## Features

**For use with Autocall® 4100ES, 4100U and 4010ES Fire Alarm Control Panels providing IDNet™ communications**

**Addressable communications supply both data and power over a single wire pair to provide:**

- Supervised Class B monitoring of normally closed or normally open dry contact security devices
- Monitored conditions are Open, Normal, Abnormal, and Short
- Abnormal occurs with ±50% of monitor loop current change
- Total wiring distance from Security iam to supervised contacts up to 500 ft (152 m)

**Compact, sealed construction:**

- Enclosed design minimizes dust infiltration
- Mounts in a 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)

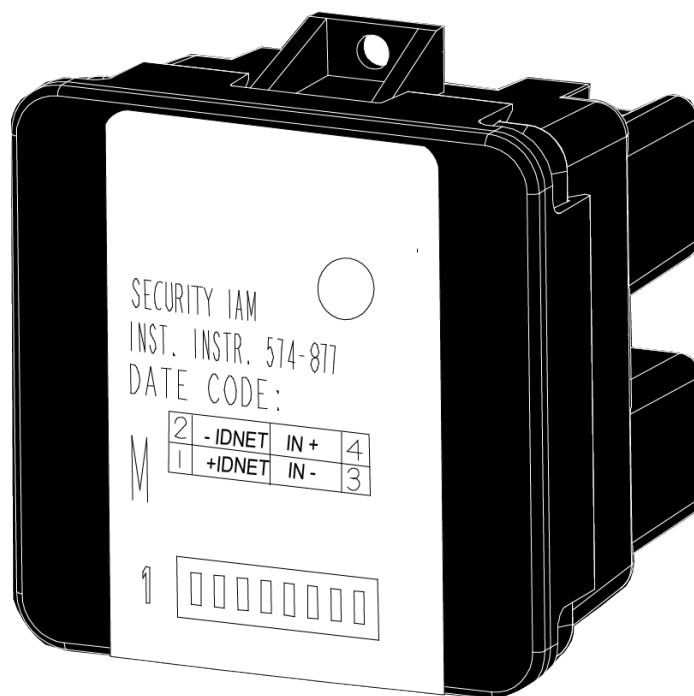**UL listed to Standard 1076**

## Description

Security Monitor IAM model A4090-9121 has both power and communications supplied by a two-wire 4100ES, 4100U or 4010ES IDNet circuit. It provides location specific addressability for up to five initiating devices (such as window or door magnet switch contacts or other similar security devices) by monitoring the circuit wiring connections to either normally closed or normally open dry contacts (one type per IAM).

**Operation.**

When the circuit is "armed" by selection from the fire alarm control panel, such as during nonworking hours, monitor loop activity (short, open, or abnormal) causes a priority 2 alarm at the panel.

When the circuit is "disarmed", such as during normal working hours, normal and abnormal conditions would be tracked as events. Depending on the point type selected, an open or short in the monitored circuit wiring will cause a trouble to be reported or a short can be tracked as an event.

**Fig 1:  A4090-9121 Security Monitor IAM (shown approximately full size)**

## Product Selection

| SKU | Description | |
|---|---|---|
| A4090-9121 | Security Monitor IAM | |
| A4090-9806 | Semi-flush mount | Optional trim plate with LED viewing window, requires A4090-9810 mounting bracket, includes mounting screws; galvanized steel |
| A4090-9807 | Surface mount box | |
| A4090-9810 | Mounting bracket, mounts IAM to box, provides screw holes for trim plate, required for optional trim plates | |
| A4081-9010 (733-973) | 1 kΩ Resistor Harness, use for series connection to N.O. switches | |
| A4081-9014 (733-092) | 2.4 kΩ Resistor Harness, use for series **and** end-of-line resistor when connected to N.C. switches (2 required) | |

* Additional listings may be applicable; contact your local product supplier for the latest status.

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## Specifications

| Communications | 4100ES/4010ES IDNet, one address | |
|---|---|---|
| Power Requirements | Consumes **two (2)** unit loads, power is supplied from the IDNet SLC (signaling line circuit) | |
| IDNet Channel Loading Reference | 32 max. on a 64 pt. channel | (no other devices on the channel) |
| | 63 max. on a 127 pt. channel | |
| | 125 max. on a 250 pt. channel | |
| Monitored Contacts | Dry contacts, up to 5 in series for normally closed (N.C.), or up to 5 in parallel for normally open (N.O.), requires two resistor harnesses per wiring type selected (see above) | |
| Wire Connections | Screw terminals for in/out wiring, 18 to 14 AWG wire (0.82 mm$^2$ to 2.08 mm$^2$ ) | |
| IAM to Contacts | 500 ft (152 m) maximum, within same building | |
| IDNet Communications Distance | 2500 ft (762 m) max. distance from control panel | |
| | 10,000 ft (3048 m) maximum total wiring distance (including T-Taps) | |
| 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 | 32° to 120° F (0° to 49° C) indoor operation only | |
| Humidity Range | Up to 93% RH at 100° F (38° C) | |
| Additional Information | Refer to Installation Instruction 574-877AC | |

## Mounting Information



Field wiring shown for reference

Security IAM

Typical application, magnetic door contacts

LED viewing port

Single gang electrical box 2-1/2" (64mm) minimum depth (supplied by others)

Address setting under resealable label

Single gang blank cover plate and mounting screws, for use when LED is not required to be externally viewed (supplied by others)
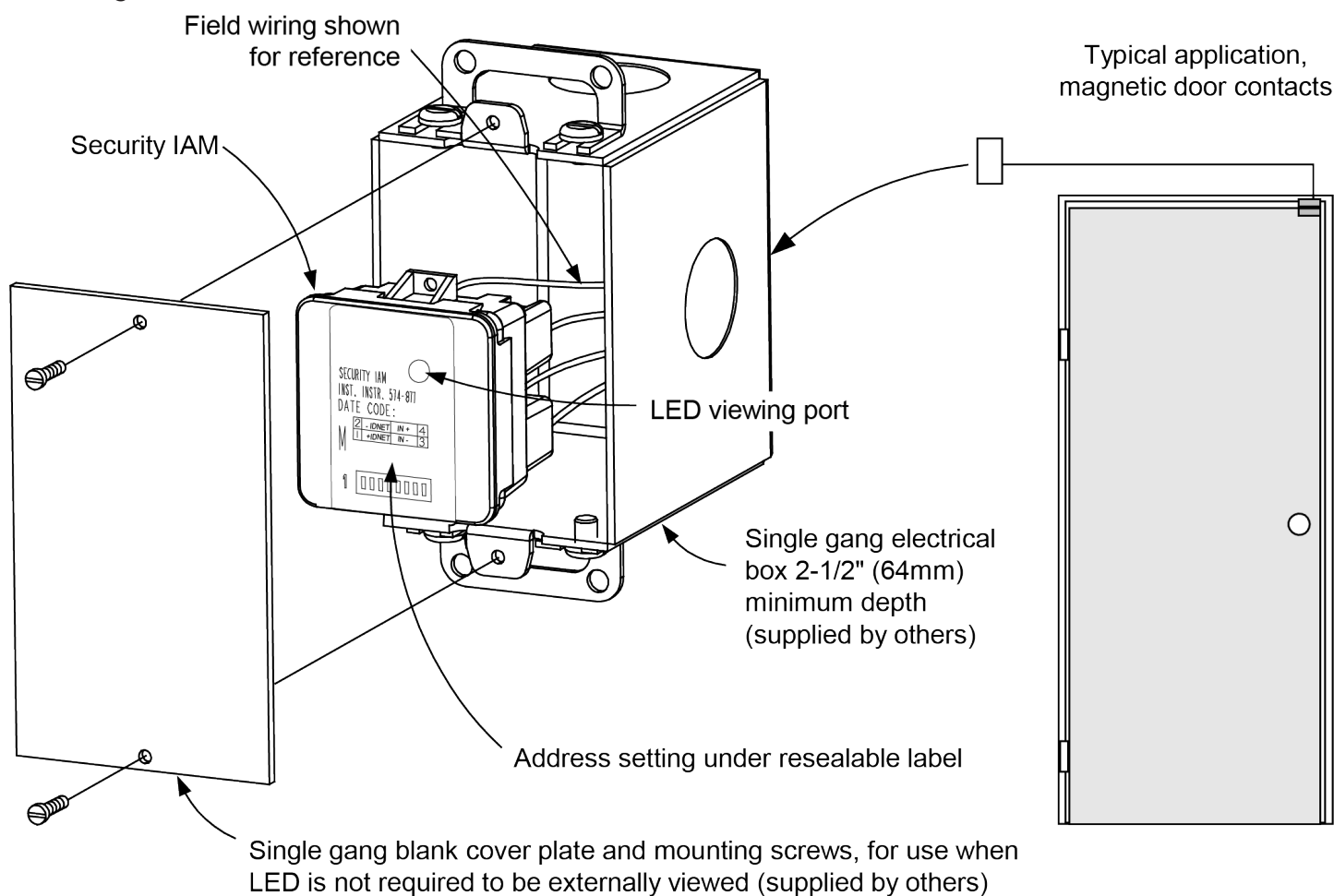
**Fig 2: Mounting Reference, Single Gang Blank Cover Plate**

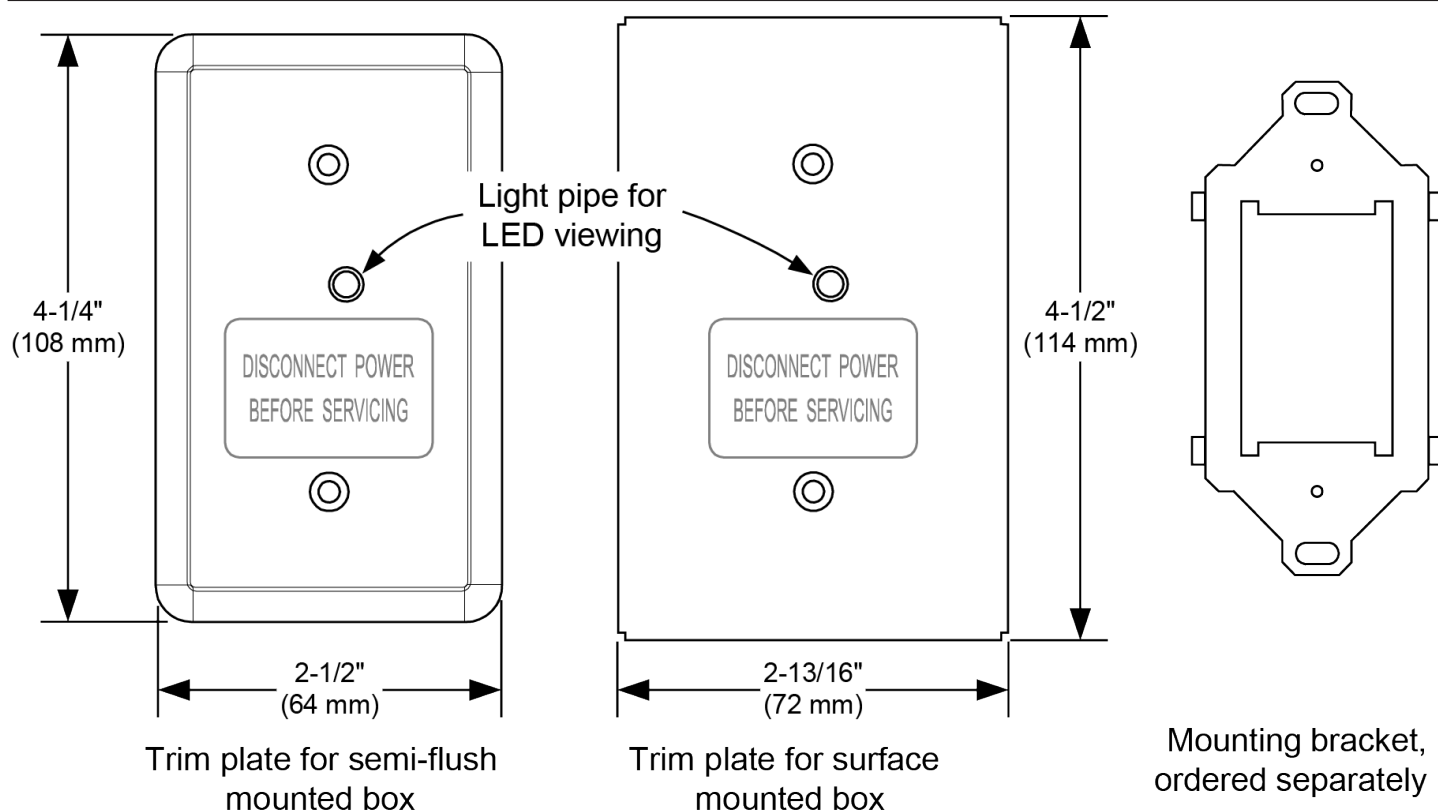**Note:** A4090-9121 Security IAM shown in Figure 2.

**Fig 3: Optional Trim Plates and Mounting Bracket for Visible LED**

**Note:** The following products are illustrated in Figure 3

· A4090-9806 trim plate for semi-flush mounted box.

· A4090-9807 trim plate for surface mounted box.

· A4090-9810 mounting bracket, ordered separately.

**Note:** These mounting plates require mounting bracket A4090-9810.