



MULTI INPUT MODULE INSTRUCTION MANUAL



SCM-MIM

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General

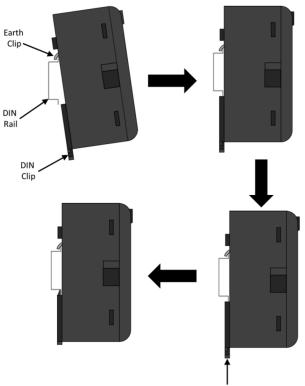
The SCM-MIM is a six input module that is designed to be DIN mounted inside of a Smart Connect Multi-loop control panel. It's powered and interfaced to the panel via a RJ45 connection. The module has six class B inputs that are commonly used to monitor and raise alarms from any ancillary equipment such as sprinkler flow switches, aspiration detectors, secondary fire control panels, beam detectors, and external power supplies etc. The module monitors and transmits the status (normal, open, short, or alarm) of inputs to the control panel. Each input can be programmed to either give an alarm or technical alarm signal when active.

Installation



ATTENTION: THE PANEL MUST BE POWERED DOWN AND DISCONNECTED FROM THE BATTERIES BEFORE INSTALLING OR REMOVING ANY MODULES.

- 1. Ensure that the installation area is free from any cables or wires that may get caught, and that there is enough space on the DIN rail to mount the module. Also ensure that the DIN clip underneath the module is in the open position.
- 2. Place the module onto the DIN rail, hooking the metal earth clip underneath onto the rail first.
- 3. Once the earth clip is hooked, push the bottom of the module onto the rail so that the module sits flat.
- 4. Push the plastic DIN clip (located at the bottom of the module) upwards to lock and secure the module into position.



- 5. Once the module is secured to the DIN rail, simply connect the supplied CAT5E cable to the module's RJ45 port.
- 6. Connect the other end of CAT5E cable to the nearest unoccupied RJ45 port on the termination PCB.





TRM RJ45 Port Address Designation

Each RJ45 port on the Smart Connect Multi-loop termination has its own unique port address. This port address is important to keep note of as it is displayed on Alarm/Fault messages and is used when configuring or setting up cause and effects on the panel (See SCM operation manual GLT-261-7-10).

Securing the modules

The modules are designed to clip together to make them more secure. In addition, the SCM panel is supplied with Din rail stoppers. These should be fitted before the first module, and after the last module on each rail.

Before Powering the Panel On

- To prevent the risk of a spark, do not connect the batteries. Only connect the batteries after powering on the system from its main AC supply.
- 2. Check that all external field wiring is clear from any open, shorts and ground faults.
- 3. Check that all the modules have been installed properly, with correct connections and placement
- 4. Check that all switches and jumper links are at their correct settings.
- 5. Check that all interconnection cables are plugged in properly, and that they are secure.
- 6. Check that the AC power wiring is correct.
- 7. Ensure that the panel chassis has been correctly earth grounded.

Before powering on from the main AC supply, make sure that the front panel door is closed



Power on Procedure

- 1. After the above has been completed, turn the panel on (Via AC Only). The panel will follow the same power up sequence described in initial power up section above
- 2. The panel will now display one of the following messages

Message	Meaning		
	Panel has not detected any modules fitted		
******	during its power up check.		
MOT MOD	ading to power up effects.		
NAC1 NACZ	Power down the panel and check that the expected modules are fitted, and that all		
ONE OF STATE			
BOYON BARTY PALEY			
MADIES FOR MANIFOCES MARKET FOR ICE ACT	module cables are correctly inserted.		
NAC CLASS B - B2			
No Modules	Note that the panel will need at least one		
No modules	module fitted to run.		
	The condition date declared and the coldest		
001 New module : SOUNDER CLASS B	The panel has detected a new module added		
002 Empty port	to a port that was previously empty.		
003 Empty port			
004 Empty port	This is the usual message seen the first time a		
005 Empty port	panel is configured		
✓	i		
001 Changed module : SOUNDER CLASS B			
002 Empty port	The panel has detected a different type of		
003 Empty port	module fitted to a port that was previously		
004 Empty port	occupied.		
005 Empty port			
✓			
	The panel has detected a module fitted to a		
001 Serial Number Changed : LOOP	-		
002 Empty port	port that is the same type, but it's serial		
003 Empty port	number has changed.		
004 Empty port			
005 Empty port	This could happen if a loop module was		
✓	swapped with another one, for example.		
001 Removed Module :LOOP			
002 Empty port	The panel has detected no module fitted to a		
003 Empty port	port that was previously occupied.		
004 Empty port	port triat was previously occupied.		
005 Empty port			
× × A			
System healthy Example Panel			
2019/02/19 09:33			
	The panel has detected no module changes, so has powered up and started running		
zeta			
ALERM SYSTEMS			



- 1. Check that the module configuration is as expected using the ▲ and ▼ to navigate the through the port numbers. Press the ✓ icon to confirm the changes.
- 2. The new module is now configured into the panel and is ready for use.
- 3. Since the batteries are not connected, the panel will report them as removed, lighting the yellow "Fault" LED, intermittently sounding the Fault buzzer, and displaying battery removed message on the screen.
- 4. Connect the batteries, ensuring that the polarity is correct (Red wire = +ve) & (Black wire = -ve). Acknowledge the Fault event via the display screen, and reset the panel to clear the battery fault.
- 5. The panel should now remain in the normal condition, and you can configure the panel as normal.

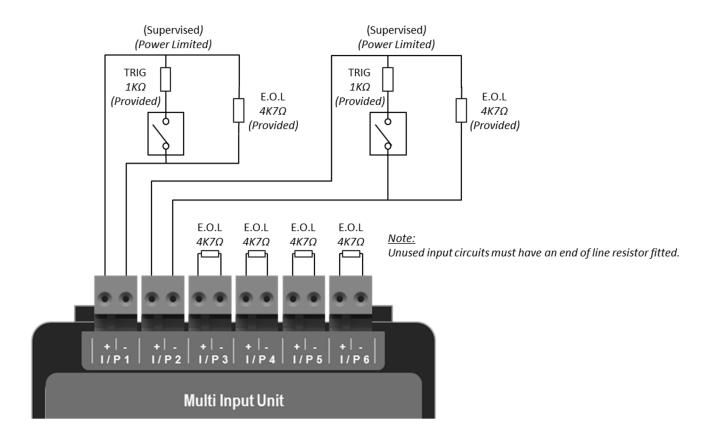
Field Wiring



NOTE: The terminal blocks are removable to make wiring easier.



ATTENTION: DO NOT EXCEED POWER SUPPLY RATINGS, OR MAXIMUM CURRENT RATINGS.





Wiring recommendations

Wire Gauge (AWG)	Maximum Wiring Run (Metres)
22	910
20	1450
18	2300



RECOMMENDED CABLE:

Cable should be BS approved FPL, FPLR, FPLP or equivalent.

Front Unit LED Indications

LED Indication	Description	LED Indication	Description
.♠.	On steady when the input is in an alarm condition.	ţ	Pulses to show communication between the module and the motherboard.
(!)	Flashing when the input is in a fault condition.		

^{*}When a SCM-MIM circuit is disabled, the Fault LED be steady (yellow).

Specifications

Specification	SCM-MIM
Design Standard	EN54-2
Approval	LPCB (Pending)
Wiring Class	6 x Class B [Power limited & Supervised]
Circuit Voltage	24VDC Nominal (16V – 24.5V with E.O.L fitted)
Quiescent Current (Module + E.O.L)	48mA
Alarm Current	73mA
Input Maximum Line Impedance	10Ω
Maximum Ground Fault Impedance	10ΚΩ
End of Line Resistor	4Κ7Ω
Triggering Resistor	1ΚΩ
Operating Temperature	-5°C (23°F) to 40°C (104°F)
Max Humidity	93% Non-Condensing
Size (mm) (HxWxD)	103mm x 97mm x 46mm
Weight	0.2KG
Recommended Cable Sizes	22 AWG to 18 AWG (0.3mm² to 0.8mm²)