

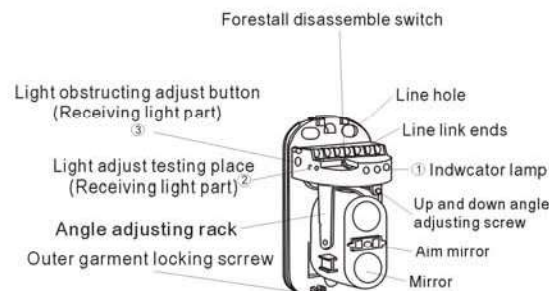
ACTIVE INFRARED DETECTOR

Usage manual

1 Part name



Outer garment



The body

① Indicator lamp



Receiver Transmitter

- LEVEL: Indicator lamp (red). The brightness will be changed according to the different precision of the light shaft.
- ALARM: The light will be on when alarming.
- GOOD: Indicator lamp (green), the green lamp will be on when the light shaft is in the right direction, other wise the lamp will not be on.
- POWER (Green): Turn on the lamp when light on.
- ② Use it when check the precision of the light shaft (Please refer to the use instruction)
- ③ Use it when the light is obstructed (please refer to the use instruction)

Outdoor30M Outdoor60M Outdoor80M Outdoor100M

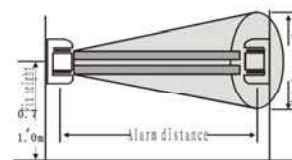
2 Attention

- Please don't use the deactor in the following places Fftfg

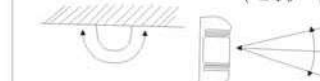


• The fix height and the alarm distance

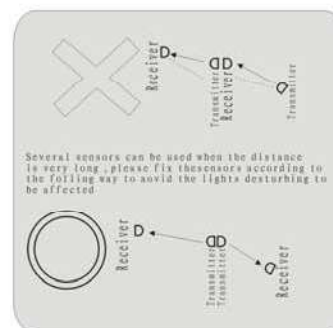
Model	Alarm distance	Light angle
SAB-30	30m	0.9m
SAB-60	60m	1.8m
SAB-80	80m	2.4m
SAB-100	100m	3m



• Light adjusting scope



Vertical direction 20° ($\pm 10^\circ$)
Horizon direction 180° ($\pm 90^\circ$)
The light shaft can be adjusted by $\pm 90^\circ$ in the horizontal direction and by $\pm 10^\circ$ in the vertical direction



3 Fixing way

• Wall fixing way

2. Stick the attached fixing board on the wall and make holes on it

3. Pierce the electronic through the line hole

4. Fix the body on the wall

5. Fix the electronic line into the link place

1. Disassemble the screw and take down the outer garment

• The way to fix the steady trestle
1. Make holes in the trestle and pierce the line through it.

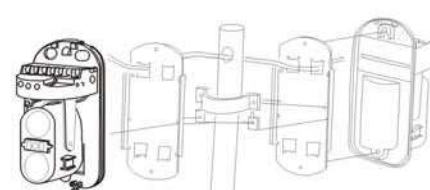
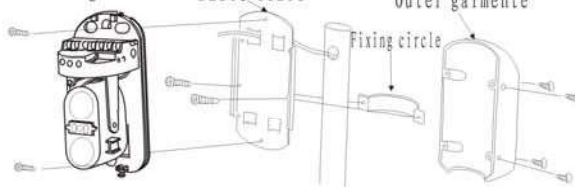
2. Take down the outer garment

3. Fix the basic board on the trestle

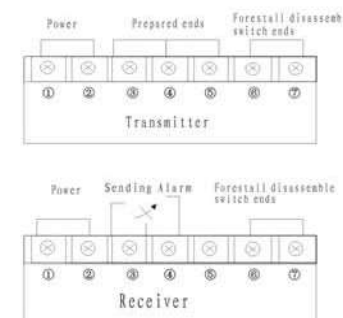
• Refer to the following picture when fixed back to back

6. Fix the outer garment after finishing adjusting the light shaft obstructing time

Outer radius if the trestle
 $\phi 38 \sim \phi 50 \text{mm}$



Line distributing ends



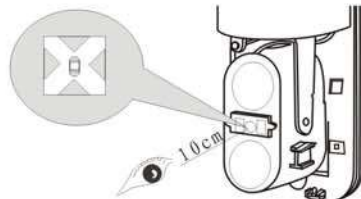
The line distributing distance from the sensor body to the sign accepted implement

Power stress	DC13.8V	DC24V
Line radius		
0.5mm ² ($\phi 0.8$)	300m	600m
0.75mm ² ($\phi 1.0$)	400m	800m
1.25mm ² ($\phi 1.2$)	700m	1400m
2.0mm ² ($\phi 1.6$)	1000m	2000m

4 Adjust the lights

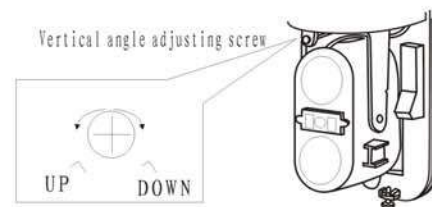
1. Take down the outer garment and switch on the power

2. Check the effect of the aim mirror on the right about 10cm away.



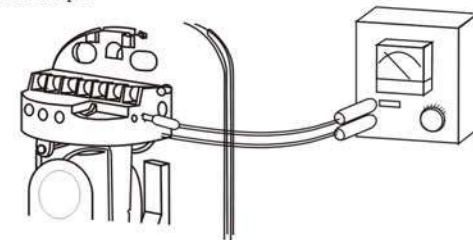
3. Adjust the up and down angle and the angle adjusting rack, the shade of the sensor opposite will be in the middle of the aim mirror then the indicator lamp of light accepting implement will be on (otherwise, please continue adjusting the light)

The red LED is more bright, the precision of the light shaft is higher



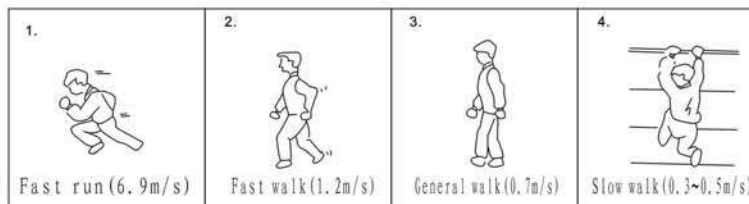
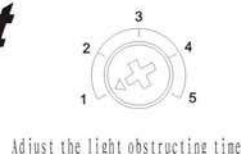
•The best light adjusting way-measure hole output

1. Plug the measure pen in the measure hole (attention the "+" "-")
2. Adjust the horizontal angle until the power is the most then adjust in the vertical direction, the way is the same as the horizontal angle.
3. If there is not 2.3v or more power, then the light sending implement and the light receiving implement must be adjusted again



5 Adjust the time of obstructing light

The obstructing time of the light accepting implement can be adjust according to the picture. Generally the time should be a little less than the time of the invading time.



6 Test

After fixing the detector, the walking test should be taken. Please take action confirm according to the chart

	Condition	Condition
Transmitter	Transmitting light	Green LED light on
Receiver	Warm	GOOD-LEVEL light on
	Alarm	Alarm shows the light is on

7 Check the unusual condition

Trouble	Reason	Countermeasure
The indicator lamp of light sending implement is not on	The power or power stress is not fit (block or cut)	Check the power line
The indicator lamp of light accepting implement is not on	The power or power stress is not fit (block or cut)	Check the power line
The light was covered and the indicator lamp of the light accepting implement is not on	1. Other light irradiate in to the light receiving implement 2. Two light was not covered at the same time 3. Covered time is too short	1. Get rid off the reflex matter of change the light direction 2. Obstructing the two lights at the same time 3. Extend the covering time
After covering the light, the alarm indicator lamp of light accepting implement is on, but there is not alarm sign.	1. The line was blocked or cut 2. The line point is obtuse	Check the line and line point
The alarm indicator lamp of the light accepting implement is always on	1. The light are not met 2. There are blocks between the light receiving implement and light sending implement 3. The outer garment was polluted	1. Adjust the light shaft again 2. Get rid of the blocks 3. Clean the outer garment
There is still alarm sign after power off	1. The line is not good 2. The power stress is changeable 3. There are moving blocks between the light receiving implement and the sending light implement 4. The fixing basic is not steady 5. The lights shaft precision is not high enough 6. Other moving matters covered the light	1. Check the line 2. Check the power resource 3. Get rid of the blocks or change the installation place 4. Choose the steady basic 5. Installate the light shaft again 6. Adjust the covering time or change the installation place.

8 Technology parameter

Model	SAB-30	SAB-60	SAB-80	SAB-100
Alarm distance	Outdoor 30m Indoor 90m	60m 180m	80m 240m	100m 300m
The longest distance	300m	600m	800m	1000m
The number of light	Two			
Survey way	Lights covered at the same time			
Light source	Infrared LED			
Response speed	50~700msec			
Alarm output	Transmit point output 1cPoint implement AC DC 30V 0.5max			
Power and power stress	Dc10. 5~28V			
Expend power	65mA max	65mA max	70mA max	70mA max
Temperature scope	-25°C~55°C			
Size	Refer to the outer shape			
Foretell disassemble	Point transmit 1b DC30V0. 5max			
Light adjusting angle (horizontal)	180° (±90°)			
Light adjusting angle (vertical)	20° (±10°)			
Deal with frost and fog	Ultrasonic wave implement			
Other attached implement	Light receive, OK sign, check point			
Material	ABS resin			
Weight	300g (Transmitter/Receiver each)			

9 The size of outer shape

