

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 Autocall 4007ES, 4010ES, 4100ES Fire Alarm Control Panels providing IDNet communications

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
- Low power latching relay design allows IDNet communications to supply both data and module power
- Relay is set to OFF on initial power up and upon loss of IDNet communications
- 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 A4090-9119 Relay IAM allows a compatible Autocall fire alarm control panel IDNet communications 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).

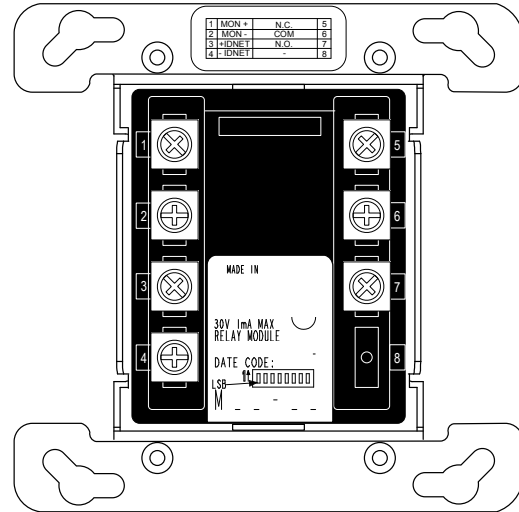


Fig 1: A4090-9119 Relay IAM with Unsupervised Input (shown approximately 1/2 size)

Product Selection

Model	Description	
A4090-9119	Relay IAM with Unsupervised Input	
Optional Adapter and Trim Plates		
Model	Description	
A4090-9813	Adapter plate to fit 4 ¹¹ / ₁₆ " (119 mm) square electrical box	
A4090-9801	For semi-flush mounted box	Optional trim plate with LED viewing window, includes mounting screws; galvanized steel
A4090-9802	For surface mounted box	

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.

Wiring Reference

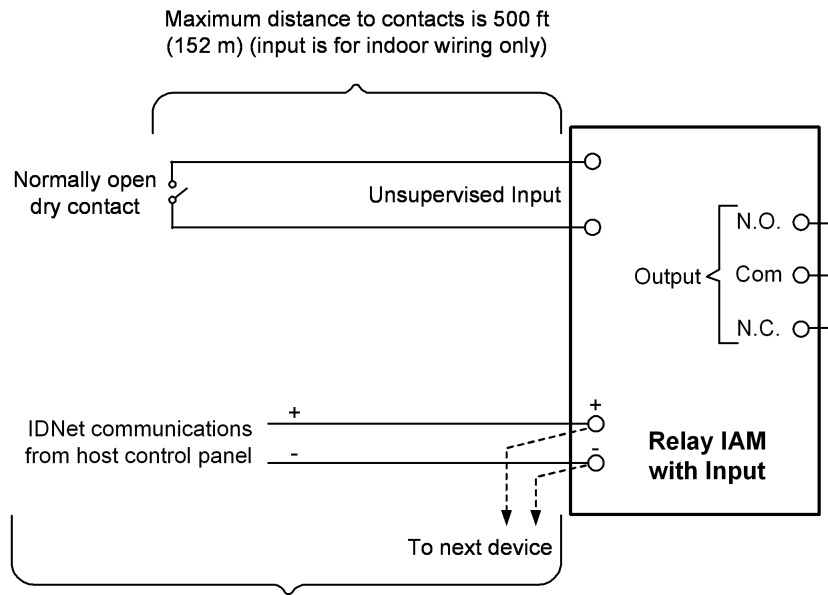


Fig 2: Wiring information

Note:

- 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)
- Refer to Installation Instructions 574-875AC for detailed installation information.
- A4090-9119 Relay IAM with Input is illustrated.

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.
- Refer to Installation Instructions 574-875AC for detailed installation information.
 - A4090-9119 Relay IAM with Input is illustrated.

Specifications

Table 1: Electrical

Specification		Rating
Communications		IDNet communications, 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 ² to 2.08 mm ²)
Relay Contact Ratings* Form C (SPDT) (not rated for incandescent switching)	Power-Limited	2 A @ 30 VDC, resistive
		1 A @ 30 VDC, inductive
	Nonpower-Limited	0.5 A @ 120 VAC, resistive
		0.25 A @ 120 VAC, inductive
* Provide circuit fusing and transient suppression as required per application. DC inductive loads can typically be diode suppressed; 120 VAC loads may require RC networks or varistors, depending on device type. Refer to Installation Instructions 574-875AC for additional information.		
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 A2081-9044 Overvoltage Protectors

Table 2: Mechanical

Specification	Rating
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

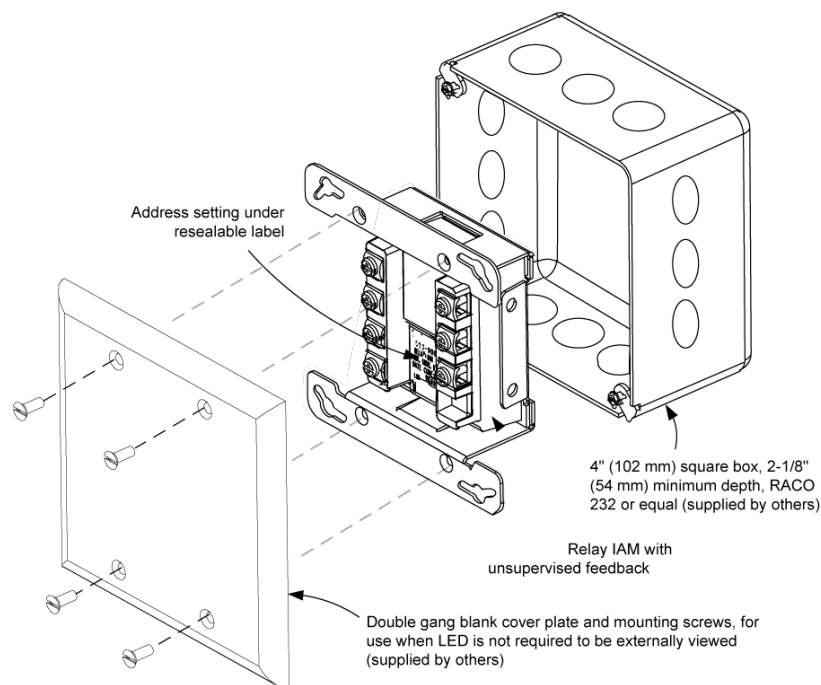


Fig 3: Mounting reference, double gang blank cover plate

Note: A4090-9119 Relay IAM with unsupervised feedback is shown in Figure 3.

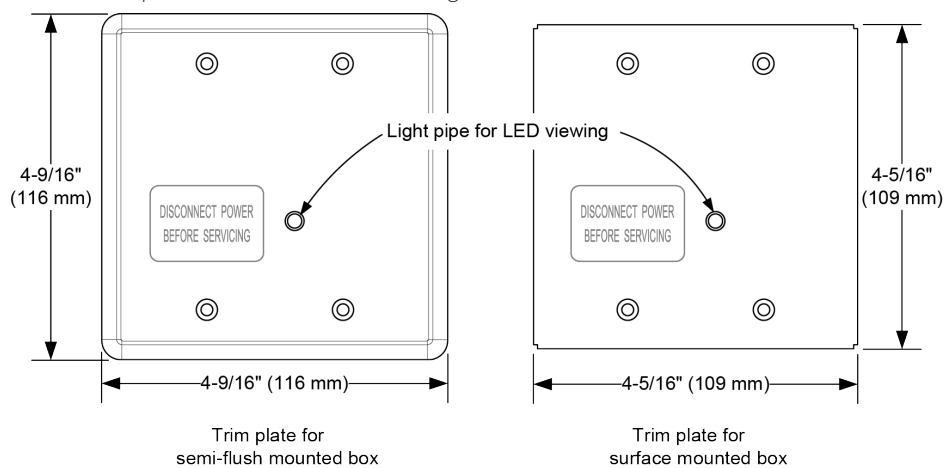


Fig 4: Optional Trim Plates for Visible LED

Note: The following parts are illustrated in Figure 4

- A4090-9801, Trim plate for semi-flush mounted box
- A4090-9802, Trim plate for surface mounted box