

INSTALLATION INSTRUCTIONS

GENERAL INFORMATION

These passive infrared motion detectors are versatile wall-mounted units employing Fresnel lenses and offering efficient protection patterns for commercial and residential applications. Best coverage will be obtained if mounting is selected such that the likely direction of intruder motion is across the pattern.

When installed per the guidelines, the Split-Zone Optics technology in the Aurora Series provides reasonable false alarm protection against pets and other animals up to 40 lbs.

SPECIFICATIONS

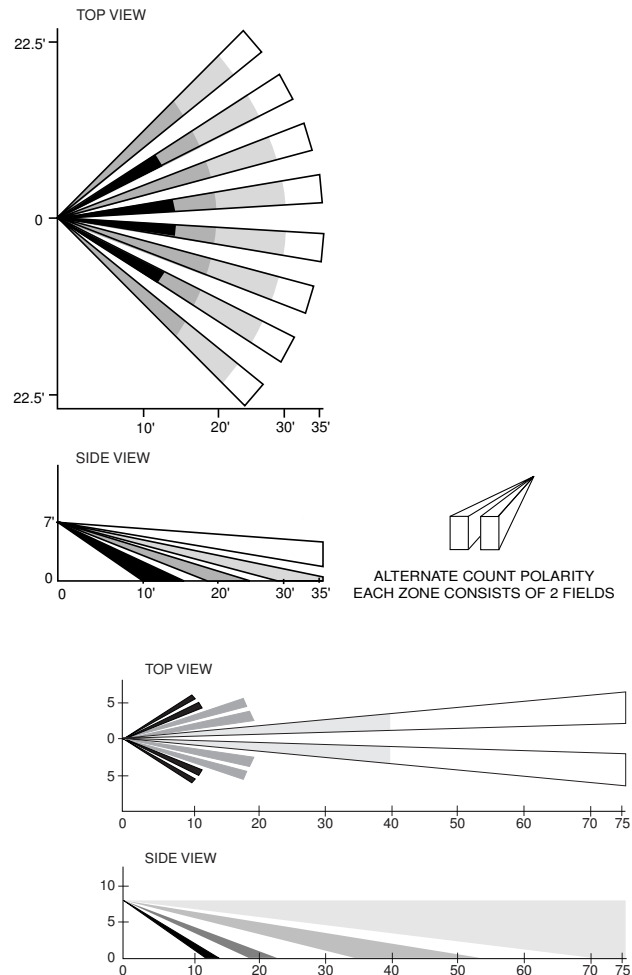
Detection Method:	Passive Infrared												
Coverage:	Pet Immune Lens, 35 ft x 45 ft (10.6m x 13.7m), 90° Long Range Lens (optional, model Aurora-LR), 75 ft x 10 ft (23m x 3m)												
Detection Zones:	Pet Immune Lens - 28 zones Long Range Lens - 6 zones, (optional, model Aurora-LR) (8 over 8 long range, 8 intermed, 4 short range)												
Pulse Processing:	Intermediate, Standard, Harsh (use "Standard" for pet immune applications)												
Temperature Comp.:	Advanced dual-slope temperature compensation adjusts for ambients both above and below body temperature												
Detectable Walk Rate:	0.5 - 10 ft/Sec (0.15 - 3m/Sec)												
Mount Height:	7.0 ft recommended (2.1m)												
Indicator:	Red LED with enable/disable link												
Alarm Relay:	Form A, SPST, 90mA@16VDC, 15-ohm protective resistor												
Input Voltage:	8 - 16VDC (Aurora and Aurora-T) (voltage reversal makes PIR inoperative)												
Current:	<table border="1"> <thead> <tr> <th>Model</th> <th>w/LED alarm</th> <th>w/o LED</th> <th>standby</th> </tr> </thead> <tbody> <tr> <td>Aurora</td> <td>10mA</td> <td>4mA</td> <td>4mA</td> </tr> <tr> <td>Aurora-T</td> <td>10mA</td> <td>4mA</td> <td>4mA</td> </tr> </tbody> </table> <p>All currents nominal at 12VDC.</p>	Model	w/LED alarm	w/o LED	standby	Aurora	10mA	4mA	4mA	Aurora-T	10mA	4mA	4mA
Model	w/LED alarm	w/o LED	standby										
Aurora	10mA	4mA	4mA										
Aurora-T	10mA	4mA	4mA										
Standby:	Power source should be capable of at least 4 hours of battery standby												
Tamper:	Normally closed (with cover on), rated at 0.5A, 30VDC (Aurora-T only)												
Operating Temp.:	14°F - 122°F (-10°C to +50°C)												
Operating Humidity:	Up to 95% RH (max.), non-condensing												
Dimensions:	2.9"W x 4.1"H x 1.5"D (max protrusion) (60mm x 104mm x 38mm)												
Approvals/Listing:	UL639, ULC S306, EN 50131-1; Security Grade 2, Environment Class II For Connection to an EN 60950 Class II Limited Power Source												

Special Instructions for Installations Containing Pets

To take full advantage of the pet immunity in the Aurora Series, the guidelines below should be followed:

- Mount the center of the detector 7 ft (2.1m) high.
- Set the PIR sensitivity for Standard (STD).
- Mount where animals cannot come within six feet of the detector by climbing on furniture, boxes, or other objects.
- Do not aim the detector at stairways that can be climbed by animals.

NOTE: This unit will provide immunity to false alarms for an individual animal or a group of animals whose total weight is equal to or less than 40 lbs when the room temperature is above 50°F (10°C).



INSTALLATION

For optimal pet immunity performance, be sure to follow all the guidelines described in the section "Special Instructions for Installations Containing Pets."

A. Normal Surface Mounting

Mount the unit to a firm vertical surface. The wall wiring hole should be no more than 5/16" (8mm) in diameter.

1. Remove the front cover as shown in Figure 2.
2. Refer to Figure 3. Knockout holes "A" in the base are for normal surface mounting on a wall (remove PC board for full access to holes). For corner mounting, see **B. Corner Mounting**. Also break out the desired wire entry hole at this time, marked X1 or X2 in Figure 3.
3. Feed wiring through the wire access hole. Make sure wires have sufficient slack to allow the PC board to be moved up and down freely when the wires are connected to the board's terminals.
4. Mount the base. A level may be used on the front case to ensure that the unit is vertical (see Figure 2).
5. Replace the PC board, positioning it to the appropriate setting (see **Vertical Adjustment for Lenses** tables later in this document). **Note the mounting orientation of this detector: terminal strip at the bottom!**
6. Refer to the *WIRING CONNECTIONS* section before replacing the front cover.

B. Corner Mounting

1. Remove the front cover as shown in Figure 2.
2. Knockout holes "B" in the base are used for corner mounting on a wall. Mount in selected corner with 4 screws.
3. Replace the PC board, positioning it to the appropriate setting (see **Vertical Adjustment for Lenses** tables later in this document). **Note the mounting orientation of this detector: terminal strip at the bottom!**
4. Refer to the *WIRING CONNECTIONS* section before replacing the front cover.

C. Changing Lenses (if required)

1. Remove front cover.
2. Release the lens support frame located in front cover as follows: Insert the blade of a small screwdriver between the locking tab and the detector case in each of the two corners of the frame, and lever each tab upward to release. See Figure 4. When both corners are released, remove the lens support frame by lifting and sliding the two remaining corners away from the stops in the front case.
3. Remove the existing lens and replace with the replacement lens. **The lens must be installed with the smooth side facing outward. Also, the lens should be oriented with the notches at the top.** Be sure to center the lens with the notches aligned with the protrusions in the front case.

NOTE: Lens surface should be free of dirt, foreign matter, and fingerprints. Use a clean, dry, soft cloth to wipe lens surfaces.
4. Insert the lens support frame into its original position and then press downward on the frame so that the lens locking tabs snap into position in each of the four corners.
5. Replace front cover.

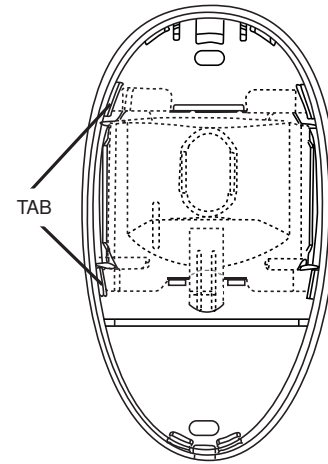


Figure 4. Changing Lenses

WIRING CONNECTIONS

Bring all wires in through the wire access hole and connect to the screw terminals (see Figure 5 for wiring details). Seal any openings in the base with foam or RTV (not supplied) to prevent drafts or insects from entering the unit. *Apply power only after all connections have been made and are inspected.*

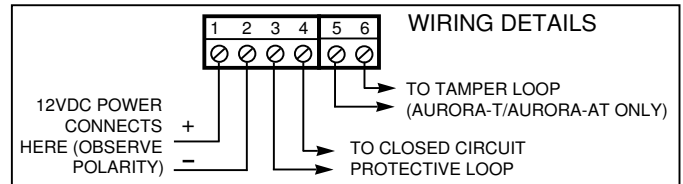


Figure 5. Wiring Connections

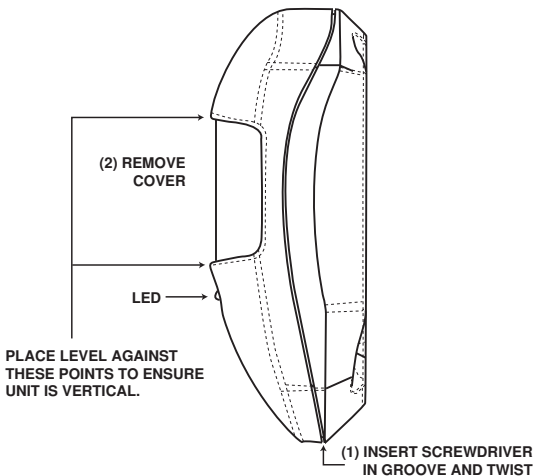


Figure 2. Cover Removal

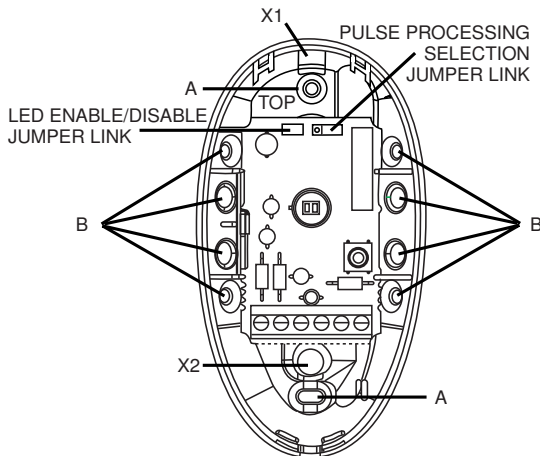


Figure 3. Detector Base

LED ENABLE/DISABLE OPTION

See Figure 3 for location of LED enable/disable jumper link.

To enable the LED, remove the LED enable/disable jumper link. To disable the LED, replace the jumper link. See Figure 6 for proper positioning of the link.

LED ENABLE/DISABLE

LED ENABLE: LINK OFF

LED DISABLE: LINK ON

PULSE PROCESSING

INT: LINK ON LEFT 2 POSTS

STD: NO LINKS CONNECTED

HARSH: LINK ON RIGHT 2 POSTS

Figure 6. Selectable Options

PULSE PROCESSING OPTION

See Figure 3 for location of Pulse Processing selection jumper link.

Intermediate Pulse Processing (INT): This is the recommended setting for any location where an intruder is expected to cover only a small portion of the protected area. It tolerates normal environments on this setting.

NOTE: NOT recommended for pet immune applications.

Standard Pulse Processing (STD): This is the recommended setting for most applications. It tolerates environmental extremes on this setting.

NOTE: STD pulse processing is recommended for pet immune applications. NOT recommended for use with the optional Long Range Lens (Aurora-LR).

Harsh Pulse Processing (HARSH): This is the recommended setting for the severest of environments and should only be used in locations where an intruder is expected to cover moderate to large portions of the protected area.

NOTE: NOT recommended for use with the optional Long Range Lens (Aurora-LR).

TEST PROCEDURES

NOTE: This detector should be tested at least once each year.

IMPORTANT: Two-minute warm-up time is required after applying power. Testing should be conducted with the protected area cleared of all people. Disarm the protective system's control during the test procedure to prevent reporting of unwanted alarms.

1. Remove front cover and set Pulse Processing Option to the setting that will be used for this detector in the installation. The LED must be enabled at this time (see Figure 6).
2. Replace front cover and walk through protective zones, observing that the detector's LED lights whenever motion is detected (the LED serves as a Walk-Test indicator during this procedure).

The absolute range of all PIR units is subject to variation because of different types of clothing, backgrounds, and ambient temperature. For this reason, ensure that the most likely intruder routes are well within the PIR's protective zones and that Walk-Testing is carried out along these routes.

After the Walk-Test is complete, the LED may be disabled (see Fig. 6).

TROUBLESHOOTING

Intermittent Alarm (LED Operative)

- A. Rapid temperature change. Check for electric or gas heaters, open flames, electric arcs, etc.
Remedy: Locate source and reposition detector.
- B. Drafts causing drapes, light fixtures, display material to move.
Remedy: Eliminate source of motion.

Intermittent or Continuous Alarm

- A. DC voltage supplied to detector is inadequate or intermittent, or polarity is reversed.
Remedy: Ensure that polarity is corrected, adequate voltage is supplied, wiring is intact (no opens/shorts), and connections secure.
- B. Protective loop is interrupted (open).
Remedy: Determine whether interruption is in protective loop wiring or at detector's alarm relay contacts. Disconnect protective loop at detector relay contact terminals. Check continuity across terminals. If absent (and proper voltage is supplied to the detector), return unit for replacement. If present, check protective loop wiring.

LED Inoperative

- A. LED jumper link ON.
Remedy: Remove LED jumper link (see Figure 6).
- B. LED malfunction.
Remedy: Check for broken/shorted leads. Return unit for replacement.

Detection Area Changes

- A. Repositioned furniture or equipment in the protected area.
Remedy: Caution customer about layout changes. Reposition detector.
- B. Mounting surface is unstable. A few degrees of vertical shift can change range substantially.
Remedy: Mount on secure surface.

Panel Indicates Continuous Fault In Zone Of Protection Containing PIRs (PIR's alarm LED not lit)

Too many detectors being used in the zone. Each detector adds 15 ohms of series resistance and the zone's allowable loop resistance is being exceeded.

Remedy: Reduce the number of detectors used in the zone until the series resistance is within the allowable loop resistance permitted by the control.

VERTICAL ADJUSTMENT FOR LENSES

Use the tables below for vertical lens adjustments for the standard and long range lenses.

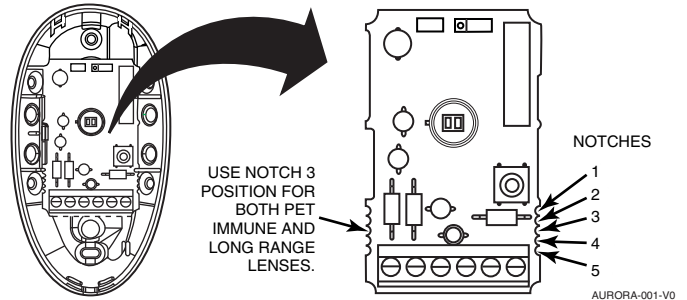


Figure 7. PCB Vertical Adjustment for Lenses

Vertical Adjustment Table - Standard Main Lens

Mtg. Ht (ft)	PCB Notch Setting and Range (feet)		
	notch 3	notch 4	notch 5
6.5	29	13	9
7	35*	16	10
7.5	35	19	12
8	35	22	14
9	35	27	18

* Pet immunity: Mount at 7ft., notch 3 only.

Vertical Adjustment Table - Long Range Lens

Mtg. Ht (ft)	PCB Setting and Range (feet)		
	notch 3	notch 4	notch 5
6.5	65	22	13
7	75	26	16
7.5	75	29	18
8	75	33	20
9	75	40	24

WARRANTY INFORMATION

For the latest warranty information, please go to:

www.honeywell.com/security/hsc/resources/wa

Honeywell

2 Corporate Center Drive, Suite 100

P.O. Box 9040, Melville, NY 11747

Copyright © 2010 Honeywell International Inc.

www.honeywell.com/security



K3119V4 9/10 Rev. A