INSTALLATION INSTRUCTIONS

Tools needed to install your Sensor
- Slotted/Phillips Screwdriver
- Pliers
- Cutters

Parts Included List
- Sensor Base (1)
- #8-32 x 3/4" Screw (2)
- #8-32 x 1/" Screw (2)

FEATURES
- Adapts OSCxx Sensors to line-voltage
- 24VDC Output
- Mounts inside a 2.125" deep octagon or 4" square Electrical Box (w/mud ring).

DESCRIPTION
The OPB15 adapts Leviton low-voltage ceiling occupancy sensors to operate on line-voltage electrical systems. Designed to control up to 15 amps of lighting load from a single occupancy sensor. The Power Base contains a power supply and a load switching relay. The power supply provides Class 2 low-voltage power for OSCxx Series Occupancy Sensors. The relay in the Power Base is controlled by the occupancy sensors connected via the control input of the two-part terminal connector. The Power Base includes zero cross switching circuitry to minimize inrush current associated with electronic ballasts. This reduces wear and tear on the relay contacts making the inrush current associated with electronic ballasts. This reduces wear and tear on the relay contacts making the inrush current associated with electronic ballasts.

Application Notes:
OPB15 works well where installation of a low-voltage wiring typical with traditional power packs and sensors is difficult, inconvenient or costly. It is ideal for existing buildings where access to wiring is limited or for new construction with line-voltage circuiting only.

LOW-VOLTAGE CURRENT CAPACITY
OPB15 is designed for a single occupancy sensor with a maximum current capacity of 40mA.

INSTALLING YOUR POWER BASE

NOTE: Use check boxes V when Steps are completed.

Step 1
WARNING: TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF power at circuit breaker or fuse and test that power is off before wiring!

Step 2
Preparing and connecting wires:
Make sure the wires from the wall box are straight (cut if necessary). Remove insulation from each wall box wire and Sensor Power Base as shown:

WIRING DIAGRAM

Step 3
Wiring your Sensor Power Base (Line Voltage): NOTE: This application is based on the wall box being pre-installed.

Connect wires per WIRING DIAGRAM as follows:
- Twist strands of each lead tightly together and, with circuit conductors, push firmly into appropriate wire connector. Screw connectors on clockwise making sure no bare conductors show below the wire connectors.

WIRE DESIGNATIONS

<table>
<thead>
<tr>
<th>Signal Name</th>
<th>Color</th>
<th>Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Voltage Wires</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line 120-277V</td>
<td>Black</td>
<td>14 AWG</td>
</tr>
<tr>
<td>Neutral</td>
<td>White</td>
<td>14 AWG</td>
</tr>
<tr>
<td>Load</td>
<td>Blue</td>
<td>14 AWG</td>
</tr>
<tr>
<td>Class 2 Two-Part Terminal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common</td>
<td>Black</td>
<td>22 AWG</td>
</tr>
<tr>
<td>Control (Occupancy Sensor)</td>
<td>Red</td>
<td>22 AWG</td>
</tr>
<tr>
<td>Control (Occupancy Sensor)</td>
<td>Blue or Gray</td>
<td>22 AWG</td>
</tr>
</tbody>
</table>

All wires rated at 105° C. 600V insulation. Class 2 wires are Teflon coated.

Step 4
Mount power base in desired electrical box application:

A. To mount inside 4" octagon 2.125" deep ceiling electrical box, refer to Figure 1. Wire per Step 2.
- Dress line voltage wires to provide enough clearance in electrical box when device is installed.
- Partially thread the two #8-32 screws provided into mounting holes of the electrical box.
- Align the power base body so that it fits between the mounting holes of the electrical box and insert over mounting screws.
- Turn counter clockwise until it reaches the stops.
- Tighten mounting screws firmly.

B. To mount inside 2.25"x 4"x 4" electrical box with mud-ring, refer to Figure 2. Wire per Step 2.
- Ensure that conduit/cable entry clamp is located in corner of electrical box.
- Dress line voltage wires to provide enough clearance in electrical box when device is installed.
- Install a two-gang mud ring (not included) on electrical box.
- Partially thread the two #6-32 screws provided into the two-gang mud ring, one on the upper left and one on the lower right.
- Align the Power Base body so that it fits between the mounting holes of the electrical box and insert over mounting screws.
- Turn counter clockwise until it reaches the stops.
- Tighten mounting screws firmly.

Figure 1
Ceiling Installation in a 4" Octagon 2.125" Electrical Box

Figure 2
Two-Part Terminal Connector

Figure 3
Sensor Power Base

Figure 4
8-32 Screws

Figure 5
Sensor Base

WARNING AND CAUTIONS:
- Sensors must be mounted on a vibration free surface.
- All sensors must be mounted at least 6 feet away from air vents, air handlers, and reflective surfaces (windows/mirrors).
- Disconnect power when servicing fixture or changing lamps.
- Use this device with copper or copper clad wire only.

CATALOG ITEMS

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Power Input</th>
<th>Power Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPB15-GDW</td>
<td>120-277VAC, 50/60Hz</td>
<td>24VDC, 40mA</td>
</tr>
</tbody>
</table>

- Input voltage tolerance 10%
- Output voltage tolerance 15%, Output voltage listed at nominal.
LIMITED 5 YEAR WARRANTY AND EXCLUSIONS

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