Installation Manual

EN



Microwave & Passive Infrared Dual-Technology Intrusion Detector (HJ-DT12)

Indoor Passive Infrared Intrusion Detector (HJ-ST12)

HJ Series (Indoor Use)

	Wide / Narrow Detection Area Flip Lens	Passive Infrared (PIR)	Microwave (MW)
HJ-ST12	✓	✓	
HJ-DT12	✓	✓	√ (10.525 GHz)

<< Contents >>

Installation Preparation Pages

- Manufacturer's Statement 2
- Parts Identification 3

1 Installation

- Disassembly 3
- Wall Mounting (Without Bracket) 4
- Wall Mounting (With Bracket) 5
- Ceiling Mounting (With Bracket) 6
- Assembly & Wiring 7

2 Settings

- Jumper Settings 8
- Wide/Narrow Detection Area Settings 8

3 Inspection 10

Other Information

- Specifications 11
- Dimensions 12
- Detection Area 12
- Angle Adjustment (Using the CW-G2 Bracket) 13
- Compliance 13

1

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Website: www.ascendo.com.sg

- Manufacturer's Statement

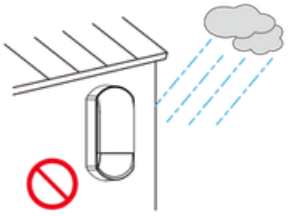
Symbol	Meaning
WARNING	Failure to follow the instructions in this manual or improper operation may result in death or serious injury.
CAUTION	Failure to follow the instructions in this manual or improper operation may result in personal injury and/or property damage.

Symbol	Meaning
✓	A check mark (✓) indicates an action that is permitted.
⊘	A prohibition symbol (×) indicates an action that is prohibited.
NOTE	This symbol indicates items that require special attention.

WARNING



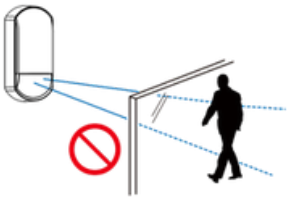
Do not disassemble or modify the detector.



Do not install outdoors.



Do not immerse the detector in water.

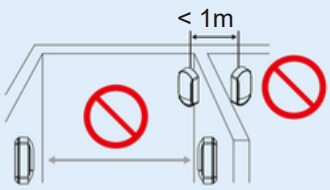


Do not detect through glass.



Do not partially or completely obstruct the detection area.

[Only HJ-DT12]



Avoid interference from the front or rear of the detector.

CAUTION





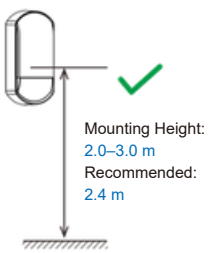












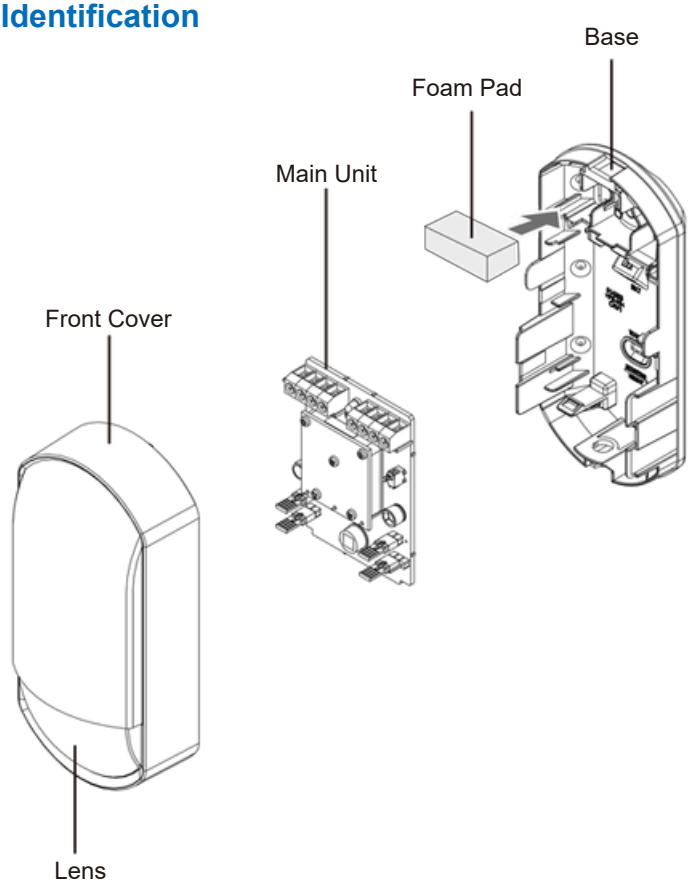


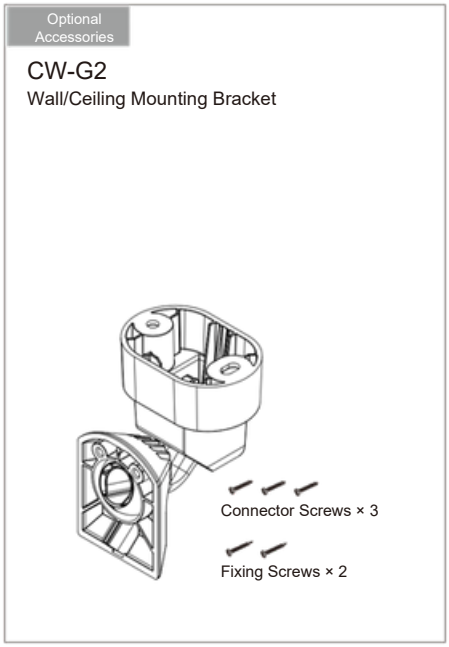
Dispose of the product in accordance with local regulations.

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- Parts Identification

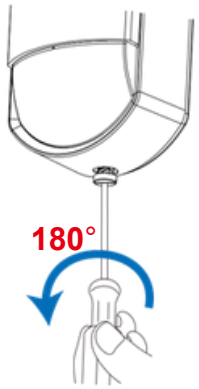




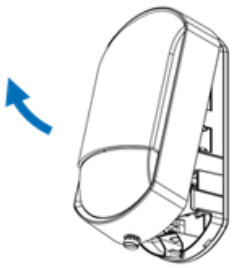
1 Installation

1-1. Disassembly

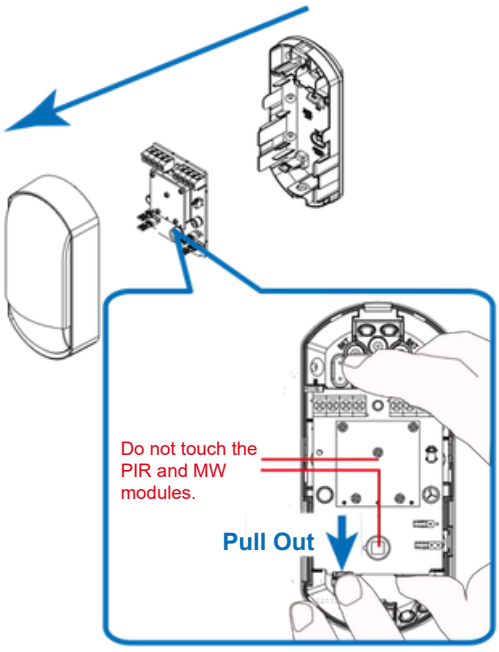
1 Open the Front Cover.



2 Remove the Front Cover.



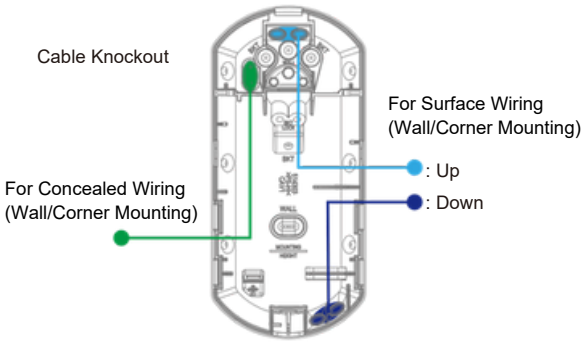
3 Remove the Main Unit.



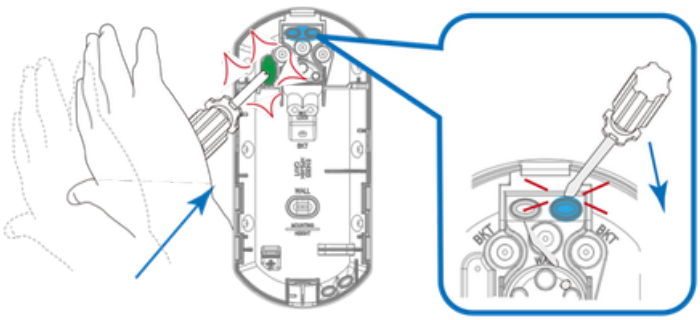
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1-2. Wall Mounting (Without Bracket)

1 Cable Routing Through the Base

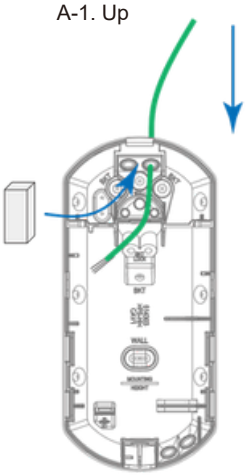


Opening the Knockout

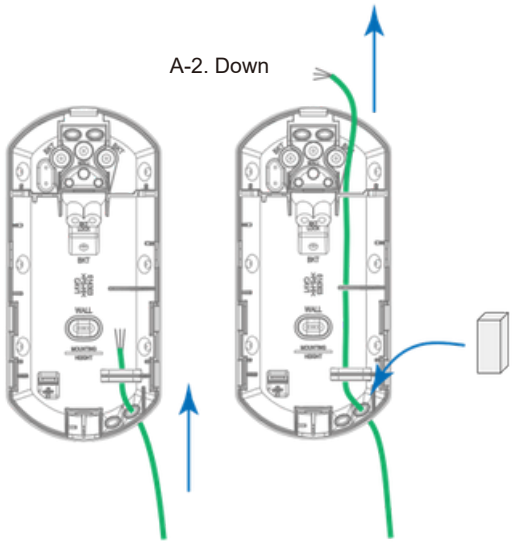


A.Surface Wiring

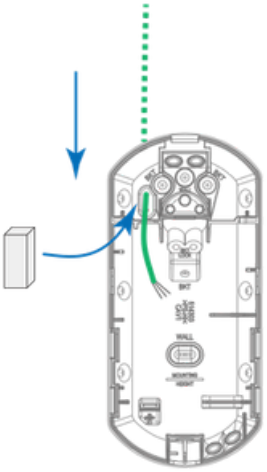
A-1. Up



A-2. Down

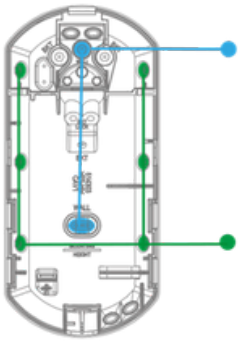


B.Concealed Wiring



2 Mount the Base

Cable Entry Hole



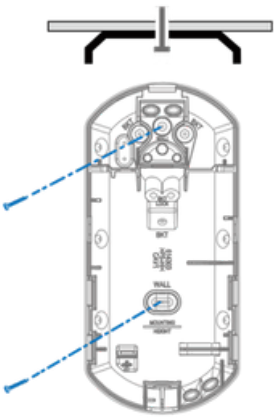
For Wall Mounting

For Corner Mounting, use any 2 of the 3 mounting holes on each side.

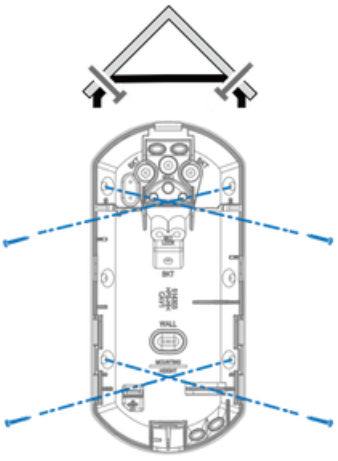
NOTE

Mounting screws are not supplied. Use Ø4 mm screws.

a. Wall Mounting



b. Corner Mounting

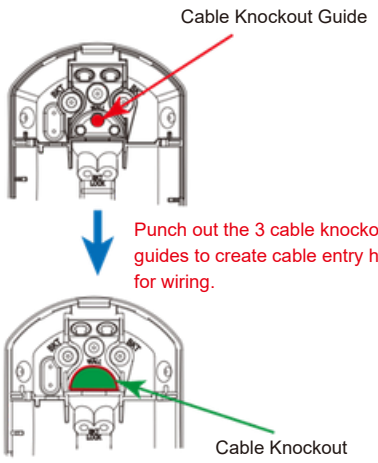


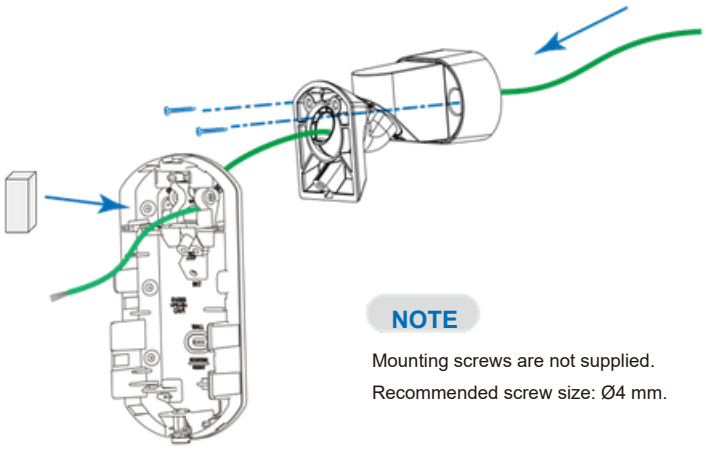
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1-3. Wall Mounting (With Bracket)

1 Wall Wiring and Mounting





NOTE

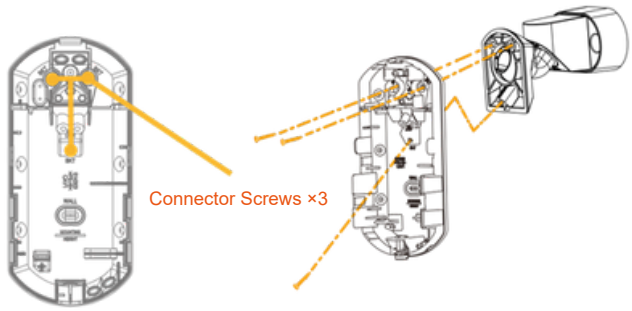
Mounting screws are not supplied.

Recommended screw size: Ø4 mm.

NOTE

For instructions on opening the cable knockout, refer to page 4.

2 Attach the Base to the Bracket.



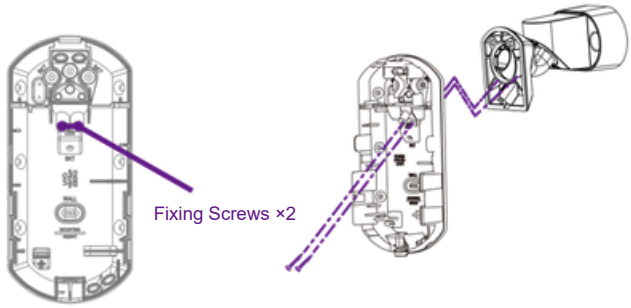
NOTE

Adjust the detection direction while attaching the detector.

A walk test must be performed to verify proper operation.

--> Refer to Section 3-1, "Walk Test".

3 Secure the Base with the Fixing Screws (Optional)



The bracket is normally secured using the 3 mounting holes and 3 connector screws. For additional support, two fixing screws may also be used.

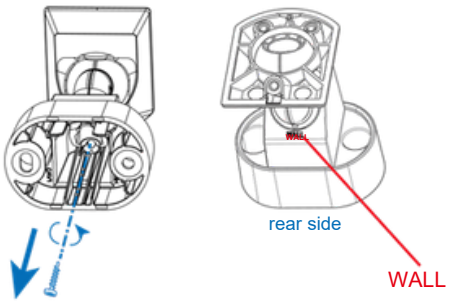
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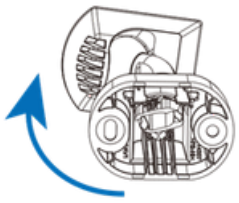
1-4. Ceiling Mounting (With Bracket)

Adjusting the Bracket for Ceiling Mounting

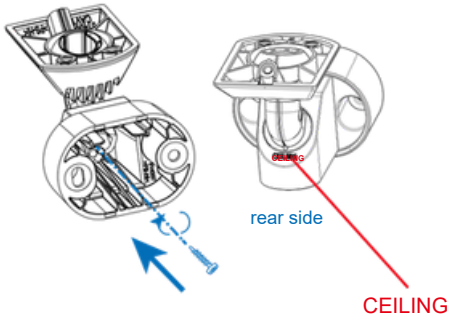
[1] Loosen the fixing screw.



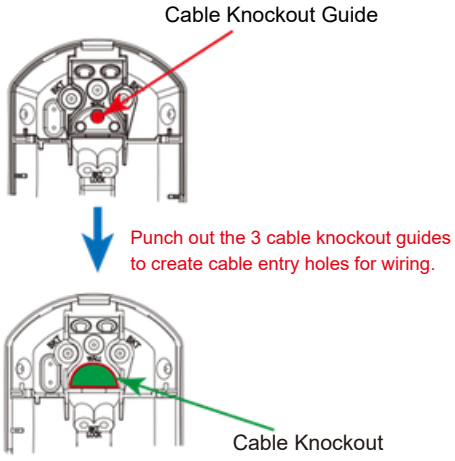
[2] Rotate the main unit.



[3] Tighten the fixing screw.

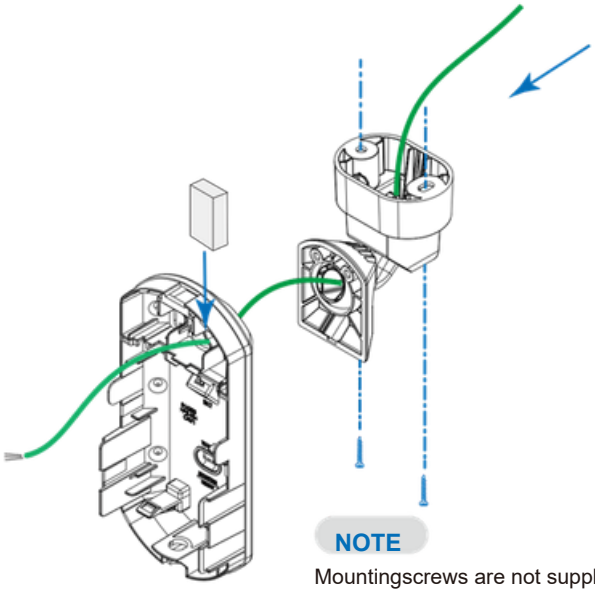


1 Ceiling Wiring and Mounting



NOTE

For instructions on opening the cable knockout, refer to page 4.

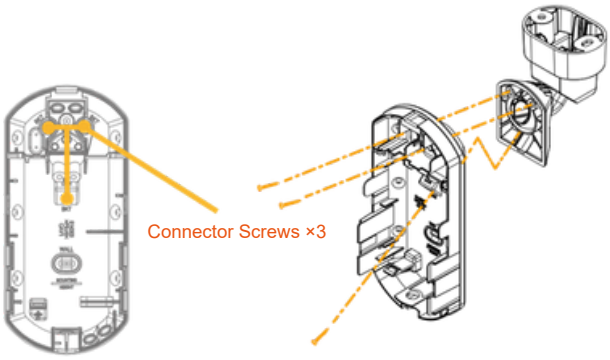


NOTE

Mountingscrews are not supplied.

Recommended screw size: Ø4 mm.

2 Attach the base to the bracket



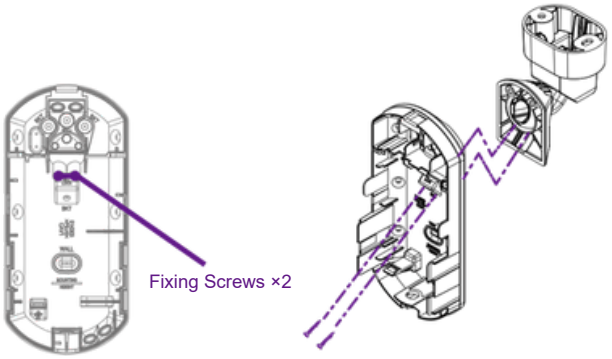
NOTE

Adjust the detection direction while attaching the detector.

A walk test must be performed to verify proper operation.

--> Refer to Section 3-1, "Walk Test".

3 Secure the base with the fixing screws (optional).



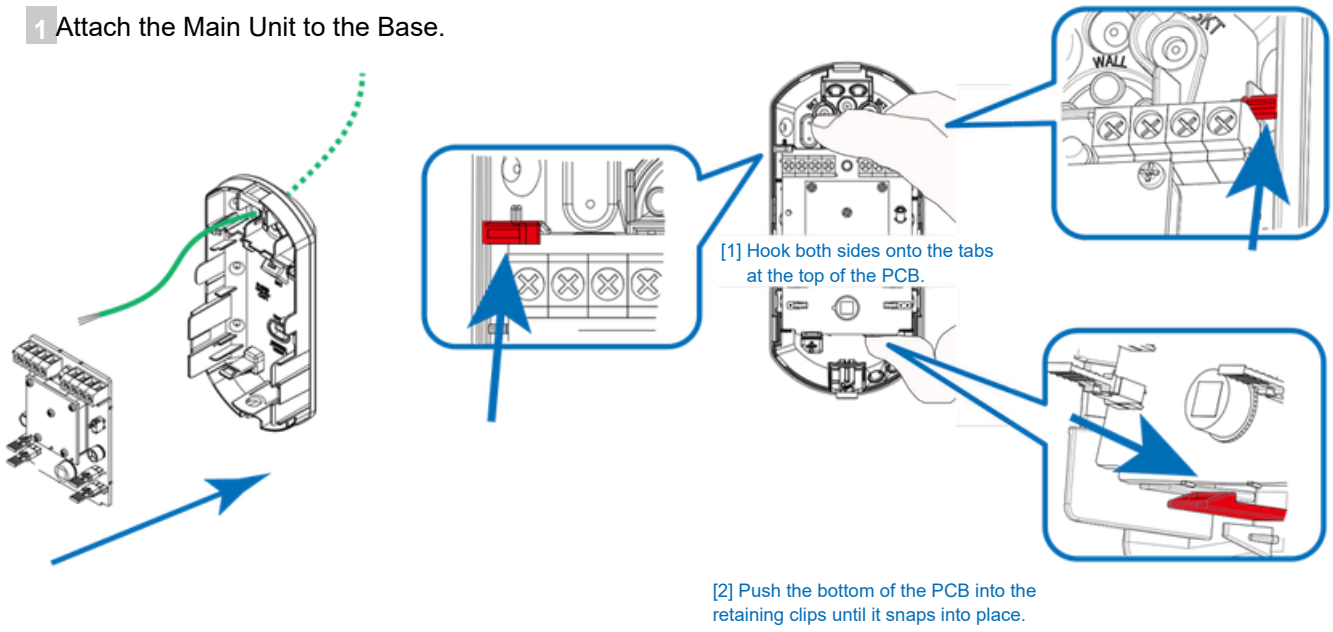
The bracket is normally secured using 3 mounting holes and 3 connector screws. For additional support, 2 fixing screws may also be used.

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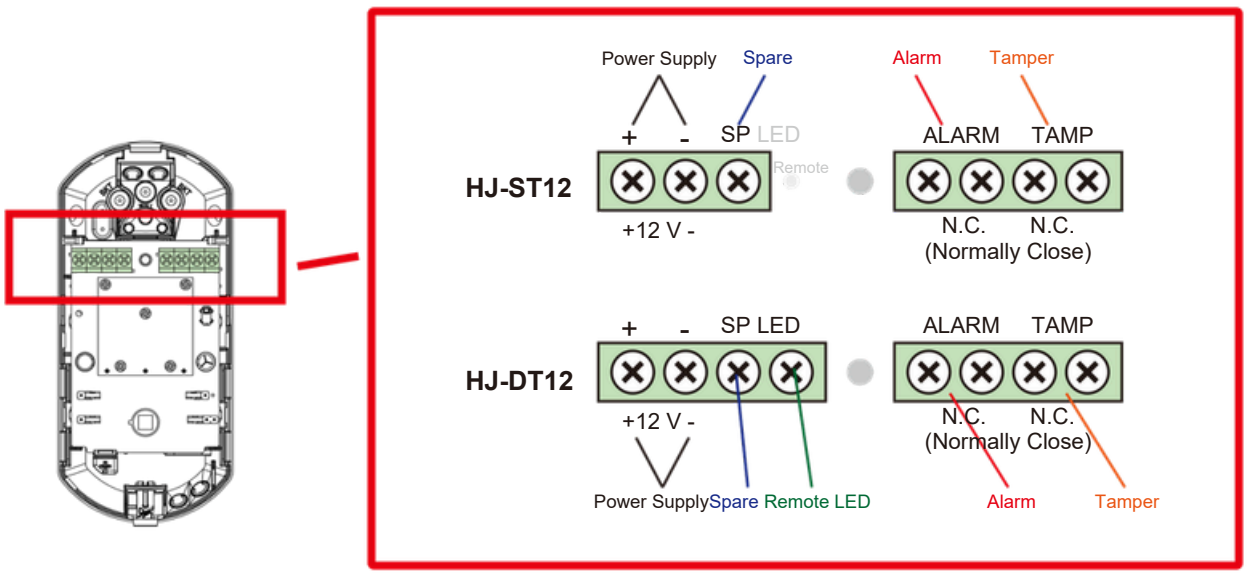
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1-5. Assembly & Wiring

1 Attach the Main Unit to the Base.



2 Connect the wires to the terminal block.



Power Cable Length

Thepowercablelength should not exceed thevaluesshown below.

HJ-ST12

Wire Gauge	12 V DC	14 V DC
AWG 22 (0,33 mm²)	520 m	1,130 m
AWG 20 (0,52 mm²)	820 m	1,790 m
AWG 18 (0,83 mm²)	1,320 m	2.850 m

HJ-DT12

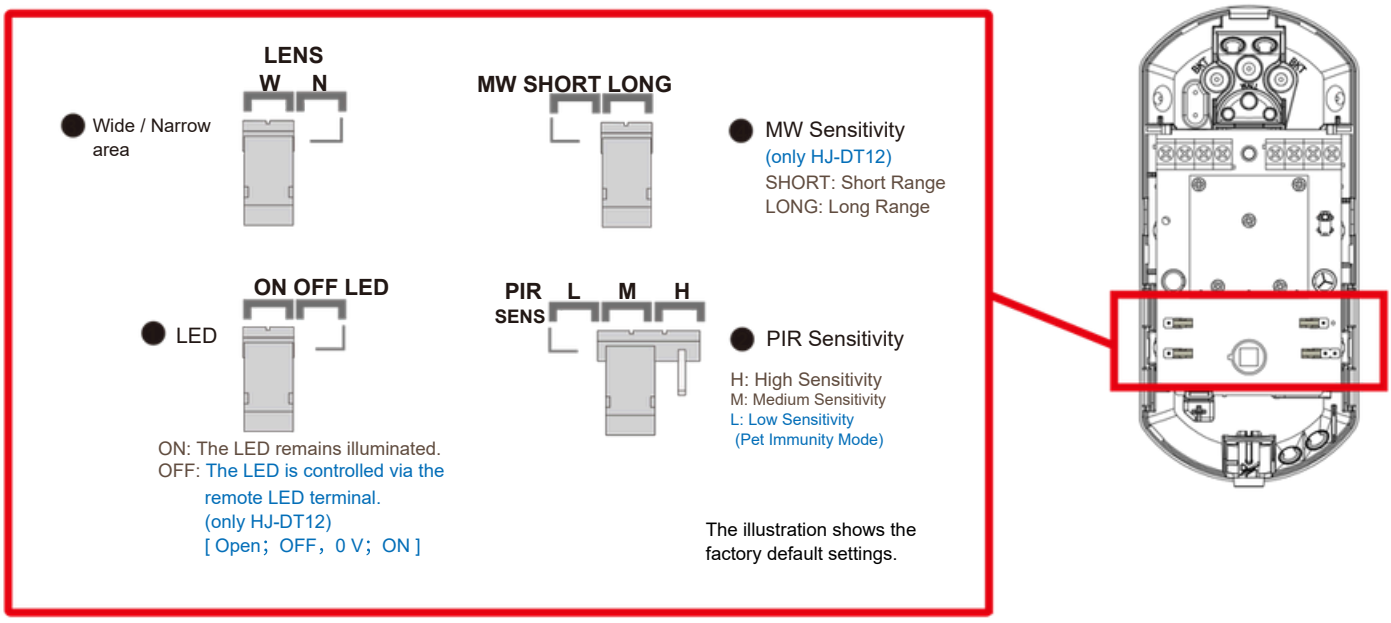
Wire Gauge	12 V DC	14 V DC
AWG 22 (0,33 mm²)	410 m	890 m
AWG 20 (0,52 mm²)	650 m	1.400 m
AWG 18 (0,83 mm²)	1,030 m	2.240 m

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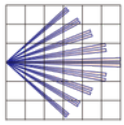
2 Settings

2-1. Jumper Settings

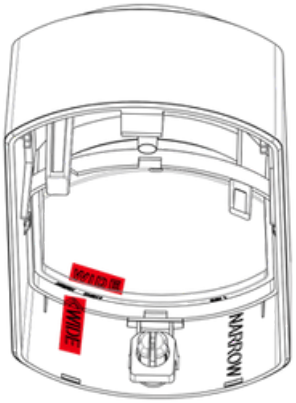


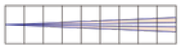
2-2. Wide/Narrow Detection Area Settings

1 Flip the lens to select either the Wide or Narrow detection area.

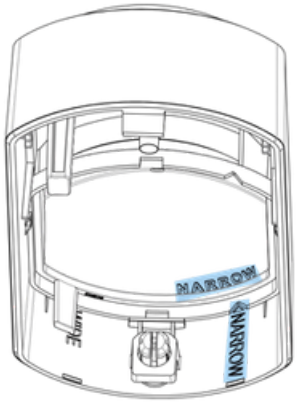


W ide
Default





Narrow



NOTE

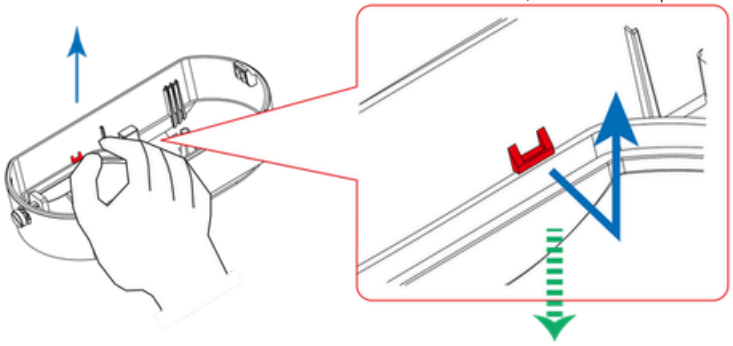
Install the lens, ensuring that the markings on the front cover and the lens correspond to the desired detection area.

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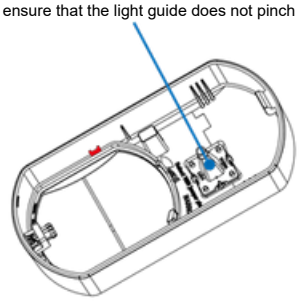
Removing the Lens

Remove the retainer, then lift the lens upward.

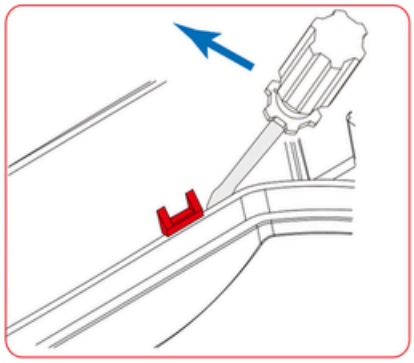


CAUTION

- Take care not to damage the LED light guide.
- When reinstalling the front cover, ensure that the light guide does not pinch the wiring.



If the lens cannot be removed by hand, use a flat-blade screwdriver.

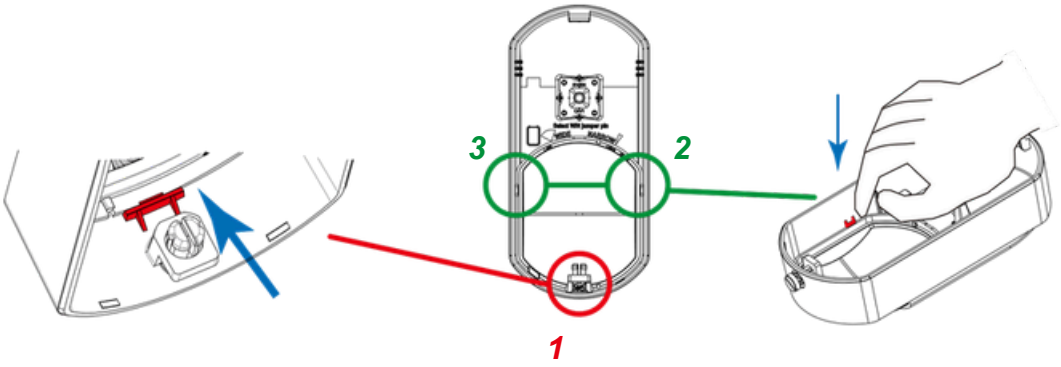


CAUTION

- Take care not to damage the lens with the screwdriver.

Installing the Lens

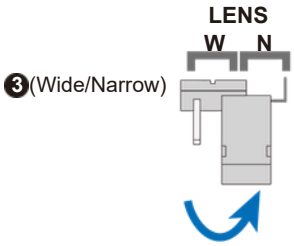
Press firmly on the three indicated points in numerical order until the lens is securely installed.



Set the jumper to either "Wide" or "Narrow".

CAUTION

- If the lens is set to "Narrow", the jumper must also be set to "Narrow".



NOTE

- The factory default setting is "Wide".
- When "Narrow" is selected, the MW detection function is disabled.

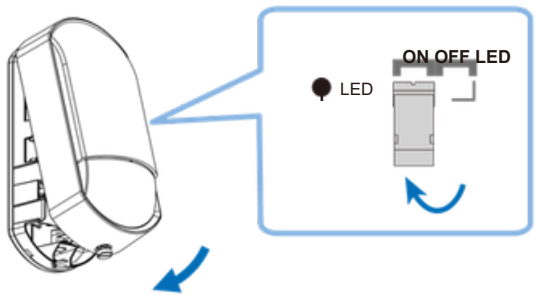
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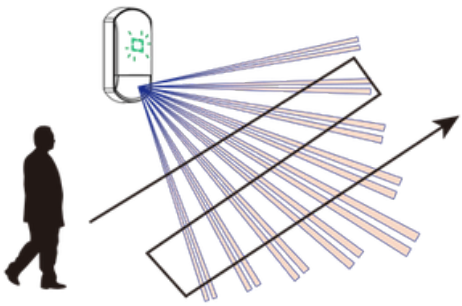
3 Inspection

3-1. Walk Test

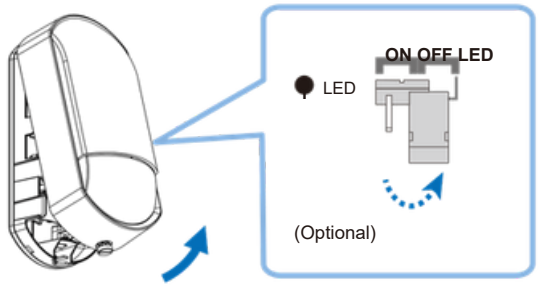
1 Ensure the LED jumper is set to "ON", then close the front cover.



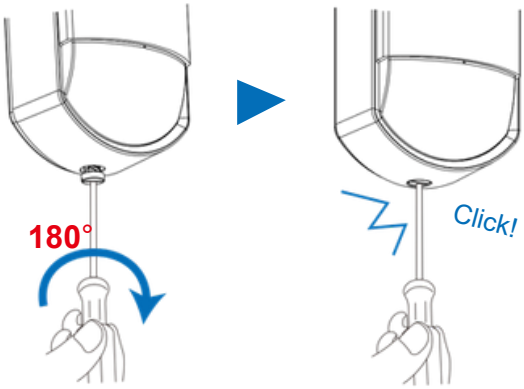
2 Walk through the detection area and verify the detection performance by observing the LED indicator.



3 If required, reset the LED jumper to "OFF" after completing the walk test.



4 Lock the Front Cover



Note

Performawalk test at least once a year.

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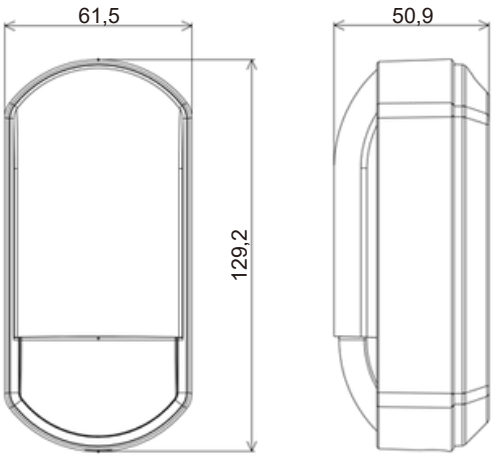
Other Information

- Specifications

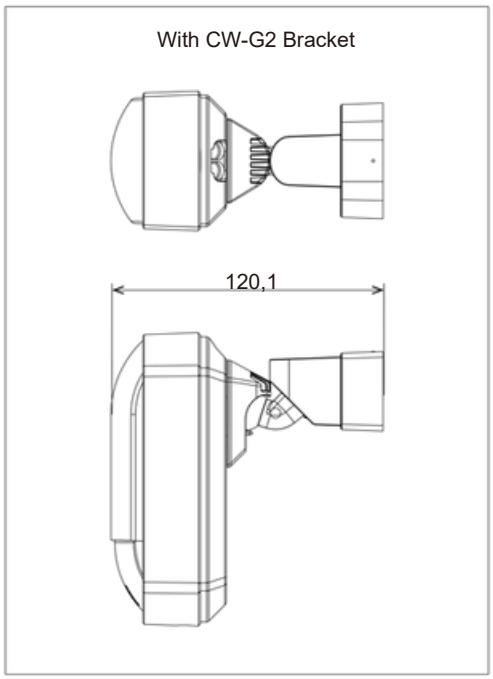
Model		HJ-ST12	HJ-DT12
Installation			
Detection Method		Passive Infrared (PIR)	Panads sMiviec rIonwfraavreed (M(PWIR))
Coverage		Wide: 12 m, 85° / Narrow: 18 m, 5° [MW detection isdisabled when "Narrow"mode isselected.]	
Detection Area		Wide: 76 detection zones / Narrow: 12 detection zones	
Mounting Height		2.0 to 3.0 m	
Alarm Period		2.0 ± 0.5 s	
Warm-up Time		Approx. 60 s (LED flashes)	
LED Indicator		Selectable ON/OFF Green: [1] Warm-up [2] Alarm	
Electrical			
Power Input			
		9.5 to 16 VDC	
Current Consumption		8mA (Normal) 11 mA (Maximum , 12 V DC	11 mA (Normal) 14 mA (Maximum) , 12 V DC
Relay Output	Alarm	Normally Closed (N.C.) 24 V DC 0.1 A （Maximum ）	
	Tamper	Normally Closed (N.C.) 24 V DC 0.1 A （Maximum ） (Opens when the front cover is removed.)	
Remote LED Control		———————	Terminal: Open = OFF, 0 V = ON
Environmental			
Operating Temperature		-20°C to +50°C	-20°C to +50°C
Temperature Compensation		Super Multidimensional Analysis (SMDA)	
Operating Humidity		95%（max.）	
RFI Immunity		No alarm at 10 V/m	
Mechanical			
Dimensions		H: 129.2 × W: 61.5 × D: 50.9 mm	
Weight		Approx. 90 g	Approx. 105 g
Installation		Wall or Corner Mounting (Indoor) (With Bracket: Wall, Corner or Ceiling Mounting)	

- Specifications and design are subject to change without prior notice.
- This product is designed to detect intruders and trigger an alarm control panel. As only one component of a complete security system, we accept no liability for any damage, losses, or other consequences resulting from intrusion.

- Dimensions

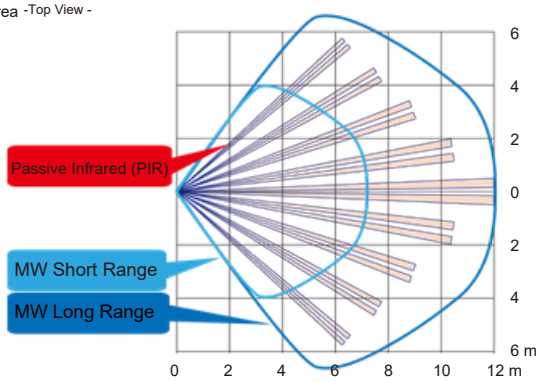


Unit: mm

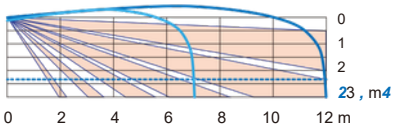


- Detection Area

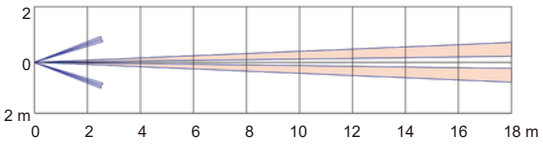
Wide Detection Area -Top View -



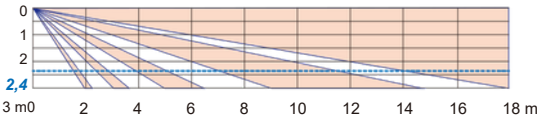
Wide Detection Area – Side View –



Narrow Detection Area – Top View –



Narrow Detection Area – Side View –



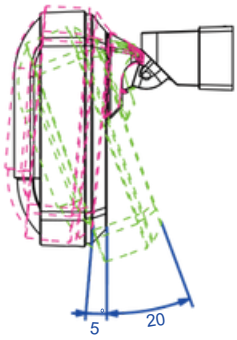
NOTE

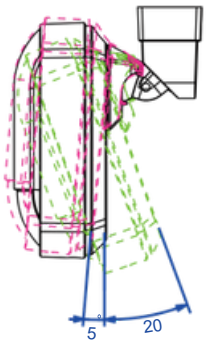
- The dashed line indicates the recommended mounting height.
- When the jumper is set to "Narrow", the MW detection function is disabled.

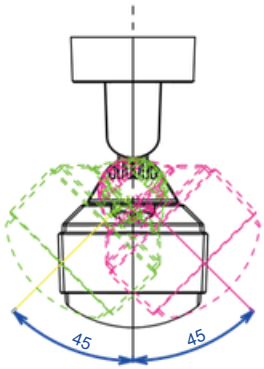
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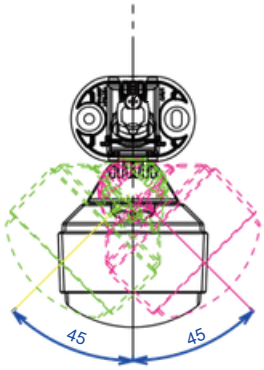
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- Angle Adjustment Using the CW-G2 Bracket









NOTE

If the detector's front cover does not contact the ceiling, the detector can be tilted upward by up to +5°.





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