



MX-862 Installation Instructions

Introduction

The MX-862 is an addressable smart ceiling PIR detector. It creates a 360° coverage area to detect the movement of intruders in indoor areas. The detector has the following features.

- Tamper protection.
- False alarm prevention via The Advanced True Motion Recognition™ algorithm

Note: For UL installations, the detector is for use with UL listed control units only.

Device overview

Figure 1: Internal view

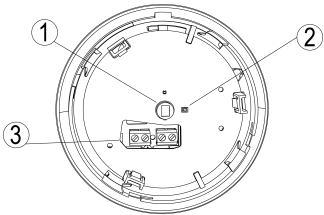


Table 1. Legend

Callout	Part
1	Pyro sensor
2	LED
3	Wiring terminal

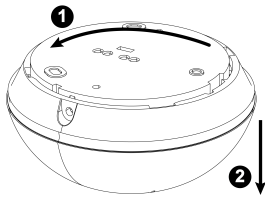
Enrolling the device

Refer to the MX alarm panel instruction manual for enrollment information.

Removing the bracket

Before wiring and mounting the device, rotate the mounting bracket anticlockwise and pull it from the detector. See Figure 2.

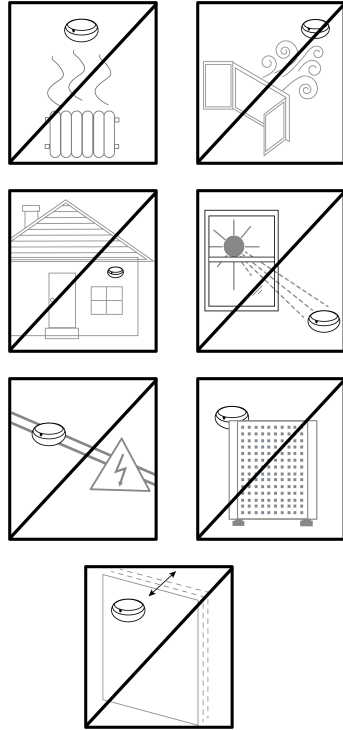
Figure 2: Removing the bracket



Installation guidelines

Consider the following guide when you choose a suitable mounting location.

Figure 3: Device mounting hazards



1. Keep away from heat sources.
2. Do not expose to air drafts.
3. Do not install outdoors.
4. Avoid direct sunshine.
5. Do not install near high voltage electrical lines.
6. Do not install behind partitions.
7. Do not mount on a moveable or unstable surface.

Notes:

- Only qualified service persons can install the device.
- Do not partially or completely obscure the device's field of view.
- Do not install the MX-862 addressable ceiling PIR detector in the following locations:
 - Hazardous areas.
 - Areas with a pollution degree higher than pollution degree 2.
 - Circuits above overvoltage category II.
- Install the MX-862 according to the Standard for Installation and Classification of Residential Burglar Alarm Systems, UL 1641.

Mounting and wiring the device

1. Use the holes in the mounting bracket to mark and drill three holes in the mounting surface. See Figure 4.
2. Fasten the bracket to the mounting surface with screws.
3. Wire the device.
 - a. Remove the jacket at the end of both cables to expose the jacketed wires. To expose the wires, remove the insulation at the end of each wire. See Figure 5.
 - b. Feed the wires through one of the pairs of openings on the mounting bracket. See Figure 6.
 - c. For each cable, insert one wire in the positive terminal loop that is marked L+ and the other wire in the negative terminal loop that is marked L-. See Figure 7.
 - d. Screw both terminals closed with a flat-head screwdriver. See Figure 8.
4. Align the bracket tabs with the device slots and rotate the device clockwise. Verify that it is securely attached. See 1 and 2 in Figure 9.
5. Fasten the device to the bracket with a screw. See step 3 in Figure 9.

Figure 4: Marking, drilling and screwing the device

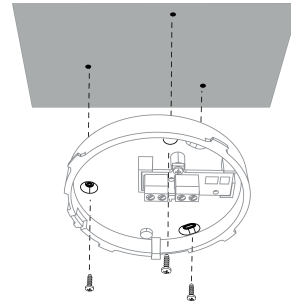


Figure 5: Removing the cable and wire jackets



Figure 6: Inserting the cables through the cable opening

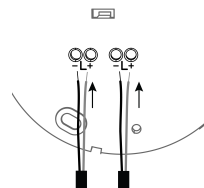


Figure 7: Positive and negative terminal loops

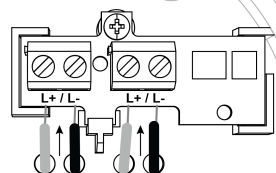


Figure 8: Closing the terminal with a screwdriver

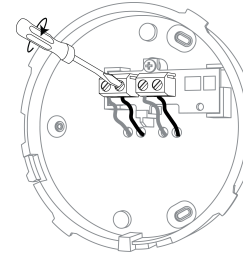
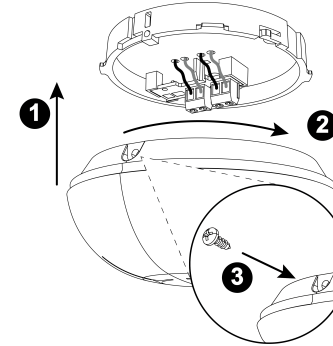


Figure 9: Attaching the device



Mounting height and detection distance

The following table outlines the detection distance in relation to the mounting height:

Table 2. Mounting height and detection distance

Height	2 m (6.6 ft)	3 m* (9.8 ft*)	4 m* (13.1 ft)
Detection distance radius	3.1 m (10.2 ft)	3.75 m (12.3 ft)	5 m (16.4 ft)

Note:
UL/ULC verified detection only at 3.35 m (11 ft) radius when the device is installed at 2.75 m (9 ft) height.
* For UL installations the maximum mounting height is 2.75 m (9 ft).

Walk testing

Perform a walk test of the coverage area at least once a week to ensure that the device is working correctly.

1. Set the alarm control panel to test mode to switch the device to walk test mode.
2. Walk test the coverage area by walking across the far end of the coverage pattern in both directions. The LED lights red each time it detects motion.

The device switches to normal mode when test mode is disabled on the panel.

Note:

- For detailed Placement instructions refer to the control panel reference manual.

Device settings

To change a default device setting, select **DEVICE SETTINGS** from the MX panel menu and configure one or more setting options in the following definition list:

- **Alarm LED:** Select **LED OFF** to turn off the LED indication of alarm events. **LED ON** is the default setting
- **Walk test:** Select **Disable** to disable the LED indication of alarm events in walk test mode. **Enable** is the default setting.

LED Event indication

The following table describes the LED patterns and the corresponding events they indicate:

Table 3. LED event indications

LED	Event
Slow blinks	Walk test
Fast blinks	Enrollment mode
On for three seconds	Intruder detection

Specifications

General

- **Detector type:** One pyroelectric sensor operating in a dual separated configuration

Optical

- **Lens data:** Fresnel type lens. Number of beams: 72.
- **Max. coverage:** Ø10 m/360° at the maximum installation height of 4 m (13.1 ft)

Figure 10: Beam distribution at 2.7 m (8.9 ft)

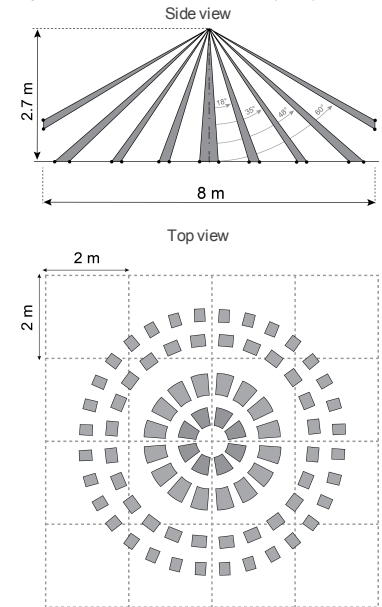
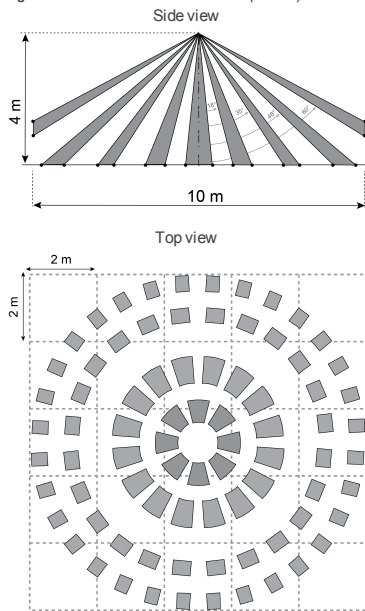


Figure 11: Beam distribution at 4 m (13.1 ft)



Compliance with standards



The MX-862 is listed by UL 639 and by ULC-S306 for Intrusion-Detection Units Europe: EN 50131-2-2 Grade 2 Class II

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