

Intruder Detector using a radar principle

URX-P01

Issued Dec 30, 2014



URX-P01-WH
[White]



URX-P01-BR
[Black]

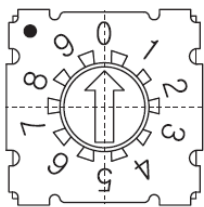
UWB(Ultra Wide Band) refers to a kind of radar technology that was traditionally used in military applications. When used as a security means, it's low power, wide band characteristics often causes frequent false alarms. Overcoming such limitations with its excellence in technology, S1 showcases the first ever UWB-based security sensor in the world. Its radar-based principle makes it inherently immune to heat source-induced false alarms and enables high level of sensitivity to heat-insulated intruders. Coverage can be flexibly adjusted to enable its deployment in various environments.

S-1



FEATURES

- Indoor UWB sensor is :
 - Radar sensor using 9GHz UWB frequency
 - High detection performance with low false-alarm rate especially in high-temperature variation environments
- Frequency band - from 8.5 GHz to 9.5 GHz
- Max detection range (human target) - to 10 meters
- Adjustable detection range from 1 to 10 meter by rotary switch



Switch Direction	0	1	2	3	4	5	6	7	8	9
Range	10m	1m	2m	3m	4m	5m	6m	7m	8m	9m

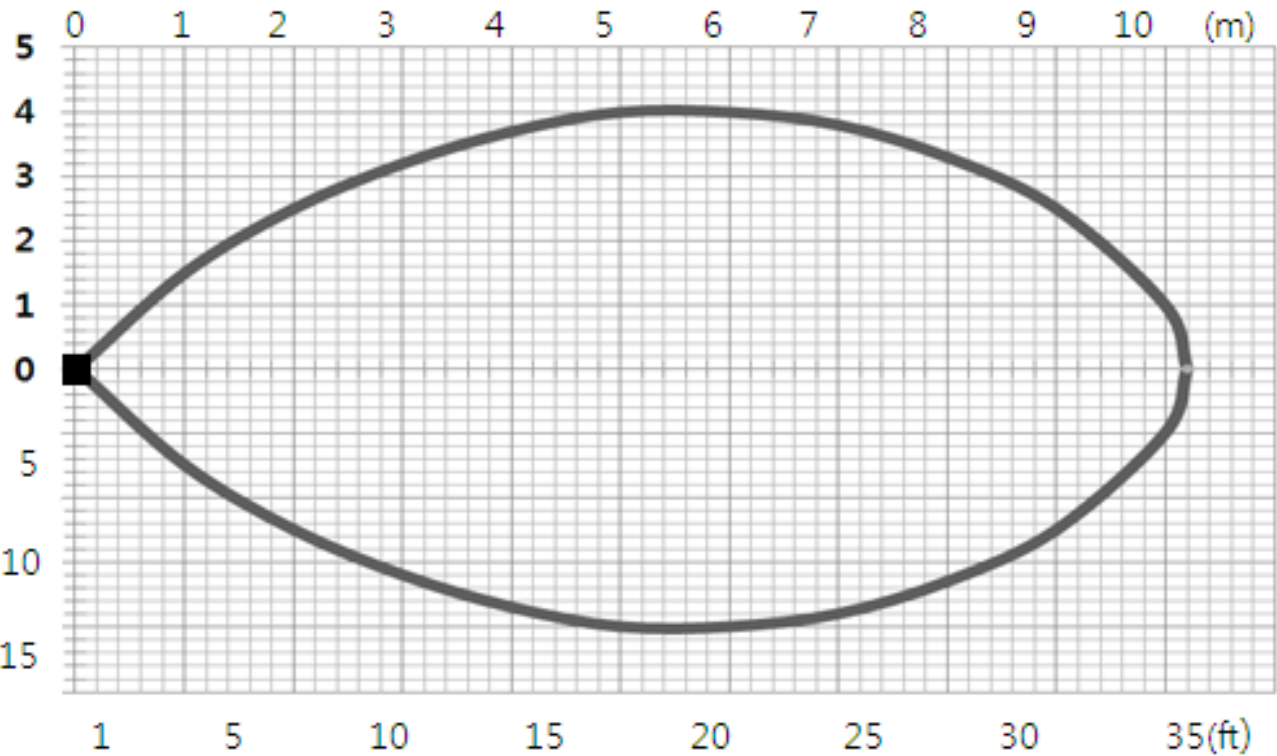
[Rotary Switch]

☞ Note that each adjusted range has $\pm 0.5\text{m}$ deviation
Be sure walk test after installation

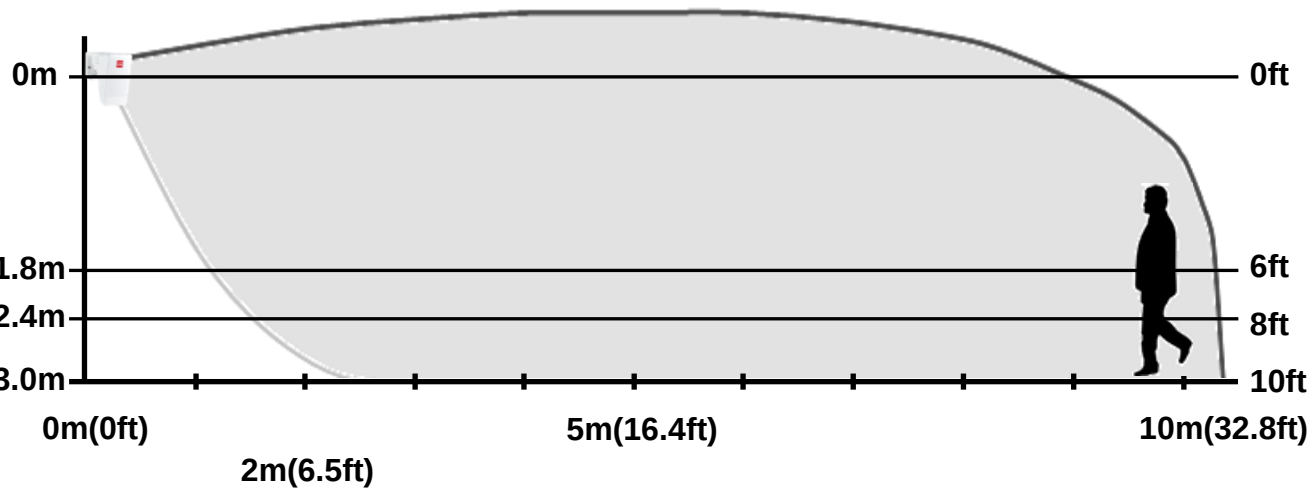
- Intruder indicator:
 - Red LED (ON, OFF selectable by switch)
- Installation – Wall & Ceiling

Coverage

Horizontal View



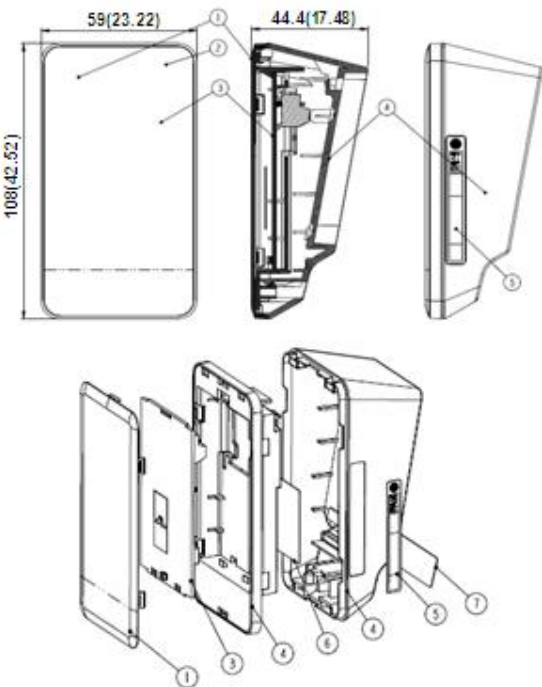
Vertical View



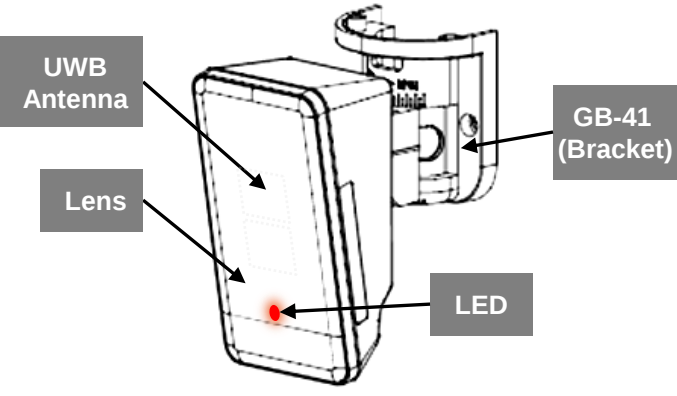
Note

- Installer is to walk into the pattern or may walk perpendicular to the pattern to verify the pattern.

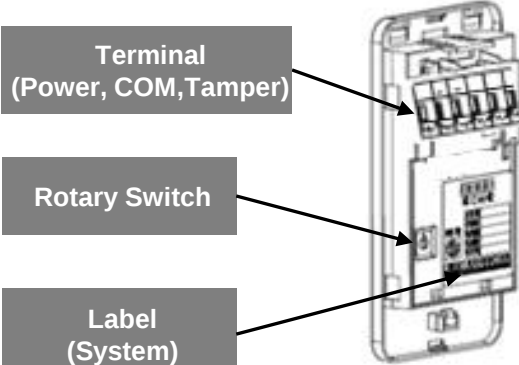
Sensor dimensions



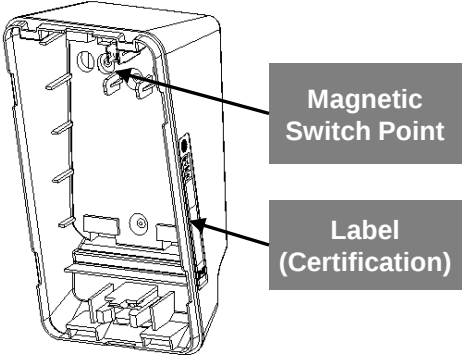
NO	Name
1	LENS-SENSOR
2	COVER-TOP
3	LAYOUT-MAIN PCB
4	COVER-BOTTOM
5	OUT LABEL-CERTIFICATION
6	LABEL-TERMINAL
7	LABEL-SERIAL



[SET]



[TOP]



[BOTTOM]

Sensor Specification

1. UWB Sensor

Model	URX-P01	
Detection Method	Impulse Radio(Ultra Wide Band)	
Colors	URX-P01-WR : White	URX-P01-BR : Black
Coverage	Wide: 8m x 10m(26.24 x 32.80ft), 80° Wide	
Mounting Height	2.0 ~ 3.0m(6.5 ~ 10ft)	
Intruder Speed	0.3 ~ 1.5m/sec.(1 ~ 5ft/sec.)	
LED Alarm Indicator	Red LED ON (When detecting)	
Tamper Parameters	N.C (200VDC 0.1A max.)	
Alarm Output Period	2 Sec.	
Alarm Output	N.C (60VDC 0.6A max)	
Warm-up Period	Approx. Under 10 sec.	
Power Supply	12VDC(9.6 ~ 14.4VDC)	
Current Consumption	20mA (max.) at 12VDC(9.6 ~ 14.4VDC)	
Weight	85g(2.99oz)	
Operating Temperature	-10℃ ~ +50℃(+14°F ~ +122°F)	
Operating Humidity	95% max.	

Bracket specification

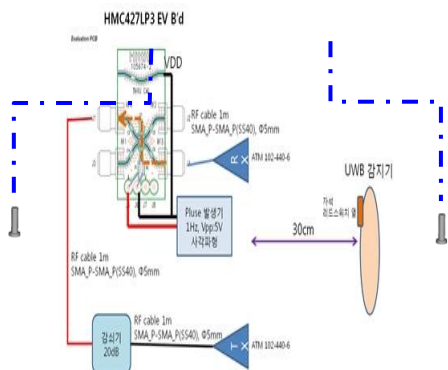
2. BRACKET SPECIFICATONS

Model		GB-41
Colors		White
Angle(Default)	Horizontal	0°
	Vertical	0° (Do not adjust)
Angle(Max range)	Horizontal	±50°
	Vertical	15° (Do not adjust)
Minimum setting unit	Horizontal	5°
	Vertical	2.5° (Do not adjust)
Installation Location		Wall, Ceiling

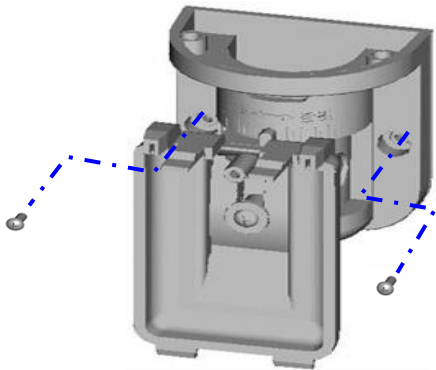
Adjust vertical angle cause reduce detection range.
Do not adjust vertical angle

Bracket installation

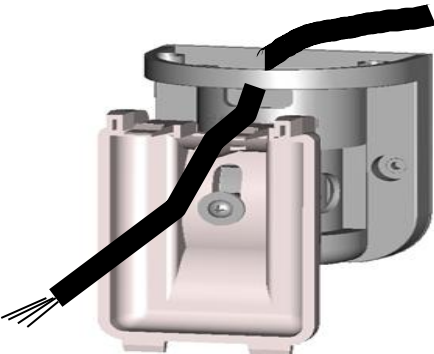
3. BRACKET Install



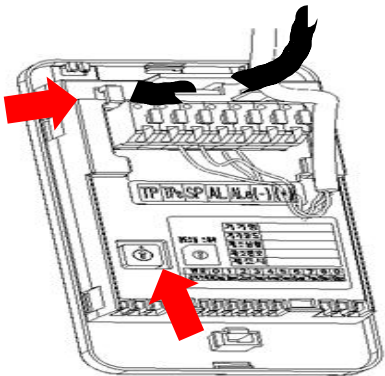
Install ceiling



Install wall



Wiring connections

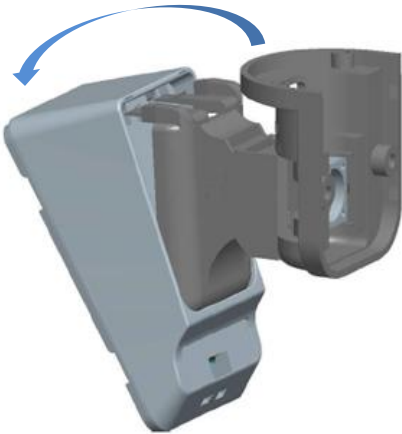


Combination sensor and Bracket

4. Remove bracket from sensor



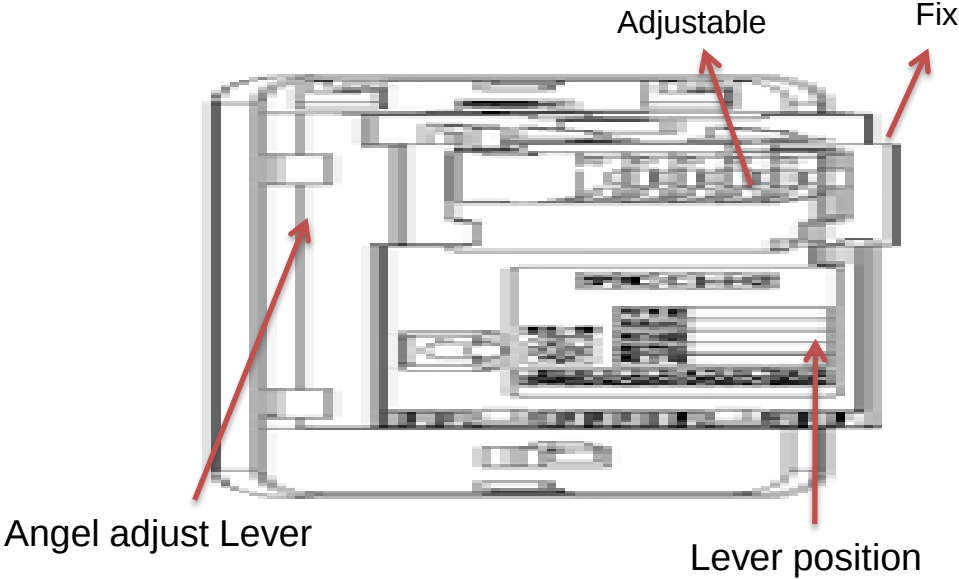
Push hook downwards



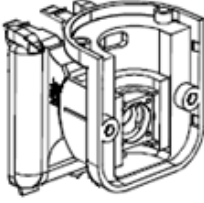
Pull sensor forward

Bracket installation

5. Adjust Bracket angle

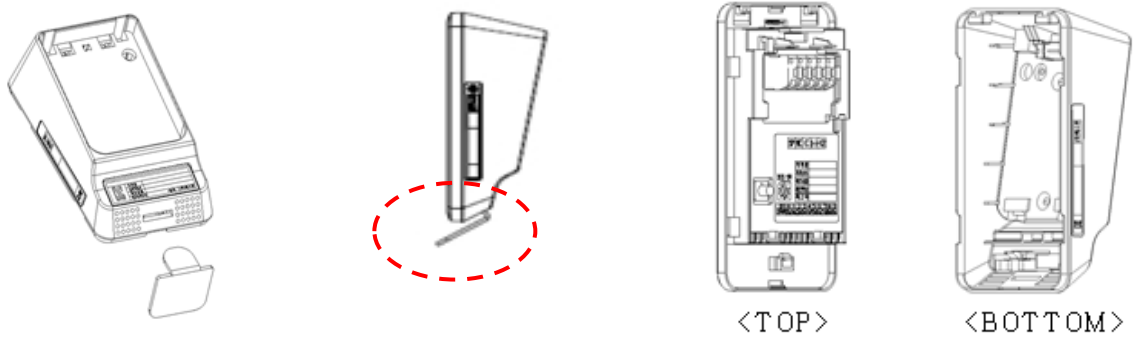


6. Sensor components (In unit Box)

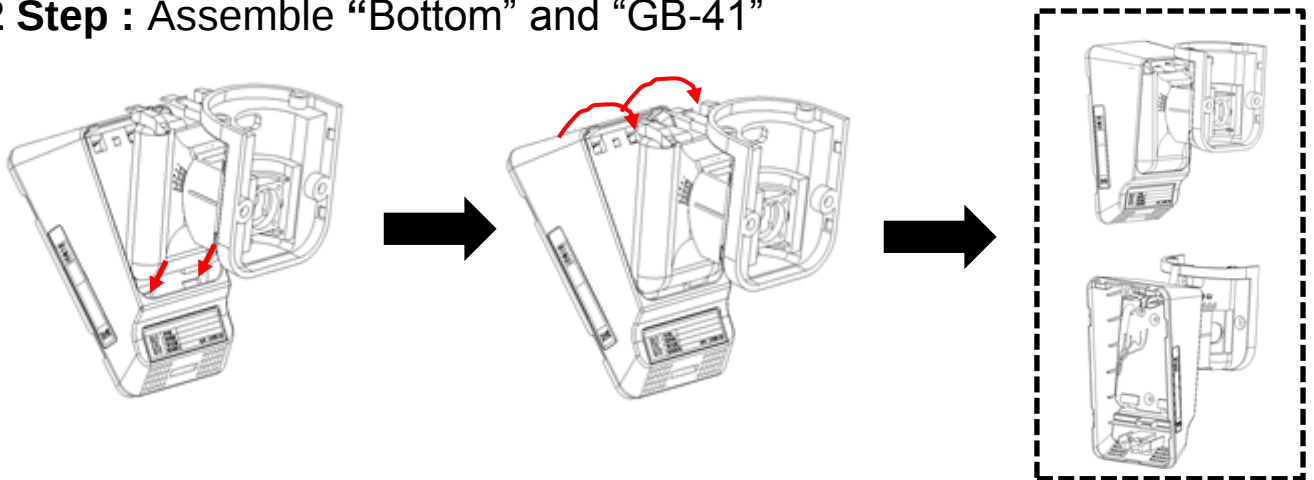
Sensor (1EA)	Bracket (1EA)	Accessories
 [Black]  [White]	 [Bracket]	 [Key] 1EA  [Screw] Φ4*30L 2EA

Sensor installation

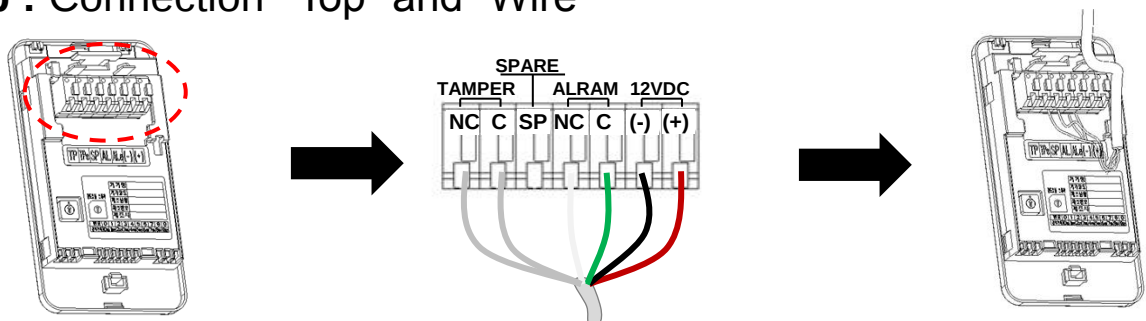
1 Step : Using key separate “TOP” and “BOTTOM”



2 Step : Assemble “Bottom” and “GB-41”

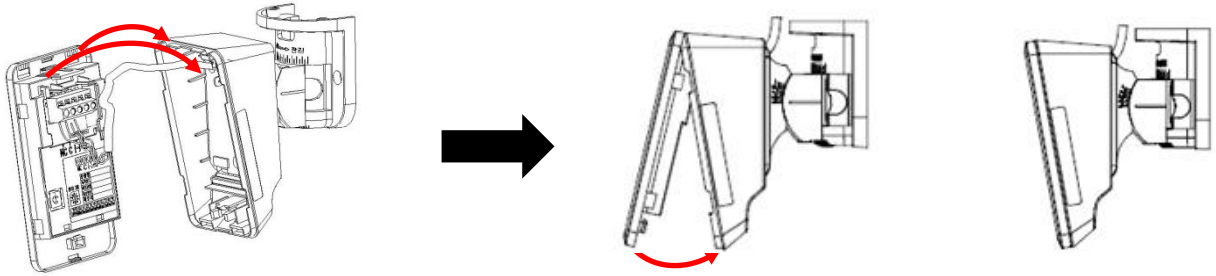


3 Step : Connection “Top” and “Wire”



Installation

4 Step : Assemble “Top” and “Bottom”



Note

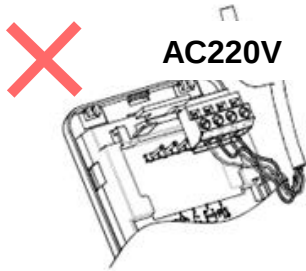
1. The unit is to be tested at a min once per year.
2. This unit is designed to detect a burglar or an intruder. When an alarm control panel is activated, the unit detects a burglar or an intruder. It is only a part of a complete system, we cannot responsibility any damage to change without prior consent of the S-1

※ Specifications and design are subject to change without prior notice

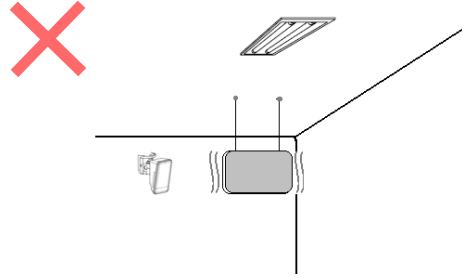
Installation Notes

Operational precautions

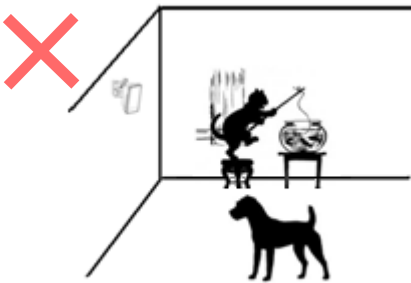
- Do not apply voltages higher than the rated voltage.



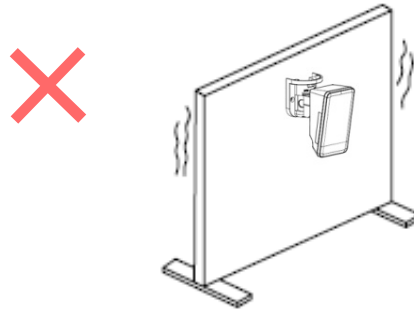
- When swaying objects(mobiles of metal material), in the detection area, change the direction or adjust the detection distance.



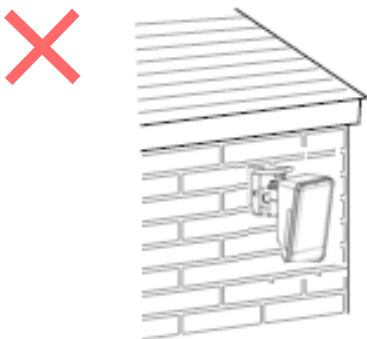
- Do not install where dogs and cats.



- Do not install in the swaying wall.



- Do not install the outdoor.



- Do not install the curtain(blind) by the external wind swaying.
- Do not install near any moving fan.

