

FW2811 INPUT MODULE







DESCRIPTION

The FW2811 input module monitors a single contact. The input line is monitored for open line faults and ground faults, and the contact must thus be wired with an end-of-line resistor. It is an intelligent addressable module and takes one address on the Signaling Line Circuit (SLC) or Data Communication Link (DCL) of the fire alarm control panel. The FW2811 is a UL listed device according to UL864 and ULC-S527 for Fire Protective Signaling Systems for indoor use. The type of the input contact is configurable. By changing the FW2811 input module functions from its attribute interface on FACP, it can be configured to be an alarm, supervisory, trouble, monitor or feedback signal, which will produce an ALARM, SUPERVISORY, TROUBLE, MONITOR or FEEDBACK event. The device LED will indicate the event condition by red steady on. They are latched/non-latched selectable. A return to normal condition will cause the event to disappear and the device LED indicator will return to the normal condition if the input is configured as non-latched. A return to normal condition will not cause the event to disappear and the device LED indicator will remain in event condition if the input is configured as latched.

ATTENTION



The products must be installed in accordance with the NFPA 72, the CAN/ULC-S524, and the Canadian Electrical Code depending on the country of installation. Check information of equipment used in the system by other

manufacturers for any guidelines or restrictions.

NOTE

Do not paint this device.

Any material extrapolated from this document or from Maple Armor's instructions or other documents describing the product for use in promotional or advertising claims, or for any other use, including a description of the product's application, operation, installation, and testing is the sole responsibility of the user. Maple Armor will not assume any liability for such use. In no case will Maple Armor's liability exceed the purchase price paid for a product.

SPECIFICATION

Nominal Voltage	24VDC	
Compatibility Voltage Range	13 to 28VDC	
Standby Current	≤0.18mA	
Alarm Current	≤0.25mA	
Max. Line Impedance for Input Circuit	25 Ω	
Max. Impedance for Grounding	6.6 ΚΩ	
Recommended Test Impedance for Open Circuit trouble	5 ΜΩ	
Recommended Test Impedance for Short Circuit trouble	0.1 Ω	
Compatible EOLR	FW421 (10KΩ) or FW422 (10KΩ)	
Operating Temperature	32 - 120°F (0 - 49°C)	
Operating Humidity	0% to 93% RH Non-condensing	
Mounting	FW800 / FW801 base	
Dimension	120 mm (L) x 120 mm (W) x 45 mm (H)	
Weight (with backbox)	8.7 oz (247 g)	
Wiring Gauge	12 to 18 AWG	

DOC-FW2811-UM-R1.0 INSTALLATION MANUAL





INSTALLATION

1. Mount the FW800 / FW801 base onto a 2X4 or 4x4 electrical box using the screws provided, as illustrated in Figure 1.

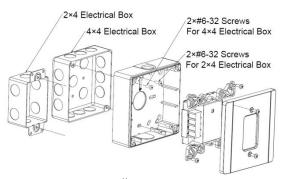


Figure 1. Installation Diagram

2. Connect the wires, see Figure 2. There is non-polarity between terminal 1 and terminal 2. All circuits are power-limited.

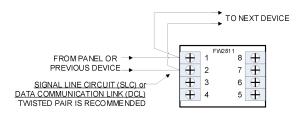
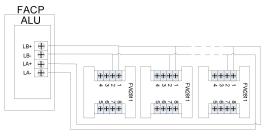


Figure 2. Wiring Diagram (SLC/DCL)

3. Wire the SLC/DCL to the module, as illustrated in Figure 3.



(a) Class A or DCLA Circuit

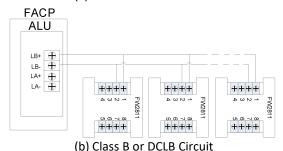
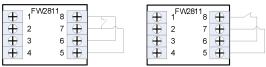
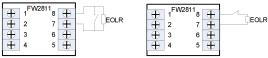


Figure 3. SLC/DCL Wiring Diagram

4. Connect the input line circuit wires. See Figure 4. The maximum line impedance for input circuit is 25Ω .



(a) Normally Open (b) Normally Closed Figure 4 Class A Wiring Diagram (Input Line Circuit)



(a) Normally Open

(b) Normally Closed

Figure 5 Class B Wiring Diagram (Input Line Circuit)

- 5. Combine the assembled unit to the base using the screws provided.
- 6. Apply power to FACP.

PROGRAMMING

The module must be programmed to a valid address before use. A valid must be in 1~252 and cannot be duplicate with other device in same loop. Refer to the manual of hand-held programmer FW2411 and Panel FW2105 to set the device address. Disconnect wire at terminal 1 and 2 before programming.

NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES

This product incorporates field-programmable software. In order for the product to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864, certain programming features or options must be limited to specific values or not used at all as indicated below.

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Program	Permitted	Possible	Permitted in UL	Note		
feature or	in UL864	settings	864			
option	(Y/N)		(Y/N)			
In. Mon	Υ	Mon.	Υ	Wirings are		
				supervised		
		Unmon.	N	Wirings not		
				supervised		
In. Invert.	Y	Normal	Υ	Feedback		
				when short		
		Inverting	N	Feedback		
				when open		

NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES

This product incorporates field-programmable software. In order for the product to comply with the requirements in CAN/ULC-S527, Standard for Control Units for Fire Alarm Systems, certain programming features or options must be limited to specific values or not used at all as indicated below.



Program feature or option	Permitted in CAN/ULC- S527 (Y/N)	Possible settings	Permitted in CAN/ULC-S527 (Y/N)	Note
In. Mon.	Υ	Mon. Unmon.	Y N	Wirings are supervised Wirings not
				supervised
In. Invert.	Υ	Normal	Υ	Feedback when short
		Inverting	N	Feedback when open

TESTING

- Before testing, inform the proper authorities that the system is undergoing maintenance and will temporarily be put out of service. Disable the system to prevent unwanted alarms.
- Make sure the indicator LED on the detector's surface is flashing every 4 seconds. Failure to flash or flashing every 1 second indicate a nonfunctioning module or a faulty wiring. Check the wiring and remount the module.
- Trigger the input switch to activate a fire alarm/supervisory/trouble/monitor signal. The LED should turn to red steady on. Check the event occurrence displayed on LCD of the controller and verify it.
- 4. Once the testing is completed, set the system back to normal operation and inform proper authorities.

MAINTENANCE

Return the module for repair if it fails to flash or alarm during testing. Do not disassemble the module without permission.