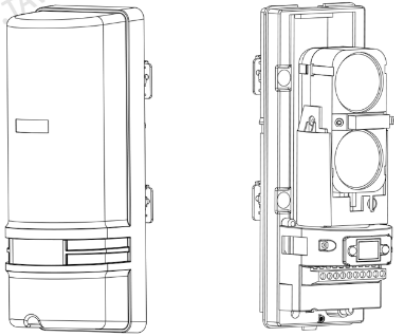


# WIRED COMPATIBLE 2 BEAMS ACTIVE INFRARED DETECTORS

## INSTALLATION GUIDE AX Series



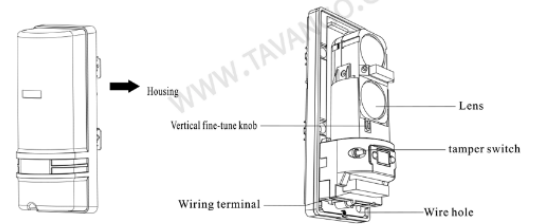
توان گستر الکترونیک  
TAVAN GOSTAR ELECTRONIC

P/N:20180123A02

### I. Technical parameters:

Model	AX-2020	AX-2030	AX-2040	AX-2060	AX-2080	AX-2100
Alert distance	(Outdoor)	20m	30m	40m	60m	100m
	(Indoor)	60m	90m	120m	180m	300m
Number of beams	2 beams					
Detection mode	2 beams blocked simultaneous					
Optical source	Infrared digital pulse beam					
Response time	50-240ms (adjustable without degree)					
Power supply	DC12V-24V					
Alarm output	Relay contact output NO.NC contact rating AC/DC30V 30mA Max					
Trouble output	Relay contact output NC contact rating AC/DC30V 30mA Max					
Tamper output	Relay contact output NC contact rating DC24V 0.5A max.					
Power consumption	≤100mA					
Operation temperature&humidity	-25℃~55℃ 5%-95%RH (relative humidity)					
Optical axis adjustment (H)	180° (±90°)					
Optical axis adjustment (V)	20° (±10°)					
Material	P C resin					

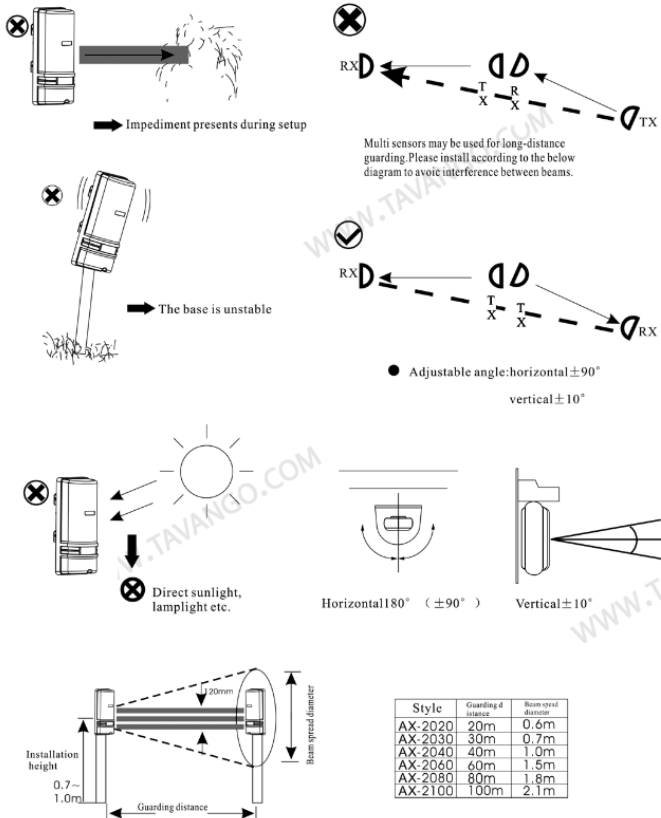
### II. Part name:



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.

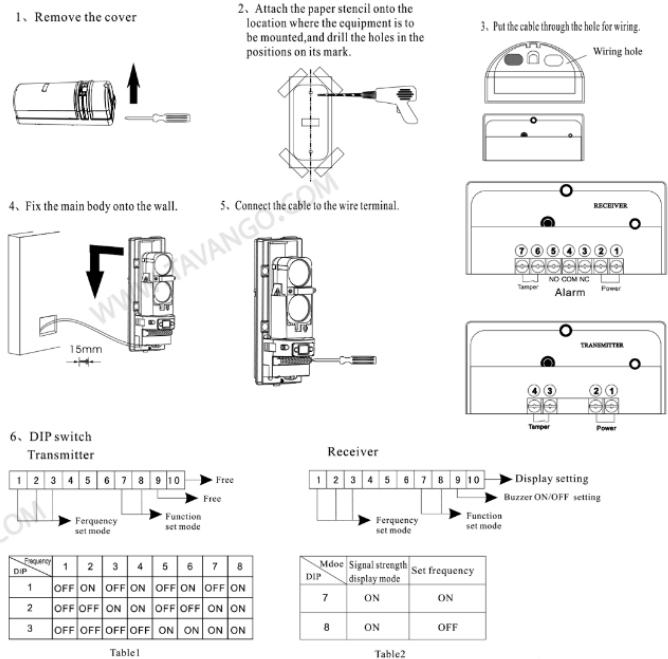
1

### III. Precautions for setting:



2

### IV. Setting procedure



### Function setting (table 2)

1. Set frequency: set DIP7 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.
2. 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 DIP1, 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)

3

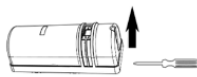
8. Take back the cover after the adjustment of the response time.

● Installation of fixed bracket

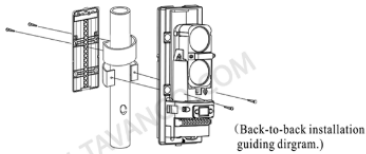
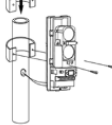
1. Drill a hole on the bracket and extend out the cable from it.



2. Take off the cover.



3. Fasten the base-plate to the bracket.



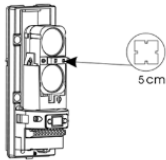
Note, please insert waterproof stopper into the hole of screw.

Wiring from power

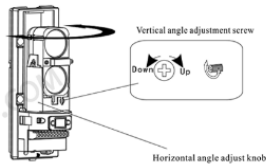
Wire	Distance	Voltage	DC13.8V	DC24V
0.5mm <sup>2</sup> (Diameter Φ0.8)			300m	600m
0.75mm <sup>2</sup> (Diameter Φ1.0)			400m	800m
1.25mm <sup>2</sup> (Diameter Φ1.2)			700m	1400m
2.0mm <sup>2</sup> (Diameter Φ1.6)			1000m	2000m

V. Beam alignment

1. Observe the collimation effect at a distance of 5cm from the view finder. 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.

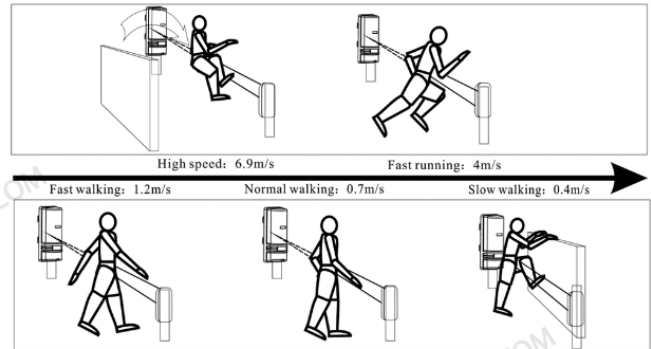


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VI. Beam response time adjustment.



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



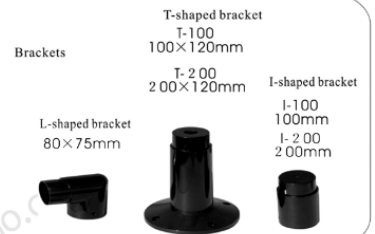
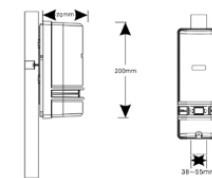
VII. LED

After finish setting, please make walk test.

	Green	Red
TX flash when is bus signal	always light on	always light on
RX flash when is bus signal	always light on	light on when alarming, light off as normal status

IX. Dimension.

Physical appearance & dimension



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