AN-B1

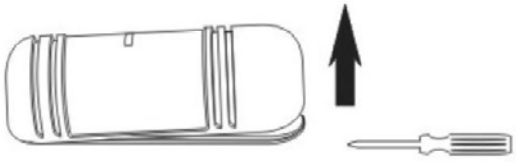
Barriers infrared

Product description

The AN-B1 barriers are IR detectors that are used to signal crossing a border. They consist of two elements: a transmitter and a receiver, between which creates a infrared barrier.

Opening the box

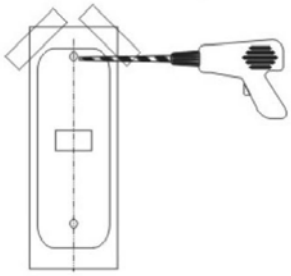
The outer container of the barrier must be removed for installation. It should unscrew 7/8 laps the retaining screw and insert a flat screwdriver into the small slot to the left of the screw



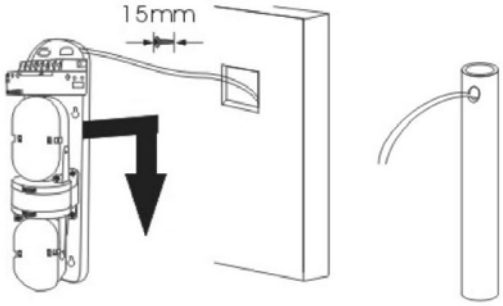
The retaining screw should not be unscrewed completely, just loosen it a few turns.

mounting

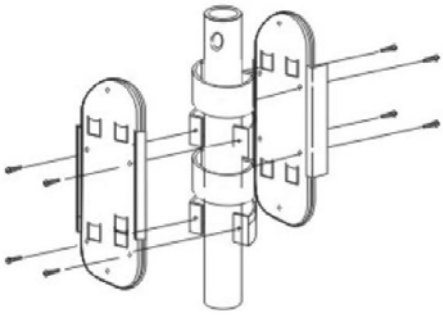
The barrier is fixed to the wall with two dowels.



The cable entry is at the top near the terminal



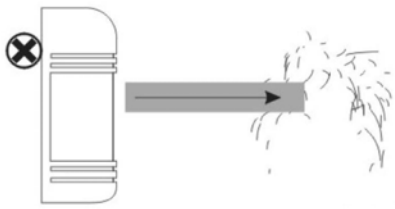
If you want to install the barrier on a pole includes two collar plates. Here it is shown a classic mounting back to back.



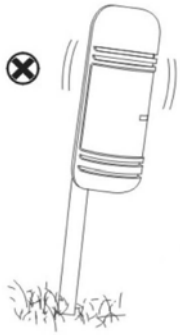
Placement

The barrier should be positioned avoiding some critical situations. It must be that there

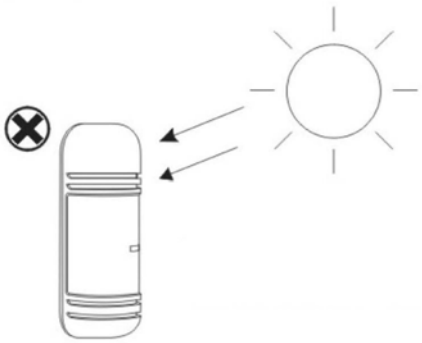
are objects interposed between transmitter and receiver.



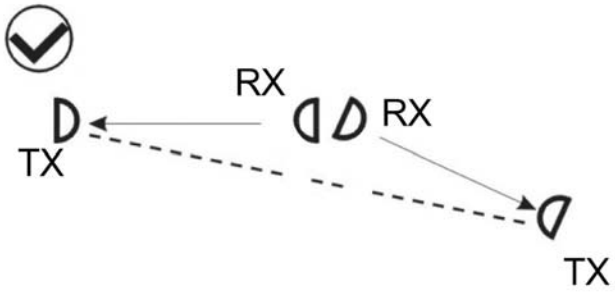
IS' essential that the barrier is fixed on a stable surface and firm, not subject to vibrations even in case of inclement weather.



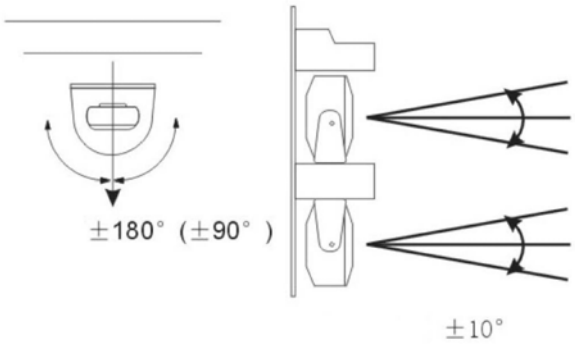
It must be avoided the barrier proves oriented directly at the sun at certain times of day.



In the protection of perimeters with consecutive barriers positioning transmitters and receivers as follows (never transmitter and receiver on the same pole).



The barrier can be operated even if the transmitter and receiver are not on the same line, if it falls within the following maximum horizontal and vertical tolerances.



Degree of protection

The container is IP54 tin and may be exposed to rain.

operation

The barrier consists of a transmitter element and a receiver element. The two elements must guard without the interposition of obstacles because they generate a dual infrared beam between the two. The alarm is generated when both beams are interrupted.

flow

The maximum distance between the transmitter and receiver element is 100 meters outdoors. The flow rate can be up to 300 m. when used in interior.

Between the transmitter and receiver the infrared beam widens up to a maximum of 2.1 meters in diameter.

Power Connections

The barriers must be fed with a voltage between 12 and 24VDC

Depending on the section of the cable used varies the maximum length of the cabling

cable Diameter	DC 12V	DC 24V
0.5 sq mm (Dia. 0.8)	300 m.	600 m.
0.75 sq mm (Dia. 1)	400 m.	800 m.
1.25 sq mm (dia. 1.2)	700 m.	1400 m.
2 sq mm (Dia. 1.6)	1000 m.	2000 m.

The connectors to be used for feeding are equal in both the transmitter and receiver

1 - Positive Power
2 - Negative for power supply

Alarm Signal Connections

The alarm output is located only unit receiving. E 'an exchange contact (NO / NC) which allows you to activate the alarm devices, such as burglar alarm systems or other occurs when the intrusion. After the detection of the alarm contact switches for approximately 2 seconds, then returns to its rest position.

3 - City Alarm
4 - normally closed Alarm contact NC
5 - normally open alarm NO contact The alarm contact it is suitable to drive 30V voltage and a current of 0.5A

Tamper Signal Connections

The tamper alarm output is used to send an alarm signal to the central in the case the container is opened by attackers. This output is a contact directly connected to a microswitch and opens to the removal of the lid.

The connectors to be used for feeding are equal in both the transmitter and receiver

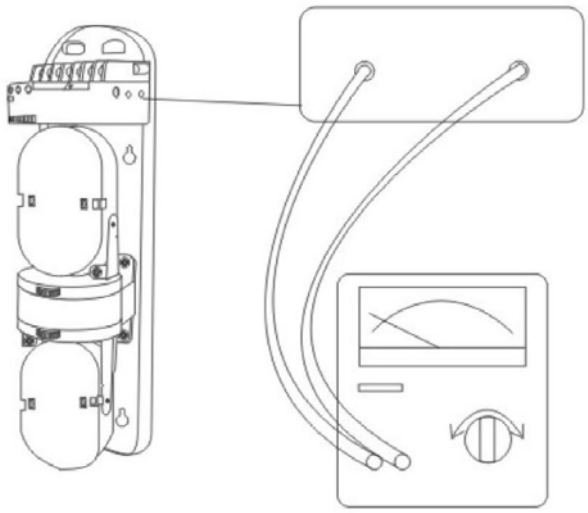
6 - Tamper contact
7 - Tamper contact

Alignment

The alignment between transmitter and receiver is essential for the proper functioning of the barrier. The two elements should be installed so they are visually facing each high. Once fixed the apparatuses it is possible to change the orientation of the rays by manually rotating the right and left lenses and screwing (SU) or unscrewing warning (DOWN) the screw for vertical adjustment.

The first thing to do an optical alignment by acting both on the receiver and the transmitter and then proceed with the refinement with the tester.

To perfectly align the barrier must be connected to a tester in the LEVEL + and holes - which are found in the receiver.

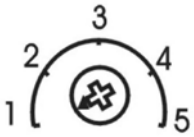


When the barrier is properly aligned on the tester you will need a voltage of at least 1.2V. Act on guidance mechanisms to achieve the highest possible value.

Adjusting the response time

The barrier may be adjusted so as to be more sensitive to short interruptions or less reactive, to react only to interruptions of the barrier that persist for longer time.

The adjustment is in the receiver



The first adjustment takes to react to the passage of a very fast intruder, like a person running, while the control 5 can be used for example to detect an intruder climbs over a fence and that remains in the barrier for longer.

Indicator LEDs and walk test

On the receiver are a green LED that indicates the power supply, a green LED that indicates the alignment between transmitter and receiver and a red LED that lights up in the event of an alarm. You can perform a walk test to check the adjustment of the barrier.

Main technical features

Technology	Infrared pulsed dual beam
range Open	100 m.
range Indoors	300 m.
Response Time	Adjustable 35/700 ms
alarm output	Relay NO / NC 30V 0.5A
Supply	12-24V DC
Absorption	Max. 65 mA / 12VDC
alarm Duration	2 sec.
Temperature	- 25 ° C + 55 ° C
Degree of protection	IP54