



## Soteria Switch Monitor Unit Installation Guide

Item No	Part No	Product Description
4110-1104	SA-4700-100AMP	Soteria Switch Monitor Unit

### Technical Information

All data is supplied subject to change without notice. Specifications are typical at 24V, 25°C and 50% RH unless otherwise stated.

Supply Voltage	17-35V dc
Quiescent Current	500µA
Power-up Surge Current	900µA
LED Current	1.6mA per LED
Maximum Loop Current (I <sub>c</sub> max; L1 in/out)	1A
Operating Temperature	-40°C to 70°C
Humidity	0% to 95% RH (no condensation or icing)
Approvals	EN 54-17 & EN 54-18

For additional technical information please refer to data sheet PDS4110-1104 which is available on request.

### Addressing

Table 1

	XP95 / Discovery Systems	Soteria CoreProtocol Systems
Segment	1	Sets the address
	2	
	3	
	4	
	5	
	6	
	7	
	8	
MCP	Priority interrupt - enables MCP behaviour	Enables priority enabled switch monitor behaviour
DLY	Enables 30 second delay into alarm	Enables 30 second delay into alarm

### Note:

On mixed systems, addresses 127 and 128 are reserved. Refer to system's panel manufacturer for further information.

### Installation

**1**

**i** Drill holes where required.

**2**

**!** Do not over tighten screws

**3**

**i** Remove knockouts and fit glands where required.

**4**

**!** Do not over tighten screws

**5**

**!** Do not over tighten screws

**6**

**i** See Table 1

**7**

**!** The 8th segment must be in set to '0' for Discovery / XP95 operation

**8**

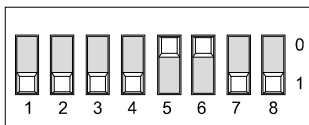
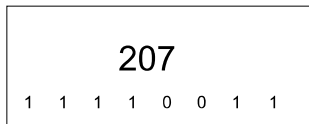
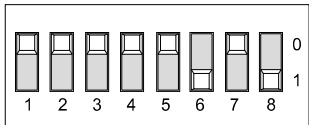
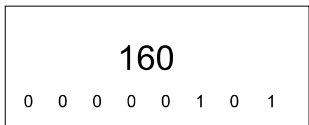
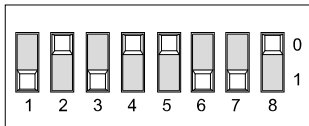
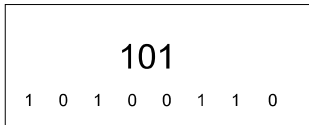
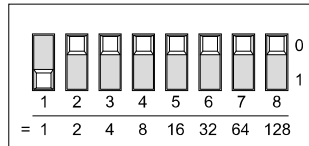
**!** All CI tests must be completed before connecting the interface. For connectivity see Figs 1, 2 & 3

**9**

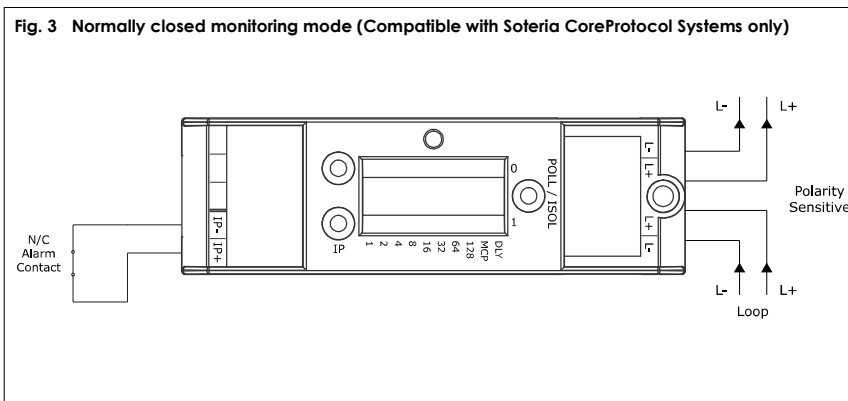
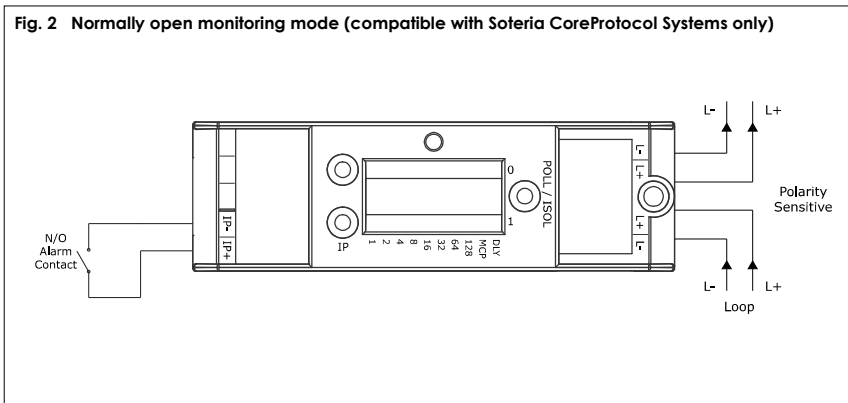
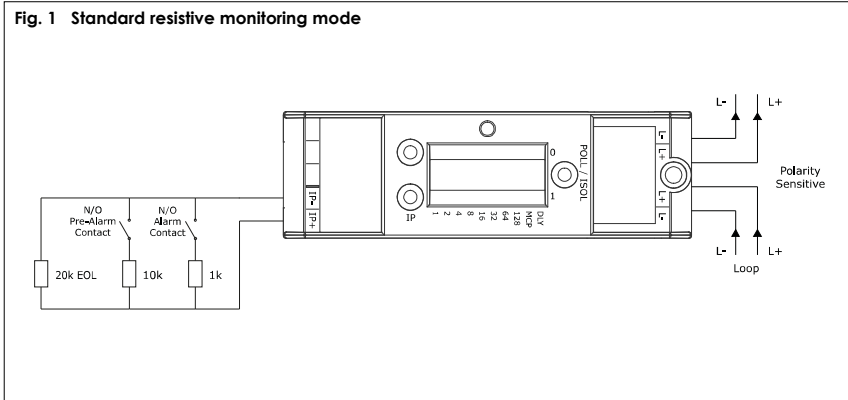
**i** Note the alignment marks

**10**

# Address Setting Examples



# Connectivity Examples



## LED Status Indicator

POLL/ ISO	Flashing Green	Device Polled
	Continuous Yellow	Isolator Active
IP	Continuous Red	Input Active
	Continuous Yellow	Input Fault

**Note:**  
Not all LEDs can be on simultaneously.

## Commissioning

The installation must conform to BS5839-1 (or applicable local codes).

## Maintenance

Removal of the external cover must be carried out using a flat screwdriver or similar tool.

## Caution!

Unit damage. No electrical supply greater than 50V ac rms or 75V dc should be connected to any terminal of this Switch Monitor Unit.

## Troubleshooting

Before investigating individual units for faults, it is important to check that the system wiring is fault free. Earth faults on data loops or interface zone wiring may cause communication errors. Many fault conditions are the result of simple wiring errors. Check all connections to the unit.

Problem	Possible Cause
No response or missing	Incorrect address setting Incorrect loop wiring
Fault condition reported	Incorrect input wiring Incorrect end-of-line resistor fitted
Analogue value unstable	Dual address Loop data fault, data corruption
Constant alarm or pre-alarm	Incorrect wiring Incorrect end-of-line resistor fitted
Isolator LED on	Short-circuit on loop wiring Wiring reverse polarity Too many devices between isolators

## Mode Table\*

Mode	Description
1	DIL Switch XP mode
2	Switch Monitor - normal resistance bands with alarm delays
3	Priority Switch Monitor - normal resistance bands
4	Switch Monitor - N/C input with alarm delays
5	Priority Switch Monitor - N/C input

\*Soteria CoreProtocol enabled systems only