ClareOne Ceiling Mount 360 PIR Installation Sheet

Last modified: 10/22/20

Part Number: CLR-C1-360PIR

Description

The ClareOne Ceiling Mount 360 PIR sensor is a passive infrared motion detector designed for ceiling mount.

The compact design allows for easy installation while the sensitivity settings provide adaptability for different environments.

The motion detector is designed for a ceiling mount application that provides a 360° detection range.

Notes

- Do not mount the sensor outdoors.
- Avoid areas with pets.
- Do not mount the sensor near ceiling fans or heating ducts.
- Avoid placing the sensor in sight of windows and direct sunlight.

Installation

Before installing the sensor, carefully select the desired location and sensitivity settings.

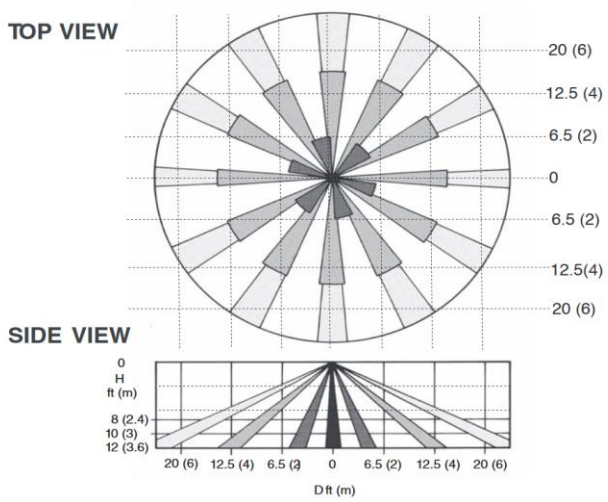
Location

The sensor's coverage pattern is dependent on mounting height. Areas can be masked off to prevent unwanted detection.

Mounting height	Detection area
8 ft (2.4 m)	20 ft (6.09 m)
10 ft (3.04 m)	30 ft (9.14 m)
12 ft (3.65 m)	45 ft (13.71 m)

Detector sensitivity can be set to allow for harsher environments with varying temperatures.

Figure 1: Detection area



Sensitivity setting

The sensor has 2 sensitivity settings: low and high.

Low (Lo): The recommended setting, allows for some environmental movement.

High (Hi): A quick response, used for quiet areas that do not expect environmental noise.

To select the sensitivity level:

1. Gently twist the sensor top and pull the domed top away from the base.
2. Place the jumper into the desired sensitivity level (Lo or Hi).

   Lo Sensitivity: Jumper placement in the top two pins.

   Hi Sensitivity: Jumper placement in the bottom two pins.

3. Replace the sensor top, twisting it firmly into place.

LED

The LED jumper is used to enable/disable a red LED to illuminate when movement is detected. The red LED does not illuminate unless the LED jumper is installed across the pins.

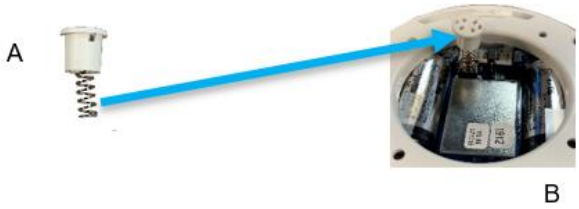
Note: Leaving the LED jumper installed greatly reduces the sensor's battery life.

Mounting the sensor

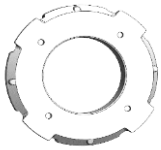
After selecting the mounting location and adjusting the sensitivity settings, mount the sensor.

To mount the sensor:

1. Attach the tamper spring to the sensor's plastic foot, A, and attach the foot to the tamper switch, B.



2. Remove the housing base from the detector.



3. Use the anchors and screws to securely mount the housing base to the ceiling.
4. Gently twist the detector on the housing base.

Programming

Add the sensor to the ClareOne panel.

To add the sensor to the ClareOne panel:

1. Ensure the sensor is not faulted (no motion currently detected).
2. Put the ClareOne panel into sensor paring mode. For detailed programming instructions, refer to *the ClareOne Wireless Security and Smart Home Panel User Manual* (DOC ID 1871).
3. Trip the sensor by causing motion detection.

Testing the sensor

Verify that the sensor is working correctly:

To test the sensor:

1. Carefully remove the sensor from the housing base.
2. Press the tamper on the motion board to enter Walk Test mode. When in this mode the detector transmits an RF signal to the control panel whenever it detects motion.
3. Place the jumper across the LED pins, allowing the LED to light when motion is detected.
4. Return the detector to its location, and then walk the coverage area verifying the LED illuminates when movement is detected.
5. The Walk Test times out after 1-minute. of no motion detection.
6. When finished twist the sensor away from the housing. Remove the LED jumper, and then replace the sensor in its secure housing.

   Note: Leaving the LED jumper installed greatly reduces the sensor's battery life.

Communication delay

The sensor has a 3-minute communication time delay between motion detections. This delay helps conserve battery.

The red LED does not illuminate unless the LED jumper is installed.

Note: Leaving the LED jumper installed greatly reduces the sensor's battery life.

Replacing the Batteries

Battery life depends on how often the detector transmits signals and the temperature of the installation environment. When the battery voltage gets low, the detector transmits a low battery signal to the panel. The panel then activates trouble beeps to notify the customer that both detector batteries must be replaced.

Replace both batteries immediately using 2 Panasonic CR123A 3V.

Note: If a low battery alarm occurs, replace both batteries within 7 days.

Caution: Batteries may explode if mistreated. Do not recharge, disassemble, or dispose of in fire.

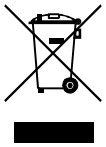
Battery Disposal

The batteries used in this sensor are lithium batteries and are not reusable. Properly dispose of used lithium batteries according to your local hazardous waste disposal laws.

Specifications

Compatible panel	ClareOne (CLR-C1-PNL1)
Power source	2 CR123A 3V Battery
Transmitter frequency	433 MHz
Typical battery life	4 to 6 years at 68 °F (20 °C)
Tamper switch	Sealed dome contact
Sensitivity	2-event or 3-event
Dimensions (diameter × depth)	2.95 × 1.39 in. (79.93 × 35.30 mm)
Housing	High impact ABS
Storage temperature	-30° to 140° F (-34° to 60° C)
Operating environment	
Temperature	-40 to 131°F (-40 to 55°C)
Relative humidity	90% noncondensing

Regulatory information

Manufacturer	Clare Controls, Llc. 7519 Pennsylvania Ave, Suite 104 Sarasota, FL 34243
North American standards	FCC: 15.109 Class B 15.231, Industry Canada: ICES-003, RSS-210
FCC compliance	FCC / IC Statement This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Per FCC 15.19 (a) (3) and (a) (4), This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesirable operation. Per FCC 15.21, The user manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: •Reorient or relocate the receiving antenna. •Increase the separation between the equipment and receiver. •Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. •Consult the dealer or an experienced radio/TV technician for help. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne doit pas provoquer d'interférences et (2) cet appareil doit accepter toute interférence, y compris celles pouvant causer un mauvais fonctionnement de l'appareil. In accordance with FCC requirements of human exposure to radio frequency fields, the radiating element shall be installed such that a minimum separation distance of 20 cm is maintained from the general population. FCC:2ABBZ-RF-CPIR-433 IC: 11817A-RFCPIR433 This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This Class B digital apparatus complies with Canadian ICES-3B. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. MANUFACTURER HEREBY DISCLAIMS ALL WARRANTIES AND REPRESENTATIONS, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE INCLUDING (BUT NOT LIMITED TO) ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THESE PRODUCTS AND ANY RELATED SOFTWARE. MANUFACTURER FURTHER DISCLAIMS ANY OTHER IMPLIED WARRANTY UNDER THE UNIFORM COMPUTER INFORMATION TRANSACTIONS ACT OR SIMILAR LAW AS ENACTED BY ANY STATE. (USA only) SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER LEGAL RIGHTS THAT VARY FROM STATE TO STATE. MANUFACTURER MAKES NO REPRESENTATION, WARRANTY, COVENANT OR PROMISE THAT ITS ALARM PRODUCTS AND/OR RELATED SOFTWARE (I) WILL NOT BE HACKED, COMPROMISED AND/OR CIRCUMVENTED; (II) WILL PREVENT, OR PROVIDE ADEQUATE WARNING OR PROTECTION FROM, BREAK-INS, BURGLARY, ROBBERY, FIRE; OR (III) WILL WORK PROPERLY IN ALL ENVIRONMENTS AND APPLICATIONS.
Environmental class	UL: Indoor dry IEC: 3K5
EU compliance	CE
EN 54	EN 54-00:0000
European Union directives	1999/5/EC (R&TTE directive): Hereby, Clare Controls declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
	2002/96/EC (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.
	2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info.

Warranty information

Clare Controls offers a two (2) year limited warranty on original Clare Controls components, from the date of shipment from Clare Controls.

Contact information

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claresupport@clarecontrols.com

Homeowner Support (ClareCare): 941.315.2273 (CARE)
help@clarecontrols.com