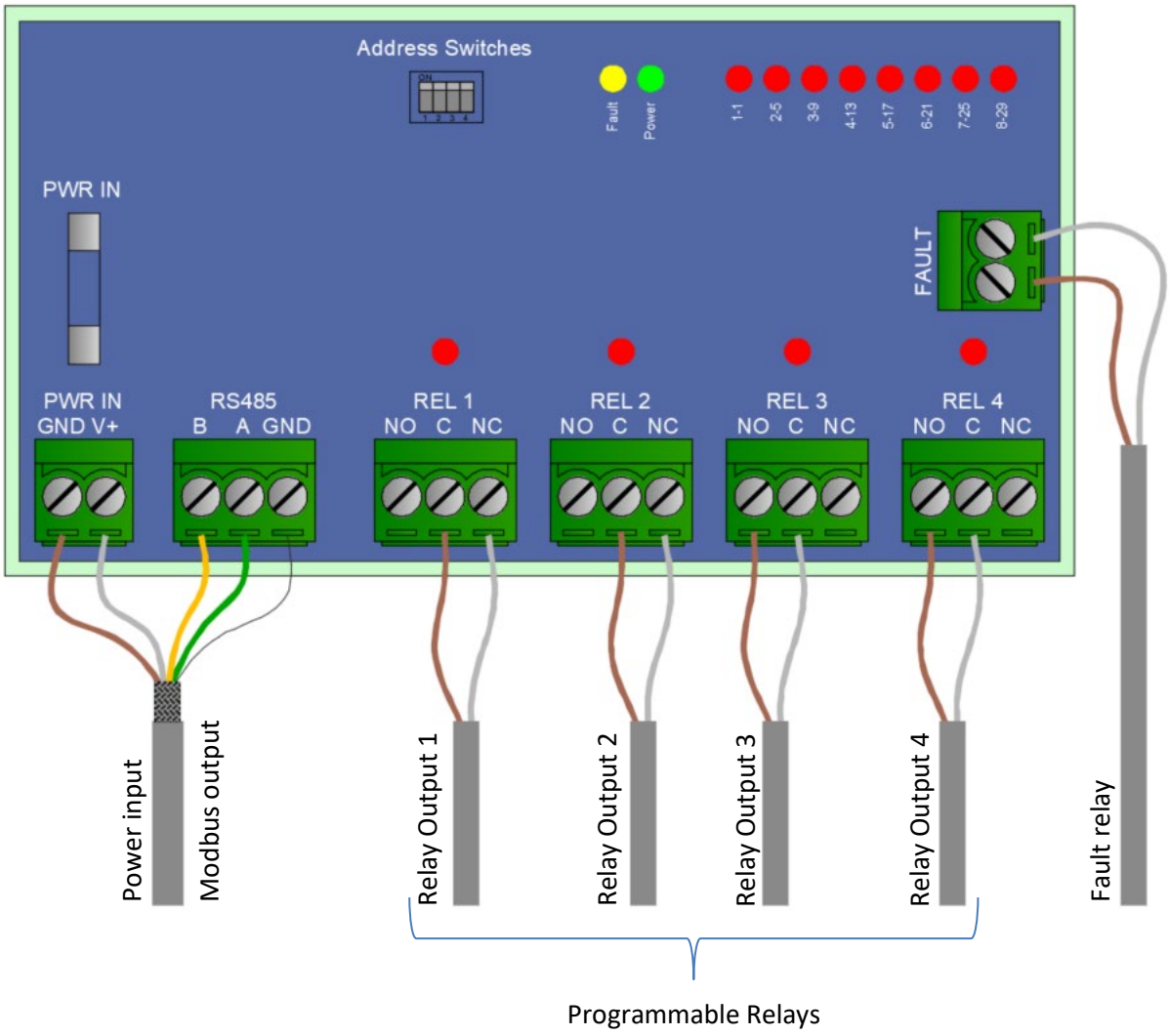
Relay Output Module

Prosense provides programmable relay output module to use for integration with 3rd party systems with relay outputs which could be connected to DPX Panel MODBUS Chain. The module has 4 programmable relays and an additional fault relay for monitoring module fault status. In total 8 modules(32 relays) can be connected per DPX panel. Relays can be programmed via DPX panel display or DPX Configurator software.



There is 1 fuse located on the electronic board. If replacement needed, plastic cover must be removed and fuse must be replaced with the new one.

Fuse	Rating
PWR IN	2000mA

Fuse Details

Connector	Pins	Usage
PWR IN	V+	Power input 12-28VDC + connection
	GND	Power input 12-28VDC - connection
RS485	A	MODBUS Connection to DPX panel - port A
	B	MODBUS Connection to DPX panel - port B
	GND	MODBUS Connection to DPX panel - port Ground
REL 1	NO	Relay 1 output NO pin
	C	Relay 1 output COM pin
	NC	Relay 1 output NC pin
REL 2	NO	Relay 1 output NO pin
	C	Relay 1 output COM pin
	NC	Relay 1 output NC pin
REL 3	NO	Relay 1 output NO pin
	C	Relay 1 output COM pin
	NC	Relay 1 output NC pin
REL 4	NO	Relay 1 output NO pin
	C	Relay 1 output COM pin
	NC	Relay 1 output NC pin
FAULT	FAULT	Fault Relay output NC pin
	COM	Fault Relay output Common pin

Pin Details

Module address can be configured via dip switches located on the electronic board. Device modbus address depends on dip switches and must be unique for every communication line.

Following table shows dip switch settings.

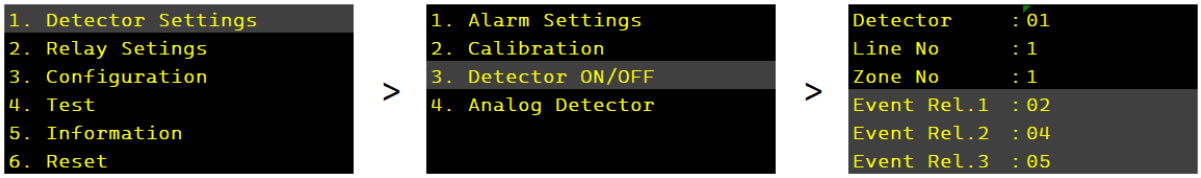
Module Address	Modbus Address	Switch Setting	Relay Addresses
1	137		1-4
2	138		5-8
3	139		9-12
4	140		13-16
5	141		17-20
6	142		21-24
7	143		25-28
8	144		29-32

Switch Settings

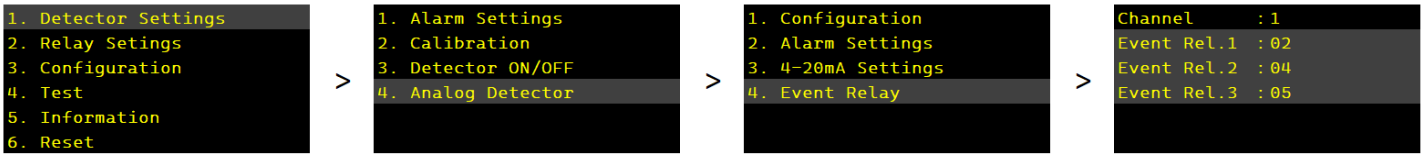
Each relay can be configured for fault, alarm 1, alarm 2, alarm 3 or over range event. Latch or auto-reset can be configured and each relay can have individual off delay from 0 to 99 minutes. These configuration can be done via DPX panel menu or DPX Configurator software.

Each RS485 detector and analogue channel can be configured for 3 events. This also could be configured via DPX panel menu or DPX Configurator software.

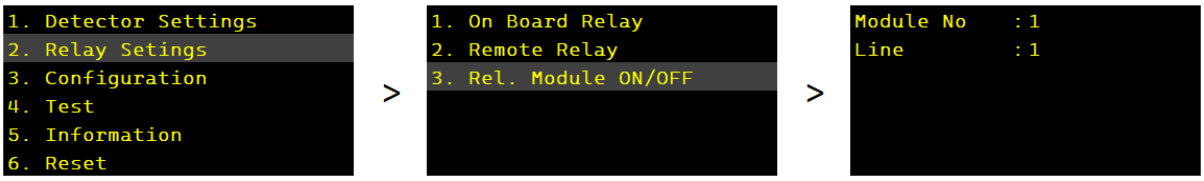
Menu steps for event configuration of a detector connected to RS485 line:



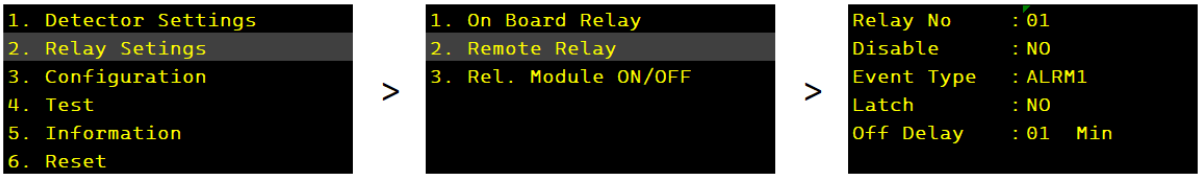
Menu steps for an analogue channel event configuration:



Menu steps for configuring relay modules:



Menu steps for configuring relay settings:



Relay output module have 14 LEDs that shows the status of the device.

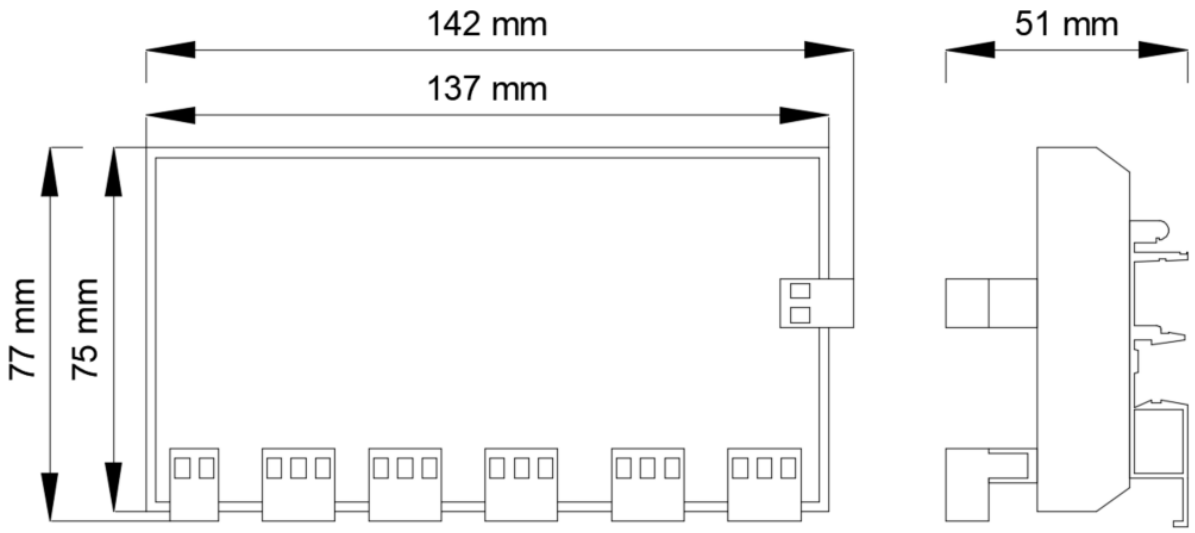
LED	Colour	Signal
Fault	Yellow	Off in normal operation, constant lit in fault
Power	Green/Red	Off when there is no power, blinks green or red in normal operation
Relay 1	Red	Off in normal operation, constant lit in activation
Relay 2	Red	Off in normal operation, constant lit in activation
Relay 3	Red	Off in normal operation, constant lit in activation
Relay 4	Red	Off in normal operation, constant lit in activation
Base Address 1	Red	Shows the base address(address of first relay) of module
Base Address 2	Red	Shows the base address(address of first relay) of module
Base Address 3	Red	Shows the base address(address of first relay) of module
Base Address 4	Red	Shows the base address(address of first relay) of module
Base Address 5	Red	Shows the base address(address of first relay) of module
Base Address 6	Red	Shows the base address(address of first relay) of module
Base Address 7	Red	Shows the base address(address of first relay) of module
Base Address 8	Red	Shows the base address(address of first relay) of module

LED Details

Specifications	Details
Inputs	-
Monitoring	Simultaneously monitoring communication status
Relay Outputs	4 programmable relays 30VAC/VDC, 2A 1 device fault relay 30VAC/VDC, 1A
LED Indicators	Power/On, Fault, Relay Statuses, Base Address Indicators for overall monitoring
Programming	Easy programming with DPX-Configurator or via panel display
Power Input	12-28VDC ±%10
Ingress Protection	No protection, must be mounted inside an enclosure
Humidity	10-95%RH Non-Condensing
Operating Temp.	-20 ˚to + 60 ˚C
Dimensions/Weight	160 gr
Mounting	Din Rail

Specifications

Relay modules have no enclosure and must be mounted inside a panel or junction box depending on the needs of the installation.



Dimensions