

SINGLE INFRARED BEAM SAFETY SENSOR

General

The package contains one infrared transmitter photocell and one infrared receiver photocell. Photocells are housed inside a high-power infrared filter plastic box. There are 2 pieces of rubber seal for each photocell. The photocell can be welded or screwed to a post or mounted directly to a wall using the plugs and screws provided. The connecting cables can be inserted through the back or through the bottom of the box depends on different application cases.

Please read the manual carefully before installation.

The photocell is without any fuse, so please make sure the power is off before installation.

Content of the package:

N.1 Transmitter Photocell
N.1 Receiver Photocell
N.6 Self Tapping Screws
N.6 Expansion Plugs
N.2 Post Screws
N1. User Manual

Each Photocell Components:

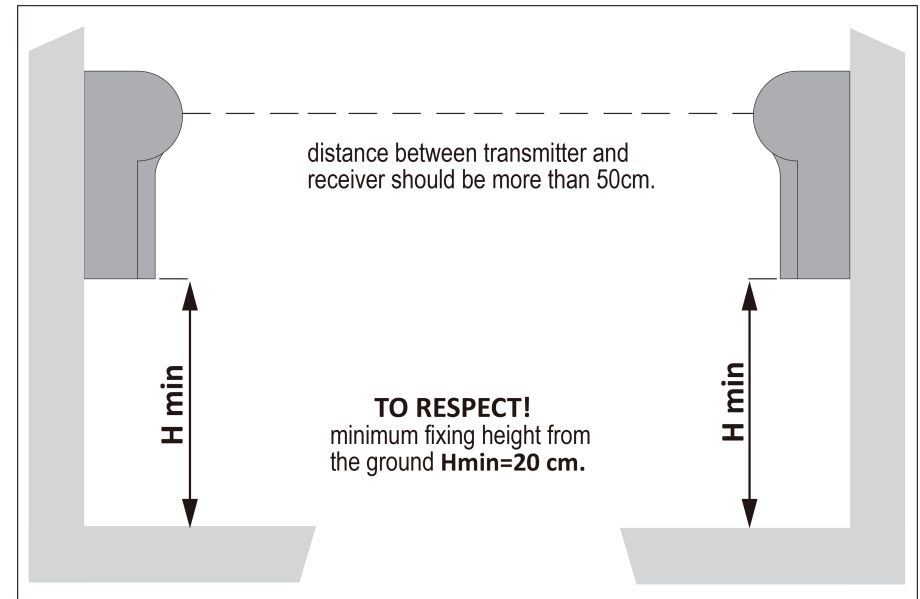
N.1 Cover
N.1 Base
N.1 Transmitter/Receiver Board
N.1 Rubber Seal
N.2 Cover Retaining Screws

TECHNICAL DATA:

Power Supply: AC/DC 12-24V
Working Current: Transmitter: $\leq 30\text{mA}$; Receiver: $\leq 50\text{mA}$
Infrared Wavelength: 890nm
Operating Distance: 12M
Receiver Relay Contact Output: Max. 1A at 24V DC
Operating Temperature: $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$
N.C. Or N.O. Can Be Set Through Jumper on Receiver Photocell
Protection Rating: IP45

INSTALLATION INSTRUCTION:

The photocells should be installed at height of more than 20cm above the ground. And the distance between transmitter and receiver should be more than 50cm.



The user should install the photocells on the back of the direct sunlight or other strong light source to keep it working steadily.

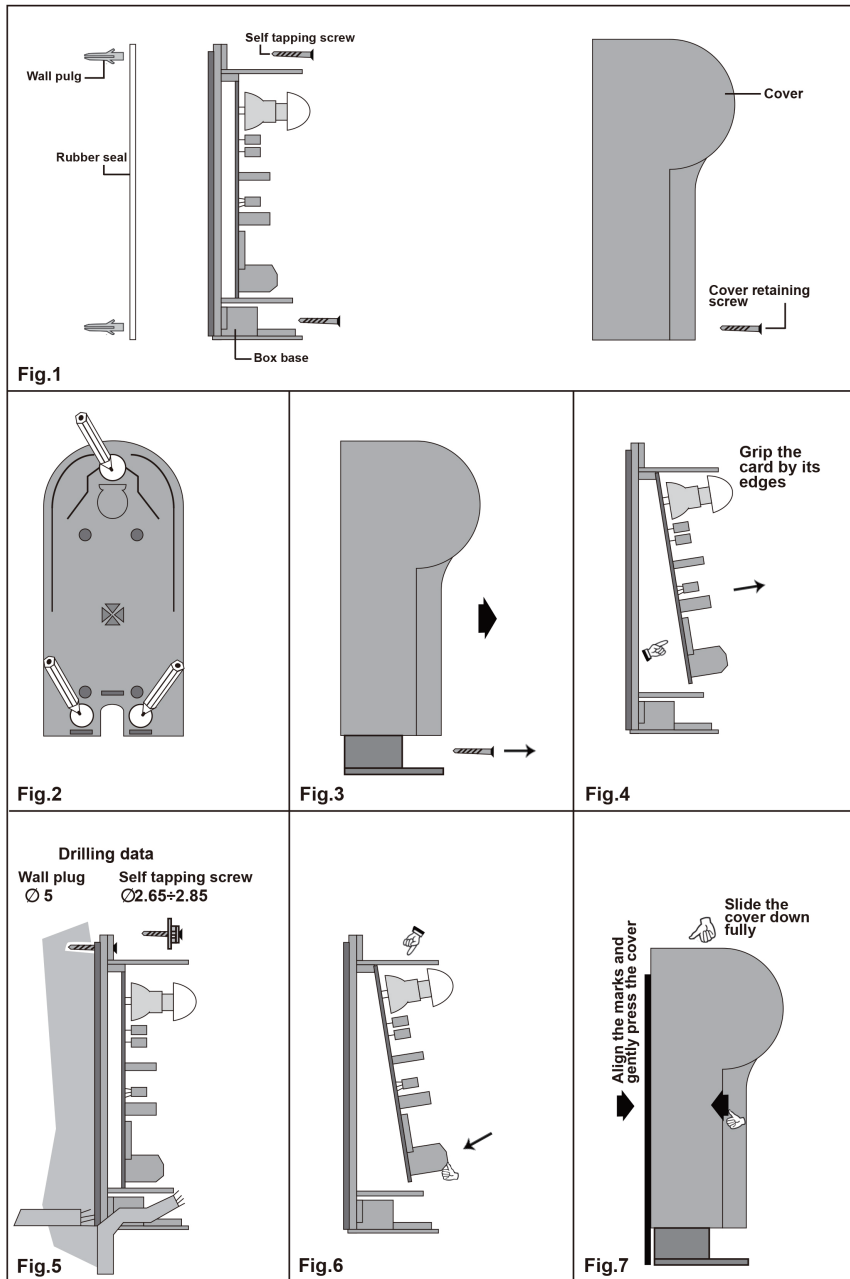
Avoid installing other infrared transmitter within effective distance of receiver.

Do not use this photocell on installations in which two or more photocells are installed in parallel and close together.

Installation

- 1.Remove the rubber seal on the back of the unit, and use it as a template to mark out the three screw holes (See Fig2.).
- 2.Drill the holes (See Fig5. for drilling details).
- 3.Open the photocell box by sliding the box cover upwards by about 1cm and then raise the cover to access the inside of the box (See Fig3).
- 4.Refit the seal to the back of the box base, then screw the box to the wall using the screws and plugs supplied (See Fig7.)
- 5.Connect up the terminal block following the wiring instructions given below.

Note: If you have to remove photocell board from the base during wiring, proceed as follows When you have completed wiring, Refit the board to the box(See Fig4 Fig6.).



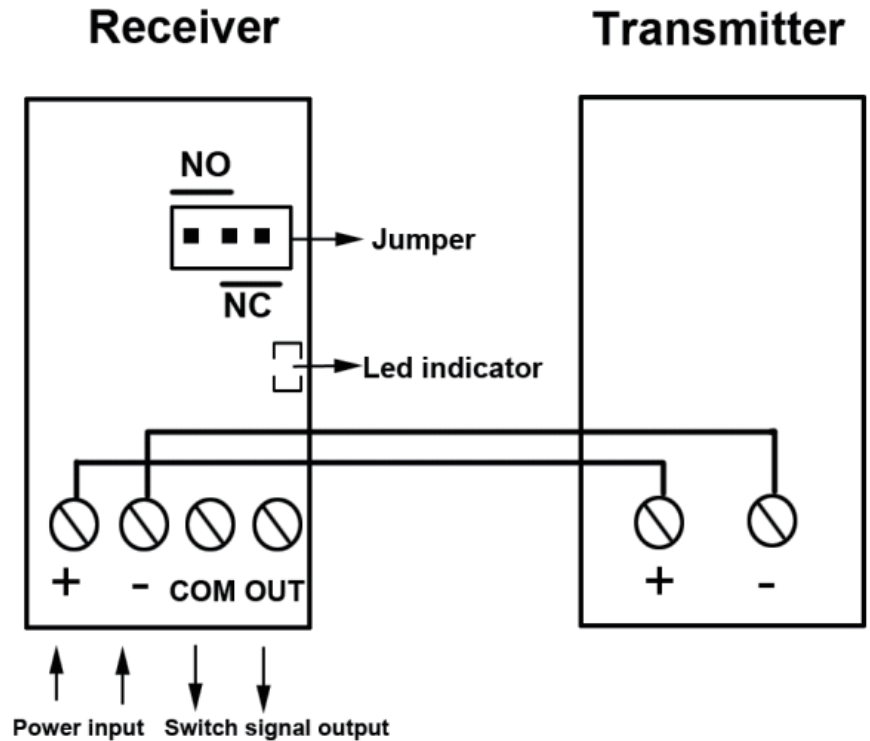
Handle the circuit board and components with care. Do not press board components. Do not use tools. Otherwise it may cause damage to the photocells.

Wiring

Connect up following the wiring diagram in Fig. as below.

Set the N.O. or N.C. control through the jumper on the receiver photocell based on your application. See Fig. as below

Always consult the wiring instructions for the control unit to which you are connecting the photocells.



After you have completed wiring, check the alignment between transmitter and receiver to ensure the photocells work efficiently. Power on after the correct wiring, the user will find the LED indicator will light up (set N.O. through jumper) or goes out (set N.C. through jumper) when the units are correctly aligned.

IMPORTANT:

USE THE CORRECT CABLE TYPE. CABLES SHOULD HAVE A SECTION AT LEAST 0.5MM.