SILENT KNIGHT

Model 5883
Relay Interface Board

The following instruction describe how to install the 5883 to a Silent Knight Addressable fire control panel. Refer to the control panel installation manual (P/N 151139 or 151209) for programming instructions.

The 5883 is a relay interface board that has 10 general purpose Form C relays that can be used for activating voice evacuation, elevator recall or HVAC fan cut-off, as examples.

Each relay is activated by an open collector input from a controlling device such as a 5880.

Specifications

Table 1 lists the electrical, physical and environmental specifications of the Model 5883.

Table 1: Model 5883 Specifications

Specification Parameter		Rating
Operating Temperature:		32° - 120° F (0° - 49° C)
Cabinet Dimensions:	Height:	10-2/8” (26.04 cm)
	Width:	10-3/8” (26.35 cm)
	Depth:	3-1/8” (7.94 cm)
Relay Trigger Voltage:		5 VDC
Form C Relay		5.0A @ 30 VDC or 250 VAC resistive
Operating Voltage		24 VDC @ 420 mA max.
For indoor use only		

Wiring

Note: *Installation and wiring of this device must be done in accordance with NFPA 72 and local ordinances.*

Important! *All wiring is supervised and power limited.*

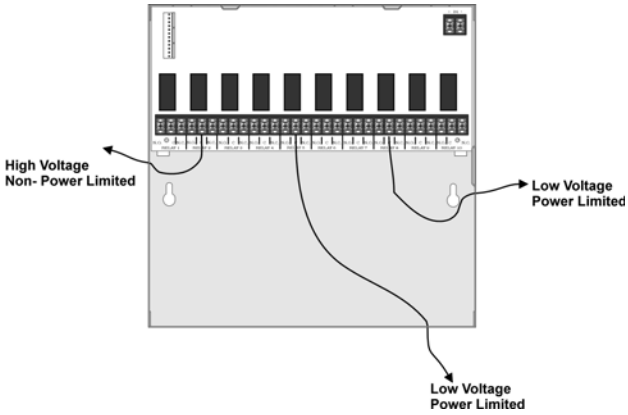


Figure 1: Wire Routing Example

Important! *1/4" spacing must be maintained between High and Low voltage circuits; as well as between power limited and non-power limited circuits.*

Important! *When using a combination of power limited and non-power limited circuits you must leave an unused relay in-between to maintain a 1/4’ spacing.*

Connecting the 5883 to Aux power

Connect the power terminals of the 5883 to a 24 VDC power supply as shown in Figure 2.

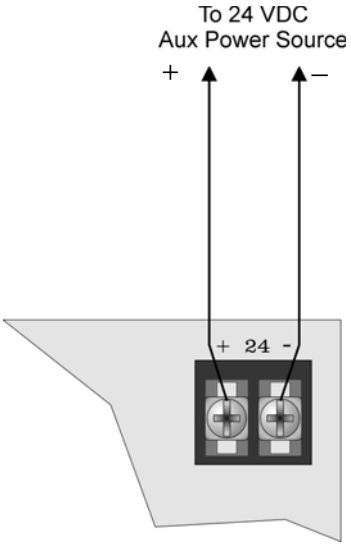


Figure 2: Auxiliary Power Connections

Note: *Auxiliary power is supplied by a Regulated UL listed power supply for Fire Protective Signalling Systems.*

Auxiliary Power Using Flexput™ Circuits

The 5883 can use aux power from any 24 VDC source. The following describes how to use the Flexput circuits as the auxiliary power source:

1. Connect the aux power wires to the Flexput terminals using “X” terminals as positive, and “O” terminals as negative power. See Figure 3.

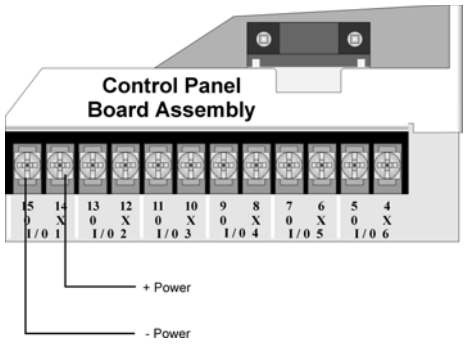
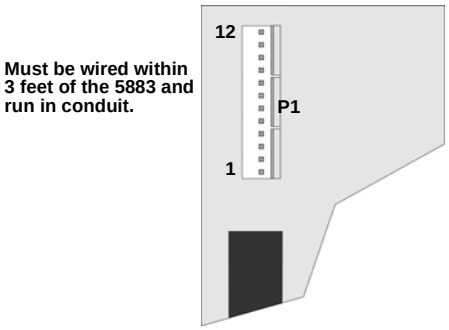


Figure 3: Flexput Auxiliary Power Output

2. Configure the auxiliary power output for constant output through programming. Refer to the control panel installation manual (*P/Ns 151139 & 151209*).

12-Pin Input Connector

The 5883's 12-Pin input connector (P1) plugs directly onto any of the 12-pin connectors on the 5880.



The following table list the pin-outs for the P-1 pin connector on the 5883.

Pin Number	Function
1	Trigger Relay 1
2	Trigger Relay 2
3	Trigger Relay 3
4	Trigger Relay 4
5	Trigger Relay 5
6	Trigger Relay 6

Pin Number	Function
7	Trigger Relay 7
8	Trigger Relay 8
9	Trigger Relay 9
10	Trigger Relay 10
11	+5 VDC
12	Not Used

Relay Wiring

The 10 on-board relays are all Form C relays. Figure 4 is an example of how the relays can be used.

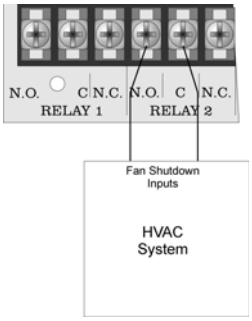


Figure 4: Relay Wiring Example

Mounting

Mount the cabinet as shown in Figure 5. Install the 5883 circuit board as shown in Figure 6.

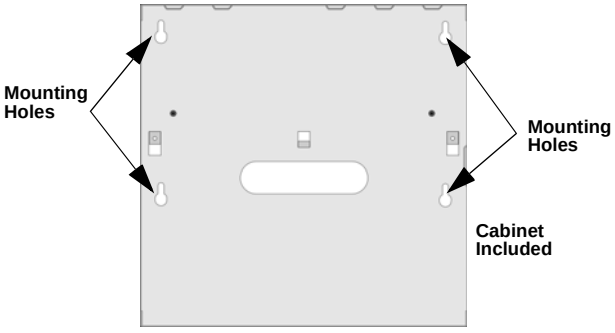


Figure 5: Cabinet Installation

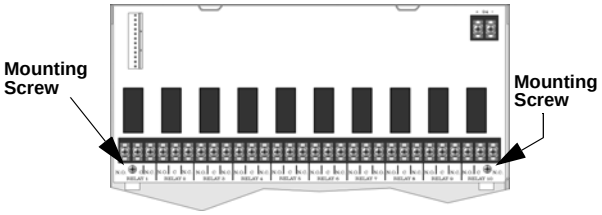


Figure 6: Circuit Board Mounting

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