

## Wireless INFRA-RED GATE BEAM

The wireless INFRA-RED BEAM is a transmitter-receiver pair that provides an invisible infra-red beam for automation applications such as sliding and swing gates, as well as garage doors and security applications such as perimeter beams either outdoors or indoors.

The transmitter makes use of 2 x AA batteries with a life span of approx 2 years.



When the batteries are low a red LED will flash on the transmitter side. A buzzer will sound on the receiver and a red LED will flash also indicating battery low.

### SPECIFICATIONS:

#### Receiver:

Power Source: 12 - 24VDC

Maximum Range: 15m

Wavelength: 940nm

Modulation Frequency: Pulsed

Relay Contact: Potential Free 1 AMP C/O

Physical Size: 136 x 54 x 32mm

#### Transmitter

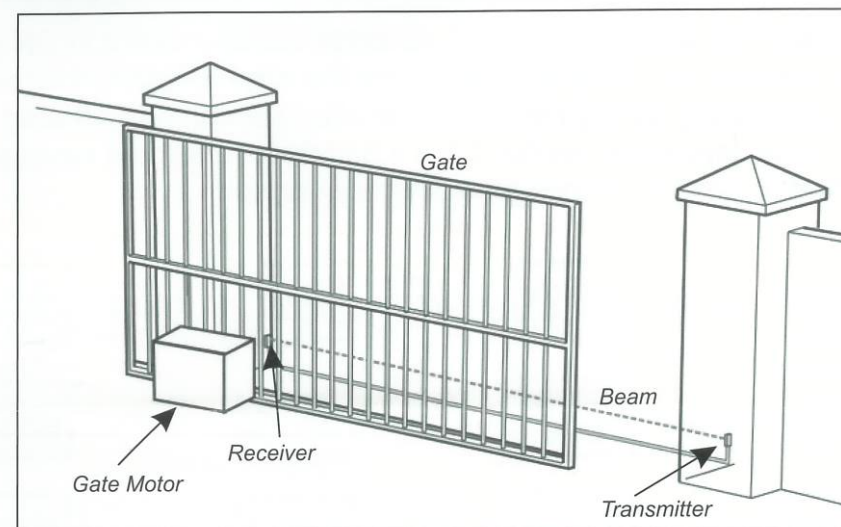
Power source: 3V (2 x AA Alkaline Batteries)

Battery Life: approx 2 years

### INSTALLATION TIPS

- Any hole made in the base, for purposes of cable entry, **MUST** be **sealed with silicone rubber** otherwise moisture will enter the product and lead to malfunction and/or failure.
- Mount the IR beams with the **lenses facing upwards**, facing each other on opposite sides of the gate, door or perimeter to be protected.
- Replace old batteries with a new good quality battery for prolonged operation on the transmitter

## INSTALLATION



The above drawing shows a standard application of the *wireless* INFRA-RED beam, in use as a safety beam for a sliding gate. The transmitter and receiver pair are mounted a distance above the ground (typically 30cm) and in such a manner that they are facing each other and are aligned i.e. the beam travels in a straight line. To aid alignment, the receiver has a LED on the board, which will illuminate if the transmitter's signal is received.

### For installation

As shown in the above drawing, a cable needs to be installed from the gate motor, to the desired location of the beam receiver. The transmitter operates from batteries thus, not cable is needed. The receiver should be mounted first, at a suitable height, the transmitter can then be adjusted for complete alignment.


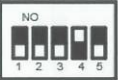




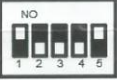






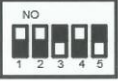




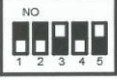
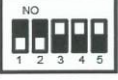











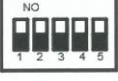
### To align the beams

Ensure that the Receiver beam is securely mounted and the cover is placed over the Lens. After 10 seconds after power up the receiver will sound the buzzer and enter alignment mode if the transmitter was not detected. When the beam is detected, the buzzer will sound rapidly for about 15 seconds and exit alignment mode. The beam will then operate as normal. A blue led is illuminated if the transmitter's signal is received.

## Switch adjustment instructions

For example the alarm time set to 3 seconds: switch 1 and 2 in ON position, and switch 3 4 5 in OFF position (select the alarm time to 3 seconds). When someone, car, or other object block the infrared beam, the receiver output alarm signal (the time is 3 seconds). The receiver outputs alarm signal continuously during the delay time, after 3 seconds, if infrared beam is detected, the alarm finished.

Debug mode description: switch 1 2 3 4 5 in ON position, the receiver is in debug mode, the buzzer output beep beep when the signal received normally, long beep or silence means without signal.

 0 second	 8 second	 16 second	 24 second
 1 second	 9 second	 17 second	 25 second
 2 second	 10 second	 18 second	 26 second
 3 second	 11 second	 19 second	 27 second
 4 second	 12 second	 20 second	 28 second
 5 second	 13 second	 21 second	 29 second
 6 second	 14 second	 22 second	 30 second
 7 second	 15 second	 23 second	 Debug mode

