

Indoor Recessed Mount PIR Detector

AP-360B(C)

360°/Wired model



360° ø6.0 m (20') detection area at 4.5 m (14' 9") mounting height



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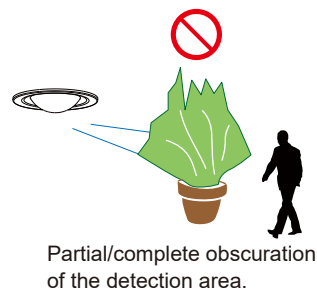
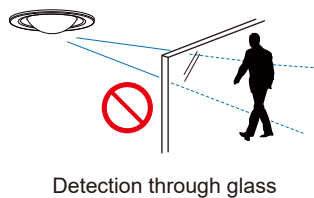
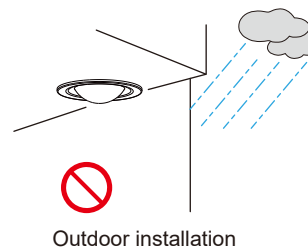
Before installation

- Manufacturer's statement

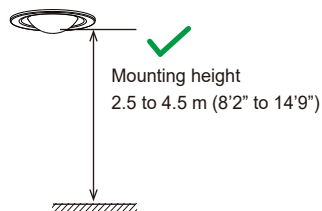
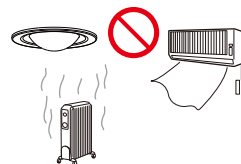
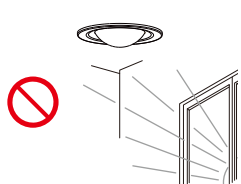
| Symbol | Meaning |
|--|---|
|  Warning | Failure to follow the instructions provided with this indication and improper handling may cause death or serious injury. |
|  Caution | Failure to follow the instructions provided with this indication and improper handling may cause injury and/or property damage. |

| Symbol | Meaning |
|--|--|
|  | Check mark indicates recommendation. |
|  | Nix sign indicates prohibition. |
| NOTE | Special attention is required to the section of this symbol. |

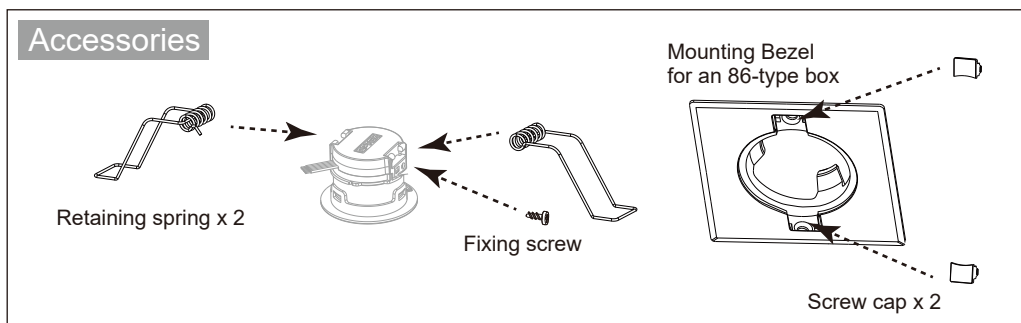
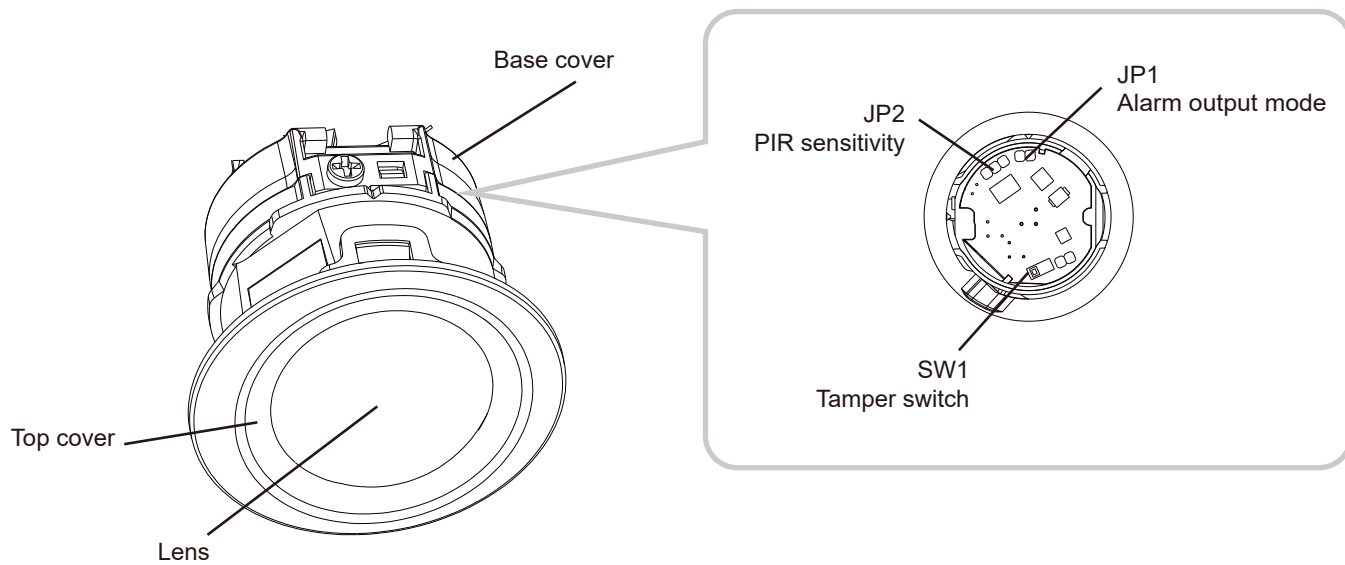
 **Warning**



 **Caution**

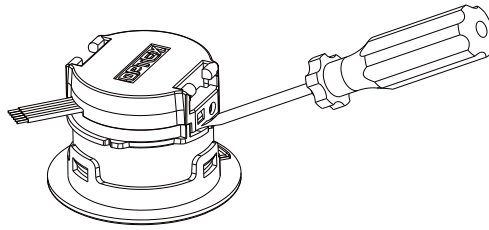


- Parts identifications



1 Settings

1 Disassemble

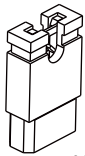


Open the base cover for setting of the detector.

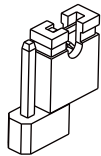
2 Jumper pin settings

JP1

Alarm output mode



N.C. (default)

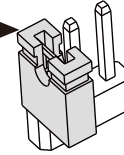


N.O.

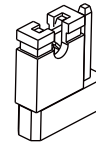
JP2

PIR sensitivity

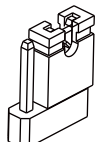
Turn the jumper PIN by 90 degrees to prevent interference with the casing.



H (recommended)



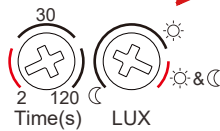
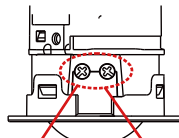
M (default)



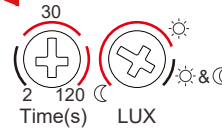
L
< 3.0 m
(9'10")

Mounting height: > 3.5 m (11'6")
3.0 to 3.5 m (9'10" to 11'6")

3 Light control mode settings

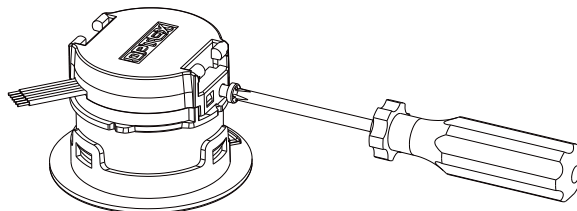


Security mode (default)



Light control mode

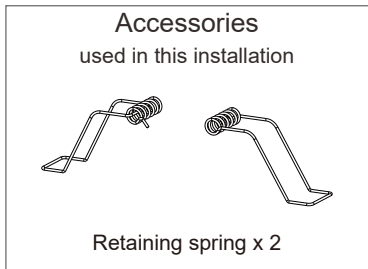
4 Assemble



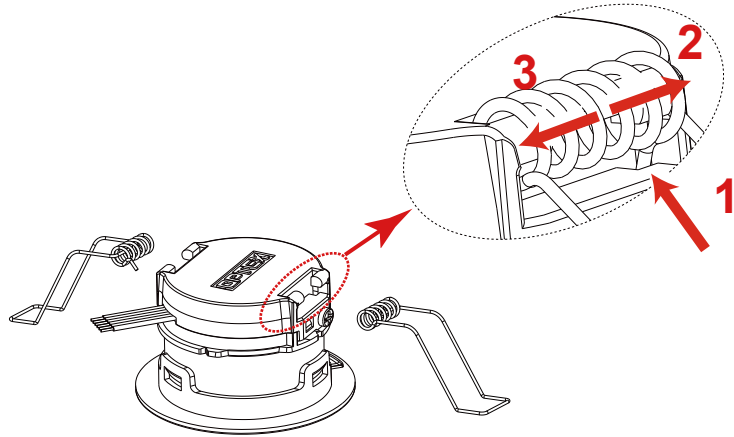
Close the base cover, and fasten the screw to fix the cover.

2 Installation

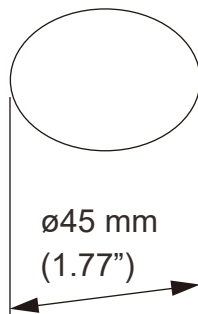
2-1. Ceiling mount *without switch box*



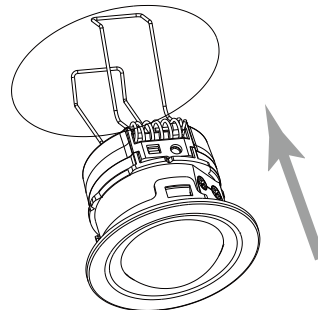
- 1 Install a retaining spring on both sides.
(follow the illustrated arrow steps to complete the assembly of the retaining spring.)



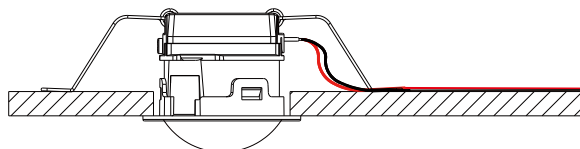
- 2 Make a $\varnothing 45$ mm (1.77") hole in the ceiling for mounting.



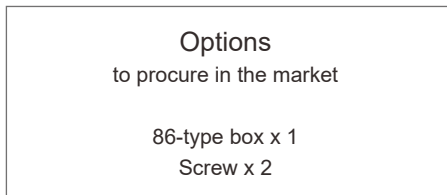
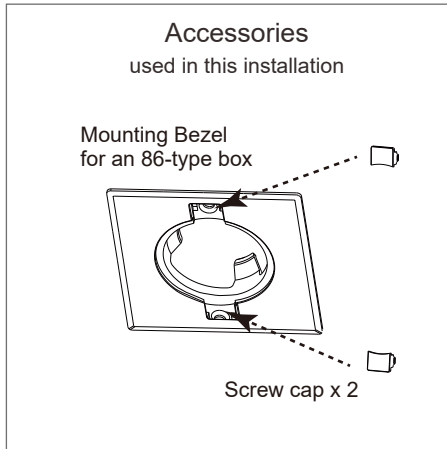
- 3 Insert the detector into the hole with the retaining spring facing up.



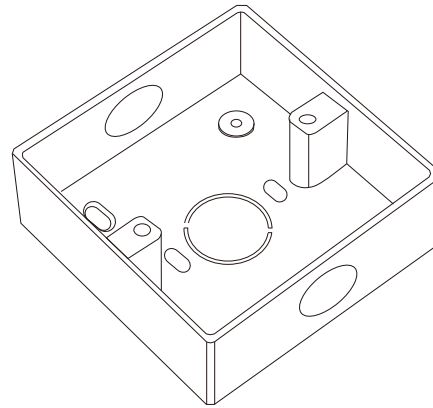
- 4 Mount the detector on the ceiling.
(Be sure to arrange the wires with a downward slope to prevent water ingress into the detector.)



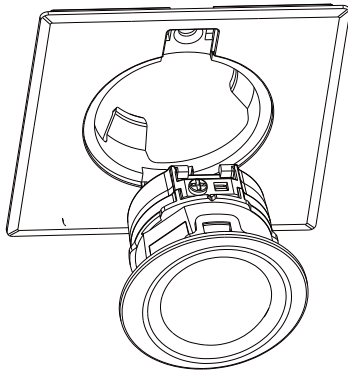
2-2. Ceiling mount *with 86-type box*



- 1 Prepare an 86-type box on the ceiling.

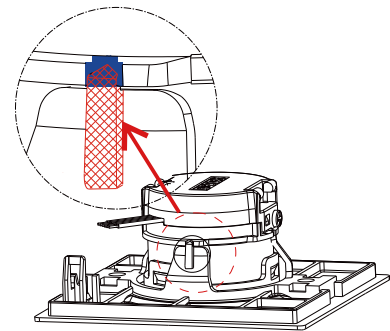


- 2 Install the detector into the 86-type box.

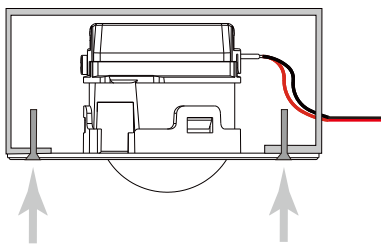


NOTE

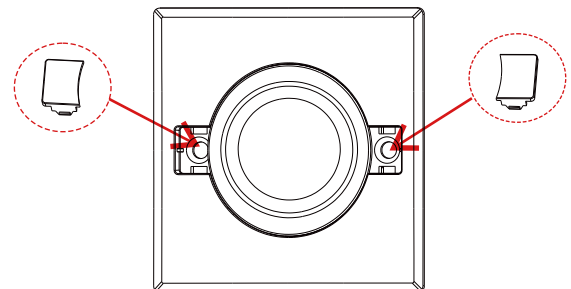
Align the bump with the triangle recess as illustrated in the figure.









- 3 Fix the detector with two screws and cover their heads with two caps.



NOTE Be sure to arrange the wires with a downward slope to prevent water ingress into the detector.



2-3. Wiring

| | | |
|---|------------|------------------------|
|  | [1] Red | Power supply: Positive |
|  | [2] Black | Power supply: Negative |
|  | [3] White | Alarm output |
|  | [4] Yellow | Alarm output |
|  | [5] Green | Tamper output |
|  | [6] Blue | Tamper output |

Power cable length

The power cable should be limited to the following length.

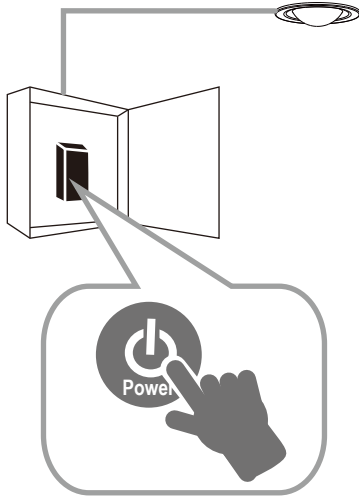
AP-360B(C)

| WIRE GAUGE | 12 V DC | 14 V DC |
|-----------------------------------|------------------------|------------------------|
| AWG 22 (0.33 mm ²) | 440 m (1,440 ft.) | 950 m (3, 110 ft.) |
| AWG 20 (0.52 mm ²) | 690 m (2,260 ft.) | 1,510 m (4,950 ft.) |
| AWG 18 (0.83 mm ²) | 1,110 m (3,640 ft.) | 2,410 m (7,900 ft.) |

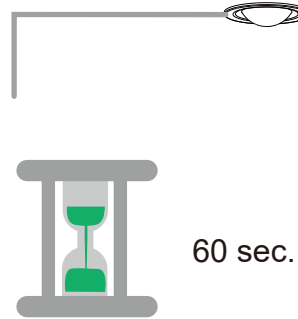
3 Checking

3-1. Walk test

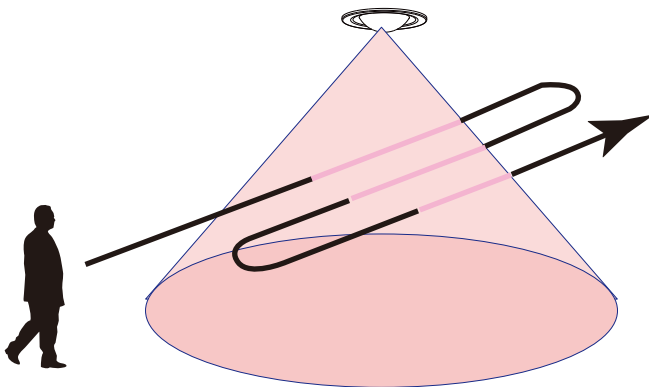
1 Power on.



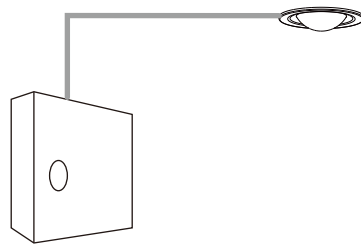
2 Wait for 60 seconds to complete the warm-up time.



3 Walk in the detection area to check the detecting performance.



4 Start operation.



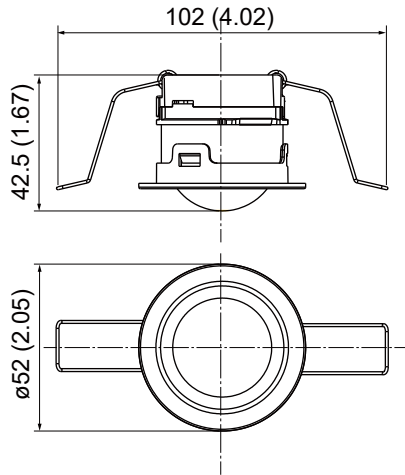
- Specifications

| Model | AP-360B(C) |
|-----------------------|--|
| Detection method | Passive infrared |
| Detection area | ø6 m (ø20') at mounting height 4.5 m (14'9") |
| Mounting height | 2.5 to 4.5 m (8'2" to 14'9") |
| Mounting type | Recessed ceiling mount/86-type box mount |
| Sensitivity | 2.0°C at 0.6 m/s (3.6°F at 2'/s) |
| Detection speed | 0.3 to 3.0 m/s (1'/s to 9'10"/s) |
| LED indicator | Warm-up upon power on: blinking Stand-by: off Alarm: solid on |
| Alarm cycle | 2 s to 120 s (variable) |
| Illuminance | 20 to 320 lux (variable/not detected) |
| Alarm output | N.O./N.C., 28 V DC 200 mA max. |
| Tamper switch | N.C. 28 V DC 100 mA max. The contact opens once the casing is detached. |
| Warm-up time | Approx. 60 s |
| Power supply | 9.5 to 16 V DC |
| Current | 12 V DC Stand-by: 11mA, Max.: 13 mA |
| PIR sensitivity | H/ M/ L |
| Weight | 50 g (1.76 oz) |
| Operating temperature | -20 to +50°C (-4°F to +122°F) |
| Operating humidity | < 95% |
| Location | Indoors |
| Dimensions | ø52 x 42.5 mm (ø2.05 in. x 1.67 in.): without switch box mount |
| | 86 x 86 x 42.5 mm (3.39 x 3.39 x 1.67 in.): with 86-type box mount |

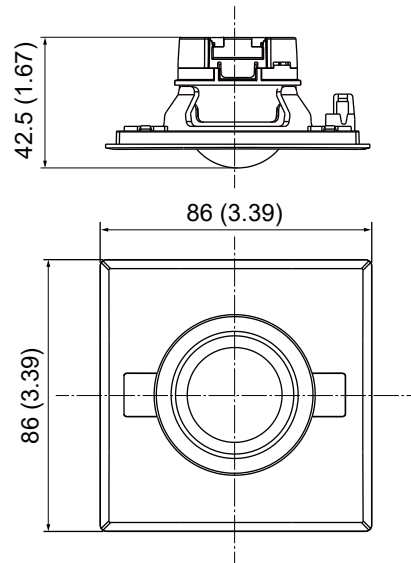
- Specifications and designs are subject to change without prior notice.
- These units are designed to detect an intruder and activate an alarm control panel. Being only a part of a complete system, we cannot accept responsibility for any damages or other consequences resulting from an intrusion.

- Dimensions

Without switch box mount



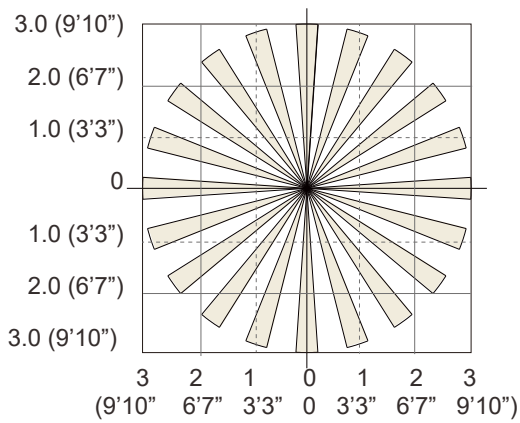
With 86-type box mount



Unit: mm (inch)

- Detection area

Top view

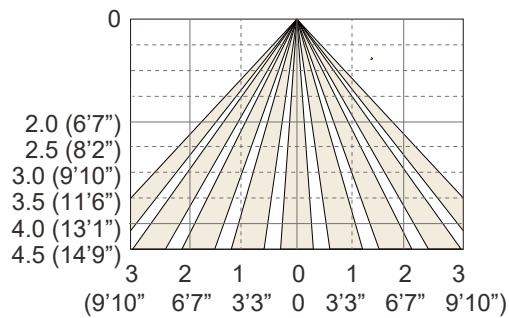


Maximum detection area

| Mounting height | 2.5 (8' 2') | 3.0 (9' 10") | 3.5 (11' 6") | 4.0 (13' 1") | 4.5 (14' 9") |
|-----------------|--------------------|-------------------|-------------------|-------------------|-----------------|
| Detection area | ø3.3 (ø10' 10") | ø4.0 (ø13' 1") | ø4.6 (ø15' 1") | ø5.4 (ø17' 8") | ø6.0 (ø20') |

Unit: m (ft., in.)

Side view



- Troubleshooting

| Problem | Cause | Solution |
|---|--|---|
| The LED is off. | The power supply voltage does not meet the requirement due to disconnection from the power supply or low voltage. | Check the power supply of the detector. Refer to "Specifications" on page 9 for the power supply voltage. |
| | Incorrect detection area. | Adjust the detection area. Refer to "Detection area" on page 10. |
| The LED is on even when there is no person in the detection area. | A moving object exists in the detection area, such as a fluttering curtain or a swinging wall-mounted pendant. | Remove the moving object from the detection area or change the detector location. |
| | The temperature changes rapidly in the detection area due to a heat source, such as a radiator or air conditioner. | Remove the heat source from the detection area or change the detector location. |
| The LED is on but the detector does not transmit signals. | Relay contact adhesion or damage occurs due to overload. | Check the output load. Repair or replace the damaged part. |
| | Improper wiring. | Connect the wires for the detector correctly. |
| The detector fails to warm up in 60 seconds after power on and the LED blinks continuously. | A moving object exists in the detection area during the warm-up period of the detector. | Be sure that there is no moving object in the detection area during the warm-up period of the detector. |
| | The detector fails to work properly. | Repair or replace the detector. |

■ EU & UK contact information



<https://navi.optex.net/cert/contact/>



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