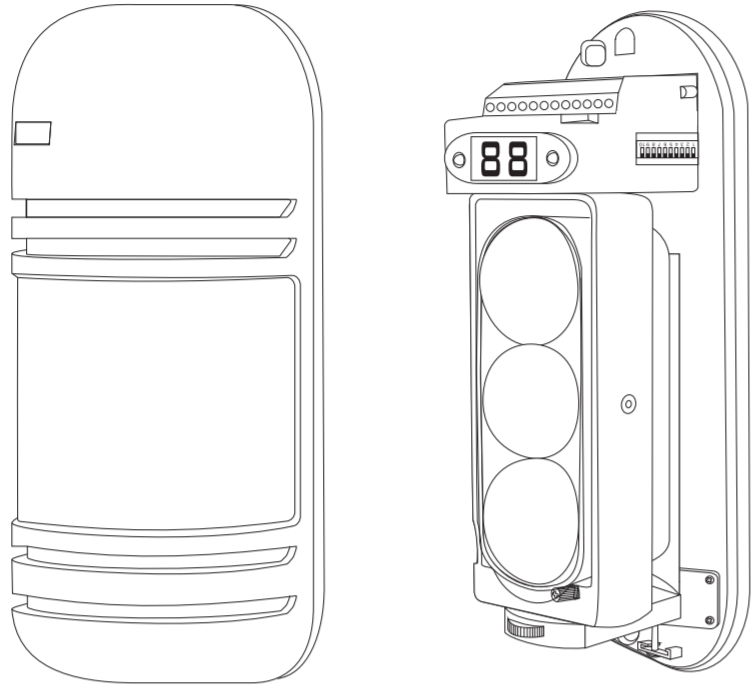


WIRED COMPATIBLE 3 BEAMS ACTIVE INFRARUSION DETECTORS

INSTALLATION GUIDE

ABE

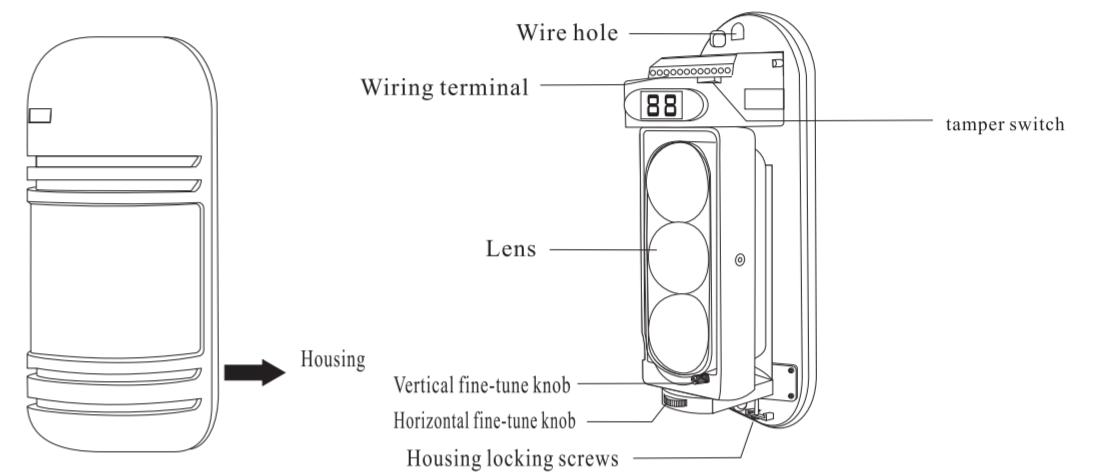


P/N:20170726A02

I. Technical parameters:

Model	ABE-50B	ABE-75B	ABE-100B	ABE-125B	ABE-150B	ABE-180B	ABE-200B	ABE-250B	
Alert distance	(Outdoor)	50m	75m	100m	125m	150m	180m	200m	250m
	(Indoor)	150m	225m	300m	375m	450m	540m	600m	750m
Number of beams	3 beams								
Detection mode	3 beams blocked simultaneous								
Optical source	Infrared digital pulse beam								
Response time	50-240ms (adjustable without degree)								
Power supply	DC13.8~24V 15W								
Alarm output	Relay contact output NO.NC contact rating AC/DC30V 30mAMax								
Trouble output	Relay contact output NC contact rating AC/DC30V 30mAMax								
Tamper output	Relay contact output NC contact rating DC24V 0.5Amax.								
Power consumption	≤65mA	≤70mA	≤80mA	≤90mA					
Operation temperature&humidity	-25°C~55°C 5%-95%RH (relative humidity)								
Optical axis adjustment (H)	180° (±90°)								
Optical axis adjustment (V)	20° (±10°)								
Material	P C resin								
Net weight	1250g (receiver+transmitter)								
Gross weight	2168g								

II. Part name:

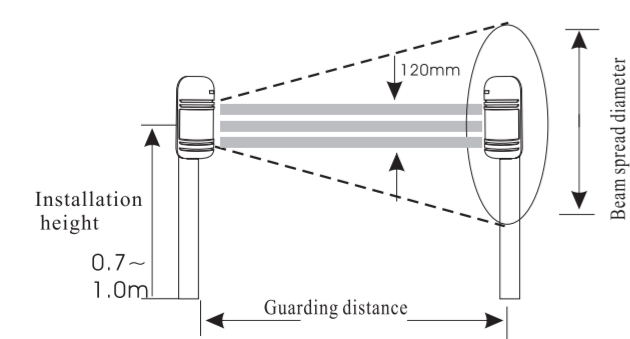
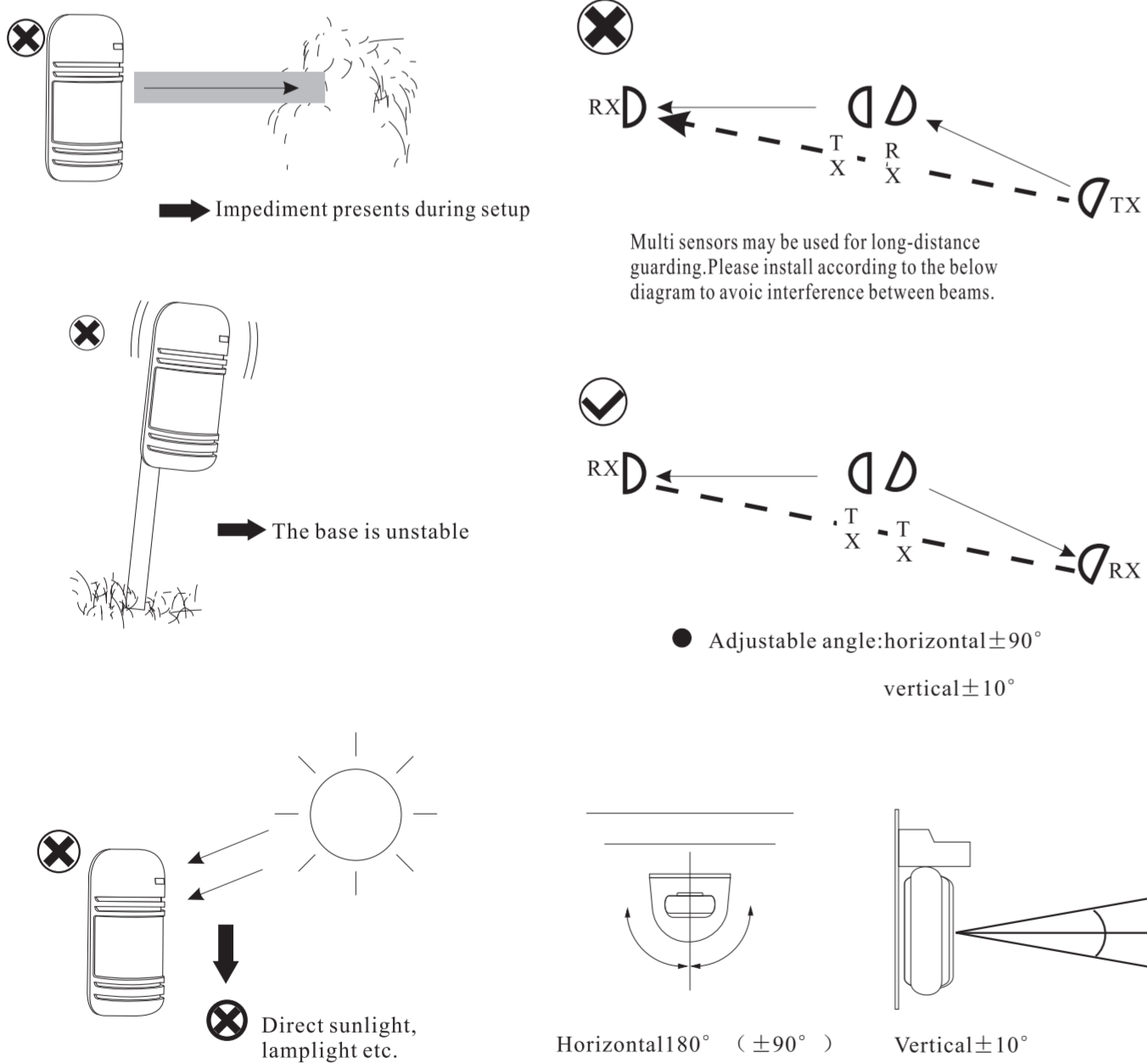


Feature:

- Under bus connection mode: The digital display of RX synchronize with the TX after the RX receive the signal from bus.
- Anti-fog function: when signal strength decrease slowly to 0.8V the detector will active anti-fog alarm (TBL out put), when signal decrease to 0.4V, will active alarm. When signal get back to 1.2v cancel alarm.

1

III. Precautions for setting:



Style	Guarding distance	Beam spread diameter
ABE- 50B	50m	1.5m
ABE- 75B	75m	2.3m
ABE- 100B	100m	3.0m
ABE-125B	125m	3.8m
ABE-150B	150m	4.5m
ABE- 180B	180m	5.4m
ABE- 200B	200m	6.0m
ABE- 250B	250m	7.5m

2

IV. Setting procedure

- Remove the cover
- Attach the paper stencil onto the location where the equipment is to be mounted, and drill the holes in the positions on its mark.
- Put the cable through the hole for wiring.
- Fix the main body onto the wall.
- Connect the cable to the wire terminal.
- DIP switch

Transmitter

Bus address setting

1 2 3 4 5 6 7 8 9 10

Free Free

Frequency set mode Function set mode

Receiver

Bus address setting

1 2 3 4 5 6 7 8 9 10

Alarm output N.O/N.C setting Buzzer ON/OFF setting

Frequency set mode Function set mode

DIP	1	2	3	4	5	6	7	8
1	OFF	ON	OFF	ON	OFF	ON	OFF	ON
2	OFF	OFF	ON	ON	OFF	OFF	ON	ON
3	OFF	OFF	OFF	OFF	ON	ON	ON	ON

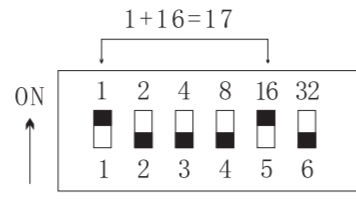
DIP	1	2	3	4	5	6	7	8
7	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
8	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF

Function setting (table 2)

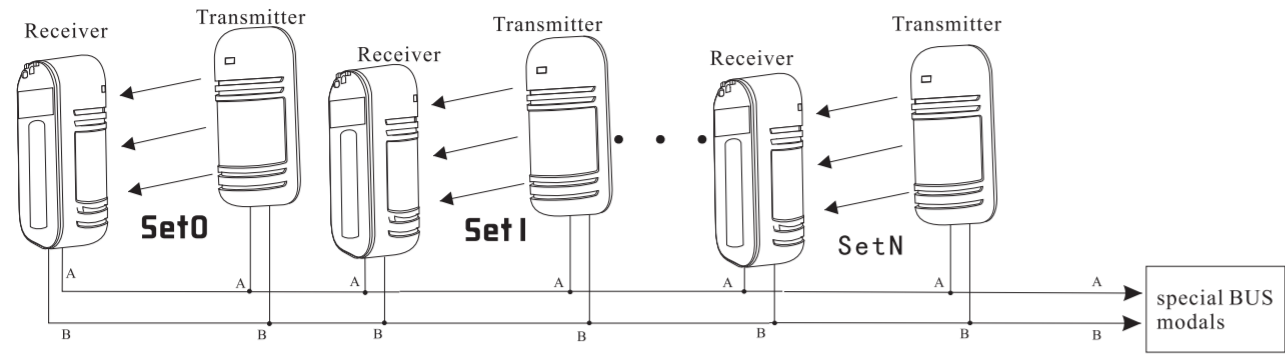
- Set frequency: set DIP 7 at ON, DIP 8 at OFF to enter the frequency setting mode, the digital display shows the frequency. Set frequency on DIP 1,2,3. see table 1.
 - Set address of BUS: set DIP 7 at off, DIP 8 at ON to enter address setting mode. The digital display shows the address number, set the address on DIP 1,2,3,4,5,6
 - Signal strength display mode: Set DIP 7 at ON, DIP 8 at ON to enter signal strength mode, the digital display shows the signal strength. The DIP 1,2,3,4,5,6 under this mode is free.
 - Address and frequency alternating display mode, set DIP 7 at OFF, DIP 8 at OFF to enter address and frequency alternating display mode, The DIP 1,2,3,4,5,6 under this mode is free.
- Frequency setting: First enter the frequency setting model (see table 2), Then set DIP 1,2,3 to set the detector's frequency. (see table 1)

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Zone address setting (first enter the address setting mode, see table 2)
 Under address setting mode, Switch the DIP 1-6 to set the detector's zone address.
 First set the DIP at ON, the number of the one DIP which set ON plus the other one, then plus 1, the final result of number is the zone number. Example this is zone 18



7. BUS Wiring :



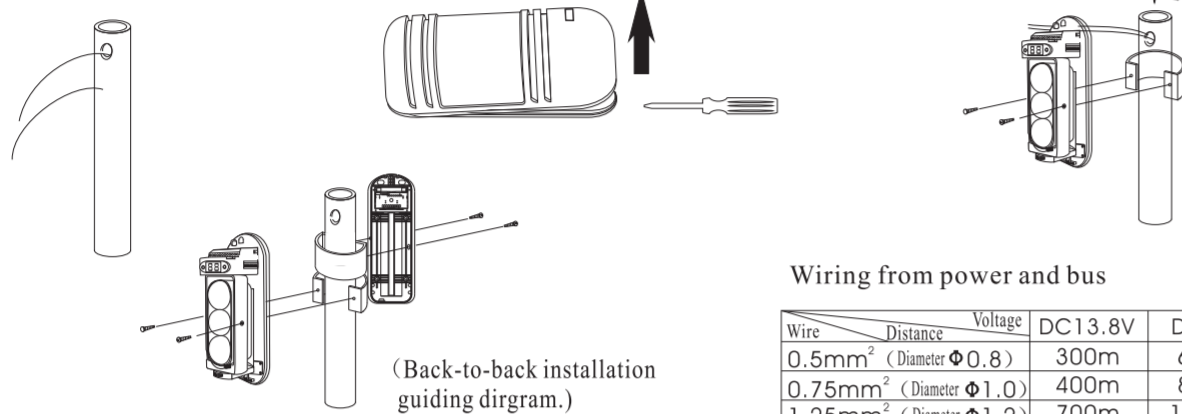
8. Take back the cover after the adjustment of the response time.

● Installation of fixed bracket

1、Drill a hole on the bracket and extend out the cable from it.

2、Take off the cover.

3、Fasten the base-plate to the bracket.



Wiring from power and bus

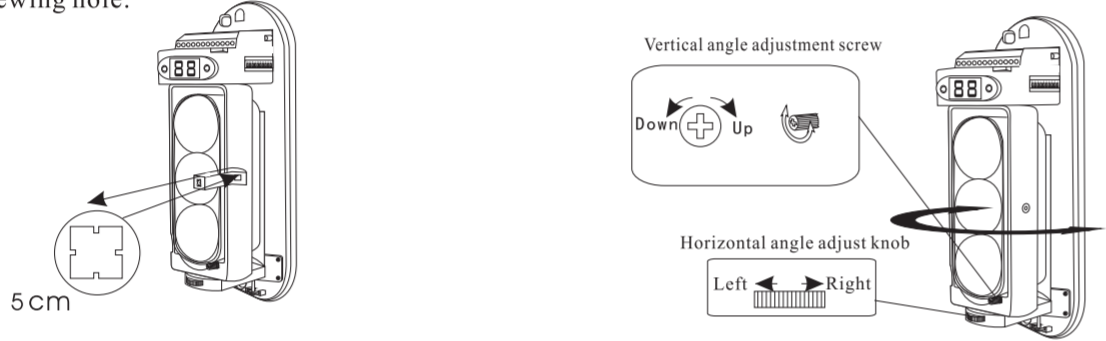
Wire	Distance	Voltage	DC13.8V	DC24V
0.5mm ²	(Diameter Φ0.8)		300m	600m
0.75mm ²	(Diameter Φ1.0)		400m	800m
1.25mm ²	(Diameter Φ1.2)		700m	1400m
2.0mm ²	(Diameter Φ1.6)		1000m	2000m

Note: please insert waterproof stopper into the hole of screw.

V. Beam alignment

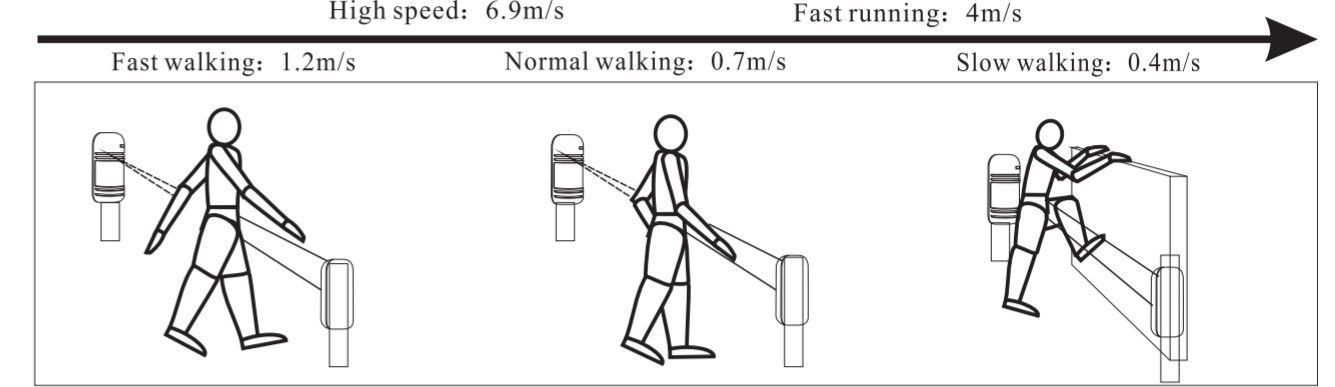
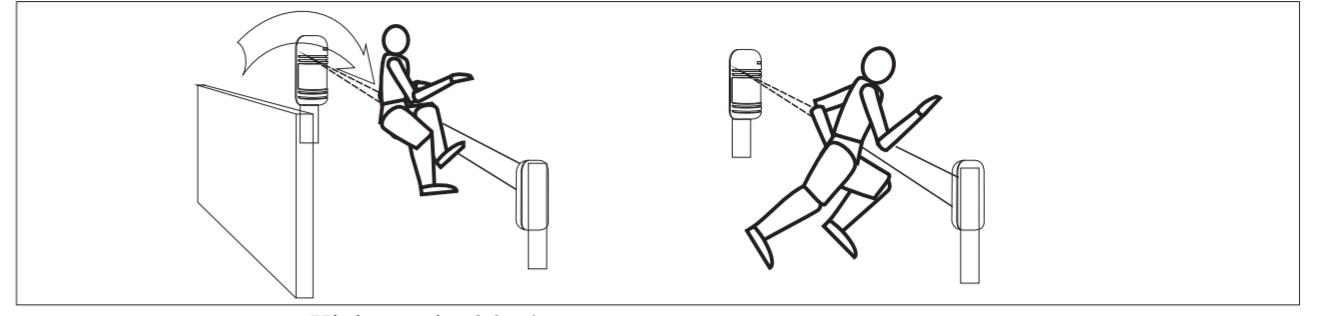
1、Observe the collimation effect at a distance of 5cm from the viewfinder. Adjust the upper/lower angle regulation screw and horizontal adjustment wheel in order that the image of opposite detector falls into the central part of the viewing hole.

2. Vertical and horizontal adjust as below picture showed to get a best signal strength, if signal strength is less than 1.8, please adjust again to get a better signal strength.



VI. Beam response time adjustment.

Please see the diagram to adjust the response time of the receiver. Usually, the time set shall be less than the time when the intruder crosses the guarding area. The MIN point is the shortest time.
 Time: 50-240m sec without degree



七、LED

After finish setting, please make walk test.

	Green	Red
TX flash when is bus signal	light on when there is no bus signal	always light on
RX flash when is bus signal	light on when there is no bus signal	light on when alarming, light off as normal status

IX . Dimension.

Physical appearance&dimension

