

Flexible Range Indoor Detector

FlipX series

STANDARD MODELS

	Wide/Narrow area Flip lens	PIR	Microwave	Mounting bracket
FLX-S-ST	✓	✓	-	-
FLX-S-ST-BKT*3	✓	✓	-	✓
FLX-S-DT-X5*1	✓	✓	✓ (10.525GHz)	-
FLX-S-DT-X5-BKT*3	✓	✓	✓ (10.525GHz)	✓
FLX-S-DT-X8*2	✓	✓	✓ (10.587GHz)	-
FLX-S-DT-X9*3	✓	✓	✓ (9.425GHz)	-

*1 Not certified to INCERT

*2 Not certified to SBSC and UL

*3 Not certified to EN 50131-2-2 :2017 (FLX-S-ST-BKT)/EN 50131-2-4:2020 (FLX-S-DT-X5-BKT/X9), INCERT, SBSC and UL

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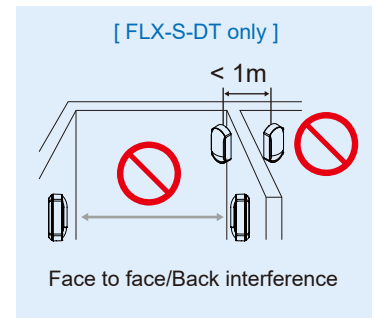
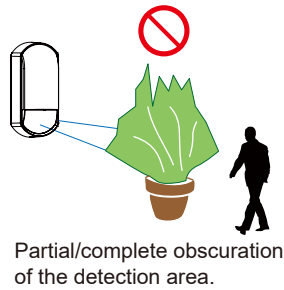
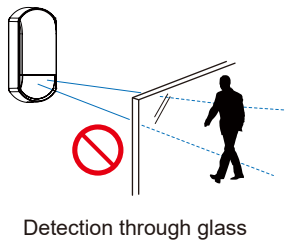
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Before installation

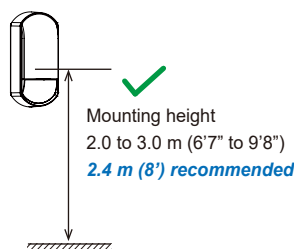
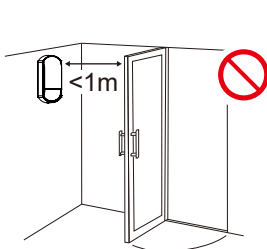
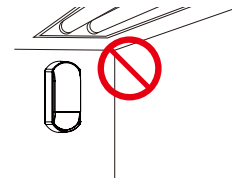
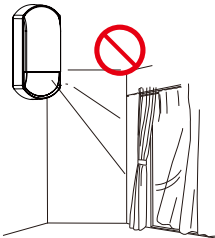
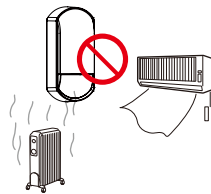
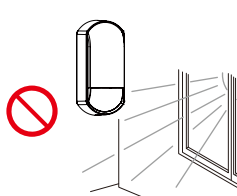
- Manufacturer's statement

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.
		NOTE	Special attention is required to the section of this symbol.

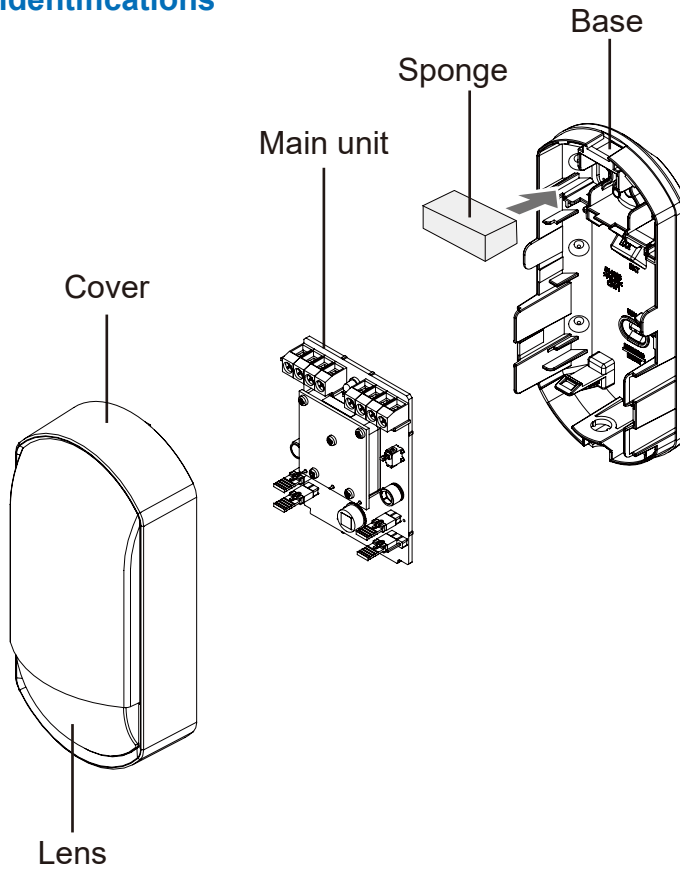
Warning



Caution



- Parts identifications

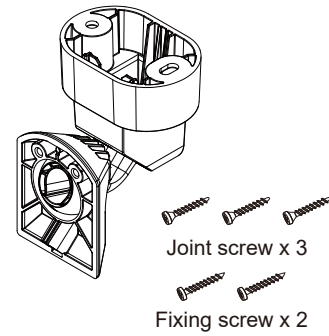


Option

CW-G2*
Bracket for wall/ceiling mount

NOTE

Models with "-BKT" in the model name include CW-G2.

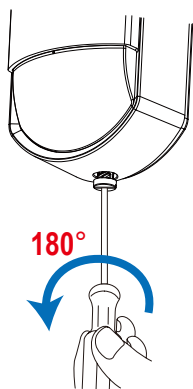


*Not certified to EN 50131-2-2:2017
/EN 50131-2-4:2020, INCERT and SBSC

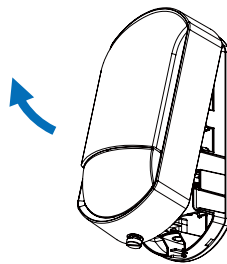
1 Installation

1-1. Disassemble

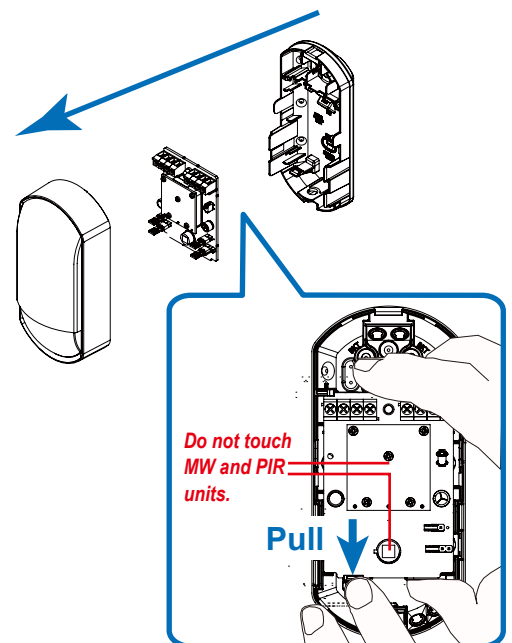
1 Unlock the cover



2 Open the cover



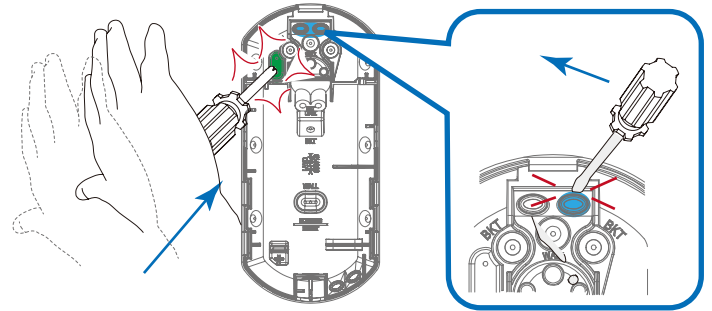
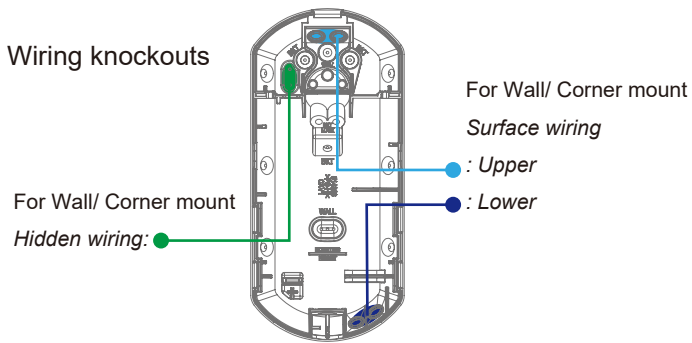
3 Remove the main unit



1-2. Wall mount *without bracket*

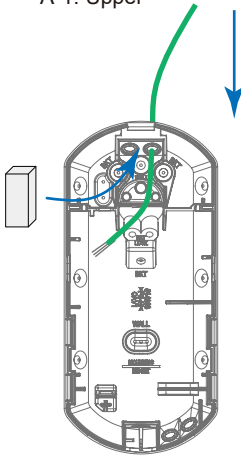
1 Wire through the base

How to break the knockouts

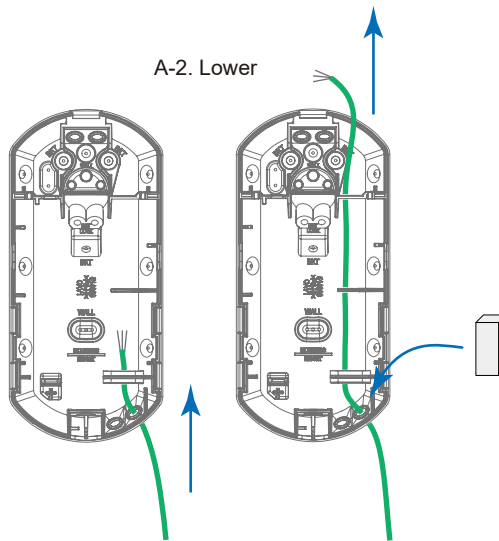


A. Surface wiring

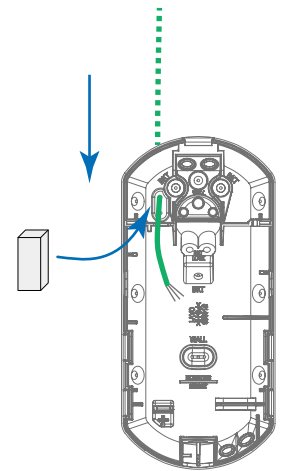
A-1. Upper



A-2. Lower

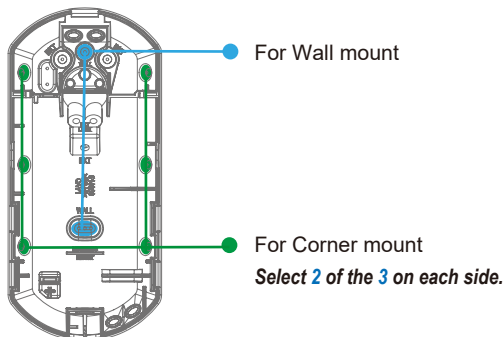


B. Hidden wiring

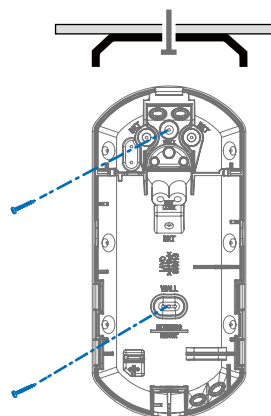


2 Mount the base

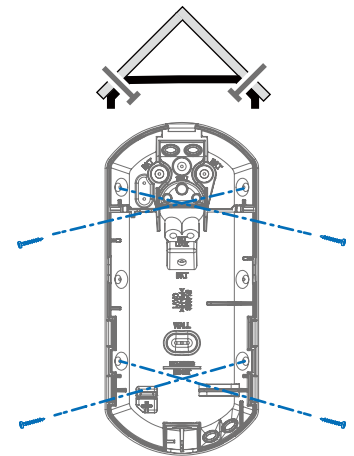
Mounting holes



a. Wall mount



b. Corner mount

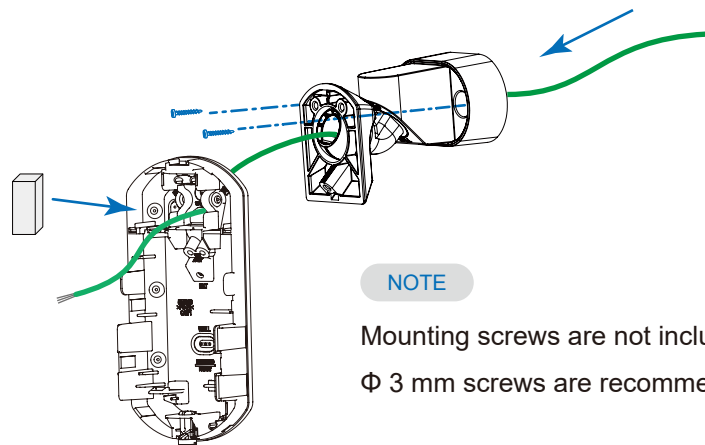
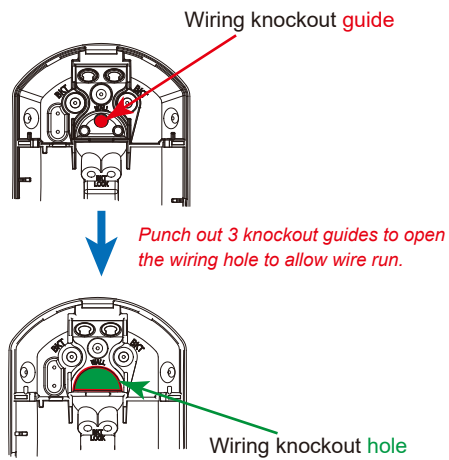


NOTE

Mounting screws are not included.
Φ 3 mm screws are recommended.

1-3. Wall mount *with bracket*

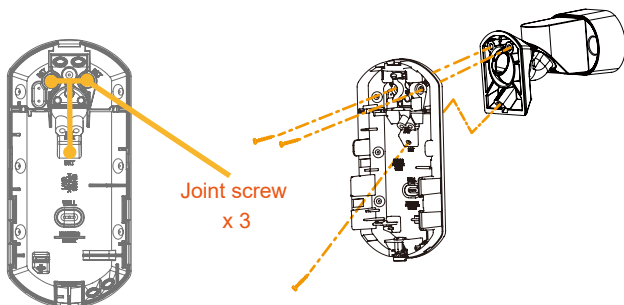
1 Wire and mount on the wall



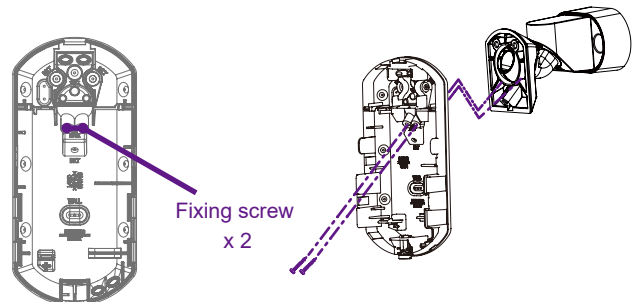
NOTE

See page 4 for how to break the knockouts.

2 Join the base on the bracket



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

Adjust the detection direction while jointing.

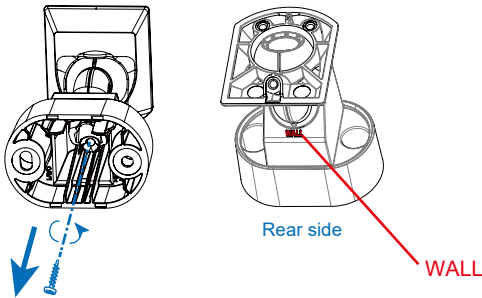
Confirming with a walk test is required.

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

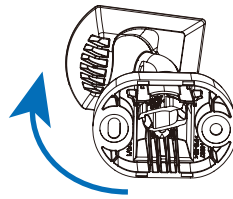
1-4. Ceiling mount *with bracket*

How to change the bracket to the ceiling mounting

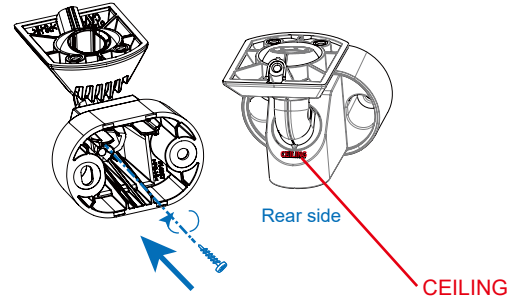
[1] Loosen the fixing screw.



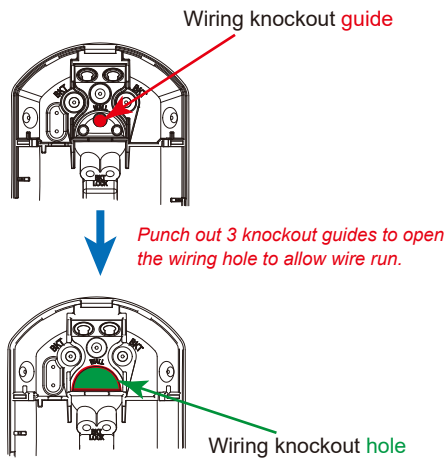
[2] Rotate the body.



[3] Tighten the fixing screw.

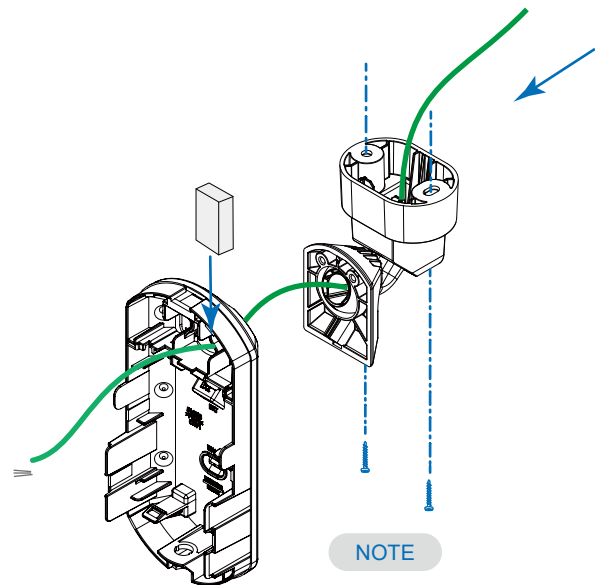


1 Wire and mount on the ceiling



NOTE

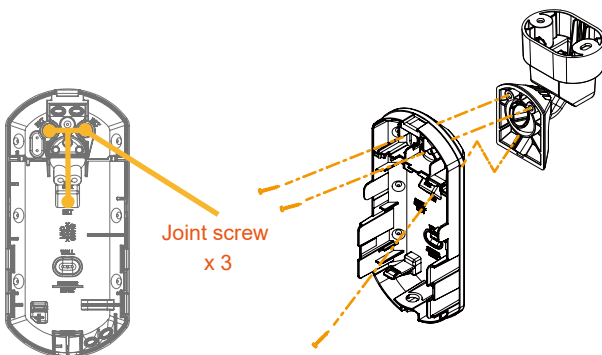
See page 4 for how to break the knockouts.



NOTE

Mounting screws are not included.
 Φ 3 mm screws are recommended.

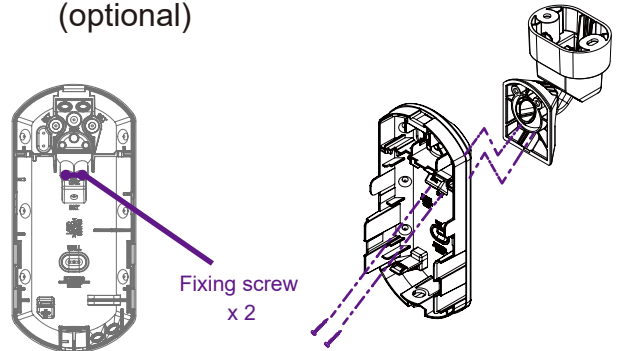
2 Join the base on the bracket



NOTE

Adjust the detection direction while jointing.
 Confirming with a walk test is required.
 --> Refer to "3-1. Walk test"

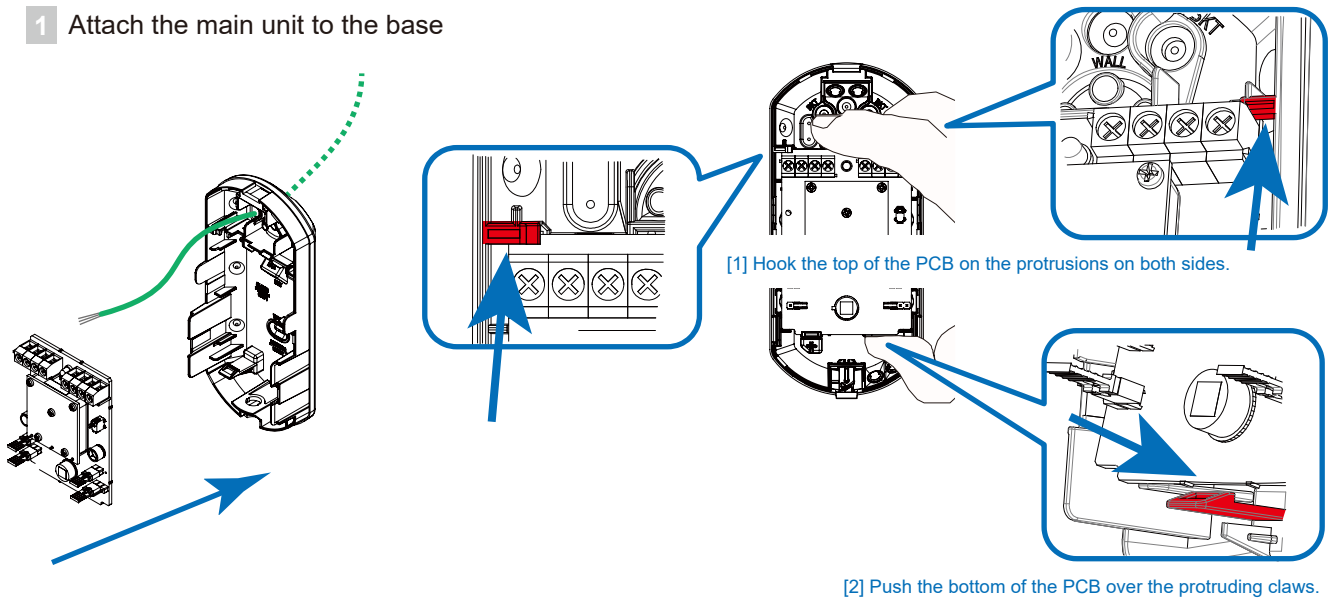
3 Fix the base with the fixing screws (optional)



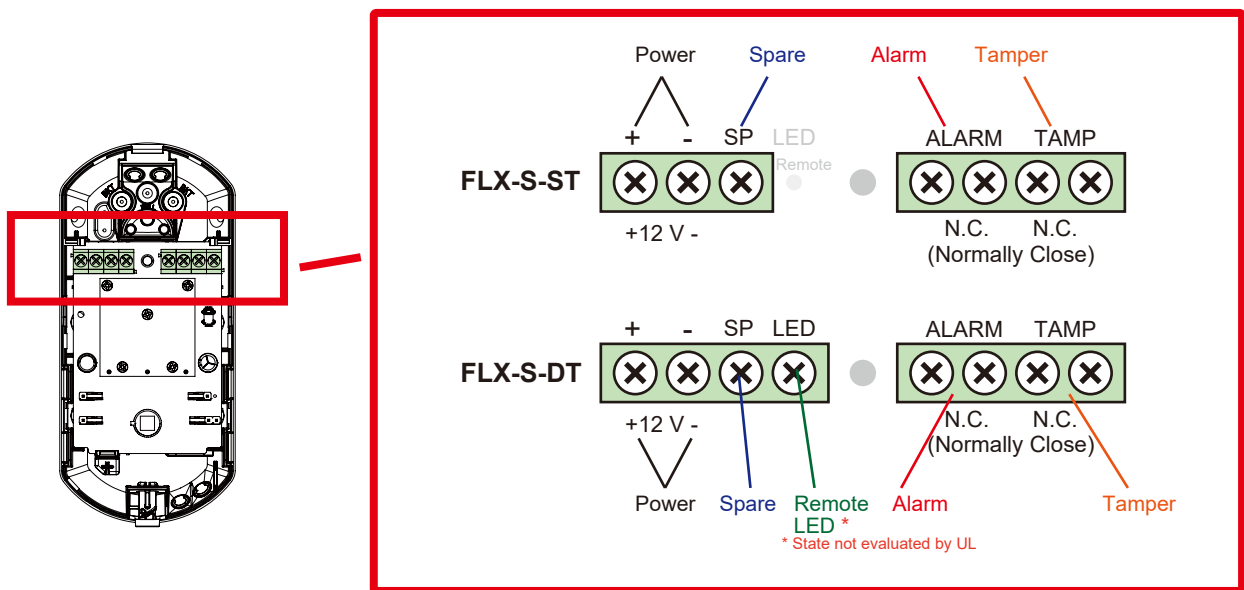
The bracket is basically jointed using 3 holes and 3 joint screws. Also use 2 additional fixing screws if stronger support is required.

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.

FLX-S-ST			FLX-S-DT		
WIRE GAUGE	12 V DC	14 V DC	WIRE GAUGE	12 V DC	14 V DC
AWG 22 (0.33 mm ²)	520 m (1,710 ft.)	1,130 m (3,718 ft.)	AWG 22 (0.33 mm ²)	410 m (1,350 ft.)	890 m (2,920 ft.)
AWG 20 (0.52 mm ²)	820 m (2,690 ft.)	1,790 m (5,870 ft.)	AWG 20 (0.52 mm ²)	650 m (2,130 ft.)	1,400 m (4,590 ft.)
AWG 18 (0.83 mm ²)	1,320 m (4,330 ft.)	2,850 m (9,350 ft.)	AWG 18 (0.83 mm ²)	1,030 m (3,380 ft.)	2,240 m (7,350 ft.)

2 Settings

2-1. Jumper pin settings

3 Wide/Narrow

1 LED

2 PIR sensitivity

4 MW sensitivity (FLX-S-DT only)

ON: LED is activated always.
OFF: LED can be controlled through the Remote LED terminal (FLX-S-DT only).
[Open; OFF 0 V; ON]

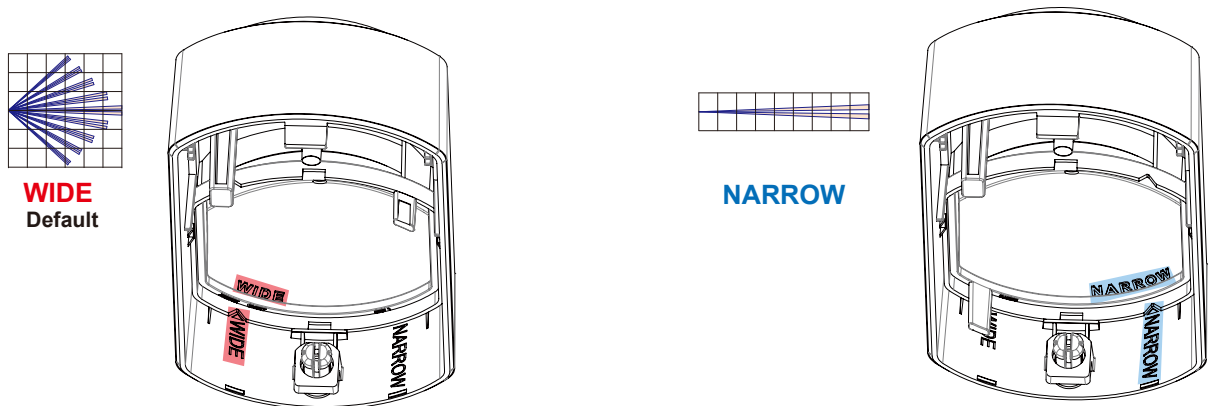
H: High sensitivity
M: Medium sensitivity
L: Low sensitivity (Pet immunity mode; Not certified to EN, INCERT and SBSC)

Illustrations show the **default** position.

2-2. Wide/Narrow setting

- 1** Set the Flip lens to “Wide” or “Narrow”

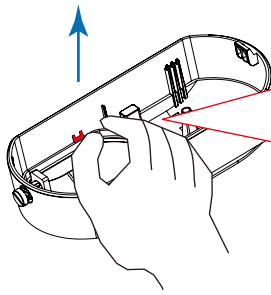
➔ **Go to 2-2 on ^{Page} 9 to skip 2-1 when using the default “Wide” setting.**



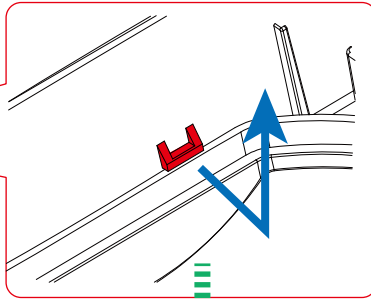
NOTE

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

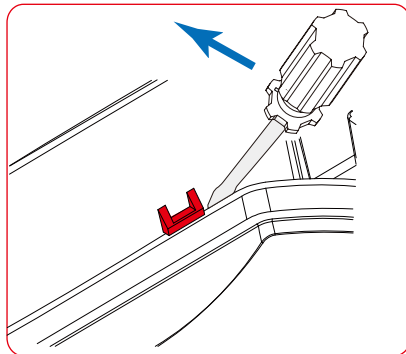
How to remove the lens



Get over the rib, then pull up the lens.

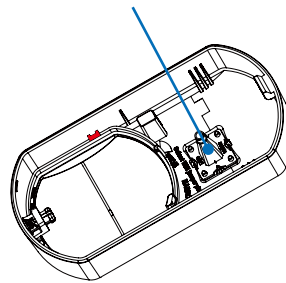


If it is difficult to get over, use a flathead screwdriver.



⚠ 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.

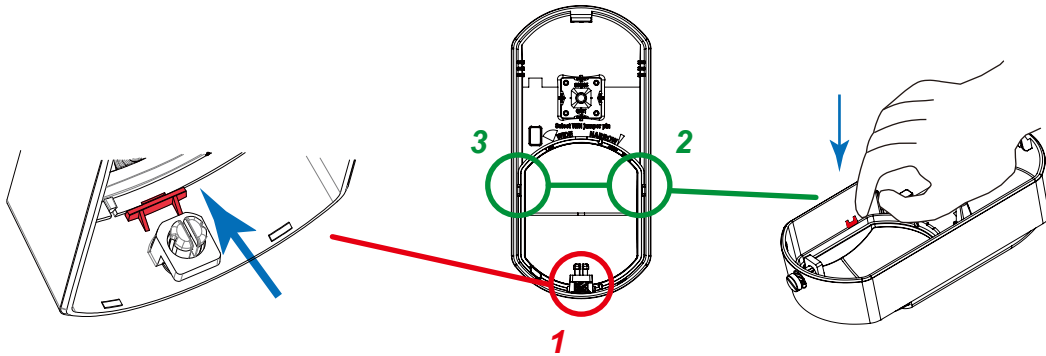


⚠ Caution

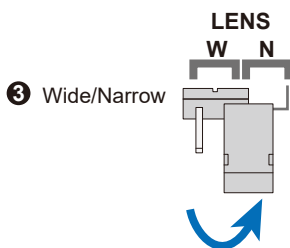
- Be careful not to damage the lens with a screwdriver.

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".

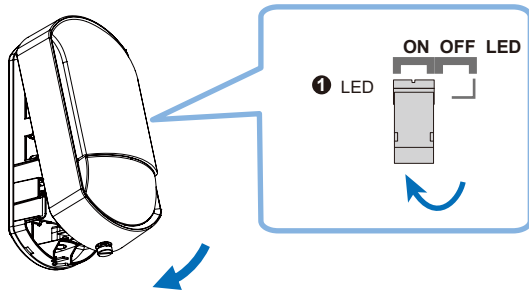
NOTE

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

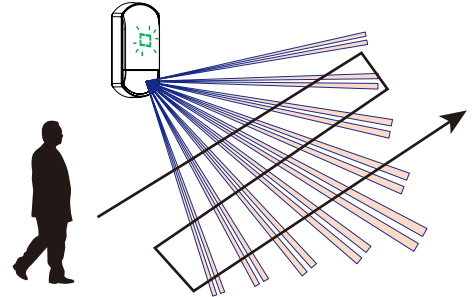
3 Checking

3-1. Walk test

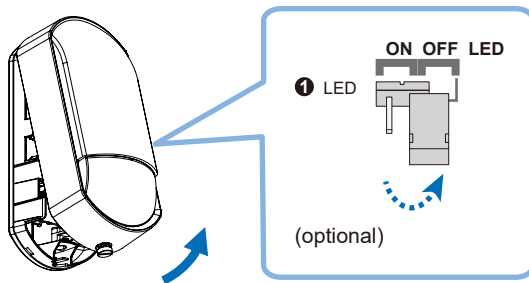
1 Confirm that the LED pin is "ON", then close the cover.



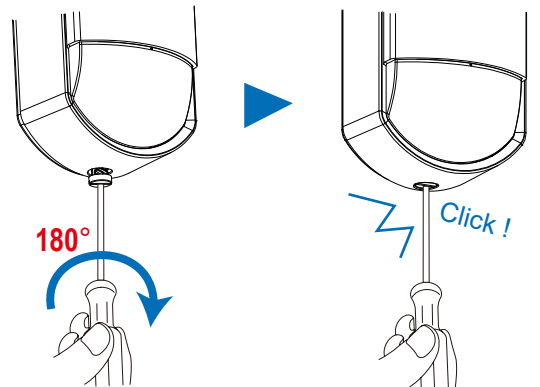
2 Walk in the detection area to check the detecting performance via LED indication.



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.

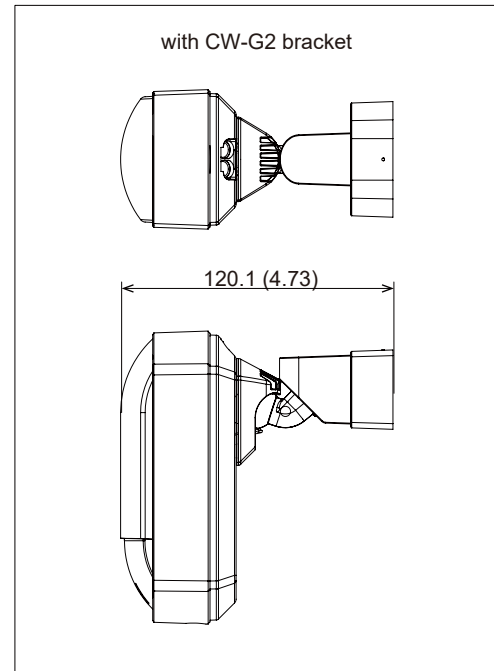
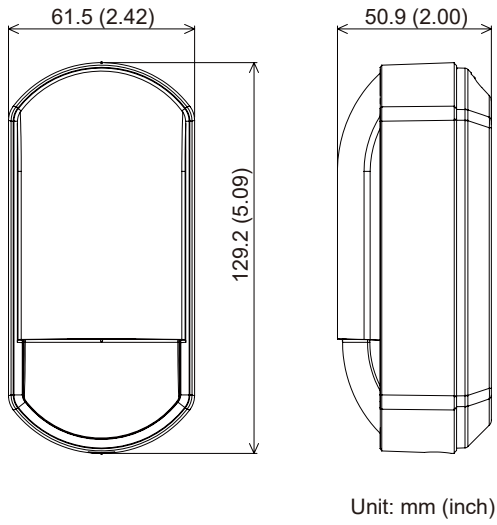
- Specifications

Model	FLX-S-ST (-BKT)	FLX-S-DT-X5(-BKT)/-X8/-X9
Installation		
Detection method	Passive infrared	Passive infrared and Microwave
Coverage	Wide: 12 m (40 ft.) 85°/ Narrow: 18 m (60 ft.) 5° (No MW detection at "Narrow" setting)	
Detection zones	Wide: 76 zones/ Narrow: 12 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°C to +50°C (-4°F to +122°F)	-20°C to +45°C (-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. 90 g (3.17 oz) (with Bracket : Approx. 120 g (4.23 oz))	Approx. 105g (3.7 oz) (with Bracket : Approx. 135 g (4.76 oz))
Mounting	Wall, Corner (Indoor) (with Bracket : Wall, Corner, Ceiling)	

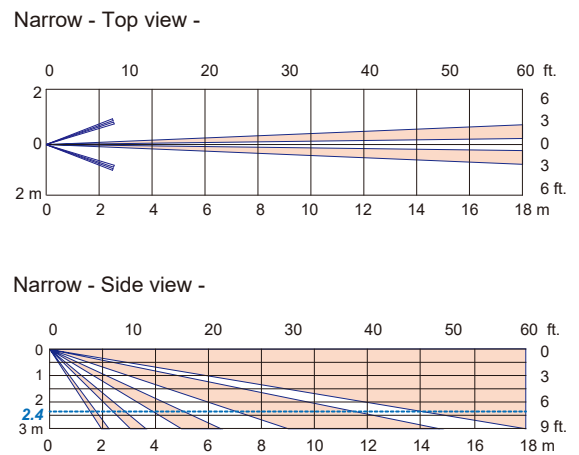
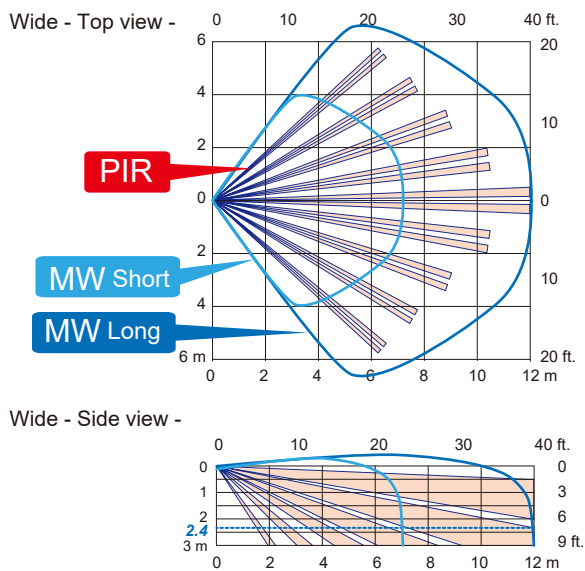
- Specifications and designs are subject to change without prior notice.
- These units are designed to detect an intruder and activate an alarm control panel. Being only a part of a complete system, we cannot accept responsibility for any damages or other consequences resulting from an intrusion.

* 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



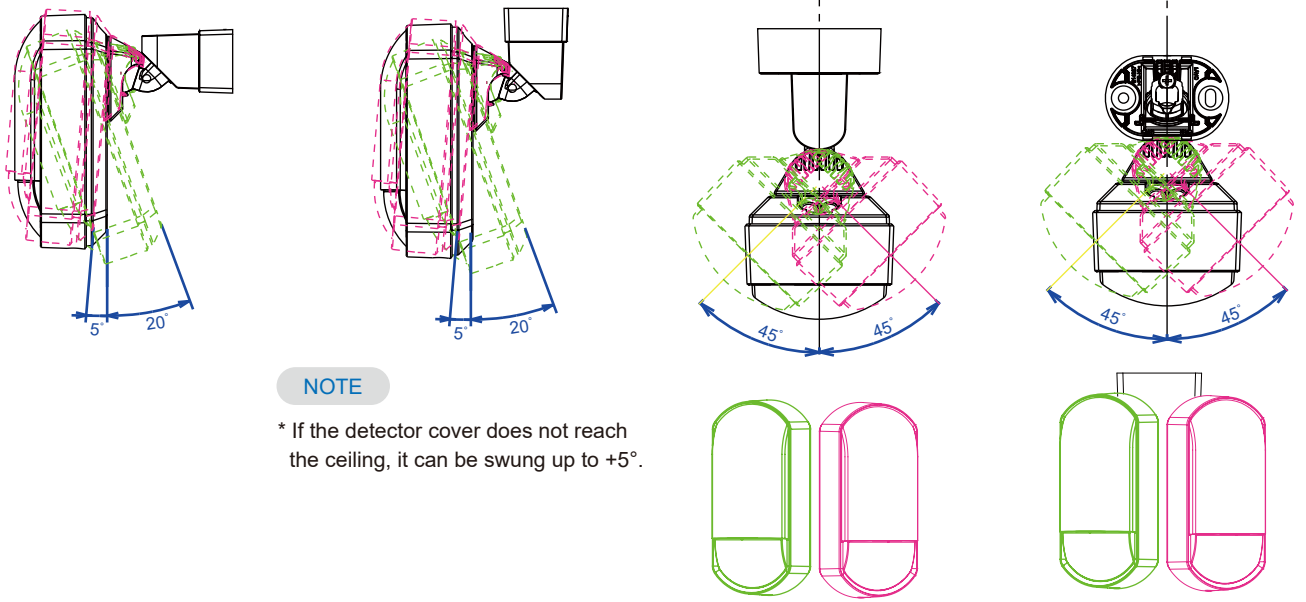
- Detection area



NOTE

- The dotted line indicates the recommended mounting height.
- When "Narrow" is selected at the jumper pin, MW detection will be stopped.
- Narrow area settings are **not** certified to the following standards. EN 50131-2-2:2017 (FLX-S-ST)/EN 50131-2-4:2020 (FLX-S-DT), INCERT and SBSC.

- Angle adjustment with bracket CW-G2



- Compliance

RE Directive 2014/53/EU

- OPTEX declares that FLX-S-DT-X5, FLX-S-DT-X5-BKT, FLX-S-DT-X8, and FLX-S-DT-X9 comply with RE Directive 2014/53/EU. Doc documents can be found on our website; www.optex.net
- Microwave emission Frequency and Power

FLX-S-DT-X5:	10.525 GHz	15.78 mW e.i.r.p
FLX-S-DT-X5-BKT:	10.525 GHz	15.78 mW e.i.r.p
FLX-S-DT-X8:	10.587 GHz	8.93 mW e.i.r.p
FLX-S-DT-X9:	9.425 GHz	14.50 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
- FLX-S-DT-X5, FLX-S-DT-X5-BKT, FLX-S-DT-X8, and FLX-S-DT-X9 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.

- EN 50131-1 Grades and Environmental Class; Security Grade 2, Environmental Class II
Applied Standards; EN 50131-2-2:2017 (FLX-S-ST), EN 50131-2-4:2020 (FLX-S-DT-X5 and FLX-S-DT-X8)
Tested and certified by Telefication
- Iarm klass 2, miljöö klass II, SSF 1014
- PD6662:2017
- UL/c-UL listed (FLX-S-ST and FLX-S-DT-X5)

■ EU & UK contact information



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



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