SK-Zone Interface Module

**SPECIFICATIONS**

- Normal Operating Voltage: 15 to 32 VDC
- Maximum Current Draw: 5.1 mA (LED on)
- Average Operating Current: 270µA (LED flashing)
- EOL Resistance: 3.9K Ohms
- Maximum IDC Wiring Resistance: 25 Ohms
- External Supply Voltage (between Terminals T10 and T11):
  - DC Voltage: Regulated 24 VDC
  - 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 1/2˝ H × 4˝ W × 1 1/4˝ D (Mounts to a 4˝ square by 2 1/8˝ 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 SK-Zone 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 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.

**COMPATIBILITY REQUIREMENTS**

To ensure proper operation, this module shall be connected to a compatible Silent Knight system control panel only (list available from Silent Knight).

**FIGURE 1. CONTROLS AND INDICATORS:**

**MOUNTING**

The SK-Zone mounts directly to 4-inch square electrical boxes (see Figure 2). The box must have a minimum depth of 2 1/8 inches. Surface mounted electrical boxes (SMB500) are available from Silent Knight.

**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 2.

**FIGURE 2. MODULE MOUNTING:**

**COMPATIBLE TWO-WIRE SYSTEM SENSOR SMOKE DETECTORS FOR USE WITH SK-ZONE INTERFACE MODULE 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>
</tr>
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<tr>
<td>1451</td>
<td>A</td>
<td>Ionization</td>
<td>B401/B</td>
<td>A</td>
<td>20</td>
</tr>
<tr>
<td>2451</td>
<td>A</td>
<td>Photoelectric</td>
<td>B401/B</td>
<td>A</td>
<td>20</td>
</tr>
<tr>
<td>2451TH</td>
<td>A</td>
<td>Photoelectric with Thermal</td>
<td>B401/B</td>
<td>A</td>
<td>20</td>
</tr>
<tr>
<td>1400</td>
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<td>Ionization</td>
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<td>20</td>
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<tr>
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<td>N/A</td>
<td>—</td>
<td>20</td>
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<tr>
<td>2400TH</td>
<td>A</td>
<td>Photoelectric with Thermal</td>
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<td>—</td>
<td>20</td>
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<td>A</td>
<td>Photoelectric</td>
<td>B110LP/B401</td>
<td>A</td>
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</tr>
</tbody>
</table>

*Used in combination with MTL isolator model MTL3043.
**Figure 3. Interface Two-Wire Conventional Detectors, NFPA Style B:**

Power to the interface module must be externally switched to reset the detectors. A relay control module can be used to switch power from a standard power supply (see Figure 5).

Listed battery-backup switched regulated DC power supply

[Diagram showing electrical connections and labels]

Do not loop wire under terminals. Break all wire run to provide supervision of connections. Detectors must be UL listed compatible with module. Install detectors per manufacturer’s installation instructions.

*Note: Any fault in the power supply is limited to that zone and does not result in a fault in a separate zone.

**Figure 4. Interface Two-Wire Conventional Detectors, NFPA Style D:**

Power to the interface module must be externally switched to reset the detectors. A relay control module can be used to switch power from a standard power supply (see Figure 5).

Listed battery-backup switched regulated DC power supply

3.9K EOL resistor required at terminals 8 & 9 (included) A2143-10

Do not loop wire under terminals. Break all wire run to provide supervision of connections. Detectors must be UL listed compatible with module. Install detectors per manufacturer’s installation instructions.

*Note: Any fault in the power supply is limited to that zone and does not result in a fault in a separate zone.

**Figure 5. Relay Control Module Used to Disconnect a Power Supply:**

Power limited DC power supply, listed for fire protection with battery backup

[Diagram showing electrical connections and labels]

*Note: Any fault in the power supply is limited to that zone and does not result in a fault in a separate zone.