

Photocell beam sensor User Manual P5112

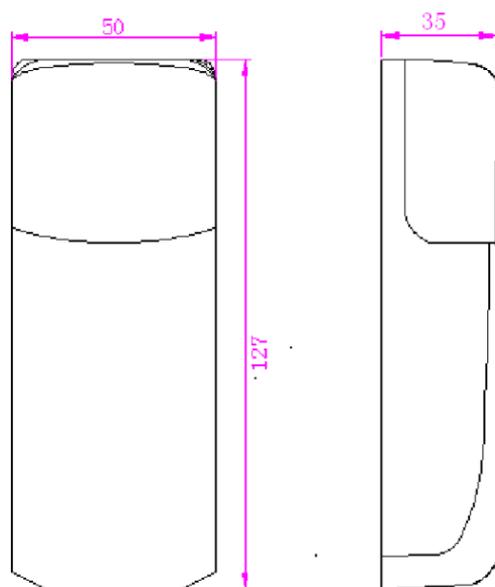
I. Technical Specification

1. For security, please read the user manual carefully before initial operation;
2. This photocell is without any fuse, so Please make sure the power is off before installation;
3. This product is only used for the equipment which will not cause life or property hazards when a breakdown happens or its security risks have been already eliminated;
4. Please guarantee the products used in effective working range.

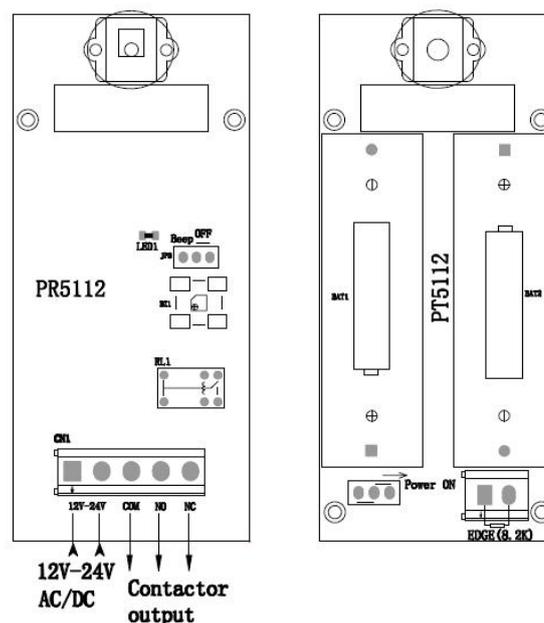
II. Safety Instruction

1. Working voltage: Receiver: 12~24VAC/DC Emitter: 2*1.5V, LR6 AA battery
2. Working current: Receiver(24VDC): $\leq 40\text{mA}$ Emitter(2*1.5V, LR6 AA battery): $\leq 0.2\text{mA}$
3. Photocell wavelength: 940nm
4. Angle of opposite emission: $\leq \pm 5^\circ$
5. Receiver range: $\geq 12\text{m}$
6. Working temperature: $-20^\circ \sim +60^\circ\text{C}$
7. Relay contact loading capacity: 1A/30VDC
8. Waterproof grade: IP54
9. Size: 127*50*35mm
10. Weight: 193g

III. Picture Display



PIC 1



PIC 2

IV. Installation instruction

- 4.1 Shown as pic 2 above, receiver module is external power supply and Emitter module is Inside Battery supply.
 - 4.1.1 Ext. Power, Supply voltage:12-24V AC/DC
 - 4.1.2 BATTERY, Battery voltage: 2*1.5V, LR6 AA battery, as shown in pic

Noted: When used in cold areas, the performance of alkaline battery will be reduced; we recommend use lithium-iron battery.

- 4.2 You can set the buzzer working or not by switch JP3 in receive module showed as pic 2
- 4.2.1 Switch on Beep, and the receiver module power supply is not lower than $2.0 \pm 0.1V$, Buzzer will be buzzing every 1 seconds. Buzzer won't buzz if power is lower than 1.7V, and the PT will stop working.
- 4.2.2 Switch on OFF, Buzzer will not work
- 4.3 Wire connection
- 4.3.1 Showed as PIC2 emitter module, SW1 is power switch. After you put on the batteries, you should put the black handle to "POWERON" to make the photocell work normally. 'EDEG' is safety switch and if you do not need safety switch, you should connect "EDGE" port to the 8.2K resistance.
- 4.3.2 Showed as PIC2 receiver module, '12-24VAC/DC' is power input port; "COM" is common port. "COM/NO" is Normally open, "COM/NC" is normally close, you can choose according to your condition.
- 4.3.3 After right wire connection and switch power on, the emitter module LED is on; align the CAP of the receiver module and emitter module, the receiver module LED is off; if not align the CAP of the receiver module and emitter module, the receiver module LED is on.
- 4.3.4 After right wire connection and switch power on, receiver module contact "NO/COM" close and "NC/COM" disconnect; align the CAP of the receiver module and emitter module, "NC/COM" close and "NO/COM" disconnect; if not align the CAP of the receiver module and emitter module, and "NC/COM" disconnect, "NO/COM" close
- 4.4 Installation
- 4.4.1 The photocells should be installed more than 20cm above the ground (to avoid reflection), and the distance between emitter and receiver shall be more than 50cm.
- 4.4.2 End user should install the photocell on the back of the direct sunlight or other strong light source ($\pm 5^\circ$) to keep photocell work well steadily.
- 4.4.3 Avoid installing other infrared photocell emitters within the effective distance of receiver
- 4.4.4 If the end user need to install other photocells in one same straight line, the receivers could be installed in the two ends and the emitters could be back-to-back installed
- 4.4.5 Stable installation could avoid the signal of emitter and receiver skewing due to lightly vibrate and the malfunction.

V Installation Pictures

