**Infrared Ceiling Mounted Occupancy Sensor**
Cat. No. OSC04-I and OSC15-I
To be used with 24VDC OSPxx Series and CN100 Power Pack Class II Low-Voltage Wiring

**INSTALLATION INSTRUCTIONS**

**WARNINGS AND CAUTIONS**
- **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER** at circuit breaker or fuse and test that power is off before wiring!
- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- If you are unsure about any part of these instructions, consult an electrician.
- Sensors must be mounted on a vibration free surface.
- All sensors must be mounted at least 6 feet away from air vents.
- If you are unsure about any part of these instructions, consult an electrician.
- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER AT CIRCUIT BREAKER OR FUSE** before wiring!

**Step 3 cont’d**

**Preparing and connecting wires:**

- **NOTE:**
  - A. **Drop Ceiling Installation (Mounting Option A):**
  
  1. Select location for mounting of sensor and proper marking for your application (refer to Mounting Location Diagram).
  2. Use the supplied threaded rod or other methods to make a hole (1/2" to 1") in the ceiling tile just large enough to pass the body of the threaded rod through.
  3. Insert the sensor wires through the thread rod and into the ceiling tile. Position the threaded rod to the base of the sensor.
  4. Insert the threaded end of the threaded rod into the opening in the bottom of the sensor and fasten in place.

- **B. Wallboard or Drop Ceiling Installation (Mounting Option B):**

  **NOTE:**
  - You may use the mounting screws, nuts and washers included, or screws in combination with commercially available wall anchors.
  1. Select location for mounting of sensor and proper marking for your application (refer to Mounting Location Diagram).
  2. Make a hole in the ceiling tile or wallboard large enough to pass the wire connections and wires through (approximately 1" diameter).
  3. Remove the back cover of the sensor. Hold the back cover and body of the sensor and rotate until the two arrows line up and pull apart.
  4. Install back cover of the ceiling sensor to the wallboard or drop ceiling using the included screws, nuts and washers, or screws in combination with commercially available wall anchors.

- **Class II Wiring:**

  Connect low-Voltage wires from Power Pack to Sensor per WIRING DIAGRAM as follows: Twist strands of each lead tightly and, with circuit conductors, push firmly into appropriate wire connector. Screw connectors on clockwise making sure that the screw connects to the wire connector. Secure each connector with electrical tape.

- **NOTE:**
  - When using Class II Wiring, connect the Blue wire of the Power Pack to the Blue wire of the Sensor. DO NOT use the Blue wire of the Sensor. **NOTE:** Ensure to cap wires that are not being used.

**INSTALLATION IS COMPLETE.**

**C. Junction Box or Surface Mount Raceway Installation**

**NOTE:** Listed below are suggested JUNCTION BOX installation applications which require to connect in order to complete the three steps below.

**Wiring Diagram:** Multiple Sensor, Single Power Pack

**Table 1: Wire Designations**

<table>
<thead>
<tr>
<th>Name</th>
<th>Color</th>
<th>Gauge</th>
<th>Temp/Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power (HT V)</td>
<td>Red</td>
<td>24</td>
<td>200°C-600V</td>
</tr>
<tr>
<td>Neutral</td>
<td>Black</td>
<td>24</td>
<td>200°C-600V</td>
</tr>
<tr>
<td>Ground (Blue)</td>
<td>Blue</td>
<td>24</td>
<td>200°C-600V</td>
</tr>
<tr>
<td>Warning line</td>
<td>Blue*</td>
<td>24</td>
<td>200°C-600V</td>
</tr>
<tr>
<td>Occupancy/Abort</td>
<td>Grey</td>
<td>24</td>
<td>200°C-600V</td>
</tr>
</tbody>
</table>

**TABLE 3: Wiring Diagram**

**Step 3 cont’d**

**C. Junction Box or Surface Mount Raceway Installation**

**WARNING:** When using the Photocell function, connect the Gray wire of the Sensor to the Blue wire of the Power Pack. DO NOT use the Blue wire of the Sensor. **NOTE:** Ensure to cap wires that are not being used.

**INSTALLATION IS COMPLETE.**
Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time it is sold by Leviton is free of defects in materials and workmanship under normal and proper use for five years from the purchase date. Leviton’s only obligation is to correct such defects by repair or replacement, at its option.

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All switches in the off position.

Figure 1 (Cat. No. OSP12-12-52-09)

Figure 2 (Cat. No. O6504) Field-of-View Ranges

Figure 3 (No. de Cat. O6515) Rangos del Campo de Visión

Figure 4 (Cat. No. K9044) Mounting Location Diagram

Troubleshooting

- Lights do not turn ON
  - Circuit breaker or fuse has tripped.
  - Low-voltage miswired. To Test: Connect RED to BLUE wire at power pack to force lights ON.
  - Line voltage miswired. To Test: Connect BLUE to BLUE relay wires (of power pack) to force the lights ON.
  - Lights stay ON
    - Constant motion. To Test: Reduce RED knob by 15%; remove motion source. If unsatisfactory, move sensor.
    - Infrared sensor can “see” into hallway. To Test: Put sensor in timer test mode walk and walk hallway. If lights continue to come ON, move sensor.

- Light turns ON too long
  - Timer setting too high. To Test: Check switch settings. Typical setting is 10 minutes.

Product Information

- For technical assistance, contact us at 1-800-824-3025
- Visit our website at www.leviton.com

Limitation of Warranty

Leviton reserves the right to change and make improvements to this manual at any time, without notice. No other warranties, express or implied, are made in connection with this manual.

Table 1: Settings

<table>
<thead>
<tr>
<th>Settings</th>
<th>Code</th>
<th>Symbol</th>
<th>Function</th>
<th>Knob Setting</th>
<th>Factory Default Setting</th>
</tr>
</thead>
</table>
| Delayed Off Time | Blue | Delayed Off Time | Range setting 
| | Black | Ambient Light Override | Range setting | | Factory Default Setting |

Table 2: Switch Settings

<table>
<thead>
<tr>
<th>Switch</th>
<th>Functions</th>
<th>On</th>
<th>Off</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Rise</td>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>A2</td>
<td>Fall</td>
<td>OFF</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>A3</td>
<td>Mix</td>
<td>AUTO ADJUST</td>
<td>ON</td>
<td>AUTO ADJUST</td>
</tr>
<tr>
<td>B1</td>
<td>Rise</td>
<td>OFF</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>B2</td>
<td>Fall</td>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>B3</td>
<td>Test Mode</td>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>B4</td>
<td>LED Enable</td>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>B5</td>
<td>LED Disable</td>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>B6</td>
<td>Auto Mode</td>
<td>OFF</td>
<td>ON</td>
<td>ON</td>
</tr>
</tbody>
</table>

Table 3: Adjustment Knob Settings

<table>
<thead>
<tr>
<th>Knob Code</th>
<th>Symbol</th>
<th>Function</th>
<th>Knob Setting</th>
<th>Factory Default Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Sets the infrared range</td>
<td></td>
<td>75 %</td>
<td></td>
</tr>
<tr>
<td>Blue</td>
<td>Delayed Off Time</td>
<td></td>
<td>10 min</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>Ambient Light</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue</td>
<td>Ambient Light</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>