) x 107 (D) mm

Order Code	
JNR-V4-1	Junior V4, 1 Loop Expandable to 2 Loops, PSU 2.4 A
JNR-V4-2	Junior V4, 2 Loops, PSU 2.4 A
JNR-V4-CARD	Junior V4 Loop Card Expansion from 1 to 2 Loop

JUNO NET REP

Available in 2 colours ○ ●

The Juno Net Repeater panel fully replicates the control panel information and control facilities allowing multiple operating points within the system. The J-Net Repeater communicates with the Master Control Panel via an RS-422/RS-485, Fiber Optic or TCP/IP network.

Sub-Panels can be integrated into the repeater panel to allow the connection of up to three additional detection loops, per sub-panel, to the system.

J-NET Repeater panel is ideal for multiple building complexes where display and control of the system is required in various locations. Depending on control panel loading, power for the J-Net-Rep can be supplied from the control panel's auxiliary power output, an external 24 Volt power supply or an optional complete built-in 24V, 2,4A or 5A power supply unit. If a sub-panel is installed in the repeater housing, then a 5 A power supply unit is required.

Note: When using the conventional sounder circuits or interfacing Panel and Repeater(s) using TCP/IP interfaces (J-NET-INT-TCP-IP), a 24V DC/ 2.4 A power supply should be fitted.

Technical Specifications	no loop card	with loop card
LOOPS	N/A	1 or 3 loops - max 275mA per loop
SOUNDER OUTPUTS	2 at 28V DC/500mA each	2 - 28V DC/ 500mA each
AUX. RELAYS FIRE	2 rated 50 VAC/DC 1A resistive	2 rated 50 VAC/DC 1A resistive
AUX. RELAY FAULT	1 rated 50 VAC/DC 1A resistive	1 rated 50 VAC/DC 1A resistive
AUX POWER OUTPUT	28V DC 600mA	28V DC 600mA
ADDITIONAL OUTPUTS	Multiplexed up to 384 Zones	Multiplexed up to 384 Zones
PRIMARY SUPPLY	N/A	85 - 265 V AC, 50/60Hz
SECONDARY SUPPLY	28 V DC Nominal	28 V DC Nominal
POWER SUPPLY RATING	N/A	65 W
QUIESCENT CURRENT (NO DEVICES)	110 mA	130mA no loop devices fitted
BATTERIES (INTERNAL)	2 x 12V 12 AH	2 x 12V 12 AH
DIMENSIONS	H: 375 W: 345 D: 139 mm	H: 420 W: 550 D: 127 mm
WEIGHT (NO BATTERIES)	4,5 Kg (no batteries)	5,1 Kg (no batteries)
OPERATING TEMPERATURE	0ºC to +40ºC	0ºC to +40ºC
STORAGE TEMPERATURE	-10 to +50ºC	-10 to +50ºC
HUMIDITY/ PROTECTION	max 85% no condensation - IP21	max 85% no condensation - IP21

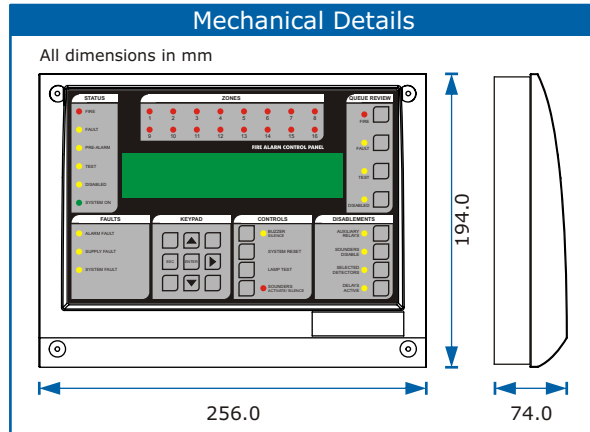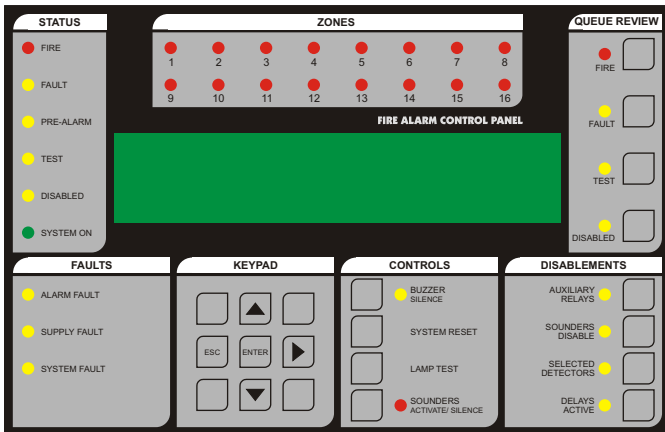| Order Code	
J-NET-EN54-REP	Juno Net EN54 Repeater

JUNIOR MINI REP

The **JUNIOR MINI REP** will provide remote control, system status display and monitoring functions for any of GFE's Analogue Addressable Fire Detection Panels. All Fire, Fault, Test and Disabled conditions are displayed. User is able to control all functions at access Level's 1, 2 (authorized user level) and 3 (installer/ programming level). Compliant with EN-54 part 2. Display and Control Functions are replicated and shown in the same manner as on any of GFE's Analogue Addressable Fire Detection Panels. Access to Levels 2 and 3 is via a code using the same as programmed for the associated panel.

It's reduced dimensions make it ideal for installation in reception areas or security booths.

It includes as standard an RS-485 interface. This unit is also compatible with all of GFE's standard data loop interfaces allowing the Junior Mini Rep panel to be interfaced to both Junior and Juno Net addressable panels using 3 different interfacing technologies:

- RS-485
- Fibre Optics
- TCP/IP

A maximum of 4 Junior Mini Rep panels can be connected to a single Addressable Panel if powered directly from the Control Panel's Auxiliary Supply Output. This number is always dependent on maximum current load derived from a single auxiliary supply output.

Mechanical Details

All dimensions in mm

194.0

256.0

74.0

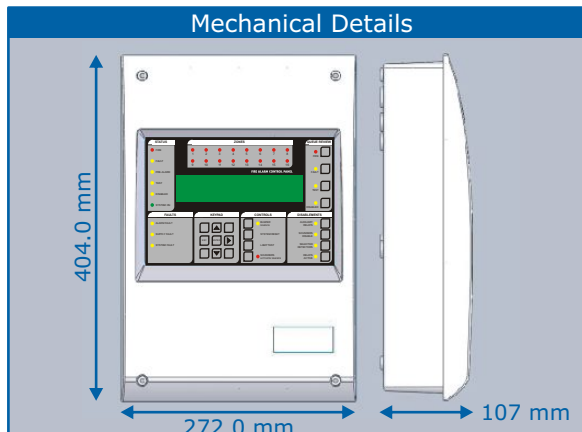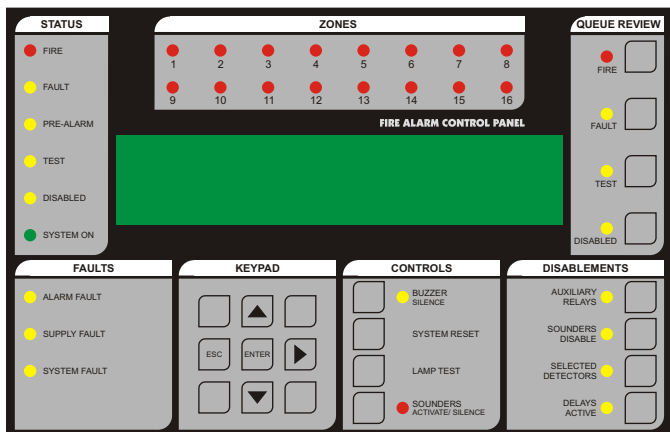| Order Code	Junior MINI REP
Supply Voltage	28V DC nominal derived from panel's Aux. Supply O/P
Supply Current	80 mA
Connections	+Supply, -Supply plus interface connections.
Repeater Network	RS-485, Fibre Optics, TCP/IP
	4 units max. when powered from aux. supply o/p from panel
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 50 ºC
Dimensions	256.0 (L) x 194.0 (W) x 76.0 (H) mm
Weight	1.5 Kg

JUNIOR REP

The **JUNIOR REP** will provide remote control, system status display and monitoring functions for any of GFE's Analogue Addressable Fire Detection Panels. All Fire, Fault, Test and Disabled conditions are displayed. User is able to control all functions at access Level's 1, 2 (authorized user level) and 3 (installer/programming level). Compliant with EN-54 part 2. Display and Control Functions are replicated and shown in the same manner as on any of GFE's Analogue Addressable Fire Detection Panel. Access to Levels 2 and 3 is via a code using the same as programmed for the associated panel.

This unit uses the same plastic enclosure as the Junior V4 panel and is available in 3 colours: white, red and black.

Available in 3 colours ●●●

It includes as standard an RS-485 interface. This unit is also compatible with all of GFE's standard data loop interfaces allowing the Junior Rep panel to be interfaced to both Junior and Juno Net addressable panels using 3 different interfacing technologies:

- RS-485
- Fibre Optics
- TCP/IP

A maximum of 4 JUNIOR REPs panels can be connected to a single Addressable Panel if powered directly from the Control Panel's Auxiliary Supply Output. This number is always dependent on maximum current load derived from a single auxiliary supply output.

Mechanical Details

404.0 mm
272.0 mm
107 mm

Order Code	JUNIOR REP
Supply Voltage	28V DC nominal derived from panel's Aux. Supply O/P
Supply Current	80 mA
Connections	+Supply, -Supply plus interface connections.
Repeater Network	RS-485, Fibre Optics, TCP/IP
	4 units max. when powered from aux. supply o/p from panel
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 50 ºC
Dimensions	272 (W) x 404 (H) x 107 (D) mm
Weight	1.6 Kg

J-NET-IP

Juno Net
Internal Printer

This 40 column internally mounted thermal printer provides a hardcopy of the Juno Net panel log containing all relevant events occurring in the system.

All events are date and time stamped and are backed by a 2000 events deep rolling log kept in the panel's non-volatile memory.

Note: in order for the printer to work properly it is necessary that the J-NET-QUART chip be installed on the Juno Net Panel - Main Board. Please refer to the panel's installation manual for full details.

Technical Specifications	
Supply Voltage	5 V DC nominal - Does not require external supply.
Current Consumption	50 mA - standby/ 250 mA - printing @ 25 ^{o}C
Interface	TTL logic levels @ 1200 baud, 8 data bits, 1 stop bit, no parity
	Hardware handshake - Printer Busy Signal
Connector Type	5-way straight polarised Molex type connector
	Flat cable assembly provided with mechanism
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	145 (W) x 45 (D) x 65 (H) mm
Weight	121 g Printer Assembly - 208 g inc. paper roll

Order Code	
J-NET-IP	Juno Net - Internal Thermal Printer - 40 column

J-NET-QUART

Juno Net QUART

J-NET-QUART

The Juno Net QUART chip should be installed on the Juno Net Panel Main Board when panel is fitted with an internal and/or external printer and when panel is connected to GFE's graphical software package Odyssey, 3rd party BMS systems or MODBUS via one of GFE's J-NET-ADV-COMS interface boards.

Order Code	
J-NET-QUART	Juno Net QUART IC (QUAD-UART)

J-NET-MPX-REL

Junior and Juno Net
Multiplexed Zone Relay Outputs

GLOBAL FIRE EQUIPMENT
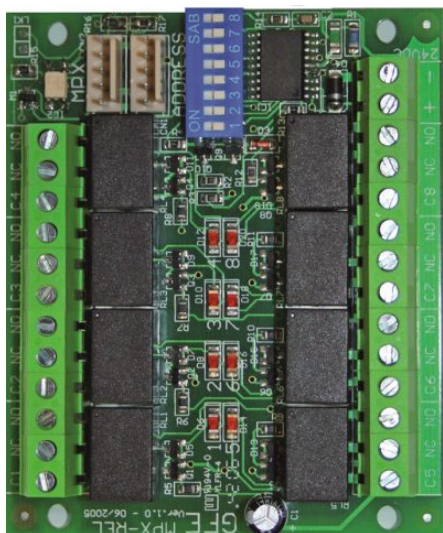
Interface card that provides zone in Fire/ Fault indication via a voltage free change-over relay contact for each zone in any of GFE's Analogue Addressable Fire Detection Panels. There is also a LED indication of FIRE/ FAULT condition for each individual zone. The LED RED indicator will be ON when the relay is active. These relay outputs are not monitored.

This module operates in three different modes:

- 8 Zone Blocks - Indication of Fire for each zone in the range 1 to 384
- 4 Zone Blocks - Indication of Fire and Fault for each zone in the range 1 to 256
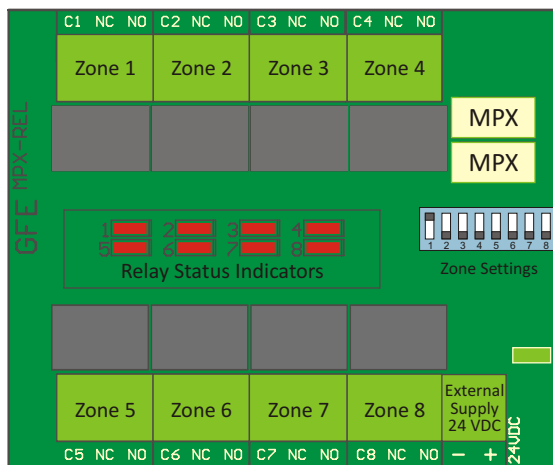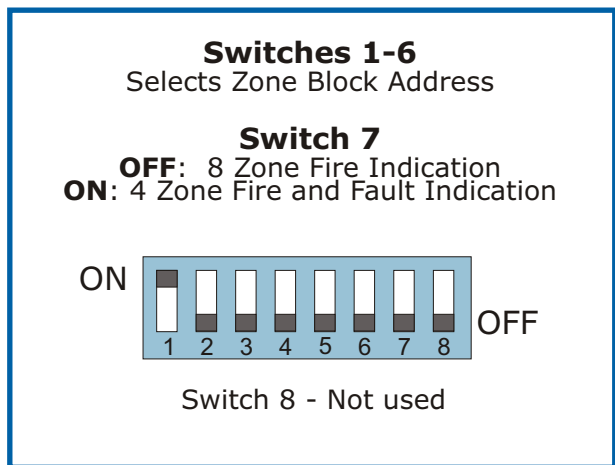- System Status - Each relay output is assigned to a specific System Status indication: Fire, Fault, Pre-Alarm, Test, Disabled, Sounders ON, Auxiliary Outputs and Sounders Disabled

The module requires an external 24 V DC supply and connection to either Juno Net or Junior Panels is via a 5 way flat cable fitted with polarised connectors. Two of these connectors are provided to enable connection of more than 1 module.

Switches 1-6
Selects Zone Block Address

Switch 7
OFF: 8 Zone Fire Indication
ON: 4 Zone Fire and Fault Indication

Switch 8 - Not used

Technical Specifications	
Supply Voltage	28V DC nominal
Current - Quiescent	7 mA - No relays active
Current - Zones in Alarm	7mA + 15 mA per active relay
Zone Selection	D.I.L. Switch
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 50 ºC
Dimensions	88.0 (L) x 72.5 (W) x 18.0 (H) mm
Weight	8 zone - 95 g

Order Code	
J-NET-MPX-REL	Junior and Juno Net Multiplexed 8 Zone Relay Board

J-NET-ADV-COMS-485

Global Fire Equipment produces a range of interfaces that allow the Juno Net Analogue Addressable Fire Detection Panel to be interfaced to GFE's graphical monitoring software Odyssey.

Four different interfacing technologies are available, namely:

- RS-232
- RS-485
- Fibre Optics
- TCP/IP

The J-NET-ADV-COMS-485 is used when connecting a Juno Net Main Panel to GFE's Odyssey software, BMS or MODBUS using either RS-232 or RS-485. This interface is also used when an external serial printer is linked to the panel. In either case the QUART chip has to be fitted on the Juno Net Main Board.
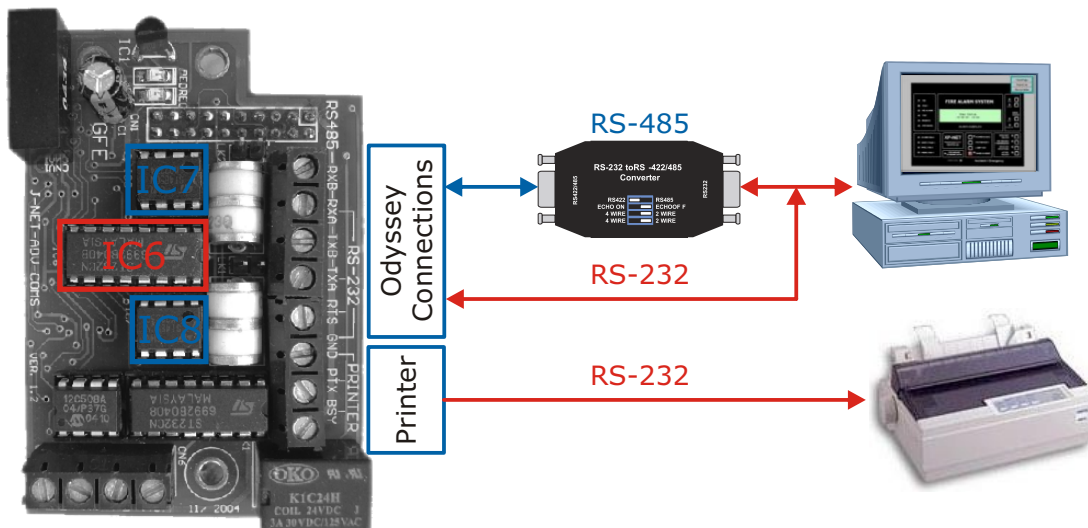
NOTE: When using RS-485 IC7 and IC8 should be in place and IC6 should be removed. When using RS-232 IC6 should be in place and IC7 and IC8 should be removed.

Technical Specifications	
Supply Voltage	28V DC nominal - range 17 to 30 V DC
Supply Current	14 mA
Software & Hardware Compatability	Juno Net Main Panel all versions
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	74.3 (L) x 51.1 (W) x 24.0 (H) mm
Weight	36 g

| Order Code	
J-NET-ADV-COMS-485	Juno Net - Odyssey RS-485 Interface

J-NET-ADV-COMS-FO
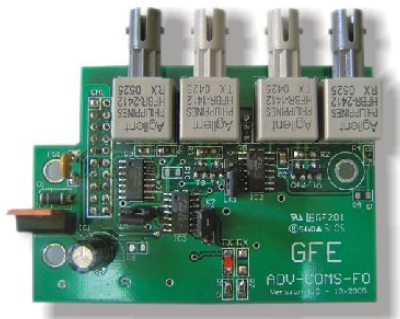
Global Fire Equipment produces a range of interfaces that allow the Juno Net Analogue Addressable Fire Detection Panel to be interfaced to GFE's graphical monitoring software Odyssey.

Four different interfacing technologies are available, namely:

- RS-232
- RS-485
- Fibre Optics
- TCP/IP

The J-NET-ADV-COMS-FO is used when connecting Juno Net Main Panels (maximum of 64 panels) to GFE's Odyssey software, BMS or MODBUS using a fibre optic link. In this case the QUART chip has to be fitted on the Panel's Main Board. Double channel multi-mode 62.5/125 optical fibre should be used. Fibre terminations used with this type of interface are industry standard ST connectors.

CONNECTING JUNO-NET PANEL TO ODYSSEY

Technical Specifications	
Supply Voltage	28V DC nominal - range 17 to 30 V DC
Supply Current	15 mA
Connector Type (FO)	ST Connectors
Fibre Optics Cable	Multi-mode 62.5/125 um
Software & Hardware Compatability	Juno Net Main Panel all versions
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	74.3 (L) x 51.1 (W) x 24.0 (H) mm
Weight	30 g

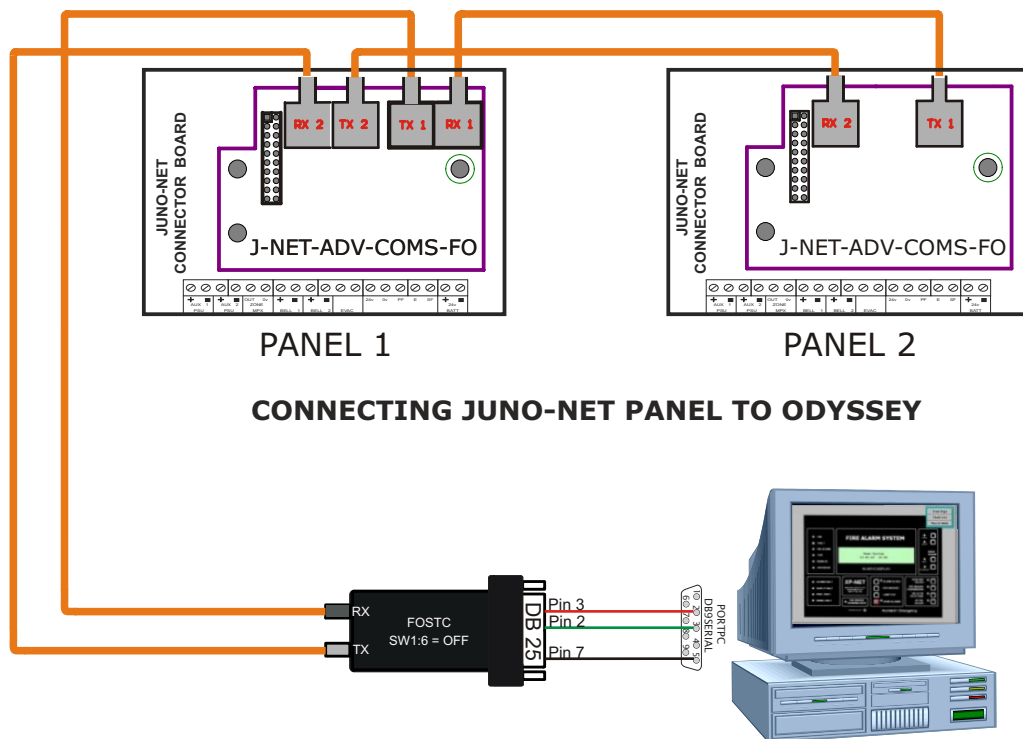| Order Code	
J-NET-ADV-COMS-FO	Juno Net - Odyssey Fibre Optics Interface

J-NET-ADV-COMS-TCP/IP

Global Fire Equipment produces a range of interfaces that allow the Juno Net Analogue Addressable Fire Detection Panel to be interfaced to GFE's graphical monitoring software Odyssey.

Four different interfacing technologies are available, namely:

- RS-232
- RS-485
- Fibre Optics
- TCP/IP

The **J**-**NET**-**ADV**-**COMS**-**TCP**/**IP** interface is used when connecting Juno Net Main Panel's (maximum of 64) to GFE's Odyssey software, BMS or MODBUS using TCP/IP protocol within a Local Area Network (LAN).

Both 10/100 Mbps speeds are supported by this device and the communication rate is automatically set depending on the type of network to which the device is connected. Juno Net panels linked to Odyssey, BMS or MODBUS, will also need to be equipped with a QUAD-UART chip (GFE ref. J-NET-QUART).

This interface is easily configured using LAN communications with provided software, Internet browser or Telnet. Alternatively the interface can also be configured using terminal emulation software via the serial port provided in the form of a D-Type 9 pin miniature connector. Two RED LED's on the interface board will assist the user when monitoring the system communication status.
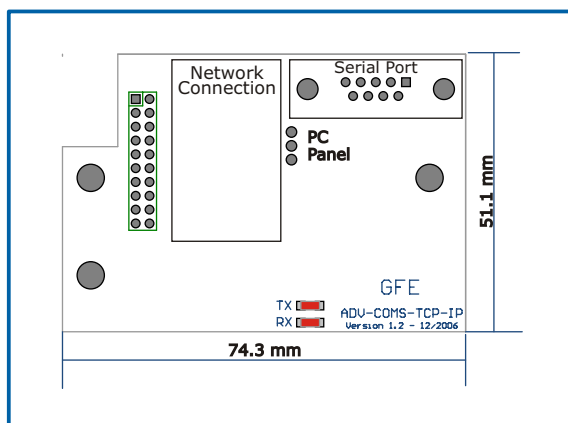
Technical Specification	
Supply Voltage	28V DC nominal
Supply Current	45 mA
Network	10/100Mbit Ethernet - auto-sensing
Configuration	Network (Internet Browser, Telnet, Device Installer)
	Serial Port / Terminal Emulator
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	74.3 (L) x 51.1 (W) x 24.0 (H) mm
Weight	40 g

Order Code	
J-NET-ADV-COMS-TCP/IP	Juno Net - Odyssey TCP/IP Interface

J-NET-INT-485

RS-485 Data Loop Interface

GLOBAL FIRE EQUIPMENT

The J-NET-INT-485 interface module allows GFE's range of panels to be interfaced to repeaters and/or sub-panels using a 4-core data communication cable suitable for RS-422/RS-485 data transmission using a common data communication loop in a ring topology. These units can also use a double-redundant data communication loop for extra security and reliability when used in conjunction with a Juno Net or Junior main panel by creating a bi-directional communication flow. In this case if the Juno Net or Junior panel is unable to communicate with a repeater or sub-panel due to a cut cable or short circuit, it will try to establish communication via the 2nd loop. A communication fault will be signalled by the Juno Net main panel when communication is lost with any sub-panels or repeater panel equipped with a loop card. Please note that the Junior panel, in all its versions, can only be interfaced with Junior Mini-Rep and Junior Rep.

This interface is used in the fire alarm control panel to provide a communications interface for the following:

1)   An Orion conventional panel and its repeater(s) - version 1.5 and above
2)   A Junior panel (all versions), and its Junior Mini-Rep(s) and Junior Rep(s)
3)   A Juno Net panel and Repeater(s), Junior Mini-Rep, Junior Rep and Sub-Panels

This interface is compatible with the following panels, repeaters and sub-panels:

1)   Orion Conventional Panel 2, 4 and 8 zones - version 1.5 and above
2)   Orion Rep and Orion Mini-Rep
3)   Junior analogue addressable panel (all versions)
4)   Junior Mini-Rep and Junior Rep
5)   Juno Net, expandable analogue addressable panel
6)   Juno Net Repeater
7)   Sub-Panel

This interface can be used in parallel with other similar modules using other interface technologies such as Fibre Optics, providing the installer with the tools to interface and create a network of panels, repeaters and sub-panels using mixed data communication technologies, catering for the most demanding applications and networking requirements.

Each panel, repeater and sub-panel will require one of these interface modules. The maximum distance between two nodes is 1.2Kms including the return path to the main panel.

Custom made versions of these modules can be produced for connection to GFE's proprietary MPX protocol to connect LEDs, mimic displays, relays and conventional sounder circuits to GFE's extensive range of conventional and analogue addressable panels. Please consult GFE for further information.

Technical Specifications	
Supply Voltage	28V DC nominal - range 17 to 30 V DC
Supply Current	14 mA
Software & Hardware Compatability	Juno Net Panel & Repeater - Sub-Panel
	Junior Panel V2,3 and 4, Mini-Rep, Junior Repeaters
	Orion Conventional Panel (version 1.5) and Orion Repeaters
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	135.0 (L) x 35.5 (W) x 18 (H) mm
Weight	47 g

Order Code	
J-NET-INT-485	RS422/485 Data Loop Interface

J-NET-INT-FO

Fibre Optics Data Loop Interface

The J-NET-INT-FO interface modules allow GFE's range of panels to be interfaced to repeaters and/or sub-panels using fibre optic cable using a common data communication loop in a ring topology. These units also use a double-redundant data communication loop for extra security and reliability.

These modules are used in the fire alarm control panel to provide a communications interface for the following:

1)   An Orion conventional panel and its repeater(s) - version 1.5 and above
2)   A Junior, analogue addressable panel, and its repeater(s)
3)   A Juno Net panel and Repeater(s), Junior Rep(s), Junior Mini-Rep(s) and Sub-Panels

The interface module is compatible with the following panels, repeaters and sub-panels:

1)   Orion Conventional Panel 2, 4 and 8 zones - version 1.5 and above
2)   Orion Rep and Orion Mini Rep
3)   Junior panel all versions
4)   Junior Rep and Junior Mini-Rep
5)   Juno Net, expandable analogue addressable panel
6)   Juno Net Repeater
7)   Sub-Panel

These interfaces can be used in parallel with other similar modules using other interface technologies such as RS-485, providing the installer with the tools to interface and create a network of panels, repeaters and sub-panels using mixed data communication technologies, catering for the most demanding applications and networking requirements.

Each panel, repeater and sub-panel will require one of these interface modules. The maximum ring distance is 4 Kms.

Fibre optic cables to be used in conjunction with these modules should be multi-mode 62.5/125um and terminated using the industry standard ST connectors.

Custom made versions of these modules can be produced for connection to GFE's proprietary MPX protocol to connect LEDs, mimic displays, relays and conventional sounder circuits to GFE's extensive range of conventional and analogue addressable panels. Please consult GFE for further information.

Technical Specifications	
Supply Voltage	28V DC nominal - range 17 to 30 V DC
Supply Current	15 mA
Connector Type (FO)	ST Connectors
Fibre Optics Cable	Multi-mode 62.5/125 um
Software & Hardware Compatability	Juno Net Panel & Repeater - Sub-Panel
	Junior Panel V2,3 and 4, Mini-Rep, Junior Repeaters
	Orion Conventional Panel (version 1.5) and Orion Repeaters
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	135.0 (L) x 35.6 (W) x 20 (H) mm
Weight	32 g

Order Code	
J-NET-INT-FO	Fibre Optic - Data Loop Interface

J-NET-INT-TCP/IP

Global Fire Equipment produces a range of interfaces that allow its range of panels, both conventional and analogue addressable panels to communicate with repeaters and sub-panels.

Four different interfacing technologies are available, namely:

- RS-232 (Orion Conventional Panel only)
- RS-485
- Fibre Optics
- TCP/IP

The J-NET-INT-TCP-IP interface is used when connecting any of GFE's range of Fire Detection panels to Repeaters or Sub-Panel, using TCP/IP protocol within a Local Area Network (LAN). Please note that sub-panels can only be interfaced to Juno Net panels.

Both 10/100 Mbps speeds are supported by this device and communication rate is automatically set depending on the type of network to which the device is connected.

Interface is easily configured using LAN communications using Telnet. Alternatively the interface can also be configured using terminal emulation software via the serial port provided in the form of a D-Type 9 pin miniature connector.

Two RED LEDs on the interface board will assist the user when monitoring the system communication status.
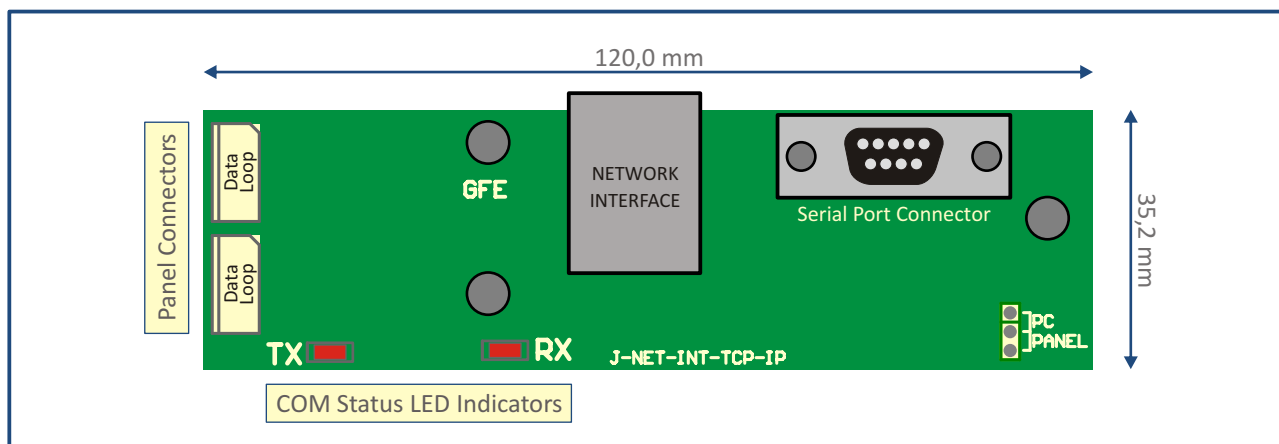
Technical Specifications	
Supply Voltage	28V DC nominal
Supply Current	45 mA
Network	10/100Mbit Ethernet - auto-sensing
Configuration	Network - Telnet
	Serial Port / Terminal Emulator
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 50 ºC
Dimensions	120.0 (L) x 35.2 (W) x 18.4 (H) mm
Weight	40 g

Order Code	
J-NET-INT-TCP-IP	Data Loop TCP/IP Interface

ODYSSEY

GLOBAL FIRE EQUIPMENT

Initial alarm screen showing general area

A Graphics Interface for the 21st Century

The Odyssey Graphics Display and Alarm Management System allows the connection of up to 64 Juno-NET fire alarm panels to a PC. Each panel can be displayed on the screen as if the operator were standing in front of it, and can be fully controlled from the computer.

Odyssey is simple to set up and to operate. Programming is password protected. Once in programming mode, each panel in the system can be enabled, and drawings can easily be imported from a graphics program such as Autocad®.

Detectors and Call Points etc. are then added graphically via the built-in interface. There are no complicated tables to set up. Device descriptions are received directly from the Juno-Net control panel.

In the event of an alarm or fault, the location of the incident will be displayed on the computer screen, with three levels of zoom available to the operator. The individual device can be viewed and interrogated, and if necessary disabled.

Second zoom screen showing zone in alarm

A printer can be connected to the computer to record all alarm, fault and programming activities on the system. Whether or not a printer is connected, a log is kept of all events. This log can be periodically downloaded and printed if required.

Other utilities are provided, such as a list of emergency phone numbers, and an operator notepad.

If a second computer is required at another location, this can be connected as a slave via an Ethernet network to the main computer. For longer distances, Fibre Optic cabling can be used. TCP/IP communications can also be used to allow remote access.

Odyssey is available in several language versions including English, Spanish, Italian and Portuguese.

Highest zoom showing detector in alarm

RS232/485 Converter

Used at the PC to convert RS-485 signal levels to RS-232 when connecting Juno Net panels to Odyssey using this interconnection technology. The unit is port powered and hence no external power is required.

Technical Specifications	
Supply Voltage	12 V DC nominal - Does not require external supply.
Current Consumption	3.0 mA + transmission load current
Communications Settings	Half Duplex - 4 wire
	9600 baud - 8 data bits - 1 stop bit - no parity
Protection Category	IP44
Connector Type	RS232 side DB9 Female - RS485 side DB9 Female
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	78 (L) x 43 (W) x 20 (H) mm
Weight	40 g

Order Code	
RS422/485 CONVERTER	RS232 to RS422/485 CONVERTER - Model 4WSD9R

FOSTC

Used at the PC to convert Fiber Optic signal levels to RS-232 when connecting Juno Net panels to Odyssey using this interconnection technology. The unit requires an external supply of 12 V DC.

Technical Specifications	
Supply Voltage	External Supply - 12 V DC
Current Consumption	140 mA max.
Connector Type (FO)	ST Connectors
Fibre Optics Cable	Multi-mode 62.5/125 um
Communications Settings	9600 baud - 8 data bits - 1 stop bit - no parity
Protection Category	IP44
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	110 (L) x 59 (W) x 25 (H) mm
Weight	70 g
Order Code	
FOSTC	RS-232 TO FIBRE OPTICS CONVERTER

ORION

Conventional Fire Detection Control Panel

GLOBAL FIRE EQUIPMENT

Available in 3 colours ○ ● ●

The Orion range of conventional control panels features three models with 2, 4 and 8 Zones of detection. Housed in a stylish modern ABS housing, the Orion is the ideal control panel for smaller installations.

Designed and manufactured to comply with the requirements of EN54 parts 2 and 4(1998) the Orion uses active End of Line monitoring to permit head removal protection as required by BS5839. (detector bases must be fitted with Diode)

Programmable Zone coincidence and alarm delay timer (0-10 min) are standard features to help reduce false alarms.

The one man test facility enables simple and rapid testing of the system at commissioning and during maintenance operations.

Features:

- Two, four and eight zone non-expandable control panels
- Up to 32 conventional smoke and/or heat detectors per zone
- Active End of Line monitoring
- Programmable non-latching zones
- Delay timer programmable on/off per zone
- Zone coincidence programmable for adjacent zones
- Three Access Levels
- One man test
- Supervised auxiliary 24 volt output
- 2 supervised/ monitored sounder circuits
- 3 remote inputs used for activation of Class Change, Day/Night mode, and Reset
- 2 Relay outputs fire and fault
- Power supply 1,7A at 28V DC
- Fully EN54 part 2 and 4 compliant
- Repeater output
- Multiplexed output for LEDs and additional relay outputs per zone (GFE-MPX-REL)
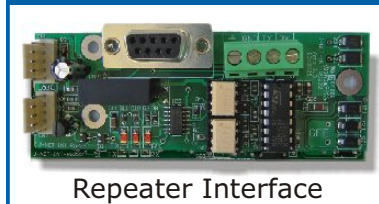- Addressable Loop Interface card (GFE-ADLI)
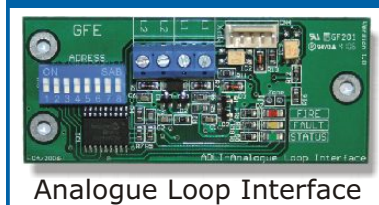
Orion Mini-Rep	Orion Rep	ORION-INT-RS232
		Repeater Interface

GFE-ADLI
Analogue Loop Interface

Technical Specifications

Supply Specification	
Primary Supply Voltage - INPUT	85-264 VAC
Primary Supply Voltage - OUTPUT	28.5 V DC nominal
Primary Supply Current - OUTPUT	1.7 A @ 28.5 V DC nominal (max.)
Secondary Supply Voltage	21.0 min. - 27.2 max.V DC -BAT charger o/p 28V DC
Secondary Supply Current Output	1.1 Amp Maximum @ 20^{0}C
Internal Battery Capacity - Maximum	2 x 12V x 7Ah Sealed VRLA Lead Acid Batteries
Mains Fuse	4 A -250V Slow Blow - 20mm
Battery Fuse	1.6 Amp - Resettable
Detection Circuit Specification	
Number of circuits	2,4 or 8
Max. Cable Resistance	40 Ohms
Max. Cable Capacitance	0.470 uF
Zone Current - Quiescent	5 mA maximum
Zone Current - Alarm	60 mA - Maximum
End of Line Monitoring	Active EOL - Capacitor
BS5839 Detector removal Compliant	YES provided diodes are fitted to detector base
Devices per Zone	32 Maximum - EN54 pt.2
Alarm Resistance Value	270 - 1000 Ohms
Sounder Circuit Specification	
Conventional Sounder Circuits	2 - 500mA max. current drive per circuit - fully monitored.
End of Line Resistor	10 K Ohms - 1/4 Watt
Monitoring	Open and Short Circuit
Alarm Voltage	27.5 V DC Nominal
Fuse Rating	1.1 Amp resettable
Auxiliary Outputs Specification	
Auxiliary Relay Outputs	1 Fire (COM-NC-NO) - 1 Fault (COM-NC) non-supervised
Relay Contact Rating	50 V DC - 1 Amp resistive loads
Remote Input Specification	
Evacuation (CC) - Day/ Night Mode	Non-Latching - Voltage free contact
Reset	Non-Latching - Voltage free contact
Mechanical & Operating Spec.	
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Weight	1.7 Kg - 7 Kg (inc. 2 x 7AH bat.)
Dimensions	272 (W) x 404 (H) x 107 (D) mm
Order Code	
ORION 2	2 Zones Conventional Fire Detection Control Panel
ORION 4	4 Zones Conventional Fire Detection Control Panel
ORION 8	8 Zones Conventional Fire Detection Control Panel

ORION MINI REP

The **ORION MINI REP** will provide remote control, system status display and monitoring functions. All Fire, Fault, Test and Disabled conditions are displayed. User is able to control all functions at access Level's 1 and 2. Compliant with EN-54 part 2. Display and Control Functions are replicated and shown in the same manner as on the Orion Fire Detection Panel. Access to Level 2 is via a four digit code (same code as used on the Orion Conventional Panel).

It includes as standard an RS-232 interface. This unit is also compatible with all of GFE's standard data loop interfaces allowing the Orion Mini Rep panel to be interfaced to an ORION conventional panel using 4 different interfacing technologies:

- RS-232
- RS-485
- Fibre Optics
- TCP/IP (Specific for Orion Conventional Systems)

A maximum of 4 Orion Mini Rep panels can be connected to a single Orion Conventional Fire Detection Panel. When using RS-232 interfaces only one repeater panel will offer both control and display of the system. The remainder of the repeater panels will only offer system status display. In order to have control from more than one Orion Mini Rep panels any of the other interfacing technologies can be used.

Mechanical Details

All dimensions in mm

194.0

256.0

75.0

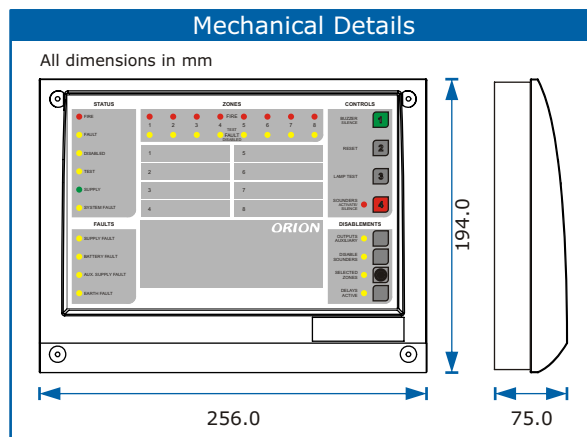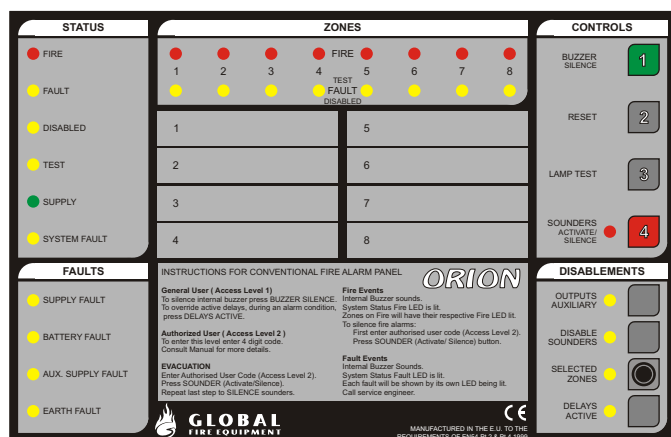| Order Code	ORION MINI REP
Supply Voltage	28V DC nominal derived from Orion Aux. Supply O/P
Supply Current	40 mA
Connections	+Supply, -Supply, TX and RX
Repeater Network	RS-232 - 1 Display & Control 3 Display Only
	RS-485, Fibre Optics, TCP/IP - 4 units max. Display and Control
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 50 ºC
Dimensions	256.0 (L) x 194.0 (W) x 75.0 (H) mm
Weight	1.4 Kg

ORION REP

Available in 3 colours ○ ● ●

The **ORION REP** will provide remote control, system status display and monitoring functions. All Fire, Fault, Test and Disabled conditions are displayed. User is able to control all functions at access Level's 1 and 2. Compliant with EN-54 part 2. Display and Control Functions are replicated and shown in the same manner as on the Orion Fire Detection Panel. Access to Level 2 is via a four digit code (same code as used on the Orion Conventional Panel).

It includes as standard an RS-232 interface. This unit is also compatible with all of GFE's standard data loop interfaces allowing the Orion Mini Rep panel to be interfaced to an ORION conventional panel using 4 different interfacing technologies:

- RS-232
- RS-485
- Fibre Optics
- TCP/IP (Specific for Orion Conventional Systems)

A maximum of 4 Orion Rep panels can be connected to a single Orion Conventional Fire Detection Panel. When using RS-232 interfaces only one repeater panel will offer both control and display of the system. The remainder of the repeater panels will only offer system status display. In order to have control from more than one Orion Mini Rep panels any of the other interfacing technologies can be used.

Mechanical Details

404.0 mm
272.0 mm
107 mm
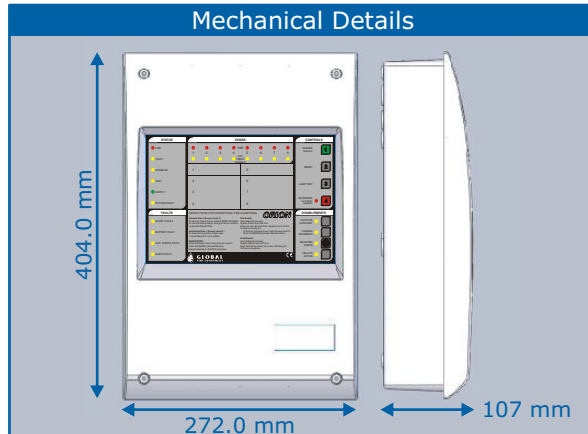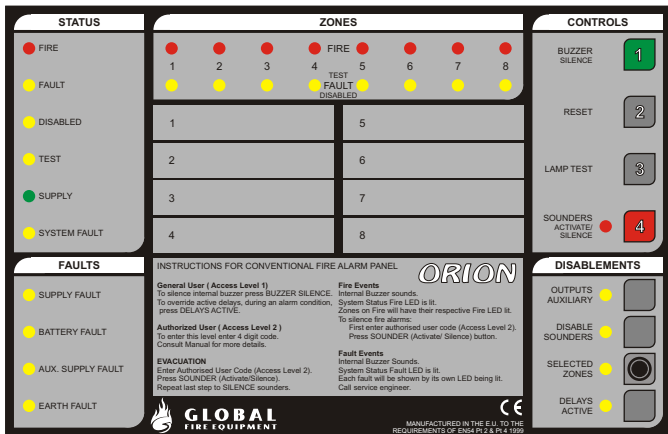
Order Code	ORION REP
Supply Voltage	28V DC nominal derived from Orion Aux. Supply O/P
Supply Current	40 mA
Connections	+Supply, -Supply, TX and RX
Repeater Network	RS-232 - 1 Display & Control 3 Display Only
	RS-485, Fibre Optics, TCP/IP - 4 units max. Display and Control
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 50 ºC
Dimensions	272 (W) x 404 (H) x 107 (D) mm
Weight	1.4 Kg

ORION-INT-232

Orion Repeater Interface

The ORION-INT-RS 232 interface module allows GFE's Orion Conventional Panels to be interfaced to Orion Mini-Reps and Orion-Reps using a 4-core data communication cable suitable for serial data transmission.

This interface is compatible with the following panels and repeaters:

1)   Orion Conventional Panel 2, 4 and 8 zones - version 1.5 and above
2)   Orion Rep and Orion Mini-Rep

The maximum distance between panel and repeater is 100 m.

Orion Panel

Orion Rep
or
Orion Mini-Rep
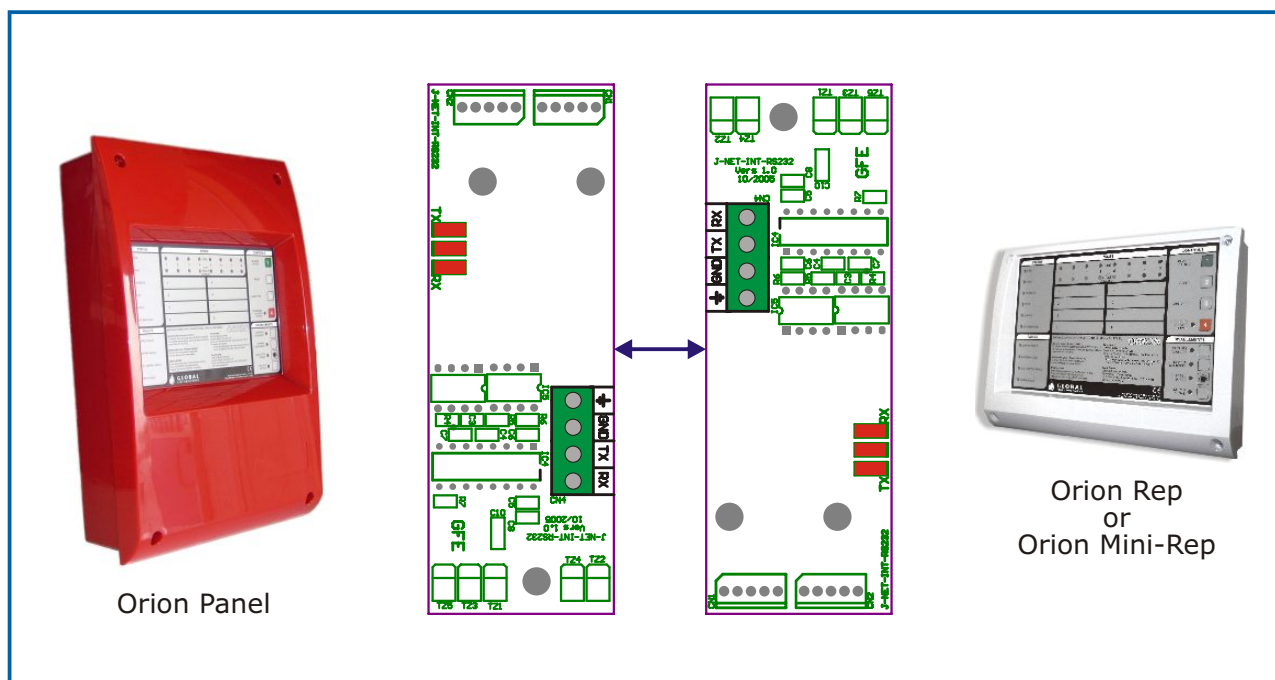
Technical Specifications	
Supply Voltage	28V DC nominal - range 17 to 30 V DC
Supply Current	5 mA
Software & Hardware Compatability	Orion Conventional Panel-version 1.5 and above
	Orion Mini-Rep and Orion Rep
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	100.3 (L) x 35.0 (W) x 18 (H) mm
Weight	20 g

Order Code	
ORION-INT-RS232	Orion RS-232 Repeater Interface

GFE-MPX-REL

Orion Multiplexed Zone Relay Outputs

Interface card that provides an individual zone in alarm indication via a voltage free change-over relay contact for each zone in an Orion conventional panel.There are 2 versions: 4 and 8 zone and they are always used for indication of ALARM/ FIRE conditions.

There is also a LED indication of ALARM condition for each individual zone. The LED RED indicator will be ON when the relay is active. These relay outputs are not monitored.

The DIL switch allows one relay output for a particular zone in the range 1 to 8 to be programmed as delayed and this is achieved using the first three switches (1 to 3) and the delay time will be provided in the range between 0-10 minutes using the next four positions (4-7) on the DIL switch. The module requires an external 24 V DC supply. Connection to the Orion PCB board is via a 5 way flat cable fitted with Molex type polarised connectors.

Switches 1-3
Selects delayed zone

Switches 4-7
Set the delay time.

ON   OFF

Switch 8 - Not used

ON (1)   OFF (0)

Zone	Time	
1 = 000	0 = 0000	4m = 0001
2 = 100	30s = 1000	4m30s = 1001
3 = 010	1m = 0100	5m = 0101
4 = 110	1m30s = 1100	6m = 1101
5 = 001	2m = 0010	7m = 0011
6 = 101	2m30s = 1010	8m = 1011
7 = 011	3m = 0110	9m = 0111
8 = 111	3m30s = 1110	10m = 1111

Technical Specifications	
Supply Voltage	28V DC nominal
Current - Quiescent	7 mA - No relays active
Current - Zones in Alarm	7mA + 15 mA per active relay
Timer	15 settings from 0 to 10 minutes
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 50 ºC
Dimensions	88.0 (L) x 72.5 (W) x 18.0 (H) mm
Weight	4 zone - 60 g 8 zone - 95 g

Order Code	
GFE-MPX-REL-4	Orion Multiplexed 4 Zone Relay Board
GFE-MPX-REL-8	Orion Multiplexed 8 Zone Relay Board

GFE-ADLI

Orion Analogue Loop Interface

The GFE-ADLI is used as an interface between an Orion conventional panel and any of GFE's analogue addressable systems. It allows the addressable panel to monitor and control the status of the conventional unit.

An 8 way DIL switch and a pluggable jumper are provided which will be used for setting the module address and the reporting mode. The module will transmit to the analogue addressable panel the status of each individual zone on the Orion Conventional Panel both in terms of Fire and Fault conditions. Alternatively the GFE-ADLI can provide a general indication per panel of both Fire or Fault conditions. When programmed to provide an individual indication per zone, the module will occupy a number of consecutive addresses corresponding to the total number of zones available on the Orion panel. If set for general indication, only one address will be occupied per module. The module is reported by the analogue addressable panel as a ZONE MONITORING UNIT. The unit is also equipped with 3 LEDs that will provide an optical indication of the status of the module, namely: Polling Rate (GREEN), Faults (YELLOW) and Fire (RED).

Finally the module allows the Orion panel to be controlled remotely from any of GFE's analogue addressable panels allowing the user to Silence/Resound Alarms (EVACUATION) and RESET.

Juno Net

Junior

Status Indicators

Loop

ADDRESS

Orion Panel
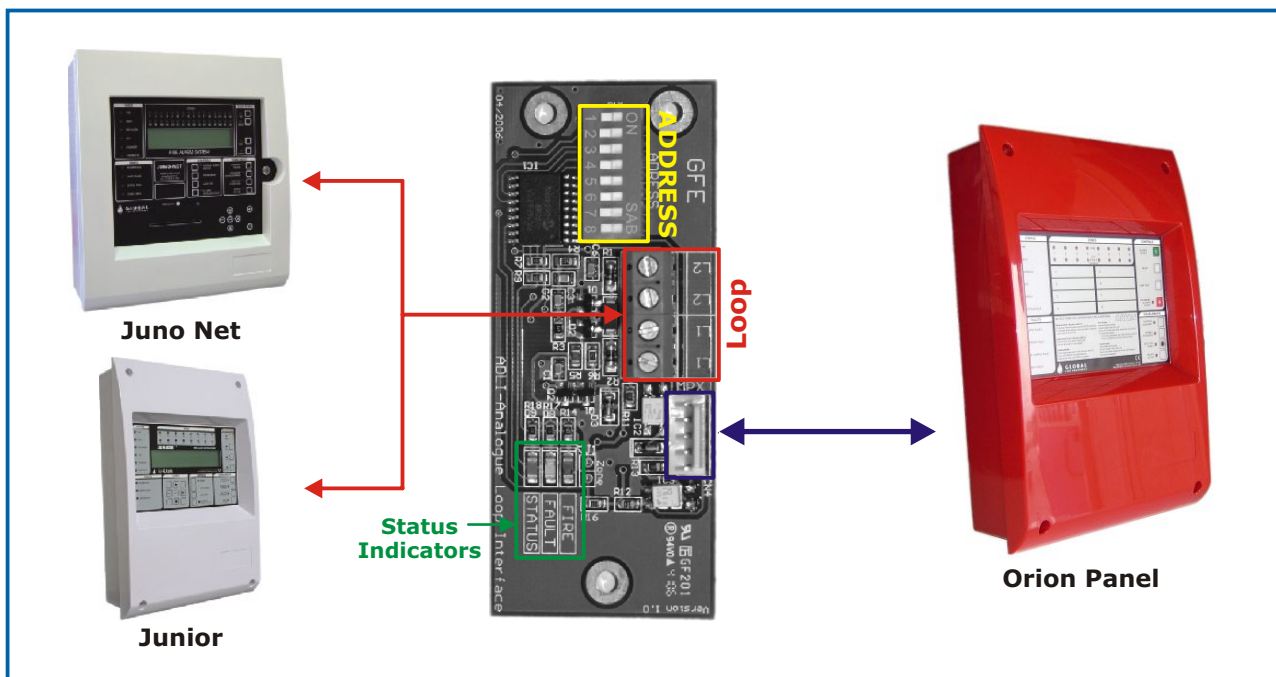
Technical Specifications	
Supply Voltage	Loop Powered - 17 to 30 V DC
Supply Current	1.2 mA (quiescent) - 3 mA (Alarm or Fault)
Software & Hardware Compatability	Orion Conventional Panel-version 1.5 and above Junior and Juno Net panels (all versions)
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	100.3 (L) x 35.0 (W) x 18 (H) mm
Weight	20 g

Order Code	
GFE-ADLI	Orion - Analogue Loop Interface

GFE-AD

Analogue Addressable Fire Detectors

Product Features:

- Dual LEDs for 360º visibility
- Advanced detection and communication protocols
- Easy installation and maintenance
- Sleek low-profile housing
- Durable sensor head, no need for replacement
- SMD circuit board design. High quality and reliability guaranteed
- Five years limited warranty
- Sensor Base Option: Regular GFE Detector Base or Deep Base

The GFE-AD series of Analogue Addressable Detectors have been designed to be fully compatible with the Global Fire Equipment range of intelligent control panels, Junior and Juno-Net.

Compliant to EN54 pt. 5 and 7 and certified by DIFT for CPD compliance, the GFE-AD series detectors are available in Optical, Heat and combined Smoke/Heat detector versions.

Technical Specifications	
Supply Voltage	Loop Powered 17-30 V DC
Current - Quiescent/ Surge	370/ 500 uA max.
Current - Device in Alarm	4 mA - Alarm LED Illuminated
Smoke Sensitivity	2.666 +/- %FT Obscuration (UL) - 0.10-0.157 dB/m (EN54)
Coverage	100 m^2 (Smoke) - 50 m^2 (Heat) - Height Dependent
Cable Size	0.5-2.5 mm^2
Reset/Star-Up Times	10/ 30 seconds max.
Colour/ Case Material	White / PolyCarbonate (PC) - FR 94V0
Oper. Temperature/ Max. Humidity	0 ºC to 50 ºC/ 95% RH Non-Condensing
Dimensions/ Weight	100.0 mm (Diameter) - 46.0 mm (Heigth) / 82 g (without base)

Order Code	Type	LED O/P	CE Marking	Approval	CPD No.
GFE-AD-SL	SMOKE	Y	Y	EN54 pt. 5	0845-CPD-232-1483
GFE-AD-HL	HEAT	Y	Y	EN54 pt. 7	0845-CPD-232-1482
GFE-AD-SHL	SMOKE & HEAT	Y	Y	EN54 pt. 5 & 7	0845-CPD-232-1484

GFE-AD-ISO

Standalone Loop Isolator

The GFE-AD-ISOLATOR has been designed to provide protection against short circuit faults on a GFE Junior or Juno-Net Analogue Addressable systems. The isolator protects the loop in the event of a short circuit by disconnecting the section of the loop where the short circuit has occurred. When the fault has been rectified, the isolating circuitry reconnects the affected part of the System.

The GFE-AD-Isolator is delivered in a White round junction box with knockouts that permit easy cable entry. Two Yellow LED indicators are provided to indicate on which side of the Device there is a short circuit (Loop In and Loop Out). This facilitates easy localisation of the fault as it is not necessary to look for two isolators to confirm the location of the affected section.

The GFE-AD-Isolator is polarity sensitive and can be damaged if connected with reverse polarity. Please be sure to note the polarity indicated at the wiring terminals.

Up to 32 devices may be fitted between each isolator (EN54) or 20 devices for BS5839 compliance.

Under Normal conditions the GFE-AD-Isolator provides a low resistance of 0.3Ω in either direction. When a short circuit condition is detected the isolator switches to the open state thereby isolating the Loop "IN" and Loop "OUT" lines. The isolated section is tested every 3 seconds with a voltage pulse and is automatically reconnected when the load resistance is greater than 175Ω.

Maximum no. of devices between 2 Isolators: 32 (En54 pt.2) - 20 (BS5839)

GFE-AD-ISO — Short Circuit Voltage 0V — GFE-AD-ISO — Loop In — Loop Out

Short Circuit LED indicators are ON
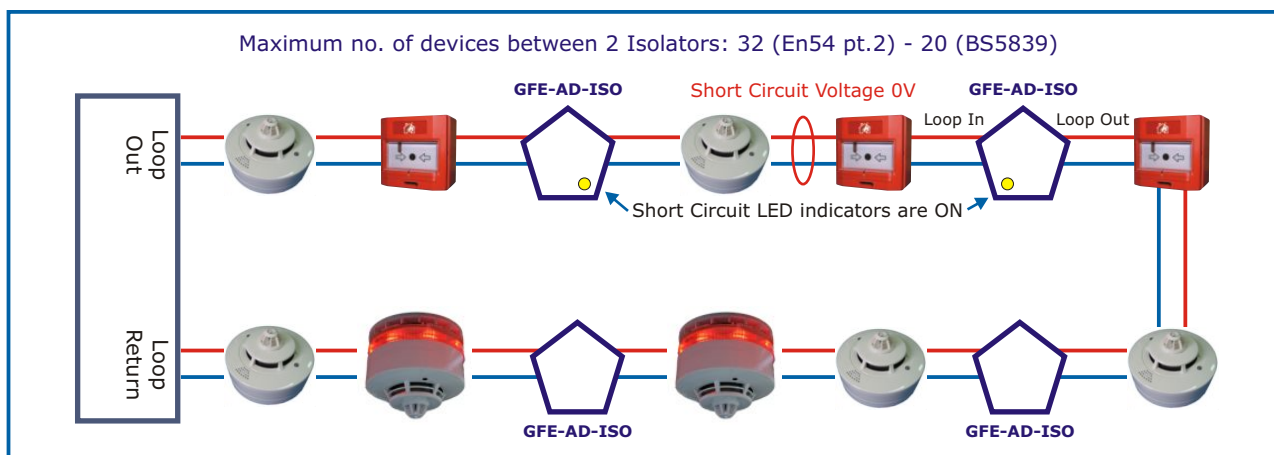
Technical Specifications	
Loop Operating Voltage	17V to 40 V
Loop Current - Quiescent	0.15 mA @ 28 V DC nominal
Loop Current - Isolated LED ON	6.2 mA @ 28 V DC nominal
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	100.0 mm (D) x 40.0 mm (H)
Weight	90 g

Order Code	
GFE-AD-ISO	Standalone Loop Isolator

REM-IND

Flashing Remote Indicator

This remote indicator can be used with any fire alarm detector, be it of the conventional or addressable types, to indicate remotely the activation of the relevant detection device.

Its main characteristics are the high visibility due to the alternate blinking of two high efficiency LEDs and the wide operating voltage range (3 to 15V DC) with a minimum 300 uA current consumption. The connections of this device are non-polarised.

This unit comes complete with a face plate compatible with standard flush mounting boxes.

Technical Specifications	
Supply Voltage	5-15 V DC
Supply Current	300 uA Quiescent - 15 mA max. LED ON
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	68 (L) x 33 (W) x 25 (H) mm
Weight	20 g

Order Code	
REM-IND	Remote Indicator
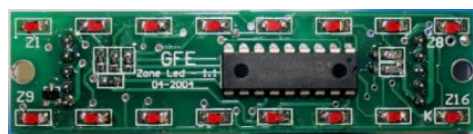
MPX-LED

Multiplexed Zone LED Board

Interface card that provides in any of GFE's Analogue Addressable Fire Detection Panels a LED indication of FIRE/ FAULT condition for each individual zone. The LED RED indicator will be ON when the zone is in FIRE condition.

This module operates in three different modes:

● 16 Zone Blocks - Indication of Fire for each zone in the range 1 to 384
● 8 Zone Blocks - Indication of Fire and Fault for each zone in the range 1 to 384
● System Status - Each LED output is assigned to a specific System Status indication: Fire, Fault, Pre-Alarm, Test, Disabled, Sounders ON, Auxiliary Outputs and Sounders Disabled

The module requires a connection to either Juno Net or Junior Panels via a 5 way flat cable fitted with polarised connectors. And it should be connected to the MPX output of either panel.

Technical Specifications	
Supply Voltage	5V DC nominal
Current - Quiescent	2 mA - No LEDS active
Current - Zones in Alarm	60 mA - Max Current during LAMP TEST @ 5 V DC
Zone Selection	Solder Links
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	78.5 (L) x 20.5 (W) x 16.0 (H) mm
Weight	10 g

Order Code	
16 ZONE LED BOARD	Junior and Juno Net Multiplexed 16 Zone LED Board

GFE-C

Conventional Fire Detectors

GLOBAL FIRE EQUIPMENT

Product Features:

- Dual LEDs for 360º visibility
- Advanced detection and discrimination algorithms
- Easy installation and maintenance
- Sleek low-profile housing
- Durable sensor head, no need for replacement
- SMD circuit board design. High quality and reliability guaranteed
- Integrated heat detector for GFE-SH-2L
- Sensor Base Option: Regular 4 or 5 inch base

The GFE-C series of Conventional Fire Detectors have been designed to be fully compatible with Global Fire Equipment's range of conventional control panels.

Compliant to EN54 pt. 5 and 7 and certified by DIFT for CPD compliance, the GFE-C series detectors are available in Optical, Heat and combined Smoke/Heat detector versions.

Technical Specifications	
Supply Voltage	12-30 V DC
Current - Quiescent/ Surge	100/ 150 uA max.
Current - Device in Alarm	80 mA Maximum - Alarm Load 340 Ohms + 3 Volt Drop
Smoke Sensitivity	2.31 +/- 1.37%FT Obscuration (UL) - 0.10-0.14 dB/m (EN54)
Coverage	100 m^2 (Smoke) - 50 m^2 (Heat) - Height Dependent
Cable Size	0.5-2.5 mm^2
Reset Time	1 second max.
Colour/ Case Material	White / PolyCarbonate (PC) - FR 94V0
Oper. Temperature/ Max. Humidity	0 ºC to 50 ºC/ 95% RH Non-Condensing
Dimensions/ Weight	100.0 mm (Diameter) - 46.0 mm (Heigth) / 82 g (without base)

Order Code	Type	LED O/P	CE Marking	Approval	CPD No.
GFE-S-2L	SMOKE	Y - 15 mA	Y	EN54 pt. 5	0845-CPD-232-1489
GFE-H-2L	HEAT	Y - 15 mA	Y	EN54 pt. 7	0845-CPD-232-1488
GFE-SH-2L	SMOKE & HEAT	Y - 15 mA	Y	EN54 pt. 5 & 7	0845-CPD-232-1490
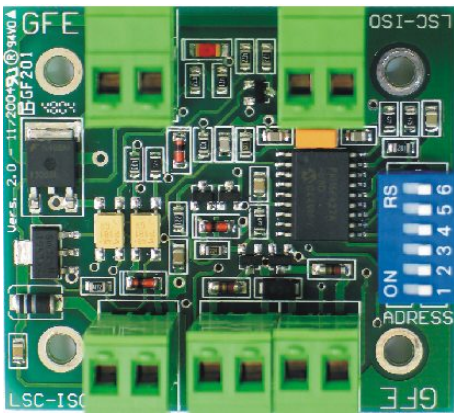
LSC-ISO

Loop Sounder Control Module
(with 1Amp monitored output)

The LSC-ISO Module is a fully monitored interface which is used to connect a line of conventional sounders to the Global Fire Addressable control panel via the detection loop.

The module requires an external 24V DC power supply and can supply up to 1A at the sounder output which is monitored for both open and short circuit faults. A 10K ohm end of line resistor is connected to the last sounder to provide line monitoring.

The LSC-ISO uses the Global Fire proprietary sounder control protocol and therefore is only compatible with the GFE range of control panels.

The output can be programmed as pulsed or continuous. A maximum of 32 LSC-ISO can be connected to each Loop using address numbers 94 -125 inclusive.

Also available complete with housing. Address setting is via switches 1 to 5 of the 6 way DIL switch where all off represents address 94.

Note: Maximum 1 Amp current drive for conventional sounders per module.

Only use polarized 24V DC sounders

✳ 10K Ohm - End of Line Resistor

Ext. Supply 24 V DC for SOUNDERS

Address Setting D.I.L. Switch

Switches 1-5
Address Setting Range 94 - 125
Switch 6
Not used

ON ... OFF
1 2 3 4 5 6

LOOP IN

LOOP OUT
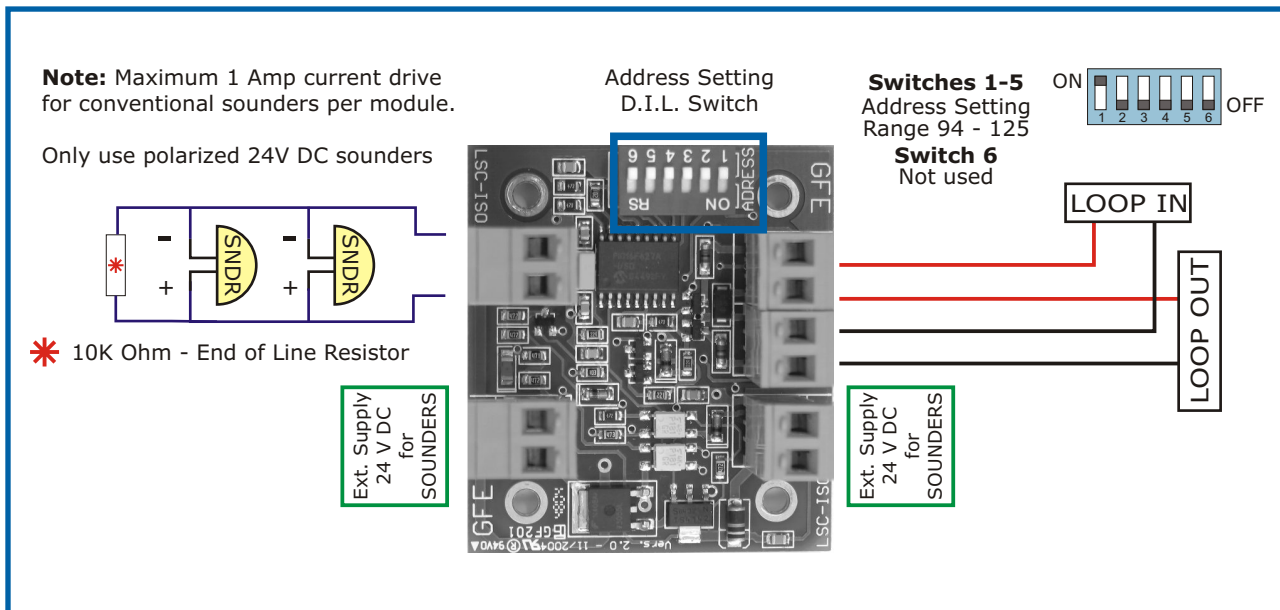
Technical Specifications	
Supply Voltage	Loop Powered - 17V to 30 V DC
Loop Current	1.0 mA (Quiescent or OC/ SC FAULT) - 1.65 mA O/P active
Ext. Supply Current @ 24V DC	1.2 mA Quiescent - 1 Amp maximum for sounders.
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	87.8 (L) x 72.7 (W) x 15.0 (H) mm
Weight	25 g - unboxed

Order Code	
LSC-ISO	Loop Sounder Control Unit

INPUT

Addressable Input Unit

The Addressable Input Module is a fully monitored device which permits the interfacing of third party equipment with the Fire Alarm Control panel using normally open dry contact connections.

The connection to the input is monitored for fault (open or short circuit) and Alarm conditions.

The interface is used to monitor the contacts of an external system which must be interfaced to the Fire Alarm System, for example a Flow Switch in a sprinkler system to indicate if the sprinklers have been activated or extinguishant level monitoring in Gas Extinguishing systems etc.

The module is powered by the detection loop and is available as an electronic module with four fixing holes or as a boxed unit for field installation.

Switches 1-7
Address Setting
Range 1 - 125

Switch 8
Not used

Resistance values

Fault
Short circuit - 2K2
Open Circuit - 47K
Normal - 8K2 to 47K
Fire - 2K2 to 8K2

END OF LINE MONITORING RESISTOR 22K

ALARM RESISTOR (4K7) IN SERIES WITH NORMALLY OPEN CONTACT

LOOP IN

LOOP OUT

22K   4K7

Technical Specifications	
Supply Voltage	Loop Powered - 17V to 30 V DC
Loop Current - Quiescent	0.75 mA
Loop Current - Alarm LED illuminated	2.5 mA
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	58.1 (L) x 52.1 (W) x 20.0 (H) mm
Weight	20 g - unboxed

Order Code	
INPUT	Addressable Input Module

I/O ISO

Addressable Input/ Output Module

The Addressable Input/Output Module is a fully monitored device which permits the interfacing of third party equipment with the Fire Alarm Control panel using normally open dry contact connections while also providing a changeover output relay to control ancillary equipment.

The connection to the input is monitored for fault (open or short circuit) and Alarm conditions.
The output relay can be powered from the detection loop (default) or optionally by an external 24Vdc supply. Relay operation is confirmed by an onboard yellow LED.

The interface is used to monitor the contacts of an external system which must be interfaced to the Fire Alarm System, for example a Flow Switch in a sprinkler system to indicate if the sprinklers have been activated or extinguishant level monitoring in Gas Extinguishing systems etc.

The output relay can be programmed to close fire doors, activate smoke removal systems etc. The factory default setting is for the relay to receive its operating power from the Loop. Opening a link on the PCB allows the use of external power which is optically isolated from the detection loop. This option is recommended in the event that many I/O units are connected to the same Loop. The Addressable I/O module is available as an electronic module with four fixing holes or as a boxed unit for field installation.

Switches 1-7
Address Setting
Range 1 - 125

Switch 8
Not used

Resistance values

Fault
Short circuit - 2K2
Open Circuit - 47K
Normal - 8K2 to 47K
Fire - 2K2 to 8K2

END OF LINE MONITORING RESISTOR 22K

ALARM RESISTOR (4K7) IN SERIES WITH NORMALLY OPEN CONTACT

OUTPUT
Change Over Relay
COM- NO - NC
Contact Rating
1A @ 50V DC Res.

Ext. Supply 24 V DC

Remove solder links when relay powered ext. 24V DC supply

Note: When relay powered directly from loop maximum of 6 IO-ISO modules per loop.

Technical Specifications	
Supply Voltage	Loop Powered - 17V to 30 V DC
Loop Current - Quiescent	0.75 mA
Loop Current - Alarm LED illuminated	2.45 mA - 12.0 mA with Relay Active (loop powered)
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	58.1 (L) x 52.1 (W) x 20.0 (H) mm
Weight	30 g - unboxed

Order Code	
IO-ISO	Addressable Input/Output Module

3 I/O

Addressable Triple Input/Output Module

The Triple Input/Output Module is a fully monitored device which permits the interfacing of third party equipment with the Fire Alarm Control panel using three normally open dry contact connections while also providing three changeover output relays to control ancillary equipment.

The connections to the input are monitored for fault (open or short circuit) and Alarm conditions.

The output relays require an external 24Vdc supply. Relay operation is confirmed by onboard red LEDs, a yellow general Fault LED is also provided. The 3 I/O occupies three consecutive addresses on the detection Loop.

The interface is used to monitor the contacts of an external system which must be interfaced to the Fire Alarm System, for example a Flow Switch in a sprinkler system to indicate if the sprinklers have been activated or extinguishant level monitoring in Gas Extinguishing systems etc.

The output relays can be programmed to close fire doors, activate smoke removal systems etc. An external 24 volt DC power supply is required to power the relays, this supply is optically isolated from the Address Loop. The Addressable 3 I/O module is available as an electronic module with four fixing holes.

Switches 1-7
Address Setting
Range 1 - 123
Switch 8
Not used

Each module uses 3 consecutive addresses

ON [ ] OFF
1 2 3 4 5 6 7 8

Ext. Supply 24 V DC

3 OUTPUTS
Change Over Relay
COM-NO-NC
Contact Rating
1A @ 50V DC Resistive

Note: When output operation is required, external supply 24V DC must be applied.

Resistance values

Fault
Short circuit - 2K2
Open Circuit - 47K
Normal - 8K2 to 47K
Fire - 2K2 to 8K2

E.O.L monitoring Resistor 22K
Alarm Resistor (4K7) in series with N/O Contact

LOOP IN
LOOP OUT

Technical Specifications	
Supply Voltage	Loop Powered - 17V to 30 V DC
Loop Current	1.2 mA (Quiescent) - 6.2 mA all I/P's in ALARM
Ext. Supply Current @ 24V DC	5.3 mA Quiescent - 15 mA per Relay Active
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	87.8 (L) x 72.7 (W) x 20.0 (H) mm
Weight	72 g - unboxed

Order Code	
3 I/O	Triple Input/ Output Module

CCPI

Conventional Control Panel Interface

The Control panel interface provides eight individually addressed normally open inputs and two pre-defined outputs. The interface permits the connection of a conventional fire alarm control panel with up to eight Zones to the Global Fire Analogue Addressable Fire Control panel via the detection loop.

The outputs are pre-defined as Silence and Reset and allow these functions on the conventional panel to be executed from the Addressable system. An external 24 V DC supply is required to power the onboard relays. This supply is optically isolated from the detection Loop. The silence and reset relay operations are indicated by two green LEDs.

Each CCPI occupies 8 addresses on the Loop even when not all inputs are used. See address setting chart below.

Switches 1-4
Address Setting
Each address uses 8 consecutive addresses

ON [   ] OFF
1 2 3 4

2 OUTPUTS (NO)
Contact Rating 1A @ 50V DC Resistive

O/P A : Reset
O/P B : Silence

Ext. Supply 24 V DC

INPUTS A-H
Zones 1-8
driven by
Zone Repeater Outputs
of
Conventional Panel

LOOP IN

LOOP OUT
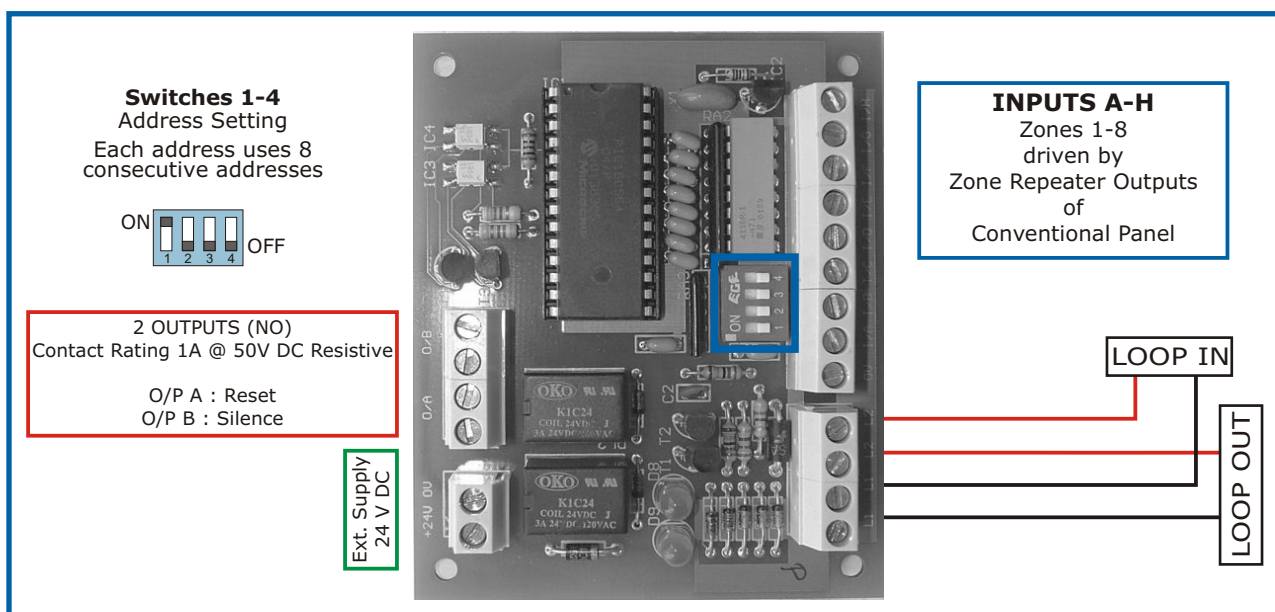
Technical Specifications	
Supply Voltage	Loop Powered - 17V to 30 V DC
Loop Current	0.7 mA
Ext. Supply Current @ 24V DC	3 mA Quiescent - 15 mA Max.
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	88 (L) x 74 (W) x 20.0 (H) mm
Weight	60 g - unboxed

Order Code	
CCPI	Conventional Control Panel Interface

ZMU

Addressable Zone Monitoring Unit

The ZMU is a fully monitored interface module which is used to connect a number of current limited conventional detectors to the Global Fire Addressable control panel via the detection loop. These detectors are then seen as one address at the addressable control panel.

The module can be powered from the Loop or optionally by an external 24V DC power supply in which case, the jumpers J1 and J2 should be removed. The detector line is monitored by a 4K7 resistor end of line (e.o.l.) resistor. A bi-colour LED is used to signal the status of the module.

Green	Normal
Red	Alarm
OFF	Fault

The external power, if used, is also monitored with the module reporting a Fault if external power is not present. Since the current drawn from the loop can be significant, particularly in Fire and Short Circuit Fault conditions, the number of ZMUs that can be connected to a loop is limited to six depending on Loop load.

✱ End of Line Resistor
4K7 Ohms 1/4 Watt Resistor

RES= Alarm Resistor in series with dry NO contact
range 270 Ohms to 820 Ohm (1 Watt)

Switches 1-7
Address Setting
Range 1 - 125
Switch 8
Not used

LOOP IN

LOOP OUT

Note: Maximum 20 conventional devices per zone.

Note: Remove jumpers when ext. 24V DC supply is applied.

Maximum 6 ZMU's per Loop if conventional zone is powered directly from Loop
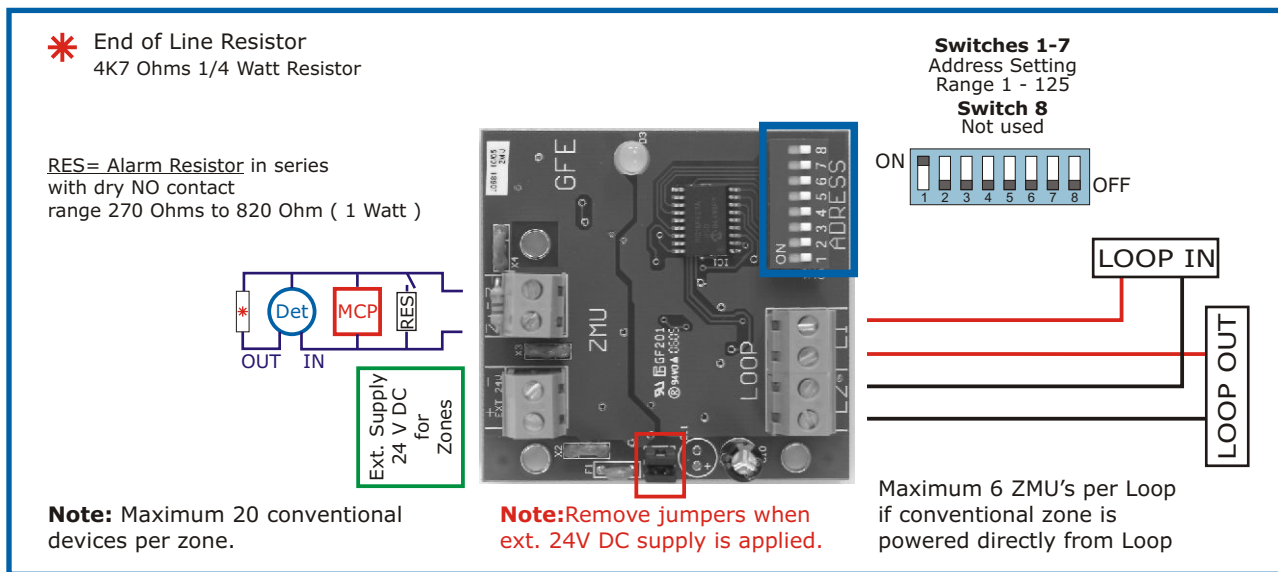
Technical Specifications	
Supply Voltage	Loop Powered - 17V to 30 V DC
Loop Current - Loop Powered	12 mA (Quiescent) - 34.5 mA (FIRE) - 4.5mA (OC) - 42.5 mA (SC)
Loop Current - Zone Supply External	4.9 mA (Quiescent) - 5.1 mA (FIRE) - 1.9mA (FAULT)
External Zone Supply	24V DC
Ext. Supply Current @ 24V DC	7 mA Quiescent - per zone OC/ SC/ FIRE - 2.5/ 60/ 29 mA
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	60.0 (L) x 58.0 (W) x 20.0 (H) mm
Weight	28 g - unboxed

Order Code	
ZMU	Zone Monitoring Unit

QUAD-ZMU

Addressable QUAD Zone Monitoring Unit
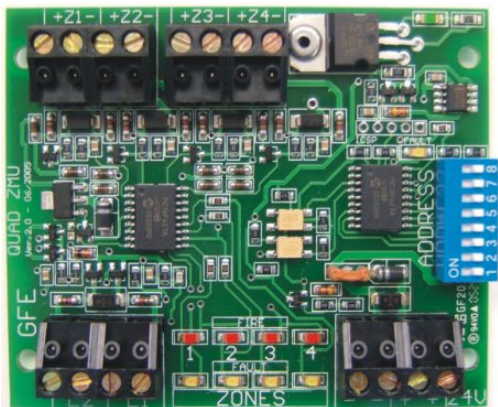
The QUAD-ZMU is a fully monitored interface module which is used to connect up to four individually addressed zones of current limited conventional detection devices to the Global Fire Addressable control panel via the detection loop.

The module requires an external 24V DC power supply. Active End of Line Monitoring with BS5839 Detector Removal compliance when Diode bases are used (New Feature).

The detection Zones and their supply voltage are optically isolated from the addressable detection loop which allows the use of a local power supply. If that supply fails, a fault condition is reported at the control panel. The status of each zone is indicated by two LEDs. A red LED signals Fire, Yellow indicates Fault on that zone. The normal state is indicated by neither LEDs being illuminated. A Green LED indicates the presence of 24 Volts. Irrespective of how many Zones are actually used, each QUAD-ZMU occupies four consecutive addresses on the loop.

＊ Active End of Line Capacitor
10 uF/ 50V Bipolar
Electrolytic Capacitor

RES= Alarm Resistor in series
with dry NO contact
range 270 Ohms to 1 K Ohm

Ext.Supply
24V DC
for
Zones

Ext. Sup.
FAULT

Switches 1-7
Address Setting
Range 1 - 122
Switch 8
Not used

Each module uses 4
consecutive addresses

LOOP IN

LOOP OUT

Note: Maximum 32 conventional devices per zone.

Maximum 31 QUAD-ZMUs per Loop
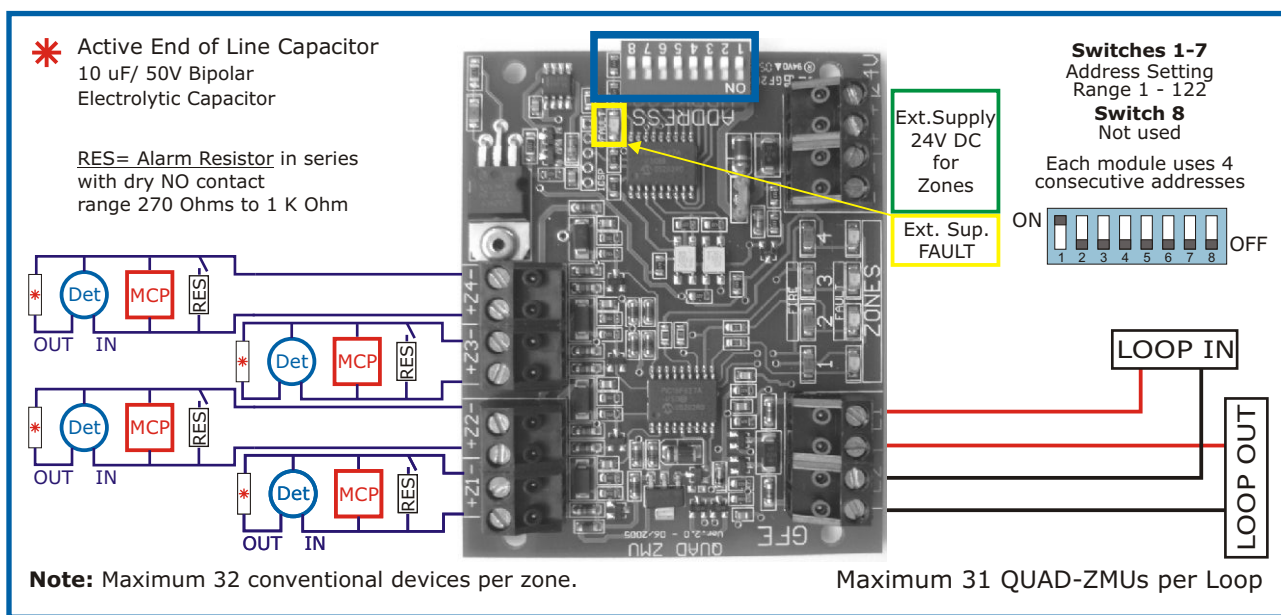
Technical Specifications	
Supply Voltage	Loop Powered - 17V to 30 V DC
Loop Current	1.6 mA
Ext. Supply Current @ 24V DC	5.3 mA Quiescent - per zone OC/ SC/ FIRE - 7/ 33/ 23 mA
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	87.8 (L) x 72.7 (W) x 15.0 (H) mm
Weight	46 g - unboxed

Order Code	
QUAD-ZMU	Addressable Quad Zone Monitoring Unit

MAM

Manually Addressable Module

The MAM allows the connection and addressing of conventional detectors, call points, Micro Input, Micro Output and conventional Sounder/ Beacon.

With its small physical size and convenient 8 way DIL switch for address setting and configuration, the MAM provides the facility to upgrade all the components of a conventional system to a full addressable system, ideal for retrofit installations. The MAM is fully compatible with all our standard addressable modules, addressable sounders, addressable manual call points and GFE detectors facilitating extensions to existing systems. To assist easy identification, the MAM is supplied in 3 coloured plastic housings:

Red: Manual call point interface / Micro Input Module
Mustard: Micro Output Module / LOOP SOUNDER/ BEACON Controller
White: Smoke / Heat Detector interface.

Device type selection is by means of switch 8 on the DIL. Additionally the MAM-LSC can be set as a sounder or beacon driver using switch 7. In Sounder mode the output is removed when a Silence Alarm signal is received from the control panel. In Beacon mode the output remains active until the system is reset.
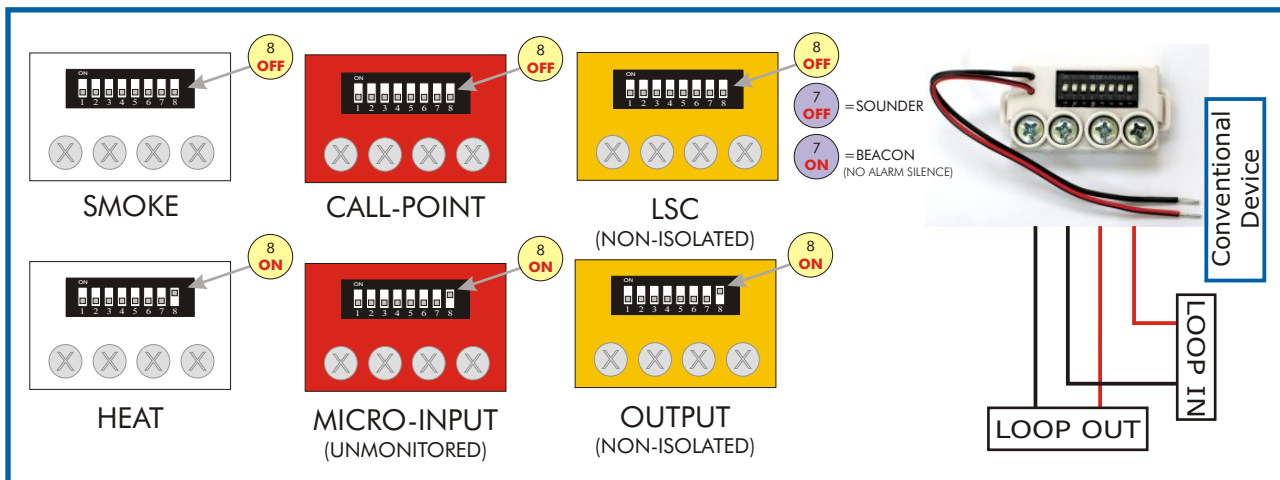
Technical Specifications	
Supply Voltage	Loop Powered - 17V to 30 V DC
Loop Current - Quiescent	1.1 mA
Loop Current - Alarm	12 mA
Address Range	1-125 (Detectors, MCP, I/O) 94-125 (Sounder/ Beacons)
Protection Category	IP44
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	48 (L) x 24 (W) x 12 (H) mm
Weight	18 g
Order Code	
MAM	Manually Addressable Module

SAM

Self Addressable Module

This tiny, very low cost, module provides any conventional detector or Manual Call Point with an address without the inconvenience of using a manual addressing unit or DIP switch. The SAM is simply attached to the conventional device and the detector address is automatically assigned to each SAM by the JUNO-NET or JUNiOr control panel during commissioning and testing. A SAM based system tolerates loop branches and can monitor loop interruptions and head removal.

SAM is ideal for low budget retrofits where fire point identification is needed but the cost of fitting a fully analogue system is too high. SAM is also an option in low budget installations that would normally be implemented with 4 to 8 zone conventional systems. It gives you the cable savings possible with an addressable system, together with the loop sounder capability but without the extra costs of analogue addressable heads.

Compatible with most conventional detectors, the SAM is fully encapsulated in a plastic case, unobtrusive and easy to connect to the detector base or manual call point.
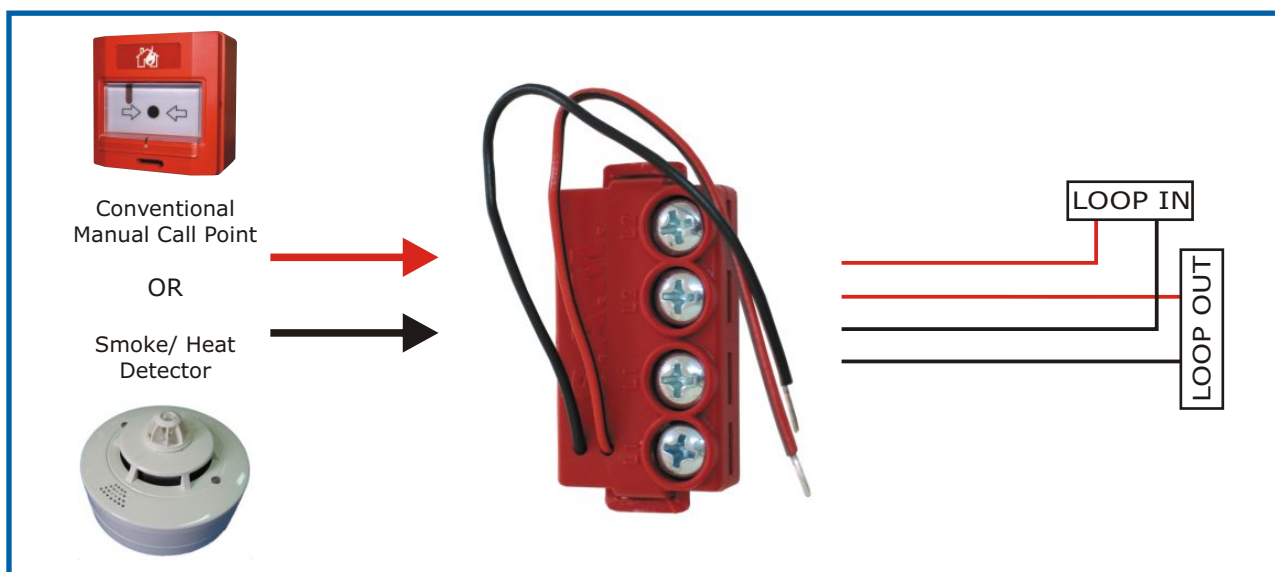
Conventional Manual Call Point

OR

Smoke/ Heat Detector

LOOP IN

LOOP OUT

Technical Specifications	
Supply Voltage	Loop Powered - 17V to 30 V DC
Loop Current - Quiescent	1.1 mA
Loop Current - Alarm	12 mA
Address Range	1-125
Protection Category	IP44
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Dimensions	48 (L) x 24 (W) x 10 (H) mm
Weight	18 g

Order Code	
SAM	Self Addressable Module

VULCAN-2A

Addressable Sounder - Beacon

With 15 different variations, the Vulcan 2 brings an exciting flexibility to the Global Fire Equipment range of warning devices and interfaces. Up to 96 Vulcan 2 devices can be connected to a single Loop depending on Loop Loading. In the case of combined Sounder and Beacon devices the maximum number of devices should not exceed 64.

The addressable Vulcan 2 is available as an Addressable Sounder, Beacon or combined Sounder / Beacon which may be field configured as a Shadow Sounder / Beacon or Auxiliary Sounder / Beacon. There are also versions available incorporating a loop isolator.

All Vulcan 2 devices have dip-switch Address setting while Tone selection is via a jumper. Shadow Sounder and Auxiliary Sounder settings are also achieved using the 8 way dip switch and a jumper respectively. There is also a potentiometer which may be used to adjust the sound level if required.

Normally the Vulcan 2 will be used in conjunction with a detector however a White or Transparent lid is available as an option for the Addressable Vulcan 2.

Shadow Sounder / Beacon

The Vulcan 2 Addressable Sounder / Beacon can be configured as a Shadow Sounder/ Beacon using the 8 way dip switch provided. A Shadow Sounder / Beacon does not have an individual address thus freeing up addresses for more detection devices. Shadow sounders / Beacons do not report back to the control panel so their presence on the Loop is not monitored, however they do draw current from the Loop and must be included in Loop load calculations. The number of combined Sounder / Beacons connected to a Loop should not exceed 64 or 96 in the case of a Beacon or Sounder only.

Auxiliary Sounder / Beacon

When the Vulcan 2 is configured as an Auxiliary device the Sounder / Beacon shares the same address as the detector with which it is co-located. Configuration of this mode is done via the jumper provided. When operating in this mode the Vulcan 2 monitors the Address loop for the command from the control Panel to the detector to illuminate it's LED. When this command is received the Vulcan 2 is also activated. If a Fire is confirmed the remaining sounders may be activated using the Evacuate command. This reduces the inconvenience to other guests in the event of a false alarm while at the same time giving early warning to the occupant of the room in the case of an actual Fire event. Pressing Sounder silence at the panel silences all active sounders.

The maximum number of Auxiliary Sounder/Beacons is 63 and they can be allocated between address 1 and 63.
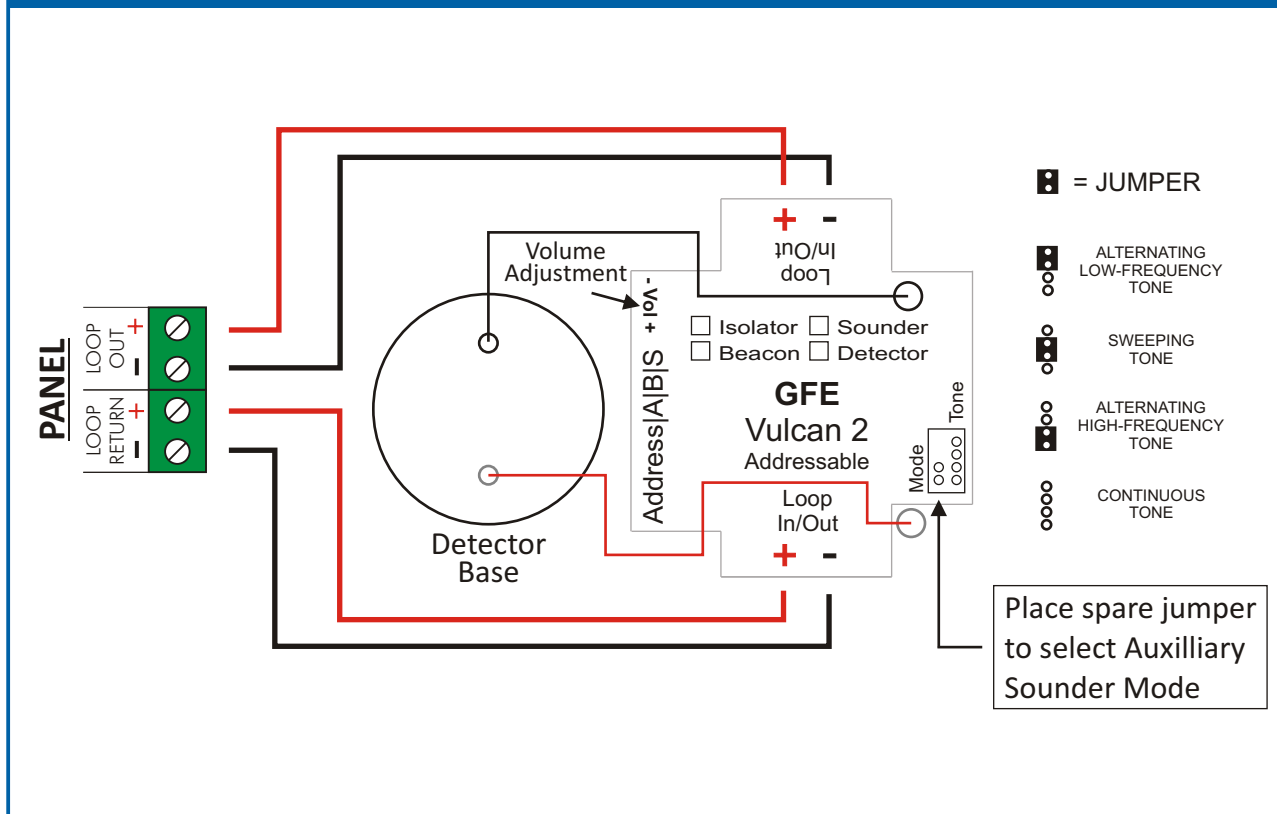
VULCAN 2 - STAND ALONE	INTERNAL VIEW

GLOBAL FIRE EQUIPMENT

CONNECTIONS AND TONE CONFIGURATIONS

= JUMPER

ALTERNATING LOW-FREQUENCY TONE

SWEEPING TONE

ALTERNATING HIGH-FREQUENCY TONE

CONTINUOUS TONE

PANEL — LOOP OUT +/− — LOOP RETURN +/−

Volume Adjustment

Detector Base

Loop In/Out +/−

- Vol +

Address|A|B|S

☐ Isolator ☐ Sounder
☐ Beacon   ☐ Detector

GFE Vulcan 2 Addressable

Mode

Tone

Loop In/Out +/−

Place spare jumper to select Auxilliary Sounder Mode

Technical Specifications	
Supply Voltage	Loop Powered - 17V to 30 V DC
Loop Current - Quiescent	1.1 mA
Loop Current -Alarm- 800 to 1000 Hz	4 mA sounder only - 5.5 mA inc. Beacon
Loop Current -Alarm- 2.0 to 3.0 KHz	7 mA sounder only -8 mA inc. Beacon
Loop Current -Alarm- Beacon	2.5 mA
Loop Current -Isolator	150 uA - added to device quiescent/alarm current load
Sounder Output - Low Freq.	84 dB @ 1 m
Sounder Output - High Freq.	88 dB @ 1 m
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Enclosure - Material	White ABS - Transparent PC - FR rating 94V0
Dimensions	100 mm (D) x 29 mm (H) - w/ LID 37.5 mm (H)
Weight	100 g or 120 g with lid

Order Code	
VULCAN 2 AS	Vulcan 2 - Addressable Sounder
VULCAN 2 ASI	Vulcan 2 - Addressable Sounder - Isolator
VULCAN 2 ASB	Vulcan 2 - Addressable Sounder/Beacon
VULCAN 2 ASBI	Vulcan 2 - Addressable Sounder/Beacon - Isolator
VULCAN 2 AB	Vulcan 2 - Addressable Beacon
VULCAN 2 ABI	Vulcan 2 - Addressable Beacon - Isolator
VULCAN 2 L	Vulcan 2 - LID - WHITE
VULCAN 2 LT	Vulcan 2 - LID - TRANSPARENT

VULCAN-2D

Detector Sounder - Beacon

GLOBAL FIRE EQUIPMENT

With 15 different variations, the Vulcan 2 brings an exciting flexibility to the Global Fire Equipment range of warning devices and interfaces. Up to 96 Vulcan 2 devices can be connected to a single Loop depending on Loop Loading. In the case of combined Sounder and Beacon devices the maximum numberof devices should not exceed 64.

The addressable Vulcan 2 is available as a Detector Sounder, Beacon or combined Sounder/Beacon. This particular device permits a conventional detector to be connected to the addressable loop via the Sounder and/or Beacon. There are also versions available incorporating a loop isolator.

All Vulcan 2 devices have dip-switch Address setting while Tone selection is via a jumper. Shadow Sounder and Detector Sounder settings are also achieved using the 8 way dip switch and a jumper respectively. There is also a potentiometer which may be used to adjust the sound level if required.

Normally the Vulcan 2 will be used in conjunction with a detector however a White or Transparent lid is available as an option for the Addressable Vulcan 2.

The number of Detector Sounders/ Beacons connected to each Loop is dependent on Loop loading and in any case the total number/ loop should not exceed 64. If only detector sounders are used then this number may be increased to 96 sounders per loop. This includes normal addressable sounder beacons placed between address 94 and 125. These are fully programmable in sounder groups. Detector Sounders are always placed between address 1 and 63 and cannot be included in sounder groups. Device will report to the panel as either a SMOKE or HEAT detector depending on MODE jumper position.

VULCAN 2 - DETECTOR SOUNDER	INTERNAL VIEW
Addressable Sounder	
Conventional Detector	

CONNECTIONS AND TONE CONFIGURATIONS

= JUMPER

ALTERNATING LOW-FREQUENCY TONE

SWEEPING TONE

ALTERNATING HIGH-FREQUENCY TONE

CONTINUOUS TONE

Place spare jumper to select Detector Sounder Mode

Smoke Detector

Heat Detector
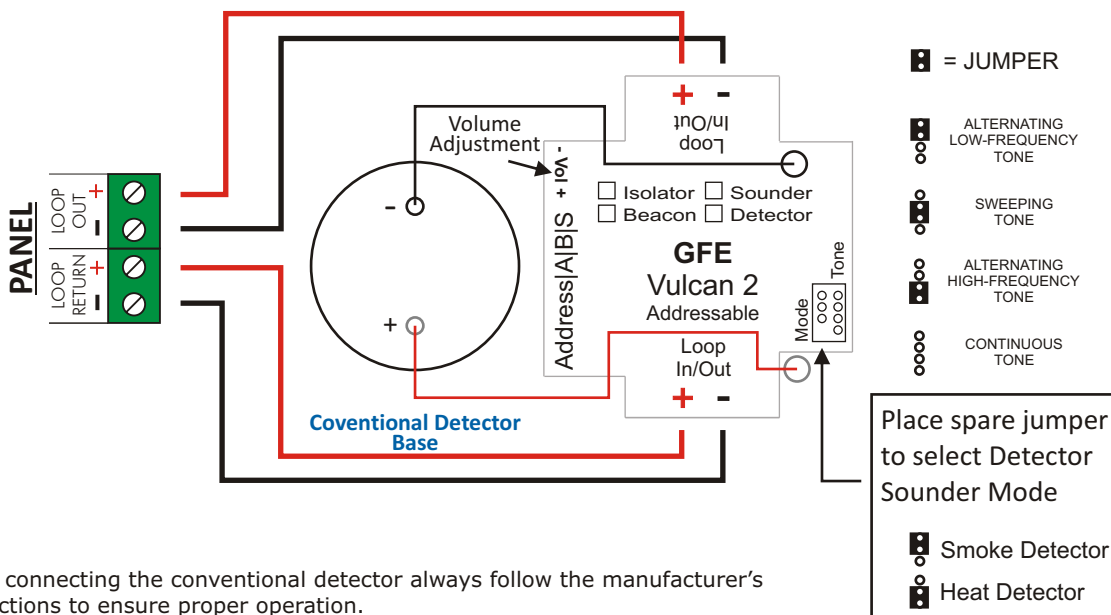
When connecting the conventional detector always follow the manufacturer's instructions to ensure proper operation.

Note: If no jumper is placed on the mode select header, the device will behave like a normal addressable sounder. In this mode no detectors, conventional or analogue addressable can be connected to this sounder unit. The shadow sounder mode will still be available by placing switch no. 8 in the OFF position.

Technical Specifications	
Supply Voltage	Loop Powered - 17V to 30 V DC
Loop Current - Quiescent	1.1 mA + conventional detector quiescent current
Loop Current -Alarm- 800 to 1000 Hz	4 mA sounder only - 5.5 mA inc. Beacon
Loop Current -Alarm- 2.0 to 3.0 KHz	7 mA sounder only -8 mA inc. Beacon
Loop Current -Alarm- Beacon	2.5 mA
Loop Current -Isolator	150 uA - added to device quiescent/alarm current load
Conventional Detector-Alarm Current	12 mA - add to addressable device alarm loop current
Sounder Output - Low/ High Freq.	84/ 88 dB @ 1 m
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Enclosure - Material	White ABS - Transparent PC - FR rating 94V0
Dimensions	100 mm (D) x 29 mm (H) - w/ LID 37.5 mm (H)
Weight	100 g or 120 g with lid

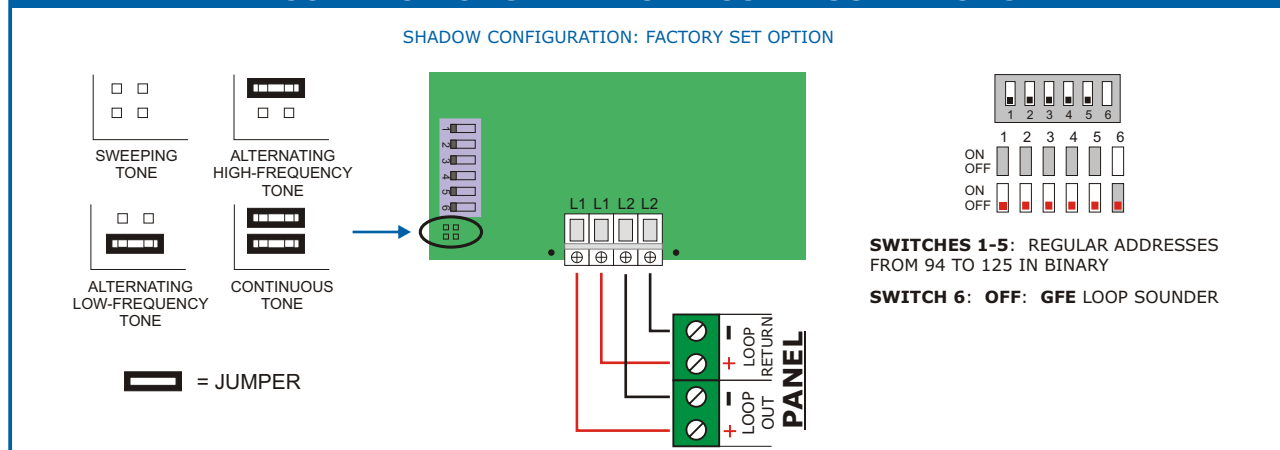| Order Code	
VULCAN 2 DS	Vulcan 2 - Addressable Detector Sounder
VULCAN 2 DSI	Vulcan 2 - Addressable Detector Sounder - Isolator
VULCAN 2 DSB	Vulcan 2 - Addressable Detector Sounder/Beacon
VULCAN 2 DSBI	Vulcan 2 - Addressable Detector Sounder/Beacon - Isolator
VULCAN 2 DB	Vulcan 2 - Addressable Detector Beacon
VULCAN 2 DBI	Vulcan 2 - Addressable Detector Beacon - Isolator
VULCAN 2 L	Vulcan 2 - LID - WHITE
VULCAN 2 LT	Vulcan 2 - LID - TRANSPARENT

VULCAN WSA

Addressable Wall Sounder

The VULCAN-WSA is a surface mount Addressable sounder with low power consumption available in either Red or White housings. Up to 32 individually addressed sounders can be installed per loop occupying address 94 to 125. The address is set using switches 1 to 5 of the 6 way DIL switch.

Four different tones are available and selected by jumpers. The Sound level can be lowered if required using the potentiometer.

When individual address reporting is not required, VULCAN-WSA can be ordered as a Shadow sounder. In this case sounders do not have an address number thus freeing up addresses for more detection devices.

Shadow sounders do not report back to the control panel so their presence on the loop is not monitored. Shadow sounders draw current from the loop (3.5mA in alarm) and must be included in loop load calculations.

CONNECTIONS AND TONE CONFIGURATIONS

SHADOW CONFIGURATION: FACTORY SET OPTION

SWEEPING TONE

ALTERNATING HIGH-FREQUENCY TONE

ALTERNATING LOW-FREQUENCY TONE

CONTINUOUS TONE

= JUMPER

L1 L1 L2 L2

LOOP RETURN

LOOP OUT

PANEL

SWITCHES 1-5: REGULAR ADDRESSES FROM 94 TO 125 IN BINARY

SWITCH 6: OFF: GFE LOOP SOUNDER

Technical Specifications	
Supply Voltage	Loop Powered - 17V to 30 V DC
Loop Current - Quiescent	0.9 mA
Loop Current -Alarm	3.5 mA
Sounder Output - Low Freq.	85 dB @ 1 m
Sounder Output - High Freq.	92 dB @ 1 m
Address Range	94 to 125
Max. Cable Size	2.5 mm^2
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Enclosure - Material	White ABS - FR rating 94V0
Protection Category	IP44
Dimensions	100 mm (Dia) x 67 mm (H)
Weight	125 g

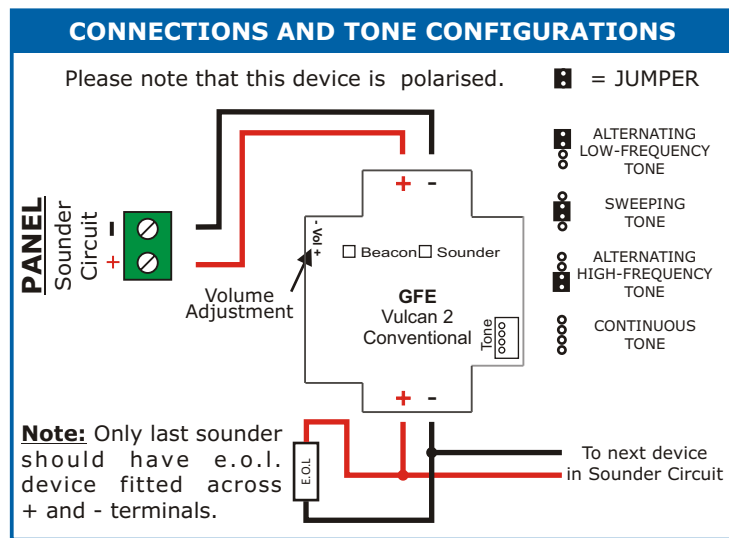| Order Code	
VULCAN WSA	Vulcan Wall Sounder Addressable
VULCAN WSA/S	Vulcan Wall Sounder Addressable - SHADOW

VULCAN-2 C

Conventional Sounder-Beacon

The Vulcan 2 C is a low consumption sounder designed to be used as an unobtrusive low profile sounder or as a base sounder to be installed in conjunction with a conventional detector. This leads to reduced installation costs and improves the aesthetics of the fire alarm system.

Four different tones are available and selected by jumpers. The Sound level can be adjusted if required, using the potentiometer.

The complete range is composed of 3 varieties in both base and wall mounted versions: Beacon, Sounder and combined Sounder/ Beacon.

VULCAN 2-Sounder/Beacon BASE

CONNECTIONS AND TONE CONFIGURATIONS

Please note that this device is polarised.   ⊞ = JUMPER

ALTERNATING LOW-FREQUENCY TONE

SWEEPING TONE

ALTERNATING HIGH-FREQUENCY TONE

CONTINUOUS TONE

PANEL Sounder Circuit

Volume Adjustment

☐ Beacon ☐ Sounder

GFE
Vulcan 2 Conventional   Tone

Note: Only last sounder should have e.o.l. device fitted across + and - terminals.

E.O.L

To next device in Sounder Circuit

Technical Specifications	
Supply Voltage	17V to 30 V DC
Current - Quiescent	1.1 mA
Alarm Current - 800 to 1000 Hz	4 mA sounder only - 5.5 mA inc. Beacon
Alarm Current - 2.0 to 3.0 KHz	7 mA sounder only -8 mA inc. Beacon
Alarm Current - Beacon	2.5 mA
Sounder Output - Low Freq.	84 dB @ 1 m
Sounder Output - High Freq.	88 dB @ 1 m
Max. Cable Size	2.5 mm^2
Max. Humidity	95% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Enclosure - Material	White ABS - Transparent PC - FR rating 94V0
Dimensions	100 mm (D) x 29 mm (H) - w/ LID 37.5 mm (H)
Weight	100 g or 120 g with lid

Order Code	
VULCAN 2 CS	Vulcan 2 - Conventional Sounder
VULCAN 2 CSB	Vulcan 2 - Conventional Sounder/Beacon
VULCAN 2 CB	Vulcan 2 - Conventional Beacon
VULCAN 2 L	Vulcan 2 - LID - WHITE
VULCAN 2 LT	Vulcan 2 - LID - TRANSPARENT

VULCAN WSC

Conventional Wall Sounder

GLOBAL FIRE EQUIPMENT
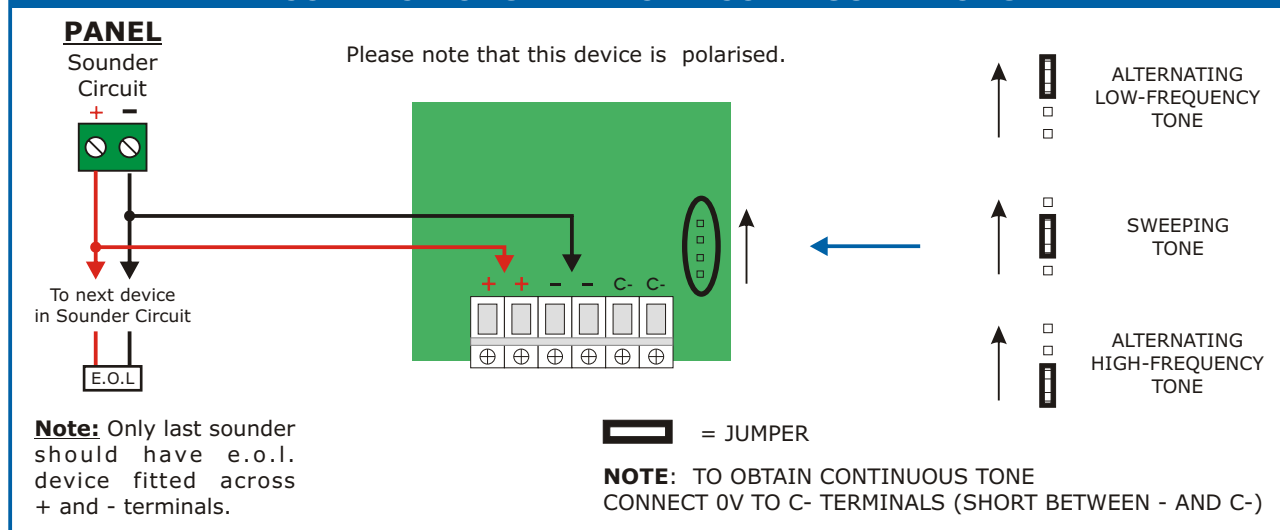
The Vulcan WSC is a low consumption sounder designed to be used as an unobtrusive low profile wall sounder. This improves the aesthetics of the fire alarm system.

Four different tones are available and selected by jumpers. The Sound level can be adjusted if required using the potentiometer.

CONNECTIONS AND TONE CONFIGURATIONS

PANEL
Sounder Circuit

Please note that this device is polarised.

ALTERNATING LOW-FREQUENCY TONE

SWEEPING TONE

ALTERNATING HIGH-FREQUENCY TONE

+ + - - C- C-

To next device in Sounder Circuit

E.O.L

Note: Only last sounder should have e.o.l. device fitted across + and - terminals.

= JUMPER

NOTE: TO OBTAIN CONTINUOUS TONE CONNECT 0V TO C- TERMINALS (SHORT BETWEEN - AND C-)

Technical Specifications	
Supply Voltage	17V to 30 V DC
Loop Current - Quiescent	0.9 mA
Loop Current -Alarm	3.5 mA
Sounder Output - Low Freq.	85 dB @ 1 m
Sounder Output - High Freq.	92 dB @ 1 m
Max. Cable Size	2.5 mm^2
Max. Humidity	85% RH Non-Condensing
Operating Temperature	0 ºC to 40 ºC
Enclosure - Material	White ABS - FR rating 94V0
Protection Category	IP44
Dimensions	100 mm (Dia) x 67 mm (H)
Weight	125 g

Order Code	
VULCAN WSC	Vulcan Conventional Wall Sounder

GFE-MCPA

Addressable Manual Call Point

With
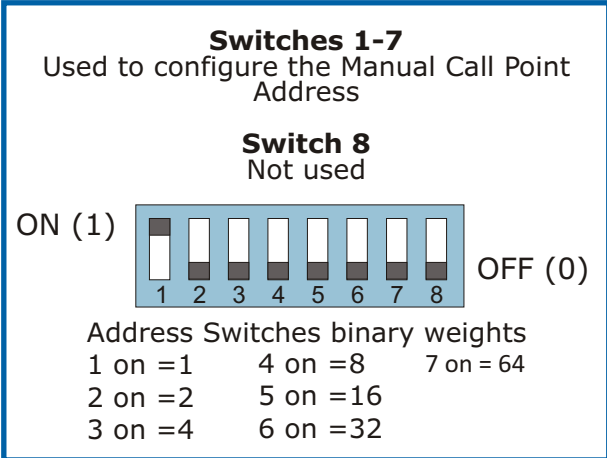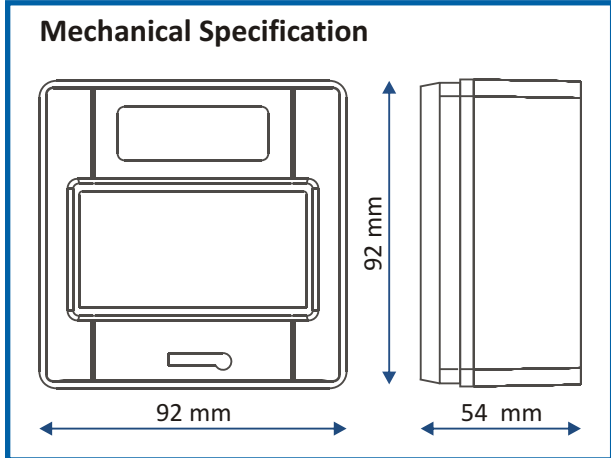**Loop Isolator**
optional

The GFE-MCPA is an Analogue Addressable Manual Call Point, designed and manufactured to comply with EN-54 part 11, compatible with all GFE Addressable Control panels. There is also a version incorporating a loop isolator.

With its enhanced communications mechanism the typical response time, when in alarm, is approximately one second, depending on the number of call points connected to the device loop.

A bi-colour LED flashes Green when the unit is interrogated by the control panel and is illuminated Red when in Alarm. The command to illuminate the Red LED is emitted by the control panel in response to activation of the individual call point thus confirming that the Alarm signal has been received at the control panel. The individual address, up to 125, of each call point is set via an eight way DIL switch.

The unit is supplied complete with a hinged flap which protects the trigger element from accidental activation and reduces malicious activations as two actions are required in order to activate the device. This unit can be both surface and flush mounted and it can be easily reset using the supplied key after activation.

Mechanical Specification

92 mm

92 mm

54 mm

Switches 1-7
Used to configure the Manual Call Point Address

Switch 8
Not used

ON (1)

OFF (0)

1 2 3 4 5 6 7 8

Address Switches binary weights

1 on =1	4 on =8	7 on = 64
2 on =2	5 on =16	
3 on =4	6 on =32	

Technical Specifications	
Supply Voltage	Loop Powered 17-30 V DC
Current - Quiescent	500 uA - 650 uA for GFE-MCPA-ISO
Current - Device in Alarm	3.5 mA - Alarm LED Illuminated
Current - Loop Short Circuit	3.1mA - YELLOW LED ON only applies to GFE-MCPA-ISO
Cable Size	0.5-2.5 mm^2
Max. Recommended per Loop	30 GFE-MCPA or 6 GFE-MCPA-ISO
Colour/ Case Material/ Protection	Red / ABS Flame Retardant 94V0/ IP24
Oper. Temperature/ Max. Humidity	-10 ºC to 50 ºC/ 95% RH Non-Condensing
Dimensions/ Weight	92.0 (W) x 92.0 (H) x 54.0 (D) mm/ 152 grams

Order Code	
GFE-MCPA	Addressable Manual Call Point
GFE-MCPA-ISO	Addressable Manual Call Point w/ Loop Isolator

MCPA-LP-FLAP

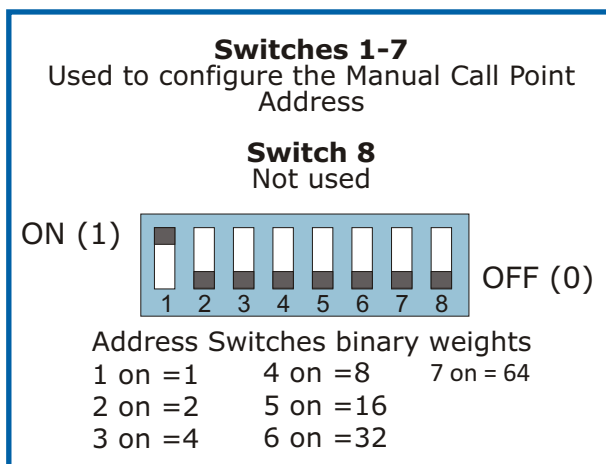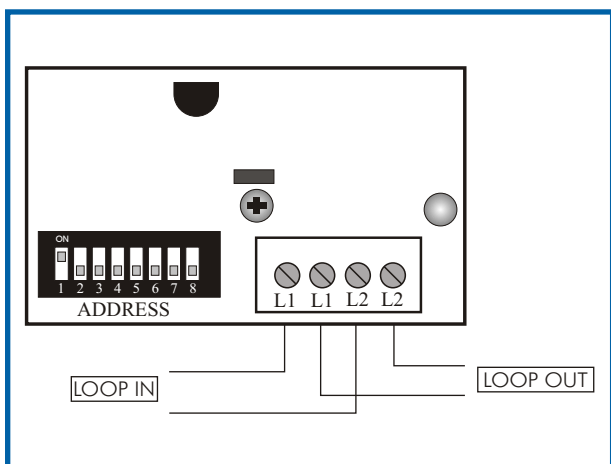## Addressable Manual Call Point
Low Profile

The MCPA-LP-FLAP is an Analogue Addressable Manual Call Point, designed and manufactured to comply with EN-54 part 11, compatible with all GFE Addressable Control panels.

With its enhanced communications mechanism the typical response time, when in alarm, is approximately one second, depending on the number of call points connected to the device loop.

A bi-colour LED flashes Green when the unit is interrogated by the control panel and is illuminated Red when in Alarm. The command to illuminate the Red LED is emitted by the control panel in response to activation of the individual call point thus confirming that the Alarm signal has been received at the control panel. The individual address, up to 125, of each call point is set via an eight way DIL switch.

The unit is supplied complete with a hinged flap which protects the trigger element from accidental activation and reduces malicious activations as two actions are required in order to activate the device. This unit can be both surface and flush mounted and it can be easily reset using the supplied key after activation.

Switches 1-7
Used to configure the Manual Call Point Address

Switch 8
Not used

ON (1)   OFF (0)

1 2 3 4 5 6 7 8

Address Switches binary weights

1 on =1	4 on =8	7 on = 64
2 on =2	5 on =16	
3 on =4	6 on =32	

Technical Specifications	
Supply Voltage	Loop Powered 17-30 V DC
Current - Quiescent	500 uA
Current - Device in Alarm	3.5 mA - Alarm LED Illuminated
Cable Size	0.5-2.5 mm^2
Max. Recommended per Loop	30
Colour/ Case Material/ Protection	Red / ABS Flame Retardant 94V0/ IP24
Oper. Temperature/ Max. Humidity	-10 ºC to 50 ºC/ 95% RH Non-Condensing
Dimensions/ Weight	90.0 (W) x 90.0 (H) x 28.0 (D) mm/ 80 grams

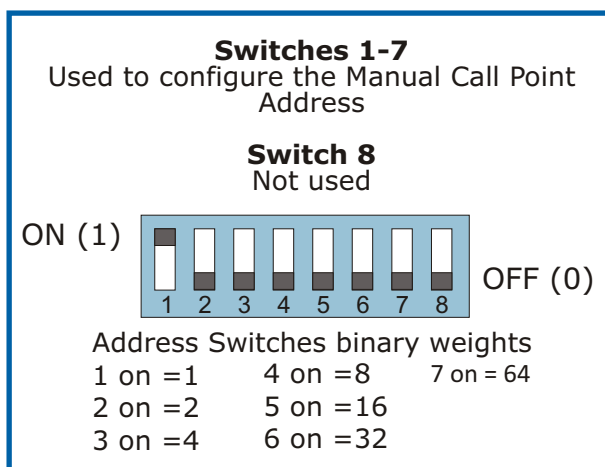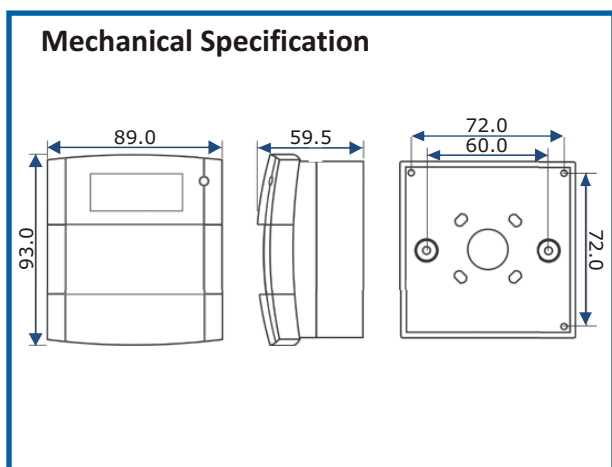| Order Code	
MCPA-LP-FLAP	Addressable Manual Call Point

MCPA-KAC

Addressable Manual Call Point

The MCPA-KAC is an Analogue Addressable Manual Call Point, designed and manufactured to comply with EN-54 part 11, compatible with all GFE Addressable Control panels.

With its enhanced communications mechanism the typical response time, when in alarm, is approximately one second, depending on the number of call points connected to the device loop.

A bi-colour LED flashes Green when the unit is interrogated by the control panel and is illuminated Red when in Alarm. The command to illuminate the Red LED is emitted by the control panel in response to activation of the individual call point thus confirming that the Alarm signal has been received at the control panel. The individual address, up to 125, of each call point is set via an eight way DIL switch.

 This unit can be both surface and flush mounted and it can be easily reset using the supplied key after activation. Optionally it can be supplied complete with a hinged flap which protects the trigger element from accidental activation and reduces malicious activations as two actions are required in order to activate the device.

Mechanical Specification

89.0   59.5   72.0   60.0   93.0   72.0

Switches 1-7
Used to configure the Manual Call Point Address

Switch 8
Not used

ON (1)

OFF (0)

1 2 3 4 5 6 7 8

Address Switches binary weights

1 on =1	4 on =8	7 on = 64
2 on =2	5 on =16	
3 on =4	6 on =32	

Technical Specifications	
Supply Voltage	Loop Powered 17-30 V DC
Current - Quiescent	500 uA
Current - Device in Alarm	3.5 mA - Alarm LED Illuminated
Cable Size	0.5-2.5 mm^2
Max. Recommended per Loop	30
Colour/ Case Material/ Protection	Red / ABS Flame Retardant 94V0/ IP24
Oper. Temperature/ Max. Humidity	0 ºC to 50 ºC/ 95% RH Non-Condensing
Dimensions/ Weight	93.0 (H) x 89.0 (W) x 59.5 (D) mm/ 160 grams

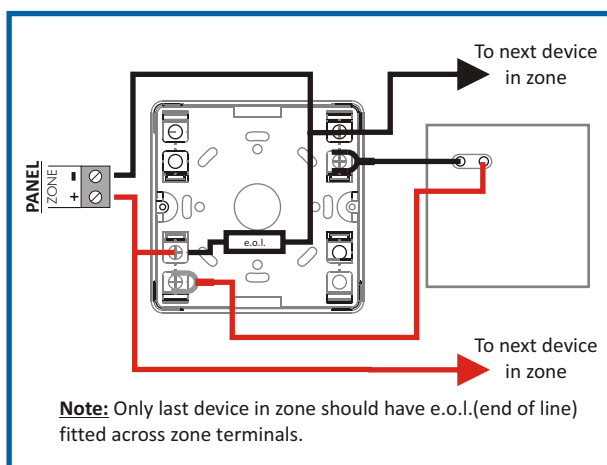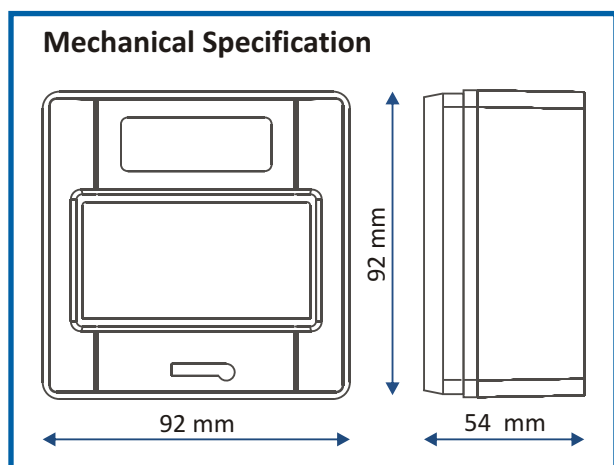| Order Code	
MCPA-KAC	KAC Addressable Manual Call Point

GFE-MCPC

Conventional Manual Call Point

The GFE-MCPC is a Conventional Manual Call Point that can be both surface or flush mounted. It is designed and manufactured to comply with EN54 pt.11.

A bi-colour LED flashes Green when the unit is connected to a control panel and is illuminated Red when in Alarm.

The unit is supplied complete with a hinged flap which protects the trigger element from accidental activation and reduces malicious activations as two actions are required to activate it.

Another convenient feature of the GFE-MCPC is that after an activation the plastic insert is easily reset using the supplied key, replacement is not required.

Mechanical Specification

92 mm

92 mm

54 mm

To next device in zone

To next device in zone

PANEL

ZONE

e.o.l.

Note: Only last device in zone should have e.o.l.(end of line) fitted across zone terminals.

Technical Specifications	
Supply Voltage	16-30 V DC
Current - Quiescent	200 uA
Current - Device in Alarm	50 mA @ 24V DC - Alarm Resistance 490 Ohms max.
Cable Size	0.5-2.5 mm^2
Colour/ Case Material	Red / ABS Flame Retardant rating 94V0
Protection - IP Rating	IP24
Oper. Temperature/ Max. Humidity	-10 ºC to 50 ºC/ 95% RH Non-Condensing
Dimensions/ Weight	92.0 (W) x 92.0 (H) x 54.0 (D) mm/ 152 grams

Order Code	
GFE-MCPC	Conventional Manual Call Point

MCPC-LP-FLAP

Conventional Manual Call Point
Low Profile

GLOBAL
FIRE EQUIPMENT

The MCPC-LP-FLAP is a low profile surface mounting Conventional Manual Call Point. A bi-colour LED flashes Green when the unit is connected to a control panel and is illuminated Red when in Alarm.

The unit is supplied complete with a hinged flap which protects the trigger element from accidental activation and reduces malicious activations as two actions are required to activate it.

Another convenient feature of the MCPC-LP-FLAP is that after an activation the plastic insert is easily reset using the supplied key, replacement is not required.

Technical Specifications	
Supply Voltage	16-30 V DC
Current - Quiescent	200 uA
Current - Device in Alarm	50 mA @ 24V DC - Alarm Resistance 490 Ohms max.
Cable Size	0.5-2.5 mm^2
Colour/ Case Material	Red / ABS Flame Retardant rating 94V0
Protection - IP Rating	IP24
Oper. Temperature/ Max. Humidity	-10 ºC to 50 ºC/ 95% RH Non-Condensing
Dimensions/ Weight	90.0 (W) x 90.0 (H) x 28.0 (D) mm/ 80 grams

Order Code	
MCPC-LP-FLAP	Conventional Manual Call Point - Low Profile

GFE-BCM-10

GFE-BCM-3

Available in 3 colours ○●●

GFE-BCM

Battery Charger Module

This unit is a fully EN-54 pt. 4 compliant battery charger which also incorporates, in some models, a loop interface that can be used with all of GFE's addressable panels. It will monitor all fault conditions including: charger fault, charger voltage level, input voltage supply fault and supply removal. It can be supplied as a standalone module or boxed in an ABS plastic enclosure, including a 28V DC @ 1.7 or 2.4 Amp PSU. The standalone unit has 10A current rating and is supplied complete with heat dissipation.

FEATURES

- Battery Charger Monitored by Addressable Panel
- Fault Relay Output
- Relay O/P Controlled Externally
- Relay O/P Remotely Controlled by Panel
- Low Battery Voltage Shutdown
- Reverse Polarity Protection
- Battery Charger Current Regulated
- LED indicators: AC ON, Battery & Charger Fault
- Boxed Unit inc. PSU and Battery Compartment
- Fully Compliant with EN54 part 4

Technical Specifications	GFE-BCM-3	GFE-BCM-10
Supply Input	85-265 V AC - Monitored	28.5 V DC - Monitored
Supply Output	28 V DC	28V DC
Current Output	1.7A OR 2.4A @ 28 V DC nominal	10A max. @ 28V DC nominal
Battery Charger - Current O/P	1A max.	4A max.
Battert Type	Lead Acid VRLA	Lead Acid VRLA
Battery Charger Monitored	YES	YES
Battery Fuse	3A	10A
I/O Unit - Loop Current	1.7mA Quiescent - 2.4mA Fault	1.7mA Quiescent - 2.4mA Fault
Address Range	1-125	1-125
Fault Relay	Changeover-30V DC 1A Resistive	Changeover-30V DC 1A Resistive
Supply Relay	2 x 12V 12 AH	2 x 12V 12 AH
Dimensions	242(W) x 404(H) x 107(D) mm	131(W) x 81(W) x 41(H) mm
Weight	1.7 Kg - 7 Kg inc. 2 x 7AH Bat.	225 g
Operating Temperature	0ºC to +40ºC	0ºC to +40ºC
Storage Temperature	-10 to +50ºC	-10 to +50ºC
Humidity/ Protection	max 85% no condensation - IP21	N/A
Order Code		
GFE-BCM-10	BATTERY CHARGER MODULE - INCLUDING CHASSIS	
GFE-BCM-3-I/O (1.7A)	BATTERY CHARGER MODULE - I/O INC. - 28V DC 1.7A PSU - BOXED	
GFE-BCM-3-I/O (2.4A)	BATTERY CHARGER MODULE - I/O INC. - 28V DC 2.4A PSU - BOXED	
GFE-BCM-3 (1.7A)	BATTERY CHARGER MODULE - 28V DC 1.7A PSU - BOXED	
GFE-BCM-3 (2.4A)	BATTERY CHARGER MODULE - 28V DC 2.4A PSU - BOXED	

wiz**m**art

Wizmart Inc. is a Taiwanese based detector manufacturer with a production facility in the city of Ning Bo in continental China.

The range of conventional as well as analogue addressable smoke, heat and combined detectors, holds various approvals by EN54 notified bodies such as Dift (Denmark), VDS (Germany) and also has many products UL listed.

Wizmart's capability to respond to customer's needs and their OEM capabilities, allied with their total quality commitment, is the reason why so many customers worldwide have chosen Wizmart as their commercial partner.

www.wizmart.com

GLOBAL
FIRE EQUIPMENT

wizMart

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