1126 Series Ceiling Mount PIR Motion Detector

Description

The 1126 Series PIR (Passive Infrared) Motion Detectors are a compact wireless PIR. The 1126 Series offer 360°, Wide Angle, or Curtain versions making the 1126 Series flexible for a variety of ceiling mount applications.

The 1126 Series PIR operates with the XR500 Series or XR100 Series Command Processor™ panels using Version 201 and the 1100X Version 104, 1100XI Version 105, or 1100XH Version 105 Wireless Receivers.

Features

- Compact Design provides the smallest ceiling mount infrared sensor
- Remote configuration from panel
- Excellent R.F.I. and noise immunity
- Adjustable sensitivity from panel programming
- Pulse count selection allows multiple triggers before an alarm is initiated
- Walk Test mode initiated from panel
- Disarm Disable operation to save battery life
- Installs up to 18' ceiling height

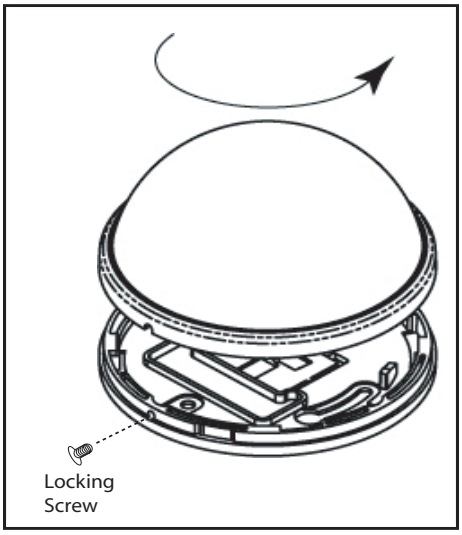

Figure 1: Remove the Base for Installation

What is Included

The 1126 Series PIR Motion Detector includes the following:

- One PIR detector with DMP wireless transmitter
- One CR17450 battery
- Zone name and number label
- Serial number label

Installation

For your convenience, an additional pre-printed serial number label is included. Prior to installing the device, record the serial number or place the pre-printed serial number label on the panel programming sheet. This number is required during programming. As needed, use the zone name and number label to identify a specific transmitter.

Optional Detection Patterns

The 1126 allows you to tailor the detection zones to your requirement by using the optional mask that simply snaps out of the base and inserts into the 1126C Curtain or 1126W Wide Angle PIRs.

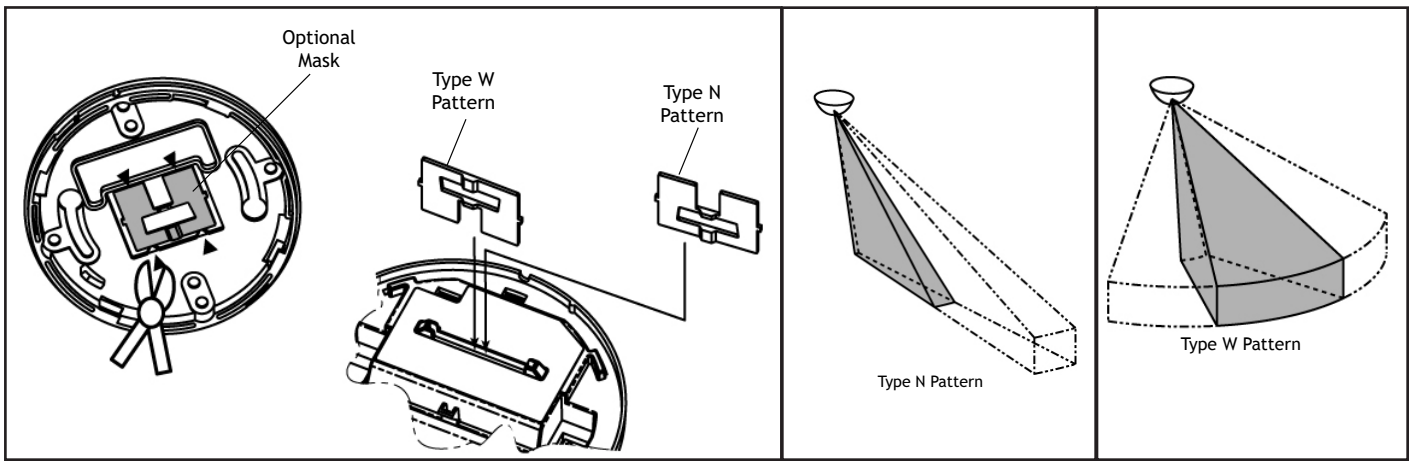

Figure 2: Optional Detection Patterns

Selecting the Best Location (LED Survey Operation)

The PIR transmitter provides a survey capability to allow one person to confirm transmitter communication with the receiver while the cover is removed. The PIR transmitter PCB Red Survey LED turns on whenever the processor turns on to send data to the receiver then immediately turns off when the receiver acknowledgement is received and the processor shuts off. While in Walk Test mode, waving your hand in front of the PIR is a convenient way to send data to the receiver to confirm operation. The PIR circuit board LED lights to indicate motion and the Survey LED briefly lights to confirm communication.

When the transmitter does not receive an acknowledgement from the receiver, the transmitter Survey LED remains on for about 8 seconds to let you know communication is not established. Relocate the transmitter or receiver until the Survey LED immediately turns off indicating the transmitter and receiver are communicating properly. If the transmitter is not programmed into the panel, it does not operate properly.

Mounting Location Considerations

Mount the unit:

- On a rigid vibration-free surface
- So the expected intruder movement is across the detection pattern fields

Do not locate the unit:

- Facing areas that may change temperature rapidly
- In any area containing excessive metallic surfaces
- Where it may be exposed to false alarm sources such as: direct sunlight, heat sources (heater, radiators, etc.) in the field of view or strong air drafts (fans, air conditioner, etc.)

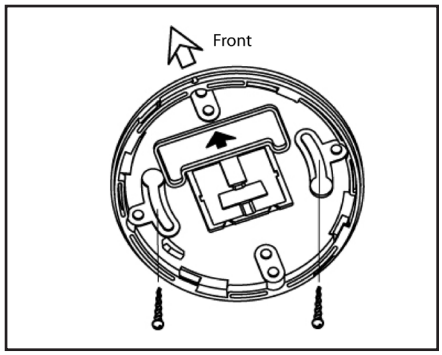

Figure 3: Mounting Holes

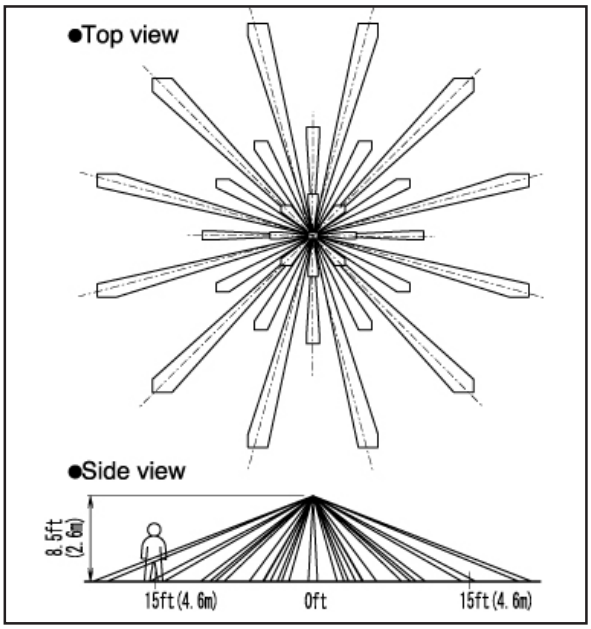

Figure 4: 1126 Detection Pattern

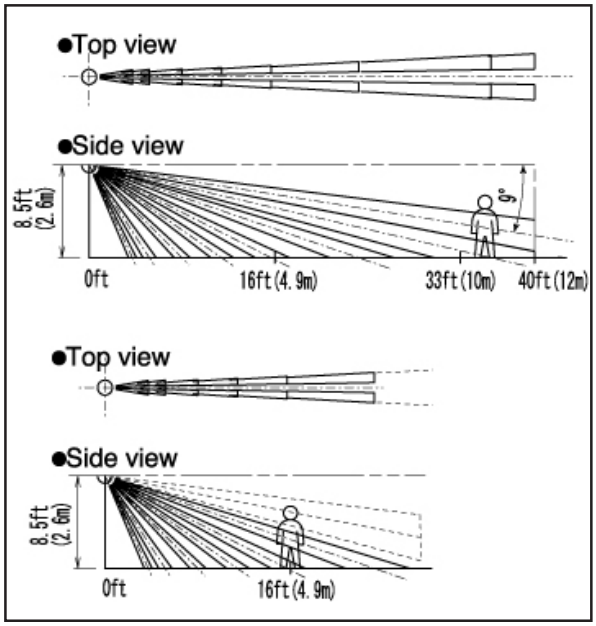

Figure 5: 1126C Detection Pattern

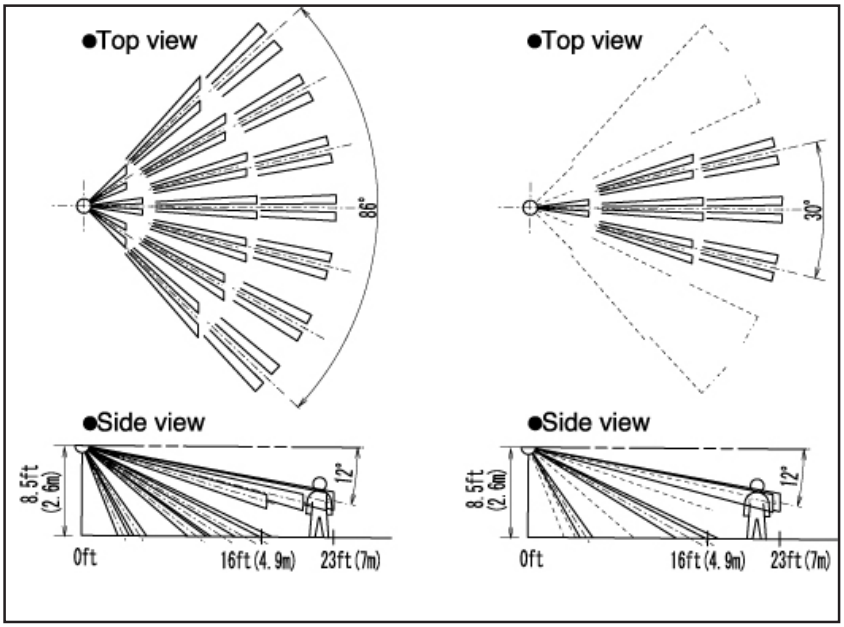

Figure 6: 1126W Detection Pattern

Mounting Height Considerations

For 1126 360° installations on ceilings under 12', refer to Figures 8 and 9 shown below.

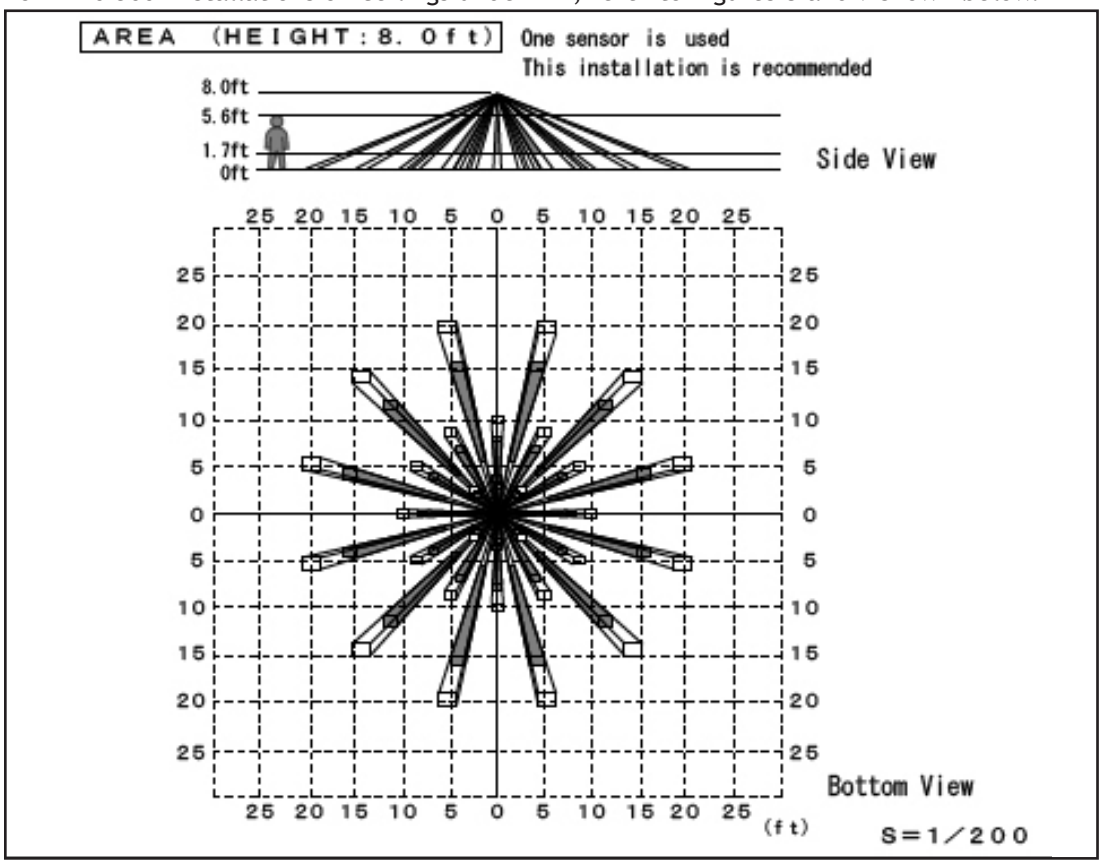

Figure 7: 1126 8' Detection Pattern

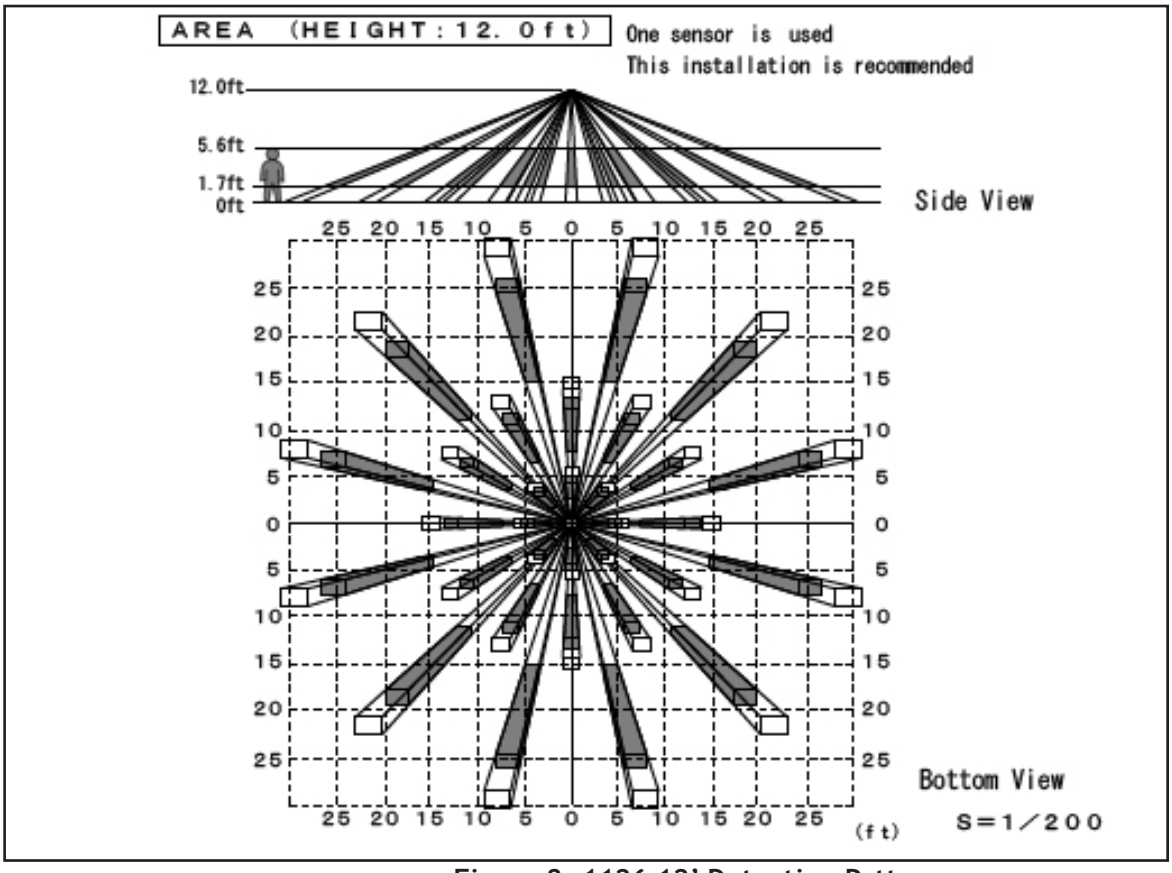

Figure 8: 1126 12' Detection Pattern

Mounting Height Considerations

For 1126 360° installations on ceilings over 12' up to 18', refer to Figures 10 and 11 shown below.

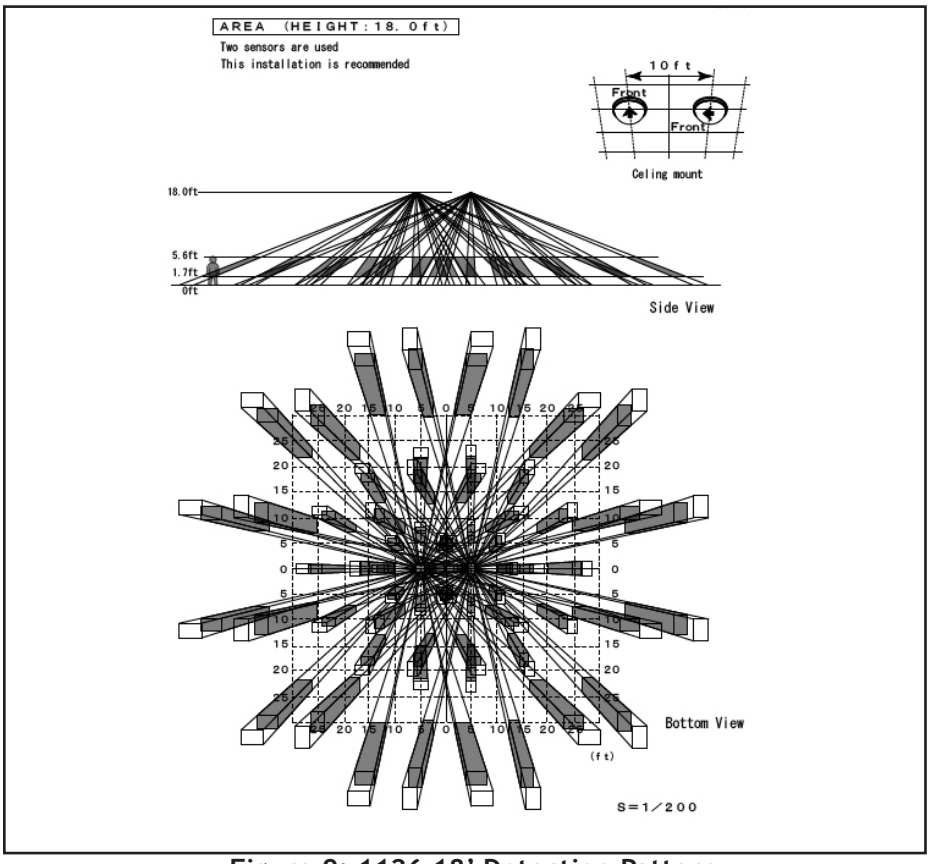

Figure 9: 1126 18' Detection Pattern

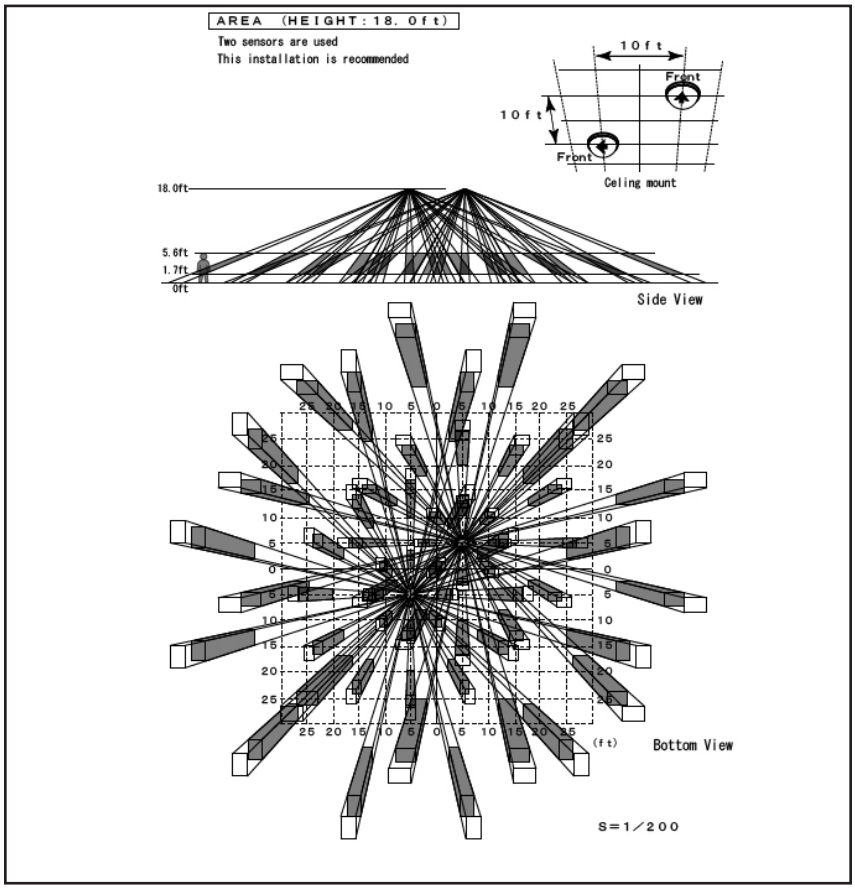

Figure 10: 1126 18' Detection Pattern

Programming the PIR in the Panel

Refer to the XR500 Series Programming Guide (LT-0679), or the XR100 Series Programming Guide (LT-0896) as needed. Program the device as a zone in **Zone Information** during panel programming. At the Serial Number: prompt, enter the eight-digit serial number. Continue to program the zone as directed in the panel programming guide.

Note: When a receiver is installed, powered up, or the panel is reset, the supervision time for transmitters is reset. If the receiver has been powered down for more than one hour, wireless transmitters may take up to an additional hour to send a supervision message unless tripped, tampered, or powered up. This operation extends battery life for transmitters. A missing message may display on the keypad until the transmitter sends a supervision message.

The 1126 Series PIR programming offers some unique features:

- Disarm-Disable operation to save battery life. Selecting YES for Disarm Disable in Zone Programming allows the 1126 PIR to be disabled for Night and Exit type zones while the area is disarmed. Default is YES.
- Pulse count selection allows multiple triggers before an alarm is initiated. The pulse count is the number of pulse inputs (trips) the 1126 PIR motion detector needs to sense before going into alarm. The pulse count for an 1126 in a high-security installation may be programed to 2, ensuring that the detector sends an alarm more quickly than a pulse count of 4.
- Adjustable sensitivity from panel programming. Programming the 1126 with a sensitivity of HIGH operates the PIR at maximum sensitivity. A sensitivity of LOW operates the PIR at 75% of maximum sensitivity. Programming a LOW sensitivity for 1126 installations in harsh environments may reduce false alarms.
- Walk Test mode initiated from panel. The Wireless PIR Walk Test is a 30-minute test allowing the installer to verify proper operation of 1126 PIR motion detectors in a system. During the Wireless PIR Test, the LED's on all 1126 PIR's are enabled to flash within one minute after the sensors detect motion. The PIR LED flashes upon motion detection for up to 30 minutes.

Testing

Walk Test

1. From the Walk Test menu of the XR100 or XR500 Series panel, select the PIR Walk Test to place the 1126 PIR in walk test mode (enable the LED) for 30 minutes. After 30 minutes, the Walk Test automatically exits and the 1126 PIR returns to normal. Any 1126 Series PIR Transmitters that have DISARM DISABLE set to YES are temporarily enabled when the Walk Test is selected. Upon completion of Walk Test, the transmitter is disabled again.
2. After entering the walk test mode, thoroughly test the installation to insure proper protection pattern of the installed units. The walk test is a local test only and no results are sent to the Central Station.

Transmission Test

1. After programming the unit, snap the plastic housing onto the mounting base to initiate the tamper switch.
2. Verify that the keypad display indicates a signal received from the detector.

Installing or Replacing Batteries

Observe polarity when installing the battery. Use only 3.0V lithium batteries, DMP Model CR17450.

Note: When setting up a wireless system, it is recommended to program zones and connect the receiver before installing batteries in the transmitters.

1. Remove the front cover. See Figure 1.
2. Remove the battery (if installed) before installing a new battery.

Caution: Risk of fire, explosion, and burns. Do not recharge, disassemble, heat above 212°F (100°C), or incinerate. Properly dispose of unused batteries.

3. Observe polarity and insert the lithium battery into the battery holder. Plug the connector into the battery header.

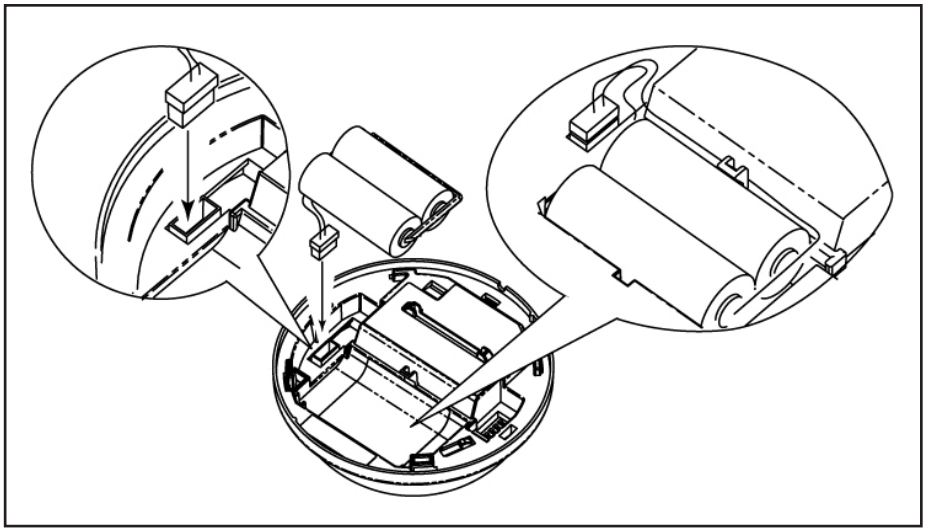

Figure 11: Battery Replacement

Note: If the battery reaches the factory preset low level, a Low Battery signal is sent to the panel. The 1126 Series PIR remains operational for approximately 30 days to allow adequate time to replace the battery.

Battery Life Expectancy

Typical battery life expectancy for a DMP Model 1126 Series wireless PIR is five years, based on 300 trips per day. Battery life can be increased 40% to seven years by programming the Disarm Disable feature at YES. See the XR100/ XR500 Programming Guide. DMP wireless equipment uses two-way communication to extend battery life.

The following situation can extend battery life expectancy:

- Enabling the Disarm Disable feature in Zone Programming allows the 1126 PIR to be disabled while the area is disarmed. This eliminates frequent motion from being detected in a high traffic area during the disarmed period.
- Extend transmitter supervision time in panel programming.

The following situations can reduce battery life expectancy:

- If a receiver is unplugged, too far away, or not installed.
  Note: Transmitters continue to send supervision messages until a receiver returns an acknowledgement. After an hour the transmitter only attempts a supervision message every 60 minutes.
- Programming the Disarm DIsable feature as NO where frequent transmissions, in areas of high traffic, cause messages to be sent every time movement is detected.
- When installed in extreme hot or cold environments.

Maintenance

When installed and used properly, the unit provides years of service with minimal maintenance. To ensure proper operation, perform unit testing annually as described. Clean the cover and optional bracket with a water dampened cloth as needed to keep it free of dust and dirt. Always test the unit after cleaning.

FCC Information

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 made by the user and not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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. 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.

Specifications

Battery	
Life Expectancy	5 to 7 years
Type	3.0V Lithium CR17450
See Battery Life Expectancy for details.	
Transmit condition	Alarm, Low Battery
Mounting height	6.5 to 18 feet
Frequency Range	903-927 MHz
Dimensions	4.0" Diameter x 2" Height
Color	White

Ordering Information

1126R-W	1126 PIR Motion Detector - 360°
1126W-W	1126 PIR Motion Detector - Wide Angle
1126C-W	1126 PIR Motion Detector - Curtain
CR17450	3.0V Lithium battery

Patents

U.S. Patent No. 7,239,236

Listings and Approvals

FCC Part 15 Registration ID CCKPC0109

IC Registration ID 5251A-PC0109

Digital Monitoring Products

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2500 North Partnership Boulevard

Springfield, Missouri 65803-8877