

Amplifier Built-in Small Photoelectric Sensor CX-44

Technical Support - Application Assistance
or Place an Order - Contact Ramco

WARNING

- Never use this product as a sensing device for personnel protection.
- In case of using sensing devices for personnel protection, use products which meet laws and standards, such as OSHA, ANSI or IEC etc., for personnel protection applicable in each region or country.

1 INTENDED PRODUCTS FOR CE MARKING

- Refer "our web site: <https://panasonic.net/id/pidsx/global>" for the intended products. The models listed under "SPECIFICATIONS" come with CE Marking. As for all other models, please contact our office.



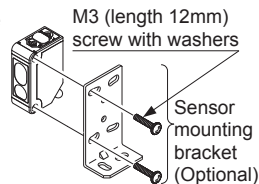
2 PART DESCRIPTION

Distance adjuster (Multi-turn) Used when adjusting distance	Operation indicator (Orange) Lights up when the sensing output is ON
Stability indicator (Green) Lights up under the stable light condition or the stable dark condition	Operation mode switch L: Light-ON D: Dark-ON

- Turn the operation mode switch gradually and lightly with a flathead screwdriver (purchase separately).

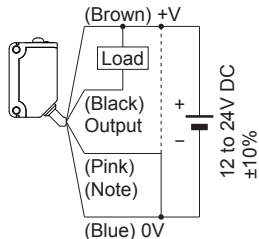
3 MOUNTING

- The tightening torque should be 0.5N·m or less.

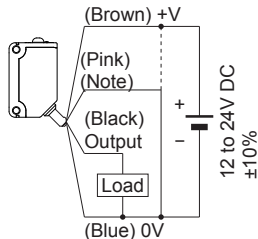


4 WIRING DIAGRAMS

• NPN output type



• PNP output type



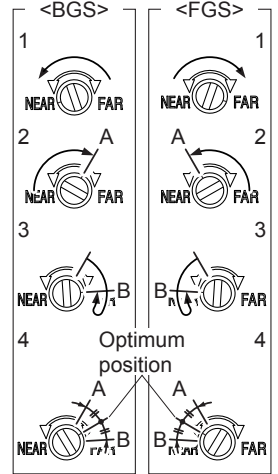
Note: This is sensing mode selection input. Wire the sensing mode selection input to either 0V (blue) or +V (brown), and select the sensing mode (BGS/FGS function)

Function	Wiring	Apprication
BGS function	Write to 0V (Solid line)	Sensing object is apart from the background.
FGS function	Write to +V (Write to)	Sensing object contacts the background Output operation is udes when detection-OFF

5 DISTANCE ADJUSTMENT

Step

- Turn the sensitivity adjuster fully.
BGS function: Counterclockwise
FGS function: Clockwise
- BGS function: In the object present condition, turn the sensitivity adjuster and confirm the point A where the sensor enters the sensing state.
FGS function: In sensing back-ground condition, turn the sensitivity adjuster and confirm the point A where the sensor enters the non-sensing state.
- BGS function: After removing the sensing object, turn the sensitivity adjuster and confirm the point B where the sensor enters the non-sensing state.
FGS function: In the object present condition, turn the sensitivity adjuster and confirm the point B where the sensor enters the sensing state.
(If the sensor does not enter the "Light" state operation even when the sensitivity adjuster is turned fully clockwise, the position is point B.)
- The optimum position to stably detect objects is the center point between A and B.



6 CAUTIONS

- This product has been developed / produced for industrial use only.
- Make sure to carry out wiring in the power supply OFF condition.
- Take care that wrong wiring will damage the sensor.
- Verify that the supply voltage variation is within the rating.
- If power is supplied from a commercial switching regulator, ensure that the frame ground (F.G.) terminal of the power supply is connected to an actual ground.
- In case noise generating equipment (switching regulator, inverter motor, etc.) is used in the vicinity of this product, connect the frame ground (F.G.) terminal of the equipment to an actual ground.
- Extension up to total 100m (each emitter and receiver of thru-beam type), or less, is possible with 0.3mm², or more of conductor area cable. However, the extension of a power supply line and the output line of less than 10m is acceptable in case using this product as conforming to S-mark.
- Make sure that stress by forcible bend or pulling is not applied directly to the sensor cable joint.
- Do not run the wires together with high-voltage lines or power lines or put them in the same raceway. This can cause malfunction due to induction.
- Do not use during the initial transient time (50ms) after the power supply is switched ON.
- Take care that the sensor is not directly exposed to fluorescent lamp from a rapid-starter lamp, a high frequency lighting device or sunlight etc., as it may affect the sensing performance.
- This sensor is suitable for indoor use only.
- Do not use this sensor in places having excessive vapor, dust, etc., or where it may come in contact with corrosive gas, etc.
- Take care that the sensor does not come in contact with oil, grease, organic solvents such as thinner, etc., strong acid, or alkaline.
- This sensor cannot be used in an environment containing inflammable or explosive gases.
- Never disassemble or modify the sensor.

7 RoHS DIRECTIVE

- This equipment complies with RoHS (EC and Chinese directive).
- Chinese RoHS indicates inclusion despite regulation value. (Refer Chinese part.)

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