

## INSTALLATION AND MAINTENANCE INSTRUCTIONS

### MIX-4003-R RELAY BASE

#### CAUTION / ATTENTION

DO NOT PAINT OR ALTER FACTORY APPLIED FINISH IN ANY WAY  
 NE PAS PEINDRE OU MODIFIER LA FINITION ORIGINALE

#### ABOUT THIS MANUAL

This manual is included as a quick reference for installation. For further information on the use of this device with a FACP, please refer to the panel's manual.

**Note:** This manual should be left with the owner/operator of this equipment.

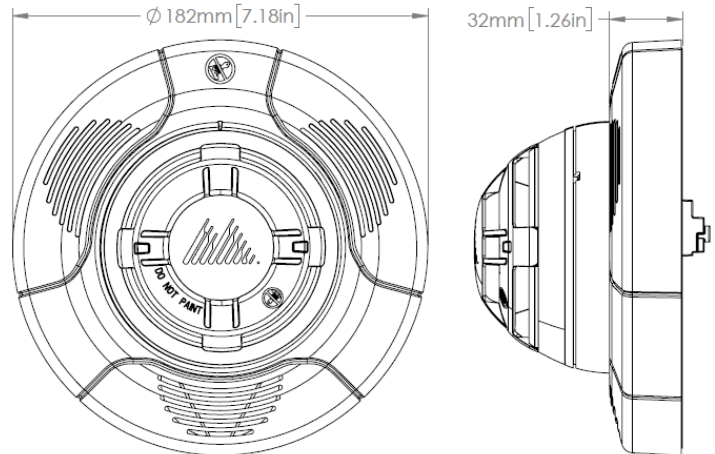
#### RELAY BASE DESCRIPTION

The MIX-4003-R relay base is designed to meet UL268/ULC S529 requirements for smoke detector, and UL521/ULC S530 requirements for heat detector.

The MIX-4003-R is used with a compatible listed UL or ULC fire alarm control panel. The device can control one independent circuit while using one address.

The MIX-4003-R provides one form C (SPDT) contact rated at 2A at 30Vdc, or 0.5A at 125Vac and a compatible panel can switch discrete contacts by code command. Circuit connections to the relay contacts are not supervised by the base. MIX-4003-R supports group activation capability for fast reaction time.

FIGURE 1: MODEL FRONT AND SIDE VIEW WITH MIX-4000 SERIES DETECTOR

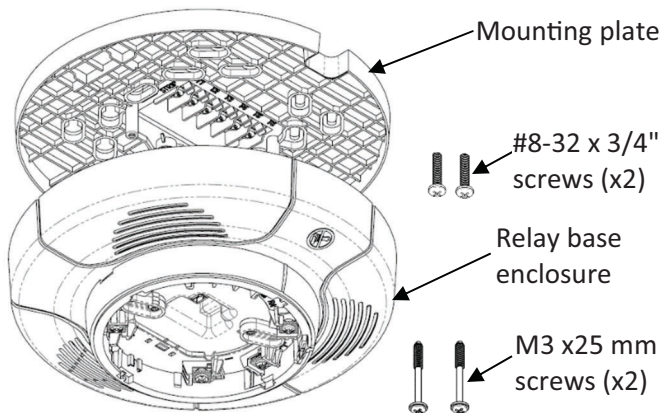


#### SPECIFICATIONS

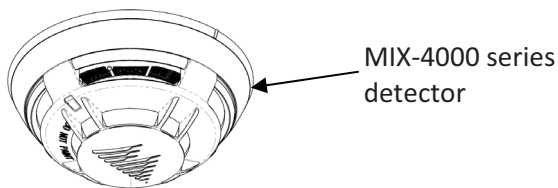
Operating Temperature:	0°C to 49°C (32°F to 120°F)
Humidity Range:	0% to 93%
Nominal Voltage:	Regulated 24VDC/VFWR
SLC Standby Current:	1.16 mA
SLC Alarm Current:	1.18 mA
Base Diameter	182mm (7-3/16 in)
Base Height	32mm (1-1/4 in)
Terminal wire gauge	12-22 AWG

## KEY COMPONENTS

**FIGURE 2: RELAY BASE ASSEMBLY COMPONENTS**



**FIGURE 3: MIX-4000 SERIES DETECTOR**



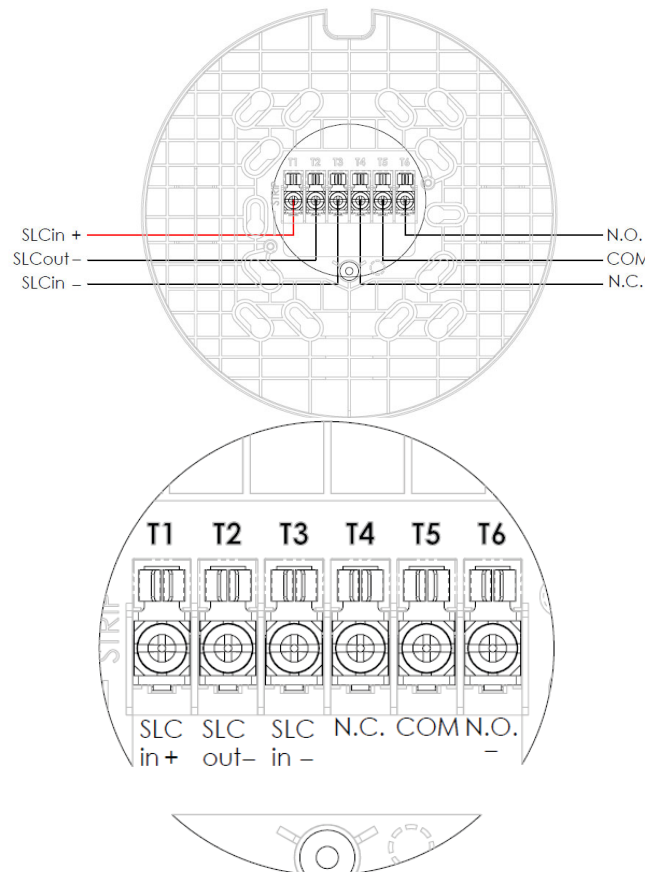
The mounting plate in figure 2 is mounted first on the electrical box and all wiring is done on integral screw connectors. The connections can be visually inspected before the relay base itself is mounted. Then, the enclosure containing the electronics, the relay base and the detector can be plugged in and secured.

**Note:** This device should be installed as per applicable requirements of the authorities having jurisdiction.

## WIRING

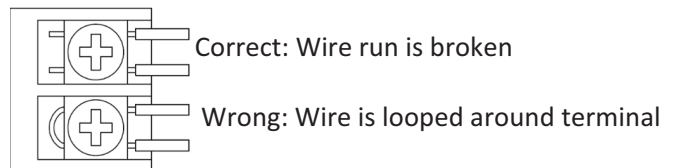
Before installing this device seek guidance from the compatible control panel instructions for the device operation modes and the configuration requirements. It is recommended to remove power from SLC and power lines before performing the installation.

**FIGURE 4: WIRING TABS**

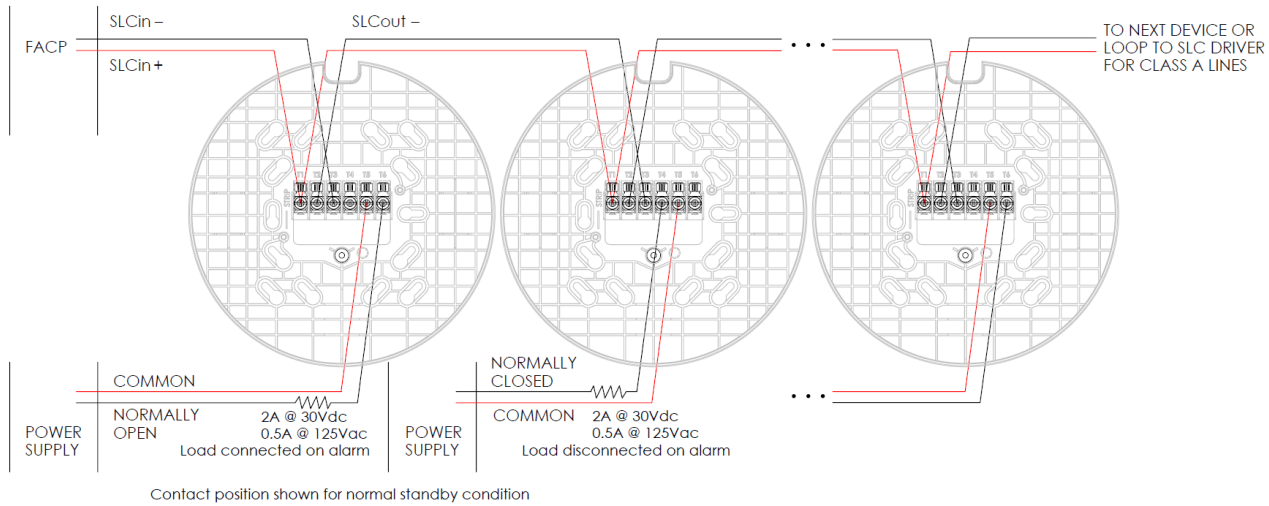


Use the information in this document to determine the total current draw of the devices. The total current draw of the devices must not exceed the SLC line capacity of the panel. In all cases, the installer should consider the voltage drop to ensure that the last device on the circuit operates within its rated voltage. Please consult fire panel installation manual for guidance on wire resistance and length.

Do not loop signal circuit field wires around terminals. Electrical supervision requires wire run to be broken at each end.



**FIGURE 5: DEVICE CONNECTION**



**Note:** Wiring must be in accordance with CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, section 32 and/or NFPA 70.

**CAUTION**

FOR SYSTEM SUPERVISION, FOR ALL TERMINAL TAPS, DO NOT USE LOOPED WIRE UNDER TERMINALS. BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTIONS.

**ATTENTION**

NE PAS UTILISER DE FILS EN BOUCLE SOUS LES BORNES. POUR FOURNIR UN BON SUIVI DES CONNEXIONS, INTERROMPRE LA CONTINUITÉ DES CÂBLES.

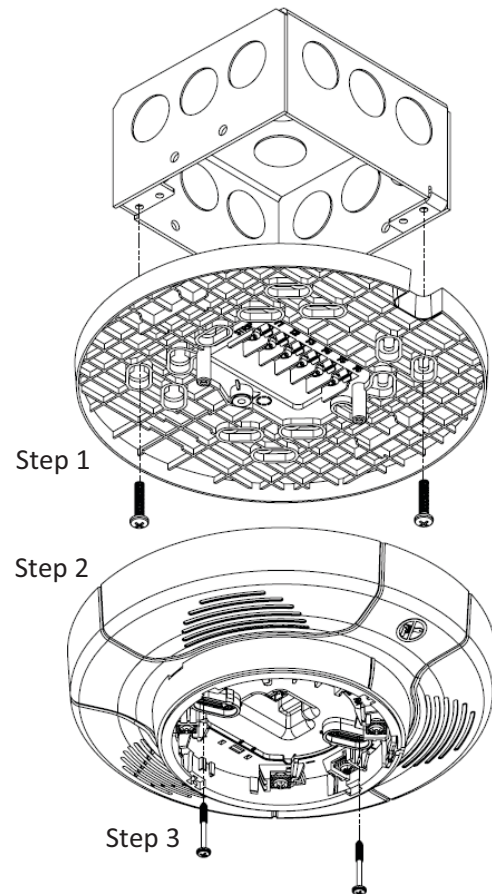
**MOUNTING**

MGC recommends spacing speaker strobe appliances in compliance with CAN/ULC S524 and/or NFPA72.

The mounting plate is compatible with 3" by 2" single gang device boxes, 3-3/4" by 4" double gang boxes, 4" by 2" single gang utility boxes, standard 4" by 4" boxes, and standard 4" octagon boxes.

1. Attach the mounting plate to the electrical box with two mounting #8-32 x 3/4" screws.
2. Slide down the relay base enclosure until the connection blades touch the clips on the mounting plate.
3. Secure the mounting plate with securing M3 x25 mm screws.

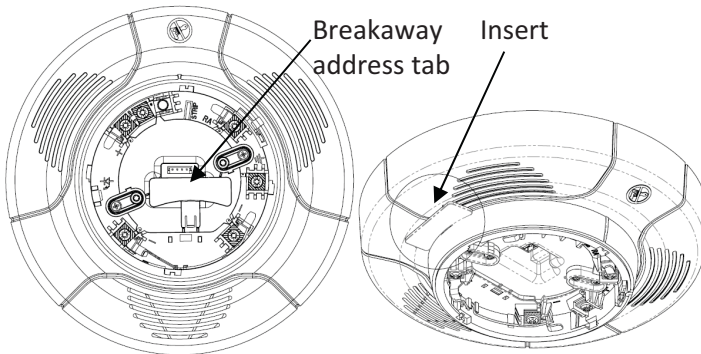
**FIGURE 6: MOUNTING DIAGRAM**



### MOUNTING DETECTOR

If the detector type and address is required to be visible from the outside, break the address tab inside the detector base and insert it in the outer rim of the base. See figure 7.

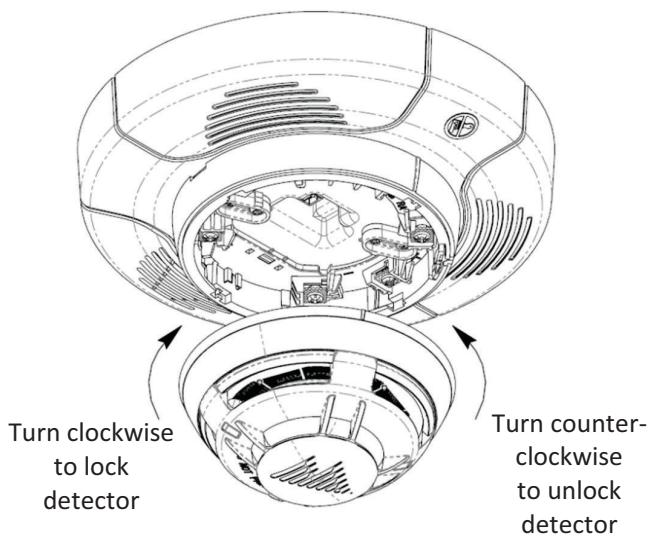
**FIGURE 7: ADDRESS TAB INSERT**



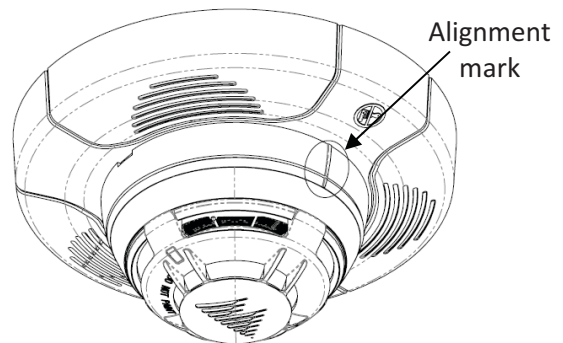
The detector can then be placed on the top base using the following steps (figure 8):

1. Position the detector centrally on its adapter base ensuring it is level.
2. Rotate clockwise applying gentle pressure. The detector will drop into its keyed location.
3. Continue to rotate clockwise a few degrees until the detector has fully engaged in the adapter base.
4. When the detector is firmly engaged, check the alignment of the raised reference marks on the detector and on the base (figure 9).

**FIGURE 8: MOUNTING DETECTOR**



**FIGURE 9: DETECTOR ALIGNMENT MARK**



### Model Numbers

**MIX-4003-R** 4000 SERIES RELAY BASE

### Accessories

#### MIX-4000 SERIES DETECTORS:

**MIX-4010**

Non-isolated photoelectric smoke detector

**MIX-4011**

Non-isolated photoelectric smoke detector

UL 268 Rev7

**MIX-4010-ISO**

Isolated photoelectric smoke detector

**MIX-4011-ISO**

Isolated photoelectric smoke detector UL 268

Rev7

**MIX-4020**

Non-isolated multi-sensor detector

**MIX-4021**

Non-isolated multi-sensor detector UL 268

Rev7

**MIX-4020-ISO**

Isolated multi-sensor detector

**MIX-4021-ISO**

Isolated multi-sensor detector UL 268 Rev7

**MIX-4030**

Non-isolated heat detector

**MIX-4030-ISO**

Isolated heat detector