

#### Features

**Dual point operation provides an unsupervised input and a relay output in a single package using only one address:**

- Typical applications are for fan control with single unsupervised status feedback monitoring
- For use with Simplex® 4100ES, 4100U or 4010ES Fire Alarm Control Panels providing IDNet™ communications (4100U requires software revision 11 or higher)

#### Input/Output details:

- Input provides unsupervised monitoring of normally open, dry contacts
- Total wiring distance to supervised contacts is up to 500 ft (152 m); for indoor wiring applications
- Both data and power are provided by the IDNet communications link over a single wire pair
- Form C relay output is rated 2 A @ 30 VDC, and 0.5 A @ 120 VAC (resistive ratings)

#### Compact, sealed construction:

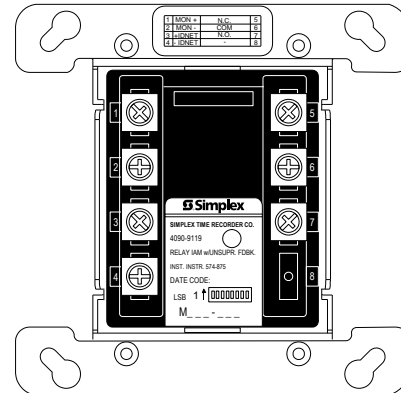
- Enclosed design minimizes dust infiltration
- Mounts in standard 4" square electrical box
- Visible LED flashes to indicate communications
- Screw terminals for wiring connections
- Optional covers are available to allow LED to be viewed after installation

#### UL Listed to Standard 864

#### Description

**Single Address Dual Point Module.** The 4090-9119 Relay IAM allows a Simplex 4100ES, 4100U, or 4010ES IDNet communication channel to monitor an unsupervised input contact closure with one point and control an output relay with the other point, both from a compact module requiring a single address. Module power is supplied from the IDNet communications channel eliminating the need for separate power wiring.

**Multi-Point Device Description.** The input circuit and relay operation are controlled independently and may be disabled separately. Point association is determined at the host panel. At the host panel display, the device address is designated as a single hardware location (such as 1-1). The individual points are considered "sub-points" and are layered underneath (such as 1-1-1 and 1-1-2).



4090-9119 Relay IAM with Unsupervised Input  
(shown approximately 1/2 size)

#### Product Selection

| Model     | Description   |
|-----------|---|
| 4090-9119 | Relay IAM with Unsupervised Input for 4100ES, 4100U or 4010ES Systems |
| 4090-9801 | For semi-flush mounted box  |
| 4090-9802 | For surface mounted box   |

Optional trim plate with LED viewing window, includes mounting screws; galvanized steel

#### Typical Applications

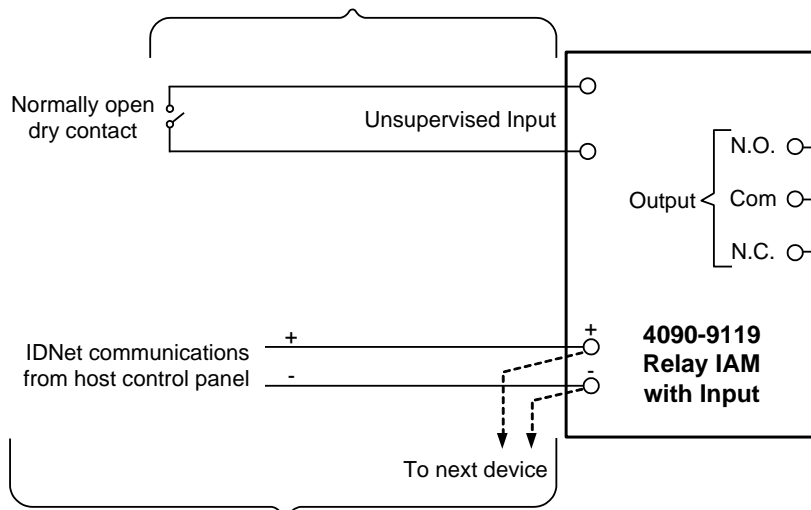
**Efficient Package.** For smoke control applications, this module provides an efficient package for fan control with single status feedback. The monitor point provides feedback from a single set of unsupervised contacts (such as a sail switch or pressure switch) allowing the host panel to track the result of the requested relay control operation.

**General Applications.** The monitor and control points can be applied for a variety of associated or independent operations. Flexible programming abilities at the host panel can provide the association logic required for a wide variety of fire or utility operations.

\* 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 7300-0026:311 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 your local Simplex product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of SimplexGrinnell LP, Westminster.

## Wiring Reference

Maximum distance to contacts is 500 ft (152 m) (input is for indoor wiring only)



For Fire Alarm applications, locate loads within 3 ft (1 m) of contacts

**Power Limited Contact Ratings:**

2 A @ 30 VDC, resistive loads  
1 A @ 30 VDC, inductive loads

**Non-Power Limited Contact Ratings:**

0.5 A @ 120 VAC, resistive loads  
0.25 A @ 120 VAC, inductive loads  
(refer to specifications for additional information)

**IDNet Wiring Distances:**

1. Up to 2500 ft (762 m) from host control panel.
2. Up to 10,000 ft (3048 m) total wiring distance, including "T" taps.

**NOTE:** Refer to Installation Instructions 574-875 for detailed installation information.

## Specifications

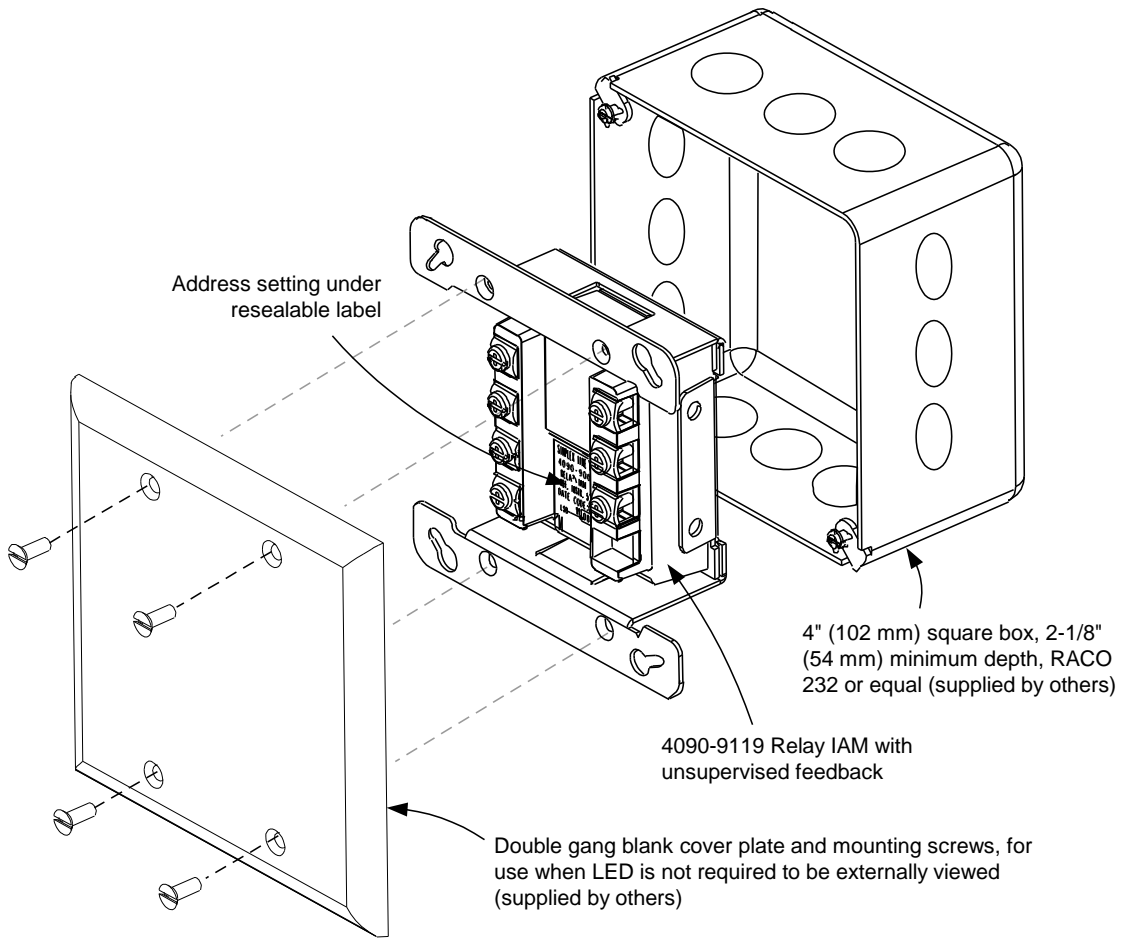
### Electrical

|   |  |   |                               |
|---|--|---|-------------------------------|
| Communications  | 4100ES/4100U/4010ES IDNet, one address   |   |                               |
| Power   | Consumes one unit load, power supplied from IDNet communications   |   |                               |
| Point Allocation Reference  | Point Type   | FRIAM   |                               |
|   | I/O Point Usage per Panel  | 1 for relay   |                               |
|   | Public Points Usage  | up to 3; 1 for relay, 1 for input, 1 for trouble; for points mapped to the Fire Alarm Network |                               |
| Input Requirements  | Normally open dry contacts   |   |                               |
|   | Up to 500 ft (152 m) total distance from Relay IAM   |   |                               |
|   | For indoor wiring applications only  |   |                               |
| Wire Connections  | Screw terminals for input and output wiring, 18 to 14 AWG wire (0.82 mm <sup>2</sup> to 2.08 mm <sup>2</sup> ) |   |                               |
| Relay Contact Ratings*<br>Form C (SPDT)<br>(not rated for incandescent switching) | Power-Limited  | 2 A @ 30 VDC, resistive   | from listed fire alarm supply |
|   |  | 1 A @ 30 VDC, inductive   |                               |
|   | Nonpower-Limited   | 0.5 A @ 120 VAC, resistive  |                               |
|   |  | 0.25 A @ 120 VAC, inductive   |                               |
| IDNet Wiring Distance Reference   | Up to 2500 ft (762 m) from the fire alarm control panel  |   |                               |
|   | Up to 10,000 ft (3048 m) total Class B wiring distance including T-Taps  |   |                               |
|   | Compatible with 2081-9044 Overvoltage Protectors   |   |                               |

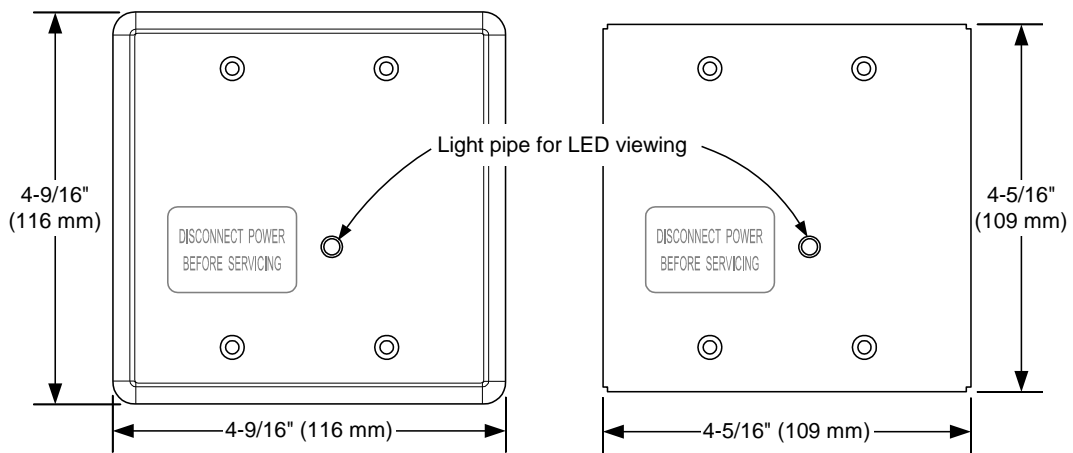
### Mechanical

|                |  |
|----------------|--|
| Dimensions     | 4-1/8" H x 4-1/8" W x 1-3/8" D (105 mm x 105 mm x 35 mm) |
| Package        | Black thermoplastic housing on metal mounting plate      |
| Temperature    | 32° to 120° F (0° to 49° C) indoor operation only        |
| Humidity Range | 10 to 90% RH at 90° F (32° C)                            |

**Mounting Information**



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



4090-9801, Trim plate for semi-flush mounted box

4090-9802, Trim plate for surface mounted box

**Optional Trim Plates for Visible LED**

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