## 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 4 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.



Note: Simplex offers semi-flush and surface covers (ordered separately) with a light pipe. The cover(s) with light pipe allow viewing of the communications LED without taking the cover off. Installation of the 4090-9806 semi-flush cover and 4090-9807 surface cover are detailed in publication 4090 IDNet<sup>™</sup> Semi-Flush/Surface Covers and IAM Bracket Installation Instruction (574-796).

## Figure 4. Supervised IAM Back Box Installation



574-331 Rev. G



# 4090-9001 Supervised IAM Installation Instructions

# **Cautions and Warnings**

**DO NOT INSTALL ANY SIMPLEX<sup>®</sup> 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. All repairs should be performed by a representative or authorized agent of your local Simplex product supplier.

**STATIC HAZARD -** Static electricity can damage components. Ground yourself before opening or installing components.

## TEMPERATURE RANGE - 32° to 158°F (0° to 70°C)

## Introduction

# IDNet<sup>™</sup>

The 4090-9001 Supervised Individual Addressable Module (IAM) provide four-state status information (NORMAL, OPEN, CURRENT-LIMITED, and SHORT) to the 4008, 4010, 4010ES, 4100U, and 4100ES Fire Alarm Control Panel (FACP) via the IDNet<sup>™</sup> channel. The IDNet channel provides the communication link between Supervised IAM and the FACP and powers the entire IAM circuitry. A typical application for this module would be to monitor a waterflow switch.

# MAPNET II<sup>®</sup>

The 4090-9001 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



**Note:** The LED flashes approximately once every three seconds to indicate valid communications with the FACP.

## Figure 1. Supervised IAM Installation

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## Setting the Supervised IAMs Address

**Note:** The IDNet channel (4010, 4010ES, 4100U, and 4100ES) supports address codes 1 through 250. The 4008 supports address codes 1 through 200. 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 1), 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 2 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."



MAPNET II supports address codes 1 through 127 only. RESERVED FOR FUTURE USE

#### Figure 2. Supervised IAM Address Chart

#### 4008 FACP (IDNet Channel)

Configure the Supervised IAM to the host 4008 FACP using the 4008 Fire Alarm Installation, Programming and Operating Instructions (579-716).

#### 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.

## 4100U, 4100ES, and 4010ES FACP (IDNet Channel)

Configure the Supervised IAM using the ES Panel Programmer's Manual (574-849).

## 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.

Note: Refer to the FACP label for appropriate revision of instructions.

#### Making Electrical Connections to the Supervised IAM

Input and output signals connect to the Supervised IAM via the terminals (1-4) as illustrated in Figure 1. Terminal connections for the IAM are illustrated in Figure 3.

## CAUTION: Do not loop wire under terminals. Break wire runs to provide supervision.



## Notes:

- 1. When connecting two wires to one terminal, position one wire on each side of the terminal screw.
- 2. IDNet and MAPNET II lines are 18 AWG twisted pair (shield recommended).
- 3. 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.
- 4. Maximum wire length is 400 feet, #18 AWG.
- 5. 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 3. Supervised IAM Connections