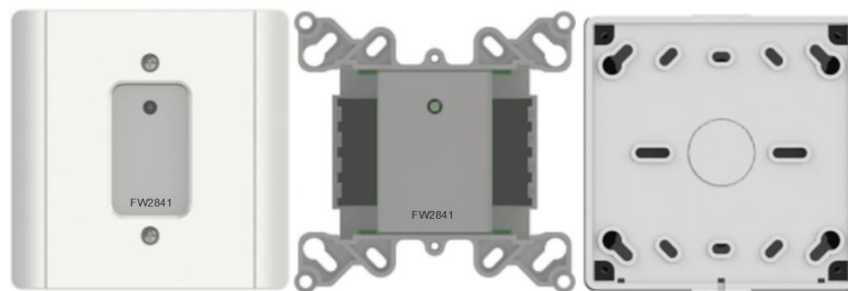


FW2841 CONVENTIONAL ZONE MODULE



DESCRIPTION

The FW2841 conventional zone module is intended to allow Maple Armor intelligent fire alarm control panels to interface and monitor 2-wire conventional detectors in retrofit applications.

The initiating zone can support a mix of 2-wire conventional automatic detectors as well as normally open dry contact alarm initiating devices such as mechanical heat detectors and manual stations. Alarm Verification is not permitted when 2-wire detectors are mixed with dry contact alarm initiating devices on the IDC. Alarm Verification is only permitted when only compatible smoke detectors are connected to the IDC.

Refer to Table 1 for compatible 2-wire smoke detectors.

ATTENTION



The products must be installed in accordance with the NFPA 72, the CAN/ULC-S524, the CAN/ULC536, 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

SLC Nominal Voltage	24 VDC
SLC Voltage Range	13 to 28 VDC
SLC Standby Current	0.8 mA
SLC Active Current	1.7 mA
External Input Power Supply	18.5 VDC to 28 VDC compatibility range
Max. IDC Line Impedance	25 Ω
Max. Impedance for Grounding	6.6 K Ω
Max. rated operating voltage range	15.5 V – 27.5 V
Max. alarm current	43 mA
Max. capacitance loading	1 μ F
Min. Normal Standby impedance	5.5 K Ω
Max. alarm reset voltage	0.2 V
Min. alarm reset time	9 s
Max. alarm verification retard reset time	40 s
Max. detector restart time for alarm verification	40 s
Compatible EOLR	2 K Ω to 5.6 K Ω
Operating Temperature	14 °F to 131 °F (-10 °C to + 55 °C)
Operating Humidity	0% to 95% RH Non-condensing
Dimension	120 mm (L) x 120 mm (W) x 45 mm (H)
Wiring Gauge	12 to 18 AWG

INSTALLATION

1. Mount the base onto a standard electrical box or a backbox model FW800& FW801 using the screws provided, See Figure 1.

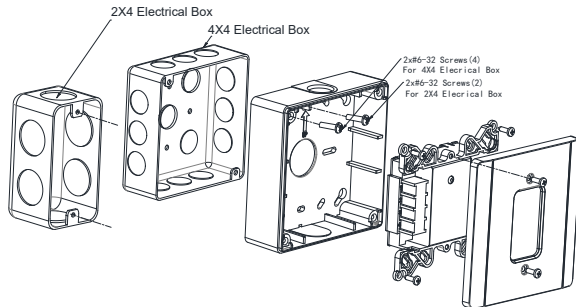


Figure 1 Installation Diagram

2. Connect the wires, see Figure 2. All circuits are power-limited.

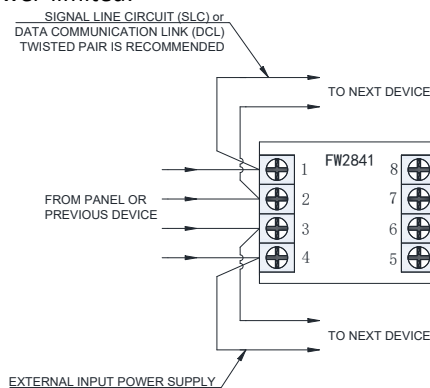


Figure 2 Wiring Diagram (SLC /DCL)

3. Connect the input line circuit wires. See Figure 3. The maximum line impedance for input circuit is 25 Ω .

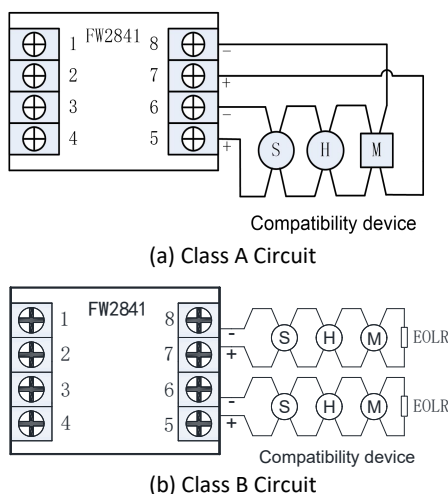


Figure 3 Wiring Diagram (Initiate device circuit)

4. Combine the assembled unit to the base using the screws provided.
5. Apply power to the control unit (compatible models: FW2105 and FW2107).

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 programmer FW2411 and Panel FW2105 to set the device address. Disconnect wire at terminal 1 and 2 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 detector's surface is flashing (Once every 4 seconds). Flashing 1 times every 1 seconds indicates the module is in trouble condition (for example missing EOLR). Failure to flash indicates a non-functioning module or a faulty wiring. Check the wiring and remount the module.
3. Trigger the input switch to activate a fire signal. The LED should turn to red steady on. Check the event occurrence displayed on LCD of the panel and verify.
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.

COMPATIBLE LIST

Table 1 Compatible 2-wire smoke detectors

Model	Manufacturer	Max. detectors per zone
55000-325	Apollo	32
55000-326	Apollo	32
55000-327	Apollo	32
55000-328	Apollo	32
C2W-BA	System Sensor	32(CLASSA)
C2W-BA	System Sensor	20(CLASSB)