# Photocell P5200 user manual (A1)

# I. Technical Specification

1. Working voltage: 12~24VAC/DC

2. Working current(24VDC):emitter: ≤8mA receiver: ≤30mA

3. Photocell wavelength: 940nm

4. Angle of emission: ≤±5°

5. Receiving range: ≥12m

6. Angel adjustment of PCBA: ±90°

7. Working temperature:  $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$ 

8. Relay contact loading capacity: 1A/30VDC

9. Waterproof level: IP5410. Size: 100\*40\*35mm

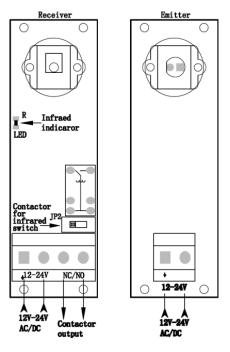
11. Weight: 107g

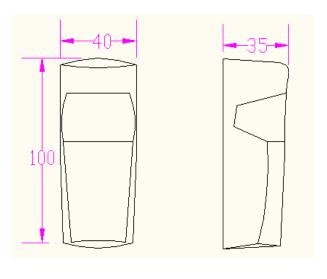
#### II. Safety Instruction

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. 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.

# III. Picture Display





Wiring diagram•

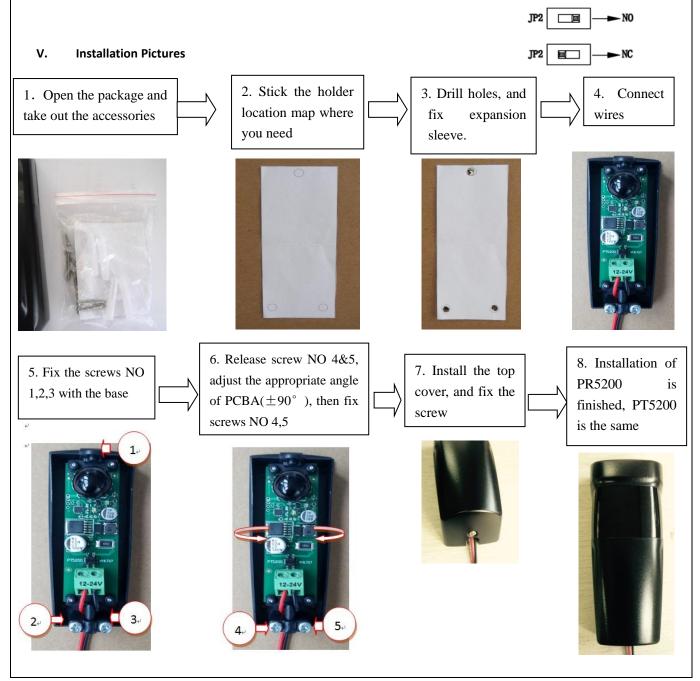
Size

### IV. Installation instruction

- $4.\,1\,$  Receive module JP2 in above picture (PR5200) is the option switch for NO and NC of photocell switch.
  - 4. 1. 1 When toggle switch JP2 at NC, it is normally open without power
  - $4.\,1.\,2\,$  When toggle switch JP2 at NO, it is normally close without power
- 4.2. Installation
  - 4. 2. 1 The photocells should be installed more than 20cm above the ground (to avoid reflection), and the distance between emitter

and receiver should be more than 50cm.

- 4.2.2 End user should install the photocell receiver on the back of the direct sunlight or other strong light source ( $\pm 5^{\circ}$ ) to keep photocell work well steadily.
  - $4.\ 2.\ 3$  Avoid installing other infrared photocell emitters within the effective distance of receiver
- $4.\,2.\,4$  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. 2. 5 Stable installation could avoid the signal of emitter and receiver skewing due to lightly vibrate and the malfunction.
  - $4.\,2.\,6\,$  When the product is installed in some place with angle , end user could adjust the PCBA to make the installation better .
- 4. 2. 7 Connecting power after checking no error of connecting lines, keep the CAP of emitter and receiver align, receiver LED off; When they are not align, receiver LED on.
- 4. 2. 8 Connecting power after checking no error of connecting lines, when toggle switch JP2 at NC, keep the CAP of emitter and receiver align, NC/NO connect; When the CAP of the emitter and receiver are blocked by obstacle, NC/NO disconnects. When toggle switch JP2 at NO, the state of NC/NO is opposite to the above phenomenon.



The interpretation and ownership of this manual belong to Hiland company. Any change of the product can be without prior notice.