READ AND SAVE THESE INSTRUCTIONS. Follow the instructions in this installation manual. These instructions must be followed to avoid damage to this product and associated equipment. Product operation and reliability depends upon proper installation.

DO NOT INSTALL ANY SIMPLEX PRODUCT THAT APPEARS DAMAGED. Upon unpacking your Simplex® product, inspect the contents of the carton for shipping damage. If damage is apparent, immediately file a claim with the carrier and notify an authorized Simplex product supplier.

ELECTRICAL HAZARD. Disconnect electrical field power when making any internal adjustments or repairs. Servicing should be performed by qualified Simplex representatives.

STATIC HAZARD. Static electricity can damage components. Therefore, handle as follows:

• Ground yourself before opening or installing components.
• Prior to installation, keep components wrapped in anti-static material at all times.

Introduction

IDNet™

The 4090-9051 Supervised Individual Addressable Module (IAM) provide four-state status information (NORMAL, OPEN, CURRENT-LIMITED, and SHORT) to the 4010 Fire Alarm Control Panel (FACP) via the IDNet™ channel. The IDNet channel provides the communication link between Supervised IAM and 4010 FACP and powers the entire IAM circuitry. A typical application for this module would be to monitor a waterflow switch.

MAPNET II®

The 4090-9051 Supervised IAM provides three-state status information (NORMAL, OPEN, and ALARM) to the host FACP via the MAPNET II channel. Applications that require current limit sensing are not compatible with MAPNET II channels (Tamper/Waterflow on the same IAM, Manual release/abort, etc.). The MAPNET II channel provides the communication link between the Supervised IAM and host 4100, or 4120, or 4020 FACP and powers the entire IAM circuitry.

Installation

Supervised IAM installation consists of the following:

• Setting the Supervised IAMs address
• Making electrical connections to the Supervised IAM
• Mechanically installing the Supervised IAM
Setting the Supervised IAMs Address

**Note:** The IDNet channel (4010 FACP only) supports address codes 1 through 250. The MAPNET II channel (4100, or 4120, or 4020 FACP) supports address codes 1 through 127.

Each Supervised IAM has a unique address. The address of the IAM is set via an eight-position DIP switch (Figure 2), DIP switch position 1 is the least significant bit (LSB) and position 8 is the most significant bit (MSB). Set the IAMs address using Figure 3 as reference. Use a small screwdriver or pen to set the switches. The device address for the Supervised IAM should be written on the re-sealable label, this information provides an aid in troubleshooting the system.

**Note:** DIP switch in “1” position is “ON” while DIP switch in “0” position is “OFF.”

![DIP Switch Location](image)

![Supervised IAM Address Chart](image)

**4010 FACP (IDNet Channel)**
Configure the Supervised IAM to the 4010 panel using the 4010 Fire Alarm - Installation and Programming (574-187) and 4010 Fire Alarm - Installing, Operating, and Programming Instructions (574-052). Refer to 4010 panel label 526-444 for appropriate revision of the instructions to be used.

**4100/4120/4020 FACP (MAPNET II Channel)**
Configure the Supervised IAM to the host FACP using the 4100, 4120, or 4020 Programmer’s Report. The Supervised IAM address and location must match up with the address listed in the specification sheets of the 4100, 4120, or 4020 Programmer’s Report.
Input and output signals connect to the Supervised IAM via the wire leads. Wire lead connections for the IAM are illustrated in Figure 4.

**Notes:**

1. IDNet and MAPNET II lines are 18 AWG twisted pair (shield recommended).
2. Maximum allowable run from FACP to farthest device not to exceed 2500 feet. Maximum total wire (including all T-Taps) from FACP is 10000 feet.
3. Maximum wire length is 400 feet, #18 AWG.
4. Refer to Field Wiring Diagram 842-073 for further information on wiring Supervised IAMs to IDNet. Refer to Field Wiring Diagrams 841-804 or 841-996 for further information on wiring Supervised IAMs to MAPNET II. IDNet and MAPNET II wiring are supervised and power-limited.

**Figure 4. Supervised IAM Connections**

**Table 1: Supervised IAM specifications**

<table>
<thead>
<tr>
<th></th>
<th>19-23 VDC, 24 VDC Nominal Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mA max short circuit current</td>
</tr>
<tr>
<td>Initiating Circuit</td>
<td>Supervised</td>
</tr>
<tr>
<td></td>
<td>Power Limited</td>
</tr>
<tr>
<td>Communication Circuit</td>
<td>24 VDC Nominal Voltage</td>
</tr>
<tr>
<td></td>
<td>Supervised</td>
</tr>
<tr>
<td></td>
<td>Power Limited</td>
</tr>
<tr>
<td>Wiring from IAM to Contacts</td>
<td>500ft (152m) max without protectors</td>
</tr>
<tr>
<td></td>
<td>400ft (122m) max with 2081-9044</td>
</tr>
<tr>
<td></td>
<td>overvoltage protectors</td>
</tr>
<tr>
<td>Dimensions</td>
<td>1-9/16” W X 1-9/16” H X 9/16” D</td>
</tr>
<tr>
<td></td>
<td>(40mm x 40mm x 14mm)</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>32°C to 158°C (0°C to 70°C), intended for indoor use</td>
</tr>
<tr>
<td>Humidity Range</td>
<td>Up to 93% RH at 90°C (32°C)</td>
</tr>
</tbody>
</table>
Mechanically Installing the Supervised IAM

Install the Supervised IAM into a UL Listed single-gang, 4-inch square, or 4-inch octagonal electrical box (not supplied) using Figure 5 as a reference. Mount the Supervised IAM to the electrical box as follows:

1. Insert the Supervised IAM into the electrical box; the attached field wiring holds the Supervised IAM in place inside the electrical box.
2. Secure the cover to the back box using the two #6/32 flathead screws.

Figure 5. Supervised IAM Back Box Installation