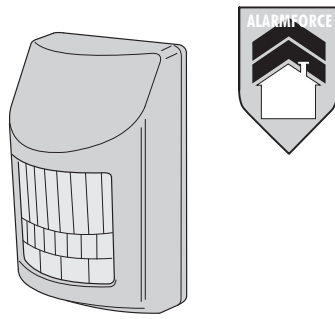


DXS-55AF

SUPERVISED WIRELESS MOTION DETECTOR With Pet Immunity

Installation Instructions

AlarmForce Industries Inc.
 675 Garyray Drive
 Toronto, ON M9L 1R2, Canada



PRODUCT DESCRIPTION

The DXS-55AF is a battery powered passive infrared motion detector with a built-in transmitter. This transmitter can be used in a variety of motion detection applications. When the passive infrared sensor detects motion in its field of view, the transmitter sends a digitally coded wireless signal to its companion receiver. To reduce false alarms caused by pets inside the protected area, the DXS-55AF features pet immunity with a selectable large or small pet setting.

The transmitter is pre-coded at the factory to unique codes, so no field coding is required. The DXS-55AF can send four different signals: alarm, low battery, status, and tamper. Receivers must be programmed to the transmitter's code before system testing and operation. Refer to the receiver's instructions for details on programming.

In a typical installation, the motion detector is mounted indoors in a corner or on a wall 7-1/2 feet high. Two mounting brackets and an adjustable PIR bracket are included. The sensor will monitor the infrared level in its detection pattern. If the level increases or decreases rapidly (as when a person moves through the area) the transmitter triggers, sending an alarm signal to the receiver.

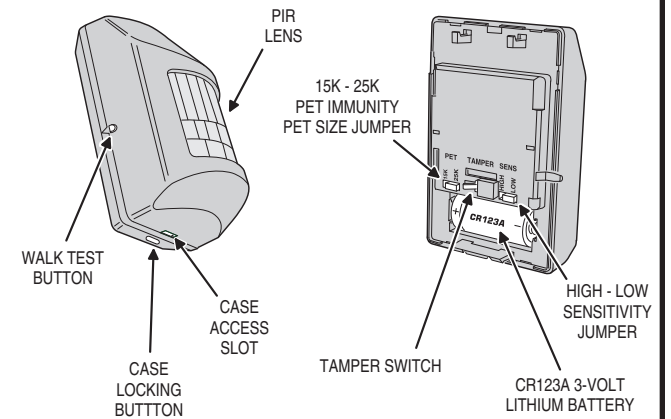
The unit is powered from a 3-Volt Type CR123A lithium battery. The battery's life can be up to three years depending on the area's traffic. When the battery gets low, a low battery signal will be sent to the receiver.

Approximately every hour, the DXS-55AF will send a status transmission to the receiver. The hourly signal updates the receiver to the transmitter's condition. By monitoring status transmissions, the receiver can determine if a transmitter has a low battery or has been removed from the system.

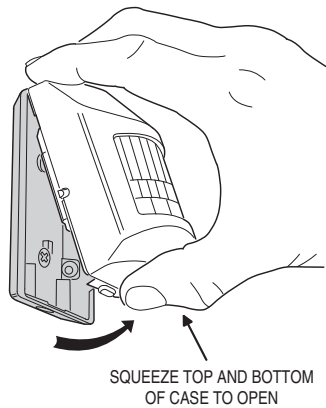
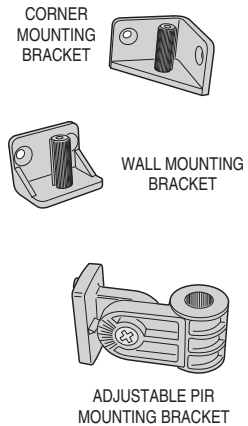
To conserve battery life, during normal operation, the detector can trigger the transmitter a maximum of once every three minutes. Opening the case will trigger a tamper transmission.

For setup and testing, pressing the small button on the left side of the case places the unit in walk test mode for three minutes. The installer can walk in front of the unit while viewing the red test indicator through the detector's lens to determine the detection area.

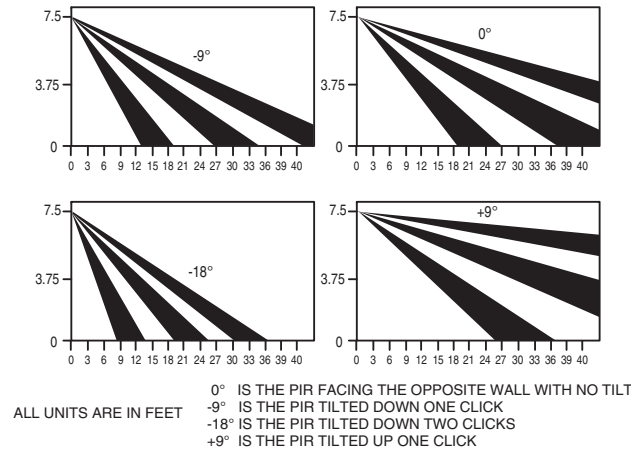
PIR FEATURES



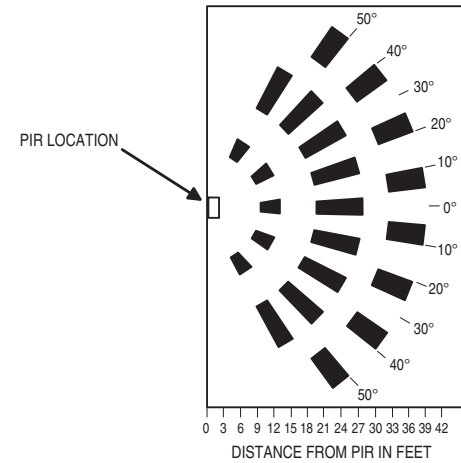
INSTALLATION BRACKETS & OPENING CASE



DETECTION PATTERN SIDE VIEW

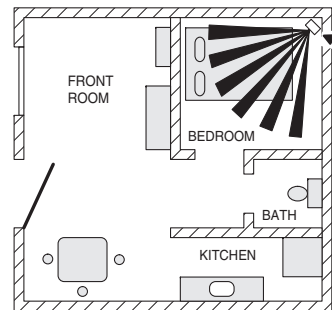


DETECTION PATTERN TOP VIEW



TYPICAL INSTALLATION

DON'T POINT AT HEAT SOURCES (HEATERS, ETC.), WINDOWS, OTHER MOTION DETECTORS OR DOOR/WINDOW TRANSMITTERS



PIR MOTION DETECTOR (FOR INDOOR USE ONLY)
 MOUNT DETECTOR SO THAT INTRUDER WILL CROSS BEAMS

PIR INSTALLATION TIPS

While the DXS-55AF PIR is a highly reliable intrusion detection device, it does not offer guaranteed protection against burglary. Any intrusion detection device is subject to compromise or failure to warn for a variety of reasons. The following issues should be considered during new installations or when troubleshooting:

- If the premise has pets, make sure to follow the instructions in this manual concerning installation with pets.
- This PIR has built-in protection, which keeps bugs from getting into the sensor area and causing false alarms. This does not prevent insects from crawling across the lens of the PIR, which in turn can cause the PIR to trigger an alarm.
- Infrared energy can be reflected off any glossy surface such as mirrors, windows, floors or counter tops with glossy finish, and slick finished concrete. Some surfaces will reflect less than others will. For example, PIRs can see a change in infrared energy reflected off any reflective surface even if the heat or cold source is not within the detection pattern of the PIR.
- Windows cannot only reflect infrared energy, but they can also allow sunlight or lights from cars to pass through to the PIR. For example, a PIR can detect a quick change in infrared energy if sun light comes through a window (which may not be detected by the PIR) and shines on a hardwood floor (which can be detected by the PIR). If the change in infrared energy is quick enough on the floor, the PIR can trigger an alarm. The same applies if the PIR "covers" the 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 directly into the lens of the detector.
- Heating and A/C ducts are also important to take into consideration because if they blow air onto an object within the fields of view, the temperature of that object could change quickly enough for the detector to see a change in infrared energy. Detectors cannot see air current, only the change in temperature of a physical object.
- 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 can decrease.

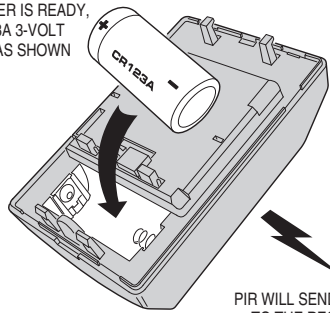
PIR INSTALLATION TIPS

- Make sure the area you wish to protect does not have obstructions (curtains, screens, large pieces of furniture, plants, etc.) that may block the pattern of coverage provided by the PIR.
- Anything that can sway or move due to air current can cause a change in infrared energy within the fields of view. Heating and A/C ducts, drafts from doors or windows can cause this to happen. Other objects to be aware of are curtains, blinds, balloons, loose paper, plants, hanging banners or baskets, etc.
- Make sure the PIR is mounted on a solid surface and does not allow for any vibration. Vibration will not only cause the PIR to move a little, but this will also cause the fields of view in the room to move with respect to the PIR. A little vibration can go a long way with the fields of view, thus the PIR may see a change in energy.
- An installation may require a PIR to be aimed at a door. The PIR may "detect" door movement before the door contact can initiate an entry delay, causing the PIR to trigger an alarm. If the PIR has to be installed this way, it is recommended that the alarm control panel program set the PIR as an entry delay.
- The PIR detects intrusion only within the pattern of coverage as diagrammed in this manual.
- The PIR does not provide volumetric area protection.
- The PIR creates multiple beams of protection and intrusion can only be detected in unobstructed areas covered by those beams.
- The PIR cannot detect motion or intrusion that takes place behind walls, ceilings, floors, closed doors, glass partitions, glass doors, or windows.
- Tampering with, masking, painting, or spraying of any material on the PIR lens or any part of the optical system can reduce the detection ability of the PIR.
- The PIR will not operate without the appropriate battery installed, or if the battery is weak or improperly connected (i.e., reversed polarity).
- The PIR, like other electrical devices, are subject to component failure. Even though the DXS-55AF is designed to last as long as 10 years, the electronic components in it could fail at any time.

BATTERY INSTALLATION & PROGRAMMING

PREPARE THE RECEIVER TO "LEARN" THE TRANSMITTER

WHEN THE RECEIVER IS READY, INSTALL THE CR123A 3-VOLT LITHIUM BATTERY AS SHOWN



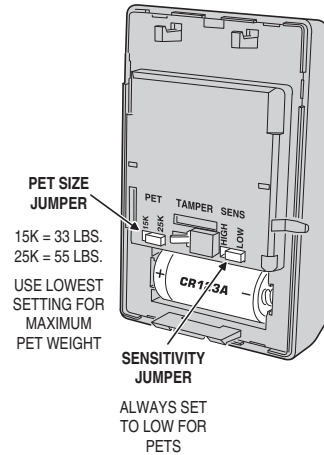
OBSERVE BATTERY POLARITY!!!

PIR WILL SEND A TRANSMISSION TO THE RECEIVER AND THE TRANSMITTER'S ID WILL BE STORED IN THE RECEIVER

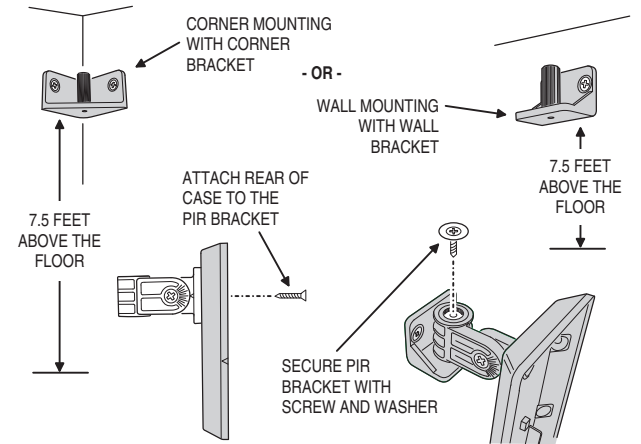
PET IMMUNITY TIPS

To take full advantage of the DXS-55AF pet immunity features in installations with pets, use these following steps:

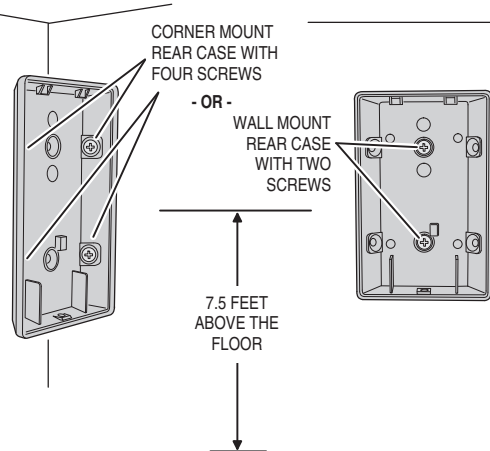
- Mount the PIR with the center of the lens 7-1/2 to 8 feet above floor level.
- Set the **SENSITIVITY jumper to the LOW position.**
- Set the **PET SIZE jumper** to the lowest setting for the maximum pet weight.
- Mount the PIR where pets cannot come within six feet of the unit by climbing on furniture, boxes, or other objects.
- Do not aim the PIR at stairs or furniture, boxes, or other objects that can be climbed by pets.
- **NOTE:** The DXS-55AF will provide immunity to false alarms for an individual animal or a group of animals whose total weight is equal to or less than 55 pounds when the room temperature is above 50° F and below 90° F. If the optional mounting bracket is used, it should be mounted with no tilt.



MOUNTING PIR WITH INSTALLATION BRACKETS



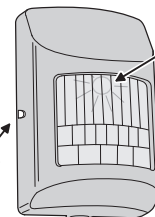
MOUNTING PIR WITHOUT INSTALLATION BRACKETS



WALK TESTING AND OPERATIONAL TESTING

SNAP CASE CLOSED BEFORE WALK TESTING

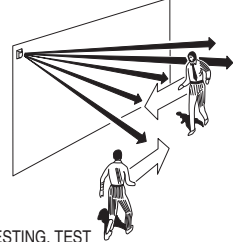
PRESS WALK TEST BUTTON ON LEFT SIDE OF CASE



UNIT WILL STAY IN WALK TEST MODE FOR THREE MINUTES

RED WALK TEST INDICATOR WILL SHOW THROUGH PIR LENS

WALK ACROSS BEAM PATTERN WHILE OBSERVING THE WALK TEST INDICATOR

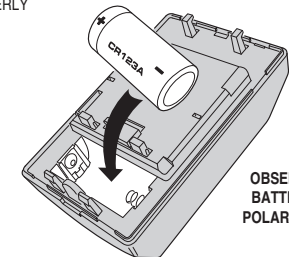
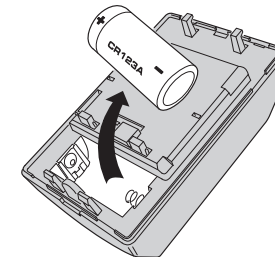


AFTER WALK TESTING, TEST THE PIR WITH THE SYSTEM CONTROL PANEL OR RECEIVER

BATTERY REPLACEMENT

WHEN THE SYSTEM INDICATES THAT THE PIR HAS A LOW BATTERY, REMOVE THE OLD BATTERY AND DISPOSE OF IT PROPERLY

INSTALL CR123A 3-VOLT LITHIUM BATTERY AS SHOWN



OBSERVE BATTERY POLARITY!!!

WARNING!
 BATTERY MUST NOT BE RECHARGED, DISASSEMBLED, OR DISPOSED OF IN A FIRE. DISPOSAL OF USED BATTERIES MUST BE MADE IN ACCORDANCE WITH THE WASTE RECOVERY AND RECYCLING REGULATIONS IN YOUR AREA.

WARNING!
 IMPROPER HANDLING OF LITHIUM BATTERIES MAY RESULT IN HEAT GENERATION, EXPLOSION OR FIRE, WHICH MAY LEAD TO PERSONAL INJURIES. REPLACE WITH ONLY TYPE CR123A BATTERY.

SPECIFICATIONS

- OUTPUTS: ALARM, LOW BATTERY, & STATUS
- TRANSMITTER FREQUENCY: 315 MHz
- UNIQUE ID CODES: OVER ONE MILLION CODES
- SUPERVISORY INTERVAL: 70 MINUTES
- SENSOR TYPE: QUAD ELEMENT
- PET IMMUNITY: SELECTABLE: 15 Kg (33 LBS.) OR 25 Kg (55 LBS.)
- SENSITIVITY JUMPER: SELECTABLE: HIGH OR LOW
- SUGGESTED MOUNTING HEIGHT: 7.5 FT. (2.3 m)
- SENSOR RANGE: 30 FT. (9.1 m) X 50 FT. (15.2 m)
- MAXIMUM HORIZONTAL SENSING ANGLE: 86°
- DIMENSIONS: 3.2" x 2.5" x 1.9" (8.12 x 6.35 x 4.82 cm)
- WEIGHT (INCLUDING BATTERY & BRACKET): 3.7 OZ. (104.9 g)
- COLOR: WHITE
- OPERATING TEMPERATURE: 32° TO 103° F (0° TO 39° C)
- RELATIVE HUMIDITY: 5-95% NON-CONDENSING
- BATTERY (INCLUDED, NOT INSTALLED): ONE (1) PANASONIC CR123A, OR EQUIVALENT LITHIUM BATTERY
- INCLUDED ACCESSORIES: MOUNTING BRACKETS AND SCREWS, PLASTIC WALL ANCHORS
- WARRANTY: FOR THE LIFE OF THE INSTALLATION

IMPORTANT!

- KEEP BATTERY AWAY FROM SMALL CHILDREN. IF BATTERY IS SWALLOWED, PROMPTLY SEE A DOCTOR.

REGULATORY STATEMENTS

- The radios are required to comply with Rules and Regulations. As such, they have limited transmitter power and therefore limited range.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- A receiver cannot respond to more than one transmitted signal at a time and may be blocked by radio signals that occur on or near their operating frequencies, regardless of code settings.
- Infrequently used radio links should be tested regularly to protect against undetected interference or fault.
- A general knowledge of radio and its vagaries should be gained prior to acting as a wholesale distributor or dealer, and these facts should be communicated to the ultimate users.