Zigbee PIR Motion Sensor with Pet Immunity

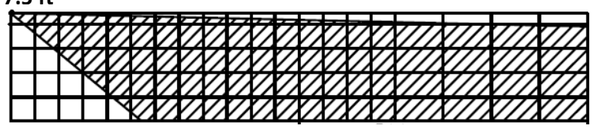
H74426

Installation Instructions and User Manual

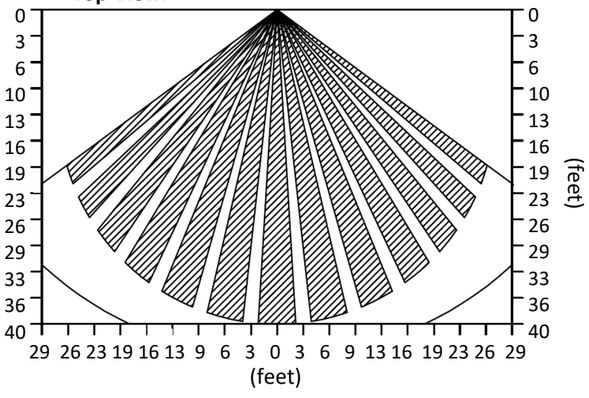
1. Specifications

Frequency:	2.4 GHz (IEEE 802.15.4)
Operating Temperature:	32°-113°F (0°-45°C)
Operating Humidity:	85% RH non-condensing
Battery:	1x CR123A Panasonic Lithium 3V DC
Battery Life:	3 Years
Compatibility:	Zigbee, WWAH (Works with All Hubs)
Pet Immunity:	Up to 50 lbs
Coverage Area:	40 feet by 40 feet, 90° angle
Light Immunity:	1500 Lux
Coverage Pattern:	

7.5 ft **Side View:**



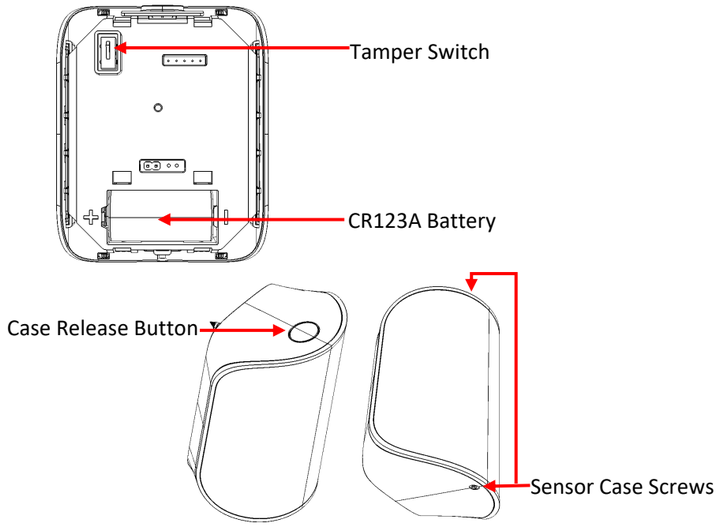
Top View:



2. Package Contents

1x Sensor	
4x Screws & Wall Anchor	1x CR123A battery (installed)
2x Sensor Case Screw	1x Back Mounting 2-Sided Adhesive Tape
1x Manual	2x Side Mounting 2-Sided Adhesive Tape

3. Component Identification



4. Zigbee Enrollment:

This PIR Motion Sensor needs to be paired before installation.

1. Pull the exposed plastic battery tab.
2. The LED will blink three times every 2-3 seconds in amber color while scanning the network.
3. If network is found and successfully joined, the LED will be lit for 1 second in amber color followed by a short blink in green color.
4. If network is not found after 1 minute, the sensor will go into sleep mode and the LED will blink in amber color every 1 minute. You need to reset the sensor to trigger a pairing process, and then sensor will repeat steps from 2 to 4.

To reset the sensor:

1. Remove the battery for 10 seconds
2. Press and hold down the temper switch while re-insert the battery
3. Release the temper switch within 3 seconds

5. Mounting

- Mount the PIR Motion Sensor at 7.5 feet (2.3 meters) above the floor.
- Press the case release button to separate the front and back sensor case.
- The back case gives access to both the flush mount and corner mount screw knock outs. Drill through the appropriate knockouts and use the included screws to mount in the desired mounting location.
- It is recommended to ensure there is a tight seal around the knockouts to prevent bugs from entering the sensor and causing false alarms.
- Replace the front sensor cover to snap shut and screw in the sensor case screws on the top and bottom of the back sensor case.

6. Walk Test Mode

Walk test mode can be used to test the motion sensor detection coverage area.
To enter walk-test mode:

1. Remove the battery for 10 seconds
2. Press and hold down the tamper button while re-insert the battery
3. Keep the tamper switch hold down for 10 seconds then release

The LED will begin to blink slowly in amber to indicates the motion sensor is warming up. After 45 seconds, the LED will stop blinking which indicates the motion sensor is ready to detect motion. The LED will be lit in red color to illuminate each time motion is detected. Once the LED goes out, the sensor is ready to detect motion again. Walk test mode ends after 20 motions detected, or no motion detected for 1 minutes. It is recommended that the PIRZB2-ECO is tested monthly to ensure proper function.

7. Operation

The PIR Motion Sensor requires 45 seconds to warm up for signal stabilizing when performing start up or reset. During the warmup period, the LED will blink slowly in amber.
After warmup completed, the LED will blink every 5 minutes in green color to indicate the sensor is working properly. However, there are no LED indications when motion is detected. This is done to maximize battery life. Furthermore, when motion is detected and a signal is transmitted to the panel, the sensor will not transmit again until there are no motion detected for a period of 3 minutes and motion is detected again.

8. Maintenance - Replacing the Battery

When the battery is low, a signal will be sent to the control panel. The LED will blink every 2 minutes in red**.**
To insert or replace the battery:

1. Press the case release button to separate the front and back sensor case
2. Remove the front case to expose the battery
3. Replace the CR123A lithium battery. Note the correct orientation of the battery as shown on the battery compartment.
4. Replace the front cover.

WARNING: Failure to follow these warnings and instructions can lead to heat generation, rupture, leakage, explosion, fire, or other injury, or damage. Do not insert the battery into the compartment in the wrong direction. Always replace the battery with the same or equivalent type (see Specifications on section 1). Never recharge or disassemble the battery. Never place the battery in fire or water. Always keep batteries away from small children. If batteries are swallowed, promptly see a doctor.

Always dispose and/or recycle used batteries in accordance with the hazardous waste recovery and recycling regulations for your location. Your city, state, or country may also require you to comply with additional handling, recycling, and disposal requirements.

9. `Environmental and Other Useful Information

5. While the PIR is a highly reliable intrusion detection device, it does not guarantee against burglary. Any intrusion device is subject to a “failure to warn” for a variety of reasons. Consider the following when installing and setting up the PIR:
6. This PIR has built-in protection to keep bugs from getting into the sensor area and causing false alarms. Note that this protection does not prevent insects from crawling across the lens of the PIR, which could trigger the PIR.
7. Infrared energy can be reflected off any glossy surfaces such as mirrors, windows, floors, or counter tops with glossy finish, and slick-finished concrete. Some surfaces reflect less than others (e.g. the PIR can see a change in infrared energy off of reflective surfaces even if the heat or cold source is not within the PIR detection pattern).
8. Windows reflect infrared energy. They also allow sunlight or light from other sources (e.g., cars) to pass through to the PIR. The PIR can detect these changes in infrared energy. For example, if sunlight passing through a window shines onto a hardwood floor and the change in infrared energy is quick enough, the PIR can trigger an alarm. The same applies if the PIR area includes a window, even though the pattern of protection cannot “see” through glass. Lights from a passing car can also pass through the window at night and shine directly into the PIR’s lens.
9. Heating and air conditioning ducts are also important because if they blow air onto an object within the field of the PIR’s view, the temperature of that object could change quickly enough for the PIR to “see” a change in infrared energy. PIR’s cannot see air current, only the change in temperature of a physical object.
10. The PIR senses change in temperature. However, as the ambient temperature of the protected area approaches the temperature range of 95° to 120° F, the detection performance of the PIR decreases.
11. Ensure that the area you wish the PIR to cover is free of obstructions (for example, curtains, screens, plants, and so on.) that may block the pattern of coverage.
12. Anything that can sway or move due to air current can cause a change in infrared energy within the fields of view. Drafts from doors or windows can cause this to happen. Plants, balloons, curtains, and hanging baskets should never be left in the PIR’s field of view.
13. Do not mount the PIR on a surface that allows for any vibration. Vibrations not only cause the PIR to move a little, but it also causes the fields of view in a room to move with respect the PIR. A little vibration can cause havoc with the PIR’s field of view, thus the PIR may see a change in energy and trigger the alarm.
14. An installation often requires that the PIR is aimed at the door. The PIR may detect door movement before the door contact can initiate an entry delay, causing the alarm to trigger. If you install the PIR facing a door, then while programming the PIR, choose an appropriate sensor/zone type.
15. The PIR ONLY detects intrusion within the pattern of coverage.
16. The PIR does not provide volumetric area protection.
17. The PIR creates multiple beams of protection. Intrusion can only be detected in unobstructed areas covered by those beams.
18. The PIR cannot detect motion or intrusion that occurs behind walls, ceilings, floors, closed doors, partitions, glass doors, or windows.
19. Tampering with, masking, painting, or spraying of any material on the PIR lens or any part of the optical system can impair detection ability.
20. The PIR, like other electrical devices, are subject to component failure. Even though the PIR is designed to last as long as 10 years, the electronic components are subject to failure.

FCC Compliance Statement

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.

This equipment has been tested and found to comply with the limits for Class B digital devices, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, 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:

- Re-orient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment to an outlet on a different circuit from the receiver
- Consult the dealer or an experienced radio/TV contractor for help.

The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits sent forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. The antennas used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operation in conjunction with any other antenna or transmitter.

Industry Canada requirements

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

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement”

Canada RF exposure compliance

To comply with RSS-102 requirements, a separation distance of 20cm must be kept between the device and the user at all times.

Pour se conformer aux exigences RSS-102, une distance de séparation de 20 cm doit être maintenue entre l'appareil et l'utilisateur à tout moment.

FCC ID: MG3-H74426 IC: 2575A-H74426

Universal Electronics Inc.

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