

Photocell beam sensor User Manual (P5101 V10)

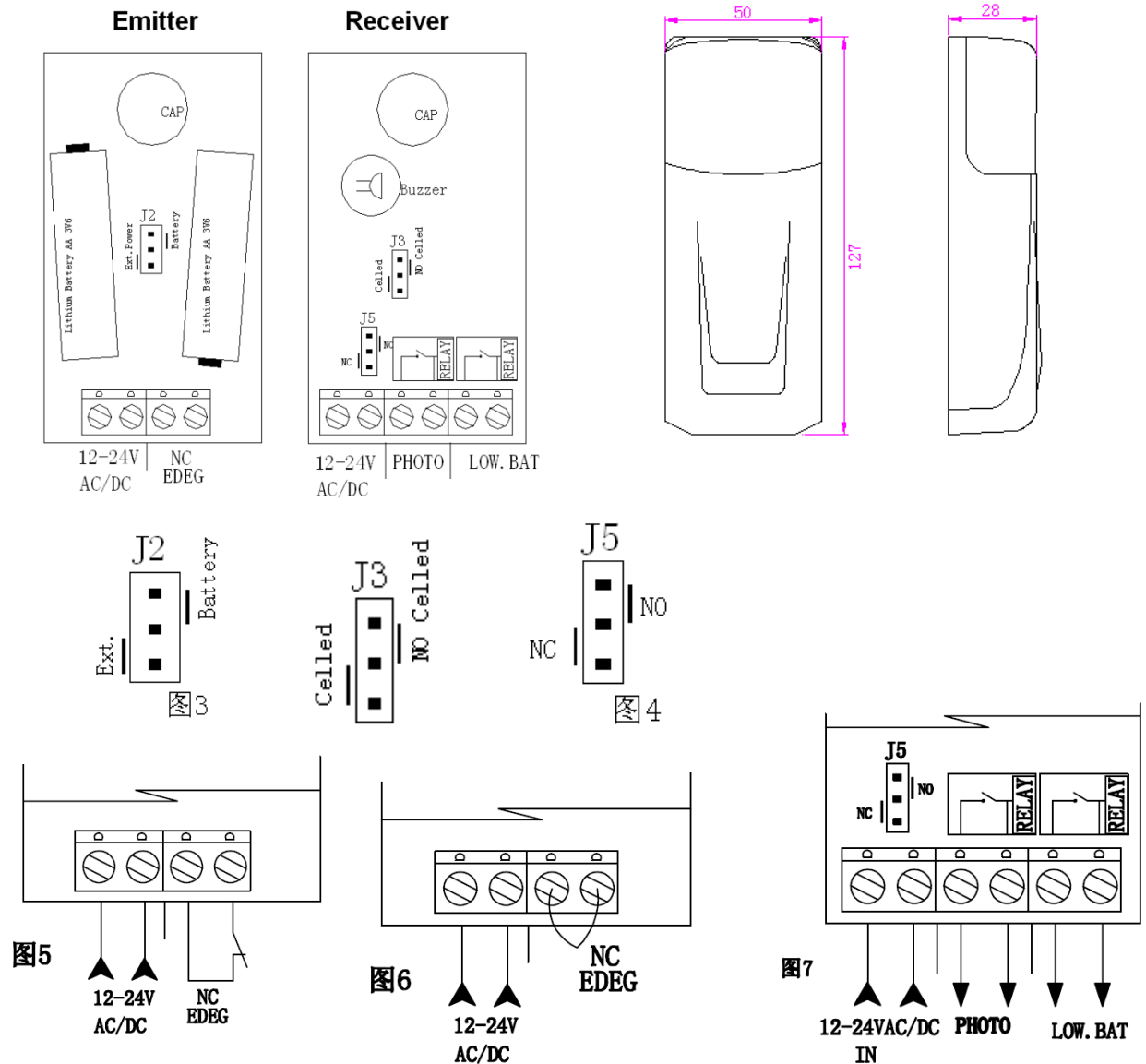
I. Technical Specification

1. Working voltage: 12~24VAC/DC or 2*1.5VGN15A Battery
2. Working current(24VDC):emitter: $\leq 8\text{mA}$ receiver: $\leq 40\text{mA}$
3. Photocell wavelength: 940nm
4. Angle of opposite emission: $\leq \pm 5^\circ$
5. Receiver range: $\geq 12\text{m}$
6. Internal Rotation system adjusted Angle: $0 \sim 180^\circ$
7. Working temperature: $-20 \sim +60^\circ\text{C}$
8. Relay contact loading capacity: 1A/30VDC
9. Size: 127*50*28mm

II. Safety Instruction

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. Only used this system that do not cause any danger life or property during the running failure or its security risks eliminated;
4. Please guarantee the products used in effective working range.

III. Picture Display



IV. Installation instruction

- 4.1 You can choose external power supply (12-24V AC/DC) or Battery supply J2 in transmit module.
- 4.1.1 put the short circuit cap on Ext. Power, Supply voltage:12-24V AC/DC
- 4.1.2 put the short circuit cap on BATTERY, Battery voltage:3V
- 4.2 You can set the buzzer working or not by switch J3
- 4.2.1 Buzzer works when short circuit cap on celled
- 4.2.2 Buzzer not work when short circuit cap on No celled
- 4.3 You can set the switch of photocell NO and NC by jumper J5.
- 4.3.1 when the short circuit cap on NO, The photocell will be Normal Open
- 4.3.2 when the short circuit cap on NC, the photocell will be normal closed
- 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.
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.
- 4.4.2 Avoid installing other infrared photocell emitters within the effective distance of receiver
- 4.4.3 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
- 4.4.4 Stable installation could avoid the signal of emitter and receiver skewing due to lightly vibrate and the malfunction.
- 4.5 Wire connection
- 4.5.1 You can choose safety switch for transmit module. If not, it should be short circuit by the cap, PLS see PIC 6.
- 4.5.2 PHOTO is the switch contact and can select NO or NC.
LOW.BAT is the low voltage alarm switch to buzzer when working voltage of emitter module is lower than 2V. Also it can activate the external alarm.
- 4.5.3 Power on after correct connection. You will find LED will turn on when you make alignment at the emitter and receiver, or led will off. Photocell switch 'PHOTO' works in set-up status(NO or NC, see 4.3). If there's obstacle between the transmit and receive module
- ① Buzzer will beep (J3 at Celled)
 - ② 'PHOTO' switch OFF or ON. When J5 is keep" NC", alignment the emitter and receiver, LED will be on, photocell switch is ON; if someone or something shelter the sensor, the Led will turn off, photocell switch is OFF.

V Installation Pictures

