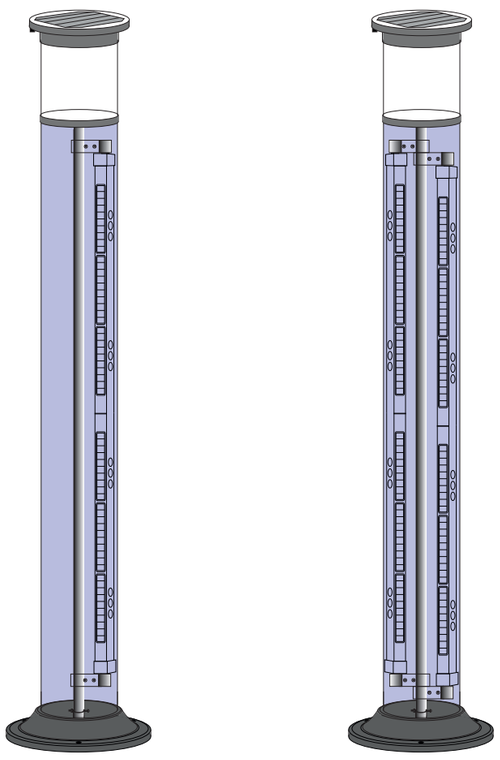
Solar-powered Garden Light & Wireless IR Detector

User Manuel



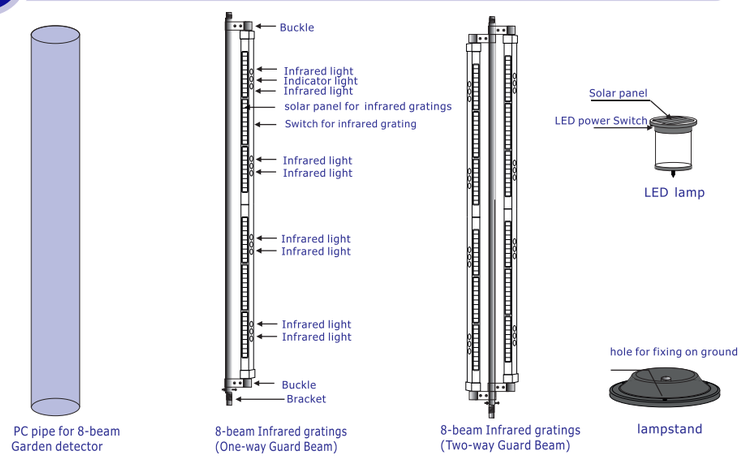
HB-T002 S8

HB-T002 S8-D

01 Product Overview

Solar-powered Garden Light & Wireless IR Detector is a new-type hi-tech environmentally-friendly product. It's of great design, practical,and safety. It transfers sun's UV rays to power-supply, adopts the wireless signal transmission device to transmit alarm signal instead of power cable and signal line. Our garden detector are classified into two types, namely 8-beam, which are widely applied in fences,gardens,swimming pools,golf courses etc.

02 Name of component



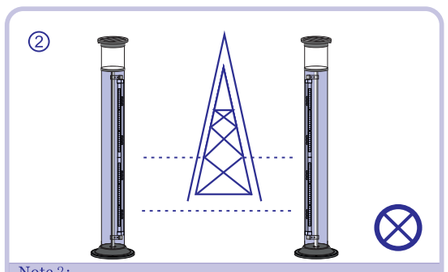
Configuration List for Garden Detector

Parts Name \ Item No.	HB-T002 S4	HB-T002 S4-D	HB-T002 S8	HB-T002 S8-D
LED lamp	1	1	1	1
Lampstand	1	1	1	1
PC pipe	0	0	1	1
8-beam Infrared gratings(One-way Guard Beam)	0	0	1	0
8-beam Infrared gratings(Two-way Guard Beam)	0	0	0	1
Remarks:	Above component calculated by one unit of garden detector			

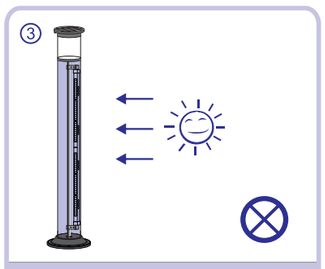
03 Installation Precautions



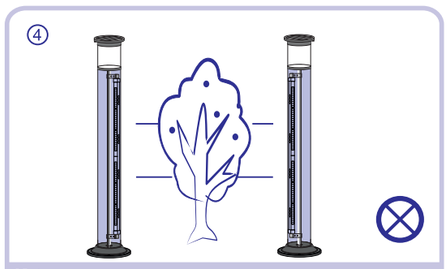
Note 1:
Never install detector at an inclined angle.



Note 2:
High-voltage tower and signal tower may influence wireless transmission distance.



Note 3:
Keep infrared hole not exposed to direct sunlight.



Note 4:
Make sure that there is no obstacle between the transmitter and receiver.

Others Significant Cautions.

①.Before installation,remove the plastic film on the solar panel of the detector.
②.To be solar wireless product,it shall not be installed ,tested or operated indoors or any dark place without sunlight.(light intensity should be ≥1800LUX).
If wanna be used indoor, suggest link extra cable to support.
③.trigger times should be ≤50times, installed indoor prohibited, which may impede normal operation of this product, and even cause damage to this product.
④.Before first operating this product, Please follow the technical guide to operate.
Special statement:Any loss or damage resulting from improper operation or unfollow the instruction, users take responsibility.

04 Operating Phenomena

①.ON: short press switch of transmitter & receiver N times(N=3-10), 3 seconds later, there's 3-6 beeps, mean it starts normally. On working state, press power switch, 1 beep, its already started.
②.After start the sensor, transmitter indicator lights 30 seconds then off, match both terminal , receiver keeps on shining with 8 beep ,its normally in working state.
③.In working state , only if block 3 infrared hole of detector with thick obstacle , it alarms.
④.OFF :short press switch of transmitter & receiver 3 times, hear long beep , mean it's off normally. This time ,press power switch,2 beep, its already powered off.

LED Parts

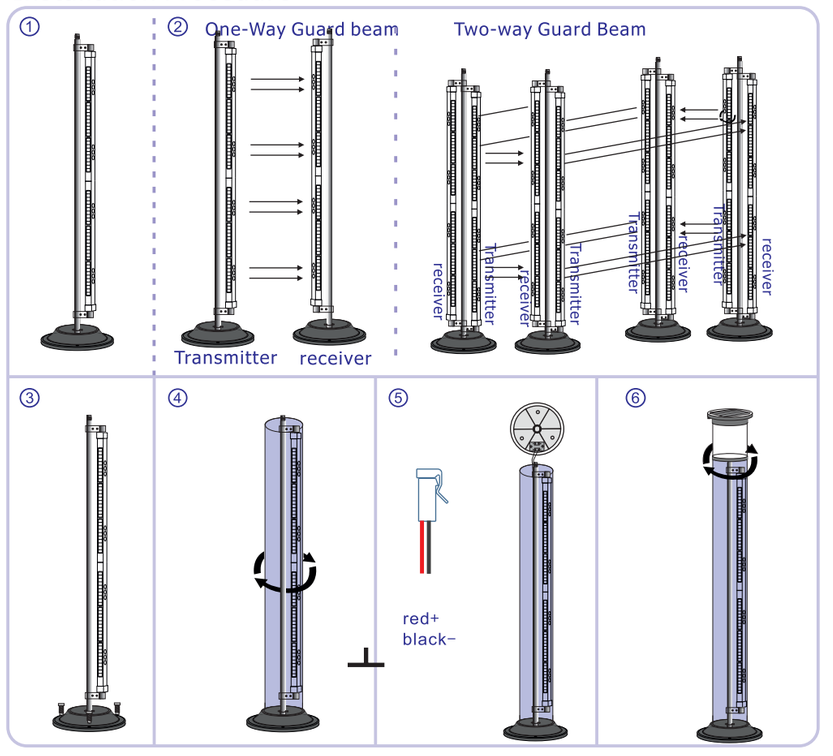
①"OFF"status,LED lamp is out of work no matter for day or night, Lamp goes out
②Start :Press power switch under LED lamp for one time. Garden sensor start to work.
Working state: a)In daytime or strong light,Led lamp goes out.
b)At night or weakness light,Led lamp lighten up automatically

Other Precautions

①.Turn off detector by clicking power button 3 times .if 1-2 times , it works and still send signal to host unit.
②.If detector cant match up with each other well, it send invalid code to host unit. Once re-match ,it works.
③.It automatically turn off ,if long time stay at dark place ,more than 100 hours.
④.Transmitter and Receiver matched by default, if wanna change either terminal ,contact us for support.
⑤.Do not start the detector at dark place or block the solar panel, otherwise , detector cant started and 3 long beeps for false operation.
⑥.Press power switch,1 beep, it starts.2 beeps, its off.
⑦."OFF" state,cover thick material above LED lamp completely,if lightens up, it's ON;if lamp goes out,its OFF.

05 Installation Method

Installation Procedure



1.Fix bracket in the lamp stand, keep wire at upper side,then turn and fasten in a clockwise direction.
2.Adjust direction and line transmitter & receiver of garden detector.
3.Fixed lamp stand on the ground.(screw not included in package)
4.Fix and make PC pipe horizontal on the lamp stand, turn in a clockwise direction.
5.link black wire and red wire accordingly as picture. Attention electrode (red:+,black:-)
6.Set LED lamp on PC pipe,circle 2-3 times anticlockwise direction,turn sliver circle round and round in clockwise direction,keep it rectangular to the ground.

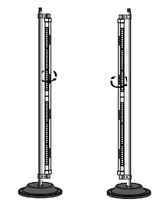
Remarks: HB-T002S8 -D is the same step as above.

06 Installation & Calibration Precautions and Test Method

Calibration Precautions

①Make sure that the power switch of the infrared gratings is turned on.
②Make sure that the infrared gratings is normally operating.
③Set it perpendicular to the ground. Small discrepancies can adjustable.

Remarks: HB-T002S8 -D is the same as above.



Test and verify whether detector is well-mounted

①Verify if the grating is normally operating by confirming if the indicator lamp of the detector.
②Hole Block-up: A) cover up 2 infrared light holes,non-alarm.
B) cover up 2 infrared light holes ,non-alarm
C) detector alarms when blocking up 3 infrared light holes.
③one infared light group insists of 3 infrared light holes,above calibration is suitable for either infrared light group.

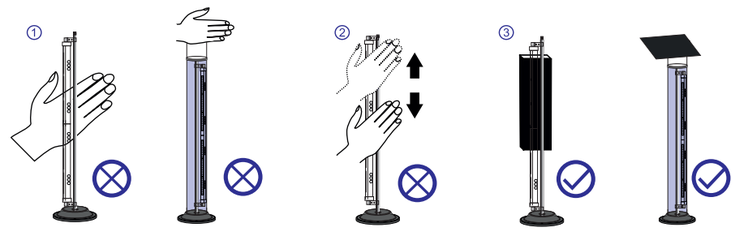
Remarks: HB-T002S8-D is the same as above.



How to trigger and alarm

①incompletely block two infrared holes of the sensor,because of the finger chink.
②Fast falling material makes non-alarm.
③cover the infrared hole an last above 1 seconds.

Remarks: HB-T002S8-D is the same as above.



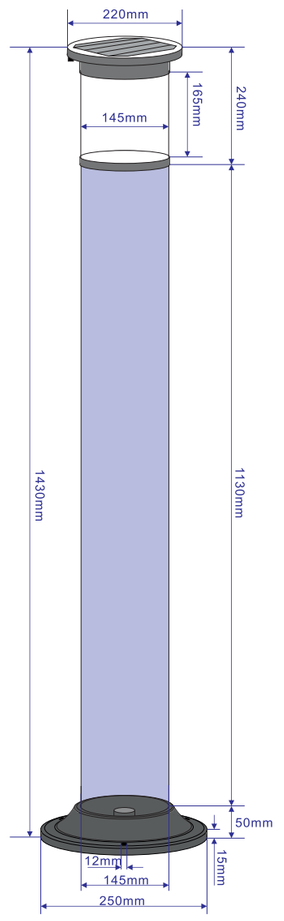
07 Check for Abnormality

Failure Symptoms	Failure Reasons	Failure Recovery Methods
No alarming when trigger, while LED lamp lights up.	1. The infrared light holes of the grating are not completely blocked up.	Completely block up infrared light holes with thick materials
	2. The host is not armed.	Arm the host by remote control, and then trigger an alarm
	3. The antenna of the host is not retracted, and wireless distance does not conform to product specifications.	Pull-out the antenna
	4. Garden sensor havn't automatically learn code with the host.	Arm the sensor into alarm host
The alarm lamp of grating does not light up	1. Garden sensor calibrated for a long time, battery protection.	Re-calibrate the sensor again
	2. Low-voltage status,battery enter into protection .	Charge sensor in a sunny place. Return batteries to the manufacturer if batteries fail to work.
	3. If the alarm lamp does not light up, but the grating can alarm, it means the lamp does not work.	Return the alarm lamp to the manufacturer.
The sensor does not normally work when powered on	1.Inappropriately powered on	Check if the active infrared gratings work normally when powered on
	2.Not keep the transmitting terminal of the grating aligned with the receiving terminal of the grating	Keep the transmitting terminal of the grating aligned with the receiving terminal of the grating
Garden sensor gives out a prompt sound lasting for 2 seconds when powered on	1. Battery voltage of detector is too low	Make sure the solar panel of the grating is kept in a sunny place when turning on the grating.
	2. Garden Detector is kept in a dark place or the solar panel is covered with any materials when powered on.	
The grating does not give out a sound prompt when powered on	1. Any operation error occurs when pressing the ON/OFF button.	Press the ON/OFF button in a proper way
	2. Infrared gratings difficulties.	Return the grating to the manufacturer

08 Technical Parameters

Parameter Items \ Product Name	Solar-powered Garden Light & Wireless IR Detector HB-T002 S8 /HB-T002 S8-D
Infrared Distance	Utility distance 50m
Wireless Transmitting Distance	700m in the open air
Wireless Transmitting Frequency	433MHz FSK+FHSS
Maximum Trigger time within 24 hours	≤200times
Battery Capacity	6000mAH
Working environment temperature range	-30°C~70°C
Number of infrared beams	4-beam,8-beam
Operating Voltage	3.3V
Battery Type	chargeable LFP battery
Static operating volume	<5mW
Infrared light wavelength	940nm±20nm
Solar electric panel output current	2W
LED lamp consumption	1W
LED lamp working time	8-12hours

09 Product Size



HB-T002 S8 HB-T002 S8-D

sn:2016-07-01

SAFERHOMEE Copayright: Ningbo Hengbo Telcommunication Co., Ltd.
Address: No. 8 JinQiao Road, Building One, Ninghai County, Ningbo City, ZheJiang, China Web: www. saferhomee. com Service Hotline: 0086-574-65222380