



IR/IT 2241 BATTERY PHOTOCELLS

Wall-mounted encoding photocells with battery-operated transmitter functionality, featuring a 180° rotation capability and an impressive range of up to 16 meters.

The battery-operated IR/IT 2241 photocell, provides a streamlined solution for challenges associated with the installation of electrical cables to connect the transmitter. The encoded signal transmitted by the device is assigned a unique code during installation, minimizing the likelihood of interference with other devices.

IT 2241 BATTERY DESCRIPTION OF THE TRANSMITTER (TX) :

Battery Powered Transmitter (1.5 Volt AAx 1)

The transmitter is powered by a 1.5 Volt Alkaline battery. The average battery life is approximately 18 months at normal power and approximately 12 months at maximum power. The battery life depends on the quality of the batteries being used.

Selecting the Operating Range (SW1 Dip Switch No. 1) :

The maximum distance of operation of the battery-operated photocell is approximately 8 metres at normal power (Dip Switch No. 1 OFF “factory configuration”) and approximately 16 metres at maximum power (Dip Switch No. 1 ON).

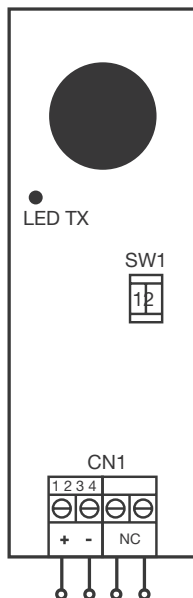
Selecting Operating Code “A” and “B” (SW1 Dip Switch No. 2) :

Selecting Operating Code “A” and “B” (Dip Switch 2): Allows 2 pairs of beams to be synchronised, this is particularly useful when mounting dual height beams or beams either side of a sliding gate. Selecting one pair to Code “A” and the other pair to Code “B” ensure no crosstalk/interference between each pair. To achieve this, set one transmitter to Code “A” along with its corresponding receiver. Then set the other transmitter and receiver to Code “B”.
Dip switch 2 OFF = Code “A”
Dip switch 2 ON = Code “B”

Important:

It is possible to connect an “NC” safety device to the transmitter (for example a safety edge mounted on the mobile edge of a sliding gate): when the contact opens the transmitter stops transmitting.

If no “NC” safety device is used, inputs 3 and 4 must always be jumpered.



Connections:

- 1 - Do not use when powered by battery
- 2 - Do not use
- 3 - “NC” safety device (Jumper only if not used)
- 4 - “NC” safety device (Jumper only if not used)

TECHNICAL DATA:

- Max. range : 16 metres
- TX power supply : 1 x 1,5V Alkaline battery mod. AA
- RX power supply : 12-24V AC-DC
- TX absorption : 0.30 mA Max.
- RX absorption : 25 mA Max.
- Relay contact capacity : 1A max at 30 VDC
- Operating temperature : -10 ÷ 55°C
- Container : Polycarbonate
- Protection rating : IP 54
- Container dimensions : 41 x 94 x 45 mm.

Attention

- The alkaline battery 1.5V (AA) must be replaced every year to guarantee optimal functioning.
- To replace the discharged battery remove the plastic lid, extract the battery in use and insert a new one, respecting the polarity indicated on the battery compartment.
- The used batteries must be disposed of in the appropriate gatherers.



IR 2241 DESCRIPTION OF THE RECEIVER (RX)



Power supply:

The receiver can be powered with 12 or 24 Volts in either DC (observing the polarity) or in AC.

Selecting the NO/NC Relay Contact (with Jumper J 1) :

With jumper selection J1 it is possible to choose the type of relay contact as NO (Normally Open) or NC (Normally Closed).

J1 position 1- 2 : NO relay contact.

J1 position 2-3 : NC relay contact (factory configuration).

Checking TX - RX (LED 1) alignment:

Led 1 is installed on the receiver indicating when the TX - RX pair of photocells is aligned.

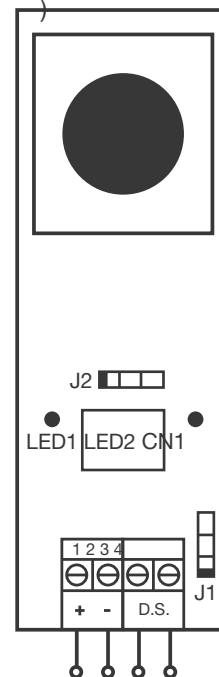
Led 1 will be on steadily when the infrared ray is aligned and will go off the when infrared ray goes off.

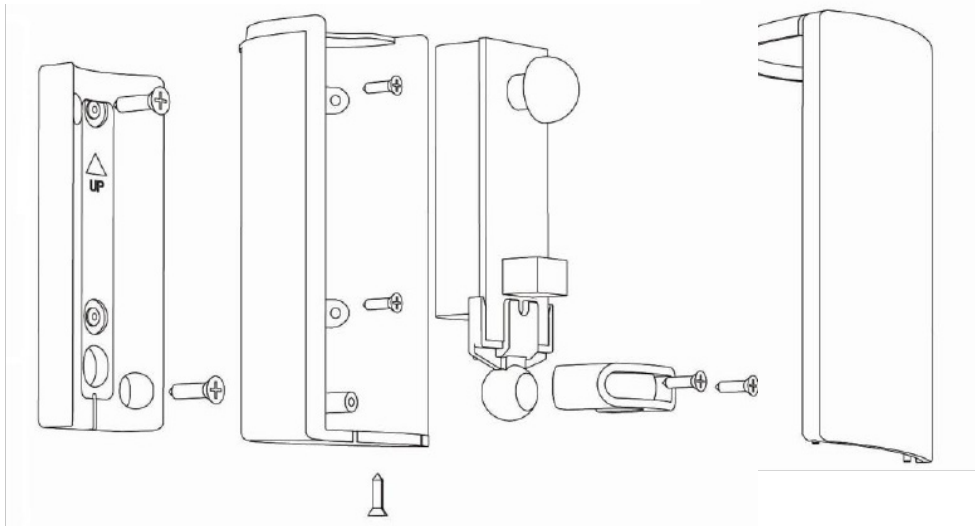
Checking the quality of the received signal (LED 2) :

Led 2 is installed on the receiver and flashes based on the quality of the signal received from its matching transmitter. The number of flashes is proportional to the intensity of the signal being received; four flashes, maximum signal, one flash is a weak signal.

Connections: (when using a power supply, rather than a battery)

- 1 - 0 Vac-Vdc Power Supply
- 2 - 12-24 Vac-Vdc Power Supply
- 3 - NO/NC photocell contact (J1 selection)
- 4 - NO/NC photocell contact (J1 selection)





IMPORTANT FOR THE INSTALLER


- If installing multiple devices it is advisable to cross beams (i.e. transmitter A and receiver B on the left and transmitter B and receiver A on the right). If this were not possible maintain a distance (especially between receivers) of at least one metre. **01488 658 276**
- Always set the minimum power necessary to cover the application distance: this increases battery life and decreases the possibility of interference with existing devices.
- The photocell allows the circuit to be oriented inside the box: in this way the transmitter can be aligned to the receiver, while preventing reception from other devices.

IMPORTANT FOR THE USER'S | INTENDED FOR PROFESSIONAL USE

- The device must never be used by children or persons with reduced physical-psychological abilities, unless supervised or trained on the functioning and the use modalities.
- Do not allow children to play with the device and keep the radio-controls away from their reach.
- ATTENTION: keep this instruction manual and respect the important safety prescriptions contained herein. The non compliance with the prescriptions may cause damages and serious accidents.
- Frequently examine the plant to detect any signs of damaging. Do not use the device if a repair intervention is necessary.

ATTENTION

- All operations which require the opening of the casing (cables connection, programming, etc.) must be carried out by expert personnel during installation. For any further operation which requires the casing to be re-opened (re-programming, repair or installation amendments) contact the after-sales assistance.

 The products: IR/IT 2241, IR/IT 2241 BATTERY, IR/IT 2241 SOLAR are compliant with the specifications of Directive EMC 2014/30/EU.



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