OA-PRESENCE TN

MANUFACTURER'S STATEMENT

Read this operation manual carefully before use to ensure proper operation of the product. Failure to read this operation manual may cause improper operation and may result in serious injury or death of a person. The meanings of the symbols are as follows:

WARNING

Damaged of the warning symbol can cause improper operation which may cause death or serious injury.

CAUTION

Damaged of the caution symbol can cause improper operation which may cause injury of a person or damage the object.

NOTE

Special attention is required to check the symbol if the symbol is shown on the product.

1. This product is a non-contact switch intended for header mount or wall mount for use on an automatic sliding door, for use on any other applications.
2. When setting the sensor's detection area, make sure that there is no traffic around the installation site.
3. Before turning the power ON, check the wiring to prevent damage or malfunction of equipment connected to the product.
4. Only use the product as specified in the operation manual provided.
5. Be sure to install and adjust the sensor in accordance with the local laws and standards of the country in which the product is installed.
6. Before leaving the installation site make sure that the product is operating properly and instruct the building owner/operator on proper operation of the door and the product.
7. The product settings can be only changed by an installer or service engineer. When changed, the changed settings and the date shall be recorded in the maintenance logbook accompanying the door.

WARNING

Do not swing, disassemble, rebuild or repair the sensor, otherwise it may cause electric shock or breakdown of the equipment.

NOTE

The following conditions are not suitable for sensor installation:

- Lag or atmospheric emission around the door
- Installation header or mounting surface
- Moving objects, streetlights, or beam reflection in the detection area or in vicinity of light reflected or floor reflected objects around the detection area

SPECIFICATIONS

Model: OA-PRESENCE TN
Operating humidity: < 90%
Cover color: Silver / Black
Note: 5420BA
Mounting height: 2.5 to 3.5 m (11"")
Detected area: 
- See DETECTION AREA
Power supply (V) 50/60Hz, 24VDC
Ambient temperature: -25 to +55°C (4 to 131°F)
Power consumption: < 1W (max. 2W)
Detection angle: 60° X 45°
Detection method: Active Infrared Reflection
Output: 
- 2-wire output
- 2-wire current (4mA-20mA)
Output signal: 
- Normally closed
- Pull-up or pull-down

INSTALLATION

1. Affix the mounting template at the desired mounting position.
2. Make sure to follow the installation instructions in the user's manual provided with the product.
3. Test the sensor by moving an object in the detection area.
4. Adjust the sensor's sensitivity and detection range as necessary.
5. Make sure the sensor is mounted securely to prevent accidents.

NOTICE

1. Connect the sensor to the control panel using the provided wires.
2. Make sure the sensor is securely mounted to the wall or header.
3. Adjust the sensor's sensitivity and detection range as necessary.
4. Test the sensor by moving an object in the detection area.

NOTICE

1. Connect the sensor to the control panel using the provided wires.
2. Make sure the sensor is securely mounted to the wall or header.
3. Adjust the sensor's sensitivity and detection range as necessary.
4. Test the sensor by moving an object in the detection area.

CAUTION

Do not use the sensor without the cover. When using the sensor, be sure to close the header or wall to prevent accidents.

WARNING

Do not use the sensor without the cover. When using the sensor, be sure to close the header or wall to prevent accidents.
**ADJUSTMENTS**

1. **Area depth angle adjustment**

   - **Depth angle adjustment screw**
   - **Depth angle adjustment tool**

   **NOTE**
   - Make sure that the detection area does not overlap with the door frame, and there is no highly reflecting object near the detection area otherwise ghosting/haloing may occur.
   - For the easier adjustment, see **REFERENCE**.

2. **Area width adjustment**

   To adjust the detection area width, use the adjustment screws shown in the picture below.

   **NOTE**
   - When adjusting the area width, make sure to turn the adjustment screw until it clicks, or the setting may not be eliminated completely. Neither can the detection area be eliminated completely. 

3. **Dipswitch settings**

   After changing the dipswitch settings, make sure to push the function switch for 2 seconds.

   **Table 2**
<table>
<thead>
<tr>
<th>Function</th>
<th>Setting</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipswitch 1</td>
<td>Sensitivity Low</td>
<td>Maximize the detection area. Set the sensitivity according to the mounting height. Values below dipswitches are reference only. Adjust the sensitivity to your risk assessment.</td>
</tr>
<tr>
<td>Dipswitch 2</td>
<td>Mode</td>
<td>High/Low</td>
</tr>
<tr>
<td>Dipswitch 3</td>
<td>Presence timer</td>
<td>1-2 sec</td>
</tr>
<tr>
<td>Dipswitch 4</td>
<td>Frequency</td>
<td>Setting 6</td>
</tr>
<tr>
<td>Dipswitch 5</td>
<td>Safety output (to door controller)</td>
<td>High</td>
</tr>
<tr>
<td>Dipswitch 6</td>
<td>Safety input (from door controller)</td>
<td>High</td>
</tr>
<tr>
<td>Dipswitch 7</td>
<td>Self monitoring</td>
<td>Enable</td>
</tr>
<tr>
<td>Dipswitch 8</td>
<td>Installation mode</td>
<td>OFF</td>
</tr>
</tbody>
</table>

**CHECKING**

Check the operation in the operation mode according to the chart below.

- **Entry**
  - **Power Off**
  - **Entry into the detection area**
  - **Entry into the detection area 1st time**

- **Status**
  - Stand-by
  - Motion / Presence detection active

- **Operation indicator**
  - None
  - Green
  - Red

- **Safety output**
  - High
  - Low

**REFERENCE**

Area depth adjustment with INFRARED FINDERT (Separately available)

1. Turn depth angle adjustment screw to the right (O) to place the detection area most away from the door.
2. Set INFRARED FINDERT sensitivity to "H" (High) and place it on the floor as shown below.
3. Set dipswitch 16 in OFF.
4. Turn the depth angle adjustment screw to the left (Shallow) until the emiting area is placed at the position where INFRARED FINDERT is in the low detection status (Shore Red Blinking).

**INFORM BUILDING OWNER / OPERATOR OF THE FOLLOWING ITEMS**

**WARNING**

1. Always keep the detection window clean. Do not wipe the window with a damp cloth. Do not use any cleaner/solvent.
2. Do not wash the sensor with water.
3. Do not disassemble, install, or repair the sensor yourself, otherwise an electric shock may occur.
4. When the operation indicator blinks green, contact your installer or service engineer.
5. Always contact your installer or service engineer when changing the settings.
6. Do not paint the detection window.

**NOTE**

1. When turning the power ON, always watch the detection area to ensure the proper operation.
2. Do not place any objects that show or emit light in the detection area. (e.g. plants, illumination, etc.)

**TROUBLESHOOTING**

<table>
<thead>
<tr>
<th>Door operation</th>
<th>Operation indicator</th>
<th>Possible cause</th>
<th>Possible countermeasures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door does not open when a person enters the detection area</td>
<td>None</td>
<td>Strong power supply voltage</td>
<td>Check the related voltage.</td>
</tr>
<tr>
<td>Door opening is not detected</td>
<td>Wrong wiring or connection failure</td>
<td>Check the wire and connector.</td>
<td></td>
</tr>
<tr>
<td>Door detection area suspension</td>
<td>Sensitivity is low</td>
<td>Check ADJUSTMENTS 1, 2.</td>
<td></td>
</tr>
<tr>
<td>Door detection area suspension</td>
<td>Sensitivity is high</td>
<td>Set the sensitivity lower.</td>
<td></td>
</tr>
<tr>
<td>Door detection area suspension</td>
<td>Short presence timer</td>
<td>Set the presence timer longer.</td>
<td></td>
</tr>
<tr>
<td>Door detection area suspension</td>
<td>Door window detection</td>
<td>Alight the detection window with a damp cloth. Do not use any cleaner or solvent.</td>
<td></td>
</tr>
<tr>
<td>Door opens but no one is in the detection area, (Shoasting)</td>
<td>None</td>
<td>Objects that move or light up in the detection area.</td>
<td>Check Table 2 (dipswitch 5, 6).</td>
</tr>
<tr>
<td>Door opens but no one is in the detection area, (Shoasting)</td>
<td>Metaldrops on the detection window</td>
<td>Use the rain-cover (SEZRA25-EXK) or wipe the detection window with a damp cloth. Do not use any cleaner or solvent. On installed in a place keeping the metaldrops off.</td>
<td></td>
</tr>
<tr>
<td>Door opens but no one is in the detection area, (Shoasting)</td>
<td>The detection area overlaps with that of another sensor</td>
<td>Adjust the detection area to “Deep” (Doutside).</td>
<td></td>
</tr>
<tr>
<td>Door opens but no one is in the detection area, (Shoasting)</td>
<td>Sensitivity is too high</td>
<td>Set the sensitivity lower.</td>
<td></td>
</tr>
<tr>
<td>Door opens but no one is in the detection area, (Shoasting)</td>
<td>Sensitivity is too low</td>
<td>Set the sensitivity higher.</td>
<td></td>
</tr>
<tr>
<td>Door opens but no one is in the detection area, (Shoasting)</td>
<td>Door window detection failure</td>
<td>Check the wire and connector.</td>
<td></td>
</tr>
</tbody>
</table>

**Yellow**

- **Operation indicator**
  - Mode: Set dipswitch 16 to “OFF”.
  - Sensitivity is too low. | Set dipswitch 6 to “ON”. |
  - Door window detection failure | Wipe the detection window with a damp cloth. Do not use any cleaner or solvent. |
  - Sensor failure | Contact your installer or service engineer. |
  - Signal saturation | Remove highly reflecting objects from the detection area. Or change the area angle detection. |
  - The detection area overlaps with the door frame | Adjust the detection area to “Deep” (Doutside). |

**Red & Green**

- **Operation indicator**
  - Mode: Set dipswitch 16 to “ON”. 

*After changing the dipswitch settings, make sure to push the function switch for 2 seconds.*