

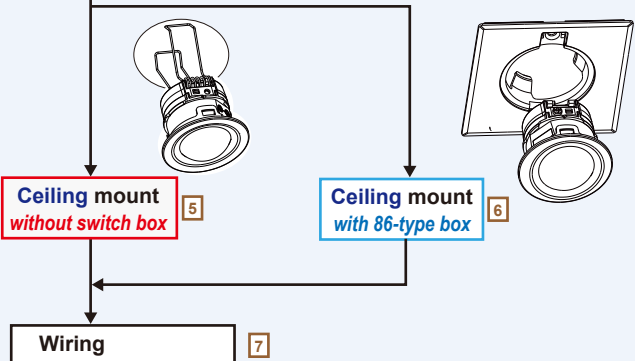
Indoor Recessed Mount PIR Detector

# AP-360BR(C)

**360°/Battery operated model**

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

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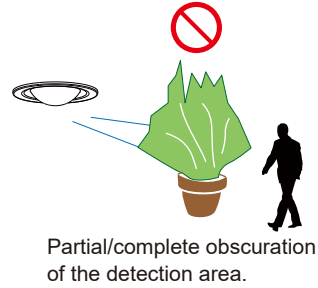
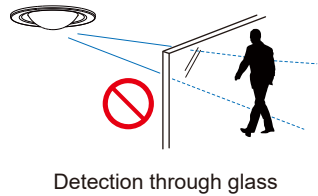
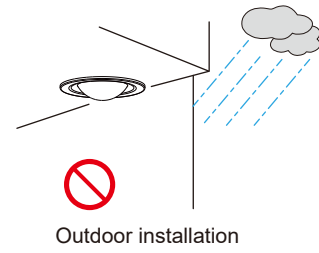
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Before installation

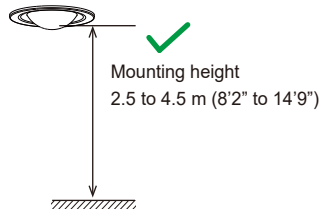
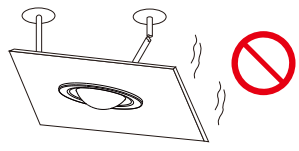
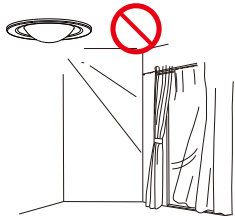
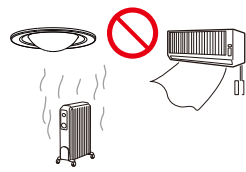
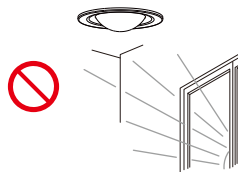
- Manufacturer's statement

| Symbol | Meaning   | Symbol      | Meaning  |
|--------|---|-------------|--|
|        | Failure to follow the instructions provided with this indication and improper handling may cause death or serious injury.       |             | Check mark indicates recommendation.                         |
|        | Failure to follow the instructions provided with this indication and improper handling may cause injury and/or property damage. |             | No sign indicates prohibition.                               |
|        |   | <b>NOTE</b> | Special attention is required to the section of this symbol. |

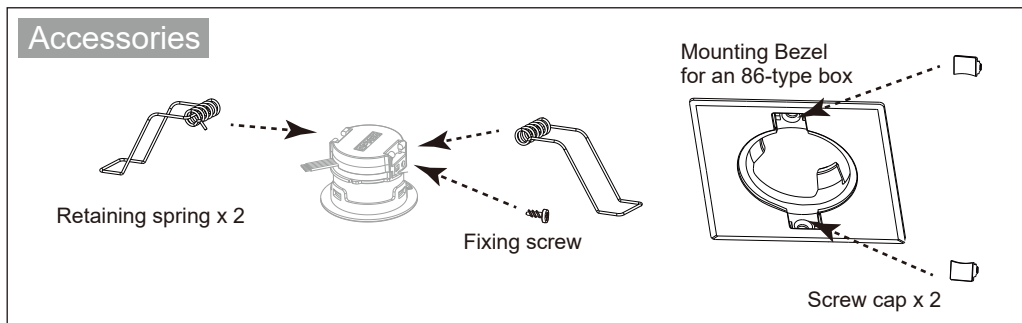
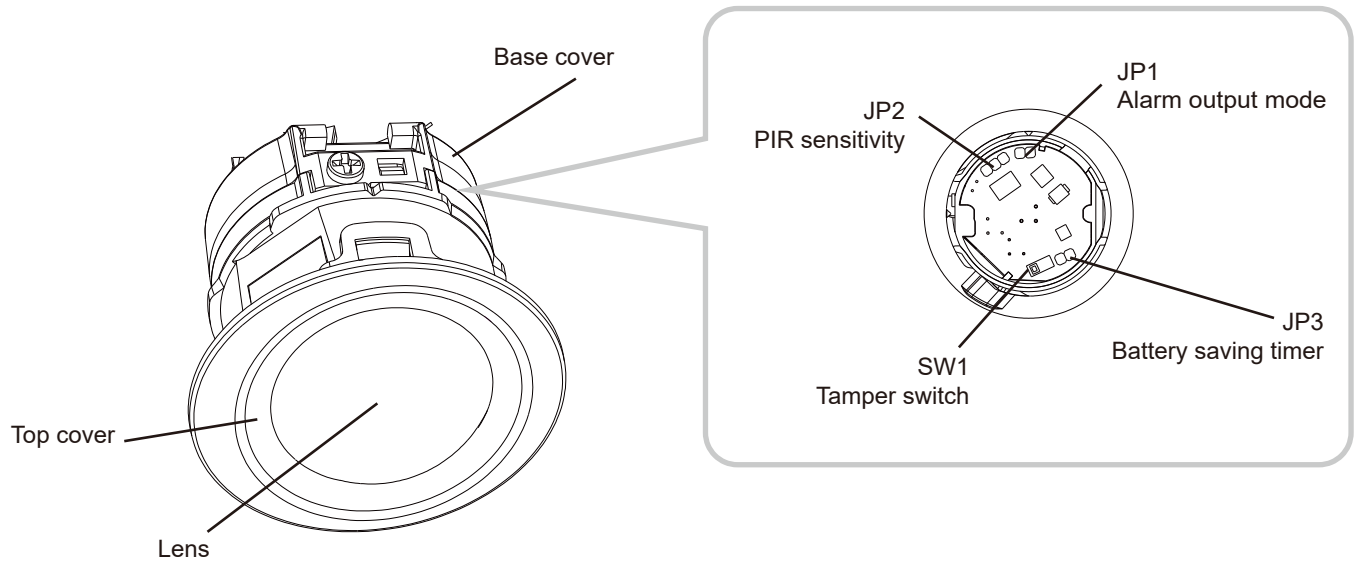
Warning



Caution

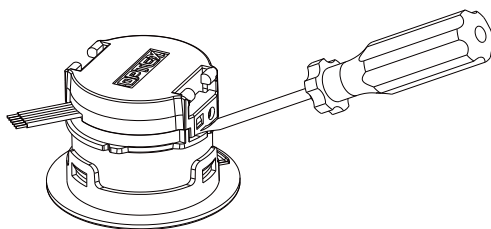


## - Parts identifications



# 1 Settings

## 1 Disassemble

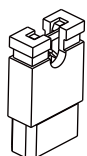


Open the base cover, and to set the detector.

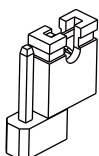
## 2 Jumper pin settings

### JP1

Alarm output mode



N.C. (default)

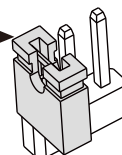


N.O.

### JP2

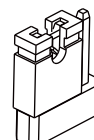
PIR sensitivity

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



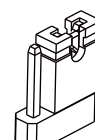
H (recommended)

Mounting height: > 3.5 m  
(11'6")



M (default)

3.0 to 3.5 m  
(9'10" to 11'6")

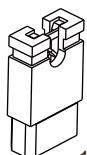


L

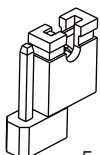
< 3.0 m  
(9'10")

### JP3

Battery saving timer

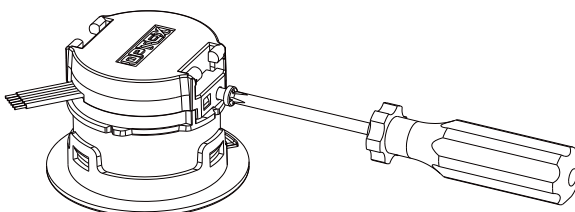


120 s (default)



5 s

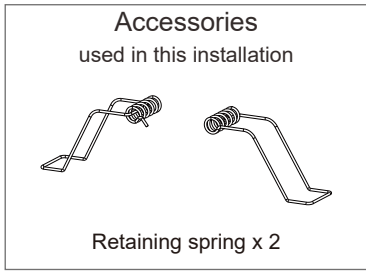
## 3 Assemble



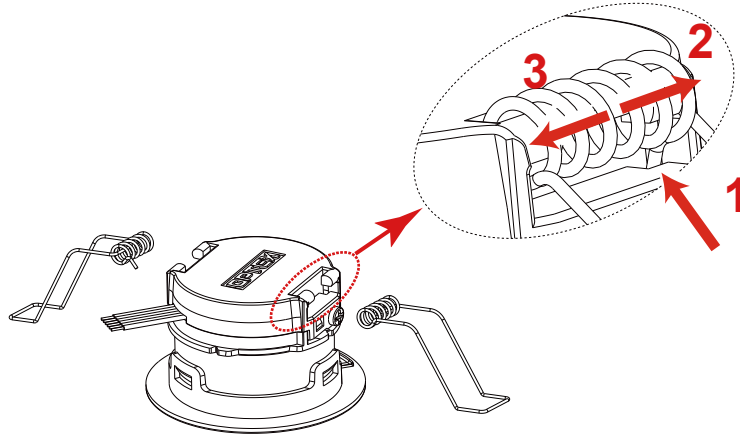
Close the base cover, and fasten the screw to fix the cover.

## 2 Installation

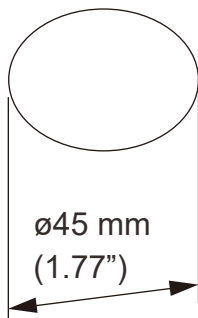
### 2-1. Ceiling mount *without switch box*



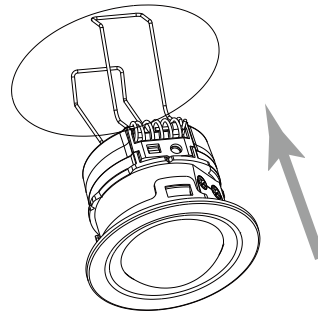
- 1 Install a retaining spring on both sides.  
(follow the illustrated arrow steps to complete the assembly of the retaining spring.)



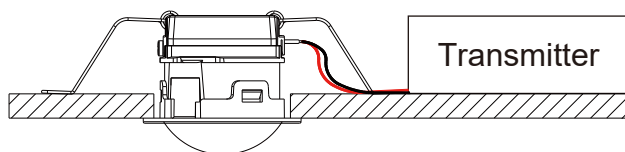
- 2 Make a  $\varnothing 45$  mm (1.77") hole in the ceiling for mounting.



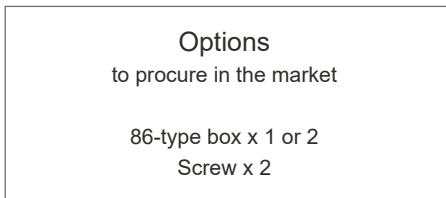
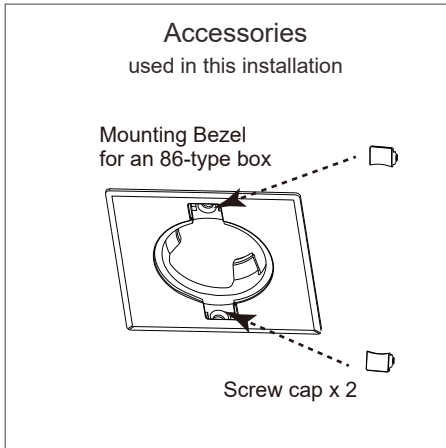
- 3 Insert the detector into the hole with the retaining spring facing up.



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

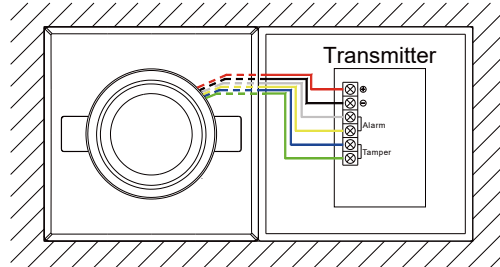


## 2-2. Ceiling mount *with 86-type box*

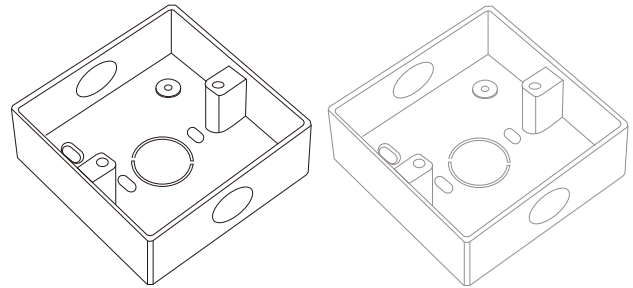


**NOTE**

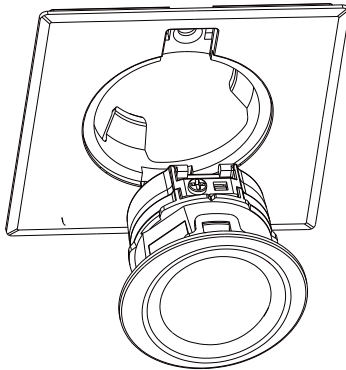
For the 86-type box mount, dual 86-type boxes are recommended with the additional one used to accommodate the transmitter.



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

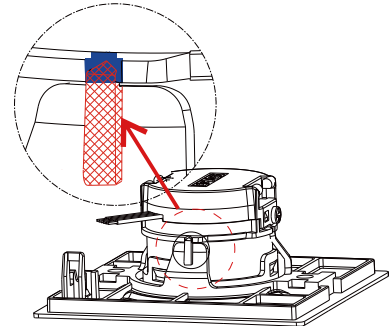


**2** Install the detector into the 86-type box.

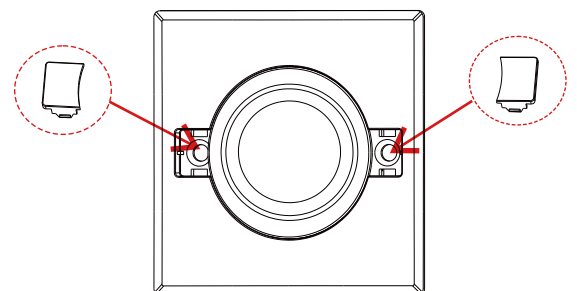
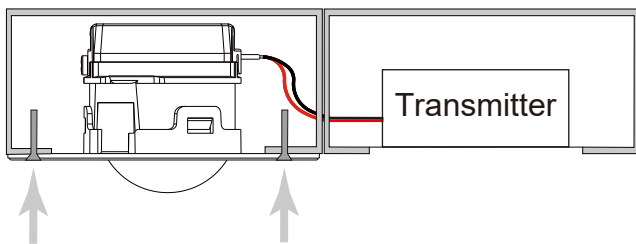


**NOTE**







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

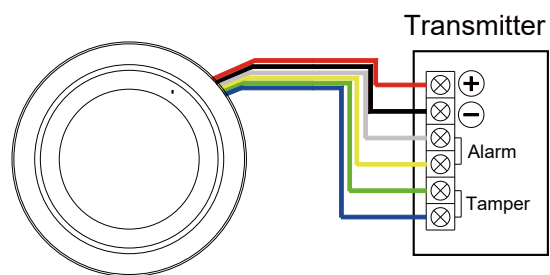


**3** Fix the detector with two screws and cover their heads with two caps.



## 2-3. Wiring

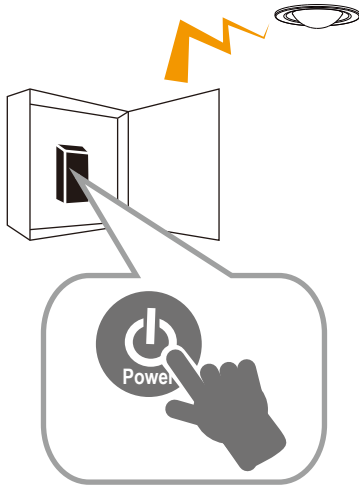
|   |            |                        |
|---|------------|------------------------|
|  | [1] Red    | Power supply: positive |
|  | [2] Black  | Power supply: negative |
|  | [3] White  | Alarm output           |
|  | [4] Yellow | Alarm output           |
|  | [5] Green  | Tamper output         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



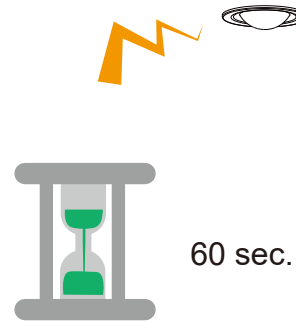
# 3 Checking

## 3-1. Walk test

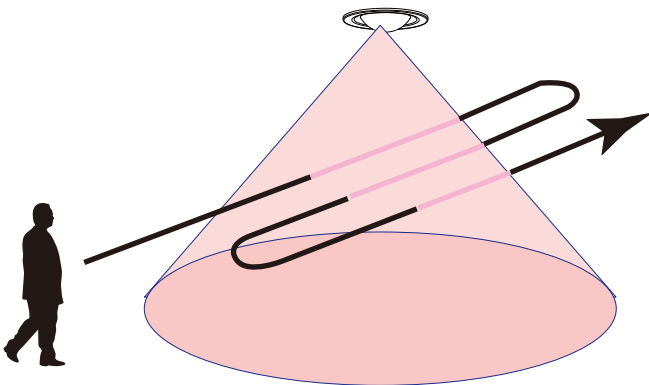
1 Power on.



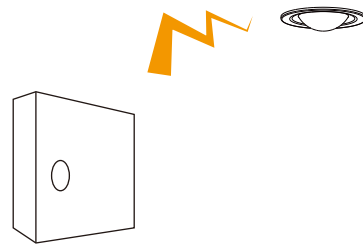
2 Wait for 60 seconds to complete the warm-up time.



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



4 Start operation.





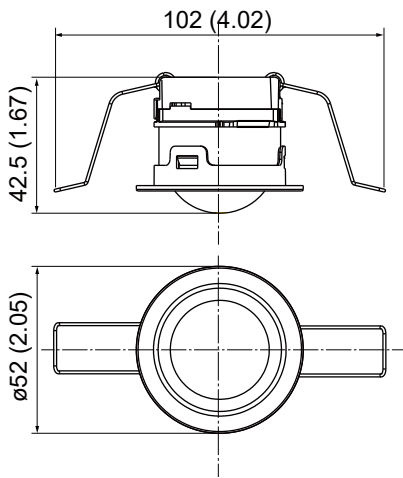
## - Specifications

| Model                 | AP-360BR(C)   |
|-----------------------|---|
| Detection method      | Passive infrared  |
| Detection area        | ø6 m (ø20' at mounting height: 4.5 m (14'9" ft.))                                     |
| Mounting height       | 2.5 to 4.5 m (8'2" ft. to 14'9" ft.)  |
| Mounting mode         | 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<br>Stand-by: off<br>Walk test: solid on<br>Alarm: off |
| Alarm cycle           | Approx. 2 s   |
| Battery saving timer  | 120 s/ 5 s selectable   |
| Alarm output          | N.O./N.C., 3.6 V DC 10 mA max.  |
| Tamper switch         | N.C. 28 V DC 100 mA max.<br>The contact opens once the casing is detached.            |
| Warm-up time          | Approx. 60 s  |
| Power supply          | 2.7 to 3.6 V DC (CR123A battery)  |
| Current               | 3 V DC<br>Stand-by: 10µA, Max.: 4 mA  |
| PIR sensitivity       | H/ M/ L   |
| Weight                | 50 g (1.76 oz)  |
| Operation temperature | -20 to +50°C (-4°F to +122°F)   |
| Operation 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                    |

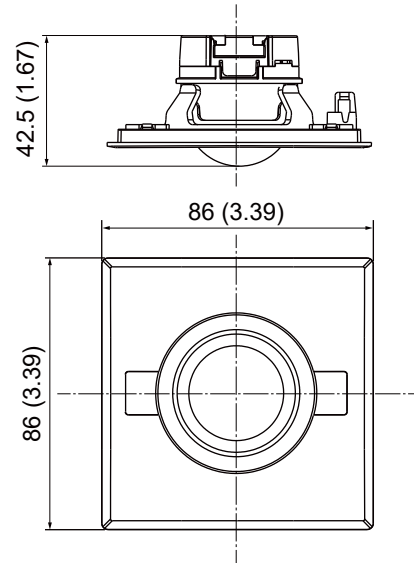
- Specifications and designs are subject to change without prior notice.
- These units are designed to detect an intruder and activate an alarm control panel. Being only a part of a complete system, we cannot accept responsibility for any damages or other consequences resulting from an intrusion.

## - Dimensions

Without switch box mount



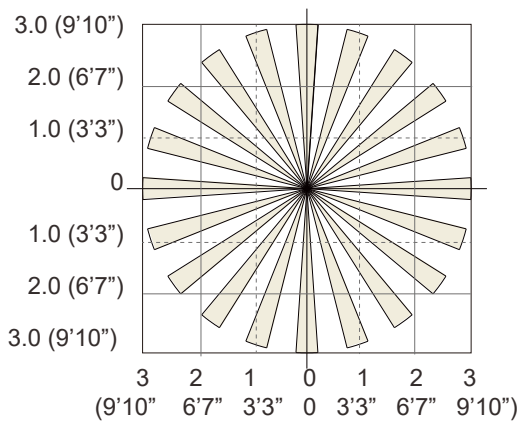
With 86-type box mount



Unit: mm (inch)

## - Detection area

Top view

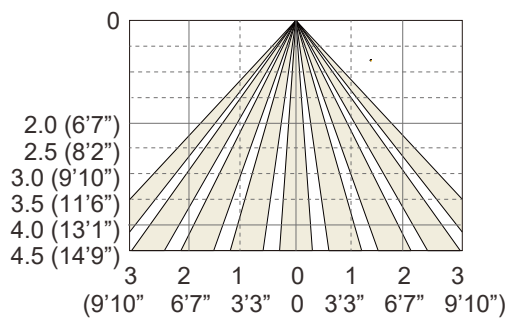


Maximum detection area

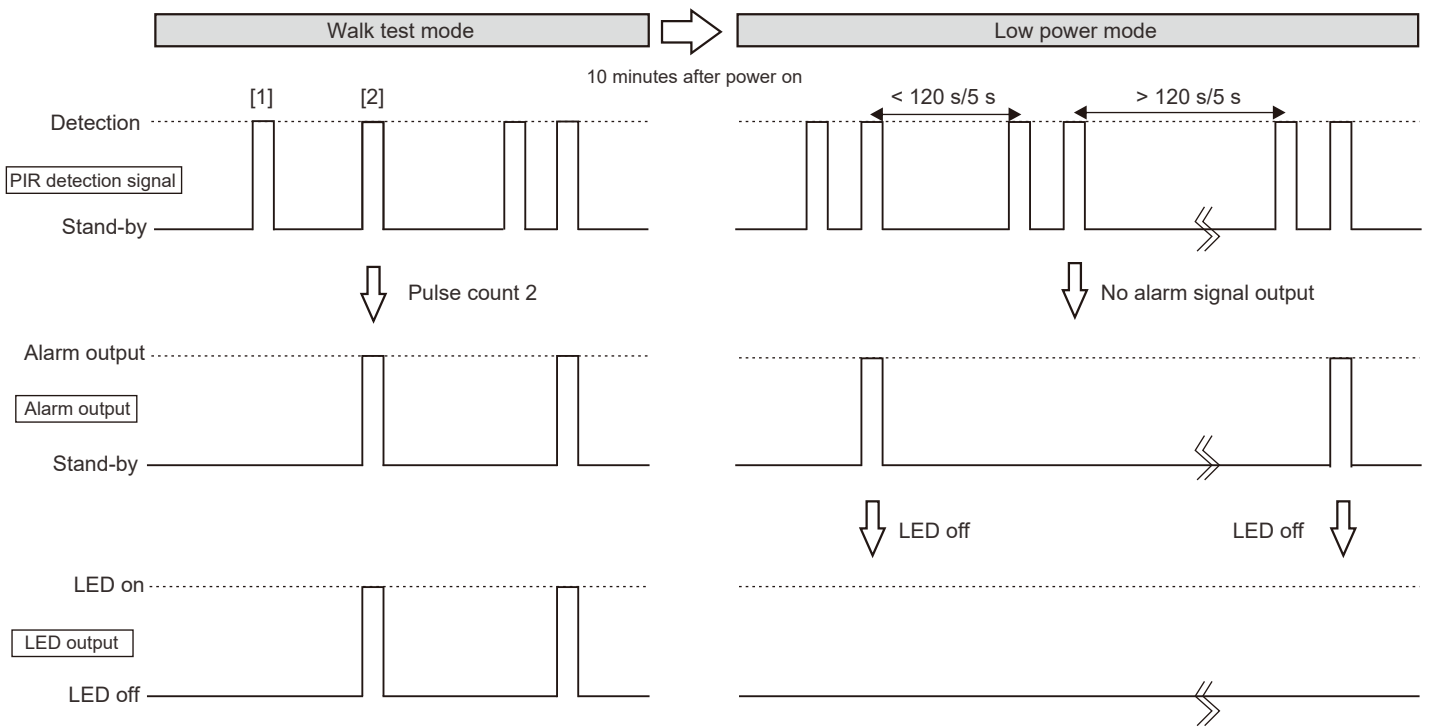
| Mounting height | 2.5<br>(8' 2")     | 3.0<br>(9' 10")   | 3.5<br>(11' 6")   | 4.0<br>(13' 1")   | 4.5<br>(14' 9") |
|-----------------|--------------------|-------------------|-------------------|-------------------|-----------------|
| Detection area  | ø3.3<br>(ø10' 10") | ø4.0<br>(ø13' 1") | ø4.6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

Unit: m (ft., in.)

Side view



## - Timing chart



## - 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 the page 9 for the power supply voltage. |
|   | Incorrect detection area.  | Adjust the detection area. Refer to "Detection area" on the page 10.  |
|   | The detector is in low power mode.   | Power on the detector again if an additional walk test is needed.   |
| The LED is on even 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.   |

## - Compliance

### ■ EU & UK contact information



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



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