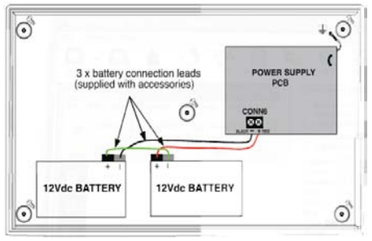
Connecting the Standby Batteries

CAUTION: There is a risk of explosion if the battery is replaced by an incorrect type. Always dispose of used batteries in accordance with the battery manufacturers' instructions.

Note: On a standard 'as-supplied' unit, PLK1 ('Battery Monitoring' link) is not fitted and a fault will occur on initial power-up if fully charged batteries are NOT connected. For the emergency standby power supply, only use good quality, sealed VRLA batteries. Position and connect the 2x12Vdc, 7Ahr batteries, as shown in diagram (see right).



Connecting Circuits to the Main Control PCB

Terminate incoming and outgoing circuits at the Main Control PCB connectors (see Figure 2 overleaf).

Technical Specification

POWER SUPPLY	
Mains Supply Voltage:	230Vac, 50/60 Hz
Internal Power Supply	24Vdc Nominal
Max. Output Current:	3A@230Vac
Power Rating (including charging):	1.5A cont, 3A peak
Battery Type:	2 x 12Vdc, 7Ahr VRLA type, connected in series
Battery charge Current:	0.7A
Earth Fault Monitoring:	YES
Mains supply/ Battery charger monitored for failure	YES
Quiescent Current drain on mains fail	40mA
DETECTOR CIRCUITS	
Number of Conventional detector circuits:	3 @ 21-28Vdc
Line Monitored for open and short circuit faults:	YES
Max. Cable length per circuit:	250m
Max. Number of smoke/heat detectors per circuit:	20
Max. Combined number of detectors and call points per circuit:	32
Zone quiescent current:	2mA max.
End-of-line resistor value:	6K8 Ohm +/- 5%, 0.25W
SOUNDER CIRCUITS	
Number of conventional sounder circuits:	3 (two x 1st stage, one x 2nd stage)
Line monitored for open and short circuits:	YES
Sounder output rating:	21-28Vdc, fused @ 200mA per circuit
Max. Sounder cable length per circuit:	50m
Max. Number of polarised sounders per circuit:	10 @ 20mA each
End-of-line resistor value:	6K8 Ohm +/- 5%, 0.25W
MONITORED INPUTS	
Number of monitored inputs:	6 (Manual release, Flow switch, Low pressure, Mode, Hold, Abort)
Thresholds:	8K to 2K ohms (normal); 1.8K to 200 ohms (active); 150 to 0 ohms (short circuit)
End-of-line resistor value:	6K8 Ohm +/- 5%, 0.25W
AUXILIARY OUTPUTS	
Number of auxiliary outputs*:	6 (Fire, Local fire, Extract, 1st stage, 2nd stage, Fault)
Extract time:	Adjustable 1-900 seconds (1 second steps)
Relay contact rating:	30Vdc, 1A max. Note: DO NOT switch mains voltage using these outputs
*Note; 5 Additional relay outputs (Reset, Mode, Discharged, Hold, Abort) are available on the GR Output Expansion Relay Board (Item No. 2980-0004)	
REMOTE INPUTS	
Number of remote inputs:	4 (SIL, AL, FLT, RST)
Auxiliary output:	24V, 100mA electronic fuse
EXTINGUISHANT RELEASE OUTPUTS	
Extinguishant release output:	21-28Vdc, rated at 1A for 5 minutes
Extinguishant release time delay:	Adjustable 1-60 seconds (1 second steps)
Extinguishant release duration:	Adjustable 1-300 seconds (1 second steps)
Extinguishant release flooding time:	Adjustable 60-1800 seconds (1 second steps)
Extinguishant release end-of-line:	GR System Line Terminator (Item No. 2980-0005)
FUSES Compliant with IEC (EN60127 Pt2)	
Mains supply fuse (F1): 1A HRC 20mm ceramic; Battery fuse (F2): 5A F 20mm glass; Auxiliary output fuse: 100mA electronic; Sounder circuit fuse: 200mA per	
DIMENSIONS & WEIGHT	
Physical Dimensions (W mm x H mm x D mm):	Back box = 439 x 276 x 70 approx (Metal); Lid = 467 x 293 x 29 approx (Plastic)
Weight:	1.75kg (without batteries)
Accessory Pack	
1 x Installation Instructions; 1 x User Manual Log Book, 1 x Allen key; 1 x 1A HRC Fuse; 1 x 5A F Fuse; 1 x set of links for PLK1 & PLK2; 1 x set of battery connection leads.	

Introduction

The Gas Release panel is a three zone automatic extinguisher control panel that is compliant with EN12094-1 and EN54-2. The panel incorporates a 3A, EN54-4 compliant switch mode PSU and a 128 x 64 pixel LCD that facilitates system programming.

Installation

Location

The panel must be mounted indoors on a dry, flat surface in an area that is well ventilated. Ideally the panel indicators should be at eye level and the ambient light level should allow the status of any indicators to be clearly seen.

Fixing

Note: The panel's base PCBs should be removed prior to first fix installation.

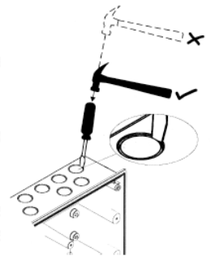
Using the five mounting holes provided, fix the base securely onto a wall. The mounting holes are suitable for use with No.8-10, or 4-5mm countersunk screws. Assess the condition and construction of the wall and use suitable screw fixings. Any dust or swarf created during the fixing process must be kept out of the enclosure and care must be taken not to damage any wiring or components.

Wiring and Cable Entry

All wiring should be installed in accordance with the current edition of the IEE Wirin Regulations (BS7671), or the relevant national standards.

The requirement for the mains supply to the panel is fixed wiring, using 3-core cabl less than 1mm^2 and no greater than 2.5mm^2), or a suitable three conductor system from an isolating switched spur, fused at 3A.

In order to maintain cable segregation, the incoming mains cable should be fed into panel via the top right hand side knockouts (provided on the base unit). Knockouts should be removed with a sharp, light tap using a flat 6mm broadsided screwdriver shown in diagram (see right). Always ensure that if a knockout is removed, the hole filled with a good quality 20mm cable gland. Any unused knockouts must be secure blanked off.



WARNING: DO NOT ATTEMPT TO CONNECT THE MAINS SUPPLY TO THE POWER SUPPLY PCB UNTIL ALL PCBs ARE SECURELY INSTALLED IN THE ENCLOSURE.

Connecting Mains Supply to the Power Supply PCB

Terminate the mains cable at the Power Supply PCB connector CONN1 (see Figure 1 below).

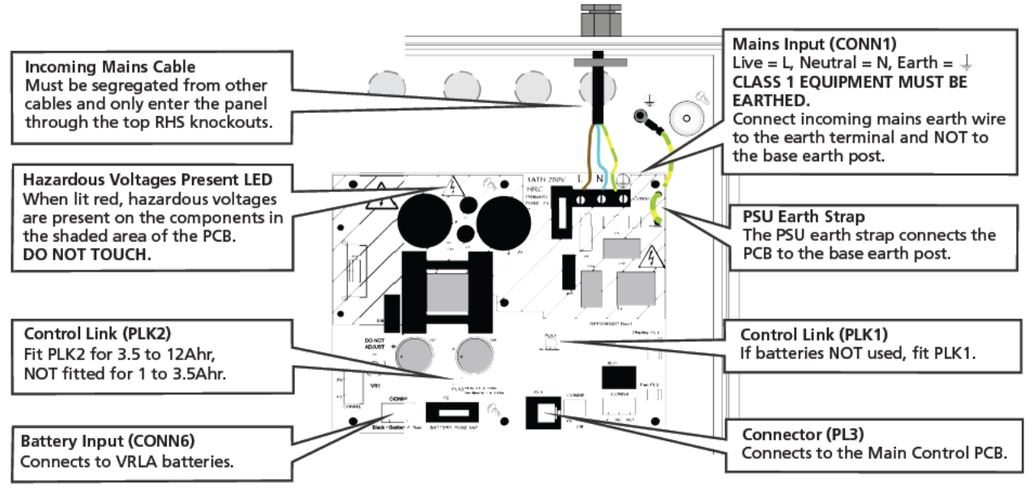
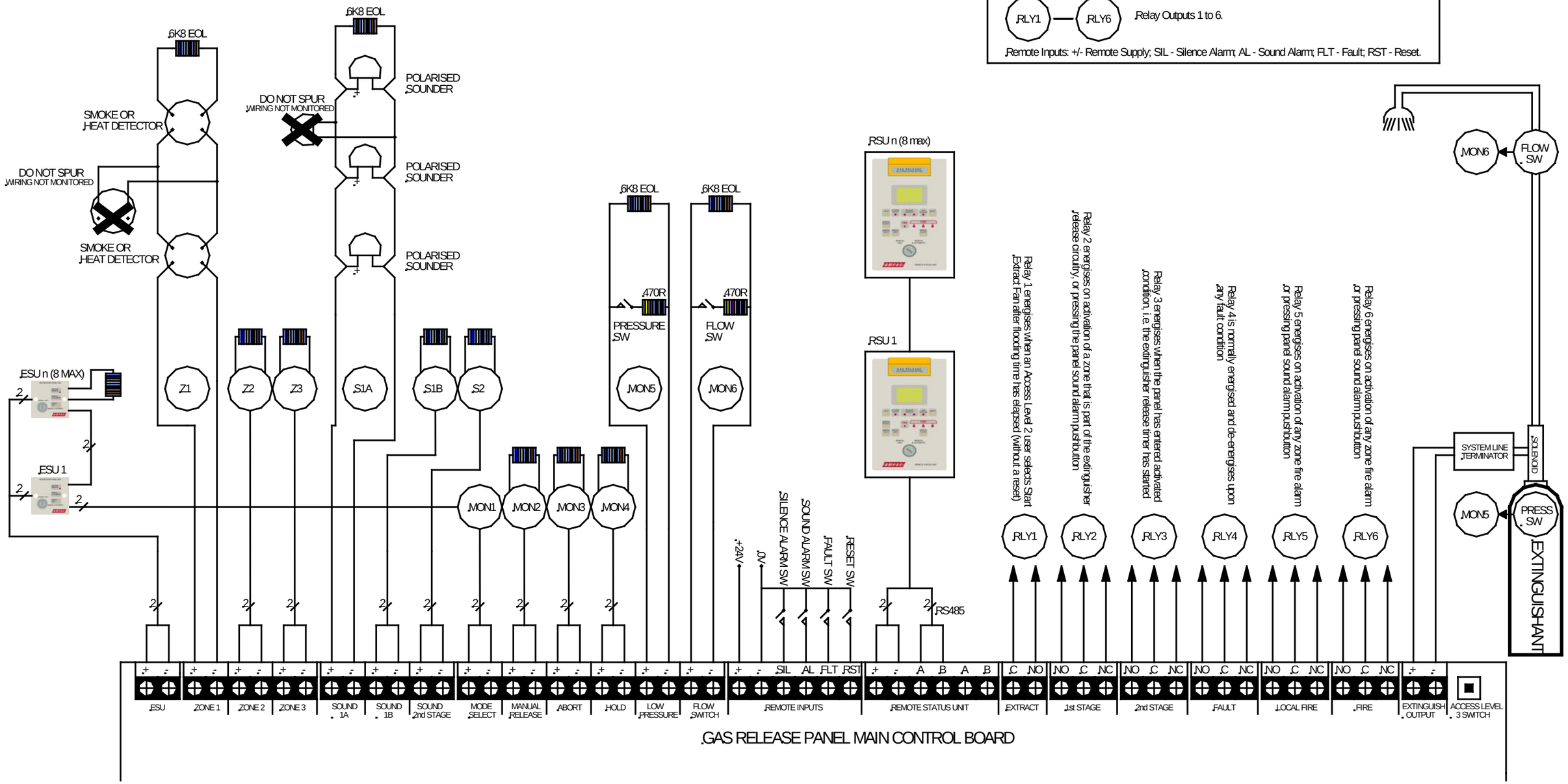


Figure 1 – Power Supply PCB Layout and Connection Details



*" Our aim is to provide ' **Consistently Excellent Service** ' in the eyes of our customers "*