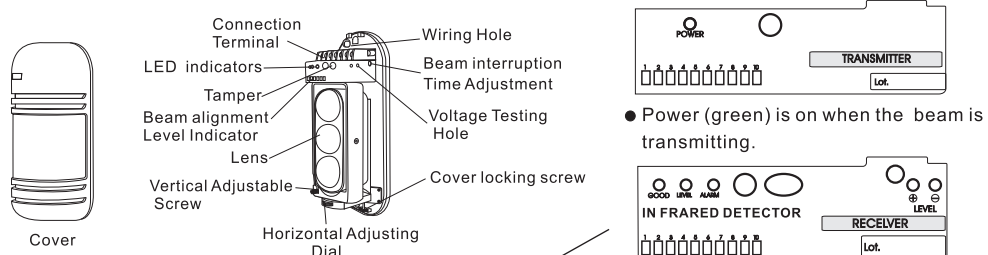


TRIPPLICATE PHOTOELECTRIC BEAM DETECTOR

User Manual

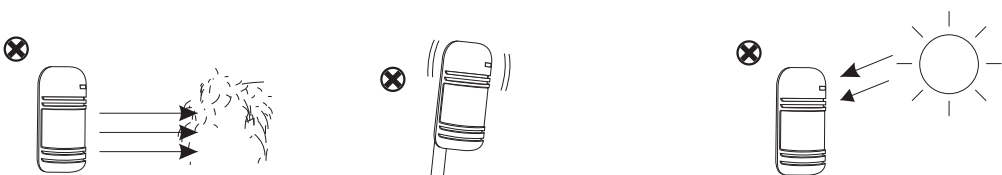
LHP-50T LHP-100T LHP-150T LHP-200T LHP-250T

1. Parts description

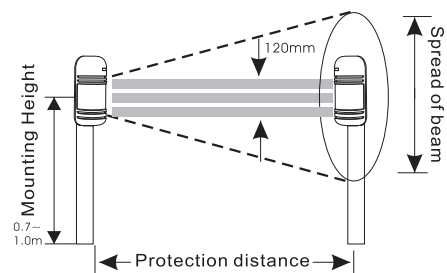
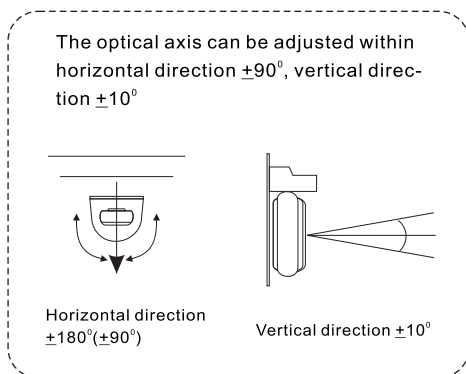
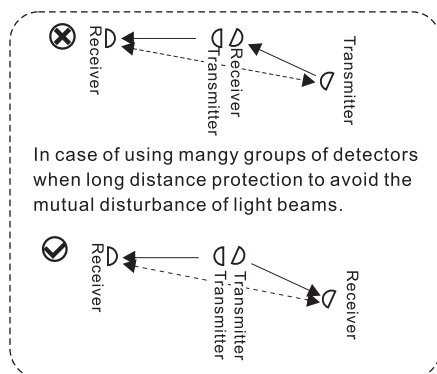


- LEVEL becomes brighter when more LEDs light in alignment.
- ALARM red is on when create alarm activation
- GOOD (green) is on when beams are aligned, and off when beams are not well aligned.
- After alignment, the fifth alignment LED of receiver must be on, otherwise you have to continue the alignment. Recommend the 7th or more LED indicators on.

2. Setting notice



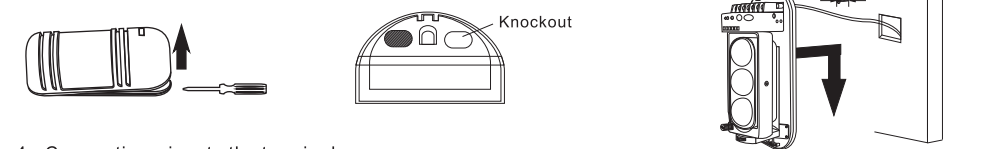
- Where blocks (such as trees or place for hanging clothes) are between the receiver and the transmitter while installing.
- Where installation base is unstable.
- Where the sunlight light and automobile headlight Shine directly.



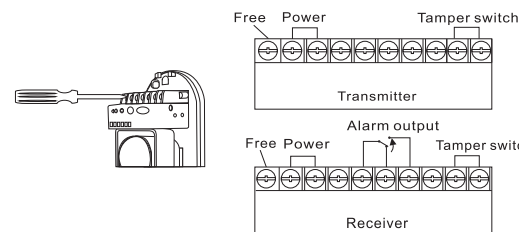
Protection distance	Dispersion
50m	1.5m
100m	3.0m
150m	4.5m
200m	6.0m
250m	7.5m

3. Mounting Method

1. Loosen the fixed screw and remove the cover.
2. Break out the knock-out and pull wire through.
3. Mount the detector on the wall.



4. Connecting wires to the terminal.



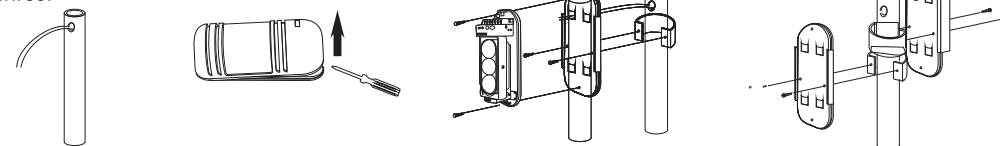
The wiring distance

Diameter	Voltage	DC12V	DV24V
0.5mm ²	(ϕ 0.8)	300m	600m
0.75mm ²	(ϕ 1.0)	400m	800m
1.25mm ²	(ϕ 1.2)	700m	1400m
2.0mm ²	(ϕ 1.6)	1000m	2000m

5. Fix the cover after beam alignment is adjusted.

Pole mounting:

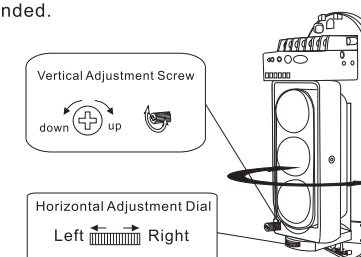
1. Break out the wire hole on the bracket then pull out the wires.
 2. Remove the cover
 3. Fix the base plate on the bracket.
- Back to back installation (Refer to the figure below.)



4. Beam Adjustment

1. Remove the cover, apply the power.
2. Adjust the horizontal adjustment dial and vertical adjustment screw, to make the most LEDs ON, the 5th LED must be ON, otherwise please readjust. More than 7 lit LEDs is recommended.

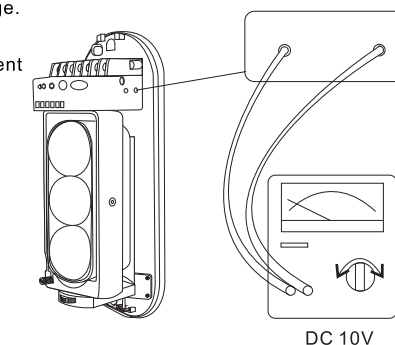
! The more LED indicators light, the higher of the precision of the beam alignment would be.



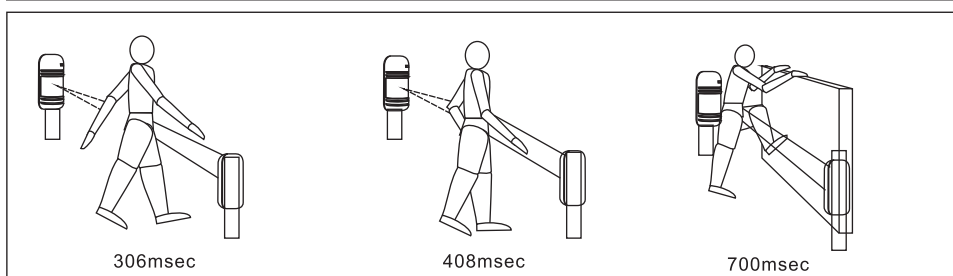
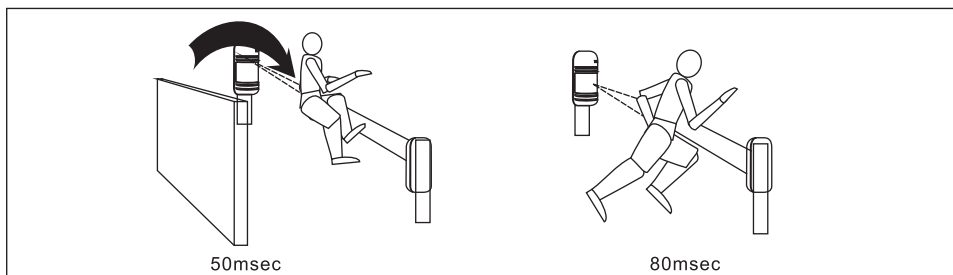
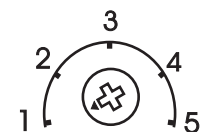
● Voltage Meter testing method:

1. Insert the probes of the voltage meter to the testing hole (Pay attention to the polarity)
2. Adjust the dial horizontally and vertically to obtain the largest voltage.
3. If 1.2V or above cannot be acquired, you have to continue to adjust. Top output can be up to 1.8V (1.5v or above is recommended to prevent false alarm in severe environment).

! After the optical axis angle alignment, the 5th LED indicator of receiver must be on, otherwise you have to continue the alignment. Recommend the 7th or more LED indicators light.



5. Beam interruption time adjustment



6. Operation confirmation

After installation, confirm correct operation by suitable walk tests. Refer to the LED indication of the right form during the walking test.

	Condition	Indication
Transmitter	Transmitting	Green LED is ON
	Watching	GOOD-LEVEL Indication is ON
Receiver	Alarm	Alarm indication lamp is ON

7. Troubleshooting

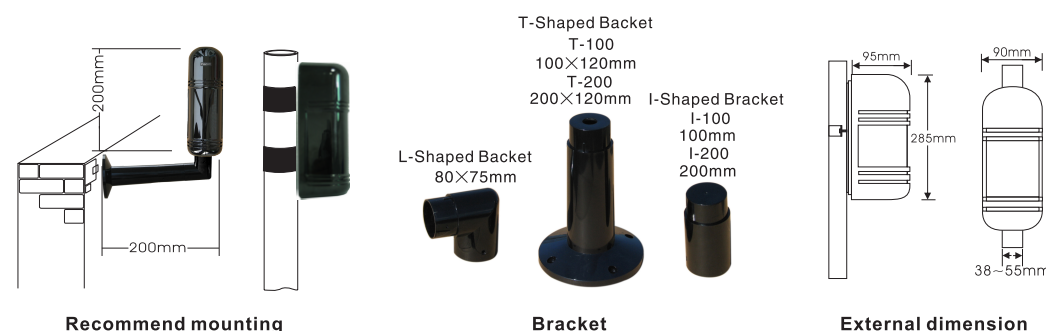
Symptom	Possible Cause	Remedy
Transmitter LED dose not light.	Improper voltage supplied.	Check the power supply and wiring.
Receiver LED dose not light.	Improper voltage supplied.	Check the power supply and wiring.
Alarm LED dose not light, even when beams are blocked.	1.Beams reflect to the receiver by other objects. 2. 3 beams are not interdicted Simultaneously. 3. Shading light time is too short..	1. Remove the reflecting object or change optical axis direction. 2. Shade 3 beam. 3. Prolong the shading time.
When the beams are blocked, the receiver LED lights is ON , but not alarm.	1.Wring is short circuit. 2. Wiring point is not good.	Checking wiring and connection spot.
The alarm indication lamp of receiver is always on.	1. Optical axis is not properly adjusted. 2. There are blocks between the transmitter and receiver. 3. The detector cover or strained slick are dirty.	1. Adjust the optical axis. 2. Remove the blocks. 3. Polish with the soft cloth.

Intermittent alarm	<ol style="list-style-type: none"> 1. Bad wiring. 2. Supplied voltage can't reach 12V. 3. Movable blocks between the transmitter and the receiver. 4. The installation base is unstable. 5. Improper lens direction. 6. Blocked by other moving objects. 7. The interruption time is too short. 8. 5 Lens do not light when uncover. 	<ol style="list-style-type: none"> 1. Check wiring. 2. Check the power supply. 3. Remove the blocks or relocate. 4. Fix the mounting. 5. Adjust the lens direction. 6. Adjust interruption time or change installing position. 7. Readjust interruption time. 8. Readjust the lens direction to obtain fine alignment.
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8. Specification

MODEL	LHP-50T	LHP-100T	LHP-150T	LHP-200T	LHP-250T	
Detection method	Infrared photoelectric					
Range	Outdoor	50m	100m	150m	200m	250m
	Indoor	150m	300m	450m	600m	750m
Beam characteristics	Pulsed infrared triplicate beams					
Interruption period	50~700msec(selectable)					
Power input	DC13.8~24V/AC11~18V					
Current consumption	70mA max	80mA max	90mA max	100mA max		
Alarm period	2sec(±1)nominal					
Alarm output	NO.NC relay (AC/DC30V 0.5A max)					
Tamper switch	N.C (DC24V, 0.5A max)					
Operating temperature	-25℃ ~+55℃					
Environment humidity	5%-95% relative humidity					
Alignment angle	20°(±10°)vertical, 180°(±90°)horizontal					
Mounting	Wall or pole					
Weight	2168g(Both transmitter and receiver)					
Appearance	PC Resin(Black)					

9. Mounting, bracket and measurement



Recommend mounting

Bracket

External dimension