

# J-NET-MPX-REL

## Addressable Panel Multiplexed Zone Relay Outputs

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:

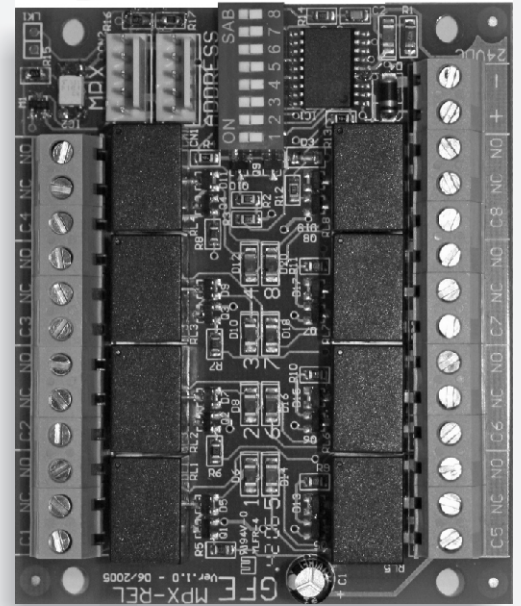
- 8 Zone Blocks - Indication of Fire for each zone.
- 4 Zone Blocks - Indication of Fire and Fault for each zone.
- System Status - Each relay output is assigned to a specific General System indication:  
Fire, Fault, Pre-Alarm, Test, Disabled, Sounders ON, Auxiliary Outputs Disabled and Sounders Disabled.

In the first 2 modes the zone block is selected using the first 6 positions of the D.I.L. Switch to set the address. Switch 7 is used to select either 8 Zone/block FIRE indication (OFF) or 4 Zone/Block FIRE & FAULT indication (ON). By setting Switch 7 to OFF and selecting address 63 ( Switches 1 to 6 are all in the ON position) the modules is set in SYSTEM STATUS mode.

When switch 7 is OFF the module address can be programmed in the range 0 to 47, providing FIRE zone indication in the range 1 to 384. If the same switch is set (ON) the address will specify a zone range from 1 to 256. Providing in this mode individual indication for each zone of FIRE and FAULT conditions.

The module requires an external 24 V DC supply which can be derived from one of the Panel's Auxiliary Supply Outputs. Alternatively the module can be powered from an external regulated 24VDC power supply.

Connection to either Juno Net or Junior Panels is via a 5 way flat cable fitted with Molex type polarised connectors. Two of these connectors are provided to enable connection of more than 1 module.



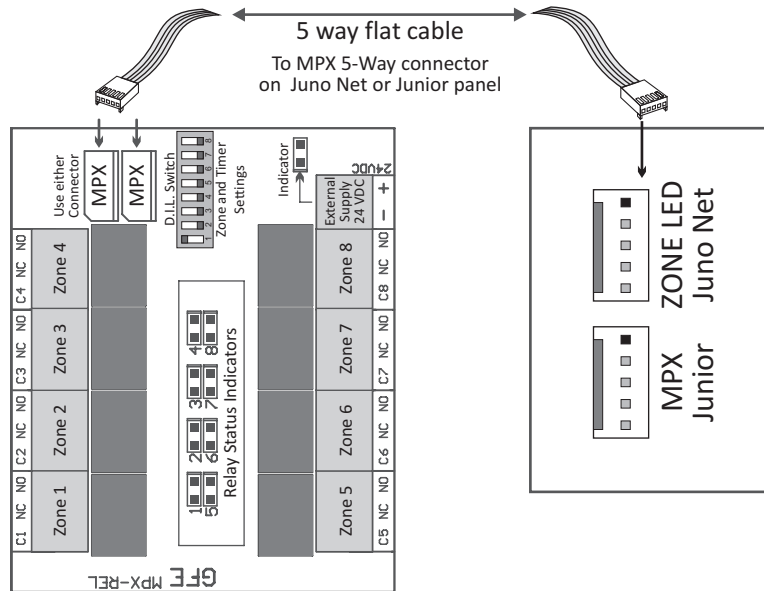
## Features

- High Quality
- Compatible with GFE's range of Analogue Addressable Panels
- Easy to Install
- 8 Zone FIRE Indication
- 4 Zone FIRE & FAULT Indication
- Selectable System Status indication:  
Fire, Fault, Pre-Alarm, Test, Disabled, Sounders ON, Disablement of Sounders and Auxiliary Outputs
- FIRE indication for 384 zones in 8 Zone/Block mode
- FIRE and FAULT indication for 256 zones In 4 Zone/ Block mode
- Possibility of Multi-Module Connection

# Connections

Using the 5 way flat cable provided with the J-NET-MPX-REL, connect this board either to a Juno Net or Junior Analogue Addressable Panel. If using this module in conjunction with a Juno Net panel this connector is situated on the Juno Net Main Connector Board (J-NET-CON) and is labelled ZONE LED or if connecting this module to a Junior panel connect it to the connector labelled MPX. On the J-NET-MPX-REL both MPX 5-way Molex connectors can be used as they are connected in parallel on the PCB. Supply to the J-NET-MPX-REL is normally derived from the Panel's Auxiliary Supply Output but an external regulated and stabilized 24V DC supply can also be used.

**Note:** Remove power to both Panel and J-NET-MPX-REL before proceeding with any connections. Re-apply power after connections are complete and verified.



## Switches - Binary Weights

SW1 - 1	SW4 - 8
SW2 - 2	SW5 - 16
SW3 - 4	SW6 - 32

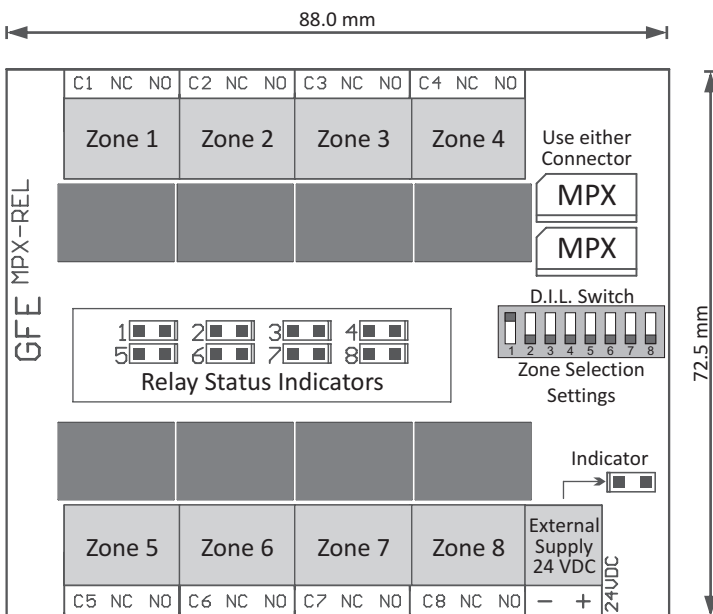
**Switches 1-6**  
Selects zone block

**Switch 7**  
Select FIRE or FIRE and FAULT



Switch 8 - Not used

## Mechanical Specification



## Technical Specifications

<b>Operating Voltage</b>	28V DC nominal
<b>Current Consumption</b>	
Quiescent	7 mA - No relays active
Zones in Alarm	7 mA + 15 mA per active relay
Zone Selection	D.I.L. Switch
Max. Humidity	95% RH Non-Condensing
Dimensions	0 °C to 50 °C
Weight	95 g

ORDER CODE	PRODUCT DESCRIPTION
J-NET-MPX-REL	Multiplexed Zone Relay Board

## Global Fire Equipment S.A.

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# Zone Block Selection - 8 Zones per Block - Fire Indication Only

**Switches 1-6**  
Selects zone block

**Switch 7 = OFF**  
Select FIRE display

ON OFF

Switch 8 - Not used

First Zone = Address x 8 + 1  
Last Zone = Address x 8 + 8

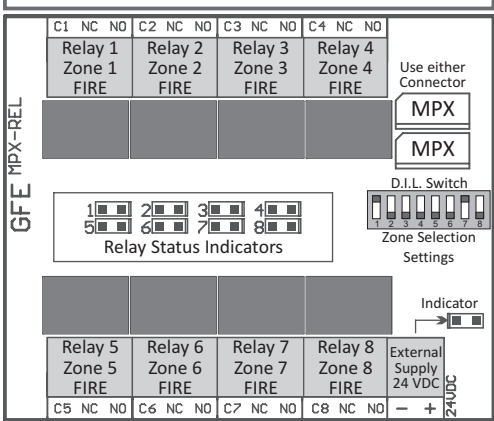
Example

Block = 5  
Address = 4

First Zone = 4 x 8 + 1 = **33**  
Last Zone = 4 x 8 + 8 = **40**

Zone	Relay	Zone	Relay
1	1	5	5
2	2	6	6
3	3	7	7
4	4	8	8

**Note:** The zone associated with each relay is always dependent on the address selected using the D.I.L. switch.



## SYSTEM STATUS MODE

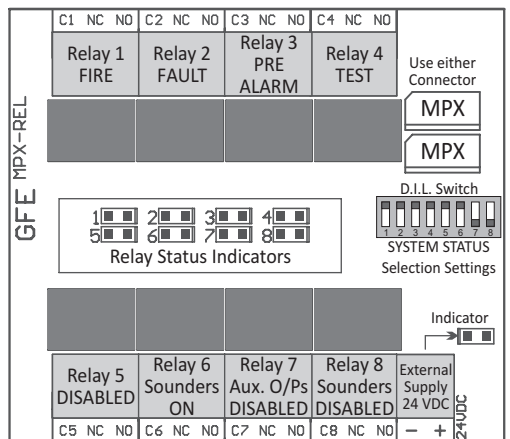
In order to set this module to provide indications of the general panel status set address to 63 as shown on the diagram on the left. Please note that these indications are representative of the general status of the panel and are not associated in any way to a particular device or zone.

**Switches 1-6**  
Set ADDRESS to **63**

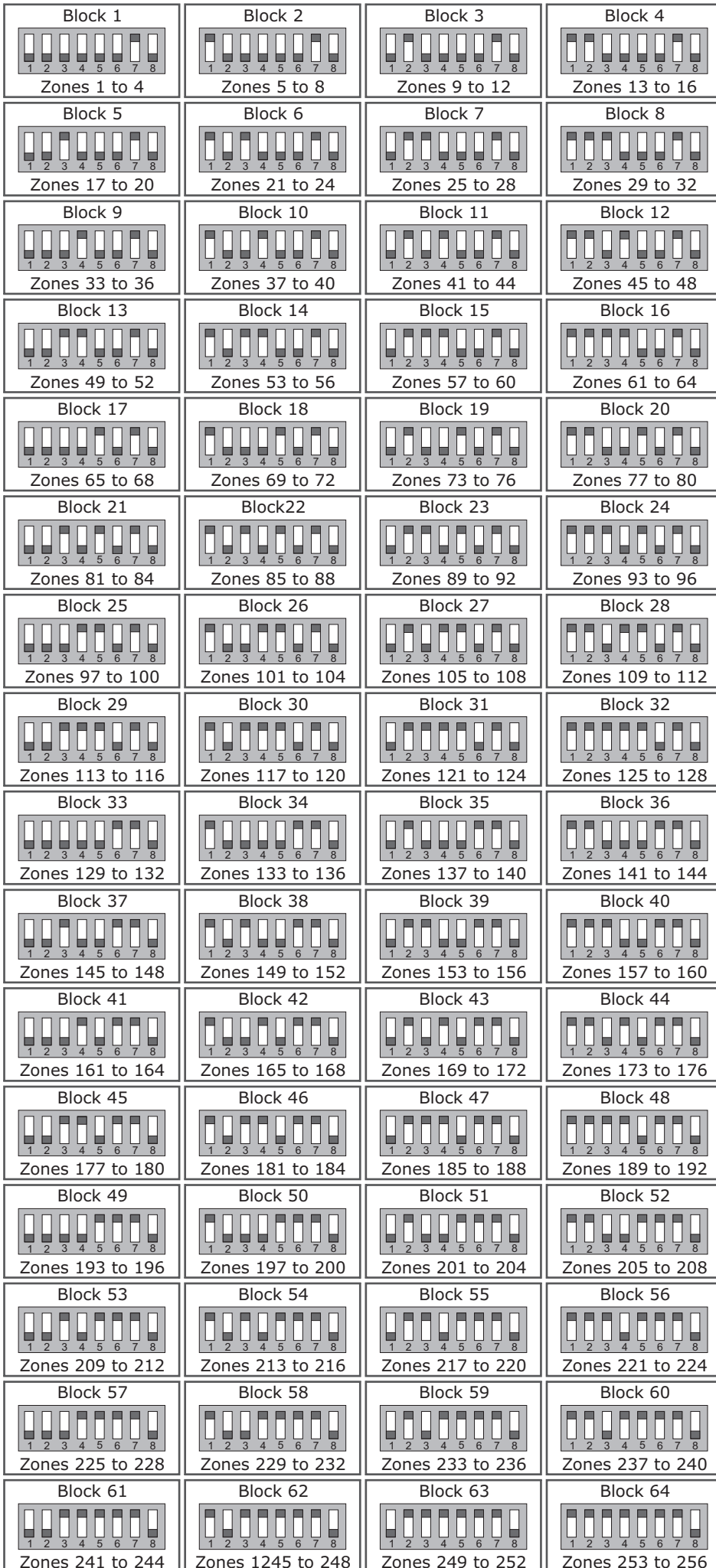
**Switch 7 = OFF**

ON OFF

Switch 8 - Not used

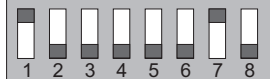


# Zone Block Selection - 4 Zones per Block - Fire & Fault Indication



**Switches 1-6**  
Selects zone block

**Switch 7 = ON**  
Select FIRE and FAULT display

ON  OFF

Switch 8 - Not used

First Zone = Address x 4 + 1  
Last Zone = Address x 4 + 4

Example

Block = 5  
Address = 4

First Zone = 4 x 4 + 1 = **17**  
Last Zone = 4 x 4 + 4 = **20**

Zone	Relay Fire	Relay Fault
<b>1</b>	1	5
<b>2</b>	2	6
<b>3</b>	3	7
<b>4</b>	4	8

**Note:** The zone associated with each relay is always dependent on the address selected using the D.I.L. switch.

