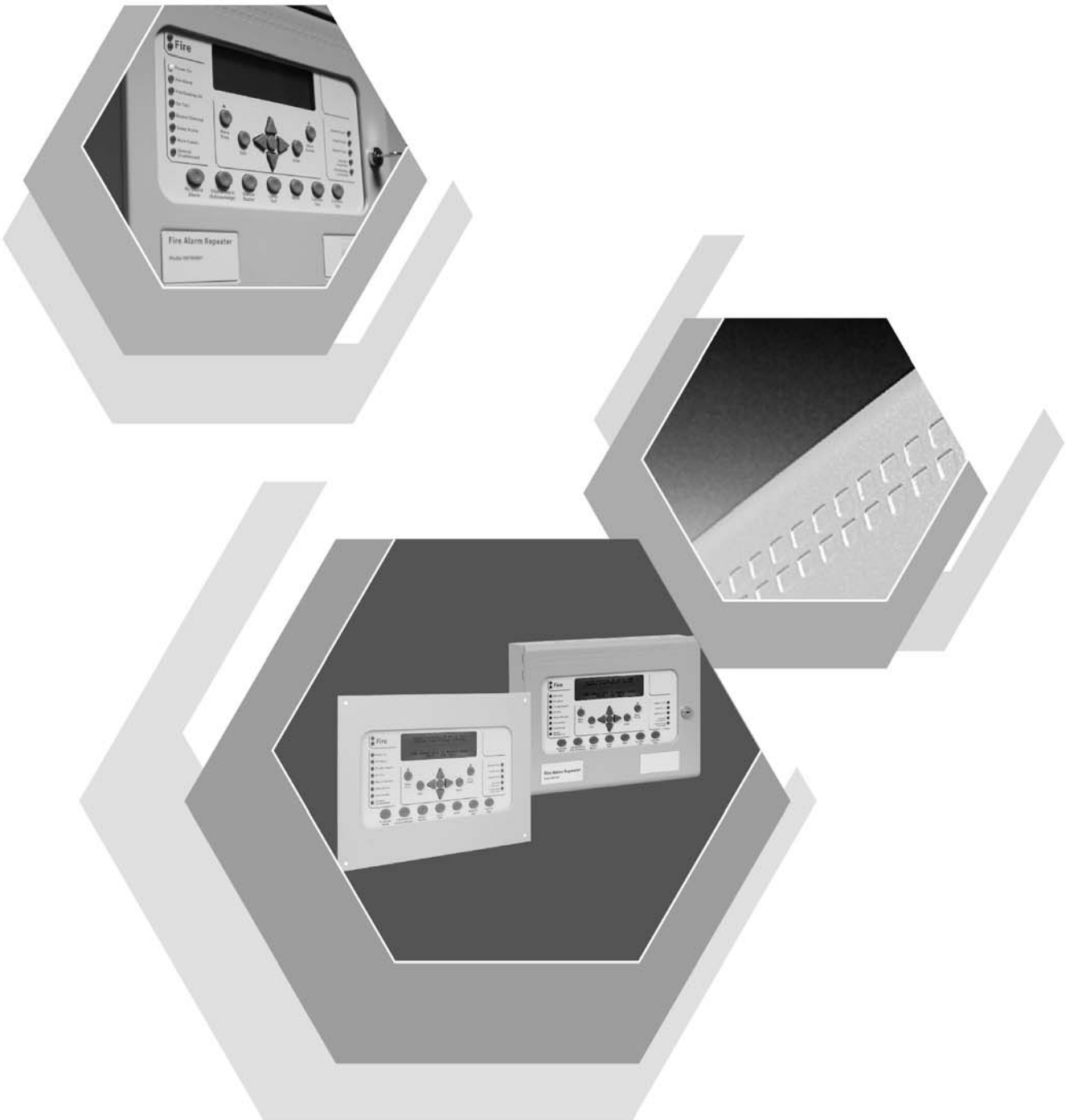
# Syncro View Marine

## Serial LCD Repeater Panel

(MK67000M1, MK67750M1, MK67001M1, MK67751M1, MK67000AM1, MK67001AM1)

## Operation and Maintenance Manual

Man-1092M Issue 03 May 2016



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## 1. Introduction

The Syncro View fire alarm annunciator is designed to provide indication and control of the status of the Syncro ASM analogue addressable fire control panel at a remote or multiple remote locations or provide a more compact and pleasing user interface for the fire alarm system in areas where a large control panel would be obtrusive.

The Syncro View provides the same indications and controls as the Syncro fire control panel to which it is connected and can take full control of network systems if the control panel to which it is connected is configured to do so.

The Syncro View repeater panel will be overridden and can not take control of the panel to which it is connected if the main control panel is at access level 2.

For Syncro ASM panels V5.22 and later, the Syncro View buzzer will follow the buzzer operation of the host panel to which it is connected. Therefore silencing the buzzer at the host panel will also silence the buzzer on the Syncro View repeater(s) connected to that panel. For all other panel firmware versions, silencing the panel buzzer at the host panel will not silence the View repeater buzzer. The View repeater buzzer will need to be locally silenced.

## 2. Safety and mounting

### 2.1 Safety

Suppliers of articles for use at work are required under section 6 of the Health and Safety at Work act 1974 to ensure as reasonably as is practical that the article will be safe and without risk to health when properly used.

An article is not regarded as properly used if it is used 'without regard to any relevant information or advice' relating to its use made available by the supplier.

This product should be installed, commissioned and maintained by trained service personnel in accordance with the following:

(i) IEE regulations for electrical equipment in buildings

(ii) Codes of practice

(iii) Statutory requirements

(iv) Any instructions specifically advised by the manufacturer

According to the provisions of the Act you are therefore requested to take such steps as are necessary to ensure that you make any appropriate information about this product available to anyone concerned with its use.

Some models of this equipment are designed to be operated from 230V AC supplies therefore all relevant safety precautions should be taken appropriate to equipment connected to mains voltages.

Syncro View fire alarm annunciators are environmental class A and are designed for indoor use only at temperatures between $-5^0$C (+/- 3) and $+40^0$C (+/- 2) and with a maximum relative humidity of 95%.

The IP rating for the enclosure is IP30.

Operation outside of these limits may render the equipment unsafe.

## 2.2 Mounting

Surface mounting units should be mounted on a dry, flat surface, at eye height to the display and in a level position such that the enclosure is not distorted.

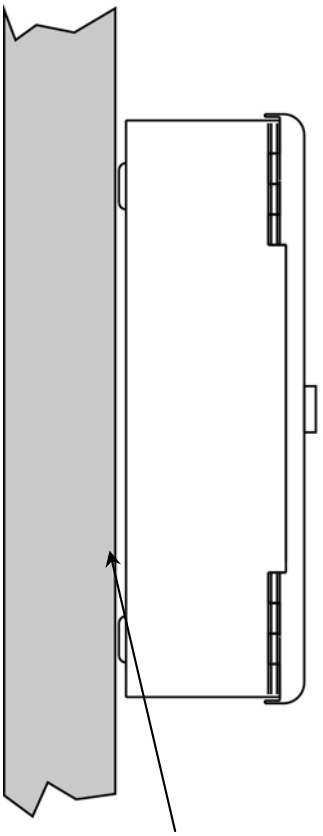
Screws or bolts of a minimum of 4mm diameter must be used to mount the enclosure in all three mounting positions.

Suitable fixings should be used at all fixing points such that the unit is securely mounted and is not liable to move once fixed.

Units should not be mounted in another enclosure or near sources of excessive heat.

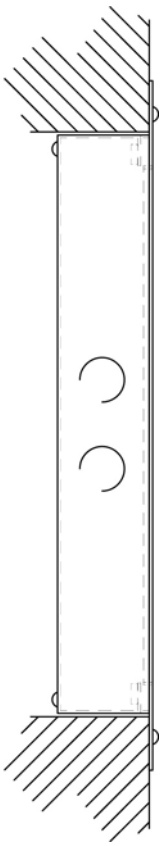
Cables should be connected using suitable cable glands. If additional cable entry points are required, all swarf and debris caused by drilling of additional cable entries must be cleared before power is applied.

Surface Mounting



Fix to flat surface using suitable wall plugs.

Flush Mounting



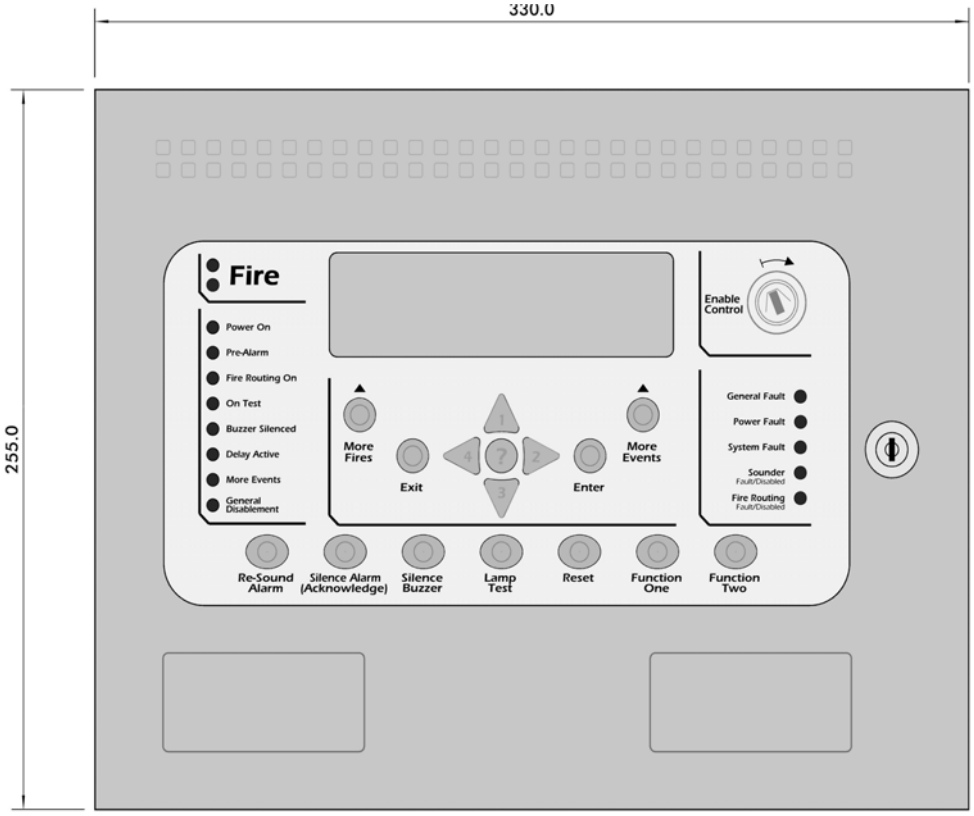
## 3. Technical specification

*Table 1 - Electrical specifications*

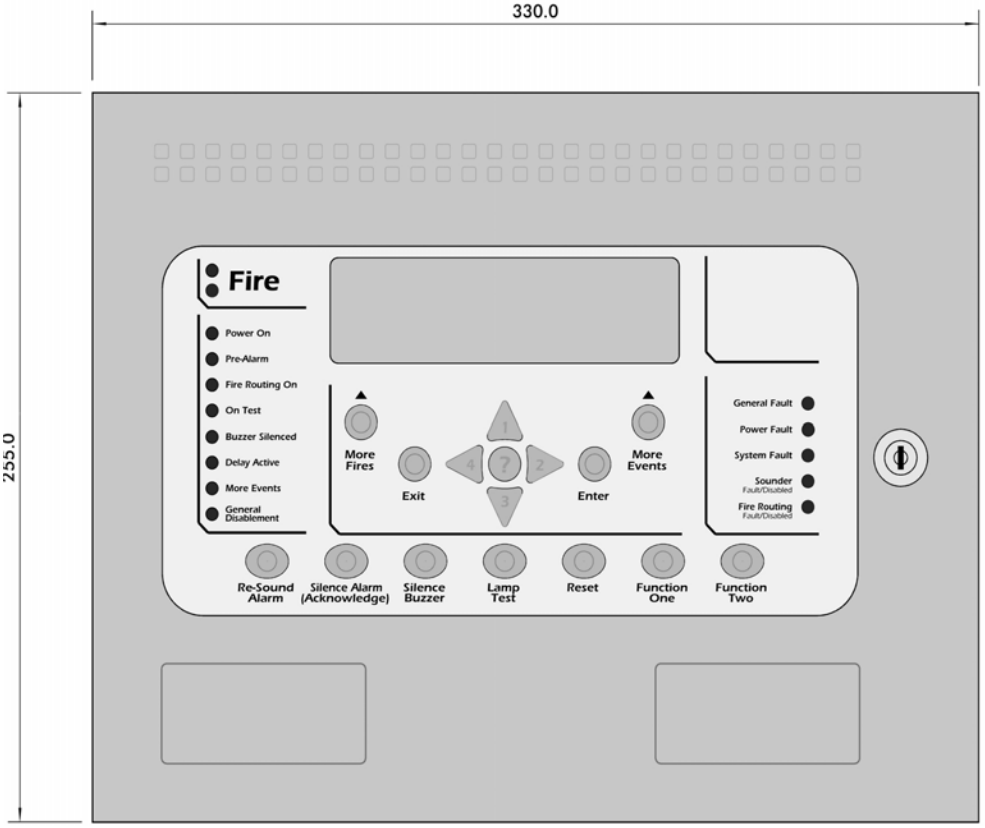
| | |
|---|---|
| Construction | 18SWG Mild steel - IP30 rated |
| Cable entry | 20mm knockouts 5 in top, 5 in rear and 1 in the side |
| Finish | BS 00-A-05 light grey, fine texture. |
| Weight | 5Kg maximum |
| Mains supply (Mains powered models only) | 230V AC +10% - 15% (20 Watts maximum) |
| Mains supply fuse (Mains powered models only) | 2 Amp, 20mm, glass HRC |
| Power supply rating (Mains powered models only) | 0.75 Amps total including battery charge 28V +/- 2V |
| Maximum ripple voltage (Mains powered models only) | 200 millivolts |
| Battery type (Yuasa NP) (Mains powered models only) | Two 12 Volt 1.9Ah sealed lead acid in series |
| Battery charge voltage (Mains powered models only) | 27.6VDC nominal |
| Battery charge current (Mains powered models only) | 0.2A maximum |
| Battery fuse (Mains powered models only) | 200 milliamp, 20mm, glass |
| Maximum current draw from batteries (Mains powered models only) | 0.095 Amps |
| | |
| 24V supply (24V DC models only) | 21 to 30V DC |
| Quiescent current of panel in mains fail | 0.03A |
| Serial data connection | 2 core RS485 (Up to 1200 metres total cable length) |
| Maximum terminal capacity | 2.5mm² |
| Max number of units on each Syncro panel serial bus | 15 |
| Maximum number of units to be powered from Syncro ASM Aux 24V output | 4 |

## 4. Syncro View fascia

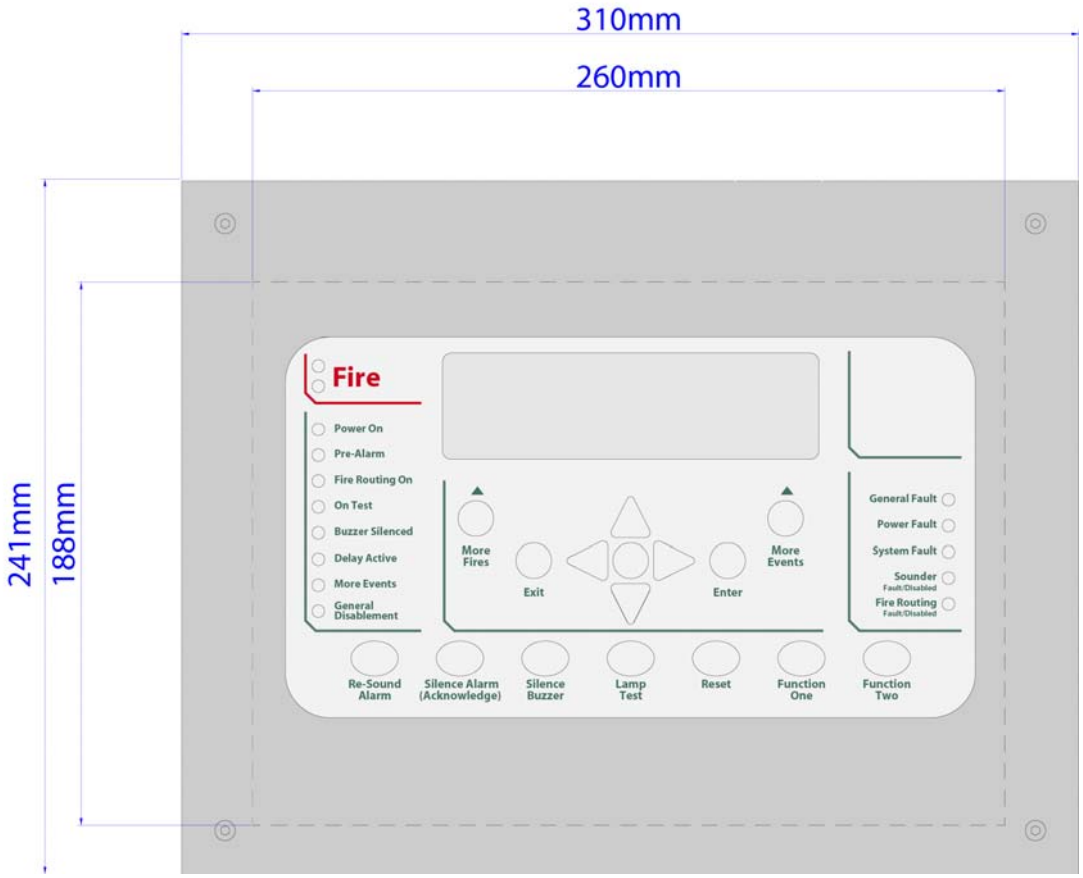
MK67001 and MK67750 models with enable controls keyswitch



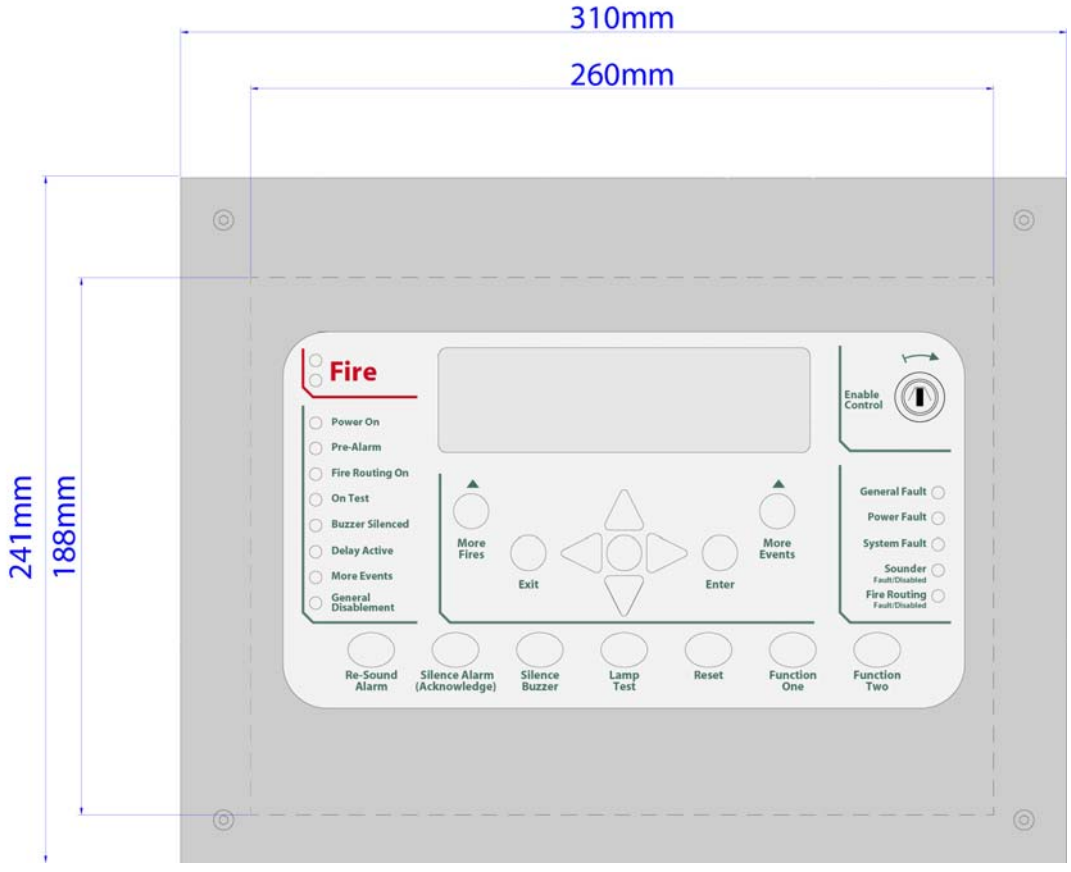

MK67000 and MK67751 models without enable controls keyswitch.



MK67000AM1 model without enable controls keyswitch.




MK67001AM1 model with enable controls keyswitch



## 5. Connecting to the circuit board

All connections for field wiring are to a single row of terminals along the bottom of the circuit board.
Shielded fire alarm cable such as FP200 and metal cable glands must be used for all connections to the unit. The resistance of any core of the data cable must not exceed 25 ohms. The shield of the cable must be bonded securely to the enclosure via the metal gland.
Wiring should enter the enclosure at the top or back of the unit using the knockouts provided and be formed tidily to the appropriate terminals.
Terminals are capable of accepting wires of up to 2.5mm$^2$.
Wiring must not go across the front of the circuit board. If cable entries need to be in positions other than at the knockouts provided, wiring must be fed well away from the surface of the circuit board.

## 6. Power and data connections

Each unit requires two cores for power and two cores for data transmission to and from the control panel. A four core cable may be used for these connections. All of these connections are polarity conscious and care should be taken to match the polarity with the corresponding terminals at the control panel. Mains powered versions require only a two core cable to the control panel and a local mains supply.

### Data Termination

Up to 15 units can be connected to a Syncro ASM control panel. In and out terminals for data and 24V DC are provided on each unit.

All units are supplied with a push on jumper fitted at position J3 on the left hand side of the PCB. This jumper connects a terminating resistor which needs to be in place at the last unit on the data line. If more than one unit is to be fitted, then the jumpers must be removed from all units except the last one.
If there is only one unit fitted then the jumper should be left in place. The COMMS LED will flash quickly while the unit is communicating correctly with the control panel and will be off if the unit is disconnected or connected incorrectly.

## 7. Addressing the units

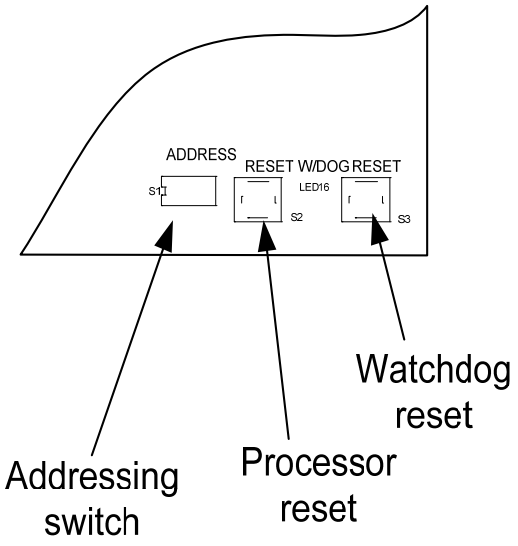
To enable the control panel to know whether any units that should be connected have been disconnected and indicate a fault condition, each unit must be allocated an address. The address switch should never be set with all switches off.
This is done by setting a binary number from 1 to 5 on the 4 way, DIL switch located at the bottom of the PCB.
The order of the addresses is not important but each unit must be allocated a different address.
The switch settings for each of the addresses are shown below.

## 8. Processor and watchdog reset switches

The Syncro View is controlled by a microprocessor, which will re-start itself and continue to run if it stops for any reason due to severe electrical interference such as an electrical storm.

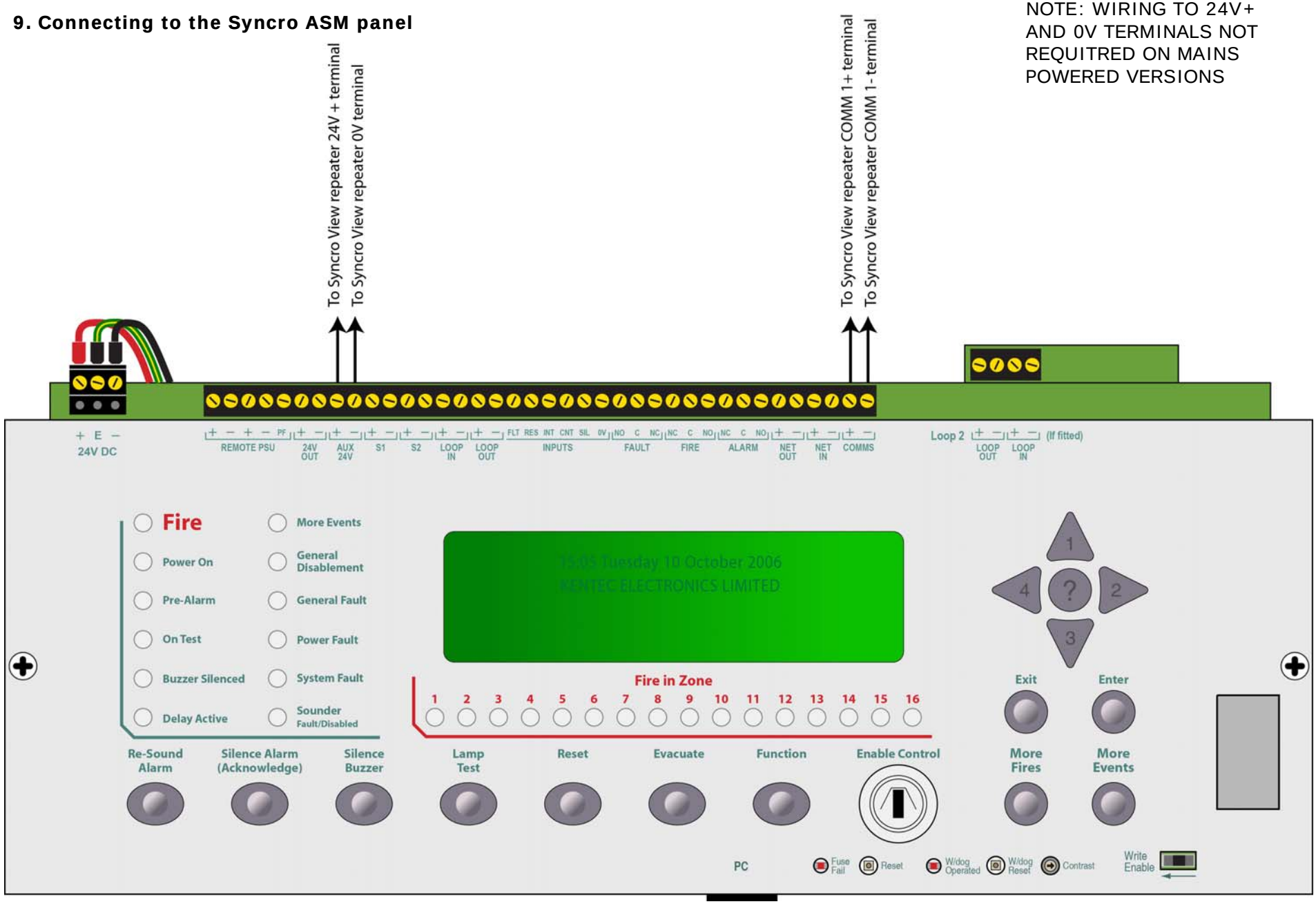
To ensure that the unit is not being subjected to continual, undue interference which may effect its proper operation, a watchdog (W/DOG) LED indicator is latched on and a fault condition signalled to the control panel.
If a processor re-start has occurred. this latched fault condition will need to de reset by pressing the W//DOG RESET button on the bottom of the PCB.

A switch is also provided to manually re-start the processor PROC RESET. This switch can be used while the units are connected to the system to ensure that the unit starts up and establishes communication with the panel in a controlled and expected manner.

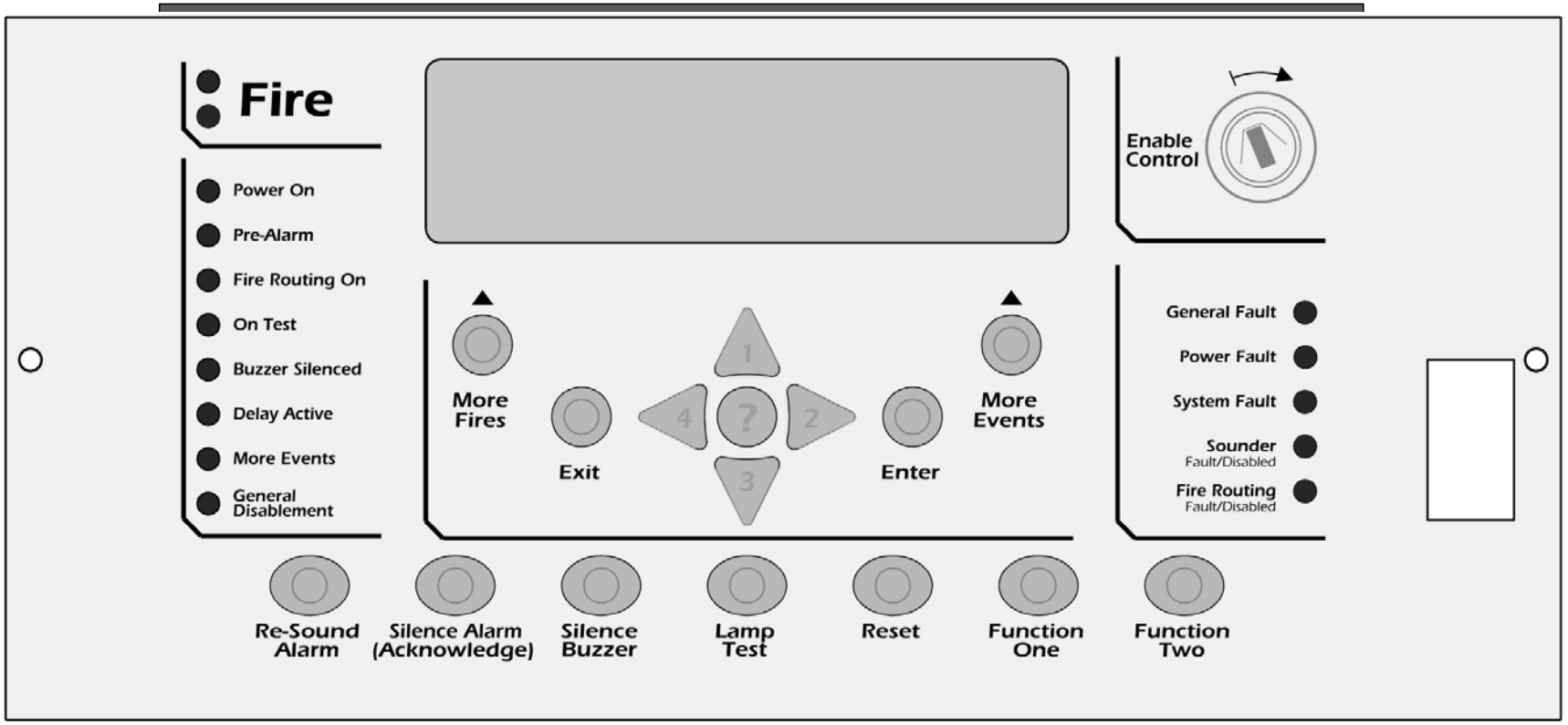


## 9. Connecting to the Syncro ASM panel

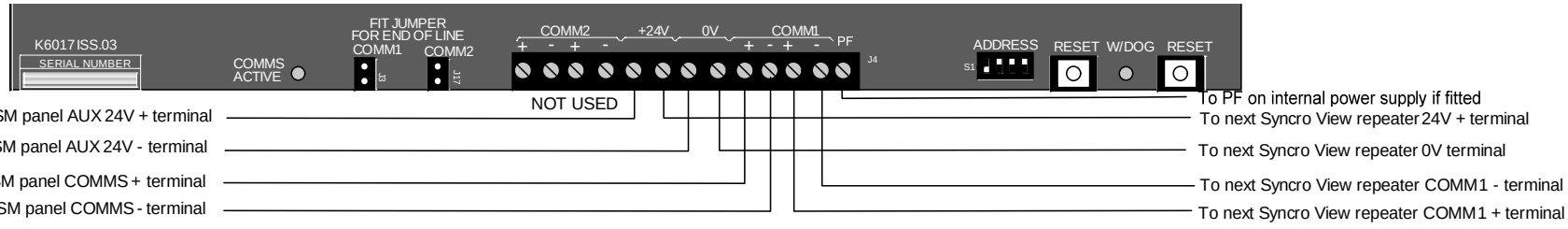
NOTE: WIRING TO 24V+ AND 0V TERMINALS NOT REQUITRED ON MAINS POWERED VERSIONS



## 10. Connections to Syncro View



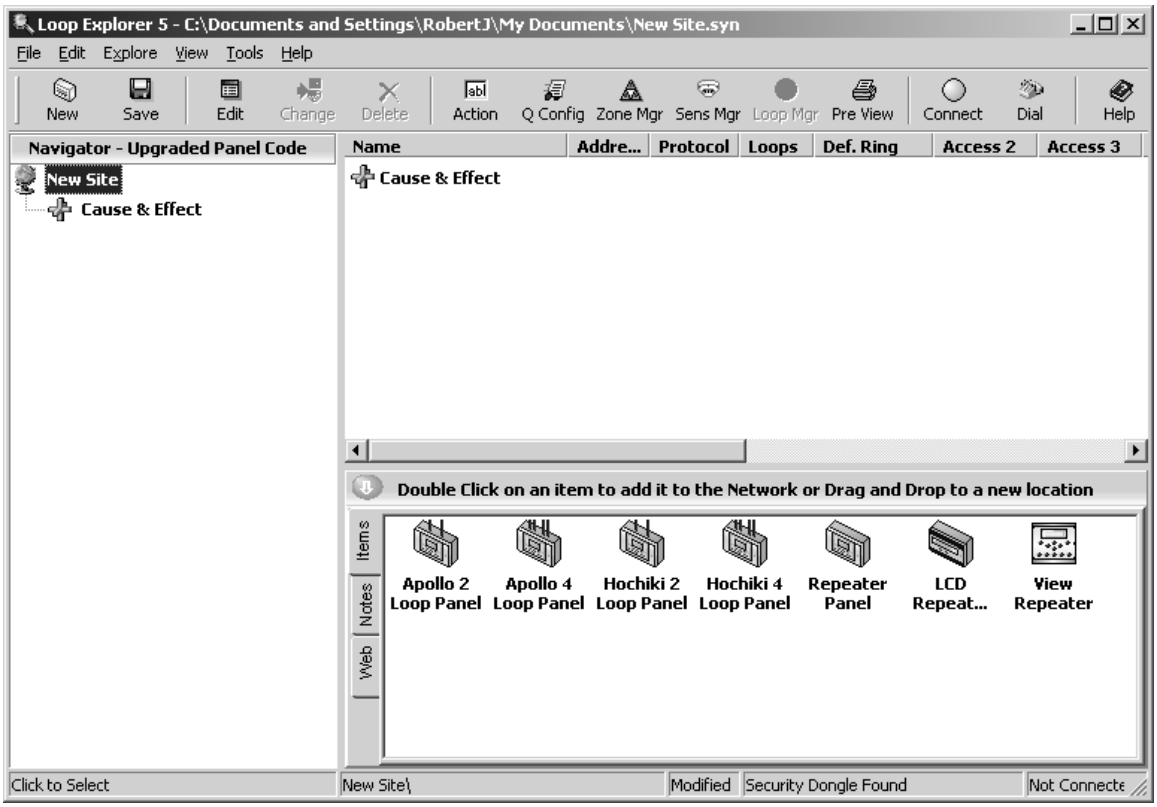

NOTE
WIRING TO 24V+ AND 0V TERMINALS NOT REQUIRED ON MAINS POWERED VERSIONS



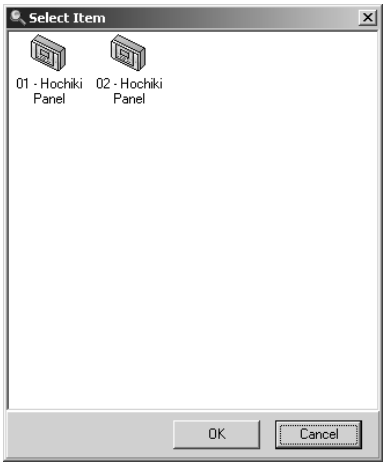
## 11. Adding a Syncro View to the Syncro ASM panel

The Syncro View repeater must be added to the system by configuring the Syncro panel using the Loop Explorer configuration utility.

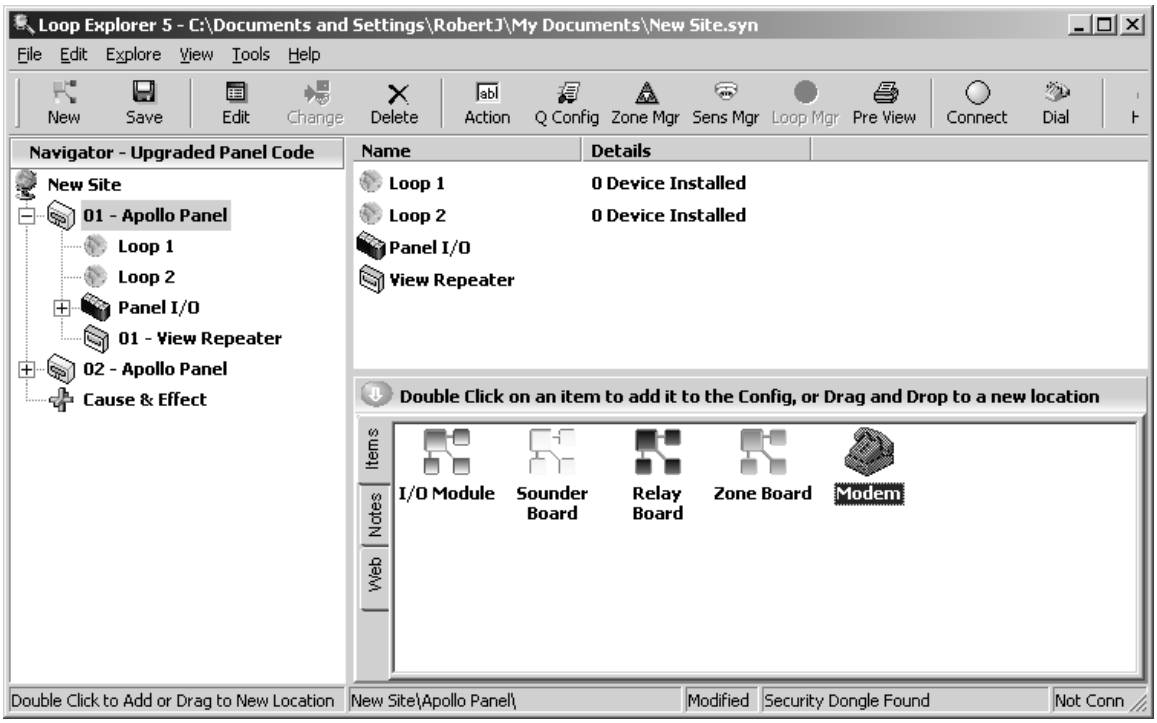
Click on the site name in the left hand window pane to show the option to add panels or repeaters to the system.
If no panels are already added to the configuration then select the type of panel required.
To add a Syncro View repeater click on the View Repeater Icon.



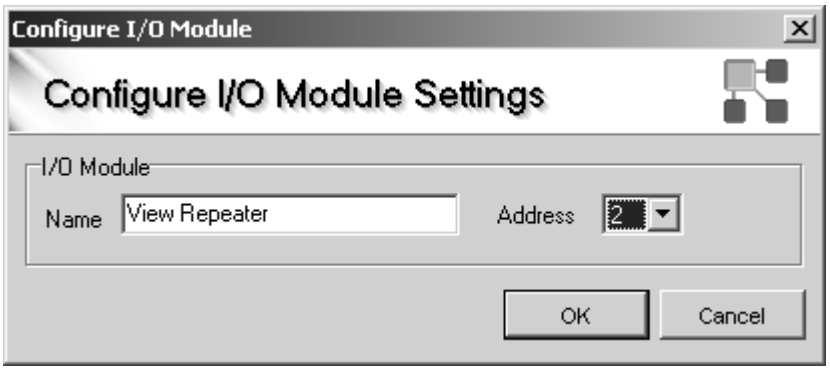

Double click on the panel to which the View repeater is to be connected.




The Syncro View repeater is now shown in the centre window pane.




Right click the Syncro View and select “edit settings” to give the Syncro View a panel name (location) and an address on the serial bus. This address should be different for each Syncro View added and different to any other I/O boards that may exist on the serial bus.




Once the configuration file has been loaded into the panel the panel will now expect to see a Syncro View at the address allocated to it and will show a fault condition if the Syncro View is not fitted or is removed.