

Description

Individual addressable modules (IAMs)

IAMs receive power and communications from a two-wire MX circuit. They provide 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. They do this by monitoring normally open dry contacts and the wiring to an end-of-line resistor.

Model 4090-5258 is packaged in a thermoplastic housing and provides screw terminal connections and a status indicating LED.

Features

Mini individual addressable module (IAM)

- MX Digital addressable communications supply data and power over a single wire pair to provide the following:
 - Supervised Class B monitoring of normally open or normally closed, dry contacts.
 - Maximum resistance of wiring distance from IAM to supervision resistors is 10 ohms.
 - Choice of hard (DIP switch) or soft (Digital Enrollment) addressing.
 - For use in indoor locations up to 120°F (49°C) such as attic spaces or similar applications.
- For use with following Simplex fire alarm control units (FACUs):
 - Model Series 2050, 2250, 4007ES, 4010ES, and 4100ES FACUs with MX communications.
- Model 4090-5258 has the following features:
 - Enclosed design that 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 so that you can view the LED after installation. This requires a mounting bracket that must be ordered separately.
- Multiple operation modes are available and are selectable at the FACU:
 - You can track contact closure status.
 - At the panel, you can select momentary contact closure conditions to be latched or tracked.
- UL listed to Standard 864

Operation

Contact change

A change in the status of the monitored contact initiates an alarm or other response as programmed at the FACU. An opening in the monitored circuit wiring causes a trouble to be reported.

Panel selections

You can make selections at the FACU 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.

Figure 1: 4090-5258 Supervised IAM, front view

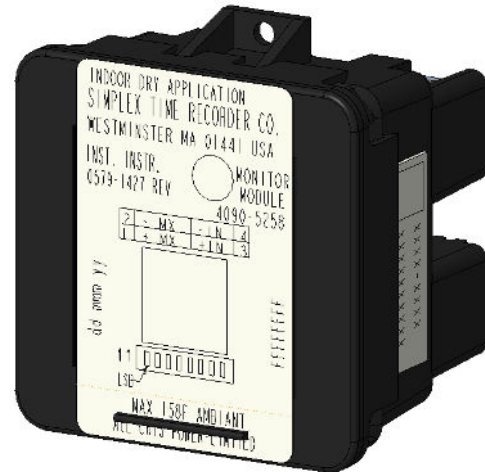


Figure 2: 4090-5258 Supervised IAM, rear view



IAM product selection

Table 1: IAM product selection

Model	Description
4090-5258	Supervised IAM, mounted in thermoplastic housing with screw terminals. See applicable options in Table 2 .

Table 2: Optional trim plates and mounting bracket for model 4090-5258

Model	Description
4090-9806	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

Table 3: End-of-line resistor harnesses, ordered separately as required

Model	Description
4081-9020	200 ohms, 1/2 W. UL Listed standard end-of-line resistor harness for N.O. or N.C. contact supervision
4081-9011	100 ohms, 1/2 W. UL Listed supervision resistor harness

Specifications

Table 4: Electrical

Specification	Rating
Power and communications	MX, one address for each IAM
Input requirements	Normally open or normally closed, dry contacts
Wire connections	Screw terminals for in/out wiring, 18 AWG to 14 AWG wire (0.82 mm ² to 2.08 mm ²)
Standby / Alarm current	Standby 0.043 mA / Alarm 4.51 mA
Installation instructions	579-1427

Table 5: Wiring distances

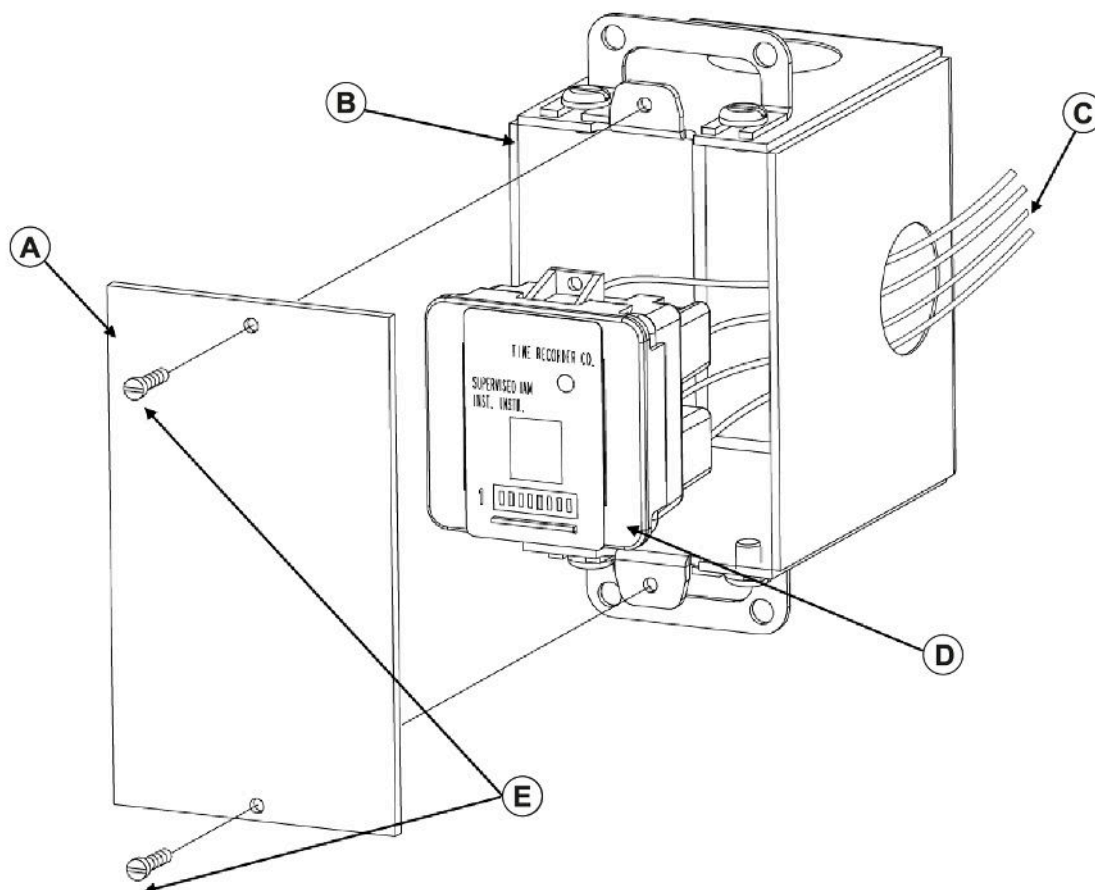
Specification	Rating
Distance from IAM to contacts.	564 ft (172 m) maximum using 16 AWG (1.5 mm ²)
Wiring distance reference for each MX Digital channel	6560 ft (2000 m) maximum from FACU

Table 6: Mechanical

Specification	Rating
Dimensions	1 9/16 in. W x 1 3/4 in. H x 1 1/4 in. D (40 mm x 45 mm x 34 mm)
Housing material	Black thermoplastic
Temperature range	32°F to 120°F (0°C to 49°C). Intended for indoor operation.
Humidity range	Up to 93% RH at 90°F (32°C)

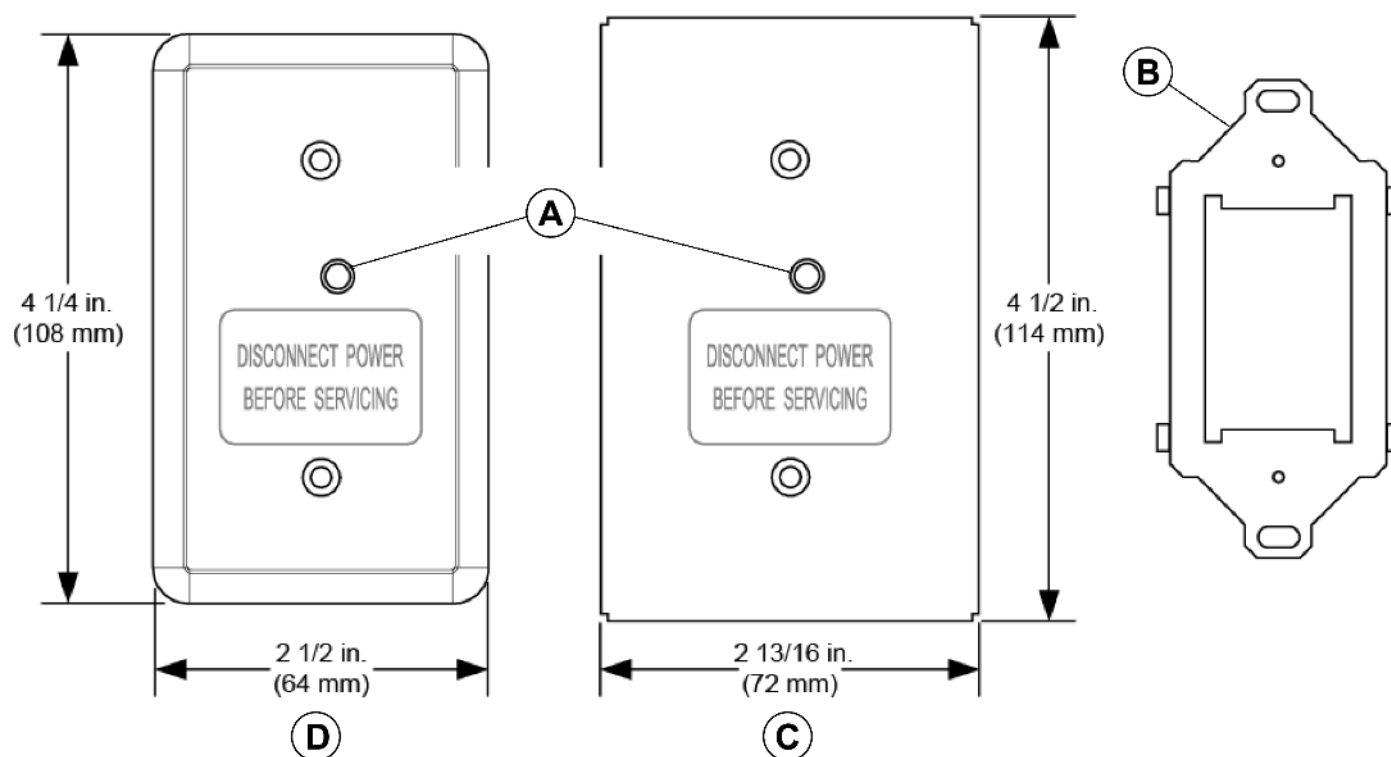
Mounting information

Figure 3: Mounting reference, single gang blank cover plate



Callout	Description
A	Cover, not supplied
B	UL Listed single-gang electrical box, not supplied
C	Field wiring
D	Supervised IAM assembly
E	#6/32 flathead screw, not supplied

Figure 4: Optional trim plates and mounting bracket for visible LED



Callout	Description
A	Light pipe for viewing.
B	4090-9810 Mounting bracket. Can be ordered separately.
C	4090-9807 Trim plate for surface mounted box.
D	4090-9806 Trim plate for semi-flush mounted box.