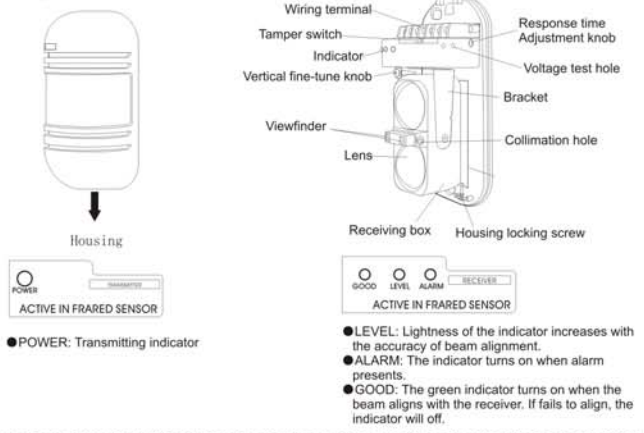


DUAL-BEAM ACTIVE PHOTOELECTRIC INTRUDER DETECTOR WITH DIGITAL FREQUENCY CONVERSION INSTALLATION GUIDE

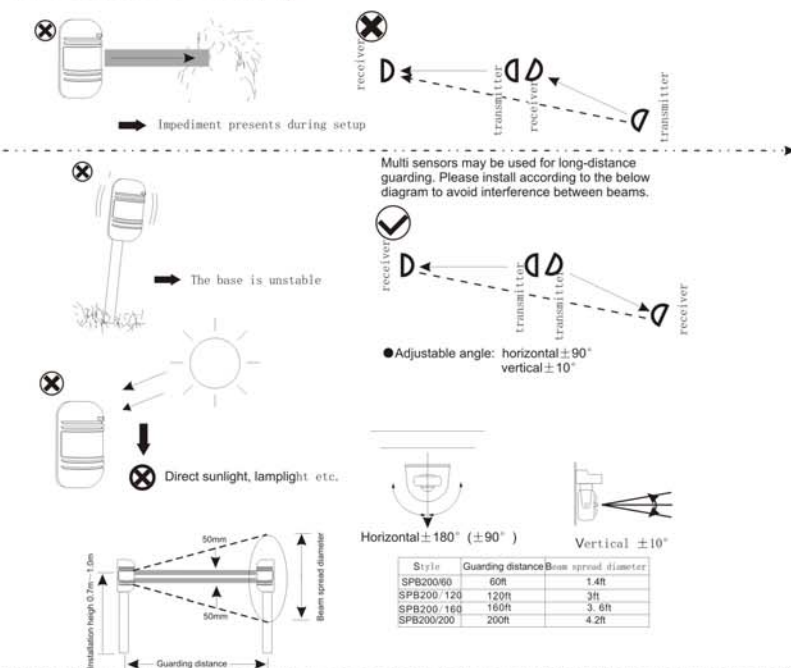
Model:

- SPB200/60 (Outdoor 60ft, Indoor 180ft)
- SPB200/120 (Outdoor 120, Indoor 360)
- SPB200/160 (Outdoor 160, Indoor 480)
- SPB200/200 (Outdoor 200ft, Indoor 600ft)

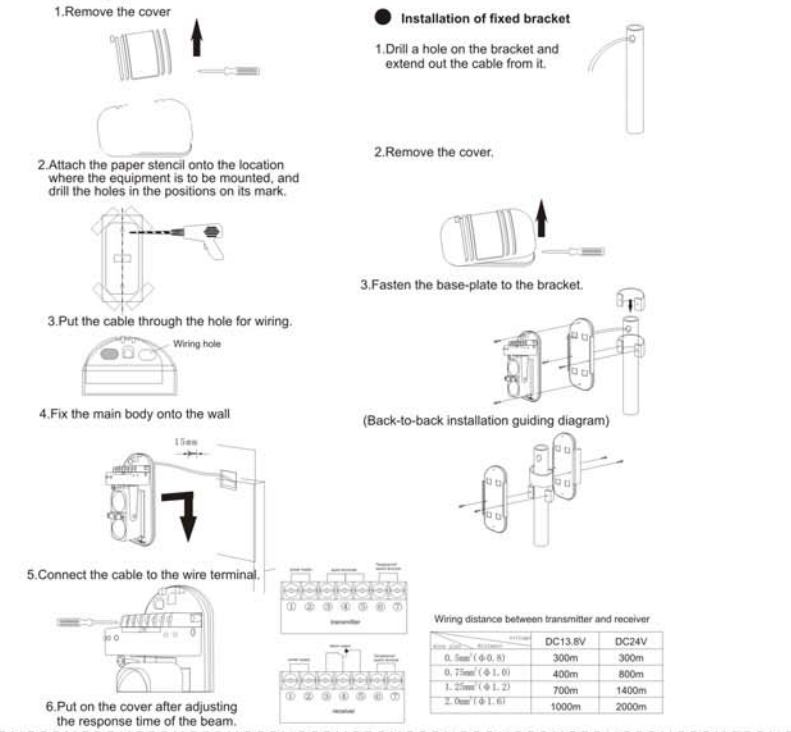
I. Part Name



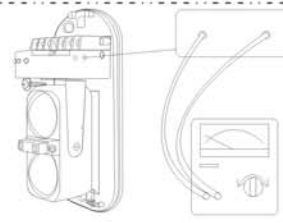
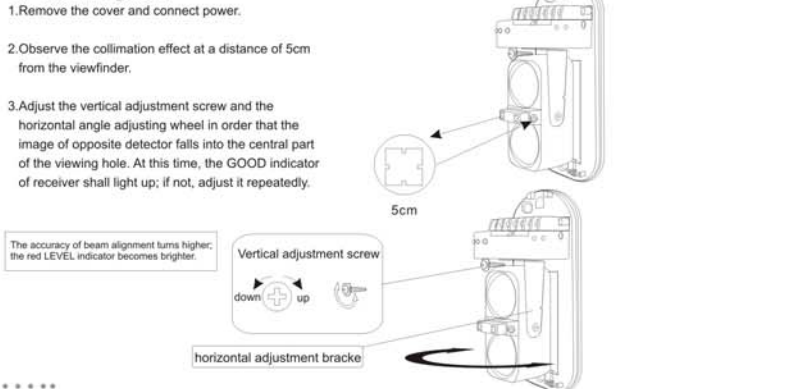
II. Precautions for setting



III Setting procedure



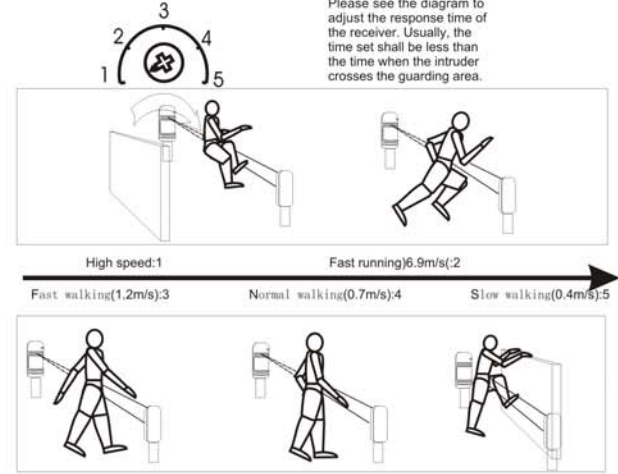
IV Beam alignment



- Insert the test pen into the test hole (please note the +, - polarity)
- First adjust the horizontal angle until the test hole voltage output maximize. Then adjust the vertical angle by the same way till the voltage reaches the value above that of below diagram.
- If it can't reach 1.1V or higher voltage, the transmitter and receiver shall be regulated again.

Multimeter selects DC 10V

V Beam response time adjustment



VI. Physical test

Walking test is required after the setting, physical test in accordance to below diagram.

	State		Signal
	Transmitter	Transmitting	The 2 indicators of green LED light up
Receiver	Guarding	In alarm	GOOD LEVEL indicators light up The red ALARM indicator light up

VII. Trouble checking

Fault	Cause	Solution
The LED of the transmitter doesn't light up	Power failure open circuit, short-circuit, etc.	Check the power wiring
The LED of the receiver doesn't light up	Power failure open circuit, short-circuit, etc.	Check the power wiring
The LED of the receiver doesn't light up when the light is blocked	1. By reflecting, or light from other sources enter the receiver 2. Both beams are not blocked at the same time 3. Response time is set too short	1. Remove the reflecting object or change the direction of beam 2. Block both beams at the same time 3. Prolong the response time
The receiver alarm indicator ON after the beam is blocked, but there is NO alarm signal output	1. Broken circuit or short-circuit of the wiring 2. Poor contact	1. Check the wiring and contact 2. Connect the cable
The alarm indicator of the receiver is constantly ON	1. The beam doesn't match closely 2. There is obstacle presents between the transmitter and the receiver 3. The cover is polluted	1. Re-adjust the beam 2. Remove the obstacle 3. Clear the cover
Intermittent alarm signal output	1. Improper wiring 2. The supply voltage does not reach 13V or higher 3. The potential obstacle appears to block the beams due to the effect of wind and rain 4. The installation base is unstable 5. The beam coincidence accuracy is inadequate 6. Beams blocked by other moving objects 7. Response time too short 8. Level 5 LED does not light up before the cover is put on	1. Check the wiring 2. Check the supply power 3. Remove the obstacle or change the location 4. Select a site with a stable base 5. Re-adjust the optical axis 6. Adjust the shade time or change the install location 7. Re-adjust the response time 8. Re-adjust the optical axis, and make the signal reception reaches to top.

VIII. Technical parameters:

Model	SPB200/60	SPB200/120	SPB200/160	SPB200/200
Alert distance	Outdoor 60ft Indoor 180ft	120ft 360ft	160ft 480ft	200ft 600ft
No. of beams	2 beams			
Detection mode	2 beams blocked simultaneous			
Optical source	Infrared digital pulse beam			
Response speed	50 ~ 700msec			
Alarm output	Relay contact output: NO, NC contact rating: AC/DC30V 0.5A Max			
Power supply	DC13.8 ~ 24V	AC11-18V	P=15W	
Power consumption	40mA Max	55mA Max	65mA Max	65mA Max
Operation temperature & humidity	-25°C ~ 55°C 5%~95%RH (relative humidity)			
Dimensions	Refer to its diagram			
Tamper output	Contact output: NC contact rating DC24V 0.5A Max			
optical axis adjustment H	$\pm 180^\circ (\pm 90^\circ)$			
optical axis adjustment V	20' ($\pm 10^\circ$)			
Protection against dew, frost	Cateflection housing (optional)			
Material	PC resin			
Net weight	65g (receiver + transmitter)			
Gross	1150g			

XI. Recommended installation guide & physical appearance and dimension

