ACCESS MENUS

INSTALLATION INSTRUCTIONS FOR M500ME MONITOR MODULE, M500CHE CONTROL MODULE, AND M500XE FAULT ISOLATOR MODULES

This information is included with the modules as a quick reference installation guide. Refer to the control panel manufacturer's installation manual for detailed system information. If the module 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

M500ME MONITOR MODULES provide a two-wire, or fault-tolerant, initiating circuit for normally open contact fire alarm and supervisory devices, or either normally open or normally closed security devices. The LED indicator can be latched on or returned to the normal mode by code command from the panel. Convenient rotary decade switches are used to set the address of each module.

M500CHE CONTROL MODULES allow a compatible control panel to switch discrete contacts by code command. The control module offers a status LED that can be latched on or returned to the normal mode by code command from the panel. Convenient rotary decade switches are used to set the address of each module.

The control module offers two modes of switching operation. As shipped, the module is configured for switching an external power source to notification appliances. The external power source can be a DC power supply or an audio amplifier (up to 70.7 Vrms). In this mode, the module reports supervision status of the connected loads to the control panel. Load circuit status is reported as a NORMAL, OPEN, or SHORTED circuit. Two pairs of output termination points are available for fault-tolerant wiring. The second mode of switching operation allows the panel to control one Form-C (SPDT) set of contacts. Circuits connections to the contacts are not supervised by the module. This mode is enabled by breaking two external tabs on the module.

M500XE FAULT ISOLATION MODULES enable part of the communications loop to continue operating when a short circuit occurs on it. A LED indicator blinks in the normal condition and turns on during a short circuit condition. The module will automatically restore the entire communications loop to the normal condition when the short circuit is removed.

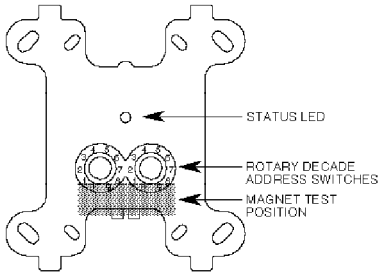

FIGURE 1.
MONITOR AND CONTROL MODULE CONTROLS AND INDICATORS

COMPATIBILITY REQUIREMENTS

To ensure proper operation, these modules shall be connected to listed compatible system control panels only.

MOUNTING M500ME, M500CHE AND M500XE DEVICES

M500ME, M500CHE, and M500XE 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.

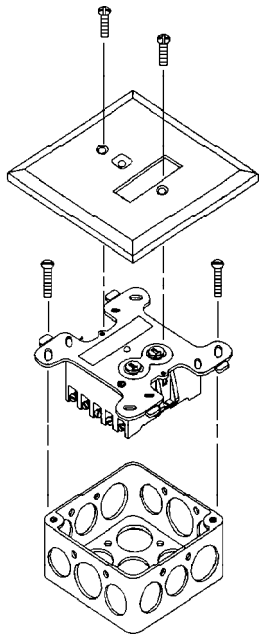

FIGURE 2.
EXPLODED VIEW OF TYPICAL MODULE DETAILING MOUNTING ARRANGEMENT

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 3-10).
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.

MAGNET TEST

The monitor and control modules can be tested with a test magnet available from System Sensor (M02-04-00, see Figure 1). The magnet test checks the module electronics and connections to the control panel. Interfaced initiating and indicating devices must be tested independently.

M500ME MONITOR MODULE WIRING DIAGRAMS

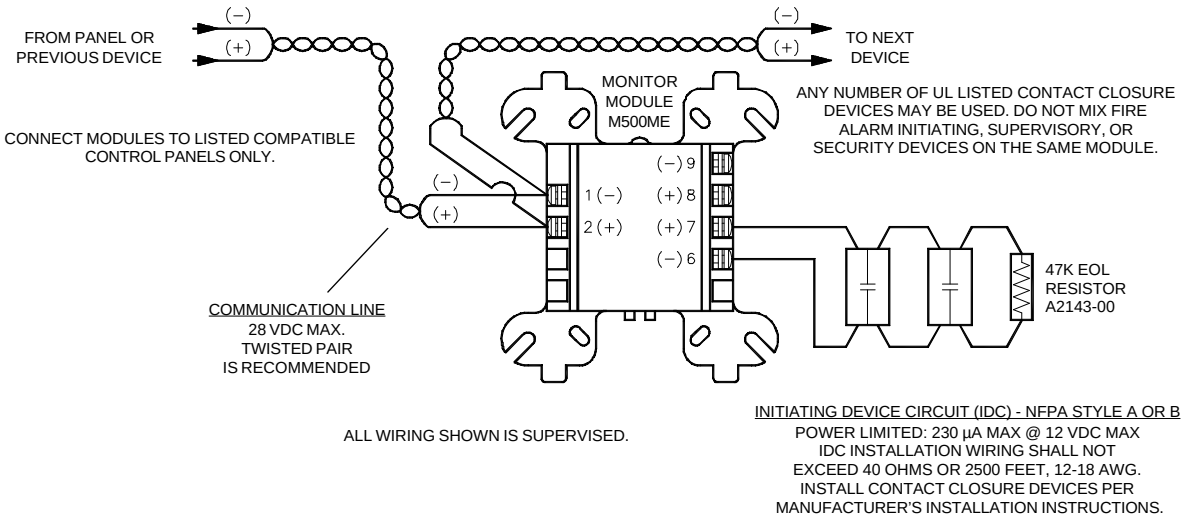

FIGURE 3. TYPYCAL 2- WIRE INITIATING CIRCUIT CONFIGURATION, NFPA STYLE A OR B

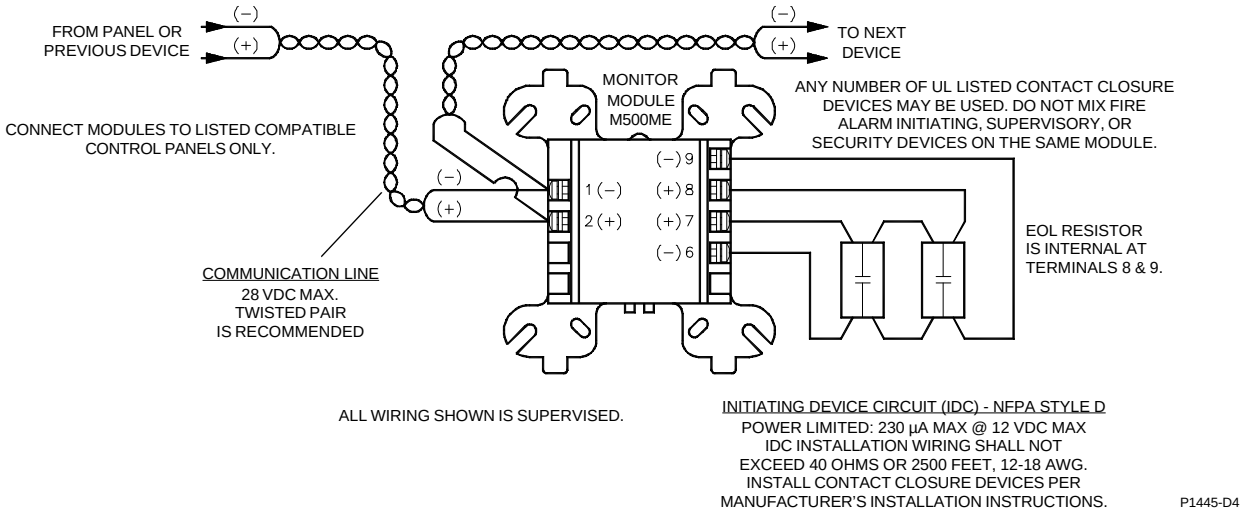

FIGURE 4. TYPICAL FAULT TOLERANT INITIATING CIRCUIT CONFIGURATION, NFPA STYLE D

M500CHE CONTROL MODULE WIRING DIAGRAMS

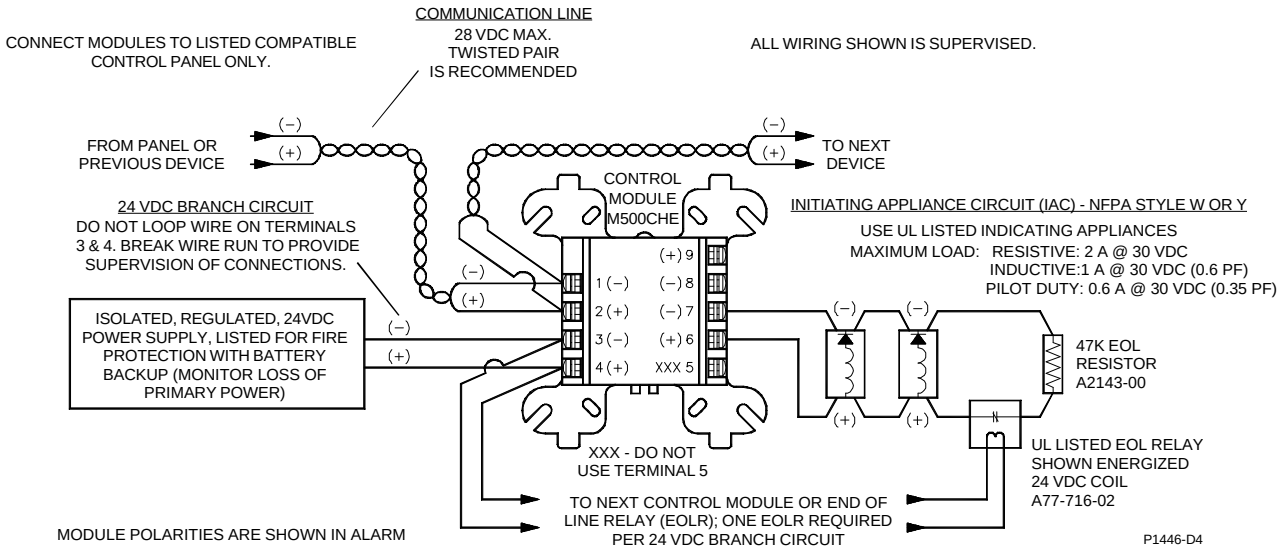

FIGURE 5. TYPICAL INDICATING CIRCUIT CONFIGURATION, NFPA STYLE W OR Y

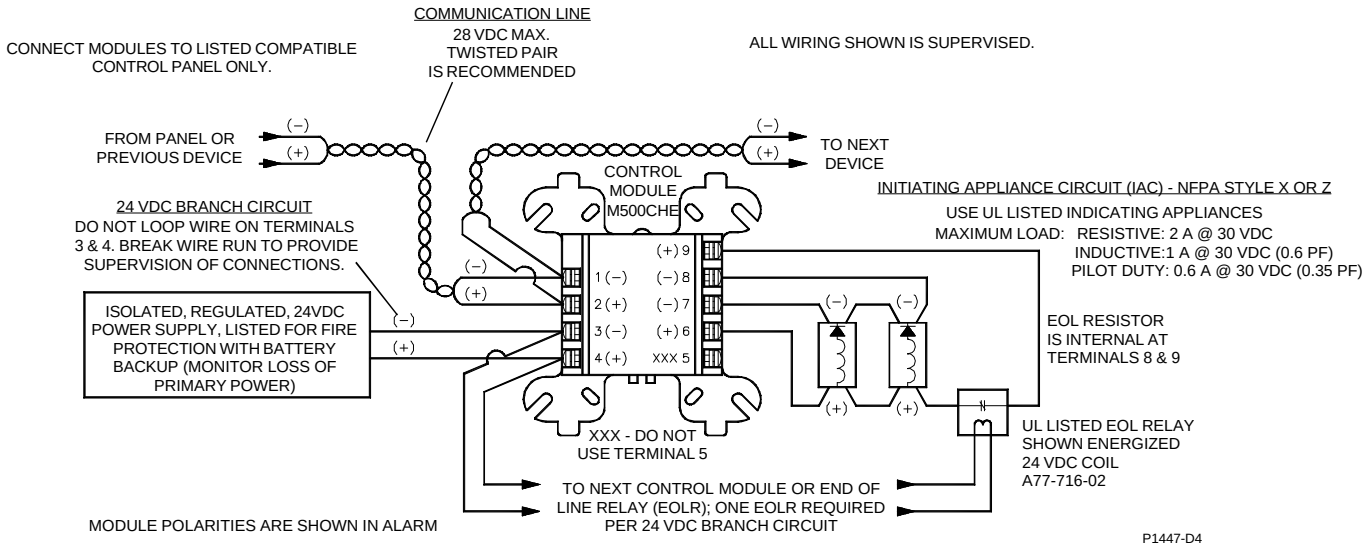

FIGURE 6. TYPICAL FAULT TOLERANT INDICATING CIRCUIT CONFIGURATION, NFPA STYLE X OR Z

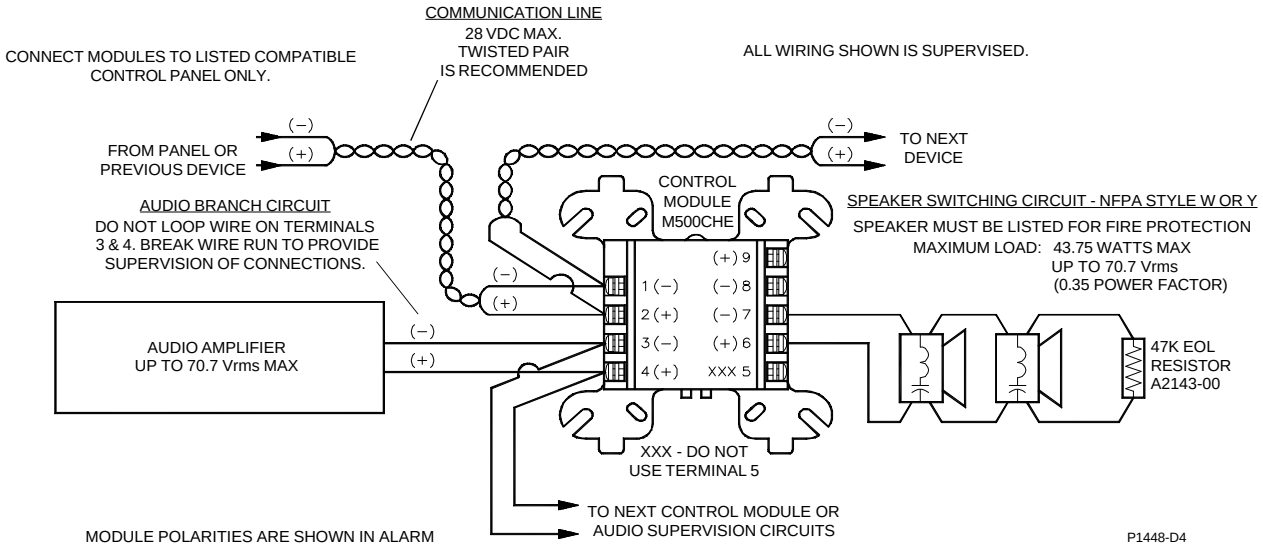

FIGURE 7. TYPICAL WIRING FOR SPEAKER SUPERVISION AND SWITCHING, NFPA STYLE W OR Y

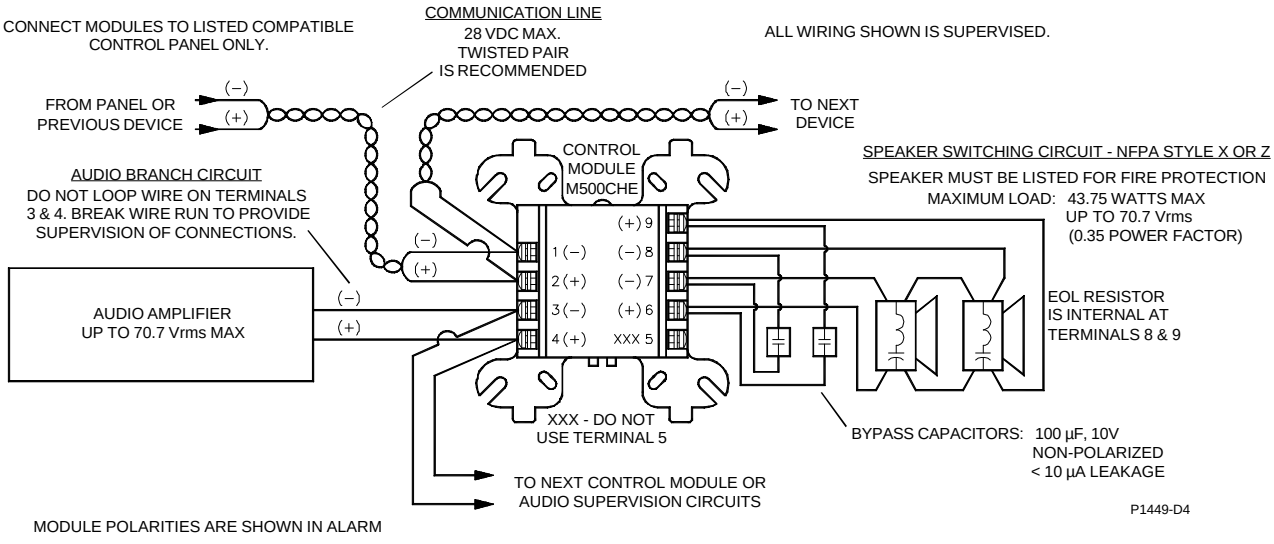

FIGURE 8. TYPICAL FAULT TOLERANT WIRING FOR SPEAKER SUPERVISION AND SWITCHING, NFPA STYLE X OR Z

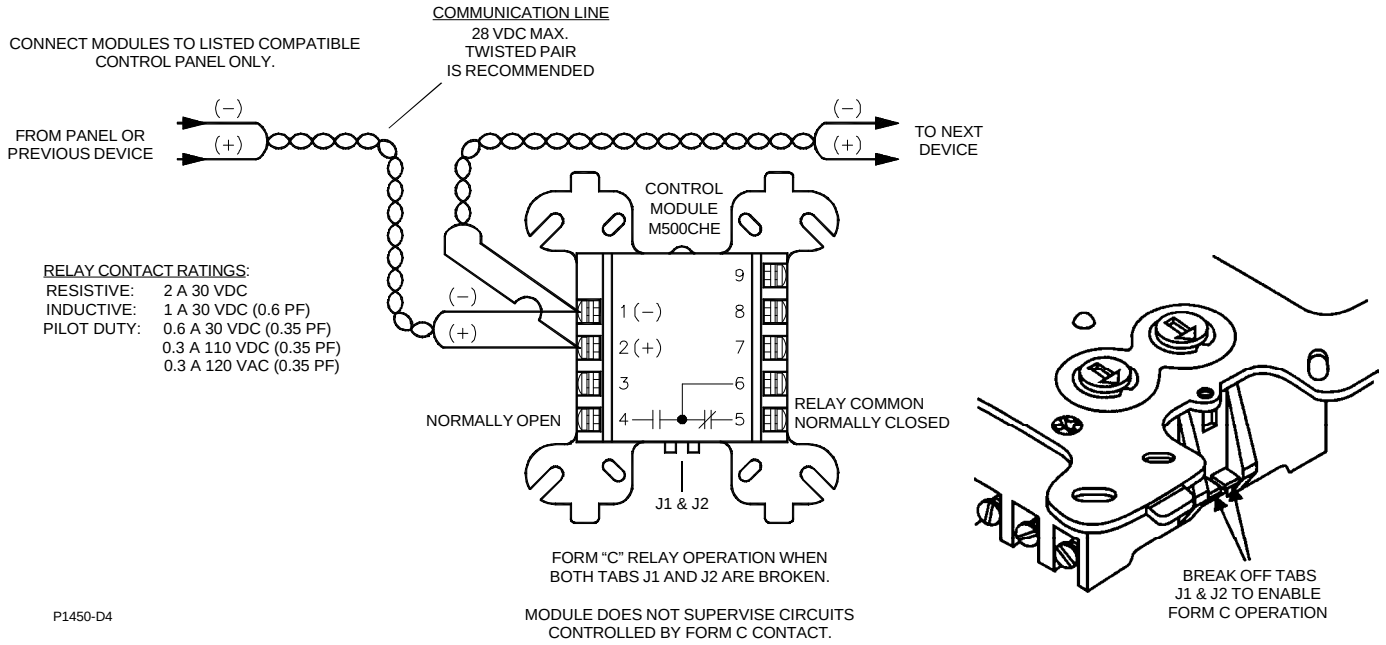

FIGURE 9. CONTROL MODULE IN RELAY OUTPUT MODE

WARNING

Control Module switch contacts are shipped in the standby state (open). Contacts may have transferred to the activated state (closed) during shipping.

The module utilizes a mechanical latching-type relay that can change states due to shock or jarring. The control panel controls this relay with "STANDBY" and "ALARM" control commands. To insure that the switch contacts are in the standby state, control modules must be made to communicate with the panel before connecting circuits controlled by the module.

M500XE FAULT ISOLATOR MODULE WIRING DIAGRAM

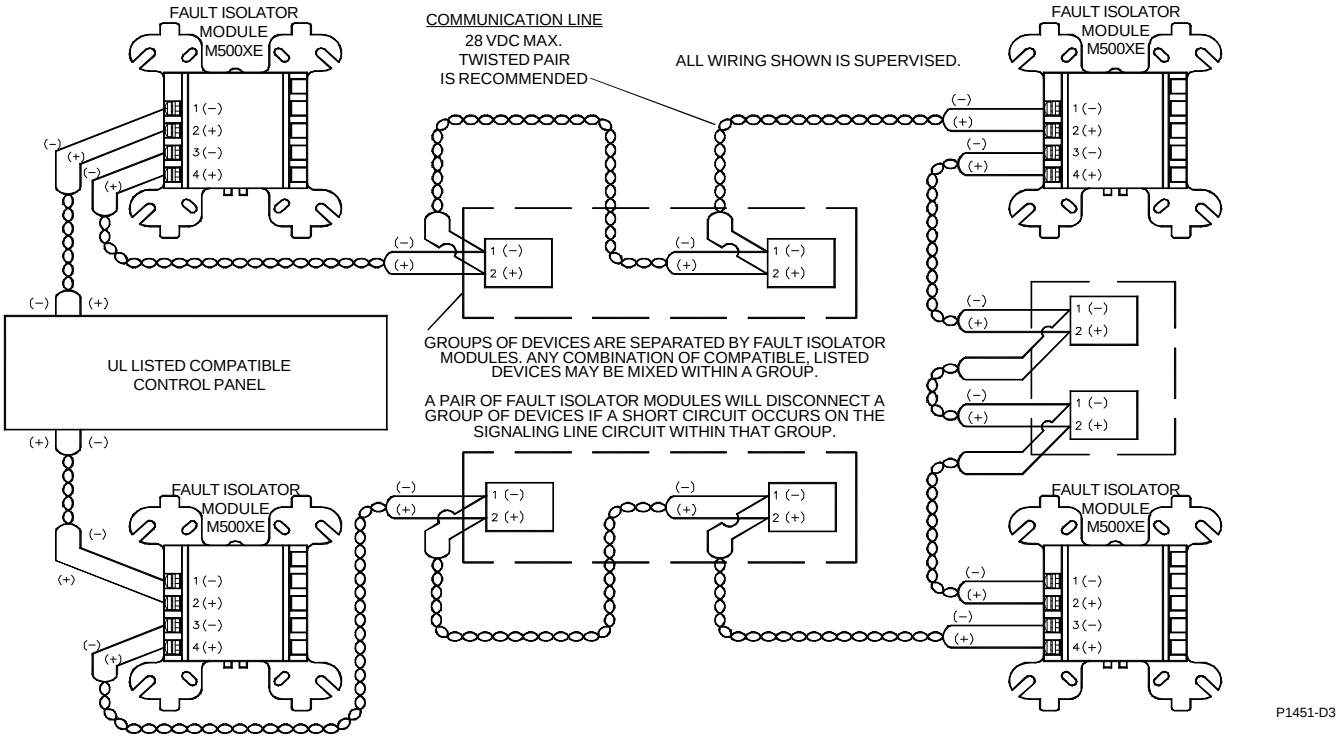

FIGURE 10. FAULT ISOLATOR MODULE WIRING