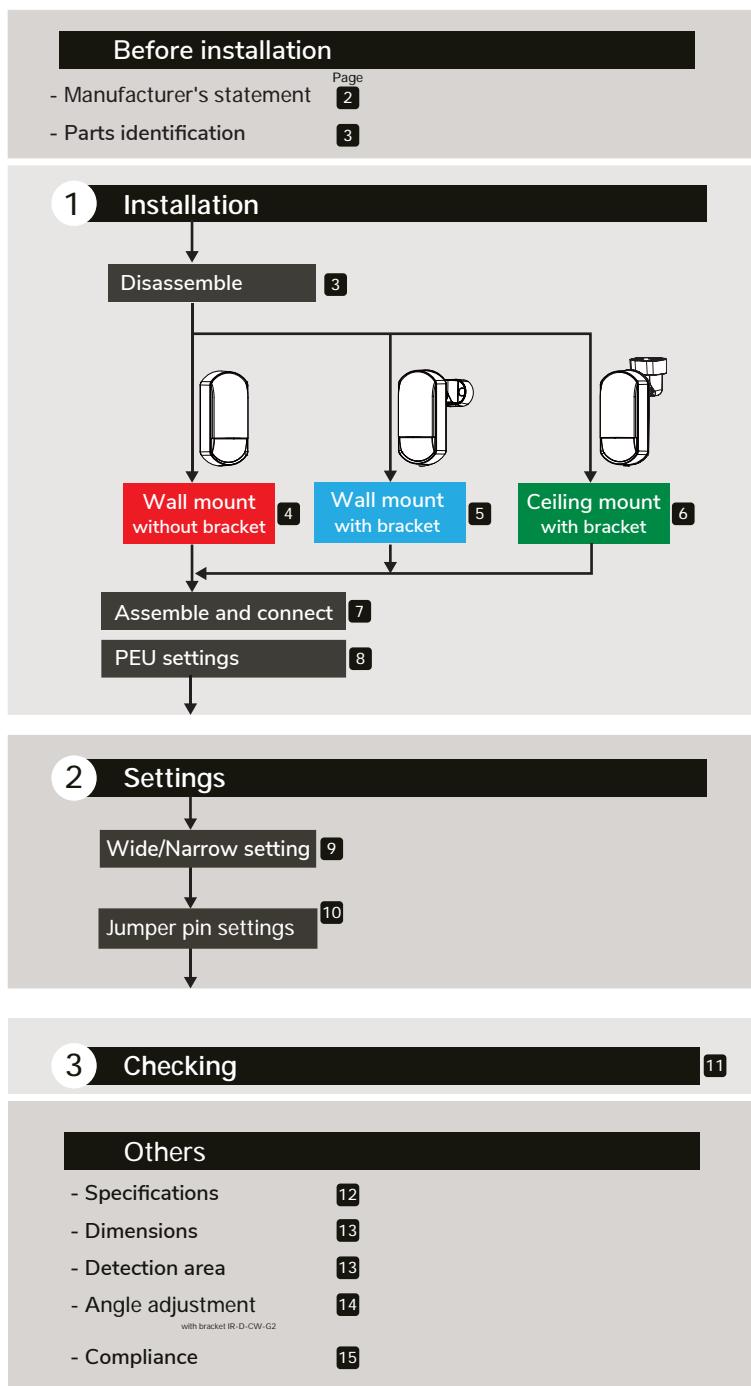


## PROFESSIONAL MODELS

	Wide/Narrow area Flip lens	PIR	Microwave
IR-D-P1E	✓	✓	
IR-D-P2E	✓	✓	✓ (10,525 GHz)
IR-D-P2E-UK *1	✓	✓	✓ (10,587 GHz)

\*1 Not certified to UL

## CONTENTS



# Before installation

## - Manufacturer's statement

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

### Symbol

Check mark indicates recommendation.



### Meaning

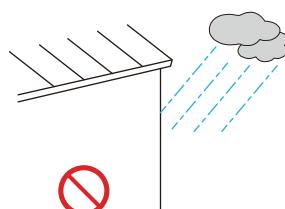
Nix sign indicates prohibition.

### NOTE

Special attention is required to the section of this symbol.



Destroy /Modify

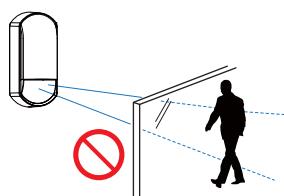


Outdoor installation

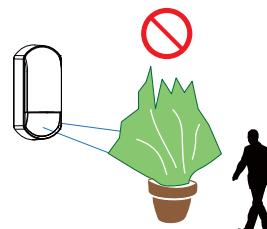


Wetting with water

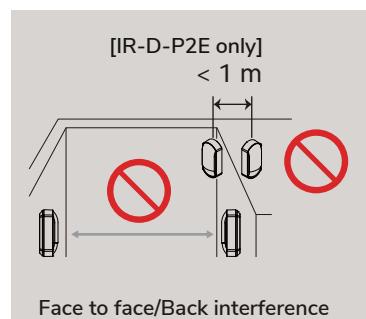
### Warning



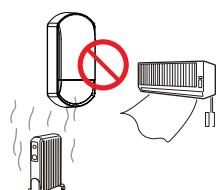
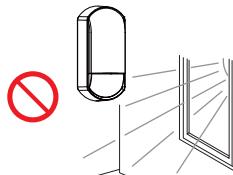
Detection through glass



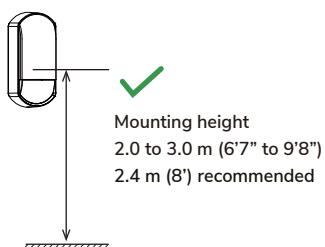
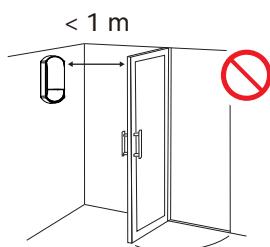
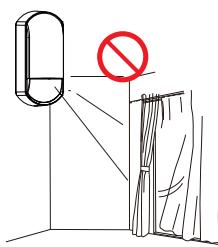
Partial/complete obscuration of the detection area.



[IR-D-P2E only] < 1 m



### Caution

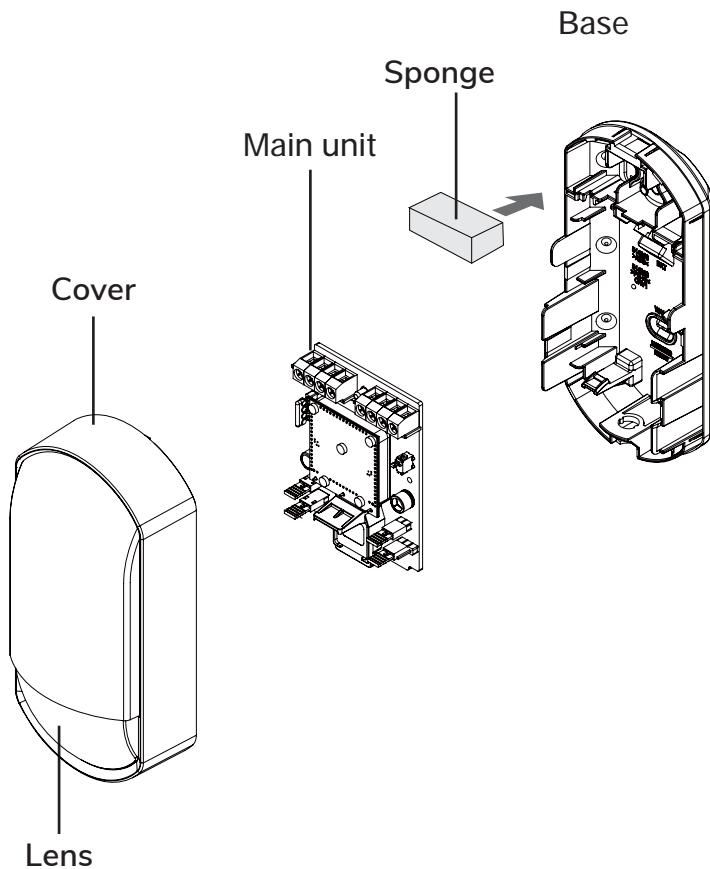


Mounting height  
2.0 to 3.0 m (6'7" to 9'8")  
2.4 m (8') recommended



Follow to the Regulations

## - Parts identifications



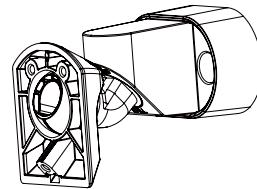
### Accessories

PEU \*\*  
Plug-in EOL Unit



### Option

IR-D-CW-G2 \*  
Bracket for wall/ceiling mount



Mounting screw x 2  
Joint screw x 3  
Fixing screw x 2

\* Not certified to EN 50131-2-2/4

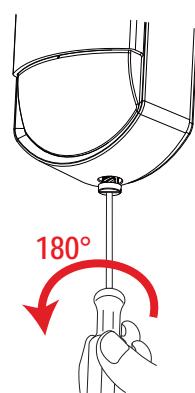
\*\* Not evaluated by UL

## 1

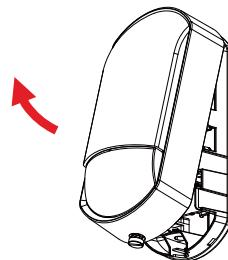
## Installation

### 1-1. Disassemble

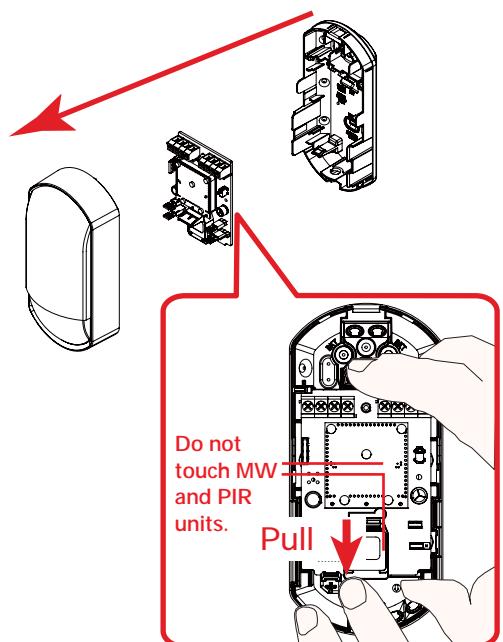
1 Unlock the cover



2 Open the cover

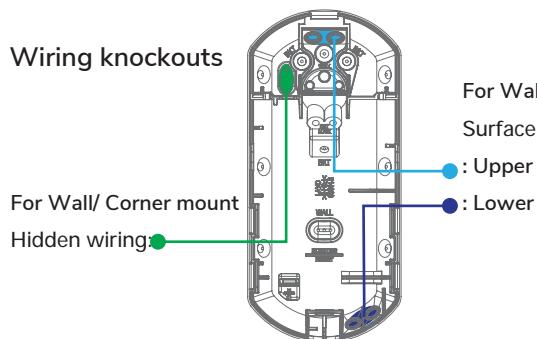


3 Remove the main unit

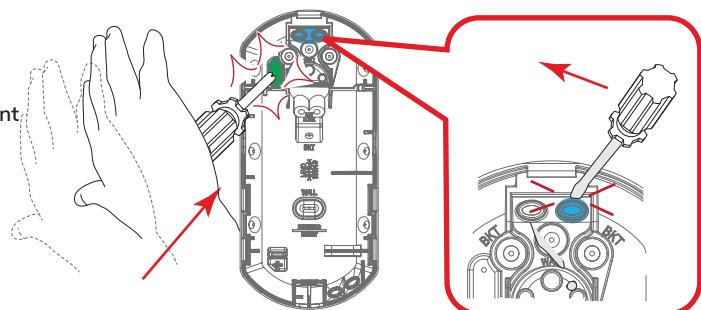


## 1-2. Wall mount without bracket

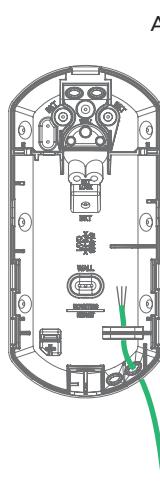
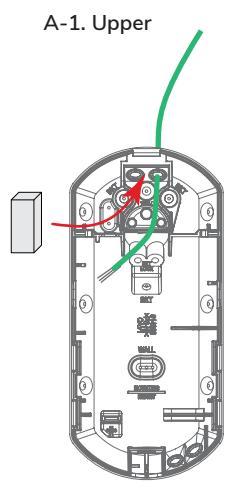
### 1 Wire through the base



### How to break the knockouts

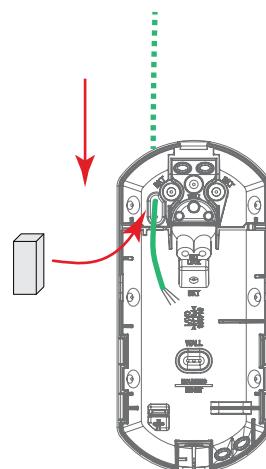


### A. Surface wiring



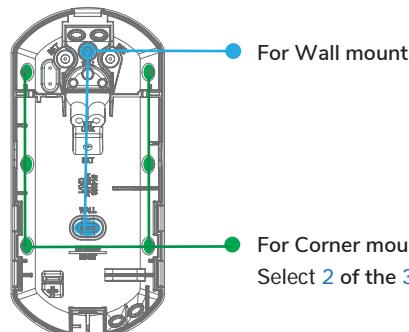
### A-2. Lower

### B. Hidden wiring

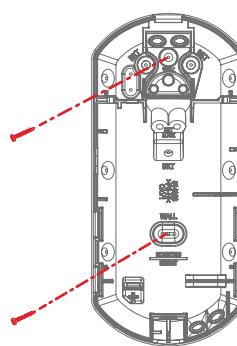
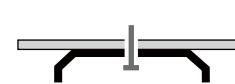


### 2 Mount the base

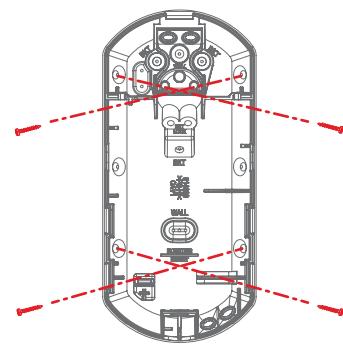
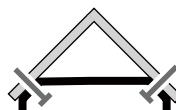
#### Mounting holes



#### a. Wall mount



#### b. Corner mount



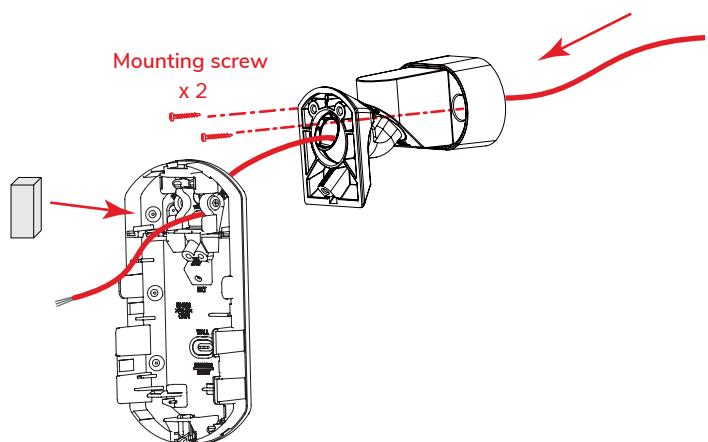
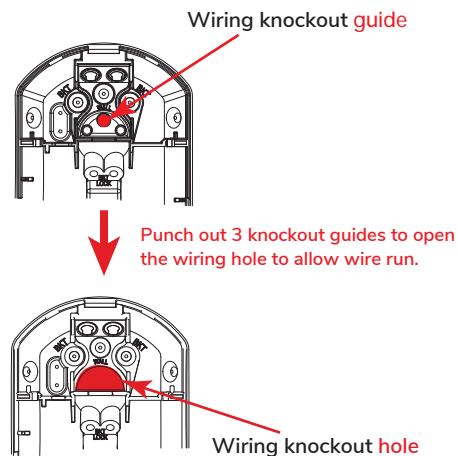
#### NOTE

Mounting screws are not included.

Φ 3 mm screws are recommended.

## 1-3. Wall mount with bracket

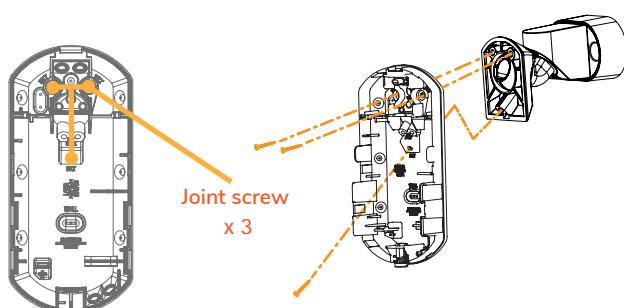
## 1 Wire and mount on the wall



## NOTE

See page 4 for how to break the knockouts.

## 2 Join the base on the bracket



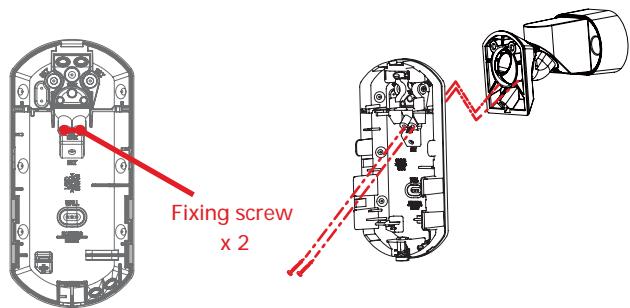
## NOTE

Adjust the detection direction while jointing.

Confirming with a walk test is required.

--> Refer to "3-1. Walk test"

## 3 Fix the base with the fixing screws (optional)



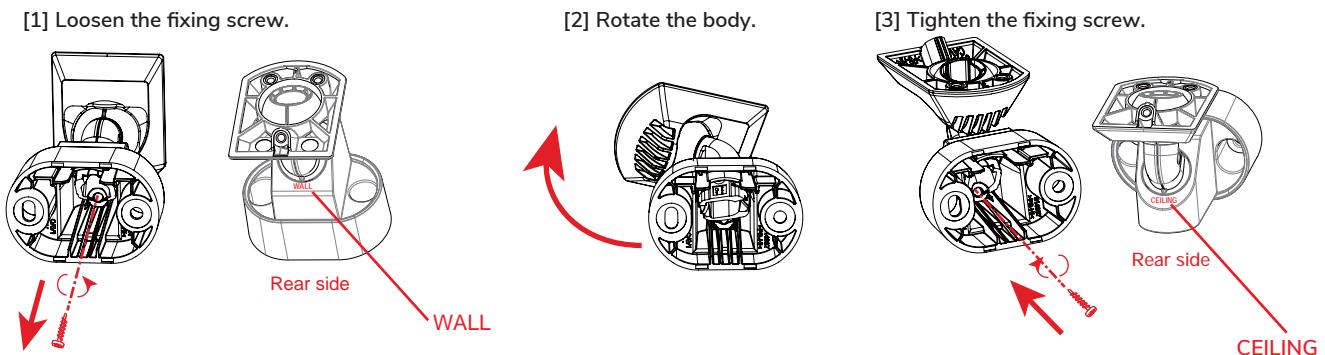
The bracket is basically jointed using 3 holes and **3 joint screws**. Also use **2 additional fixing screws** if stronger support is required.

## NOTE

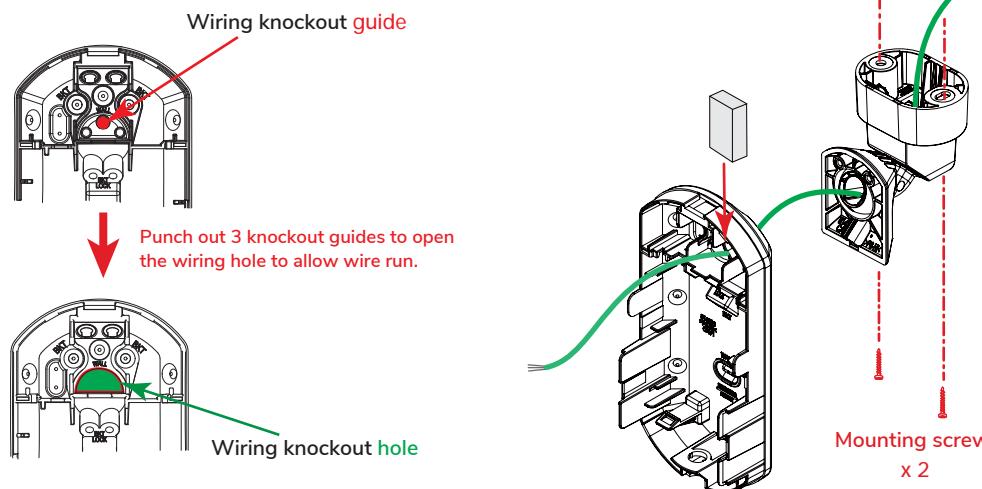
2 fixing screws are required for the Grade 2 and higher grade installation.

## 1-4. Ceiling mount with bracket

How to change the bracket to the ceiling mounting



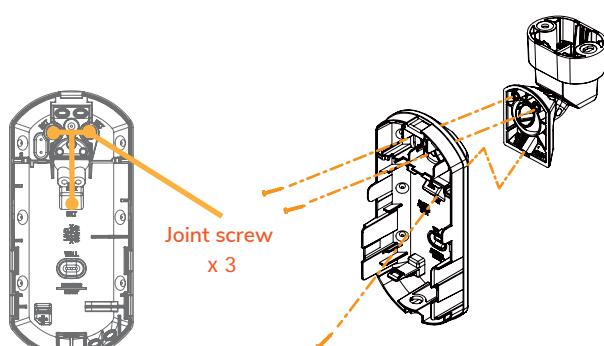
### 1 Wire and mount on the ceiling



NOTE

See page 4 for how to break the knockouts.

### 2 Join the base on the bracket



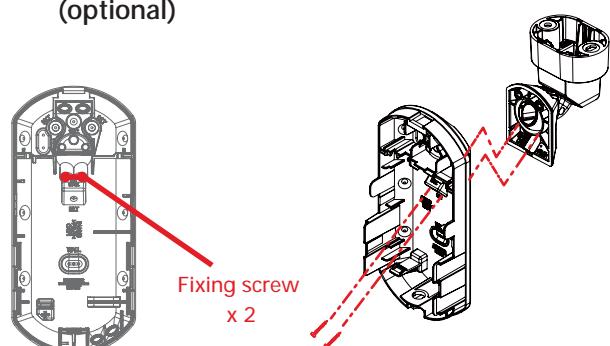
NOTE

Adjust the detection direction while jointing.

Confirming with a walk test is required.

--> Refer to "3-1. Walk test"

### 3 Fix the base with the fixing screws (optional)

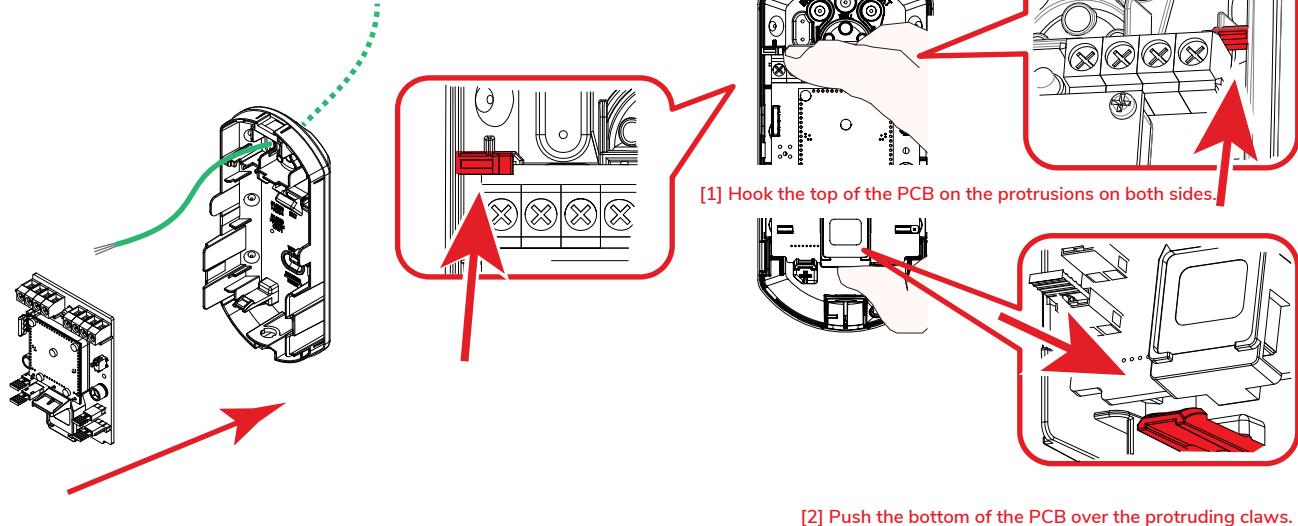


NOTE

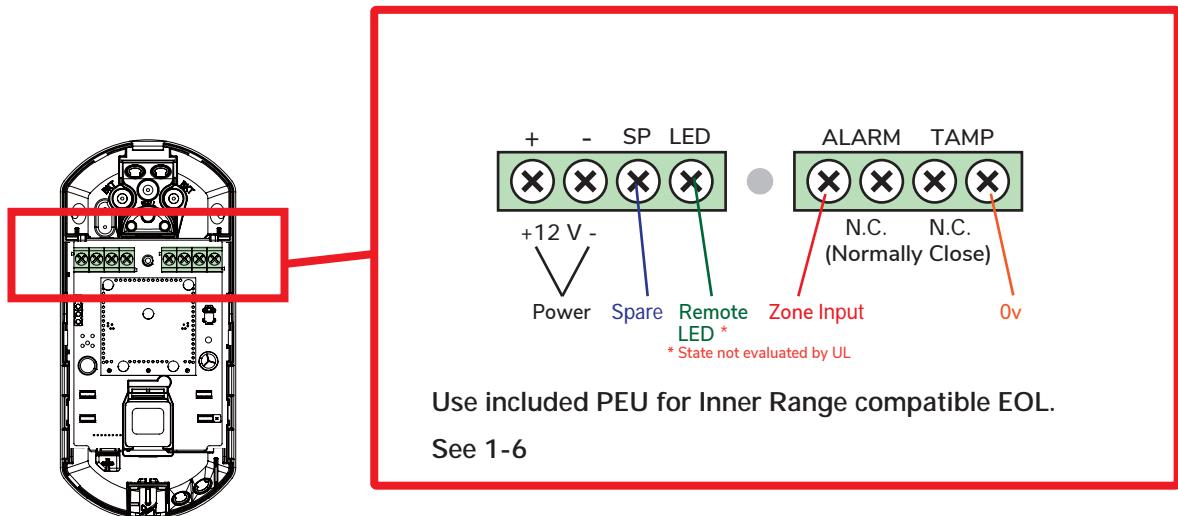
2 fixing screws are required for the Grade 2 and higher grade installation.

## 1-5. Assemble and connect

### 1 Attach the main unit to the base



### 2 Connect wires to the terminal



#### Power cable length

The power cable should be limited to the following length.

IR-D-P1E

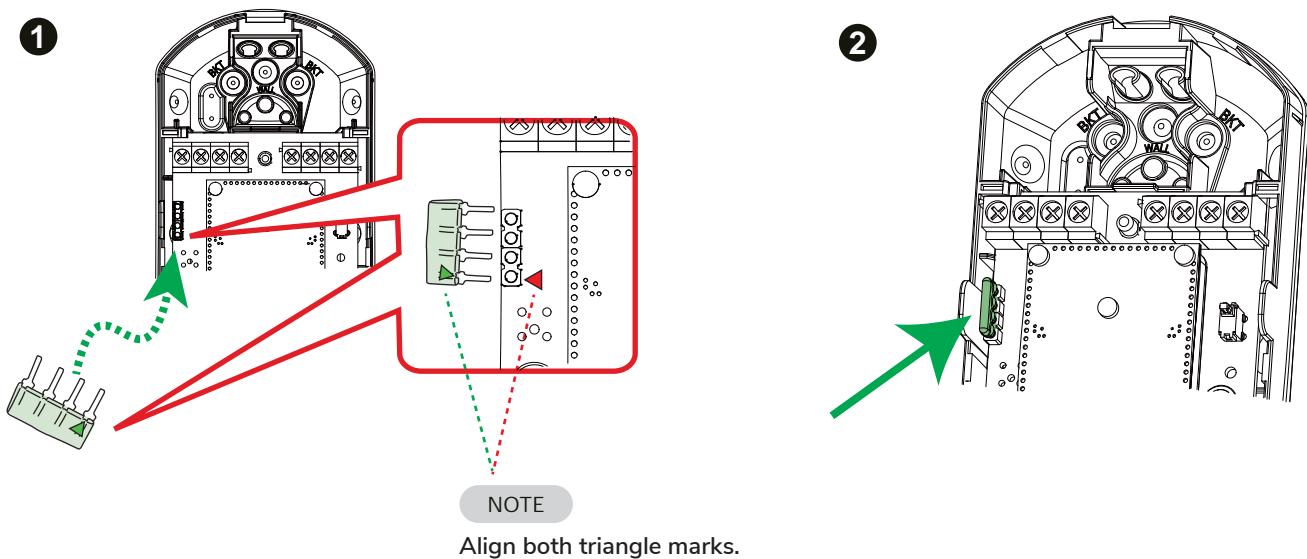
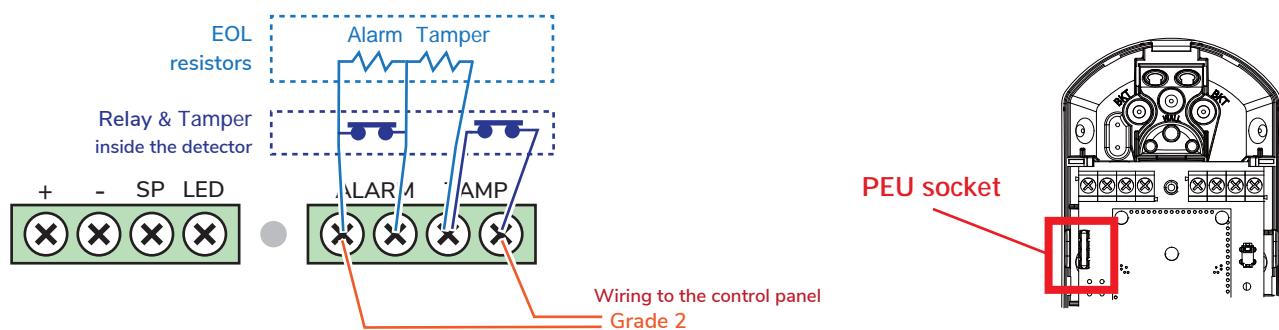
WIRE GAUGE	12 V DC	14 V DC
AWG 22 (0.33 mm <sup>2</sup> )	520 m (1,710 ft.)	1,130 m (3,718 ft.)
AWG 20 (0.52 mm <sup>2</sup> )	820 m (2,690 ft.)	1,790 m (5,870 ft.)
AWG 18 (0.83 mm <sup>2</sup> )	1,320 m (4,330 ft.)	2,850 m (9,350 ft.)

IR-D-P2E

WIRE GAUGE	12 V DC	14 V DC
AWG 22 (0.33 mm <sup>2</sup> )	410 m (1,350 ft.)	890 m (2,920 ft.)
AWG 20 (0.52 mm <sup>2</sup> )	650 m (2,130 ft.)	1,400 m (4,590 ft.)
AWG 18 (0.83 mm <sup>2</sup> )	1,030 m (3,380 ft.)	2,240 m (7,350 ft.)

## 1-6. PEU settings

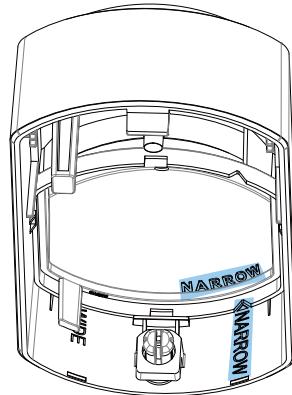
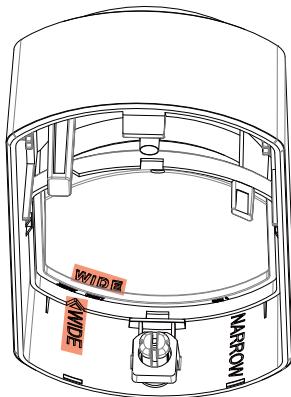
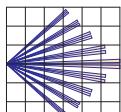
When using a PEU (Plug-in End of line Unit), no resistors need to be fitted. The PEU packaged with this detector is designed for Inner Range systems.



## 2-1. Wide/Narrow setting

1 Set the Flip lens to "Wide" or "Narrow"

→ Go to 2-2 on Page 9 to skip 2-1 when using the default "Wide" setting.

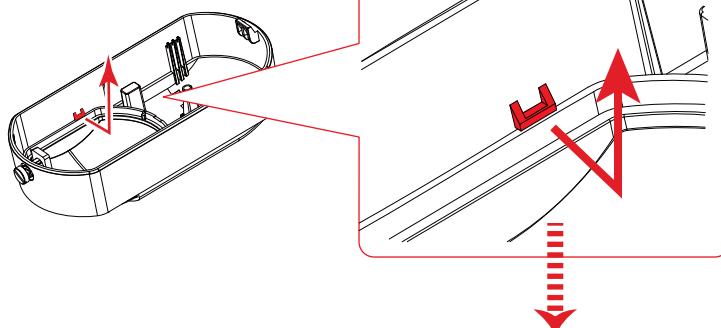


## NOTE

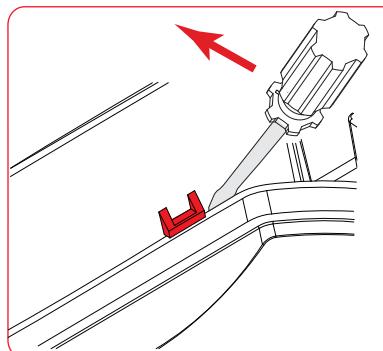
Install the lens so that the letters on the cover and on the lens match your intention.

## How to remove the lens

Get over the rib, then pull up the lens.

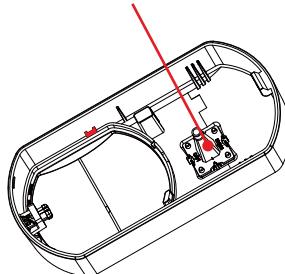


If it is difficult to get over, use a flathead screwdriver.



## Caution

- Be careful not to damage the light path of the LED.
- Also, be careful not to allow the light path to pinch the wiring when closing the cover.

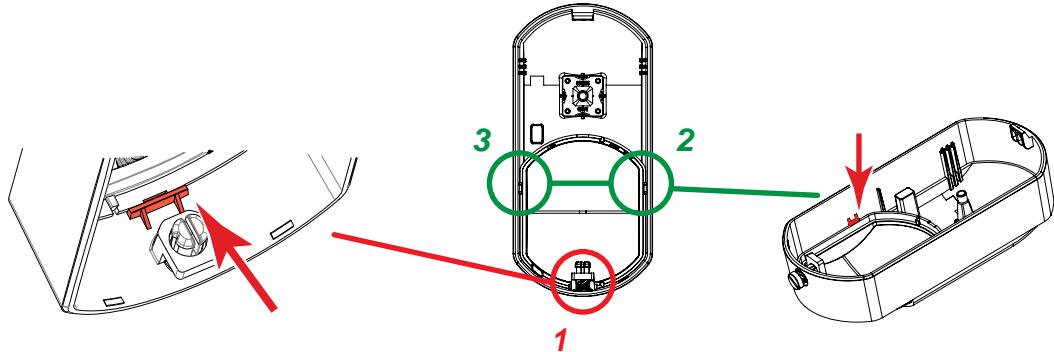


## Caution

- Be careful not to damage the lens with a screwdriver.

## How to install the lens

Push the lens firmly at 3 points in **numerical order**.



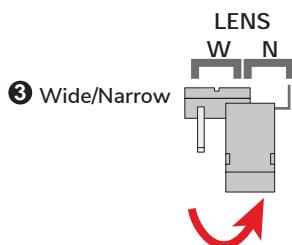
## 2 Set the jumper pin to "Wide" or "Narrow"

### ⚠ Caution

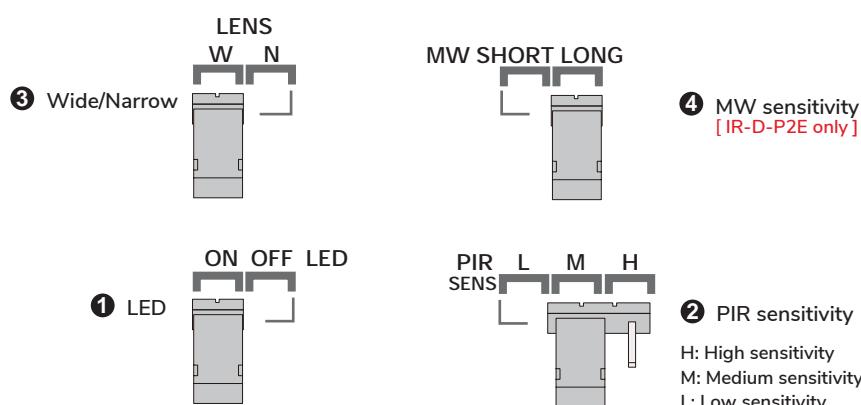
- The jumper pin must be "Narrow", when the lens is set to "Narrow".

### NOTE

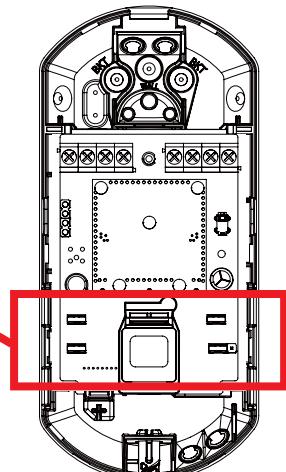
- Default setting is "Wide".
- When "Narrow" is selected, MW detection will be disabled.



## 2-2. Jumper pin settings

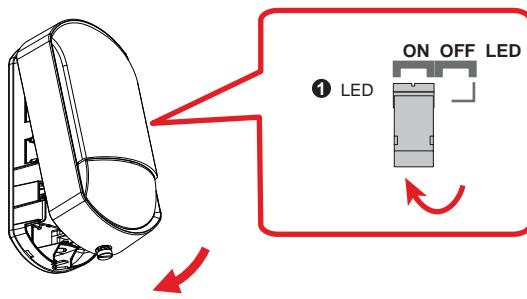


Illustrations show the **default** position.



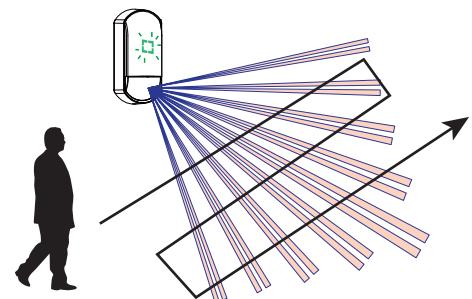
## 3-1. Walk test

1 Confirm that the LED pin is "ON", then close the cover.

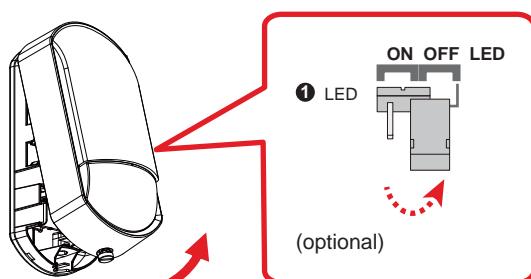


2

Walk in the detection area to check the detecting performance via LED indication.

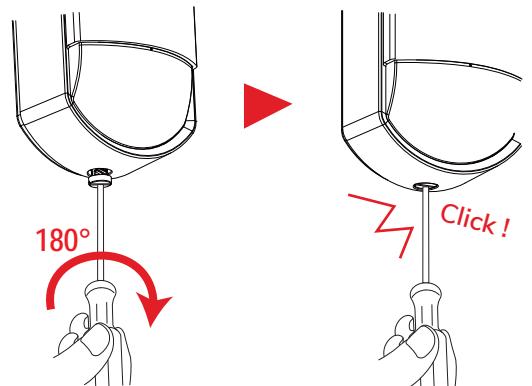


3 Return the LED pin to "OFF" after the walk test, if necessary. 4 Lock the cover



NOTE

Conduct a walk test at least once a year.



## Other

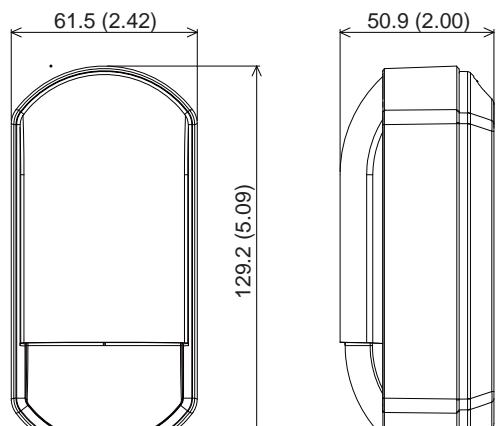
## - Specifications

Model	IR-D-P1E	IR-D-P2E / UK
<b>Installation</b>		
Detection method	Passive infrared	Passive infrared and Microwave
Coverage	Wide: 15 m (50 ft.) 85% Narrow: 24 m (80 ft.) 5° ( No MW detection at "Narrow" setting )	
Detection zones	Wide: 78 zones/ Narrow: 18 zones	
Mounting height	2.0 to 3.0 m (6'7" to 9'8")	
Alarm period	2.0 ± 0.5 s	
Warm-up period	Approx. 60 s (LED blinks)	
LED indicator	Switchable ON/OFF Green: [1] Warm-up [2] Alarm	
<b>Electrical</b>		
Power input	9.5 to 16 V DC <b>UL</b> * 8 mA (normal) 11 mA (max.) at 12 V DC	
Current draw	11 mA (max.) at 12 V DC	14 mA (max.) at 12 V DC
Relay output	Alarm	N.C. 24 V DC 0.1 A max. (Resistive load)
	Tamper	N.C. 24 V DC 0.1 A max. (Resistive load) (Open when the cover is removed.)
Remote LED	Terminal: open = OFF 0 V = ON	
<b>Environmental</b>		
Operation temperature	-20 to +50 (-4°F to +122°F)	-20 to +45 (-4°F to +113°F)
Temperature compensation	Digital (SMDA)	
Environmental humidity	95% max.	
RF interference	No alarm 10 V/m	
<b>Mechanical</b>		
Dimension	H: 129.2 x W: 61.5 x D: 50.9 mm (H: 5.09" x W: 2.42" x D: 2.00")	
Weight	Approx. 95 g (3.35 oz) (with Bracket : Approx. 125 g (4.41 oz))	Approx. 110 g (3.88 oz) (with Bracket : Approx. 140 g (4.94 oz))
Mounting	Wall, Corner (Indoor) (with Bracket : Wall, Corner, Ceiling)	

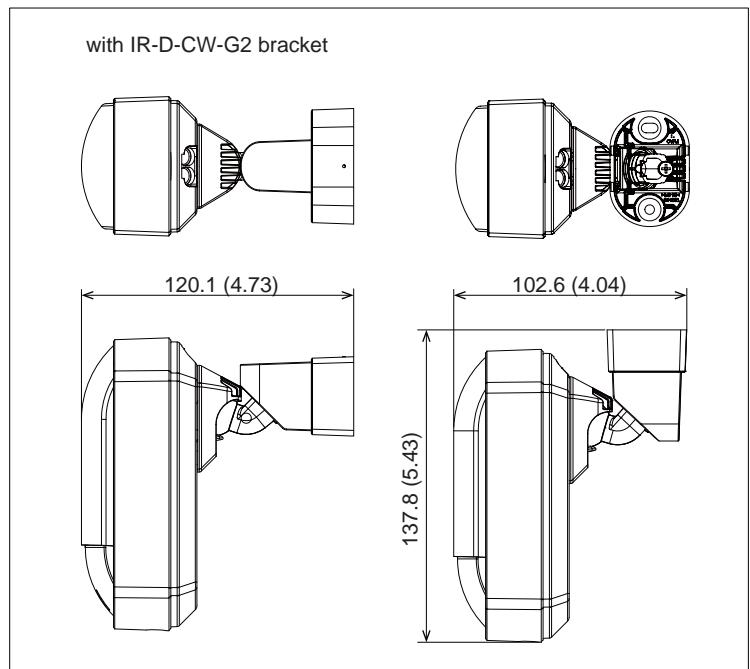
- Specifications and designs are subject to change without prior notice.
- These units are designed to detect an intruder and activate an alarm control panel. Being only a part of a complete system, we cannot accept responsibility for any damages or other consequences resulting from an intrusion.

**UL**\* Shall be powered via a UL listed burglar alarm class 2 output power limited power supply that has a min standby power of 4 hrs.

## - Dimensions

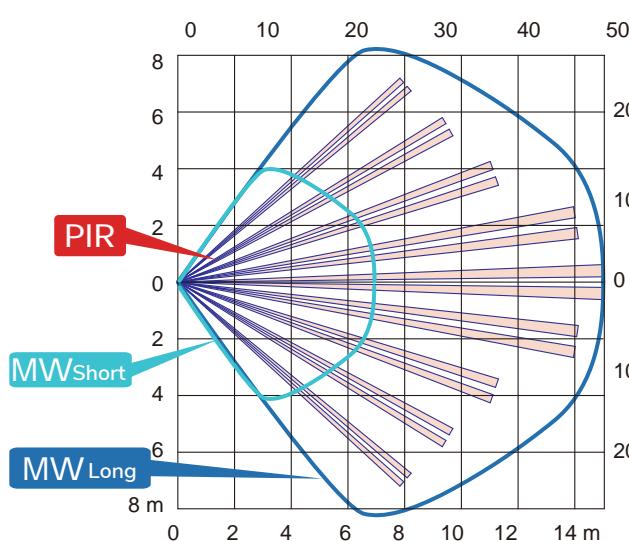


Unit: mm (inch)

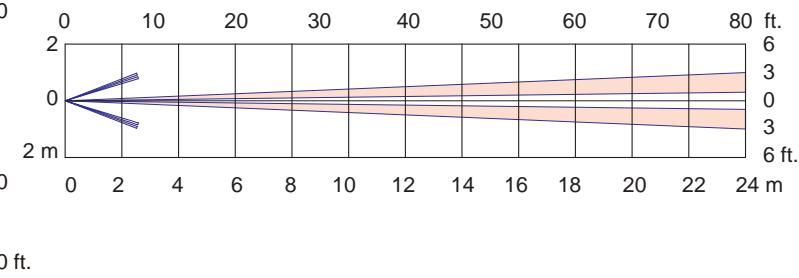


## - Detection area

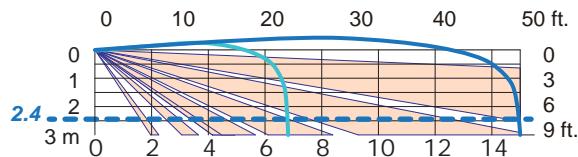
Wide - Top view -



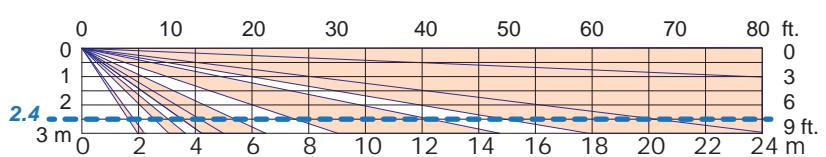
Narrow - Top view -



Wide - Side view -



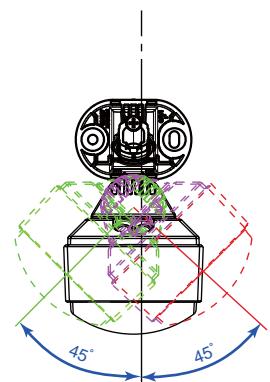
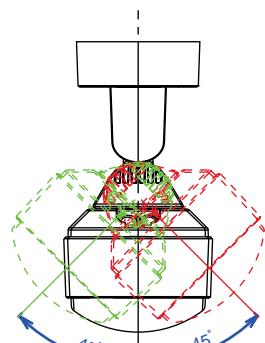
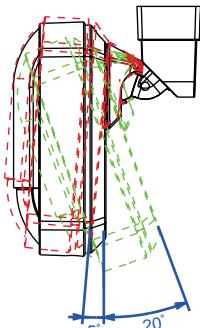
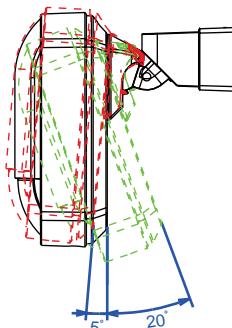
Narrow - Side view -



### NOTE

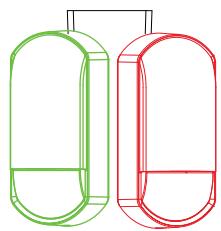
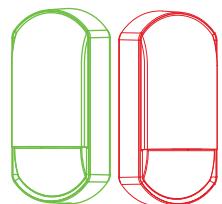
- The \* 2.4 m dotted line indicates the recommended mounting height.
- When "Narrow" is selected at the jumper pin, MW detection will be stopped.

## - Angle adjustment with bracket IR-D-CW-G2



### NOTE

\* If the detector cover does not reach the ceiling, it can be swung up to +5°.



## - Compliance

### RE Directive 2014/53/EU

- IR-D-P2E and IR-D-P2E-UK comply with RE Directive 2014/53/EU.
- Microwave emission Frequency and Power
  - IR-D-P2E: 10.525 GHz 15.78 mW e.i.r.p
  - IR-D-P2E-UK: 10.587 GHz 8.93 mW e.i.r.p
- The following list indicates the areas of intended use of the equipment and any known restrictions.  
For countries not included in this list, please consult the responsible Spectrum Management Agency.
  - 10.525 GHz: Belgium, Denmark, Finland, Germany, Greece, Italy, Luxembourg, The Netherlands, Spain, Sweden, Iceland, Norway, Switzerland
  - 10.587 GHz: Belgium, France, Germany, Ireland, Luxembourg, The Netherlands, United Kingdom
- IR-D-P2E and IR-D-P2E-UK also comply with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

### UK Radio Equipment Regulations 2017

- IR-D-P2E-UK also comply with UK radiation exposure limits set forth for an uncontrolled environment.  
This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.
- The radio equipment type IR-D-P2E-UK is in compliance with Radio Equipment Regulations 2017.

### FCC/IC

- 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.
- This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
  - (1) This device may not cause interference.
  - (2) This device must accept any interference, including interference that may cause undesired operation of the device
- The end user has to also be informed that any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

- EN 50131-1 Grades and Environmental Class; Security Grade 2, Environmental Class II  
Applied Standards; EN 50131-2-2 (IR-D-P1E), EN 50131-2-4 (IR-D-P2E and IR-D-P2E-UK )  
Tested and certified by Kiwa
- PD6662:2017



inner range

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