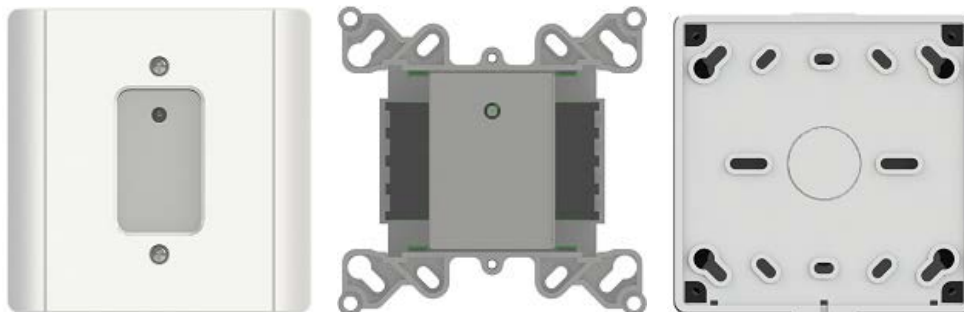


# FW831 RELAY MODULE



## DESCRIPTION

The FW831 relay module provides two control relay outputs which will be activated simultaneously. When the outputs are activated, the device LED will indicate the event condition by red blinking. A return to normal condition will cause the event to disappear and the device LED indicator will return to the red idle condition. The FW831 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. It is a UL listed product according to UL864 and ULC-S527 for Fire Protective Signaling Systems for indoor use.

### 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 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

<b>Nominal Voltage</b>	24VDC
<b>Voltage Range</b>	15 to 28VDC
<b>Standby Current</b>	0.15mA
<b>Active Current</b>	0.26mA
<b>Contact Rating</b>	30VDC 2A, 0.35pf
<b>Operating Temperature</b>	32°F to 120°F (0°C to 49°C)
<b>Operating Humidity</b>	0% to 93% RH
<b>Dimension</b>	120 mm (L) x 120 mm (W) x 45 mm (H)
<b>Weight (with backbox)</b>	9.0 oz (255 g)
<b>Mounting</b>	FW800 Base
<b>Wiring Gauge</b>	12 to 18 AWG

## INSTALLATION

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

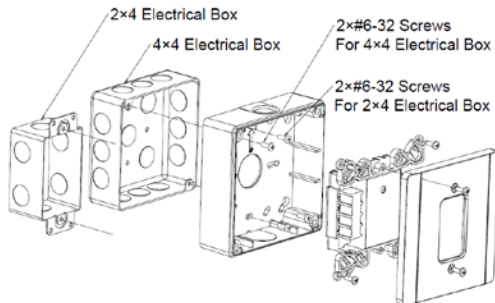


Figure 1. Installation Diagram

2. Connect the wires, see Figure 2. Terminal 1 and 2 are polarity sensitive. All circuits are power-limited. An external power source is needed since the relay outputs are dry contacts. External power source shall be UL 864 Listed with Class 2, power-limited output.

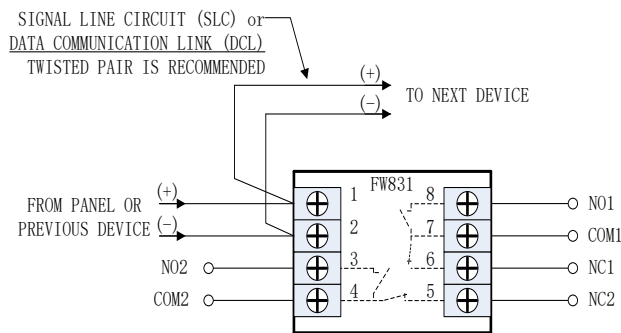
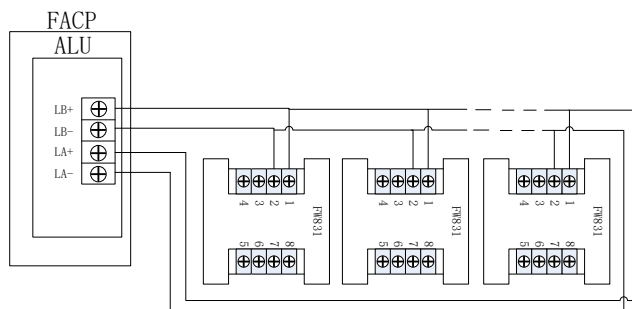
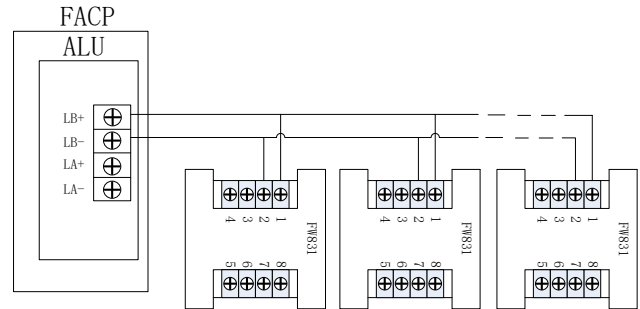


Figure 2. Module Wiring Diagram

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



(a) Class A or DCLA Circuit



(b) Class B or DCLB Circuit

Figure 3. SLC/DCL Wiring Diagram

4. Combine the assembled unit to the base using the screws provided.
5. Apply power to the control unit.

## 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 manual of the hand-held programmer ReadWritor FW411 and panel FW106 to set the device address. Disconnect wire at terminal 1 and 2 before programming. Disconnect wire at terminal 1, 2, 3, and 4 before programming.

## TESTING

1. 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.
2. Make sure the indicator LED on the module's surface is flashing. Failure to flash indicates a non-functioning detector or a faulty wiring. Check the wiring and remount the detector.
3. Check the relay contacts status to make sure they are in normal position.
4. Activate the output (you may need to first make a related control logic on the control panel). The LED should turn to red fast blinking.
5. Deactivate the output. The LED should turn to red idle condition.
6. 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.