

### Features

**MAPNET II or IDNet addressable communications supply both data and power over a single wire pair to provide\*\*:**

- Supervised Class B monitoring of normally open, dry contacts
- Total wiring distance from IAM to supervision resistor(s) of up to 500 ft (152 m)
- Monitored connection is compatible with Simplex 2081-9044 Overvoltage Protectors for outdoor or electrically noisy applications

#### Compatible with Simplex:

- Model Series 4010/4100/4120/4020 fire alarm control panels equipped with either IDNet or MAPNET II communications
- Model Series 2120 communicating device transponders (CDTs) equipped with MAPNET II communications

#### Compact, sealed construction:

- Enclosed design minimizes dust infiltration
- Mounts in standard single gang electrical box
- Screw terminals for wiring connections
- Visible LED flashes to indicate communications
- Optional covers are available to allow LED to be viewed after installation (requires mounting bracket, ordered separately)

**Provides current limited monitoring** (for use with IDNet communications):

- To monitor tamper switch (trouble) and waterflow switch (alarm) on same circuit using one point

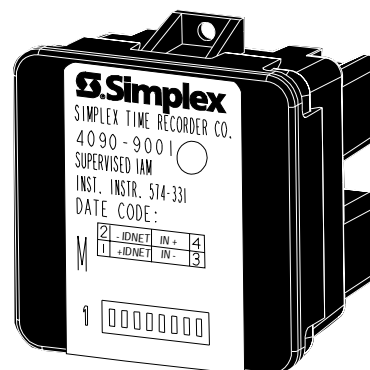
**Multiple operation modes are available and are selectable at the control panel:**

- Contact closure status can be tracked
- Momentary contact closure conditions can be latched, such as from rate-of-rise heat detectors

**UL listed to Standard 864**

\* This product has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7300-0026:223 for allowable values and/or conditions concerning material presented in this document. It is subject to re-examination, revision, and possible cancellation. Accepted for use – City of New York Department of Buildings – MEA35-93E. Additional listings may be applicable, contact Simplex for the latest status.

\*\* MAPNET II and IDNet addressable communications designs are protected by U.S. Patent No. 4,796,025.



4090-9001 Supervised IAM  
(shown approximately full size)

### Description

The 4090-9001 is an individual addressable module (IAM) with both power and communications supplied by a two-wire MAPNET II or IDNet circuit. It provides location specific addressability to a single initiating device (such as single station smoke detector alarm contacts or heat detector contacts) or multiple devices at the same location by monitoring normally open dry contacts and the wiring to an end-of-line resistor.

Closure of the monitored contacts initiates an alarm or other response as programmed at the fire alarm control panel. An open in the monitored circuit wiring will cause a trouble to be reported.

Selections can be made at the control panel to maintain the alarm condition if the initiating device contacts are momentary, such as from a rate-of-rise heat detector, or to track the device contact status (not applicable with 2120 CDT).

### Current Limited Operation Applications

For use with IDNet communications only, the 4090-9001 can sense normal, open circuit, short circuit, and current limited conditions. With the proper end-of-line and current limiting resistors, dual functions such as tamper switch and waterflow switch monitoring can be determined and communicated by a single addressable point.

## Product Selection

### IAM Module

| Model Number | Description           |
|--------------|-----------------------|
| 4090-9001    | Supervised IAM module |

### Optional Trim Plates and Mounting Bracket

| Model Number | Description   |                            |
|--------------|---|----------------------------|
| 4090-9806    | Trim plate with LED viewing window, requires 4090-9810 mounting bracket, includes mounting screws                         | For semi-flush mounted box |
| 4090-9807    |   | For surface mounted box    |
| 4090-9810    | Mounting bracket, mounts IAM to electrical box and provides screw holes for trim plate, required for optional trim plates |                            |

## Specifications

### Electrical

|   |  |   |
|---|--|---|
| Power and Communications  | MAPNET II or IDNet, auto selected, 1 address per IAM |   |
| Input Requirements  | Normally open, dry contacts                          |   |
| Wire Connections  | Screw terminals for in/out wiring, 18 to 14 AWG wire |   |
| Supervision Resistor  | 6.8 k $\Omega$ , 1/2 W                               | <b>NOTE:</b> Refer to installation instructions 574-331 and field wiring diagrams 841-804 and 842-073 for additional information. |
| Resistors for Current Limited Operation (for use with IDNet communications only ) | 1.8 k $\Omega$ and 4.7 k $\Omega$ , 1/2 W            |   |

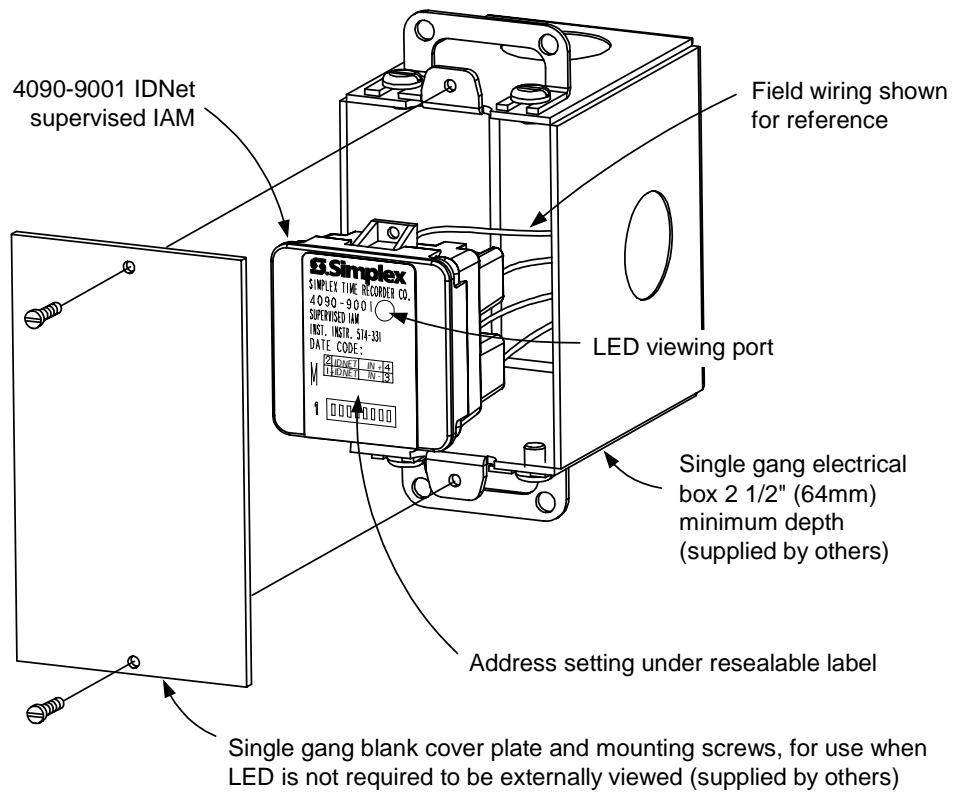
### Wiring Distances

|  |   |
|--|---|
| Distance from IAM to Contacts                    | 500 ft (152 m) maximum without protectors                           |
|  | 400 ft (122 m) maximum with 2081-9044 Overvoltage Protectors        |
| Wiring Distance, MAPNET II or IDNet, per Channel | 2500 ft (762 m) maximum from fire alarm control panel               |
|  | 10,000 ft (3048 m) maximum total wiring distance (including T-Taps) |

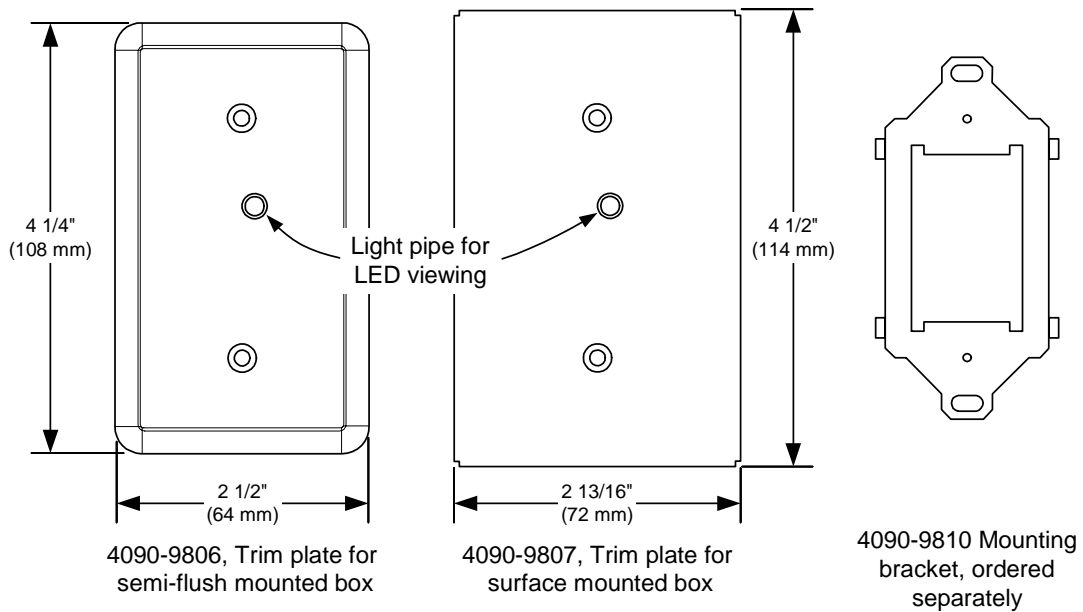
### Mechanical

|                   |   |
|-------------------|---|
| Dimensions        | 1 9/16" W x 1 3/4" H x 1 1/4" D (40 mm x 44 mm x 32 mm)   |
| Housing Material  | Black thermoplastic                                       |
| Temperature Range | 32° to 120° F (0° to 49° C) intended for indoor operation |
| Humidity Range    | Up to 93% RH at 100° F (38° C)                            |

**Mounting Information**



**Mounting Reference, Single Gang Blank Cover Plate**



**NOTE:** These mounting plates require mounting bracket 4090-9810.

**Optional Trim Plates and Mounting Bracket for Visible LED**

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Westminster, Massachusetts 01441-0001 USA  
visit us on the world wide web at [www.simplexnet.com](http://www.simplexnet.com)

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