Manual of Diffuse Reflective Photoelectric Sensor
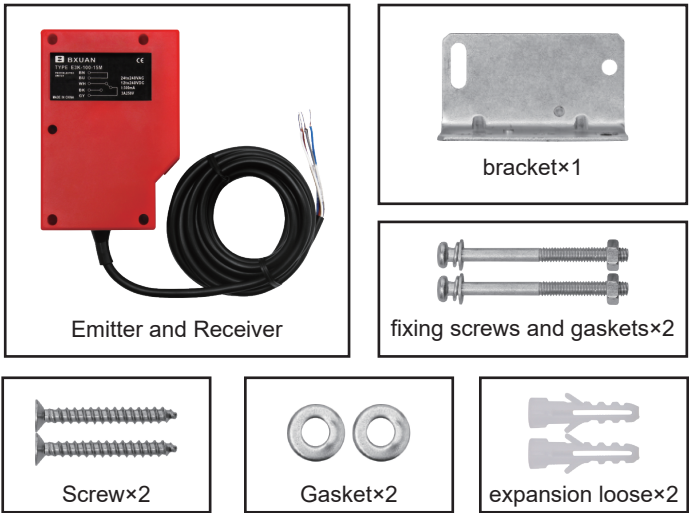
Application:
Diffuse reflective photoelectric sensor consists of light projector and light receiver in one, can distinguish transparent or opaque reflective object.Infrared photoelectric sensor can be compensated for longer distance with sensitivity controller, less susceptible to interference, fast reaction, long life, high resolution and high reliability
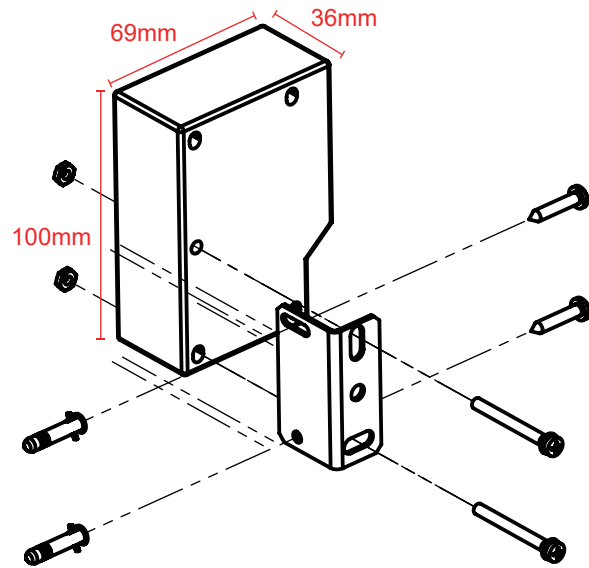
I. Parameter:

Work Voltage	12-24V (AC/DC)	Temperature Influence	Temperature range -30~65°C, at +23°C, ±15% detection distance Temperature range -25~60°C, at +23°C, ±10% detection distance.
Sensing Distance	≤8M	Product Size	100×69×36mm
Consumption Current	≤30mA	Cable Length	270cm
Protection Class	IP67	Weight	392.7g

II. Package List:

Emitter and Receiver

bracket×1

fixing screws and gaskets×2

Screw×2

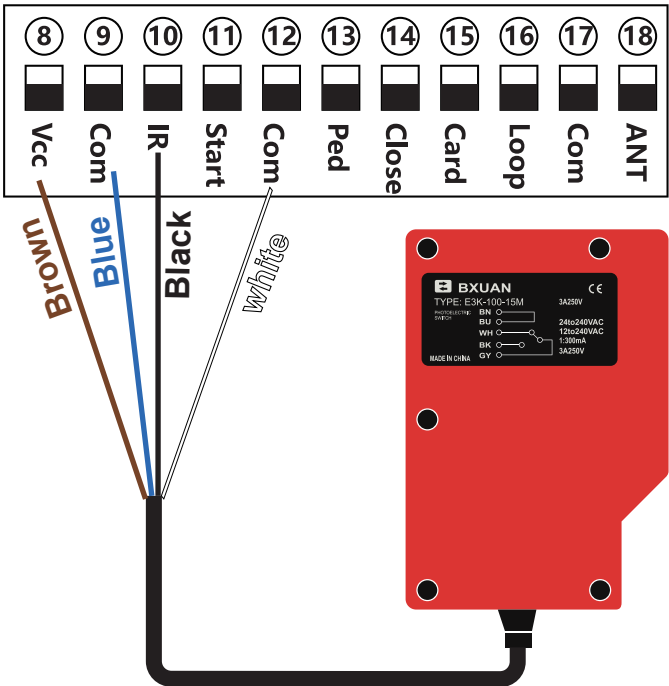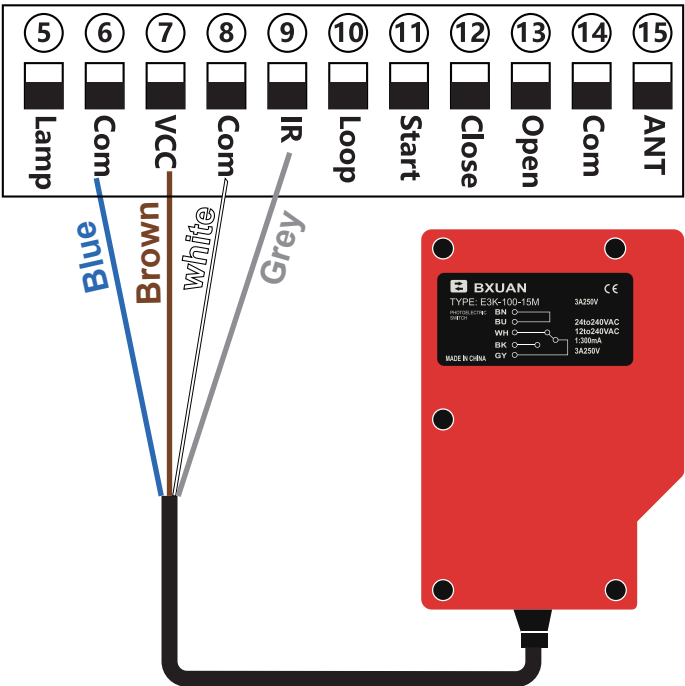Gasket×2

expansion loose×2

III. Installation:

IV. Feature:

The diffuse reflection sensor detects objects and materials without contact and indicates their presence by a switching signal.

Normally open:

⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰	⑱
Vcc	Com	IR	Start	Com	Ped	Close	Card	Loop	Com	ANT

Brown Blue Black White

TYPE: E3K-100-15M

Normally closed:

⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮
Lamp	Com	VCC	Com	IR	Loop	Start	Close	Open	Com	ANT

Blue Brown White Grey

TYPE: E3K-100-15M

V. Power terminal:

Blue: Negative/-   Brown: Positive/+

VI. Signal Terminal:

White wire: COM   Black wire: Normally Open   Gray wire: Normally Close. You have to connect either White wire and Black wire for N.O. detects or White wire and Gray wire for N.C. detects depends on the setting of your control panel.
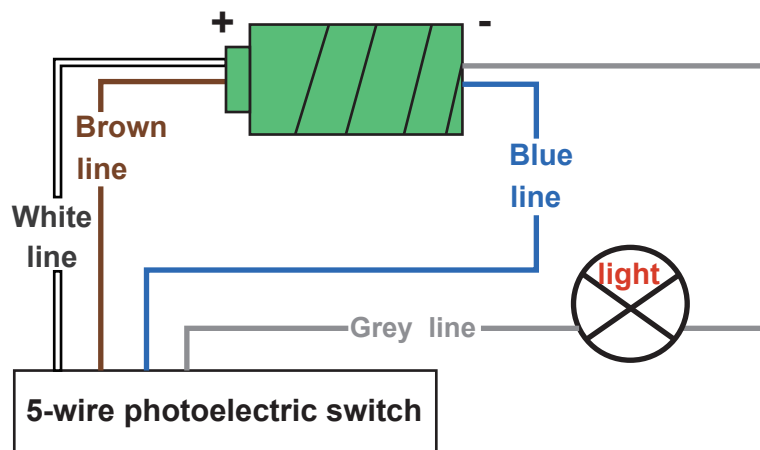
Normally open:

When an object is sensed

Light bulb ON

+ **-**

Brown line

Blue line

White line

light

Black line

5-wire photoelectric switch
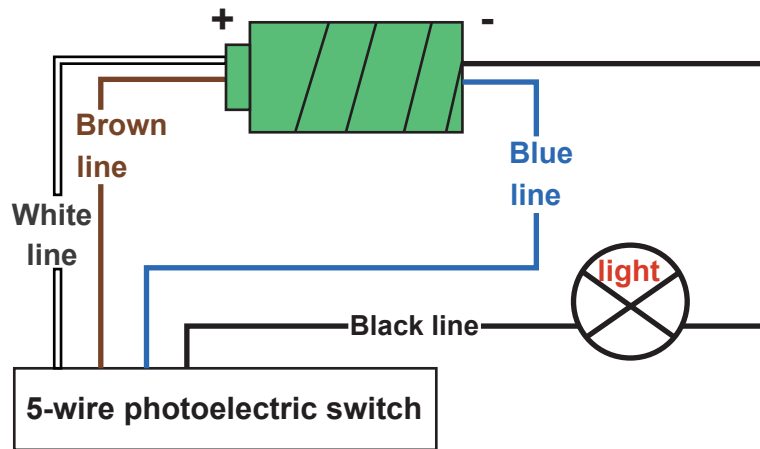
Normally closed:

When an object is sensed

Light bulb OFF

+ **-**

Brown line

Blue line

White line

light

Grey line

5-wire photoelectric switch

VII. Sensing distance adjustment:

By adjusting the knob on the product, it is possible to adjust the sensing distance. Rotate the knob clockwise to increase the sensing distance, and counterclockwise to decrease the sensing distance.

45°   MIN   MAX   **Obstacle**

90°   MIN   MAX   **Obstacle**

45°   MIN   MAX   **Obstacle**
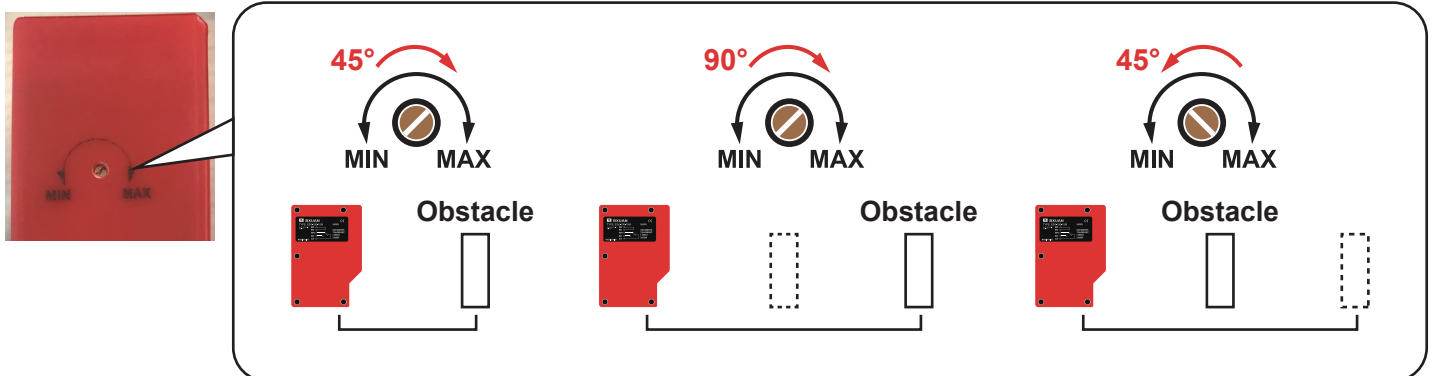
Important note:

1. Power supply voltage, please use the rated power supply voltage range within ± 15%.

2. Under the rated power supply voltage, there is an error of ± 10% in the detection distance.

3. Pure black obstacles may cause a shorter detection distance, which is a normal phenomenon.