Features

Individual addressable manual fire alarm stations with:

· Power and data supplied via MX Technology addressable loop communications using a single wire pair
· EMI compatibility
· Address is easily programmed with the MX Service Tool
· Internally mounted addressable module is similar to the design of the A4090-5201 Mini-IAM
· Available as single action or double action breakglass operation
· Pull lever that protrudes when alarmed
· Break-rod supplied (use is optional)
· UL listed to Standard 38

Compatibility:

· For use with Autocall 4100ES, 4010ES, and 4100U Series fire alarm control panels equipped with an MX Loop Module
· Refer to data sheet *AC4100-0059* for MX Loop Module details

Compact construction:

· Electronics module enclosure minimizes dust infiltration
· Allows mounting in standard electrical boxes
· Screw terminals for wiring connections

Tamper resistant reset key lock (keyed same as Autocall fire alarm cabinets)

Multiple mounting options:

· Surface or semi-flush with standard boxes or matching Autocall boxes
· Flush mount adapter kit
· Adapters are available for retrofitting to commonly available existing boxes

Description

MX addressable stations contain an integral addressable module that constantly monitors status and communicates with an MX Loop Module located in the host fire alarm control panel.

Operation

Activation of the A4099-5201 single action manual station requires a firm downward pull to activate the alarm switch. Completing the action breaks an internal plastic break-rod (visible below the pull lever, use is optional). The use of a break-rod can be a deterrent to vandalism without interfering with the minimum pull requirements needed for easy activation. The pull lever latches into the alarm position and remains extended out of the housing to provide a visible indication.

Double Action Stations (Breakglass) require the operator to strike the front mounted hammer to break the glass and expose the recessed pull lever. The pull lever then operates as a single action station.

Station reset requires the use of a key to reset the manual station lever and deactivate the alarm switch. (If the break-rod is used, it must be replaced.)

Station testing is performed by physical activation of the pull lever. Electrical testing can be also performed by unlocking the station housing to activate the alarm switch.
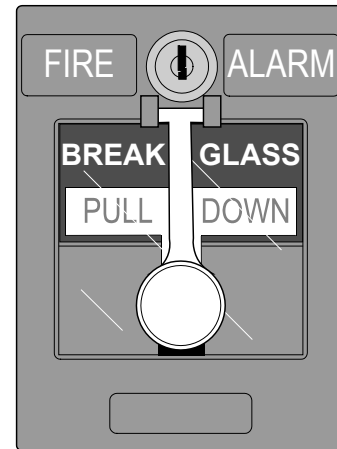

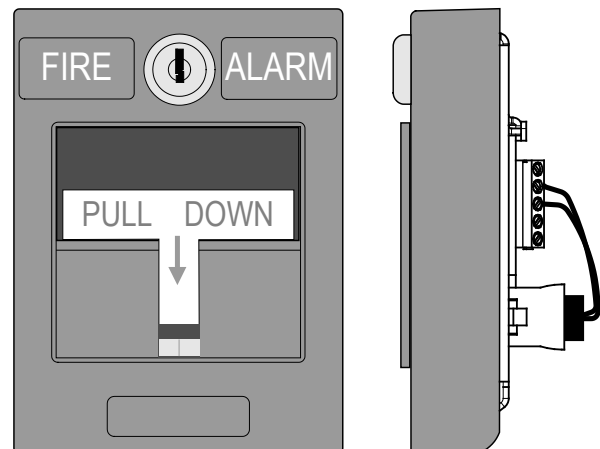Fig 1: A4099-5202 Double Action (Breakglass) Manual Station

Fig 2: A4099-5201 Single Action Manual Station (front and side view)
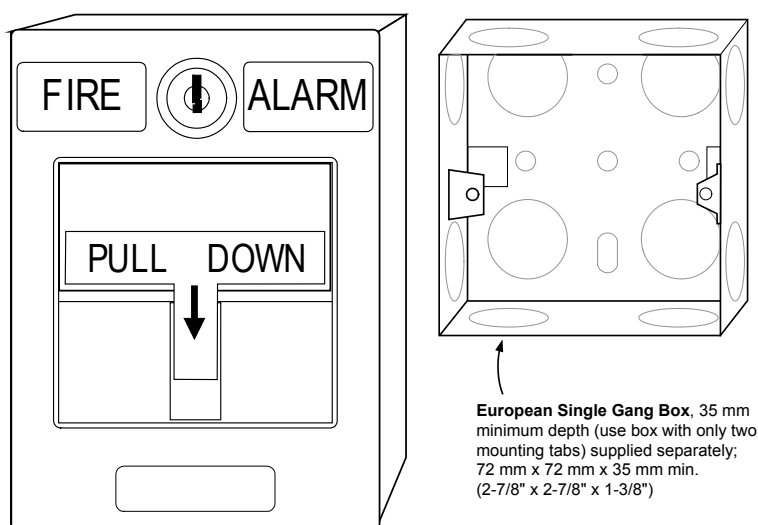
Addressable Manual Station Semi-Flush Mounting

FIRE ALARM

PULL DOWN

European Single Gang Box, 35 mm minimum depth (use box with only two mounting tabs) supplied separately; 72 mm x 72 mm x 35 mm min. (2-7/8" x 2-7/8" x 1-3/8")

Fig 3: Addressable Manual Station Semi-Flush Mounting

Addressable Manual Stations Surface Mounting

Preferred Mounting. For surface mounting of these addressable manual stations, the preferred electrical boxes are shown in Figure 4.

Additional Mounting Reference. Refer to Addressable Manual Station, Additional Mounting Information on page 4 for Wiremold box mounting compatibility.
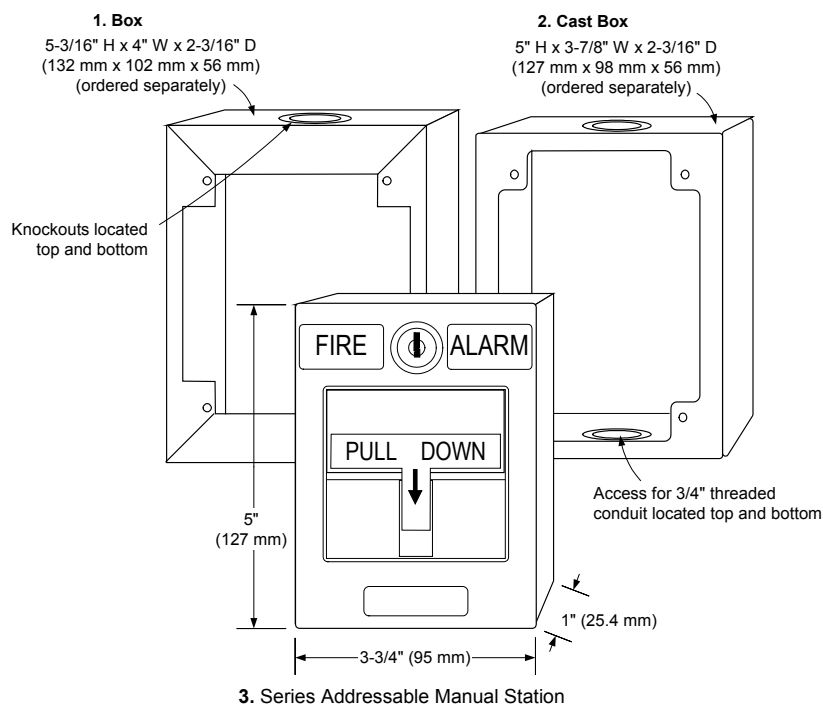

1. Box
5-3/16" H x 4" W x 2-3/16" D
(132 mm x 102 mm x 56 mm)
(ordered separately)

2. Cast Box
5" H x 3-7/8" W x 2-3/16" D
(127 mm x 98 mm x 56 mm)
(ordered separately)

Knockouts located top and bottom

FIRE ALARM

PULL DOWN

Access for 3/4" threaded conduit located top and bottom

5" (127 mm)

1" (25.4 mm)

3-3/4" (95 mm)

3. Series Addressable Manual Station

Fig 4: 4009 Mounting

Note: The following products are displayed in Figure 4:
1. 2975-9178 Box
2. 2975-9022 Cast Box
3. A4099 Series Addressable Manual Station
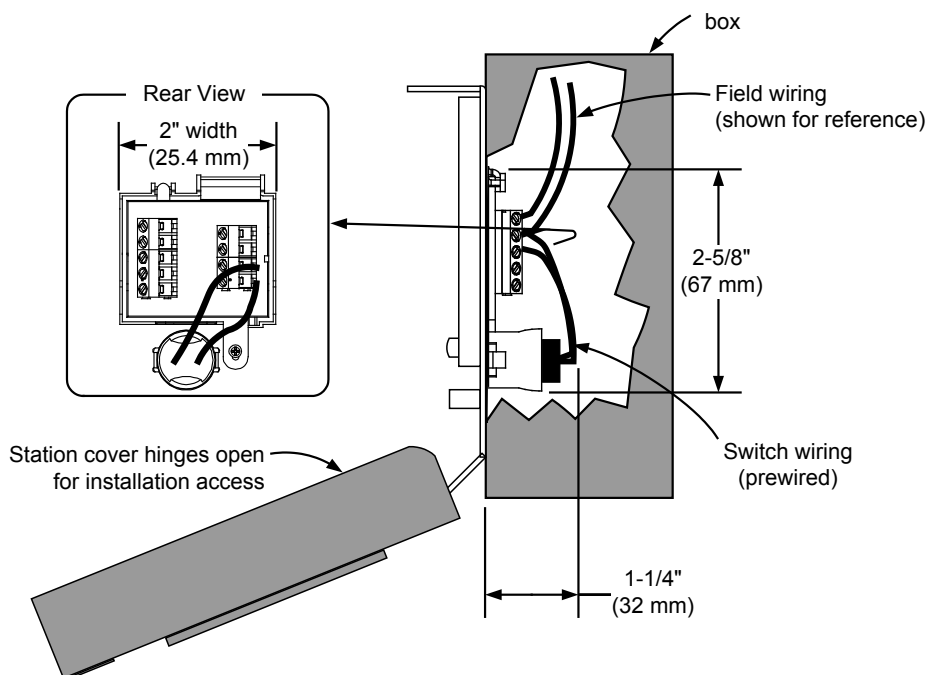
Surface Mount Side View with Internal Detail

Fig 5: Internal detail

Note: The Autocall, 2975-9178 box is shown for reference in Figure 5.

Application Reference

Refer to NFPA 72, the *National Fire Alarm and Signaling Code*, and all applicable local codes for complete requirements for manual stations. The following summarizes the basic requirements.

1. Stations shall be located in the normal path of exit and distributed in the protected area such that they are unobstructed and readily accessible.
2. Mounting shall be with the operable part not less than 3 ½ ft (1.1 m) and not more than 4 ½ ft (1.37 m) above floor level.
3. At least one station shall be provided on each floor. Additional stations shall be provided to obtain a travel distance not more than 200 ft (61 m) to the nearest station from any point in the building.
4. When manual station coverage appears limited in any way, additional stations should be installed.

Addressable Manual Station, Additional Mounting Information

For retrofit and new installations, additional compatible mounting boxes and the required adapter plates are shown in Figure 6.
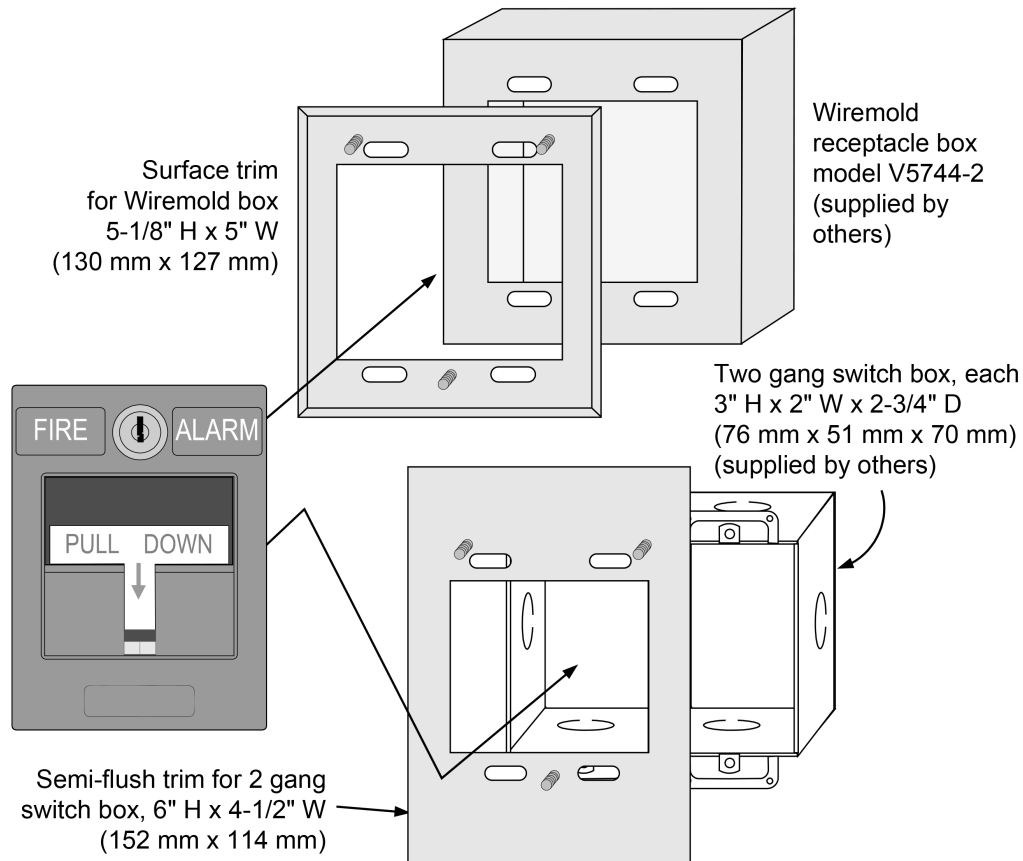
Surface trim
for Wiremold box
5-1/8" H x 5" W
(130 mm x 127 mm)

Wiremold
receptacle box
model V5744-2
(supplied by
others)

FIRE   ALARM

PULL   DOWN

Two gang switch box, each
3" H x 2" W x 2-3/4" D
(76 mm x 51 mm x 70 mm)
(supplied by others)

Semi-flush trim for 2 gang
switch box, 6" H x 4-1/2" W
(152 mm x 114 mm)

Fig 6: Additional mounting information

Note: The following Autocall products are illustrated in Figure 6:
· 2099-9814 Surface trim for Wiremold box
· 2099-9813 Semi-flush trim for 2 gang switch box
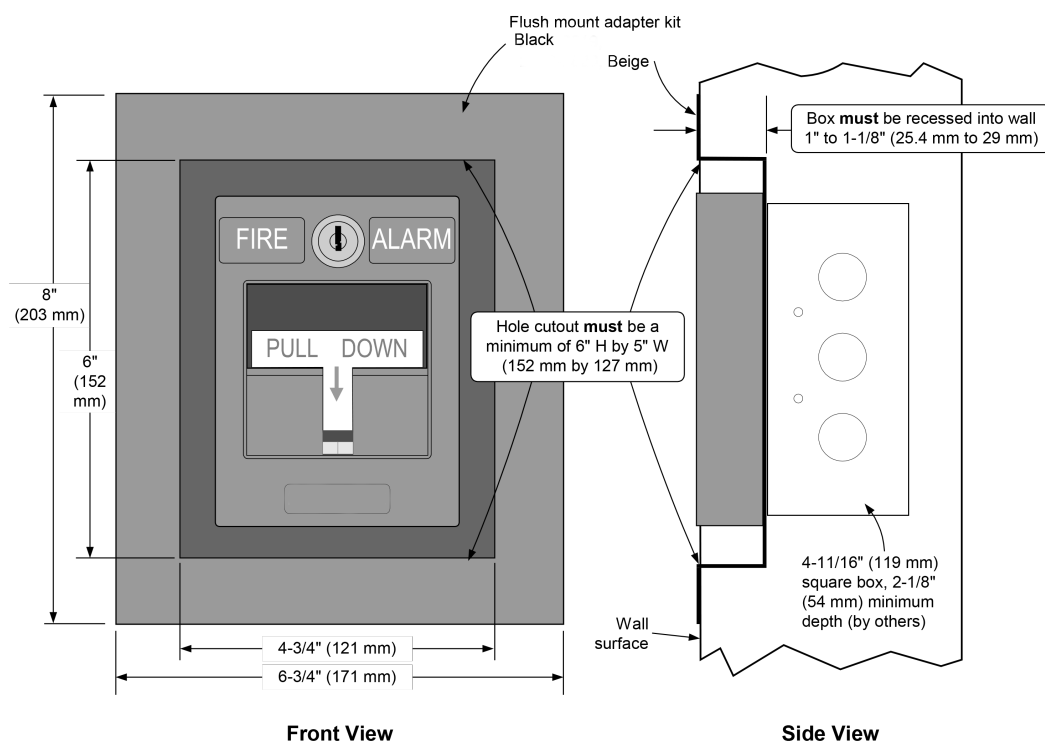
Addressable Manual Station, Flush Mounting Information

Flush mount adapter kit
Black

Beige

Box **must** be recessed into wall
1" to 1-1/8" (25.4 mm to 29 mm)

8"
(203 mm)

FIRE   ALARM

6"
(152
mm)

PULL   DOWN

Hole cutout **must** be a
minimum of 6" H by 5" W
(152 mm by 127 mm)

4-11/16" (119 mm)
square box, 2-1/8"
(54 mm) minimum
depth (by others)

Wall
surface

4-3/4" (121 mm)

6-3/4" (171 mm)

Front View   **Side View**

Fig 7: Flush mounting information

Note: the 2099-9819, Black, or the 2099-9820, Beige flush mounted adapter kit are illustrated in Figure 7.

MX Technology Addressable Manual Station Product Selection

Table 1: Addressable Manual Stations, Red Housing with White Letters and White Pull Lever

SKU	Description
A4099-5201	Single action operation
A4099-5202	Double action, Breakglass operation

Table 2: Accessories

SKU	Description	
2975-9178	Surface mount steel box, red	Refer to Addressable Manual Stations Surface Mounting on page 2 for dimensions.
2975-9022	Cast aluminum surface mount box, red	
2099-9813	Semi-flush trim plate for double gang switch box, red	Refer to Addressable Manual Station, Flush Mounting Information on page 5 for details.
2099-9814	Surface trim plate for Wiremold box V5744-2, red	
2099-9819	Flush mount adapter kit, black	
2099-9820	Flush mount adapter kit, beige	
2099-9803	Replacement breakglass	
2099-9804	Replacement break-rod	

Specifications

Table 3: Specifications

Specifications	Rating
Power and Communications	MX Loop, 1 address per manual station
Current	0.46 mA, standby and alarm
Address Means	Select with MX Service Tool
Wire Connections	Terminal blocks, for wire size 20 to 14 AWG (0.5 to 2.5 mm^2)
UL Listed Temperature Range	32° to 120° F (0° to 49° C) intended for indoor operation
Humidity Range	Up to 93% RH at 100° F (38° F)
Housing Color	Red with white raised lettering
Material	Housing and pull lever are Lexan polycarbonate or equal
Pull Lever Color	White with red raised lettering
Housing Dimensions	5" H x 3 ¾" W x 1" D (127 mm x 95 mm x 25 mm)
Installation Instructions	579-948AC