# **Operation Instruction**

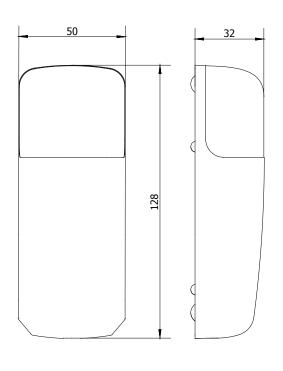
# 1 Technical Specification

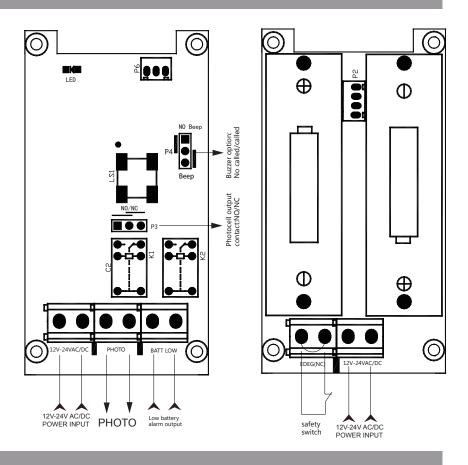
Working voltage	12-24VAC/DC or 1.5v, LR6AA size
Working current (24VDC)	Emitter: ≤8mA Receiver: ≤40mA
Photocell wavelength	940nm
Angle of opposite emission	≤±5°
Receiver range	≥12m
Internal Rotation system adjusted Angle	0~180°
Working temperature	<b>-20</b> ℃ <b>~</b> +60℃
Relay contact loading capacity	1A/30VDC
Size	128*50*32mm

### 2 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.

# 3 Picture Display





#### 4 Installation Instruction

- 4.1 You can choose external power supply or Inside Battery supply.
  - 4.1.1 Ext. Power, Supply voltage: 12-24V AC/DC.
  - 4.1.2 BATTERY, Battery voltage: 3V, as shown in pic.

- 4.2 You can set the buzzer working or not by switch P4 in receive module
  - 4.2.1 Buzzer works when short circuit cap on called.
  - 4.2.2 Buzzer not work when short circuit cap on No called.
- 4.3 You can set the switch of photocell NO or NC by P3 in receive module
  - 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.

### NO/NC • • •

NO Called

Called

P3

#### 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 (±5°) 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 needs to install other photocell in the one same straight line, the receivers could be installed in the two end 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.

#### 4.5 Wire connection

- 4.5.1 'EDEG' is safety switch (See transmit module in PIC 2). It should be short circuit if the safety switch is not used. '12-24VAC/DC' is outside power input port.
- 4.5.2 It is receive module in pic 1, '12-24VAC/DC' is power input port. 'PHOTO' is the switch contact and can select NO or NC (refer to 4.3). LOW.BAT is the low voltage alarm switch to buzzer when working voltage of emitter module is lower than 1.9±0.1V. Also it can activate the external alarm.
- 4.5.3 Power on after correct connection. You will find LED turn OFF when you make alignment at the emitter and receiver, or led will be ON. Photocell switch 'PHOTO' works in set-up status (NO or NC, see4.3). If there's obstacle between the transmit and receive module.
  - (1) Buzzer will beep (P4 at Called).
  - ②'PHOTO' switch OFF or ON. When P3 is keep 'NC', alignment the CAP in emitter and receiver module, LED will be OFF, 'photocell' switch is ON; if someone or something shelter the sensor, the Led will turn ON, photocell switch is OFF.

#### Installation Pictures

