



AP950W Wireless PIR Detector Installation Instructions

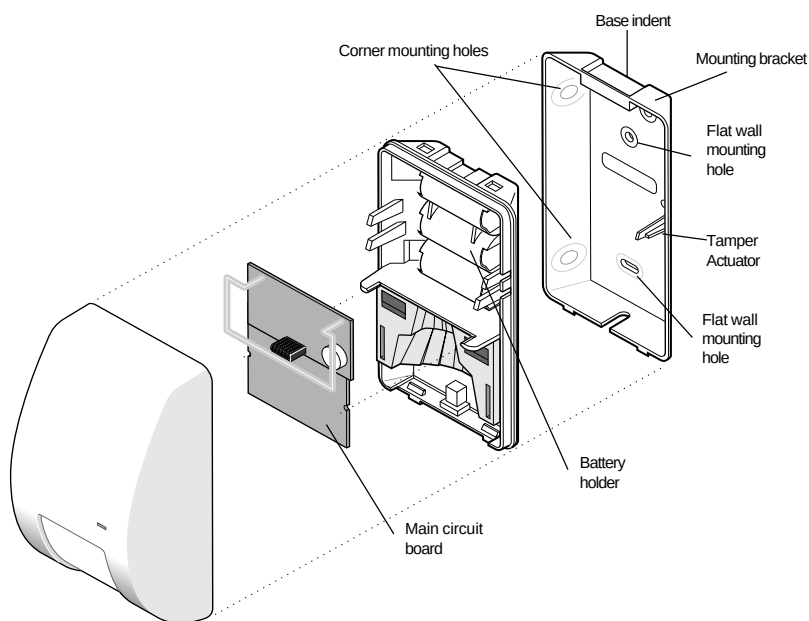


Figure 1

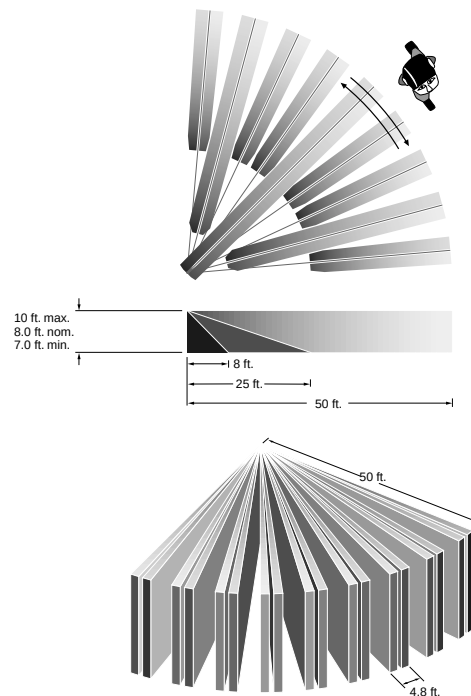


Figure 2

Description

The AP950W is a wireless low-current, passive infrared motion detector that is highly sensitive to moving infrared sources. It features superior immunity to RFI, vibration, static electricity, temperature changes and other false alarm sources.

The detector provides switch selectable sensitivity and range and allows optional masking to modify the coverage pattern for a wide variety of applications.

Parts

The following parts are included with the detector:

- PIR detector
- Three 3V lithium batteries
- Two plastic masks
- One screw to secure the PIR unit to the wall mounting bracket
- Wall mounting bracket
- Sheet of adhesive masking labels
- Removable undercrawl mask

Selecting a Location

- Mount the sensor within 200 feet of the receiver unit.
- Mount the sensor on a rigid vibration-free surface.
- Mount the sensor 7 to 10 feet high.
- Mount the sensor so the expected movement of an intruder is across the fields of the detection pattern. See Figure 2.
- Do not locate the sensor in any area with an excessive metallic surface.
- Do not locate the sensor on a surface exposed to moisture.
- Do not locate the sensor where it may be exposed to false alarm sources such as: direct sunlight, heat sources (heater, radiators, etc.) in the field of view, strong air drafts (fans, air conditioner, etc.) on sensor.
- Do not locate the sensor where the ambient temperature is below 32° F or above 131° F.

Mounting the Detector

Verify the detector communicates with the control panel before you permanently mount the detector. See *Walk Testing the Detector*.

Refer to Figure 1 as you perform the following steps:

1. Separate the PIR unit from the mounting bracket by pushing apart the tabs at the bottom of the unit.
2. Select the appropriate knockout mounting holes on the mounting bracket for either corner or flat wall mounting.
3. Use screws and wall anchors, if necessary, to attach the mounting bracket to the wall.

Selecting the Coverage Pattern

The coverage pattern for the detector can be modified to fit specific applications by masking off mirror curtains. Curtains should be masked to avoid sources of false alarms, such as heaters, air conditioners, and windows.

Open the unit by pressing the opening tab up. See Figure 6.

If necessary, use one or more of the following methods to modify the coverage pattern:

- Use one or both of the plastic masks provided to mask off large areas of coverage as shown in Figure 4.
- Mask the appropriate mirror curtains with the adhesive labels provided. See the example shown in Figure 5. **Do not** use sharp objects to remove unwanted labels. If necessary, carefully peel the label off.
- An undercrawl mask is molded into the window allowing objects to be placed within 5 feet of, or directly below the detector. This mask can be removed cutting the three plastic tabs holding it in place as shown in Figure 3.

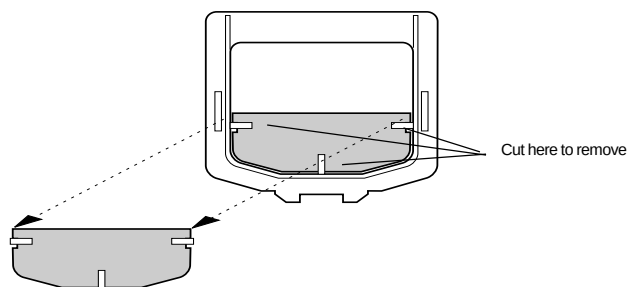


Figure 3

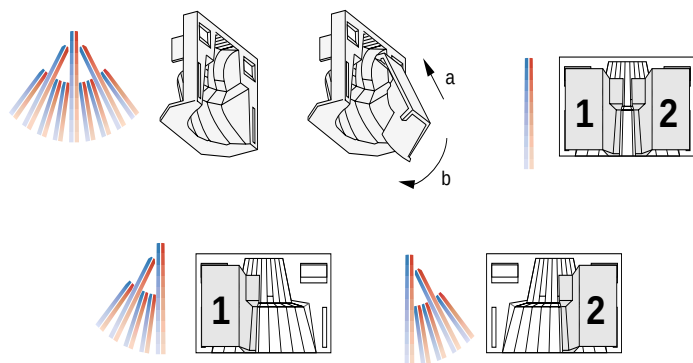


Figure 4

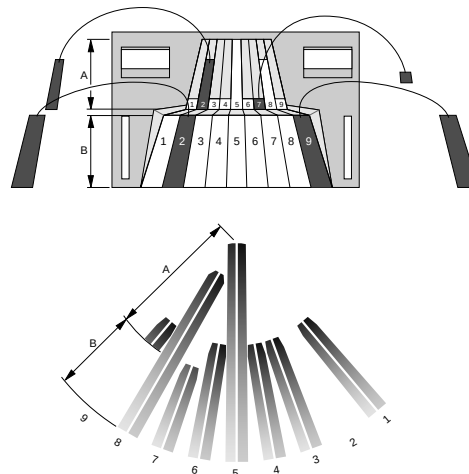


Figure 5

Setting the Sensitivity and Range Switches

The detector provides switches on the back of the detector for setting sensitivity and range, as shown in Figure 6.

Use the following to determine the appropriate switch settings for an application mode:

- BI= BI-curtain mode. Increases false alarm immunity in smaller areas. Requires the intruder to pass through two curtains to trigger an alarm. Do not use for single curtain applications or ranges under 5 feet. **Factory default.**
- STD= Standard mode. Use for wide angle or single-curtain applications. Requires the intruder to only pass through one curtain to trigger alarm.
- Range= Program switch for range under 33 ft. (factory default) or to 50 ft. It's important to program the sensor correctly for optimum sensitivity. Walk test the sensor regularly by walking across the fields of view and checking that the LED lights and that the opening relay is indicated back at the control panel.

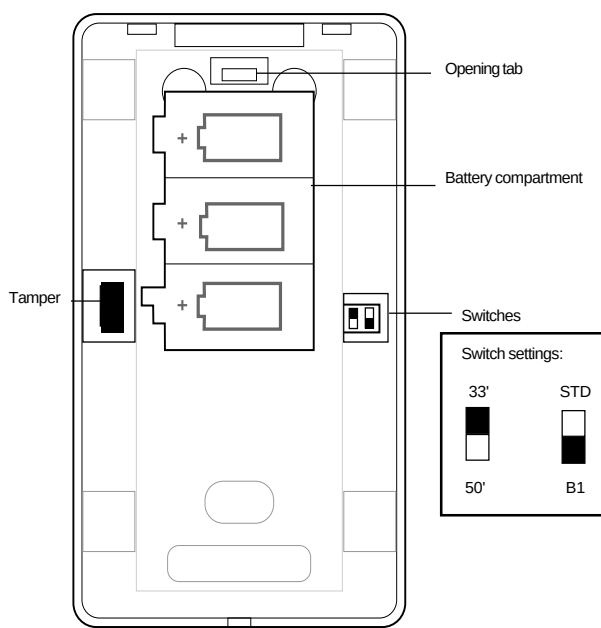


Figure 6

Pet Alley Application

To create a detection free area close to the floor, mount the detector about 3.5 feet above the floor, upside down (detector window towards the ceiling). To reduce the exposure to the ceiling, leave the plastic undercrawl mask in place.

As shown in Figure 7, pets are free to roam below the mounting height of the detector without causing alarms.

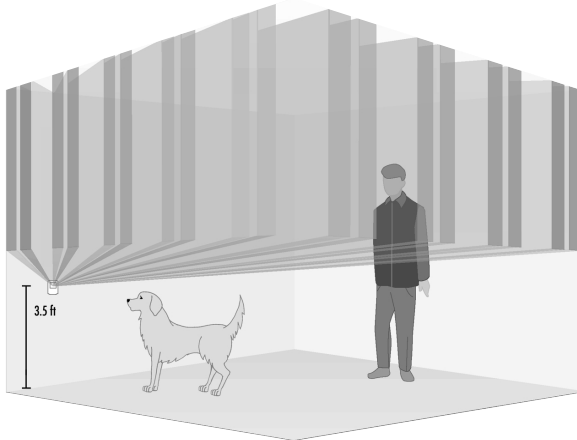


Figure 7

Installing Batteries and Setting up the Transmitter

The detector contains a built-in transmitter that is used in conjunction with a compatible receiver. Use the following instructions to set up the transmitter for wireless operation:

1. Make sure the tamper switch on PIR is released (not pressed down), by removing the PIR from the wall mounting bracket.
2. Observing the proper polarity, insert lithium batteries provided into the battery holder.

Important: Once the batteries are installed, allow 3 minutes for the detector to become fully operational before performing walk testing.

3. Detach one of the device address labels from the transmitter board and use it to enroll the detector at the control panel. See the control panel manufacturer's instructions.
4. Walk test the detector to ensure proper operation and coverage. See *Walk Testing the Detector*.

Walk Testing the Detector

The detector provides a Walktest mode for testing the detector operation and coverage pattern. Use the following instructions to walk test the detector:

1. Remove the sensor from the bracket to enable the Walktest mode.
2. When the sensor is remounted on the bracket, the detector remains in the Walktest mode for 3-4 minutes. Depending on jumper settings, the Walktest mode allows the detector to alarm whenever one or two curtain areas are entered. The LED visible on the front cover lights to indicate an alarm.
3. Walk test the detection pattern, remove the sensor, and make any necessary adjustments.
4. Replace the sensor, walk test the unit and verify the detector is communicating with the control panel. Replace the securing screw. See the control panel manufacturer's instructions.

Important: After Walktest mode times out (3 to 4 minutes), the detector returns to normal operating mode. In normal operating mode, the detector will alarm no more often than once every 3 minutes, and the LED is disabled to reduce battery consumption.

Maintaining the Detector

When installed and used properly, the AP950W provides up to 10 years of service with minimal maintenance. To ensure proper operation, you should walk test the detector annually as described in *Walk Testing the Detector*.

Clean the inside of the detector with a soft bristled brush or compressed air. Clean the cover with a damp (water) cloth as needed to keep it free of dust and dirt. **Always test the detector after cleaning.**

Replacing the Batteries

Important: You must remove all batteries to reset the low battery signal before installing new batteries.

To ensure proper operation, if any battery is less than 3VDC, replace all batteries.

Use only 3 V lithium CR-123A batteries as listed on the inside of the detector.

Use of any other batteries may present a risk of fire or explosion. Dispose of used batteries promptly. Keep away from children.

Caution: Risk of fire, explosion, and burns. **Do not** recharge, disassemble, heat above 212°F (100°C), or incinerate. Dispose of used batteries properly.

FCC

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.

Specifications

Input voltage.....	2.35 to 3.3VDC
supplied by three 3V lithium batteries provided	
Battery type.....	DL123A, CR123A
Typical current.....	11uA
Typical battery life.....	10 years
Transmitter frequency.....	345 Mhz
Transmit condition.....	alarm, tamper, low battery
Detection range.....	35'
Mounting height.....	7' to 10'
Number of curtains.....	9
Operating temperature.....	32° to 131° F (0° to 55° C)
Relative humidity.....	10 to 90% non-condensing
RFI immunity.....	>10V/meter from 28 to 1000Mhz
Dimensions:	
Width.....	2.9" (7.4 cm)
Depth.....	2.2" (5.6 cm)
Height.....	5.1" (12.9 cm)
Weight.....	7.7 oz
Color.....	white
Recommended receiver.....	ADEMCO 5881, 5882, 6128RF

Ordering Information

Model number	Description
AP950W-ADT	AP950W wireless detector with three 3V lithium batteries.

This unit should be used with a UL listed control unit capable of providing a minimum of 4 hours standby power.
The equipment should be installed in accordance with NFPA 70. The unit shall be tested at least once a year.



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