**WARNINGS AND CAUTIONS:**

- **DISCONNECT POWER AT CIRCUIT BREAKER OR FUSE WHEN SERVICING, INSTALLING OR REMOVING LUMINARIA.**
- **DO NOT connect a load in excess of the specified ratings. Damage to the unit, fire, electric shock, personal injury or death can occur.**
- **If you are unsure about any part of these instructions, consult an electrician.**
- **To be installed and/or used in accordance with electrical codes and regulations.**

**TOOL NECESSARY TO INSTALL YOUR SENSOR:**

- Flat head screwdriver
- 2-Wire flat head screwdriver

**FEATURES:**

- **Easy to Set Style Design:**
  - Can be ganged with other units in a multi-switch installation.
  - Self-Adaptive Technology adjusts to occupancy patterns of use in multi-adapt models.

- **The Adapting Time-out walk-through feature prevents lights from turning OFF while the room is unoccupied for a certain period of time.**
  - Adjustable time-out feature.
  - Integrated photointerrupter prevents lights from turning ON when room is in a well-lit area.
  - True Zero-Cross for primary relay provides maximum life and compatibility with electronic ballasts.
  - Dual-detection technology, both Passive Infrared and Ultrasonic. Can be configured as Ultrasonic Only and PIR Only.

**DESCRIPTION:**

Leviton’s Designer Multi-Technology Wall Switch Occupancy Sensor, Cat. No. OSSMD-MF, OSSMD-FF, OSSMD-GF are designed to detect motion using passive infrared (PIR) sensor from sources (such as a person entering a room) within its field-of-view (horizontal and vertical spread and automatically switches lights ON. The Occupancy Sensor senses motion within its maximum coverage area of 2402 sq. ft. (223 m²). The Ultrasonic (US) sensors work with the PIR to keep the lights OFF when occupied. The controlled lights will remain ON or in OFF/OFF switching at any time.

**INSTALLING YOUR SENSOR:**

**NOTE:** Use check boxes [ ] when Steps are completed.

**WARNING:** TO KNOB FIRE, SMOKE, OR DEATH: TURN OFF POWER AT CIRCUIT breaker or fuse before handing that is without safety glasses.

**Preventing and connecting wires:**

**Step 1:**

- **Connecting wires** as follows: Insert wires into proper terminals as shown below and tighten to 4-6 cm.

**Step 2:**

- **Testing your wiring:**

**Identifying your wiring:**

**Circuit 1**

1. Line Load - L1
2. Neutral - N
3. Load - L

**Circuit 2**

1. Secondary Load - L
2. Neutral - N
3. Earth

**Step 3:**

**Preparing and connecting wires:**

- **Strip Gage (measure bare wire length).**
  - **Connect wires** as follows: Insert wires into proper terminals as shown below and tighten to 4-6 cm.

**Step 4:**

**Installing your Sensor - Single Location Application:**

**WARNING:** If you are unsure about any part of these instructions, consult an electrician.

**NOTE:** Allow 1 minute for warm-up after connecting and energizing.

**OSMDD-GF Wiring Methods:**

Connect wires per WIRING DIAGRAM as follows: Insert wires into proper terminals and a flat head screwdriver to turn terminal screws clockwise to secure wires.

**NOTE:** The occupancy sensor Cat. No. OSSMD-GF does not require a neutral connection in order to operate. It requires an Earthing wire bonded to the Neutral at the source to operate properly. If the Earthing wire is floating this device will not work.

**OSMDD-FF Wiring Methods:**

Connect wires per WIRING DIAGRAM as follows: Insert wires into proper terminals and a flat head screwdriver to turn terminal screws clockwise to secure wires.

**NOTE:** The occupancy sensor Cat. No. OSSMD-FF requires a neutral connection to operate. It requires an Earthing wire bonded to the Neutral at the source to operate properly. If the Earthing wire is floating this device will not work.

**OSMDD-MF Wiring Methods:**

Connect wires per WIRING DIAGRAM as follows: Insert wires into proper terminals and a flat head screwdriver to turn terminal screws clockwise to secure wires.

**NOTE:** The occupancy sensor Cat. No. OSSMD-MF requires an Earthing wire bonded to the Neutral at the source to operate properly. If the Earthing wire is floating this device will not work.

**Preparation and Mounting:**

- Position all wires to provide room in outlet wall box for device.
  - Partially secure device using long mounting screw provided.
  - Reset power at circuit breaker or fuse.

**NOTE:** Allow 1 minute for warm-up after energizing.

**NOTE:** All models of the OSSMD are factory preset to work without any adjustments. If necessary, adjust the Blenders and PIR Range Control to stop any unwanted activation of the lights (refer to FEATURES section).

**For additional Time Control Settings (refer to the SETTINGS section):**

**WARNING:** To avoid PERMANENT DAMAGE to the unit, be careful NOT TO OVERTURN the control knobs or levers when setting the Sensor. The controls can be accessed by removing the wallplate (if applicable) and control panel cover (refer to Control Panel Diagram). Use a small straight blade screwdriver to adjust knobs and blinder levers.

**NOTE:** DO NOT press in on blinder levers or use excessive force (refer to Control Panel Diagram).

**Attach the Control Panel cover when the desired settings are complete.**

If lights do not turn ON, refer to the TROUBLESHOOTING section.

**TROUBLESHOOTING:**

- **Do not install this unit to control a receptacle.**
  - **Normal connection required when used in circuits with GFCI's. Use Cat No’s OSSMD-MF or OSSMD-FF only.**
  - **Do not touch the surface of the lens. Clean outer surface with a damp cloth only.**
  - **Use this device WITH COPPER OR COPPER CLAD WIRE ONLY.**
**FEATURES**

NOTE: To access control settings, remove the control panel cover. If necessary, remove the screw label that covers the adjustment wheel prior to setting the control knobs and release button. (refer to Control Panel Diagram).

Factory Settings: The sensor has been shipped from the factory set up with the light control in the fully clockwise (cw) position, the time-out of 30 minutes, and the ambient light level is set to the maximum level.

- Fixed Time-Out: This is the value of this Time-Out is user selected through the use of the Time Control Settings. (refer to Control Panel Diagram and Time-Out Settings).
- Adjusting Time-Out: When activated, the value of this Time-Out (30 minutes) is user selected. After the control knobs and release button are turned on full time-out, the control knobs and release button are turned off. After this, the Time-Out value will be decreased by one increment per second, unless the Time-Out value is decreased by greater than one increment per second. (refer to Control Panel Diagram).

Vacancy Confirmation: After lights shut off within 30 seconds, it is user confirmed that the room is unoccupied. (refer to Control Panel Diagram).

- Walk-through Time-Out: This is the value of this Time-Out is preset to 2.5 minutes and only works in the Adjusting Time-Out mode.

**US Sensitivity and PIR Disable**:

- 1 amber flash = High ultrasonic sensitivity, PIR enabled
- 2 amber flashes = Medium ultrasonic sensitivity, PIR enabled
- 3 amber flashes = Low ultrasonic sensitivity, PIR enabled
- 1 green flash = High ultrasonic sensitivity, PIR disabled
- 2 green flashes = Medium ultrasonic sensitivity, PIR disabled
- 3 green flashes = Low ultrasonic sensitivity, PIR disabled

Control Panel Diagram

<table>
<thead>
<tr>
<th>Control Panel Cover</th>
<th>Wallplate</th>
<th>Device mounting screw (2 pieces)</th>
</tr>
</thead>
</table>

**LIMITED 5 YEAR WARRANTY AND EXCLUSIONS**

Leviton warrants the original consumer purchaser and excludes for anyone else that this product at the time of sale to be free of defects in material and workmanship for five years from the purchase date. Leviton’s only obligation is to correct such defects by repair or replacement, at its option, within such five year period. The product is returned with proper purchase data, and a description of the problem to Leviton Manufacturing Co., Inc. At: Quality Assurance Department, 201 North Service Road, Melville, N.Y. 11747 U.S.A. This warranty excludes and there is determined to be caused by other than rust or corrosion, (refer to Control Panel Diagram). If the light control is in the fully CW position, the light control will turn on regardless of motion detected, until the Time-Out expires. (refer to Control Panel Diagram). If the relays and their corresponding loads are ON, the relays will turn OFF when their corresponding loads are OFF. If the relays are OFF, the relays will turn ON when their push buttons is pressed, and the relays will turn OFF when the push button is pressed. If the relays and their corresponding loads are ON, the relays will turn OFF when their corresponding push buttons are pressed. The relays will turn OFF regardless of motion detected, until the Time-Out expires. (refer to Control Panel Diagram). If the OSSMD is in the fully CCW position, the OSSMD will turn OFF regardless of motion detected, until the Time-Out expires. (refer to Control Panel Diagram). If the OSSMD-AF and OSSMD-G have two push button switches that toggle the relays and their corresponding loads ON and OFF, the OSSMD-AF and OSSMD-G will turn OFF when their corresponding push buttons are pressed. The relays will turn OFF regardless of motion detected, until the Time-Out expires.

Leviton warrants to the original consumer purchaser and excludes for anyone else that this product at the time of sale to be free of defects in material and workmanship for five years from the purchase date. Leviton’s only obligation is to correct such defects by repair or replacement, at its option, within such five year period. The product is returned with proper purchase data, and a description of the problem to Leviton Manufacturing Co., Inc. At: Quality Assurance Department, 201 North Service Road, Melville, N.Y. 11747 U.S.A. This warranty excludes and there is determined to be caused by other than rust or corrosion