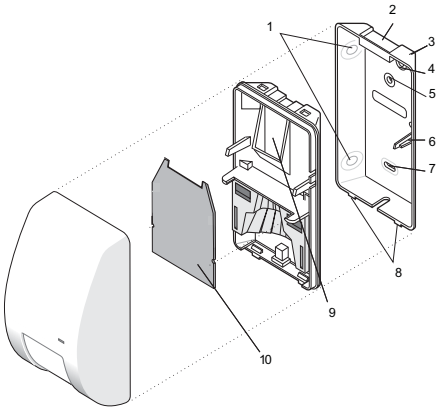
AP750-ID Installation Instructions

Description

The AP750-ID is an addressable PIR device that interfaces with the PinPoint® system. This system provides flexible and reliable two-way communication between the device and the controller.

Figure 1: Exploded view



1 - Corner mounting knockouts
2 - Base indent
3 - Wall mounting bracket
4 - Flat wall mounting knockout
5 - Cable entry
6 - Tamper actuator
7 - Flat wall mounting knockout
8 - Tabs
9 - Wiring access
10 - Circuit board

Parts included

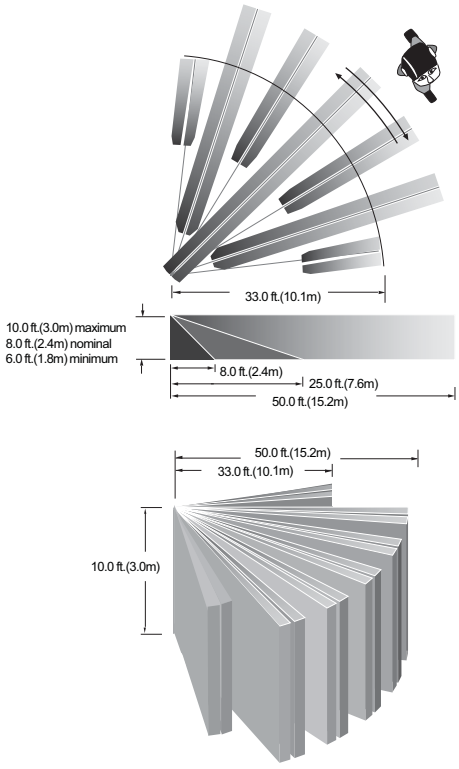
- PIR detector
- Two plastic masks
- One screw to secure the to the wall mounting bracket
- Wall mounting bracket
- Sheet of adhesive masking labels
- Cardboard undercrawl window mask

Selecting a location

Mount the unit:

- On a rigid vibration-free surface.
- 6 to 10 feet (1.8 to 3m) high, but at least 6 inches (15cm) from the ceiling.
- So the expected movement of an intruder is across the fields of the detection pattern. See Figure 2 below.

Figure 2: Detection pattern



Do not locate the unit:

- On a surface exposed to moisture.
- 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.).

- Where the ambient temperature is below 32° F (0°C) or above 131°F (55°C).

Mounting the unit

1. Separate the PIR unit from the mounting bracket by inserting a small, flat-bladed screwdriver between the tabs at the bottom of the unit and turning the screwdriver to push the tabs apart. See Figure 1 on page 1.

Caution: You must be free of static electricity before handling sensor circuit boards. Touch a grounded, bare metal surface before touching circuit boards or wear a grounding strap.

2. Select the coverage pattern and set the sensitivity and range switches. See Figure 6 on page 3, Selecting the Coverage Pattern, and Setting the Sensitivity and Range Switches.
3. Set the PinPoint address DIP switches. See Figure 6 on page 3.

   Note: Units are shipped with DIP switches set to 255. This is an invalid address. The unit will not communicate with the control panel until a valid address has been set. Refer to the NX-2192 manual to determine the correct address setting for each unit.
4. Remove the appropriate knockout mounting and wiring holes on the mounting bracket for either corner or flat wall mounting and PinPoint wiring.

   Note: Holes near the tamper actuator are not mounting knockouts.
5. Pull the PinPoint wiring through the wiring knockout hole. Use screws and wall anchors, if necessary, to attach the mounting bracket to the wall. Do not over-tighten.
6. Strip 1/4 inch (6.4mm) of insulation from the PinPoint wires. Connect the wiring to the appropriate screw terminals and tighten the screws. See Figure 6 on page 3.
7. Be careful not to catch the wiring as you snap the unit to the mounting bracket.
8. Test the unit when the PinPoint system is completely installed and the control panel is powered.

Selecting the coverage pattern

The coverage pattern for the unit 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 pushing the opening tab up. See Figure 6 on page 3.

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 3 below.
- Mask the appropriate mirror curtains with the adhesive labels provided. See the example shown in Figure 4 below. **Do not** use sharp objects to remove unwanted labels. If necessary, carefully peel the label off.
- Use the cardboard undercrawl window mask as shown in Figure 5 below. The undercrawl mask allows objects to be placed within 5 feet of, or directly below, the detector.

Figure 3: Plastic masks

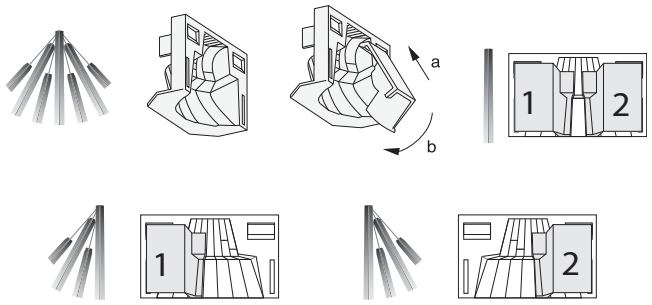


Figure 4: Adhesive labels

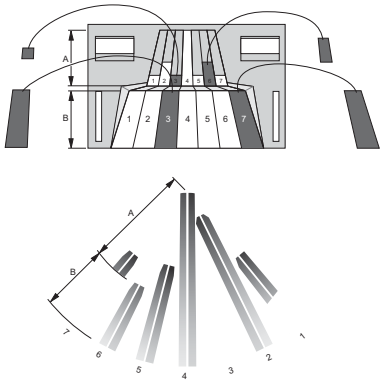


Figure 5: Undercrawl mask

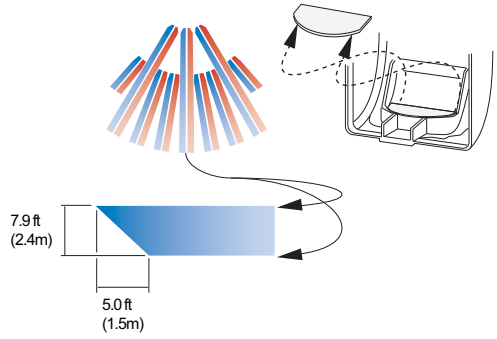
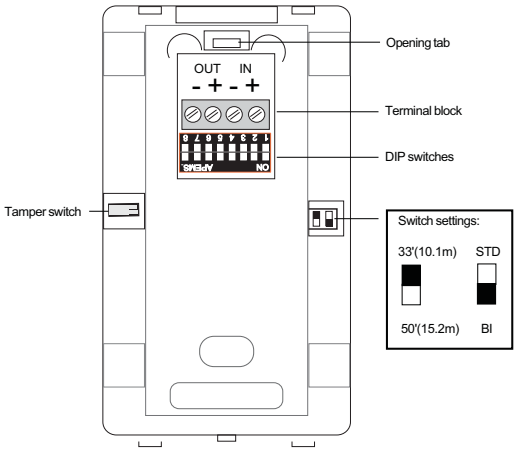


Figure 6: Detector back



Setting the sensitivity and range switches

There are switches on the back of the unit for setting sensitivity and range, as shown in Figure 6 above.

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

Mode

BI=Bi-curtain Mode **(factory default)** increases false alarm immunity in smaller areas and requires the intruder to pass through two curtains to trigger an alarm. Do not use for single curtain applications or ranges under 5 feet (1.5m).

STD=Standard Mode is used for wide-angle or single-curtain applications. It requires the intruder to only pass through one curtain to trigger an alarm.

Note: Operation in the Standard Curtain Mode is UL 639 Listed for the specified ranges of 33 feet (10.1m) and 50 feet (15.2m). For operation in Bi-curtain Mode, the unit is UL 639 Listed for 30 feet (9.1m) of range only. For ranges from 30 to 50 feet (9.1 to 15.2m), the unit is not UL 639 Listed but will provide detection within 6 steps or 14 feet (4.3m) across the plane of coverage. UL has not tested the 6 steps or 14 foot (4.3m) detection.

Range

Program switch for range under 33 feet (10.1m) (factory default) or to 50 feet (15.2m). It's important to program the unit correctly for optimum sensitivity. Walk test the unit regularly by walking across the fields of view and checking that the LED lights and that an alarm is indicated at the control panel. See “Walk testing” below.

Note: The LED only lights if the unit is placed in Walktest Mode by the installer and the unit is enrolled in the system.

Walk testing

A Walktest Mode for testing the unit operation and coverage pattern is provided. Use the following instructions to walk test the unit:

1. Ensure the unit is enrolled in the PinPoint system.
2. Lift the unit from the bracket until the tamper switch opens to enable the Walktest Mode.
3. When the unit is remounted on the bracket, the unit remains in the Walktest Mode for 3-4 minutes. If additional time is required, depressing and releasing the tamper switch will reset the Walktest timer. Depending on switch settings (see “Selecting the coverage pattern” on page 2), the Walktest Mode allows the unit to alarm whenever one or two curtain areas are entered. The LED visible on the front cover lights to indicate an alarm.
4. Walk test the detection pattern and make any necessary adjustments.
5. Replace and walk test the unit to verify the unit is communicating with the control panel.

   Note: After Walktest Mode times out (3 to 4 minutes), the unit returns to normal operating mode. In normal operating mode, the unit will alarm no more often than once every 3 minutes, and the LED is disabled to reduce voltage loss on the PinPoint bus.

Maintenance

When installed and used properly, the unit provides years of service with minimal maintenance. To ensure proper operation, you should walk test the unit annually as described in Walk Testing.

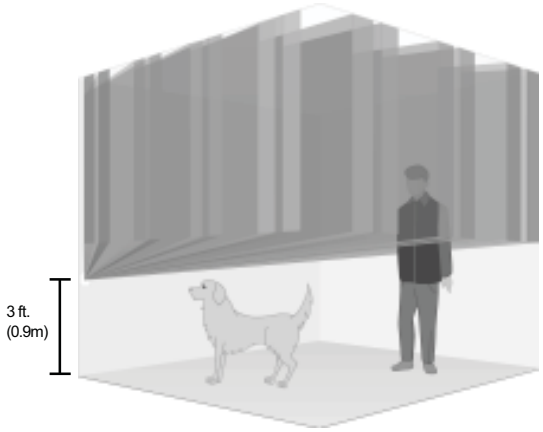
Clean the inside of the unit with a soft bristled brush or compressed air. Clean the cover with a damp (water) cloth as needed to keep it free of dust and dirt. Always test the unit after cleaning.

Pet alley application

To create a detection-free area close to the floor, mount the unit 3 feet (0.9m) above the floor, upside down (detector window towards the ceiling). The undercrawl mask should be in place to reduce exposure to the ceiling. Coverage distance is 25 feet in Bi-curtain Mode.

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

Figure 7: Pet alley



Specifications

Housing material	Flame retardant ABS
Operating voltage	8 to 27V (as supplied by NX-2192)
Current draw	250µA typical average 3 mA with LED momentarily on
Transmit condition	Alarm, tamper
Detection range	50 feet (15.2m)
Mounting height	6 to 10 feet (1.8 to 3m)
Number of curtains	7
Operating temperature	32 to 131° F (0 to 55° C)
Relative humidity	10 to 90% non-condensing
Maximum line length	10,000 feet (3km)
Dimensions: Width Depth Height	 2.9 inch (7.4cm) 2.2 inch (5.6cm) 5.1 inch (12.9cm)
Color	White

Regulatory information

Listings	UL 639
FCC compliance (Class A & B)	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. 2 This device must accept any interference received, including interference that may cause undesired operation.
Certification	CE

Product ordering

Product	Description
AP750-ID	An addressable, passive infrared motion sensor for use with the NX-2192 PinPoint Bus Interface.

Contact information

www.utcfireandsecurity.com or www.interlogix.com

For customer support, see www.interlogix.com/customer-support