5800PIR-OD2 Wireless Outdoor Motion Detector

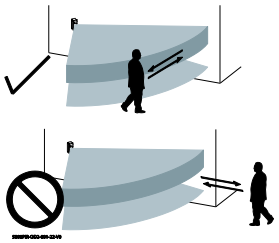
Installation and Setup Guide

General Information

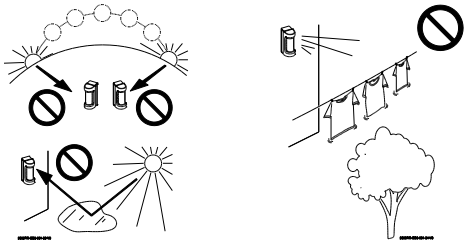
The 5800PIR-OD2 Wireless Outdoor Motion Sensor combines the convenience of wireless technology with a full featured outdoor PIR motion sensor. It has an adjustable range of up to 40ft with 7 selectable horizontal settings to cover a desired area within 180 degrees of its mounting location. It features white light immunity from low sunlight, headlights and other bright light sources. This detector can discriminate between people and small animals. It also features a Transmission Lockout that uses either a 5 or 120 second period of inactivity between activations to help save battery life.

Select the Mounting Position

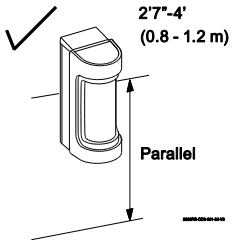
- Position the detector so that the intruder passes across the detection field, not into the sensor.



- Avoid strong sunlight into the sensor's field.
- Avoid moving or swaying objects, trees, and bushes.

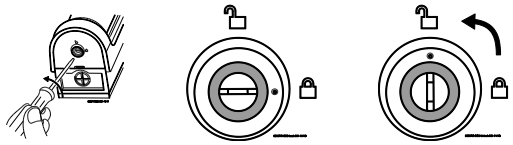


- Ensure the sensor can be mounted on a perpendicular wall or pole that would make its detection pattern parallel to the ground.

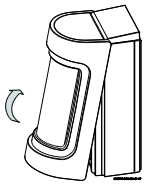


Prepare for Mounting

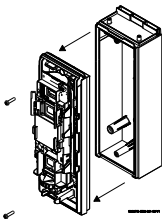
1. Locate the lock on the bottom side of the motion detector.
2. Use a small screwdriver to unlock the cover by turning the lock counter-clockwise until it clicks.
   DO NOT USE EXCESSIVE FORCE



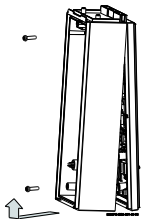
3. Allow a minimum of 4.4" (110mm) clearance above the sensor to enable opening the cover.
4. Remove the Cover by pulling from the bottom.



5. Remove both screws from the Main PCB and pull it from the Back Box.
   NOTE: Use CAUTION when handling the Main PCB so components are not damaged.



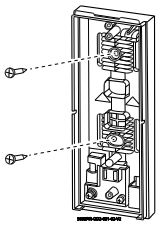
6. Remove both screws from the Back Box and pull it from the Back Plate.



Mount the Back Plate

Wall Mount

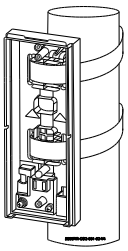
Install the Back Plate on the wall, 2.7 – 4ft from the ground, using two 4 x 20mm screws provided.



OR

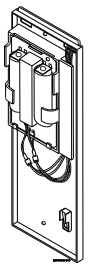
Pole Mount

Using metal banding 1 inch in width, fasten the Back Plate to the pole 2.7 – 4ft from the ground.



Install / Replace Batteries

Observe the proper polarity when installing and replacing the batteries. Insert the negative end of the battery first to the springs. **Ensure positive side of battery is at the top, opposite side from the springs.**



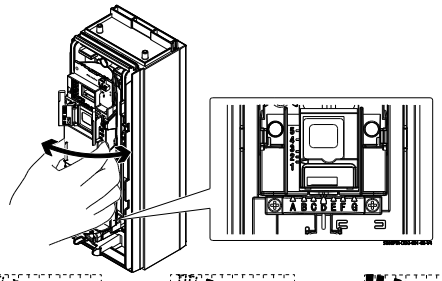
IMPORTANT:

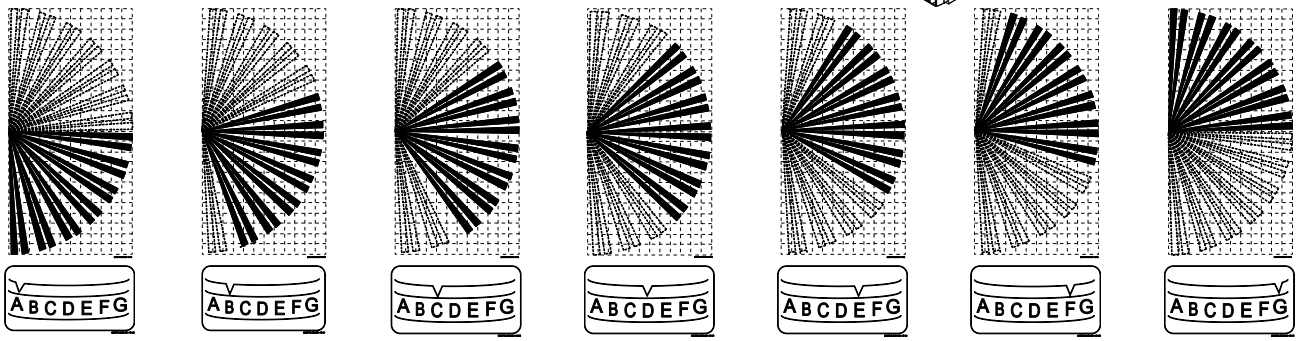
- Use only Lithium batteries.
- Use two (2) Lithium 1.5VDC AA cells. (Energizer L91 or equivalent.)
- Change both batteries at the same time. Do not mix weak batteries with new batteries.
- Observe polarity.

5800™ Series transmitters draw quick bursts of current during transmission, then sit idle with very nominal current draw. Most batteries are not designed for this type of use, therefore, only batteries listed as compatible should be used if the expected battery life is to be attained. Each transmitter's Installation Instructions has listed compatible battery manufacturers and their part numbers. When other non-approved batteries are used, the quick bursts of current draw kill the battery cells prematurely causing them to go low in a matter of months and can also cause unpredictable results. Other low quality batteries have not been UL tested and pose a safety hazard if used.

Coverage Area Angle

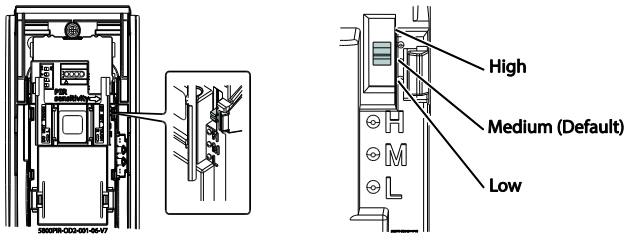
The coverage area will always be 90° with 13 zones, and can be adjusted to 7 different angles from A to G. It comes defaulted at the D setting. Turn the Pyro-Electrics firmly until it clicks into the desired angle indicated by the arrows at the bottom with the respect to the letters.





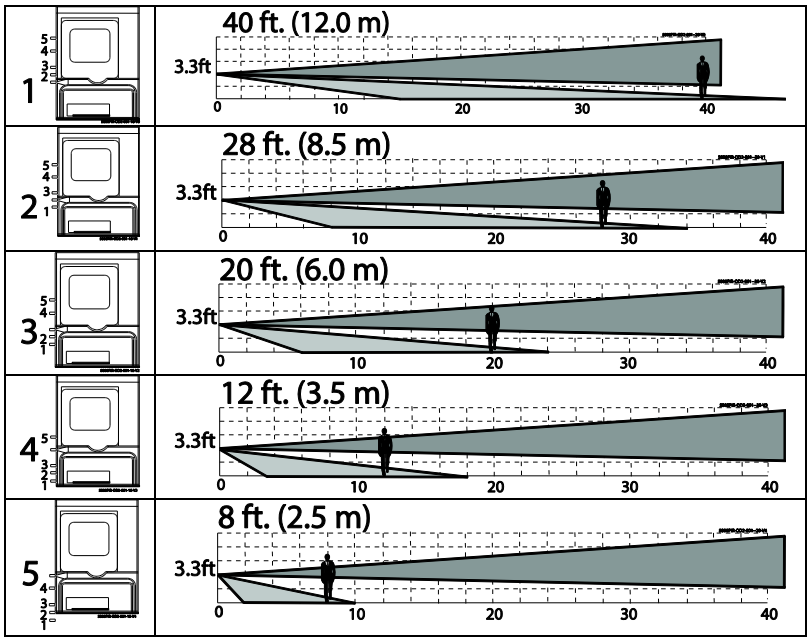
PIR Sensitivity

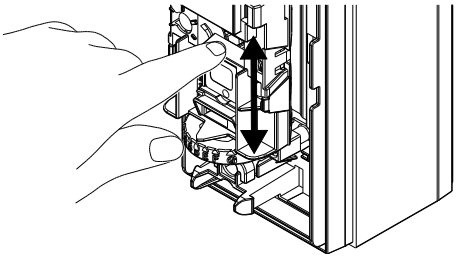
The sensitivity of the PIR can be adjusted from Low to Medium to High, represented as L, M, and H. The setting is on the right-hand side, behind the flange, next to the top pyro-electric.To adjust the PIR sensitivity, push the sensitivity selector up or down until it indicates L, M, or H.



Detection Range

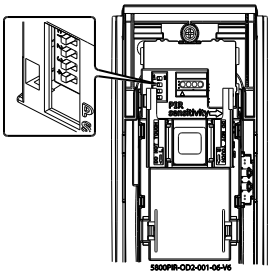
The detection range is determined by the bottom Pyro-Electric. The top Pyro-Electric remains stationary and is aimed parallel to the ground. To change the detection range, simply grasp the bottom Pyro-electric and firmly move it up or down to the desired setting indicated by the embossed arrow on the bottom-left corner of the Pyro Electric. These settings are based on a mounting height of 3.3ft (1 meter). The height of the motion detector will affect the detection range. Additionally, the detection range may vary due to environmental conditions (heavy rain or snow, fog, etc.).



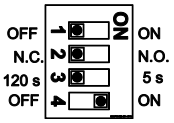


DIP Switches

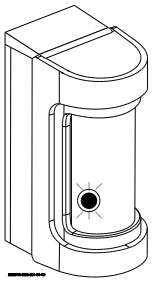
There are four DIP switches that control the LED, transmitter contact input, Transmission Lockout, and Anti-Masking.



Default values shown



DIP 1 - LED
DIP 2 – Normally Closed or Open
DIP 3 – Transmission Lockout
DIP 4 – Anti-Masking

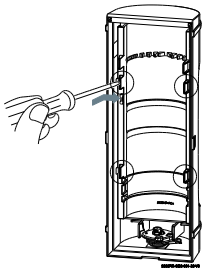


- DIP 1 - When enabled, the red LED will always reflect the detector's status for alarm and trouble and will illuminate through the lens. When disabled, it will only illuminate for its Warm-up period and Walk Test Mode.
  - Warm-Up Period – Blinks for 60 seconds or less.
  - Alarm – Lights for 2 seconds
  - Mask Detection – Blinks 3 times and repeats until condition is restored.
  - Blinks for 5 seconds when Walk Test expires.
- DIP 2 – Selects whether the alarm/trouble output to the transmitter will be normally open or normally closed. This needs to stay in the N.C. position (default). If it is set to N.O., the fault/restore signals for alarms/troubles may operate backwards.
- DIP 3 – Selects 120 seconds (2 minutes) or 5 seconds Transmission Lockout. This is how much time must pass from the time it was activated to when it can be activated again. This timeout option helps save battery life.
- DIP 4 – Enables or disables Anti-Masking. When enabled and it detects a masking condition it will generate a trouble.

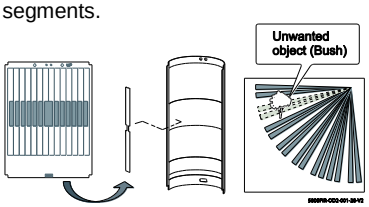
Detection Masking

Detection masking allows you to block certain parts of the lens to prevent nuisance alarms from objects such as bushes. When any part of the lens is masked, the detector will not be able to detect any movement within the masked segments.

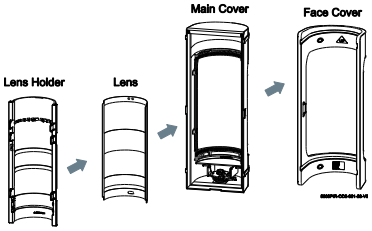
1. Use a screwdriver, carefully pry on all four locking tabs to remove the lens holder.



2. Identify the segments on the lens to be masked.
3. Then, apply the adhesive masking strip(s) on the inside of the lens to mask the desired segments.



4. Last, reassemble the lens to the lends holder and to the covers.



Program the Control Panel

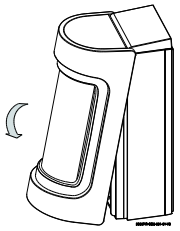
The transmitter's 7-digit serial number and loop number (Loop 1) must be programmed in the zone along with Input Type 3 (RF Supervised), and the appropriate response type for the application. Refer to the control panel's instructions for further details on zone programming.

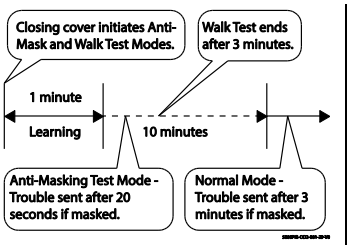
NOTE: The serial number and loop number can be programmed by either manually entering them in the zone program or by learning it in via wireless transmission by walking across the coverage area, activating the detector. Make sure it is not in the 5 second or 2-minute transmission lockout, else it will not activate until after the lockout time expires.

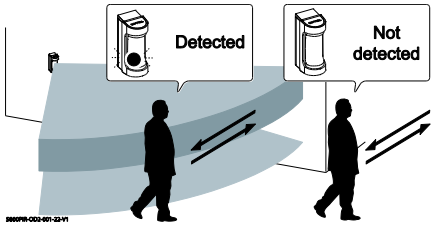
Mask Learn Mode and Walk Test

When the cover is closed, two things happen:

1. The detector starts Mask Learn Mode for 1 minute with a 10 minute Anti-Mask Test Mode afterwards. Learn Mode means it learns what normal objects will be within 3.3 ft (1 m) of it inside its Coverage Area so it will know the difference between a normal object and a masking object. Do NOT leave any object within 3.3ft (1 m) from the detector. During test mode, it will send a trouble after 20 seconds of being masked, whereas after test mode, it takes 3 minutes to go into trouble. It uses Active Infrared technology and constantly monitors the signal strength of the IR beam's reflection. When the lens surface is covered by an object such as a piece of paper, the strength of the IR beam reflection increases, then, the detector initiates a trouble condition.
2. Walk Test Mode is automatically enabled for 3 minutes. Walk test the detector to ensure that it will detect movement where desired and that it is operating correctly with the alarm system.







Specifications

Detection Method	Passive Infrared
Initial Warm Up	< 60 seconds
Dimensions	Height: 8 in. (203mm), Width: 3.2 in. (82mm), Depth: 4.3 in. (109mm)
Mounting Height	2.7 - 4ft (0.8 - 1.2m) To the center of lens.
Range	Adjustable up to 40ft (12m)
Pattern	90° pattern consisting of 13 zones. This pattern can be adjusted in 15° increments from center up to 45°.
Sensitivity	3.6° F at 2.0ft/s (2.0° C at 0.6m/s)
Detection Speed	1ft – 6ft 7in /s (0.3 - 2m/s)
Operating Voltage	3VDC (uses 2 Lithium Battery 1.5VDC AA cells) Energizer L91 or equivalent
Transmission Lockout	Adjustable 120sec or 5sec
Alarm Period	~ 2 seconds
LED Indicator	Red – Warm-up, Alarm, Masking Detection.
Weatherproof	IP54 compliance
Operating Temperature	– 40°F to +140°F (– 40°C to + 60°C)
Humidity	95% Max
Accessories (included)	Screw kit, detection masking strips.

FEDERAL COMMUNICATIONS COMMISSION (FCC) & INDUSTRY CANADA (IC) STATEMENTS

The user shall not make any changes or modifications to the equipment unless authorized by the Installation Instructions or User's Manual. Unauthorized changes or modifications could void the user's authority to operate the equipment.

CLASS B DIGITAL DEVICE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, as defined by FCC Rules Part 15.105. The Class B Digital Device statement can be viewed at:
https://customer.resideo.com/en-US/support/residential/codes-and-standards/FCC15105/Pages/default.aspx

FCC / IC STATEMENT

This device complies with Part 15 of the FCC Rules, and Industry Canada's license-exempt RSSs. 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.

Cet appareil est conforme à la partie 15 des règles de la FCC et exempt de licence RSS d'Industrie Canada. Son fonctionnement est soumis aux conditions suivantes: (1) Cet appareil ne doit pas causer d'interférences nuisibles. (2) Cet appareil doit accepter toute interférence reçue y compris les interférences causant une réception indésirable.

INFORMATION TO USER

Unauthorized changes or modification could void the user's authority to operate the equipment.

Support, Warranty, & Patent Information

For the latest warranty information, please go to:
https://www.security.honeywellhome.com/hsc/resources/wa/index.html

For patent information, please go to:
https://www.resideo.com/patent

For the latest documentation and additional information, please go to:
https://mywebtech.honeywellhome.com

Warranty Patents MyWebTech

The product should not be disposed of with other household waste. Check for the nearest authorized collection centers or authorized recyclers. The correct disposal of end-of-life equipment will help prevent potential negative consequences for the environment and human health.

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