EQUIPMENT: **SIO800**
PUBLICATION: 17A-03-SIO
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# DOCUMENT CONTROL NUMBER /

# SIO800 SINGLE INPUT/OUTPUT MODULE - INSTALLATION INSTRUCTIONS


**Fig. 1 SIO800 Single Input/Output Module**

## 1. TECHNICAL SPECIFICATION

| | |
|---|---|
| **Type Identification Value:** | 148 |
| **System Compatibility**: | Use only with MX Fire Alarm Controllers |
| **Environment**: | Indoor Application only |
| **Operating Temperature**: | -25$^{o}$ to +70$^{o}$C |
| **Storage Temperature:** | -40$^{o}$ to +80$^{o}$C |
| **Operating Humidity**: | Up to 95% non-condensing |
| **Dimensions (HWD)**: | 85 x 60 x 15mm |
| **Mounting Requirements**: | One MK backbox surface mount or an ANC-8 ancillary housing |
| **Battery Requirements**: | |
| Standby current: | 0.3mA |
| Alarm current: | 3mA |
| **Wire Size**: | Min 1.5mm$^2$<br>Max 2.5mm$^2$ |

**Addressable Device Conditions**:
- Normal
- Short Circuit wiring fault
- Open Circuit wiring fault
- Device Type invalid
- Device No Response

**Input Circuit**:

| | |
|---|---|
| EOL: | 3k3 |
| Alarm resistor: | 680Ω |

**Electromagnetic Compatibility**

The SIO800 complies with the following:

Product family standard EN50130-4 in respect of Conducted Disturbances, Radiated Immunity, Electrostatic Discharge, Fast Transients and Slow High Energy

EN50081-1 for Emissions

## 2. INTRODUCTION

The SIO800 Single Input/Output Module is designed to provide to provide a monitored open collector input and a volt free relay changeover output.

### 2.1 FEATURES

- SIO800 can switch up to 2A @ 24V dc

## 3. WIRING NOTES

The following notes apply:

1) There are no user-required settings (such as switches or headers) on SIO800.
2) All wiring must conform to the current edition of IEE Wiring Regulations and BS5839 part 1.
3) All conductors to be free of earths.
4) Fit the PCB to the M520 cover/ANC-8 ancillary housing.
5) Verify the correct polarity of wiring before connecting the SIO800 to the addressable loop circuit.
6) For SIO800 typical wiring configurations (see Figures 6).

### 3.1 INSTALLATION OF MODULES INTO AN ANC-8 ANCILLARY HOUSING

The housing can accommodate up to eight ancillary PCBs. A stacking kit is available if a second layer of PCBs is required.

To install MX800 modules into an ANC-8 ancillary housing, proceed as follows:

a) Assemble required ancillary PCBs onto chassis plate as required, fixing as shown in Fig. 3.
b) Assemble chassis plate into housing and secure using fixing screw, see Fig. 2.




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c) Connect chassis plate earth lead to housing, see Fig. 2.

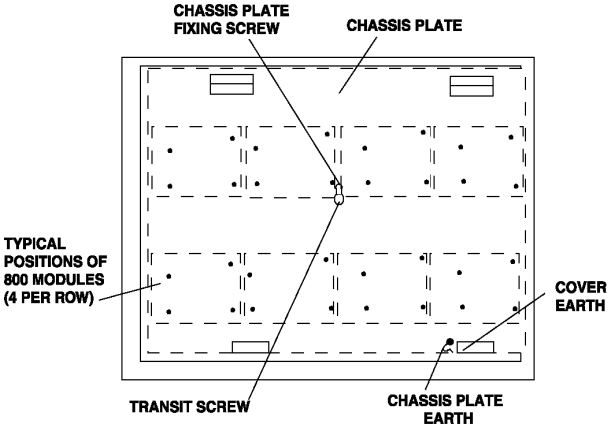


**Fig. 2 ANC-8 - Chassis Plate**

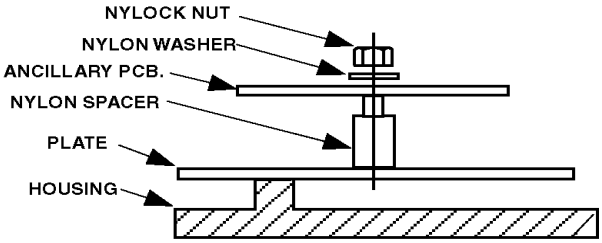


**Fig. 3 ANC-8 - PCB Fixing Detail**
**CAUTION**
**Ensure only nylon spacers and nylon**

### 3.2 INSTALLATION TO M520 DOUBLE GANG COVER

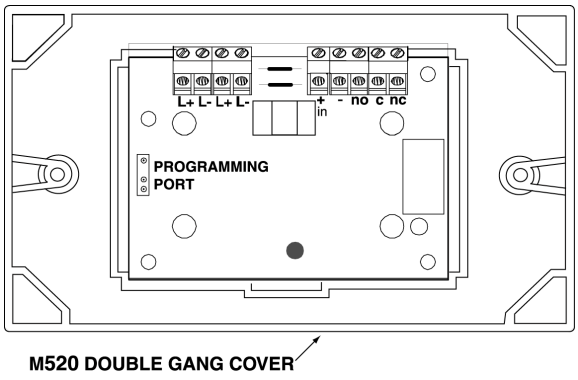


**Fig. 4 SIO800 Fitted to Cover**

1) Assemble the SIO800 to M520 Double Gang cover, using the four screws and washers provided.

2) Fit cover onto MK backbox.

## 4. ADDRESS SETTINGS

The SIO800 has a default factory set address of 255. This must be set to the loop address of the device using the 801AP MX Service Tool. The SIO800 may be programmed with the address prior to being installed by using the internal programming port (see Fig. 4) or after being installed by using the programming port on the front cover (see Fig. 5).

*Note: Once the address has been programmed, take note of the device location and address number, to include on site drawings.*

## 5. CABLING

Cables are to be selected in accordance with Publication 17A-02-D and the requirements of the current issue of BS5839. A maximum of one 1.5mm$^2$ or one 2.5mm$^2$ cable may be connected at any one terminal.

## 4. ASSOCIATED EQUIPMENT

The module fits onto a standard dual-gang MK box, or an ANC-8 ancillary housing.

## 5. ORDERING INFORMATION

| | |
|---|---|
| SIO800 Single Input/Output Module c/w Cover: | 555.800.064 |
| SIO800 Single Input/Output Module: | 555.800.063 |
| M520 Double-Gang Cover: | 517.035.007 |
| ANC-8 Ancillary Housing Assy: | 557.180.096.A.T.Y |

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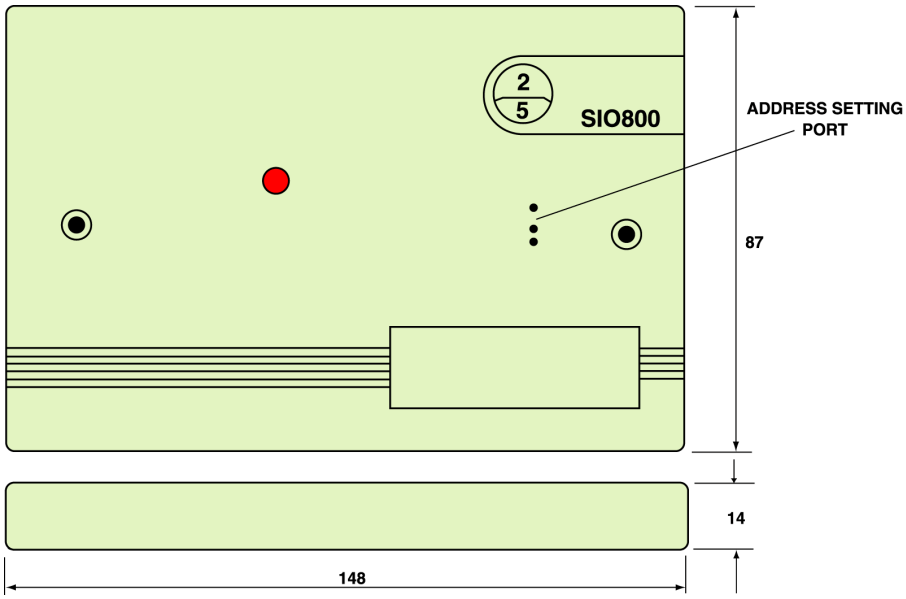


**Fig. 5 SIO800 Single Input/Output Module Facia Plate**

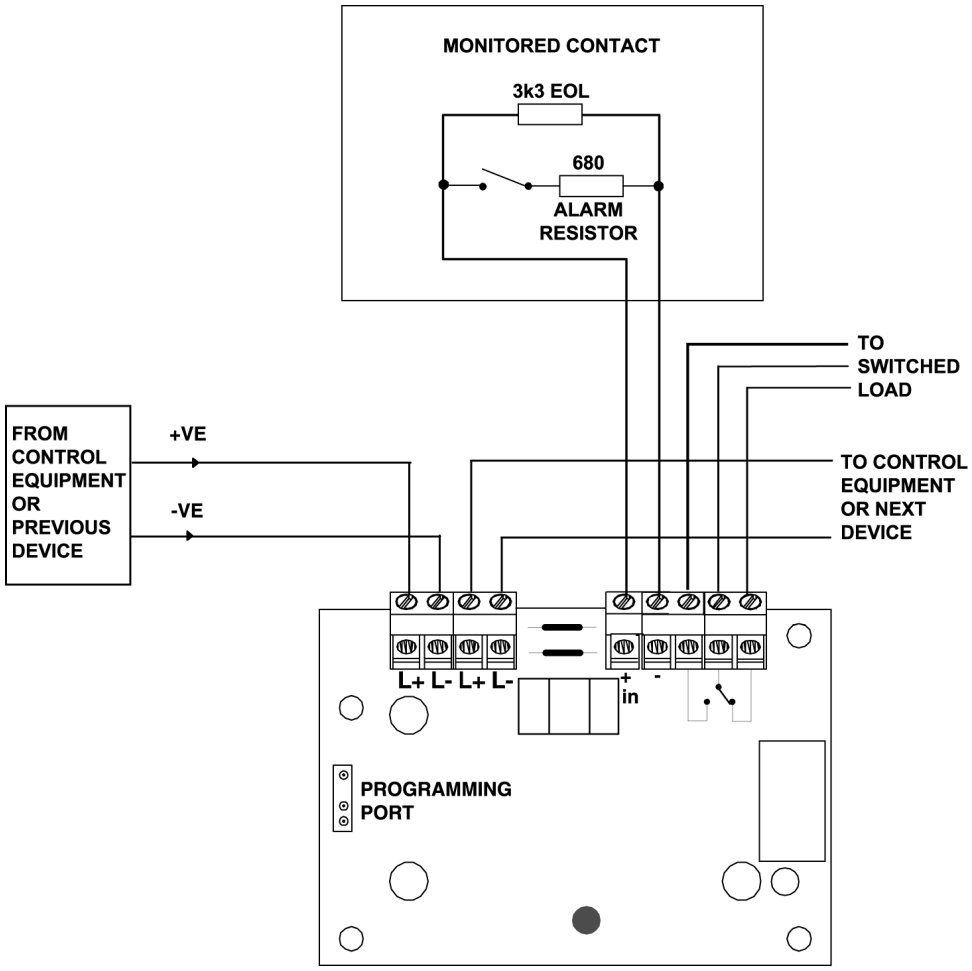


**Fig. 6 SIO800 - Simplified Wiring Diagram**