NOTIFIER®

Division of Pittway Corporation

INSTALLATION INSTRUCTIONS FOR MMX-2 AND MMX-2A
TWO-WIRE CONVENTIONAL DETECTOR INTERFACE MODULE

Notice: This manual should be left with the owner/user of this equipment.

This information is included with the modules as a quick reference installation guide. Refer to the appropriate Notifier Installation Manual for detailed system information. If the modules will be installed in an existing operational system, inform the operator and local authority that the system will be temporarily out of service. Disconnect power to the control panel before installing the modules.

GENERAL DESCRIPTION

The MMX-2 and MMX-2A interface modules allow intelligent panels to interface and monitor two-wire conventional smoke detectors. All two-wire detectors being monitored must be UL compatible with the module.

The module is addressed through the communication line of intelligent systems. When the module is interrogated, it transmits the status of one zone of two-wire detectors to an intelligent control panel. Status conditions are reported as NORMAL, OPEN, or ALARM. The interface module supervises the zone of detectors and the connection of an external power supply.

Two rotary decade switches allow setting module addresses from 00–99. A status LED indicator is provided and is controlled by code command from the control panel. The module provides a magnetically activated test switch for testing the module's electronics and connections to the control panel (see Figure 1).

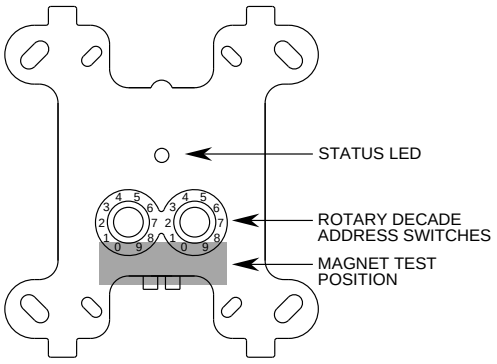

FIGURE 1.
MODULE CONTROLS AND INDICATORS

COMPATIBILITY REQUIREMENTS

To insure proper operation, this module shall be connected to compatible intelligent control panels only.

Conventional two-wire smoke detectors must be UL compatible with the interface module. A list of compatible two-wire conventional detectors is available from Notifier (P/N 15378).

PACKAGE CONTENTS

The interface module includes the following items:

(1) Two-wire interface module
(1) 3.9K ohm end-of-line resistor (A2143-10)
(1) Off-white cover plate
(1) Screw pack for cover plate

MOUNTING

The MMX-2 and MMX-2A interface modules mount directly to 4 inch square electrical boxes as shown in Figure 2. The box must have a minimum depth of 2-1/8 inches.

WIRING

NOTE: All wiring must conform to applicable local codes, ordinances and regulations.

1. Install module wiring in accordance with the job drawings and appropriate wiring diagrams (Figures 3 – 5).
2. Set the address on the module per job drawings.
3. Secure the module to the electrical box (supplied by installer), as shown in Figure 2.
4. Perform steps one, two, and three for all modules.

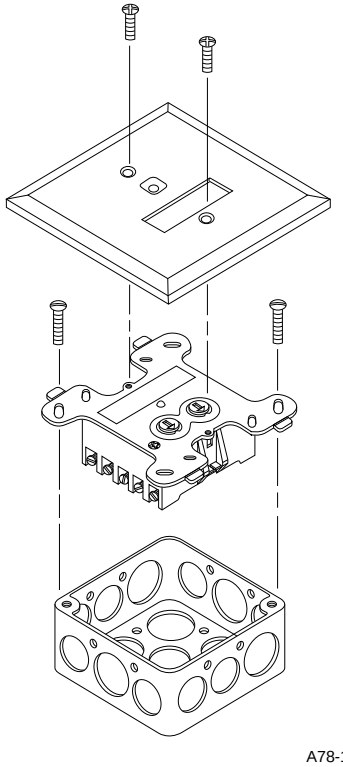

FIGURE 2.
EXPLODED VIEW OF TYPICAL MODULE
DETAILING MOUNTING ARRANGEMENT

Notifier, 12 Clintonville Rd., Northford, CT 06472, (203) 484-7161

TESTING

The MMX-2 and MMX-2A interface modules can be tested with a test magnet available from Notifier (M02-04-00, see Figure 1). The magnet test checks the module's electronics and connections to the control panel. Interfaced two-wire detectors must be tested independently. Test two-wire detectors per manufacturer's installation instructions.

MMX-2 AND MMX2A INTERFACE MODULE WIRING DIAGRAMS

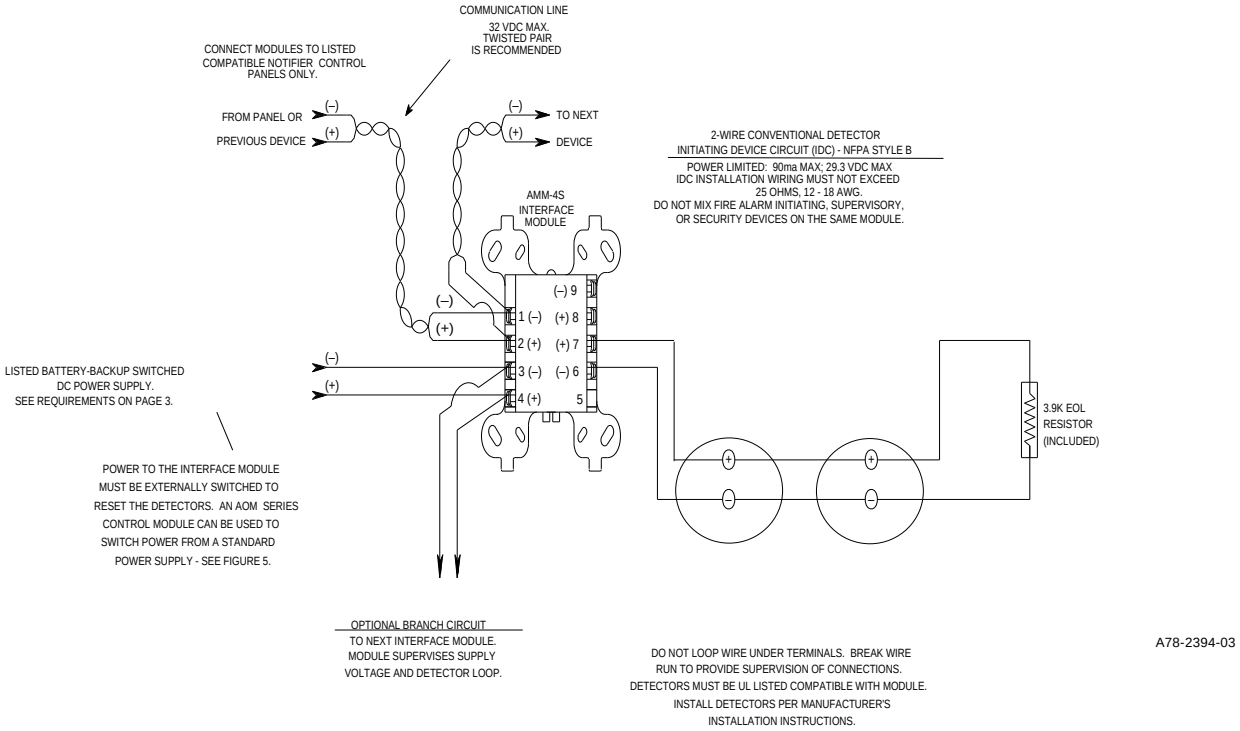

Figure 3. INTERFACE TWO-WIRE CONVENTIONAL DETECTORS, NFPA STYLE B

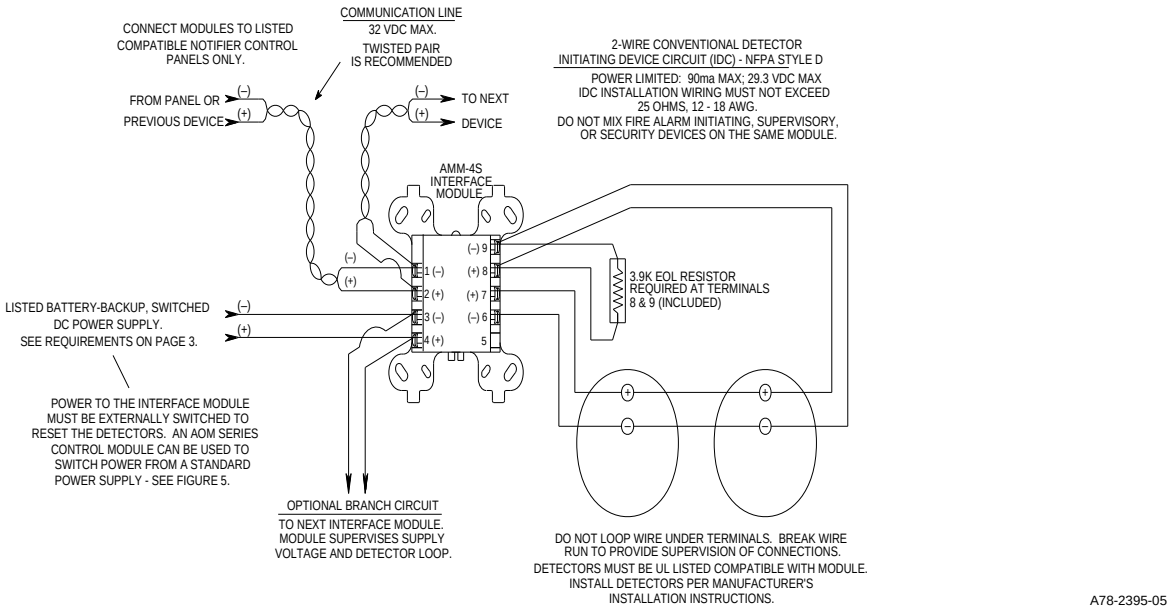

Figure 4. INTERFACE TWO-WIRE CONVENTIONAL DETECTORS, NFPA STYLE D

CMX SERIES CONTROL MODULE SWITCHING A POWER SUPPLY (controls switched 24 VDC external power to MMX-2 or MMX-2A)

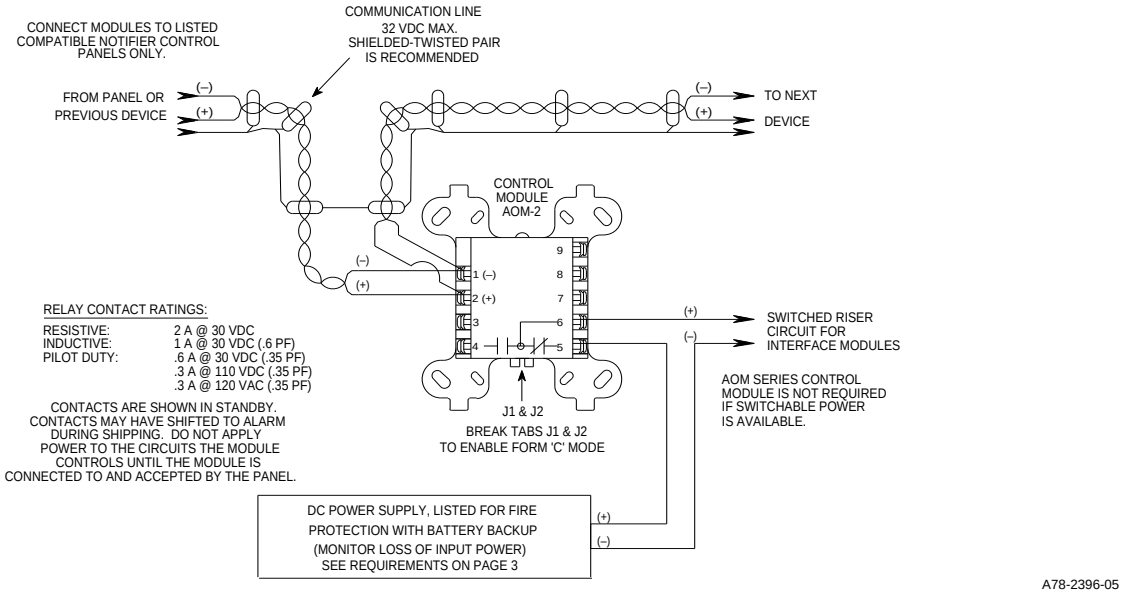

Figure 5

SPECIFICATIONS

Temperature:	32° to 120° F (0° to 49° C)	
Humidity:	10% to 93% Noncondensing	
Weight:	.5 lbs (232 gm)	
Dimensions:	4-1/2″H, 4″W, 1-1/4″D (Mounts to 4″square by 2-1/8″deep electrical boxes.)	
Test Features:	Magnetically activated reed switch.	
Accessories:	SMB500	Surface Mount Box for 500 series modules
	M02-04-00	Test Magnet for testing devices

Communication Line – Terminals 1 & 2

Voltage:	15 – 32 VDC
Current:	200 μA Max (Standby) 1.3 ma Max (Style D enabled) 7.5 ma Max (LED latched on)
Communication Line Loop Impedance:	40 Ω Max

External Power Supply Requirements – Terminals 3 & 4

Voltage:	22.2 – 25.5 VDC (filtered, regulated, and power-limited)
Ripple:	100mV RMS Max
Current:	90 ma per module

Power must be interrupted to reset detectors. The interface module must have a minimum of 18.8 VDC at terminals 3 and 4 to function properly. Ground fault detection must be accomplished by the control panel.

SPECIFICATIONS (Continued)

Initiating Device Circuit (IDC) – Terminals 6, 7, 8, & 9

Voltage:	16 – 28 VDC (Ripple: 100mV RMS Max)
Current:	90 ma Max
IDC Loop Impedance:	25 Ω Max
Supervisory Current:	7.0 ma Max
Detector Current in Standby:	Up to 2.4 ma
Alarm Current:	20 ma minimum
Style:	Style B (class B) / Style D (class A)
EOL Resistance:	3.9K ohm nominal

Detector loop current is sufficient to ensure operation of one alarmed detector per zone. For compatible detectors refer to the control panel documentation.