

Intelligent Input/Output Unit Installation Guide

Part No	Product Name
SA4700-102APO	Intelligent Input/Output 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

Relay Output Contact Rating 1A at 30V dc or ac

LED Current 1.6mA per LED

Maximum Loop Current 1A (I_cmax; L1 in/out)

Operating Temperature -40°C to 70°C

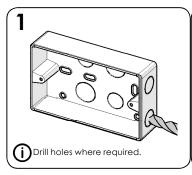
Humidity 0% to 95% RH

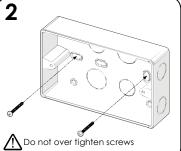
(no condensation or icing)

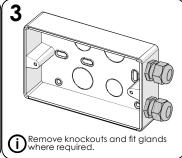
Approvals EN 54-17 & EN 54-18

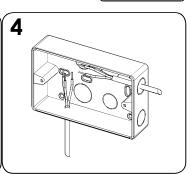
For additional technical information please refer to the following documents which are available on request.

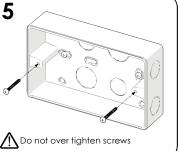
PP2553 - Intelligent Input/Output Unit











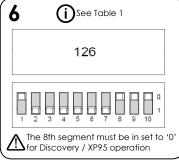
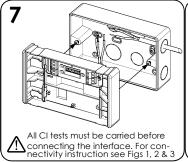
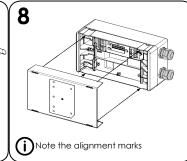
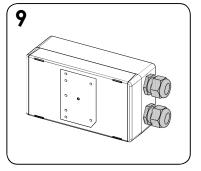


Table 1





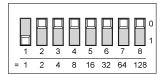


Addressing

		XP95 / Discovery Systems	CoreProtocol Systems
	1		
	2		
	3		
 _	4	Sets the address	Sets the address
l e	5		seis irie address
ᄩ	6		
Še	7		
	8	Set to '0' (Fault value is returned if set to '1')	
	FS	Enables failsafe mode (compliant with BS7273-4 for door holders)	Enables failsafe mode (compliant with B\$7273-4 for door holders)
	LED	Enables/Disables LED (except Isolator LED)	Enables/Disables LED (except Isolator LED)

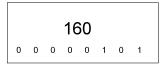
Note: On mixed systems addresses 127 and 128 are reserved. Refer to system's panel manufacturer for further information.

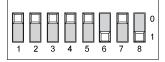
Address Setting Examples









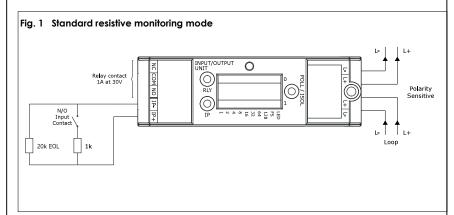






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Connectivity **Examples**



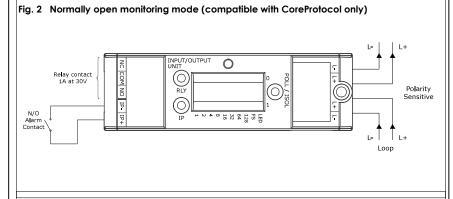
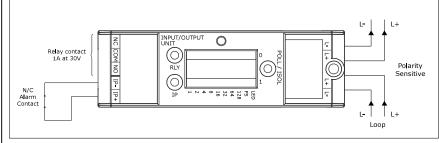


Fig. 3 Normally closed monitoring mode (Compatible with CoreProtocol only)



When operated under XP95 or Discovery Protocols, EN54-13 type 2 devices can be connected. In case EN54-13 type 1 devices need to be connected they must be installed directly next to this module, with no transmission path according to EN 54-13.

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LED Status Indicator

RLY POLL/ ISO	Continuous Red	Relay Active
	Continuous Yellow	Fault
	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.

Commissionina

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

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

<u>Unit damage. No electrical supply greater than 50V ac rms or 75V dc should be connected to any terminal of this Input/Output Unit.</u> Note: For compliance with Electrical Safety Standards the sources switched by the output relays must be limited to a 71V transient over-voltage condition. Contact Apollo for more information.

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
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No response or missing Incorrect address setting Incorrect loop wiring Incorrect input wiring Fault condition reported Incorrect wiring
Control panel has incorrect cause
and effect programming Relay fails to operate

Relay energised continuously

Analogue value unstable

Constant Alarm

Incorrect loop wiring Incorrect address setting Dual address Loop data fault, data corruption Incorrect wiring
Incorrect end-of-line resistor fitted
Incompatible control panel

software

isolators

Isolator LED on

Short-circuit on loop wiring Wiring reverse polarity Too many devices between

Mode Table*

Mode	Description	
1	DIL Switch XP Mode	
2	Alarm Delays	
3	Output and N/O input (can be equivalent for Output only)	
4	Output and N/C input	
5	Output with Feedback (N/C)	
6	Failsafe Output with Feedback (N/C)	
7	Failsafe Output without Feedback	
8	Momentary Input Activation Sets Output Relay	
9	Input Activation Sets Output	

*CoreProtocol enabled systems only