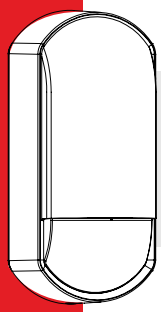


PROFESSIONAL MODELS

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

CONTENTS

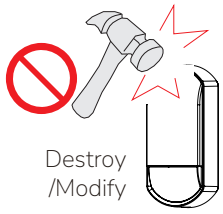
Before installation

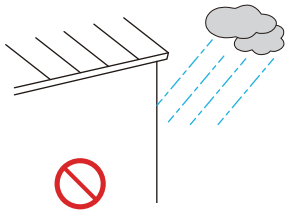
- Manufacturer's statement

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.

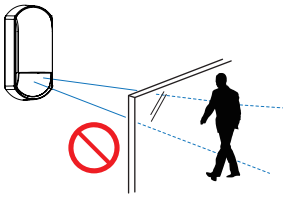
Symbol	Meaning
✓	Check mark indicates recommendation.
⊘	Nix sign indicates prohibition.
NOTE	Special attention is required to the section of this symbol.

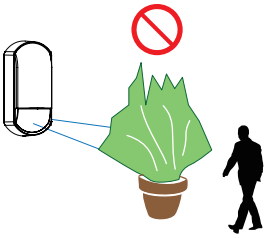
⚠ Warning


Destroy /Modify

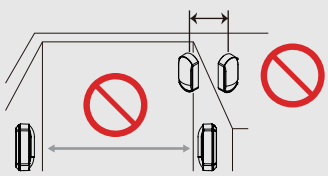

Outdoor ation

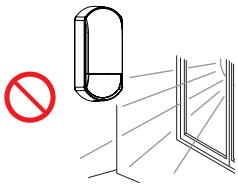

Wetting with water

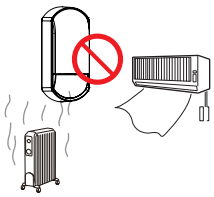

Detection through glass


Partial/complete obscuration **of the detection area.**

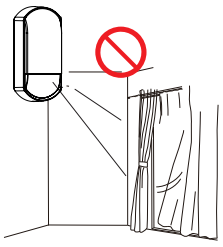
[IR-D-P2 only]
< 1 m

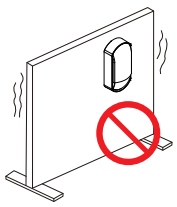

Face to face/Back interference

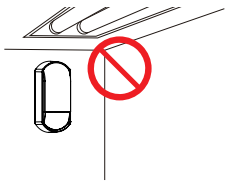




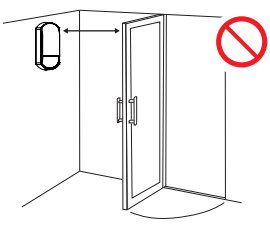
⚠ Caution

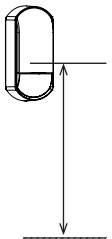






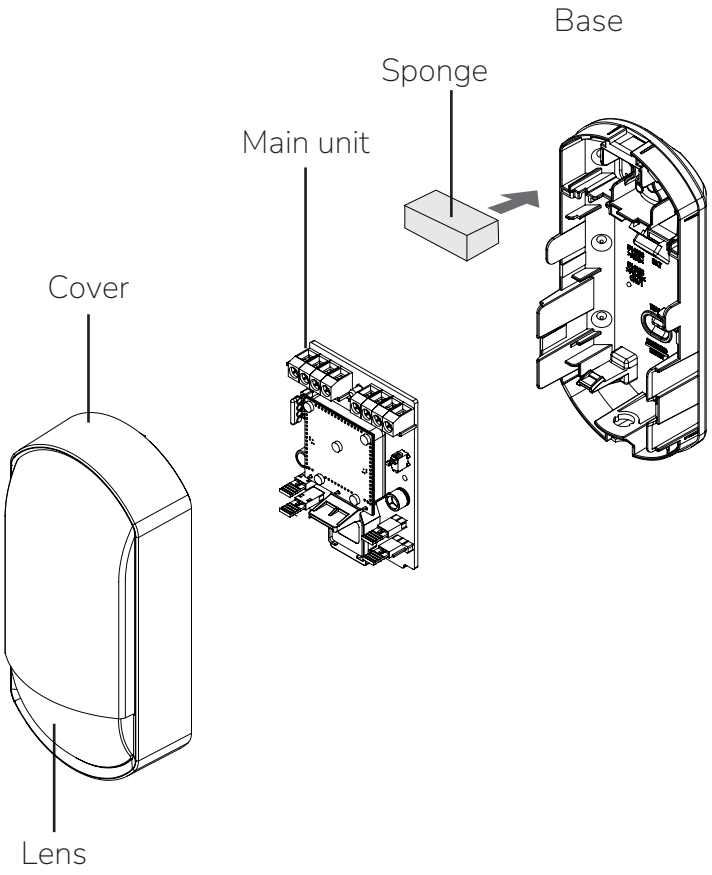
< 1 m




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

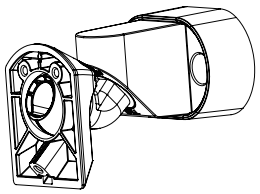

Follow to the Regulations

- Parts identifications



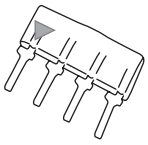
Option

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



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

PEU **
Plug-in EOL Unit

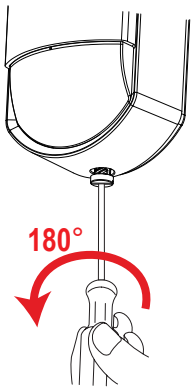


* Not certified to EN 50131-2-2:2017 / EN 50131-2-4:2020 and INCERT.
** Not evaluated by UL

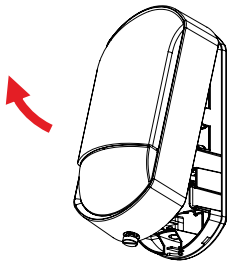
1 Installation

1-1. Disassemble

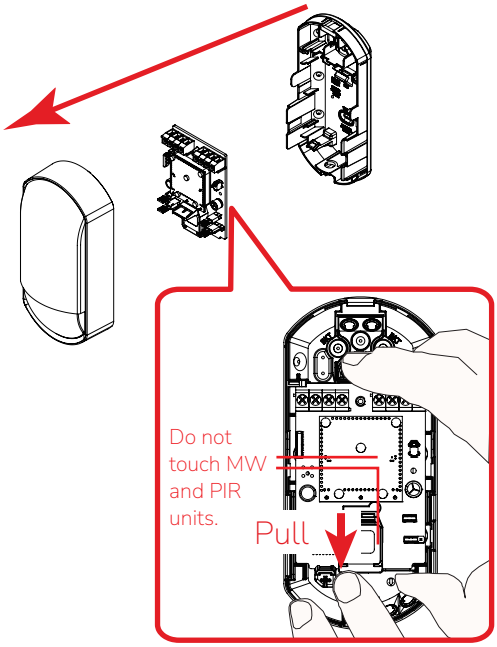
1 Unlock the cover



2 Open the cover



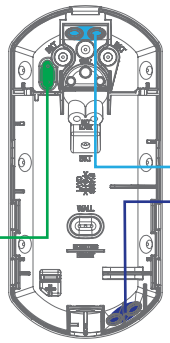
3 Remove the main unit



1-2. Wall mount without bracket

1 Wire through the base

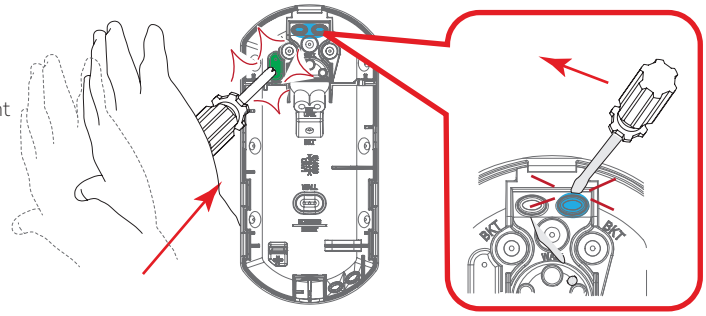
Wiring knockouts



For Wall/ Corner mount
Hidden wiring:

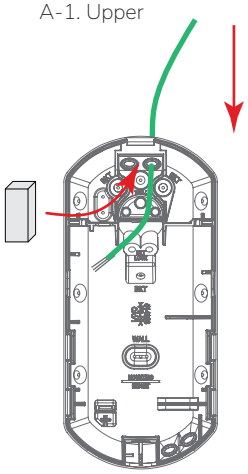
For Wall/ Corner mount
Surface wiring
: Upper
: Lower

How to break the knockouts

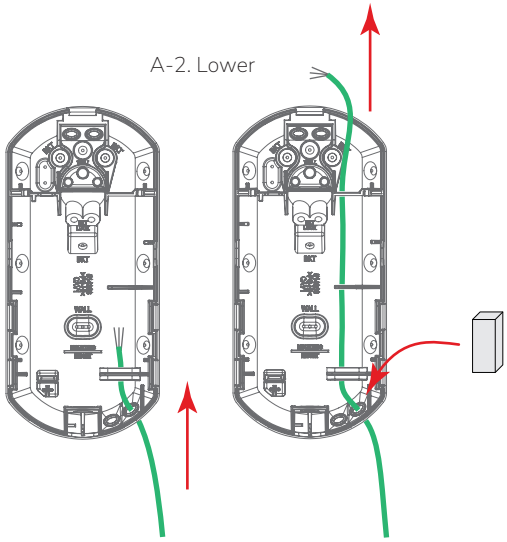


A. Surface wiring

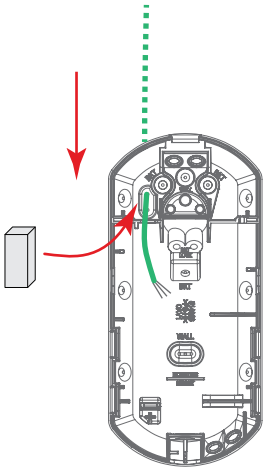
A-1. Upper



A-2. Lower

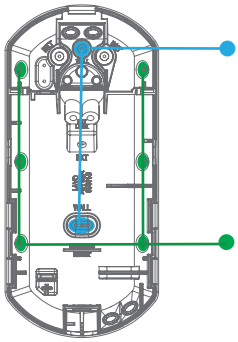


B. Hidden wiring



2 Mount the base

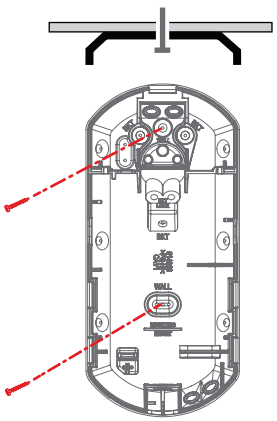
Mounting holes



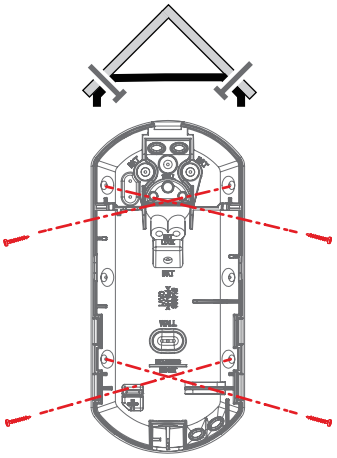
For Wall mount

For Corner mount
Select 2 of the 3 on each side.

a. Wall mount



b. Corner mount



NOTE

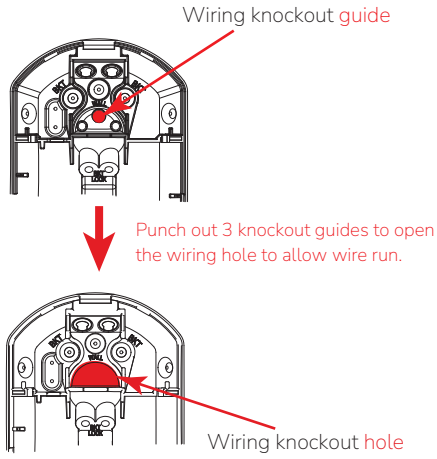
Mounting screws are not included.

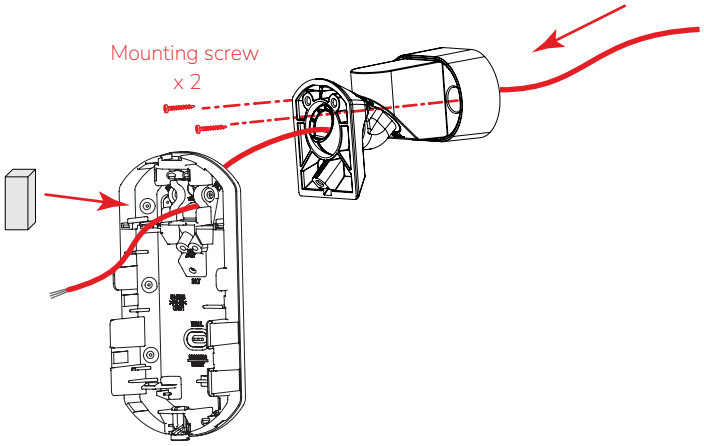
Φ 3 mm screws are recommended.

Go to Page 7

1-3. Wall mount with bracket

1 Wire and mount on the wall

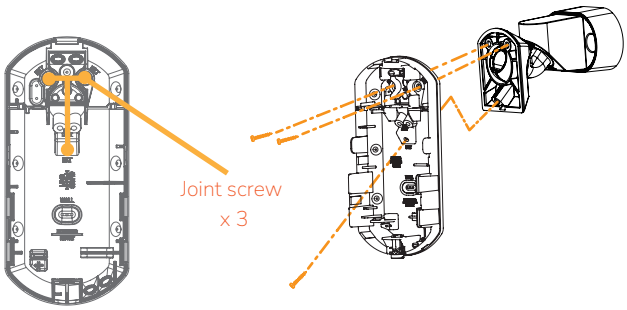




NOTE

See page 4 for how to break the knockouts.

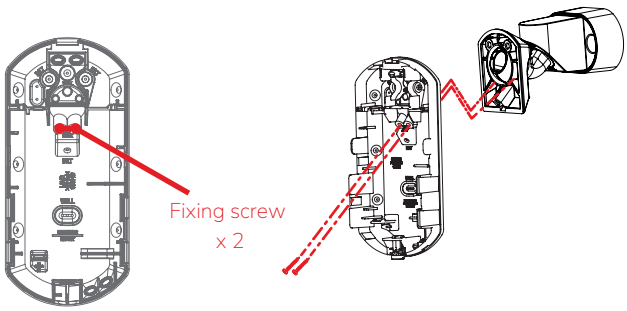
2 Join the base on the bracket



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

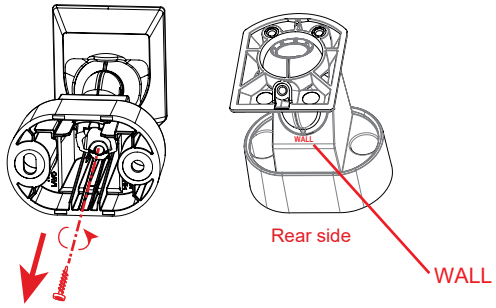
2 fixing screws are required for the Grade 2 and higher grade installation.

Go to Page 7

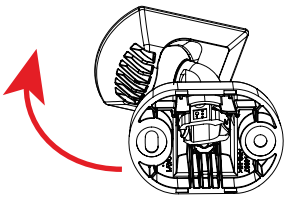
1-4. Ceiling mount with bracket

How to change the bracket to the ceiling mounting

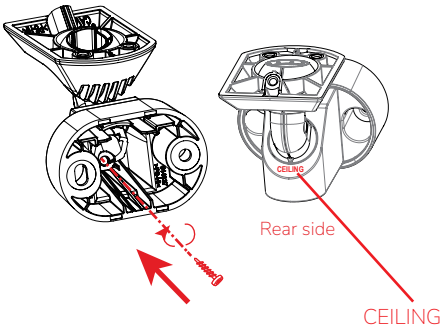
[1] Loosen the fixing screw.



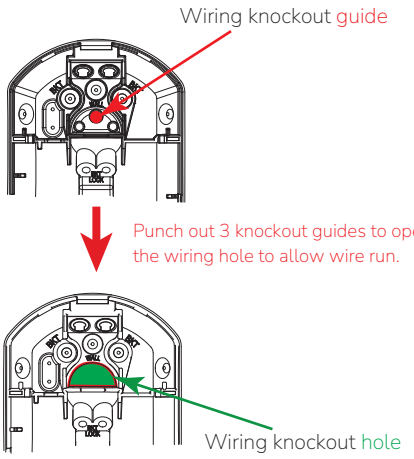
[2] Rotate the body.

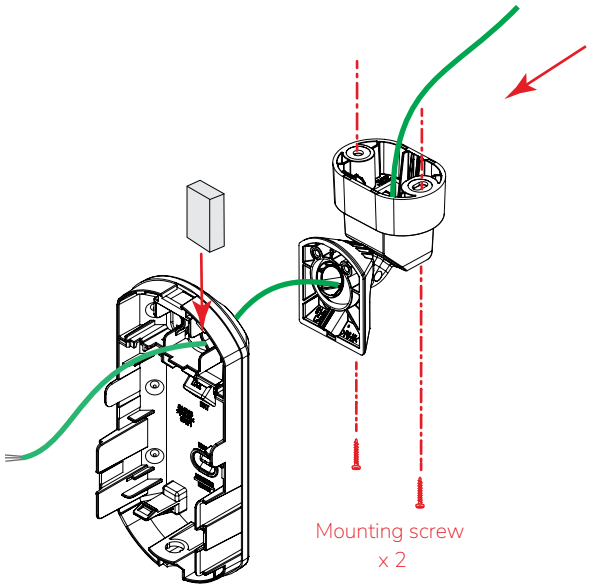


[3] Tighten the fixing screw.



1 Wire and mount on the ceiling

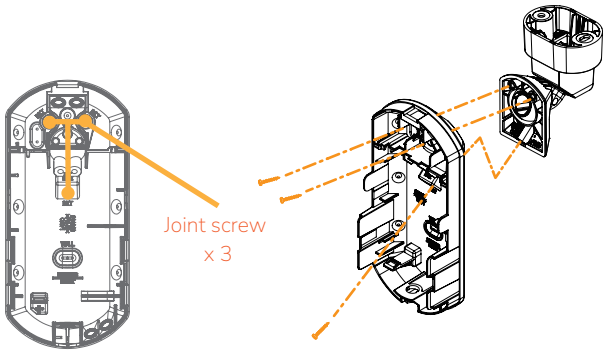




NOTE

See page 4 for how to break the knockouts.

2 Join the base on the bracket



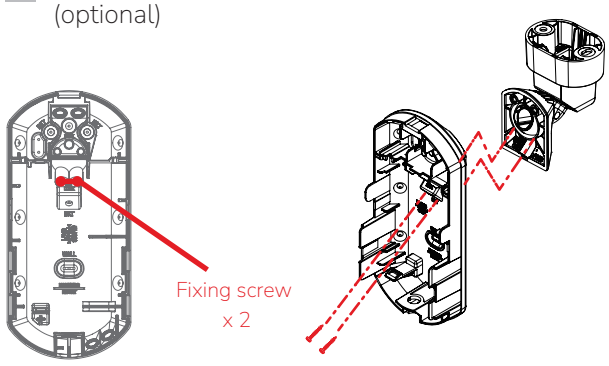
NOTE

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)



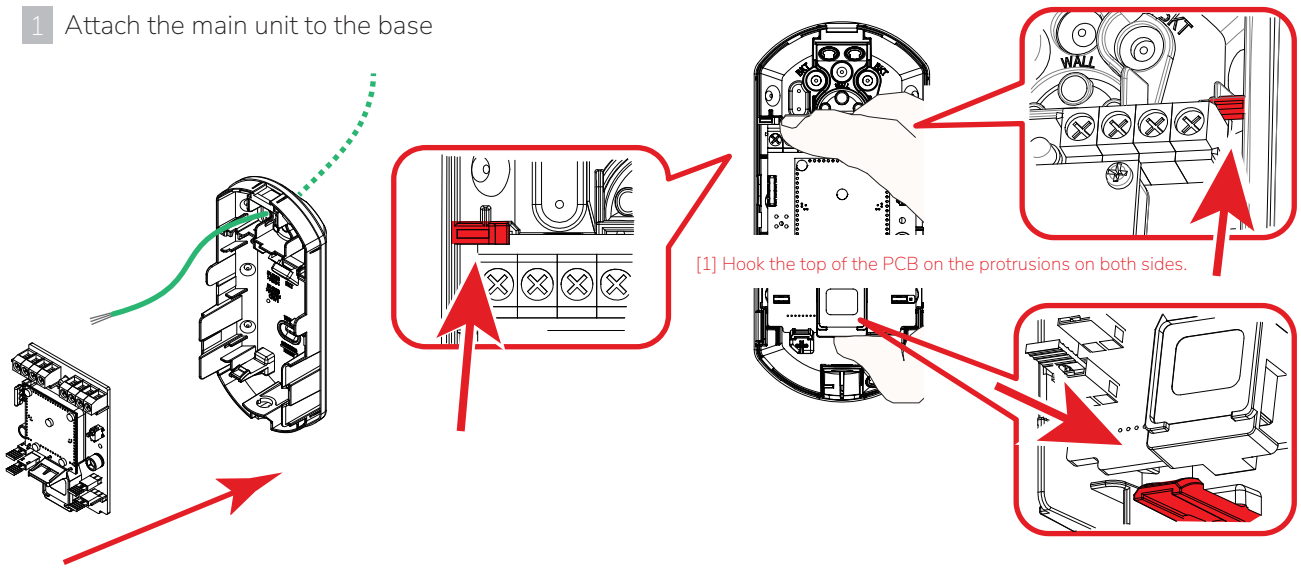
The bracket is basically jointed using 3 holes and 3 joint screws.
Also use 2 additional fixing screws if stronger support is required.

NOTE

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

1-5. Assemble and connect

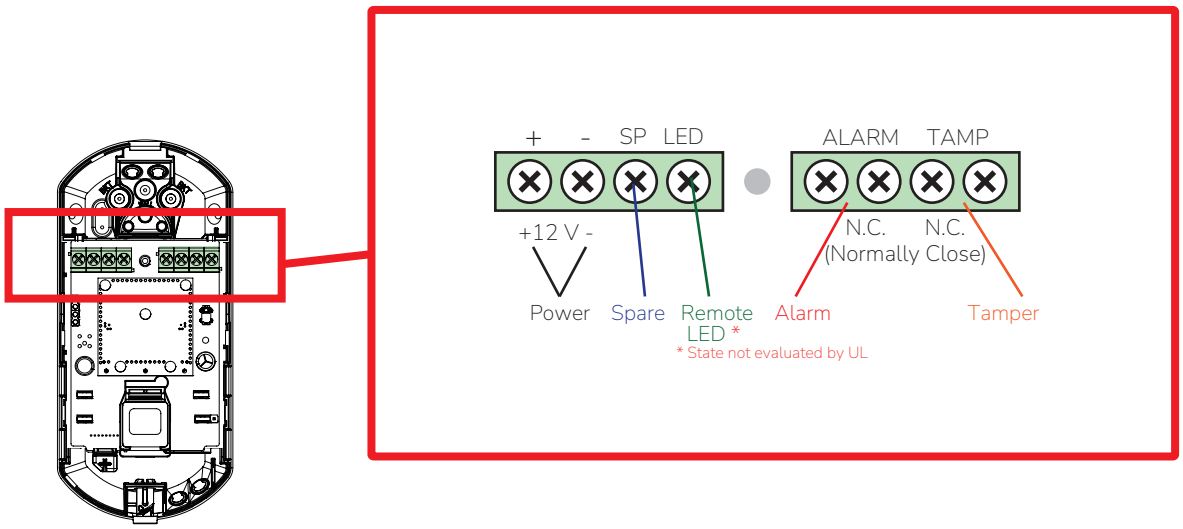
1 Attach the main unit to the base



[1] Hook the top of the PCB on the protrusions on both sides.

[2] Push the bottom of the PCB over the protruding claws.

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 mm²)	520 m (1,710 ft.)	1,130 m (3, 718 ft.)
AWG 20 (0.52 mm²)	820 m (2,690 ft.)	1,790 m (5,870 ft.)
AWG 18 (0.83 mm²)	1,320 m (4,330 ft.)	2,850 m (9,350 ft.)

IR-D-P2E

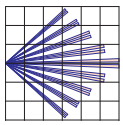
WIRE GAUGE	12 V DC	14 V DC
AWG 22 (0.33 mm²)	410 m (1,350 ft.)	890 m (2,920 ft.)
AWG 20 (0.52 mm²)	650 m (2,130 ft.)	1,400 m (4,590 ft.)
AWG 18 (0.83 mm²)	1,030 m (3,380 ft.)	2,240 m (7,350 ft.)

2 Settings

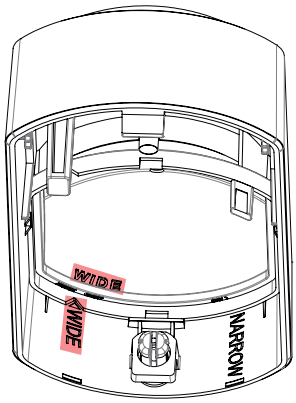
2-1. Wide/Narrow setting

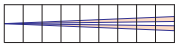
1 Set the Flip lens to “Wide" or “Narrow"

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

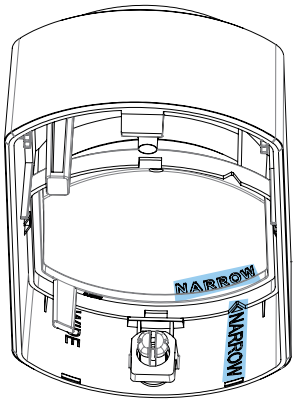


WIDE
Default





NARROW

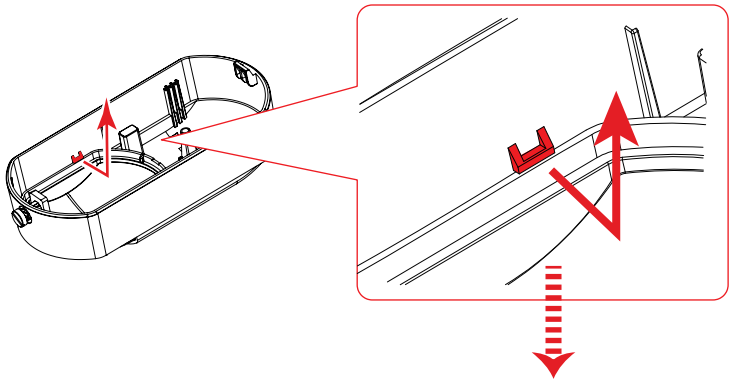


NOTE

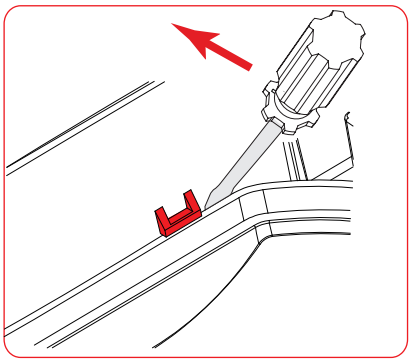
Install the lens so that the letters on the cover and on the lens match your intention.

How to remove the lens

Get over the rib, then pull up the lens.

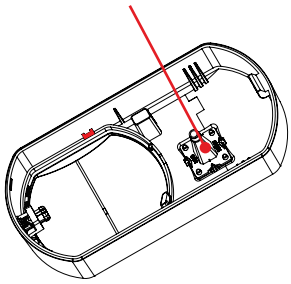


If it is difficult to get over, use a flathead screwdriver.



⚠ 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.

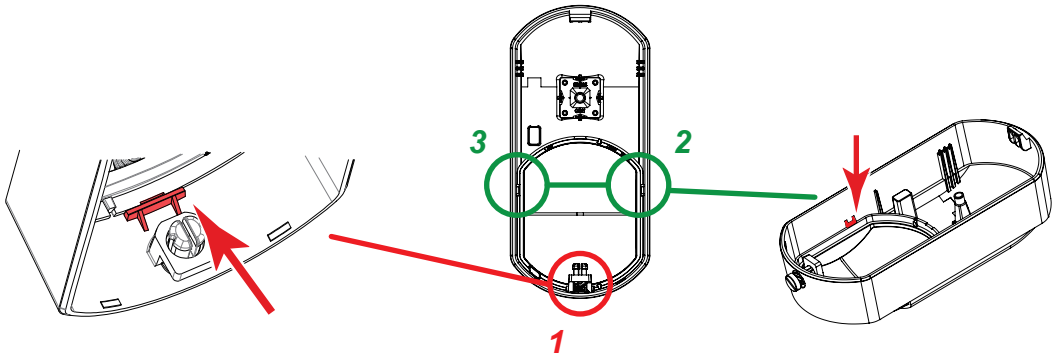


⚠ Caution

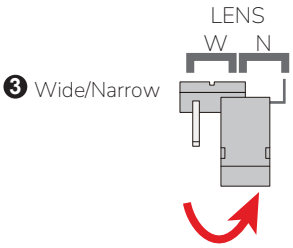
- Be careful not to damage the lens with a screwdriver.

How to install the lens

Push the lens firmly at 3 points in numerical order.



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



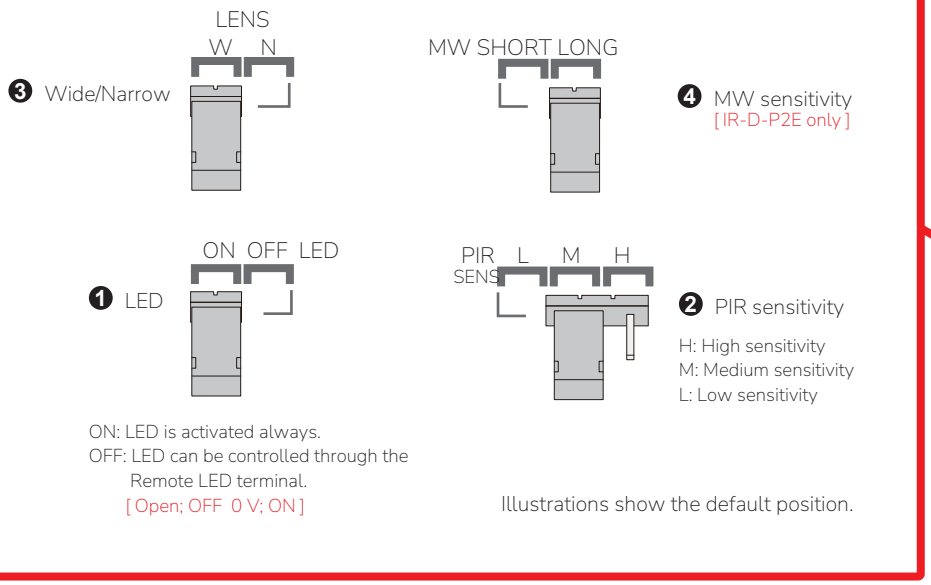
⚠ Caution

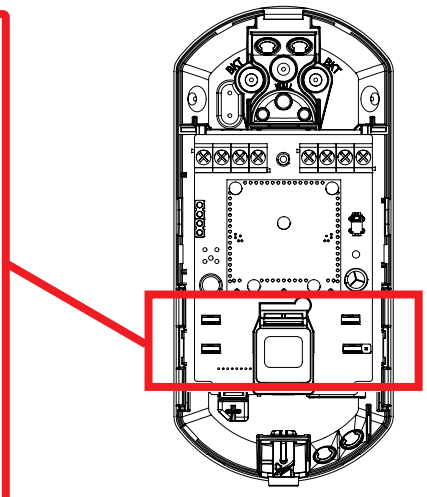
- The jumper pin must be “Narrow", when the lens is set to “Narrow".

NOTE

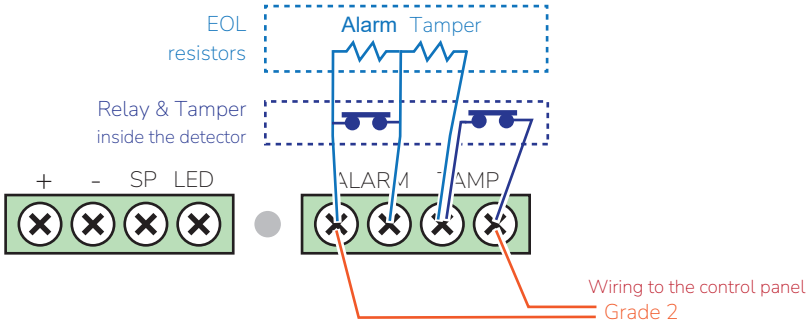
- Default setting is “Wide".
- When “Narrow" is selected, MW detection will be disabled.

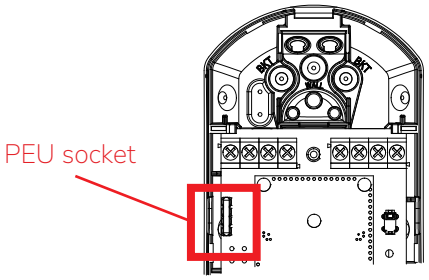
2-2. Jumper pin settings

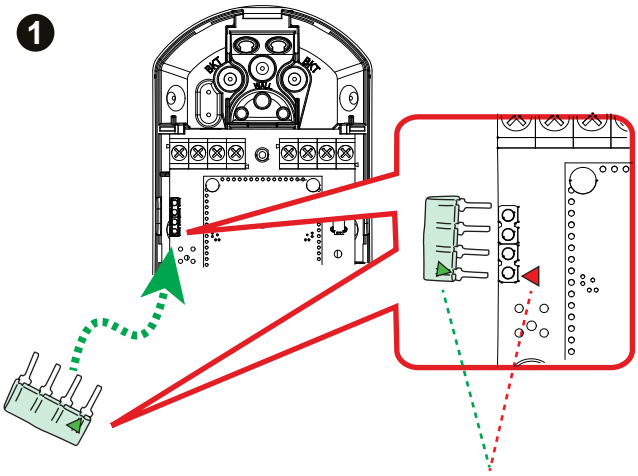


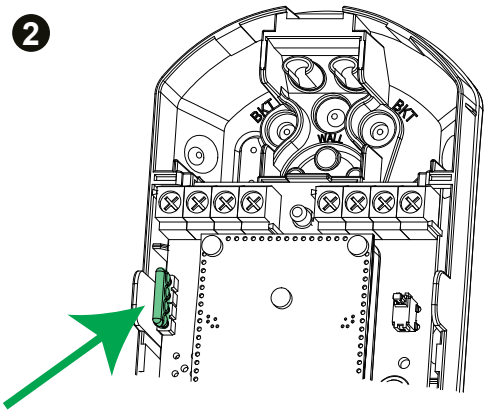


2-3. PEU settings







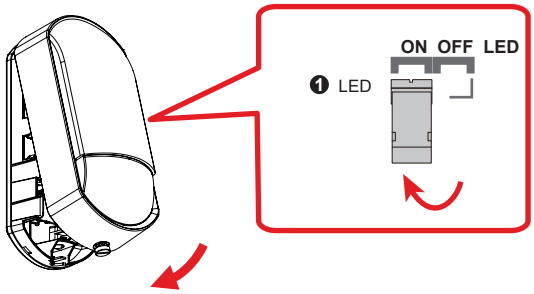


NOTE

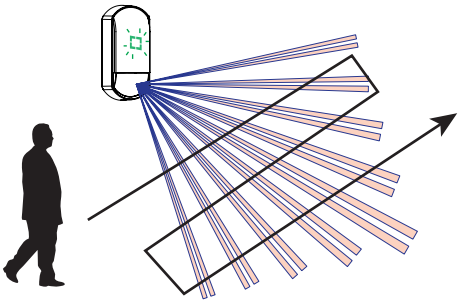
Align both triangle marks.

3-1. Walk test

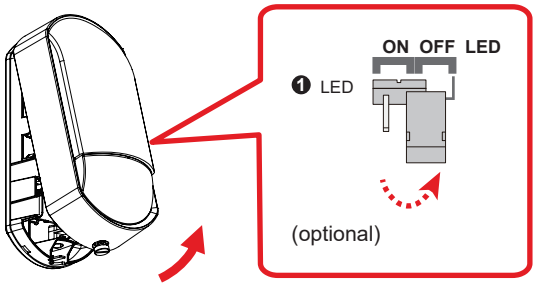
1 Confirm that the LED pin is “ON" , then close the cover.



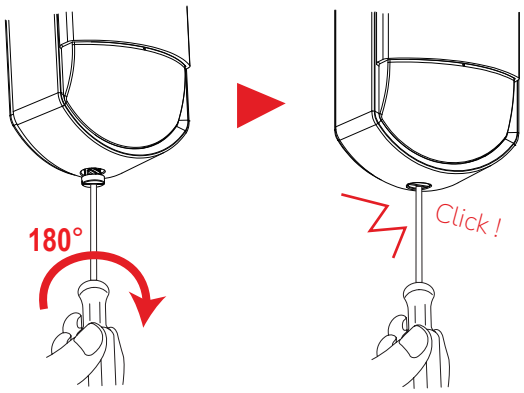
2 Walk in the detection area to check the detecting performance via LED indication.



3 Return the LED pin to “OFF" after the walk test, if necessary.



4 Lock the cover



NOTE

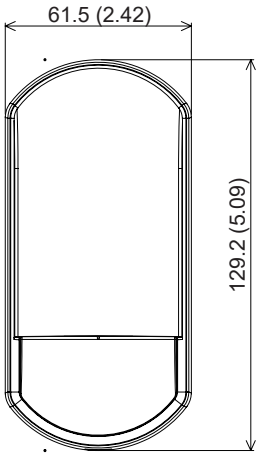
Conduct a walk test at least once a year.

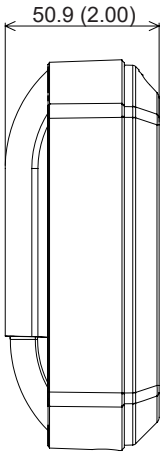
- Specifications

Model		IR-D-P1E	IR-D-P2E / UK
Installation			
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	
Electrical			
Power input		9.5 to 16 V DC	
Current draw		8 mA (normal) 11 mA (max.) at 12 V DC	11 mA (normal) 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	
Environmental			
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	
Mechanical			
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)	

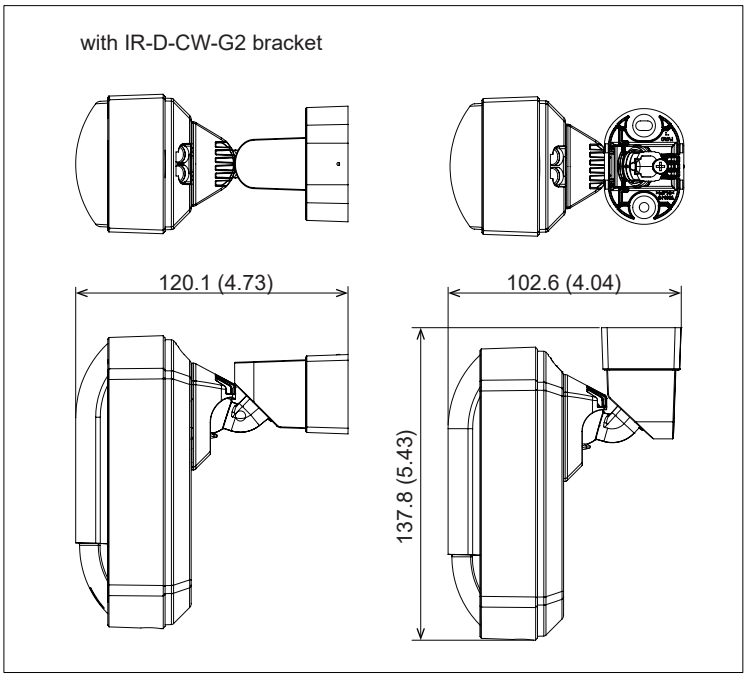
- Specifications and designs are subject to change without prior notice.
- These units are designed to detect an intruder and activate an alarm control panel. Being only a part of a complete system, we cannot accept responsibility for any damages or other consequences resulting from an intrusion.

- Dimensions



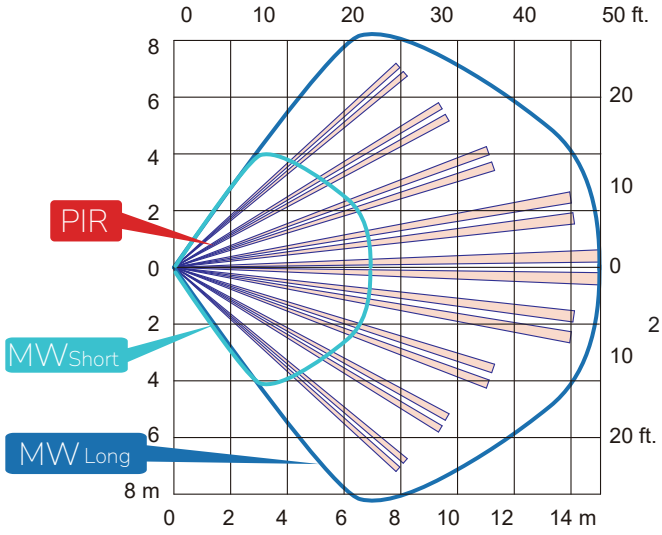


Unit: mm (inch)

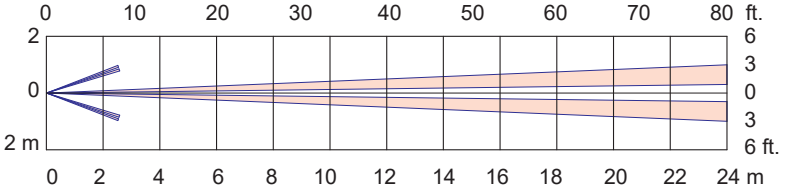


- Detection area

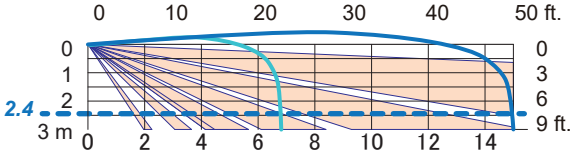
Wide - Top view -



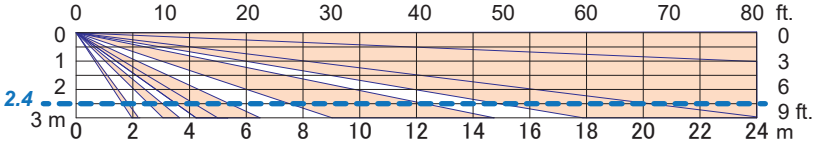
Narrow - Top view -



Wide - Side view -



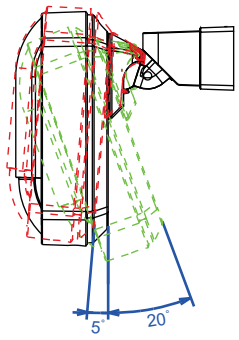
Narrow - Side view -

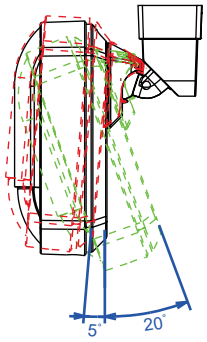


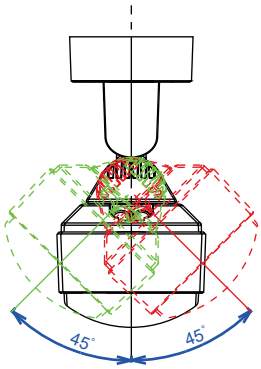
NOTE

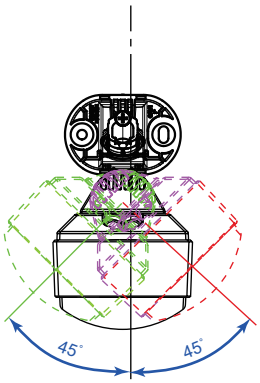
- The * 2.4 m dotted line indicates the recommended mounting height.
- When "Narrow" is selected at the jumper pin, MW detection will be stopped.

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



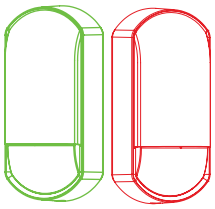


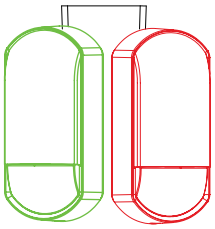




NOTE

* 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
  9.425 GHz: Austria, Czechia, Estonia, Germany, Slovakia, Turkey, Russia
- 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

- 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 Telefication
- larm klass 2, miljö klass II, SSF 1014
- PD6662:2017

inner range

INNERRANGE.COM

Global Headquarters
Inner Range Australia
1 Millennium Court, Knoxfield, Victoria, 3180, Australia

Inner Range United States
2301 Patriot Blvd
Glenview, IL 60026

Inner Range United Kingdom
Units 10-11 Theal Lakes Business Park
Moulden Way, Reading, Berkshire RG74GB

Inner Range Middle East
Plot No S20141, PO Box 16854
Jebel Ali Free Zone - South, Dubai, UAE

Inner Range Canada
200 Foster Crescent Mississauga,
Ontario, Canada L5R-3Y5

Inner Range India
National Sales Office 95 Brigade Road,
Bangalore, 560 025 India