Thank you very much for purchasing Panasonic products. Read this Instruction Manual carefully and thoroughly for the correct and optimum use of this product. Kindly keep this manual in a convenient place for quick reference.

- Please refer to “user’s manual on our web site (http://panasonic.net/id/pidxs/global)” for more details (specification and operation etc.)
- Access method is “Download” → “Model no.”
- If you could not visit our web site, contact our sales office near your sight.

**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 CE MARKED PRODUCT**

- Refer to “our web site (http://panasonic.net/id/pidxs/global)” for the intended products.
- Contact for CE

Panasonic Marketing Europe GmbH Panasonic Testing Center Winsbergring 15, 22525 Hamburg, Germany

The following items are required, as conditions for use

- The tightening torque should be 0.8N·m or less.
- Be sure to add a short-circuit protection (a fuse or a breaker) to the power supply input and the output.

**2 PART DESCRIPTION**

![Operational diagram](https://example.com/diagram.png)

**3 MOUNTING**

The tightening torque should be 0.8N·m or less.

**4 WIRING DIAGRAMS**

<table>
<thead>
<tr>
<th>Color Code</th>
<th>Supply Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red (GND)</td>
<td>DC 24V   AC 12V</td>
</tr>
<tr>
<td>Blue</td>
<td>DC 12V   AC 24V</td>
</tr>
<tr>
<td>Black</td>
<td>N.O.</td>
</tr>
<tr>
<td>Gray</td>
<td>N.C.</td>
</tr>
<tr>
<td>White</td>
<td>COM.</td>
</tr>
</tbody>
</table>

Note: The emitter of thru-beam type sensor has two wires for the power supply (+V and 0V) only.

**5 SENSITIVITY ADJUSTMENT**

**Step**

1. Turn the sensitivity adjuster fully counterclockwise to the minimum sensitivity position, MIN.
2. In the light received condition, turn the sensitivity adjuster slowly clockwise and confirm the point A where the sensor enters the “Light” state operation.
3. In the dark condition, turn the sensitivity adjuster further clockwise until the sensor enters the “Light” state operation and then bring it back to confirm point B where the sensor just returns to the “Dark” state operation.
4. The position at the middle of points A and B is the optimum sensitivity position.

**6 CAUTIONS**

- This product has been developed / produced for industrial use.
- Make sure that the power supply is OFF while wiring.
- 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.
- 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.
- 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.
- Do not use during the initial transient time (50ms) after the power supply is switched ON.
- Extension up to total 100m, (for emitter and receiver of thru-beam type: 100m each) is possible with 0.3mm2, or more conductor area cable.
- When connecting an inductive load, such as a DC relay, connect a surge absorber as shown in the right figure.
- Do not use this product under high temperature and high humidity for long periods of time. The detection performance may be affected due to the deterioration of internal components.
- This sensor is suitable for indoor use only.
- Avoid dust, dirt, and steam.
- Take care that the sensor does not come in direct contact with water, oil, grease, organic solvents, such as, thinner etc., or strong acid, and alkaline.

**7 RoHS DIRECTIVE**

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