AN-B1C

Barriers infrared

Product description

The AN-B1C 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.

The barriers are coded and can be superimposed without interfering between them.

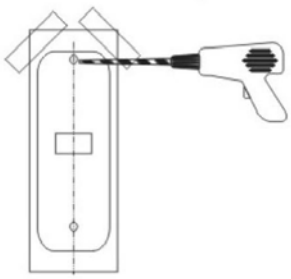
Opening the box

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

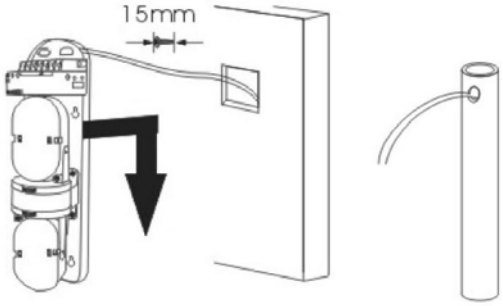
The retaining screw should not be unscrewed completely, just loosen it a few turns.

mounting

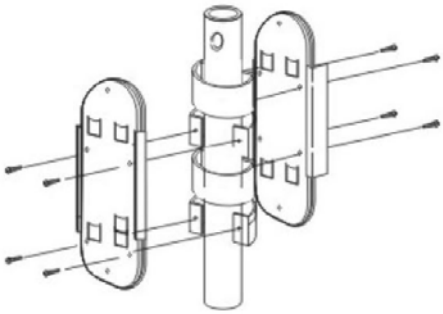
The barrier is fixed to the wall with two dowels.



The cable entry is at the top near the terminal



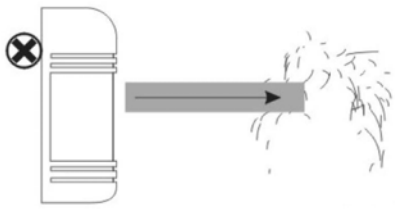
If you want to install the barrier on a pole includes two collar plates. Here it is shown a classic mounting back to back.



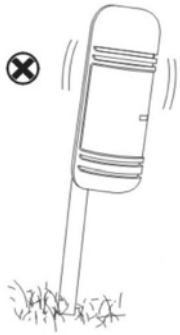
Placement

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

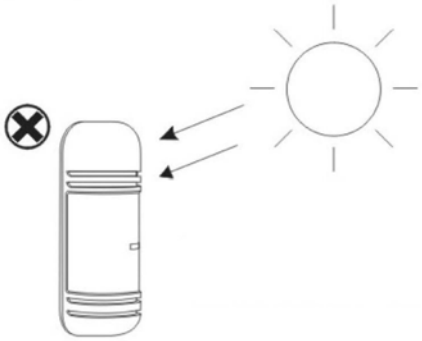
are objects interposed between transmitter and receiver.



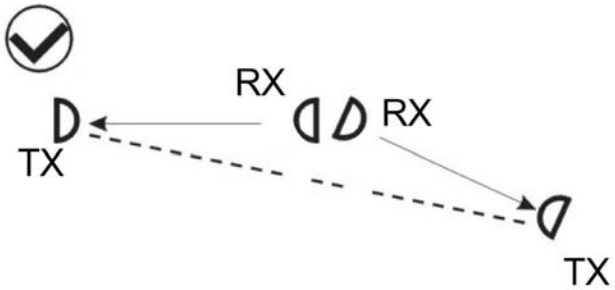
IS' essential that the barrier is fixed on a stable surface and firm, not subject to vibrations even in case of inclement weather.



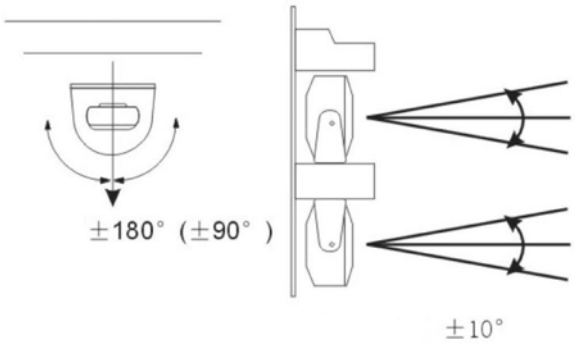
It must be avoided the barrier proves oriented directly at the sun at certain times of day.



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 - normally closed Alarm contact NC
4 - City Alarm
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

8 - Tamper contact (NC)
9 - Tamper contact (NC)

Connections of the fog signal

The fault output (FAULT) is activated when the fog or poor visibility due to bad weather make it impossible for the proper functioning of the barrier. This output

It is only found in the receiver. It's a exchange contact (NO or NC) depending on how it is connected.

The fog alarm condition is detected by the barrier by measuring the signal strength received by the receiver. When the signal falls slowly under

0.8V is activated this fault output.
6 - normally closed contact NC of failure
7 - City failure alarm
8 - normally open contact NO of failure If the received signal falls below the 0.4V active alarm output barrier.

The output fault fog is restored when the IR signal voltage rises to at least 1.2 V

Frequency Selection (SW 7-8-1-2-3)

These barriers can transmit on different frequencies.

E 'a useful feature if you install the barriers one above the other to create a virtual wall. In this condition, each barrier should be set to a different frequency to avoid that the receivers receive the signal of the other barriers.

To set how often you act on the microswitches that are found in both the receiver and transmitter. The procedure is as follows:

1 - Move the switch 7 to ON and OFF switch 8. This puts the product in the frequency setting mode. The display on the front shows the frequency set at that time.

2 - Set the frequency acting on the 1,2,3 switch according to the following table. You can set 8 frequency. It 'important to set the same frequency on the transmitter and receiver

SW FR1	FR2	FR3	FR4	FR5	FR7	FR8	FR6				
1	OFF	ON	OFF	ON	OFF	ON	OFF	ON	2				
	OFF	OFF	OFF	OFF	ON	ON	ON	ON	3				
	OFF	OFF	OFF	OFF	ON	ON	ON	ON					

3 - Bring 7:08 switch to ON to exit the mode of frequency setting

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 as explained below. To align the barrier must fully observe the

level of signal indicated from the display.

Check that the switches 7:08 They are both ON to see the display of the IR signal. When the

barrier is well aligned on the display you will need to read a voltage of at least 1.8V. Take action

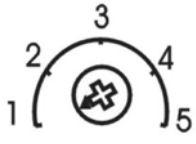
on

orientation mechanisms of the transmitter and the receiver until it reaches the highest value possible.

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

After aligning the barrier perform a walk test by observing the red LED lights up on alarm. While you can walk test bring

Switches 7 and 8 out of OFF. In this way, the display alternates between the frequency and the signal.

Deactivation of the display (SW 10)

When you have finished aligning and adjusting the operating time should turn off the display by bringing

the switch 10 ON position

Deactivation of the buzzer (SW 9)

When you have finished the alignment if you want you can

turn off the alarm buzzer by pushing the switch 9 of the receiver only in the OFF position

Main technical features

Technology	Infrared pulsed dual beam
range Open	100 m.
range Indoors	300 m.
Response Time	Adjustable 50/240 ms
alarm output	Relay NO / NC 30V 0.5A
Supply	12-24V DC
Absorption	Max. 12VDC 65mA
alarm Duration	2 sec.
Temperature	- 25 ° C + 55 ° C
Degree of protection	IP54