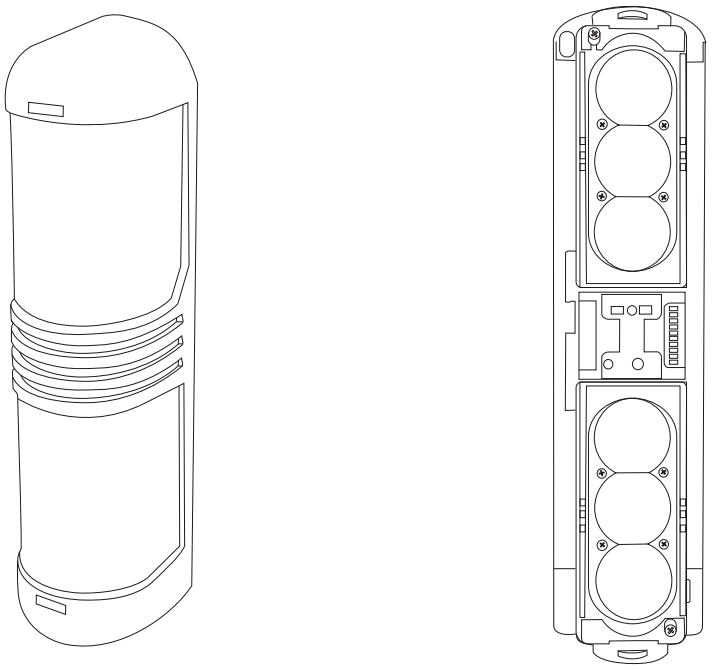
Wired / Wireless Perimeter Intrusion Beam Detector

BS 1626



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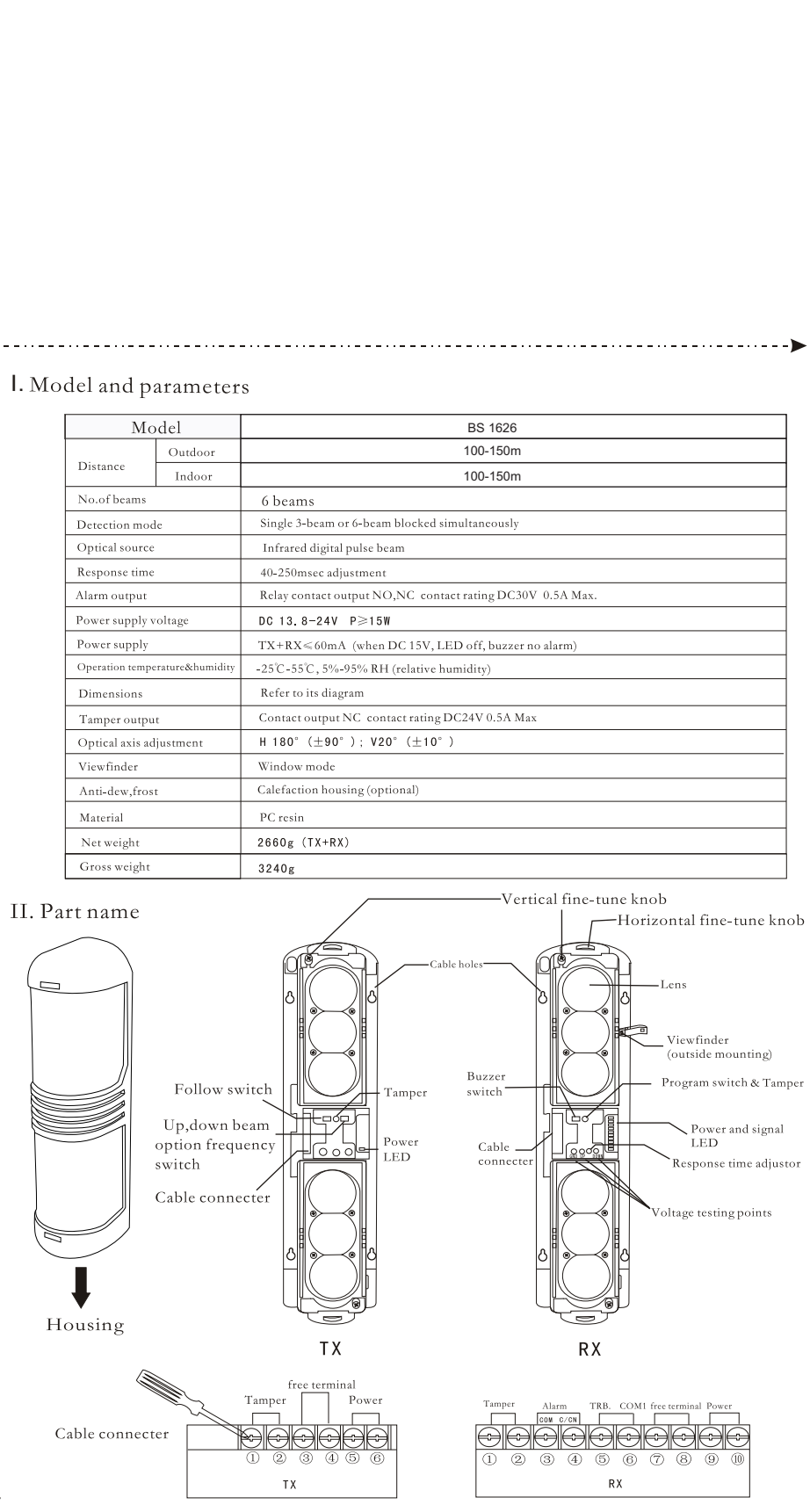
I. Model and parameters

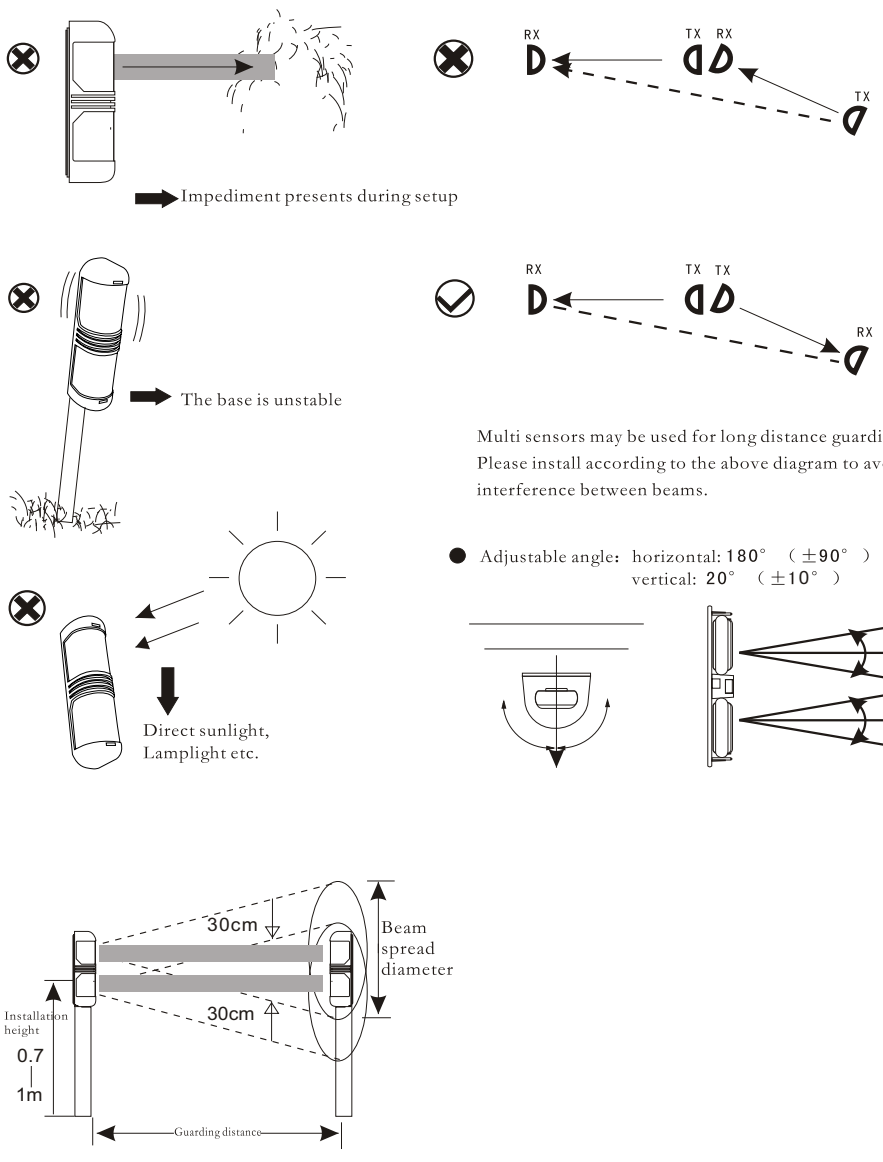
Model		BS 1626
Distance	Outdoor	100-150m
	Indoor	100-150m
No.of beams		6 beams
Detection mode		Single 3-beam or 6-beam blocked simultaneously
Optical source		Infrared digital pulse beam
Response time		40-250msec adjustment
Alarm output		Relay contact output NO,NC contact rating DC30V 0.5A Max.
Power supply voltage		DC 13.8-24V P≥15W
Power supply		TX+RX≤60mA (when DC 15V, LED off, buzzer no alarm)
Operation temperature&humidity		-25℃-55℃, 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 180°（±90°）; V20°（±10°）
Viewfinder		Window mode
Anti-dew,frost		Calefaction housing (optional)
Material		PC resin
Net weight		2660g (TX+RX)
Gross weight		3240g

II. Part name



III. Precautions for installation

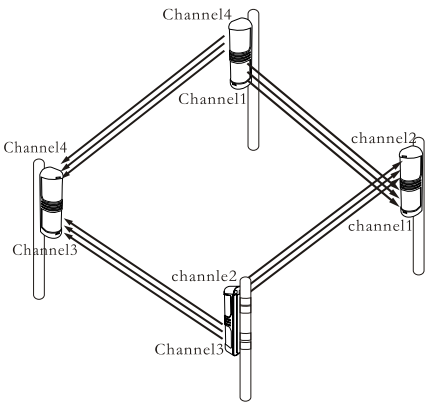
3.1 Notes in installation



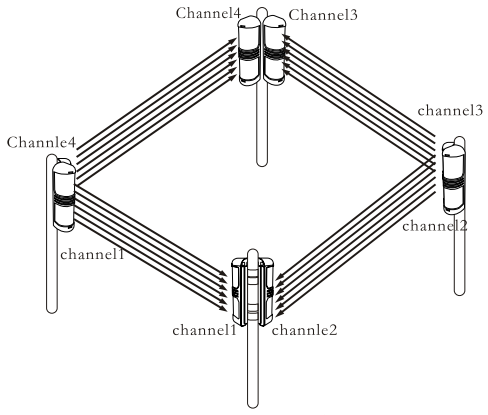
Multi sensors may be used for long distance guarding. Please install according to the above diagram to avoid interference between beams.

● Adjustable angle: horizontal: 180° （±90°）
vertical: 20° （±10°）

3.2 Typical usage



Usage 1: split installation (relay mode)
Collocation: 2 pc TX,2 pc RX

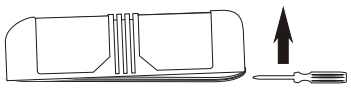


Usage 2: combination installation (reinforce mode)
Collocation: 4pc TX,4pc RX

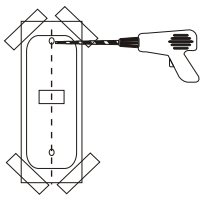
3.3 Installation method

(1) Installation on the wall

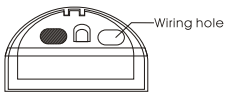
1. Remove the cover



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

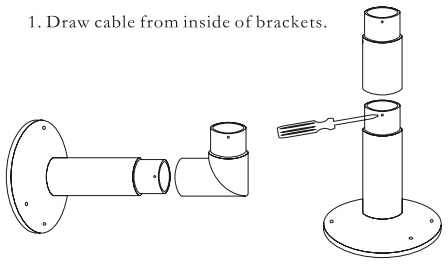


3. Put the cable through the hole for wiring.

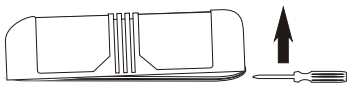


(2) Installation of fixed brackets

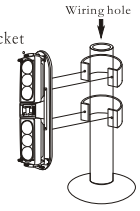
1. Draw cable from inside of brackets.



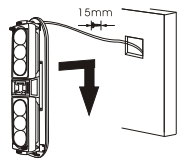
2. Remove the cover



3. Fasten the base-plate to the bracket



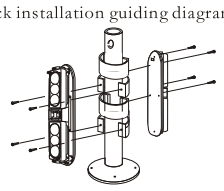
4. Fix the main body onto the wall.



5. Connect the cable to the wire connecter.

6. Put on the cover back after adjusting the response time of the beam.

(back-to-back installation guiding diagram)

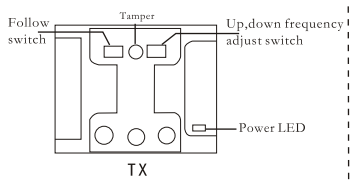


Wiring distance between TX and RX

Wire size \ distance \ voltage	DC13.8V	DC24V
0.5mm² (Φ0.8)	200m	400m
0.75mm² (Φ1.0)	300m	600m
1.25mm² (Φ1.2)	600m	1200m
2.0mm² (Φ1.6)	900m	1800m

IV. Function description and setting

① TX dip switch function



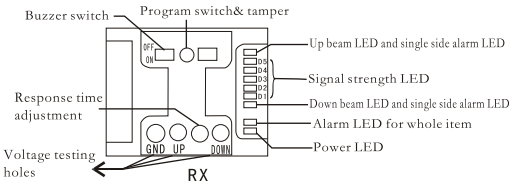
DIP	0	1	2	3	4	5	6	7
1	0	1	0	1	0	1	0	1
2	0	0	1	1	0	0	1	1
3	0	0	0	0	1	1	1	1

NOTE: 0=OFF
1=ON

If DIP4=OFF, DIP1～3 are up beam frequency, down beam frequency is up frequency sequence plus 1. E.g.:up beam frequency is 1, so the down beam frequency should be 2.
(Note:up beam frequency is 7,down beam frequency should be 0)
If DIP4=ON, DIP1～3 are up,down beam frequency, up and down beam transmit at the same time, frequency is DIP1～3.

Emphases: Must block down beam when justing up beam frequency, same opposition.

② RX function discription



Under working condition, press programming switch 3 times in 3 seconds continuously, hear two sound of "di-,di-", that is enter programming state(set parameter state). In this condition,the buzzer will hoot periodically to prompt that it is in setting parameter state.

(1)The buzzer sound once periodically , enter No.1 programming, it is to set BUS address. D1～D5 display the panel BUS address. Each pressing program switch ,D1～D5 will - binary plus 1.

(2)The buzzer sound twice periodically, enter No.2 programming, it is to set up beam receiving frequencyand alarm output N.C./N.O..D1～D3 display down beam receiving frequency, D4 display alarm output N.O./N.C.function. Each pressing program switch,D1～D4 will binary plus 1.(D4 light, relay alarm output is N.O.; Otherwise, it is N.C..)
It will go to next setting if no any operation in 10sec.

(3)The buzzer sound 3 times periodically, enter No.3 programming, it is to set down beam receiving frequency and alarm AND/OR. D1～D3 display up beam receiving frequency, D4 display alarm AND/OR function.Each pressing program switch ,D1 ～D4 will binary plus 1. (D4 light, choose alarm "OR",, as long as blockany one of up or down beam, it will alarm; D4 off, choose "AND", it will alarm when up and down beams are blocked at the same time, if only block up or down beam, the corresponding LED will light, but no alarm..)
No any operation in 10sec, a long sound will be heard, it is setting over and saved,enter working state.

Note: After powered on,LED will display frequency setting data for 10 secretary automatically,and alarm LED (buzzer) also take prompt , then go to working state.

In working state,D1～D5 display the signal strength received by up and down beams.

Frequency	Signal LED D3	D2	D1
0	0	0	0
1	0	0	1
2	0	1	0
3	0	1	1
4	1	0	0
5	1	0	1
6	1	1	0
7	1	1	1

NOTE: 1=ON, 0=OFF

③ RX signal LED description

Signal strength instruction (LED5-LED1)	Grade
On on on on on	10
On on on on flash	9
Off on on on on	8
Off on on on flash	7
Off off on on on	6
Off off on on flash	5
Off off off on on	4
Off off off on flash	3
Off off off off on	2
Off off off off flash	1
Off off off off off	0

V. Beam alignment

(1) Remove the cover and connect power.

(2) Put the viewfinder on the TX/RX,observe the collimation effect at a distance of 5cm from the viewfinder, adjust to let the image of opposite detector falls into the central part of the viewing hole.

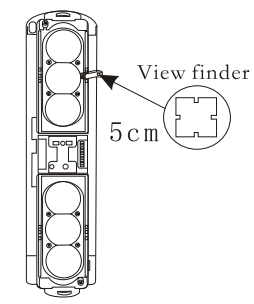
(3) Set TX and RX up/down beam frequency, let up frequency same as down frequency separately.

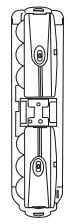
(4) Block down beams of TX, adjust up beams,let them aim correctly, Choose up beams of RX, let signal strength up to grade 7,and up beam LED keep light.

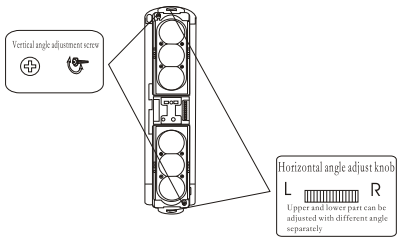
(5) Adjust down beams refer to (4),signal LED strength instruction(grade 11),suggest set to above grade 7.

(6) Test if it is working well on "AND" or "OR" state.

(7) Adjustment finished, put the cover back.

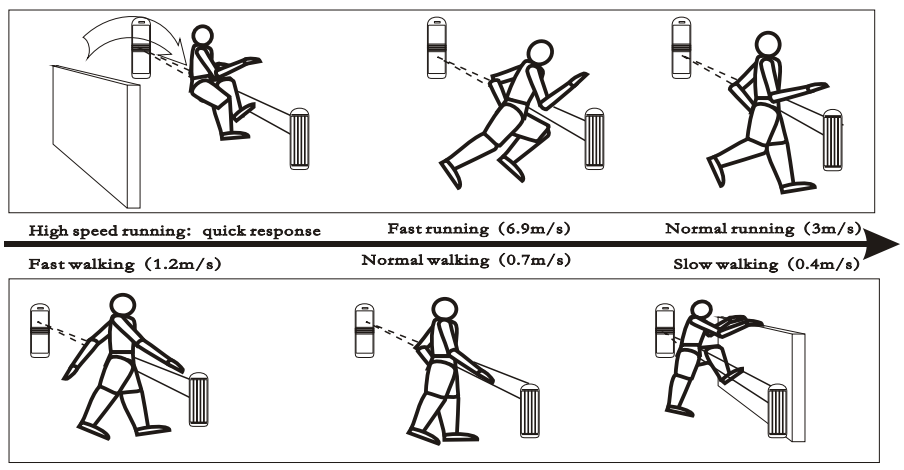






VI. Response time adjustment

Please see the diagram to adjust the response time of the RX. Usually, the time set shall be less than the time when intruder crosses the area.



VII. Motion confirmation

	Up beam LED	Down beam LED	Signal strength LED	State
Up beam aiming (block down beam totally)	ON	—	Strong	Up beams are working well
	ON	—	Weak	Up beams are working well, but signal is weak
	FLASH	—	Strong	Signal strong, up beams alarm,maybe frequency is not correct.
	FLASH	—	Weak	Signal is weak,up beams alarm, aiming failed.
Down beam aiming (block up beam totally)	—	ON	Strong	Down beams are working well.
	—	ON	Weak	Down beams are working well,but signal is weak.
	—	FLASH	Strong	Signal is strong,down beams alarm, maybe frequency is not correct.
	—	FLASH	Weak	Signal is weak,down beams alarm,aiming failed.

VIII. Installation brackets and dimensions

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