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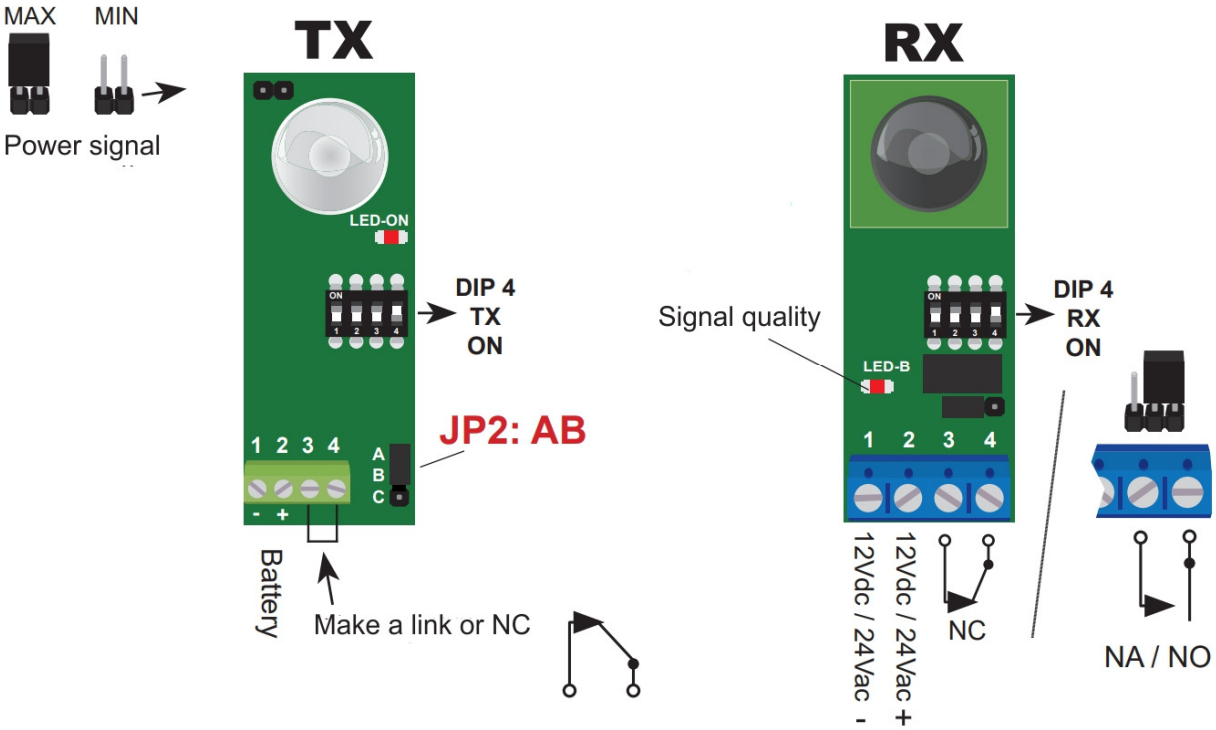
Adjustable Battery Through Beam Photocells

PC180B

User manual



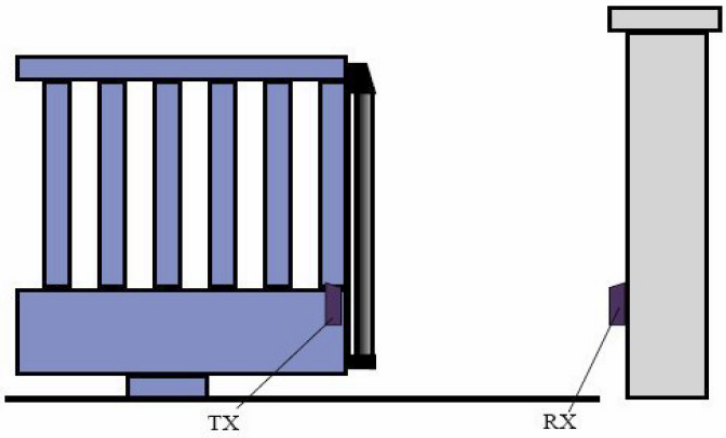
PC180B Specifications	
Receiver power supply	12 or 24Vac/dc
Transmitter power supply	3V alkaline battery pack (2 x AAA)
Output	Normally open (NO) or normally close (NC) relay contacts
Relay rating	1A @ 24Vac/dc
Range	Up to 20 metres
Temperature	-20 to +60°C
Dimensions	103 x 33 x 36 mm
Protection	IP55

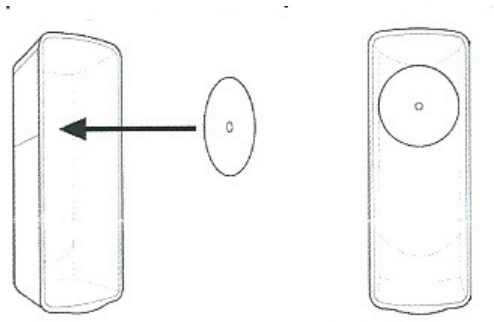
The PC180B comprises a pair of photocells, a transmitter and a receiver, these are installed either side of the door or gate opening, creating an infra-red beam. If the beam is broken the door or gate will not operate or if it is moving it will stop or stop and reverse, dependent upon the control unit.

The transmitter is battery powered and has a normally closed contact input for connection of a safety edge, when the safety edge is activated the photocell receiver operates in the same way as if the infra-red beam was broken. The photocells are normally positioned either side of the opening at a height of about 300mm.

Before installation ensure that power to the control unit is switched off.

1. Remove the covers of both photocells and identify the receiver.
2. Fix the receiver to one side of the opening and run a 4-core cable from the control unit to the receiver and make connections – see connection details above.
3. Fix the transmitter on the other side of the opening or onto the sliding gate and connect the battery pack. Set the transmitter power jumper (M) as required, without the jumper connected the range is 10-15 metres and battery life 24 months, with the jumper connected the range is 15-25 metres and battery life is 12 months.

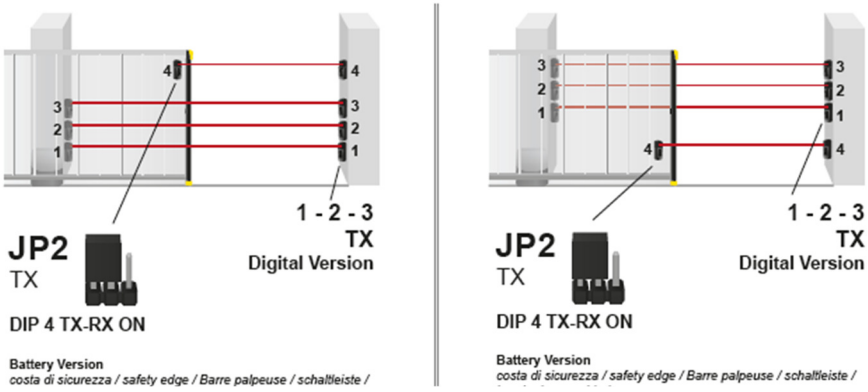




Adhesive power reduction RX

4. Switch on the power to the control unit and adjust the photocell circuit boards so the transmitter aligns with the receiver. When the two are correctly aligned the status LED light on the receiver will be on, now tighten the rotating mount locking screws. The signal quality LED flashes, the greater the number of flashes the better the signal quality.
5. Set the relay configuration jumper as required, default is normally closed.
6. Operate the door or gate and break the infra-red beam by passing an obstacle through it, the LED status light on the receiver will extinguish and the door or gate will stop, or stop and reverse depending upon the control unit.
7. If a safety edge is connected to the transmitter activate the edge, the LED status light on the receiver will extinguish and the door or gate will stop, or stop and reverse depending upon the control unit.
8. Fix the covers to the transmitter and receiver, to enable the covers to be easily removed for servicing the cut out at the bottom of the front covers can be removed using a pair of cutters.

Shown is the installation of 3 pairs of photobeam PC180 (Digital Version - JP2 BC) and one photo-beam PC180B (Battery Version - JP2 AB) which control the safety edge in the gate. Each pair of photo-beams has an identification number selected with the dip switch.



The power supply of the transmitter with a battery can reduce the transmission, in such cases the receiver can be interfered from infrared rays. To avoid this inconvenience, activate the FLASHING function, put the DIP 3 in OFF (RX). In this mode, you can install a maximum of 1 pair of photocells with battery.

CODES: TX-RX

Battery Version

DIP 3 RX OFF

With Flashing effect Max 1 pair

DIP 3 RX ON

Max 2 pairs