### Specifications

**Model**: OA-PRESENCE TN  
**Safety output**: Form A relay 50 V to 0.3 A Max.  
**Cover color**: Silver/Black  
**Test input**: Optic coupler  
**Mounting area**: 2.0 (6.7”) to 3.5 m (11.8”)  
**Detection area**: See Detection area  
**Detection method**: Active infrared reflection  
**IP rate**: IP54  
**Power consumption**: 12 to 24 VDC ±5% (100 Hz)  
**Voltage**: 5 to 30 VDC  
**ESPE**: Type 3  
**Weigh1**: 250 g (8.8 oz)  
**Dimensions**: 38 (1 1/2")  
**Operation indicator table**:  
- **Operation**: Warm-up  
- **Color**: Yellow blinking  
- **Operation**: Stand-by (Installation mode)  
- **Color**: Yellow & Green blinking  
- **Operation**: Stand-by (Service mode)  
- **Color**: Green  
- **Operation**: Error handling  
- **Color**: Red blinking  
- **Operation**: Communication Test output  
- **Color**: Turn on/off 0.17 s/0.33 s  
- **Operation**: Setting error  
- **Color**: Red & Green blinking  
- **Signal saturation**: Slow Green blinking  
- **Operation**: Sensitivity too low (Sensor failure)  
- **Color**: Fast Green blinking  

**NOTE**: The specifications herein are subject to change without prior notice due to improvements.  
1. The sensor has to be connected to a door system which has a SELV circuit.  
2. Do not use for any other applications.  
3. LED light will be turned off approximately 300 ms when the sensor Test indicator signal works well.

### Installation

#### 1. Mounting

- **a.** Place the mounting template at the desired mounting position.  
- **b.** Drill two mounting holes of ø3.4 mm (ø1/8”).  
- **c.** Fix the sensor to the mounting surface with the two mounting screws.  
- **d.** Position the mounting template at the desired mounting position.  
- **e.** Remove the housing cover. Fix the sensor to the mounting surface with the two mounting screws.  
- **f.** Make sure to connect the cable correctly to the door controller before turning the power ON.

#### 2. Wiring

- **a.** Plug the connector.  
- **b.** Supply power to the sensor. Adjust the detection area and set the dipswitches.  
- **c.** Make sure to connect the cable correctly to the door controller before turning the power ON.  

#### 3. Turn On the power

- **a.** Plug the connector.  
- **b.** Supply power to the sensor. Adjust the detection area and set the dipswitches.  

#### 4. Mounting the housing cover

- **a.** Place the housing cover.  
- **b.** If wiring is to be exposed, break the knockout.

**NOTE**: The actual detection area may become smaller depending on the ambient light, the color/material of the object or the door as well as the entry speed of the object. The sensor may not be activated when the entering speed of the object or person is less than 50 mm/s or faster than 1500 mm/s.
**Adjustments**

1. **Area depth angle adjustment**

   - When adjusting the 1st row close to the door, see Table 1 dipswitch 16 for the easier adjustment.
   - Make sure that the detection area does not overlap with the door header, and there is no highly reflecting object near the detection area otherwise ghosting/signal saturation may occur.
   - Depth angle adjustment screw for the area.

2. **Area width adjustment**

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

**Table 1**

<table>
<thead>
<tr>
<th>Dipswitch No.</th>
<th>Function</th>
<th>Setting</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sensitivity</td>
<td>Low</td>
<td>Middle</td>
<td>High</td>
</tr>
<tr>
<td>2 Presence timer</td>
<td>30 s</td>
<td>60 s</td>
<td>600 s</td>
</tr>
<tr>
<td>3 Frequency</td>
<td>Setting 1</td>
<td>Setting 2</td>
<td>Setting 3</td>
</tr>
<tr>
<td>5 Safety output (door controller)</td>
<td>N.C.</td>
<td>N.O.</td>
<td>Dipswitch 6 Test input</td>
</tr>
<tr>
<td>6 Test input (from door controller)</td>
<td>Off</td>
<td>ON</td>
<td>Dipswitch 8 Test input</td>
</tr>
<tr>
<td>14 Self monitoring</td>
<td>ON</td>
<td>OFF</td>
<td>Set dipswitch 16 to &quot;ON&quot; to adjust the 1st row. During the installation mode only the 1st row remains active and the operation indicator shows yellow. After setting the row, set dipswitch 16 to &quot;OFF&quot;.</td>
</tr>
<tr>
<td>16 Installation mode</td>
<td>OFF</td>
<td>ON</td>
<td>Switch to the Operation mode that keeps pushing function switch until the operation indicator goes off.</td>
</tr>
</tbody>
</table>

**Reference**

1. Turn the depth angle adjustment screw to the right (Deep) to place the detection area most away from the door.
2. Set INFRARED FINDER sensitivity to "H" (High) and place it on the floor as shown below.
3. Turn the depth angle adjustment screw to the left (Shallow) until the sensing area is placed at the position where INFRARED FINDER is in the low detection status. (Slow Red blinking)

**Checking**

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

**Table 1**

<table>
<thead>
<tr>
<th>Status</th>
<th>Stand-by</th>
<th>Mid/Door/Presence detection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation indicator</td>
<td>None</td>
<td>Green</td>
</tr>
</tbody>
</table>

**Inform building owner/operator of the following items**

**WARNING**

1. Always keep the detection window clean. If dirty, wipe the window with a damp cloth.
2. Do not use any cleaner/solvent.
3. Do not disassemble, rebuild 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.

**Troubleshooting**

**Door operation**

- **Operation indicator**
  - None: Wrong power supply voltage. Set to the stated voltage.
  - Yellow: Wrong wiring or connection failure. Check the wires and connector.
  - Red: Wrong area width selection. Check Adjustments 1, 2.
  - Green: Sensitivity is too low. Set the sensitivity higher. (*)
  - Slow blinking: Dirty detection sensor. Wipe the detection window with a damp cloth.
  - Fast blinking: Do not use any cleaner or solvent.
  - Blinking: Proper wiring or settings. Check the wires and/or dipswitches.

**Door does not open when person enters the detection area.**

- **Error:**
  - None: Readjust the detection area. Or lower the sensitivity. (*)
  - Blinking: Slowly adjust the detection area. Or lower the sensitivity. (*)

**Door remains open.**

- **Operation**
  - Slow Green blinking: Sensitivity is too low. Set the sensitivity higher. (*)
  - Red & Green blinking: Check the area depth angle positioning. (Check Adjustment 3).

**Service mode**

- **During the "Service mode", only the 1st row remains transmitting and the operation indicator shows Yellow & Green blinking.**
- **After installation, be sure to turn to the "Operation mode" because it does not comply with EN 16005.**
- **If the problem is not solved after adjusting the detection area, change the dipswitch settings.**
- **If the problem still persists, hard-read the sensor. (Turn the power OFF and ON again) Proper wiring or connection failure. Check the wires and connector.**

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