M502M Interface Module

Specifications

- Normal Operating Voltage: 15 to 32 VDC
- Maximum Current Draw: 5.1mA (LED on)
- Average Operating Current: 300 µA, 1 communication and 1 LED flash every 5 seconds, 3.9k eol
- EOL Resistance: 3.9k Ohms
- Maximum IDC wiring resistance: 25 Ohms
- IDC Supply Voltage (between Terminals T10 and T11):
  - Regulated DC Voltage: 24 VDC power limited
  - Ripple Voltage: 0.1 Volts RMS maximum
  - Current: 90mA per module
- Temperature Range: 32˚F to 120˚F (0˚C to 49˚C)
- Humidity: 10% to 93% Non-condensing
- Dimensions: 4 ½” H x 4” W x 1¼” D (Mounts to a 4” square by 2½” deep box.)
- Accessories: SMB500 Electrical Box

Before Installing

This information is included as a quick reference installation guide. Refer to the control panel 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.

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

General Description

The M502M Interface Module is intended for use in intelligent, two-wire systems, where the individual address of each module is selected using the built-in rotary decade switches. This module allows intelligent panels to interface and monitor two-wire conventional smoke detectors. It transmits the status (normal, open, or alarm) of one full zone of conventional detectors back to the control panel. All two-wire detectors being monitored must be UL compatible with this module. The M502M has a panel controlled LED indicator.

Compatibility Requirements

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

Mounting

The M502M mounts directly to 4” square electrical boxes (see Figure 2A). The box must have a minimum depth of 2½”. Surface mounted electrical boxes (SMB500) are available from System Sensor.

Compatible Two-wire System Sensor Smoke Detectors for Use with M502M with Zone Identifier A:

<table>
<thead>
<tr>
<th>Detector Model</th>
<th>Detector ID</th>
<th>Detector Type</th>
<th>Base Model</th>
<th>Base Identifier</th>
<th>Max Detectors</th>
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<td>Ionization</td>
<td>B401/B</td>
<td>A</td>
<td>20</td>
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<td>B401/B</td>
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</table>

*Used in combination with MTL isolator model MTL3043.

Wiring

NOTE: All wiring must conform to applicable local codes, ordinances, and regulations. This module is intended for power-limited wiring only.

1. Install module wiring in accordance with the job drawings and appropriate wiring diagrams.
2. Set the address on the module per job drawings.
3. Secure module to electrical box (supplied by installer), as shown in Figure 2A.

Figure 2B:
Figure 3. Interface two-wire conventional detectors, NFPA Style B:

- Connect modules to listed compatible control panels only.
- Relays control module used to disconnect a power supply.
- Twisted pair is recommended.
- Do not loop wire under terminals. Break all wire run to provide supervision of connections.
- Power limited DC power supply, listed for fire protection with battery backup.
- Three-Year Limited Warranty.
- System Sensor warrants its enclosed product to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. System Sensor makes no other express warranty for the enclosed product. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the replacement of any part of the product which is found to be defective in materials or workmanship under normal use and service during the three year period commencing with the date of manufacture. After phoning System Sensor's toll free number 800-SENSOR2 (736-7672) for a Return Authorization number, send defective units postage prepaid to: Honeywell, 12220 Rojas Drive, Suite 700, El Paso TX 79936 USA. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.