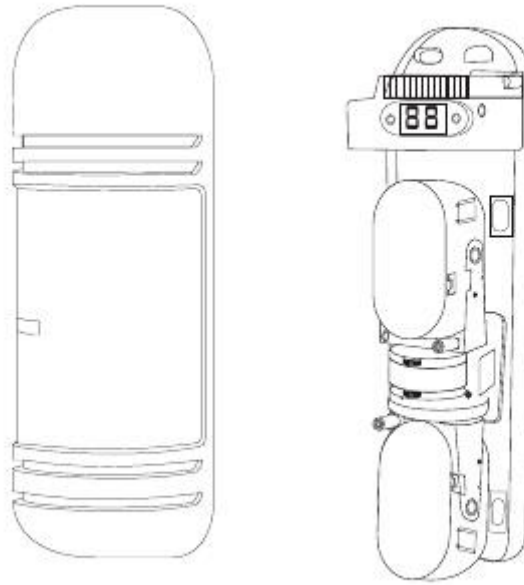


Bus/Wired Passive Infrared Intruder Detector with Four Beams

Installation Manual

ABH-B Series

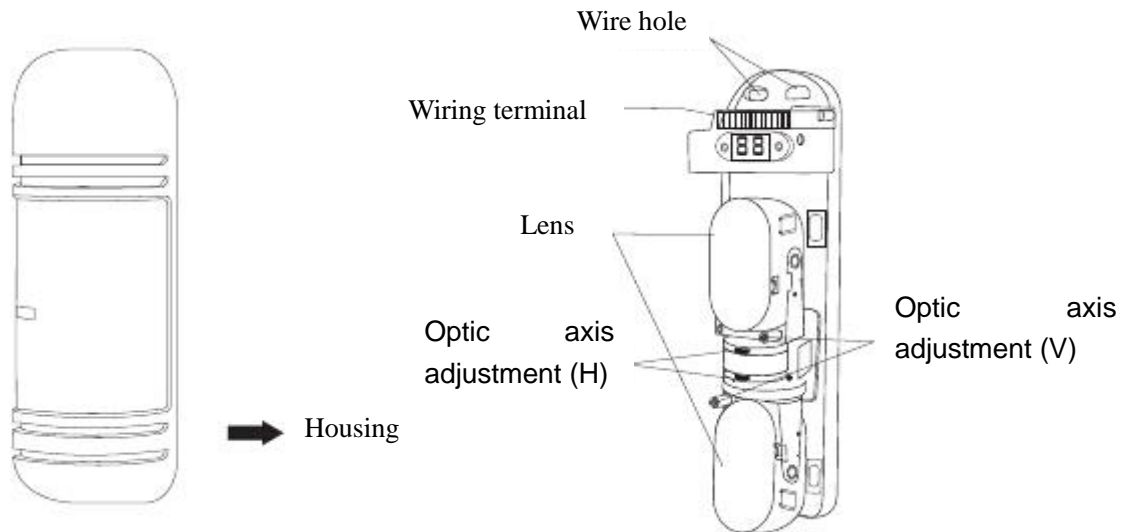


P/N: 20141114

I. Model and specifications

Model		ABH-50	ABH-100	ABH-150	ABH-200	ABH-250
Detection range	outdoor	50m	100m	150m	200m	250m
	indoor	150m	300m	450m	600m	750m
Beams		Four beams				
Detection method		Four beams blocked simultaneously				
Light source		Infrared digital pulse				
Response time		50-240ms(Non-adjustable)				
Alarm output		Relay output, NO~NC,able to connect AC, DC30V 30mA Max.				
Power supply		DC13.8-24V				
Power consumption		95mA	100mA	100mA	100mA	105mA
Temperature& humidity		-25°C-55°C, 5%-95%RH(relative humidity)				
Tamper output		NC, able to connect AC,DC24V 0.3A Max				
Optic axis adjustment(H)		180°(±90°)				
Optic axis adjustment (V)		20°(±10°)				
House Material		PC				
Net weight		2000g(transmitter+receiver)				
Gross Weight		2500g				

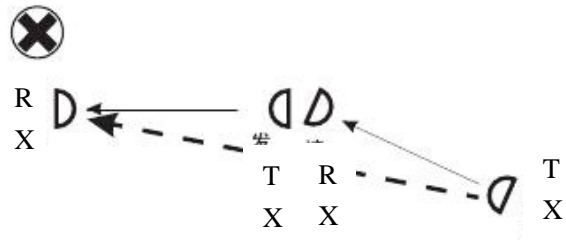
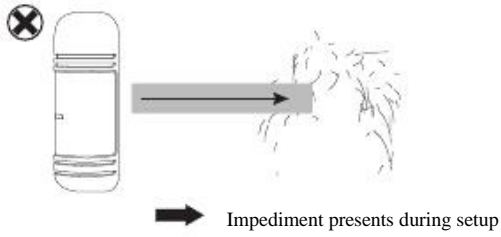
II.Part name:



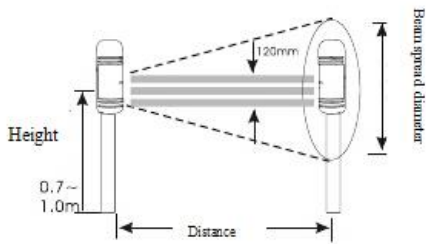
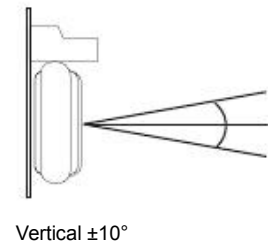
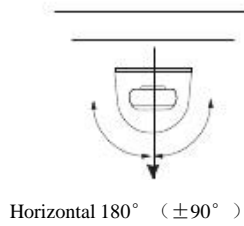
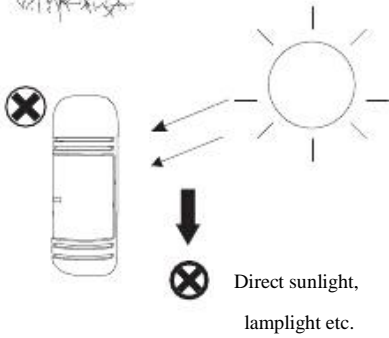
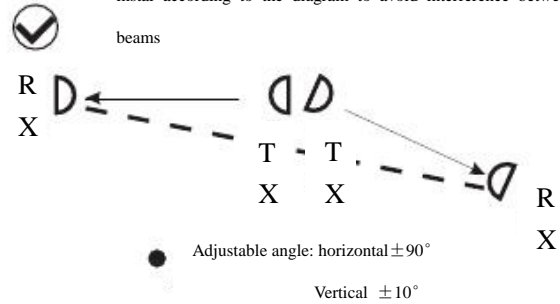
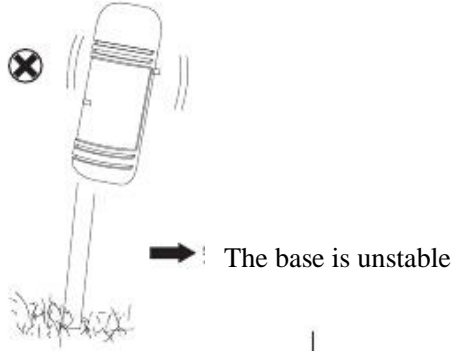
Feature:

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

III. Precautions for installation



Multi sensors may be used for long-distance guarding. Please instal according to the diagram to avoid interference between beams



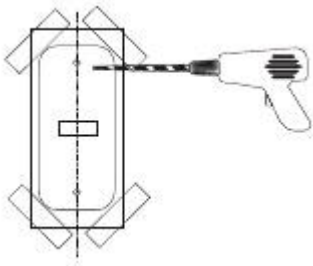
Model	Distance	Beam diameter
ABH-50	50m	0.8m
ABH-100	100m	1.6m
ABH-150	150m	2.4m
ABH-200	200m	3.2m
ABH-250	250m	4.0m

IV. Setting procedure

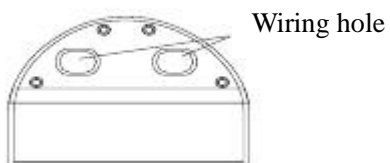
1. Remove the house



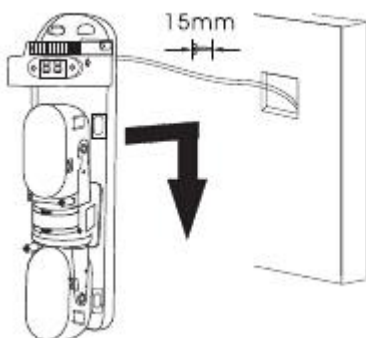
2. Attach the paper stencil onto the location where the equipment to be mounted, and drill the holes in the positions on its mark



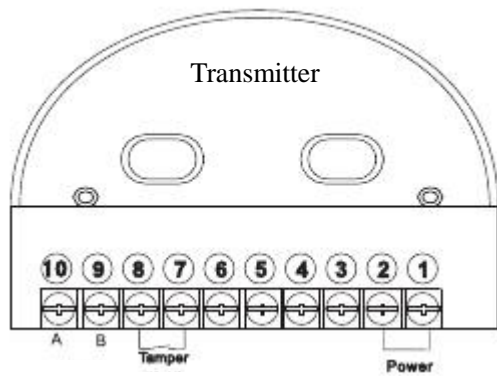
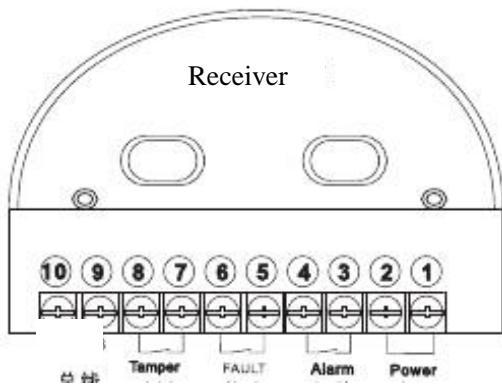
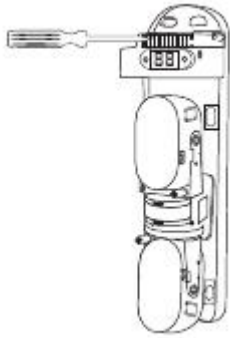
3. Put the wire through the hole for wiring.



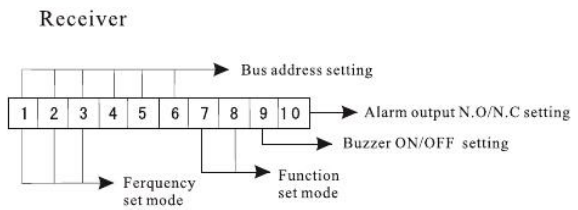
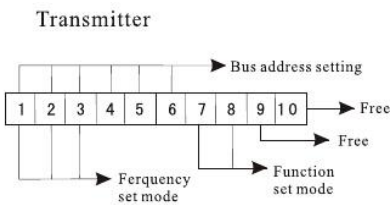
4. Fix the main body onto the wall.



5. Connect the wire to the wire terminal



6. DIP switch



Frequency 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

Table1

Mdoe DIP	Signal strength display mode	Set frequency	Set address of BUS	Address and frequency alternating display mode
7	ON	ON	OFF	OFF
8	ON	OFF	ON	OFF

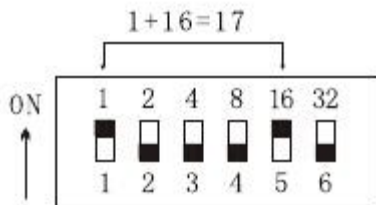
Table2

Function setting(table 2)

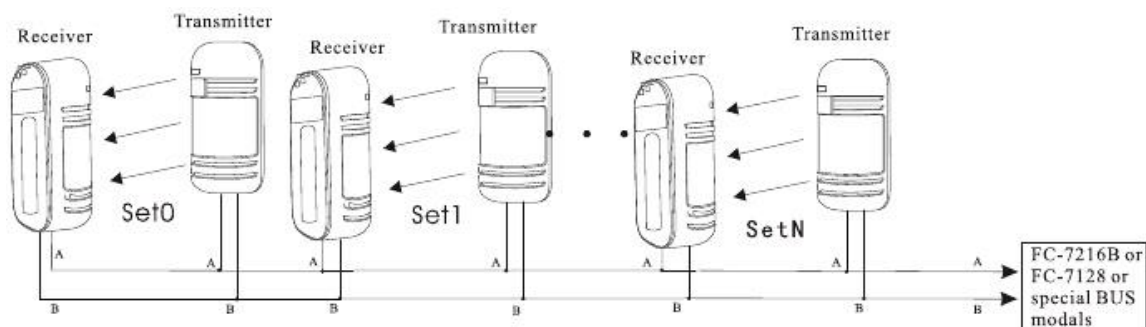
1. Set frequency mode: the digital shows the frequency, set it on DIP 1,2,3, refer to table 1.
2. Set address of bus: the digital display shows the address number, set it at DIP 1,2,3,4,5,6
3. Set signal strength display mode: the digital display shows the signal strength of beams, The DIP 1,2,3,4,5,6 under this mode is free.
4. Address and frequency alternating display mode: the digital display take turns to show the address and frequency. The DIP 1,2,3,4,5,6 under this mode is free.

Frequency setting: first enter the frequency setting mode (refer to table 2), then set DIP 1,2,3 to set the frequency. (refer to table 1)

Zone address setting(first enter the address setting mode, refer to 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 (17+1)



7. Bus wiring

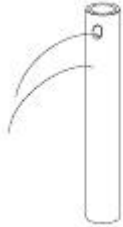


Note: it is possible for transmitter not to connect the blue wire, but if in this case, it will not display the strength of signal, and can not adjust the transmitting frequency automatically according to signal strength.

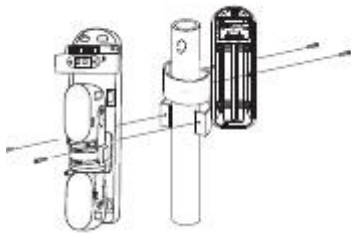
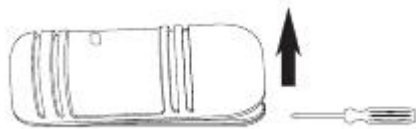
8. Take back the cover after the adjustment of the response time.

- Installation of the fixed bracket

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



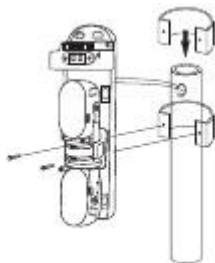
2. Take off the cover



Back to back installation guiding diagram

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

3. Fasten the base-plate the bracket

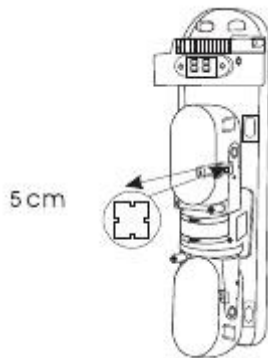


Wiring form power to bus

Wire	Distance	Voltage	
0.5mm ² (Diameter Φ 0.8)		DC13.8V	DC24V
0.75mm ² (Diameter Φ 1.0)		300m	600m
1.25mm ² (Diameter Φ 1.2)		400m	800m
2.0mm ² (Diameter Φ 1.6)		700m	1400m
		1000m	2000m

V. Optic axis adjustment

1. Observe the collimation on effect at a distance of 5cm from the view finder, enable the image of detector shown in the view finder.

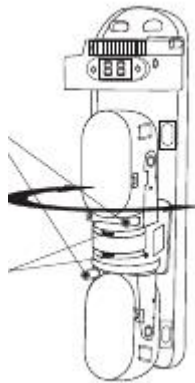
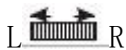


2. Adjust the vertical and horizontal optic axis following the picture below in order to get a best signal strength. If the signal is less than 1.8, please adjust again to get a better signal strength.

Adjust screw in vertical angle



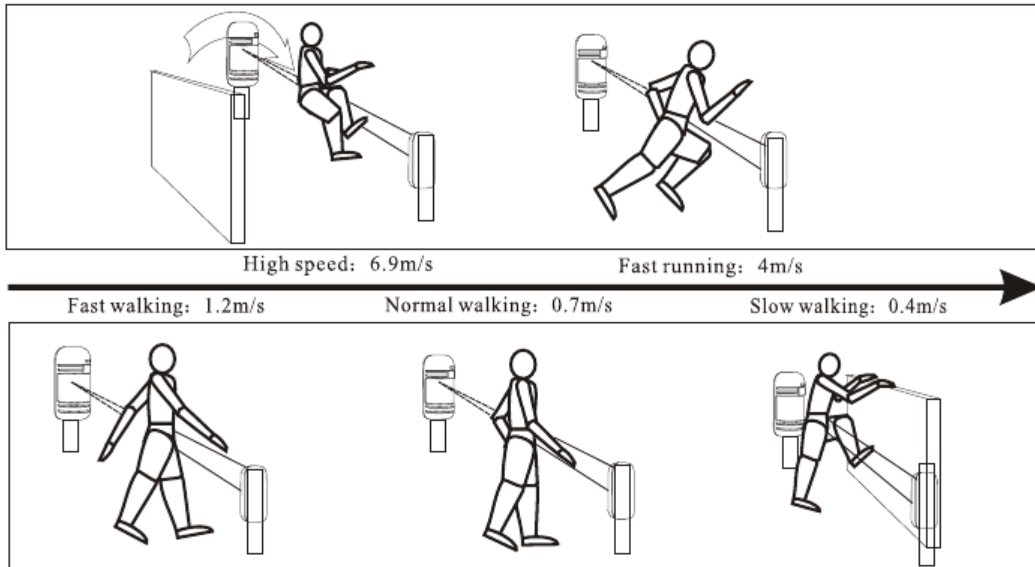
Adjust knob in horizontal angle



VI. Beam response time adjustment.

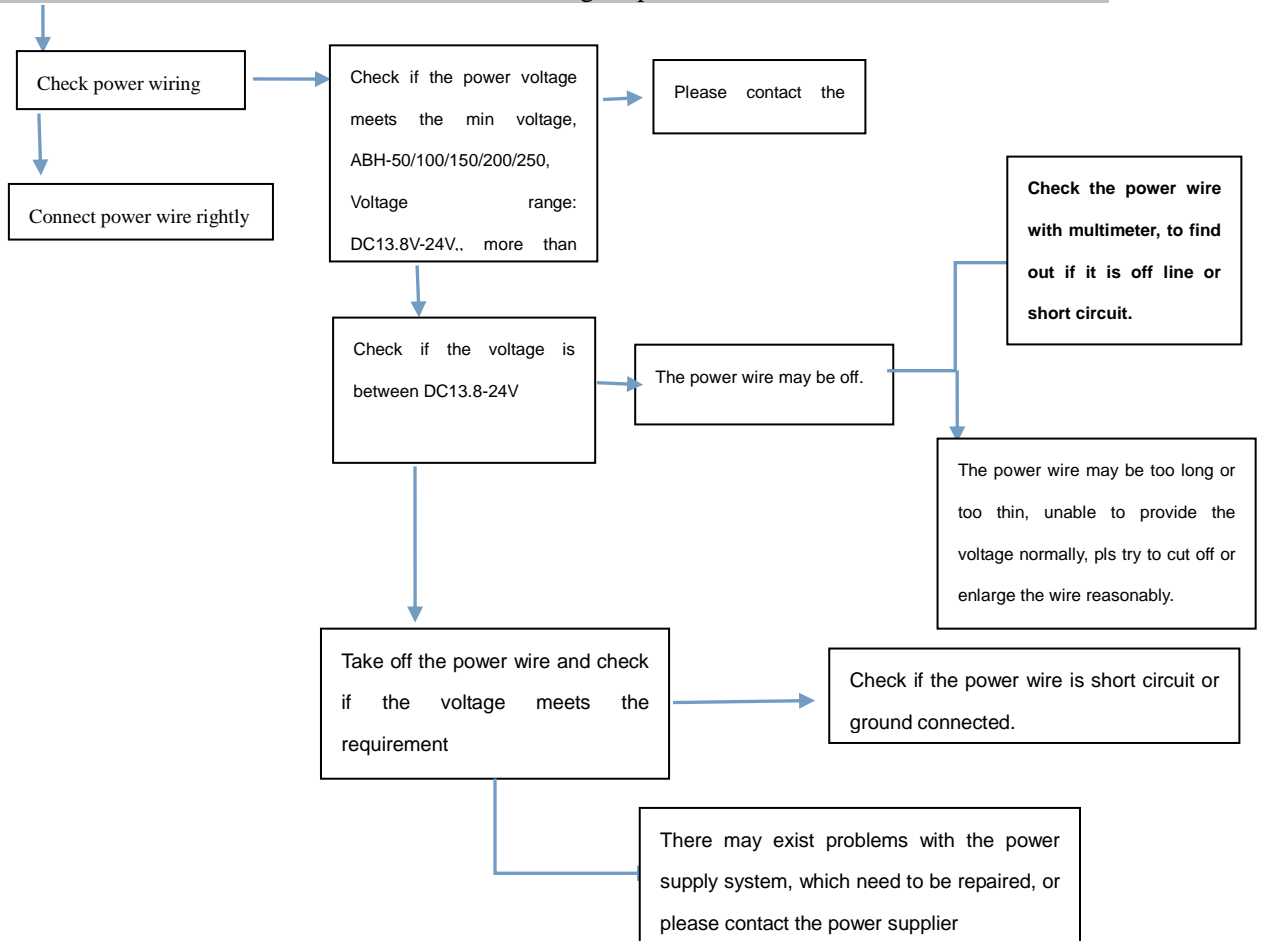


Please see the diagram to adjust the response time of the receiver. Usually, the time set shall be less than the time when the intruder crosses the guarding area. The MIN point is the shortest time.
Time: 50-240m sec without degree

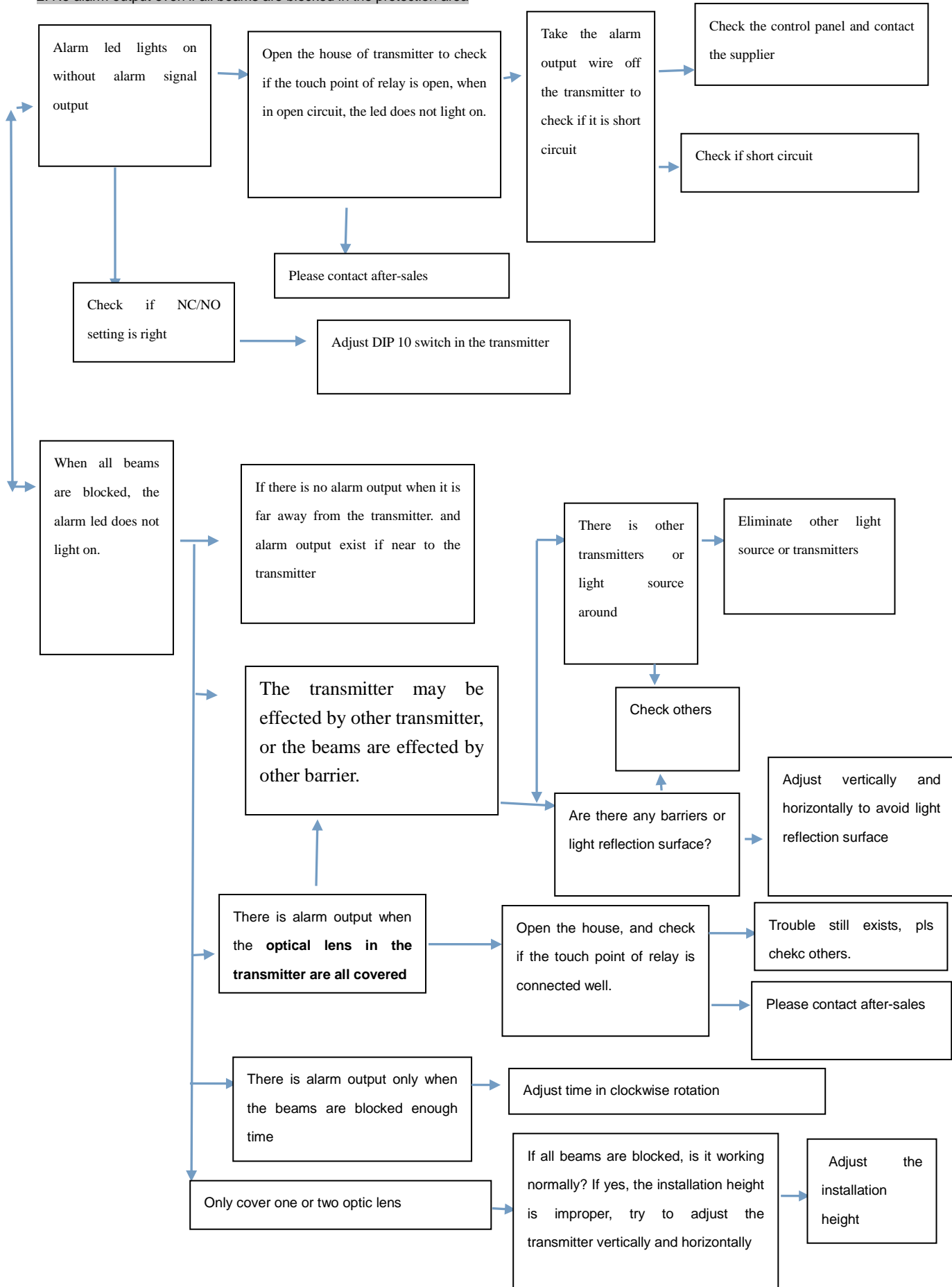


Trouble Checking ABH series

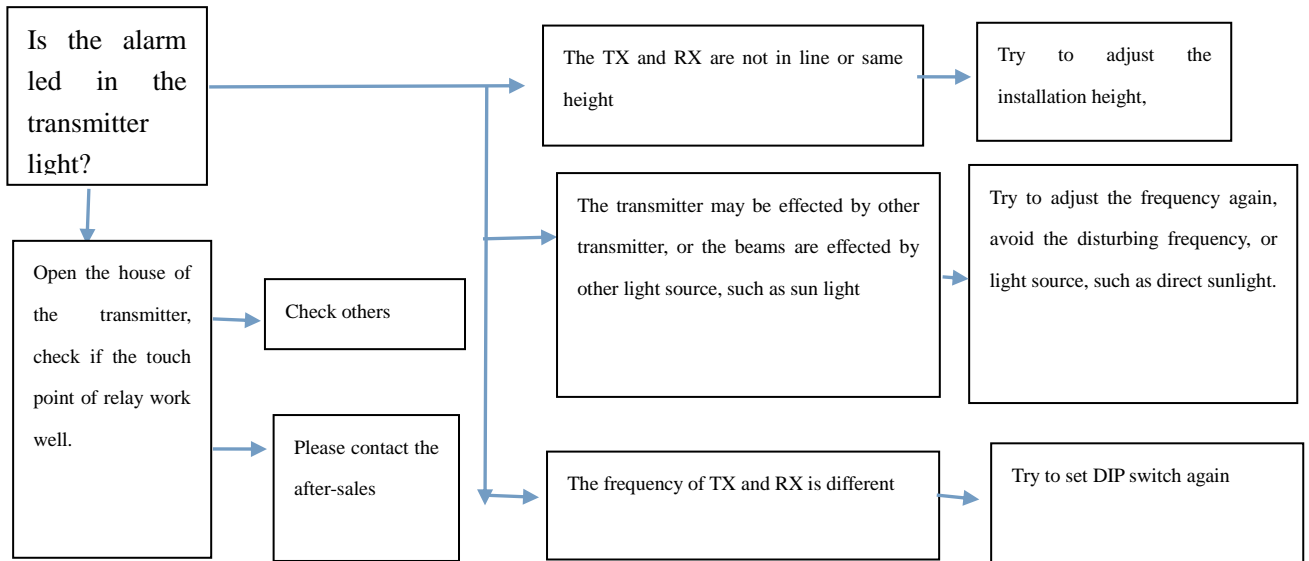
1. The led of the transmitter and receiver does not light up



2. No alarm output even if all beams are blocked in the protection area



3. There is alarm output even no beams are blocked.



4. False alarm

