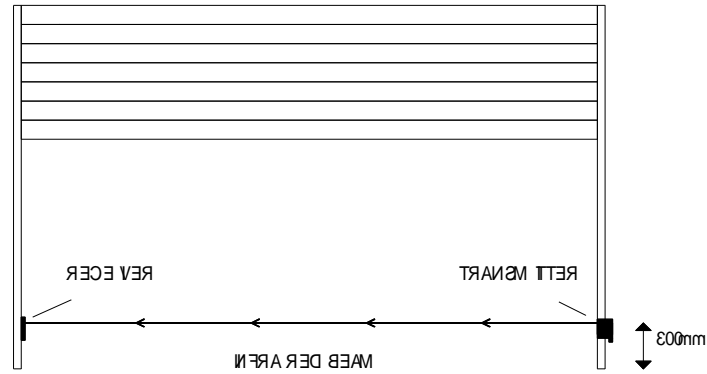


# Photoelectric Safety Beam – Part No. PC1

The PC1 comprises a pair of photocells, a transmitter and a receiver, these are installed either side of the door or gate opening, this creates an infra red beam, if the beam is broken the shutter or gate will not operate or if it is moving it will stop or stop and reverse, dependant upon the control unit.

The photocell's are normally positioned either side of the opening at a height of about 300mm

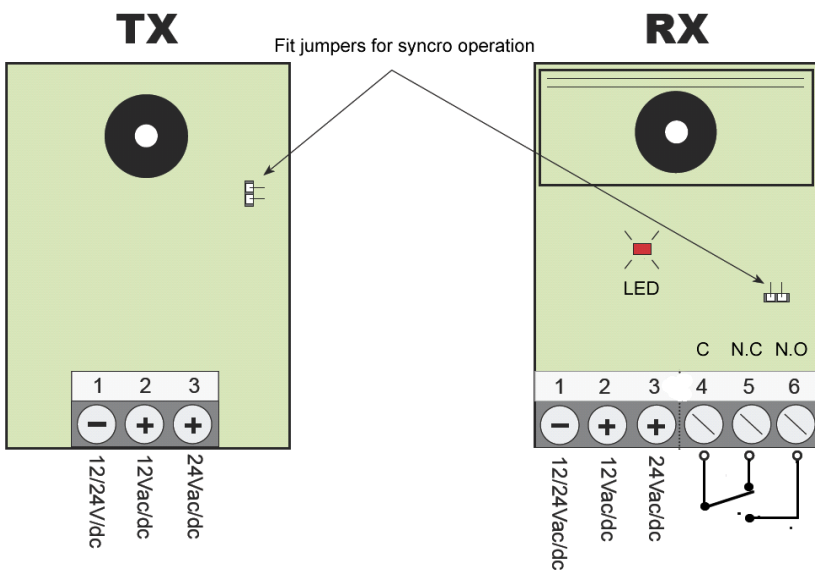


## INSTALLATION

1. Remove the covers of both photocells and identify the receiver, it has the most terminals.
2. Run a 4 core cable, (eg alarm cable) from the door or gate control unit to the receiver and a two core cable from the control unit to the transmitter

**Before making any connections ensure power to the control unit is switched off**

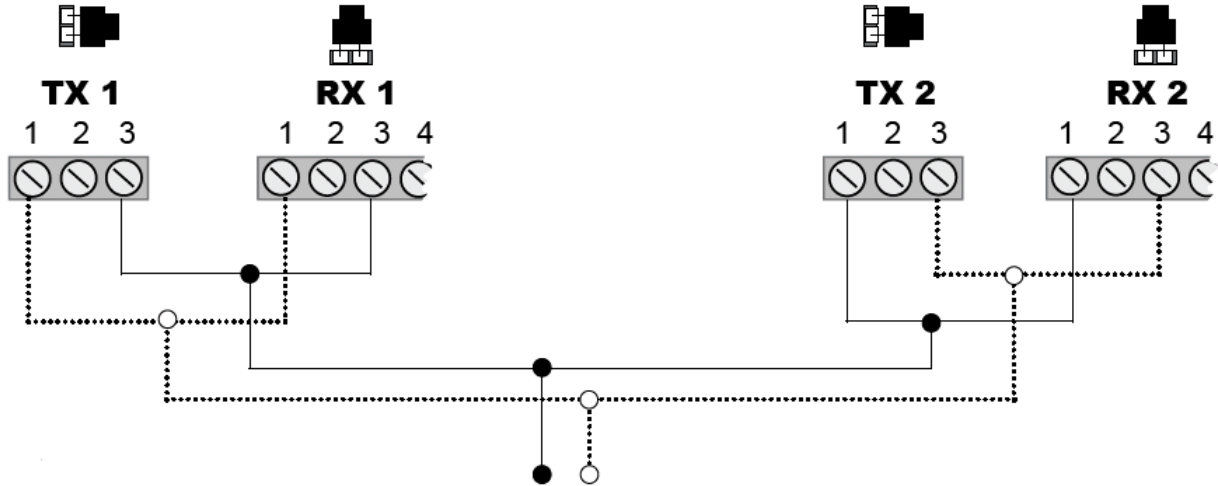
3. Locate the auxiliary power output connections on the control unit, determine the output voltage and connect to the 12 or 24V power connections of the transmitter and receiver, if the supply is dc ensure that the negative is connected to terminal 1
4. Locate the safety input on the control unit (if there is a link remove it) and connect to 4 and 5 of the receiver
5. Fix the **receiver only** to one side of the opening, switch on power to the control unit and check that the LED light located on the receiver is on. Now position the transmitter on the other side of the opening so it aligns with the receiver when the two are correctly aligned the LED light will be off, now mark the position of the transmitter, and fix it in position.
6. Operate the door or gate and break the beam by passing an obstacle through it, the LED light on the receiver will light and the door or gate will stop, or stop and reverse depending upon the control unit.



TRANSMITTER - TX	
1	12/24V ac/dc – if dc negative
2	12V ac/dc – if dc positive
3	24V ac/dc – if dc positive
RECEIVER - RX	
1	12/24V ac/dc – if dc negative
2	12V ac/dc – if dc positive
3	24V ac/dc – if dc positive
4	Common
5	N.C – Normally closed
6	N.O – Normally open

## SYNCRO MODE – AC POWER SUPPLY

When 2 sets of photocells are used and there is a possibility of interference between them, use the syncro feature by connecting the photocells as shown ensuring J1 is fitted to both the transmitter and receiver. **Syncro mode can only be used when the supply voltage is AC**



### NOTES:

1. If installed outdoors use a sealant around the cables where they enter the photocells.
2. The transmitter and receiver should be cleaned occasionally with a soft damp cloth.

SPECIFICATIONS	
Power Supply	12 or 24Vac or dc
Output	Normally open (NO) and Normally closed (NC) relay contacts
Relay Rating	1A 30V dc, 1A 120V ac
Range	Up to 20 metres
Temperature	-10 to +40 deg C
Dimensions	90 x 25 x 45mm
Protection	IP55

PC1-1110

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