

LEVITON®

Triple Mount High Bay Occupancy Sensor

Cat. No. OSFHS-IxW (Sensor)
Ratings:

800VA-6.67A @ 120VAC, 1/4 HP, 50-60Hz
1200VA-4.33A @ 277VAC, 50-60Hz
1500VA-4.32A @ 347VAC, 50-60Hz
32° F to 160° F

Compatible with electronic and magnetic ballasts,
electronic and magnetic low-voltage ballasts

INSTALLATION INSTRUCTIONS

DI-041-OSFHS-05B

LIMITED 5 YEAR WARRANTY AND EXCLUSIONS

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale 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. For details visit www.leviton.com or call 1-800-824-3005. This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. **There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to five years. Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation.** The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

For Technical Assistance Call:
1-800-824-3005 (USA Only)
or 1-800-405-5320 (Canada Only)
www.leviton.com

FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada ULC to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9 or by telephone at 1 800 405-5320.**

DI-041-OSFHS-05B

FEATURES

- Multiple mounting options – surface mount (with threaded nipple or key holes), or recessed mount
- Quick-snap nipple allows for installation into standard Double D Knockout on Luminaire without requiring a locknut
- 360 degree lenses for field-of-view (included):
 - Blue Lens = 8-25 ft. mounting height
 - White Lens = 20-40 ft. mounting height
- Aisle coverage: Add included aisle mask to either lens option.
- Adjustable Time Delay does not require power to set
- LED indicator light blinks when sensor detects motion
- Adjustable rotating lens for optimizing sensor detection points within the FOV for the specific room
- False detection circuitry reduces nuisance tripping for energy savings
- During a power outage, return-to-last-state design, assures lights ON for safety when occupied and lights OFF for energy savings when unoccupied
- H.I.S. - Leviton High Inrush Stability uses a robust mechanical latching relay and zero crossing for long life
- Instant startup powers Luminaire under 3 seconds to speed up testing on fixture assembly line
- 21" pre-stripped color coded wire leads
- Optional peel and stick mask kit

DESCRIPTION

Leviton's surface mount high bay occupancy sensor, OSFHS-IxW, is specifically designed for high mounted areas such as warehouses, manufacturing and other high ceiling applications. It has the flexibility to be surface mounted directly to the front of a fixture or recess mounted internal to the fixture. It is a self-contained sensor and relay that detects motion using the passive infrared (PIR) to sense sources (such as a person entering a room) within its field-of-view (monitored space) and automatically switches lights ON. The controlled lights will remain ON until no motion is detected and the scheduled time-delay has expired. The sensor is supplied with two interchangeable lens rings that allows the user to select between a 360 degree High Bay/Low Bay pattern or an aisle pattern.

Cat. No. OSFHS-IxW is UL listed, cUL listed and conforms to California Title 24 requirements. The Sensor's High Bay lens is designed for 20 ft. to 40 ft. mounting heights for a symmetrical pattern which will provide coverage of 50' to 60' diameter (refer to **Figure 4**). The Low Bay lens is designed for 8 ft. to 20 ft. mounting heights for a symmetrical pattern which will provide coverage of 30' to 50' diameter (refer to **Figure 6**). The Sensor is sensitive to the heat emitted by the human body. In order to initially trigger the Sensor, the source of heat must move from one zone of detection to another.

Note that occupancy sensors respond to rapid changes in temperature, so care should be taken not to mount the device near a climate control source (i.e. radiators, air exchanges, and air conditioners). Hot or cold drafts will look like body motion to the device and will trigger it if the unit is mounted too close. **It is recommended to mount the Occupancy Sensor at least 6 ft. away from the heating or cooling ventilation source.**

INSTALLATION INSTRUCTIONS

WARNING: TO AVOID FIRE, SHOCK, OR DEATH: TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT THE POWER IS OFF BEFORE WIRING.

WARNING: TO BE INSTALLED AND/OR USED IN ACCORDANCE WITH APPROPRIATE ELECTRICAL CODES AND REGULATIONS.

WARNING: IF YOU ARE NOT SURE ABOUT ANY PART OF THESE INSTRUCTIONS, CONSULT AN ELECTRICIAN.

WARNING: CONTROLLING A LOAD IN EXCESS OF THE SPECIFIED RATINGS WILL DAMAGE THE UNIT AND POSE RISK OF FIRE, ELECTRIC SHOCK, PERSONAL INJURY OR DEATH. CHECK YOUR LOAD RATINGS TO DETERMINE THE UNIT'S SUITABILITY FOR YOUR APPLICATION.

WARNING: USE THIS DEVICE WITH COPPER OR COPPER CLAD WIRE ONLY.

OTHER CAUTIONS AND NOTES:

1. DISCONNECT POWER WHEN SERVICING LUMINAIRE OR CHANGING BULBS.
2. CLEAN OUTER SURFACE WITH A DAMP CLOTH ONLY.

TO INSTALL:

NOTE: The OSFHS-IxW is supplied with two lens trim rings. The 360 degree High Bay lens (white color trim ring) is installed at the factory with the Low Bay lens (blue color trim ring) in the carton. Choose the correct lens for your fixture height location and add the black aisle mask (**figures 5, 8**) if blocking detection outside of the aisle is desired. The OSFHS-IxW can be mounted to the surface of a fixture using the 1/2" threaded nipple or using the keyhole slots on the back of the sensor. It can also be recess mounted internal to the fixture using the slots on the side of the sensor. Reference **figures 1, 2 and 3** for dimensions and mounting specifications.

SENSOR INSTALLATION:

1. **WARNING: TO AVOID FIRE, SHOCK, OR DEATH: TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT THE POWER IS OFF BEFORE WIRING.**
2. The sensor comes with two lens rings. **NOTE:** Masking is provided to customize your detection area. Aisle mask can be inserted inside the lens and an optional peel and stick masking kit is included. This circular white adhesive label (with removable wedges) is applied to the **OUTSIDE** of the sensor lens. Use any number of wedges to alter field-of-view for your desired application.
3. To change lens, turn trim ring so that the two indented dots line up and pull out by the finger tabs (refer to **Figure 7**).

Surface Mount Installation:

- a. Remove the lock-nut from the threaded nipple and insert the wires and the threaded nipple into a half inch hole of the luminaire body.
- b. Slide the lock-nut over the wires and thread clockwise on to the threaded nipple to secure firmly in place, making sure the lens is oriented towards the area to be monitored (refer to **Figure 1**).

Keyhole Mount Installation:

- a. Remove the threaded nipple from the back of the sensor by turning counterclockwise.
- b. Using the specifications in **Figure 2** as a guide, place the sensor and keyhole slots over the screws (use #8-32 pan head screws) and turn clockwise to lock into place, making sure the lens is oriented towards the area to be monitored.

Recessed Mount Installation:

- a. Using the specifications in **Figure 3** as a guide, cut a hole per dimensions specified into the luminaire.
 - b. Slide the sensor into the hole until the clips on the side of the sensor snap into place, securing the sensor.
6. Connect wires per **Wiring Diagram** as follows: BLACK lead to LINE (Hot); RED lead to LOAD; WHITE lead to LINE (Neutral). Twist strands of each lead tightly and, with circuit conductors, push firmly into the appropriate wire connector. Screw connector on clockwise making sure that no bare wire shows below the connector.
 7. Restore power at circuit breaker or fuse.

NOTE: Allow approximately 1 minute for charge-up. If the lights turn ON and the LED blinks when a hand is waved in front of the lens, then the Sensor was installed properly. If the operation is different, refer to the Troubleshooting Section.

The Sensor is factory preset to work without any adjustments. If you desire to change the factory settings, refer to the **SETTINGS** section.

SETTINGS

NOTE: Settings should be determined during the installation period. Remove the lens to access the Time Delay and Sensitivity dials.

Time-Delay: This adjustment controls the amount of time the lights stay ON after the last detected motion. You may select settings varying from 30 seconds to 30 minutes and any time in between, no power required.

Sensitivity: Turn dial clockwise to increase detection to small movements. Turn dial counter-clockwise to decrease detection to small movement.

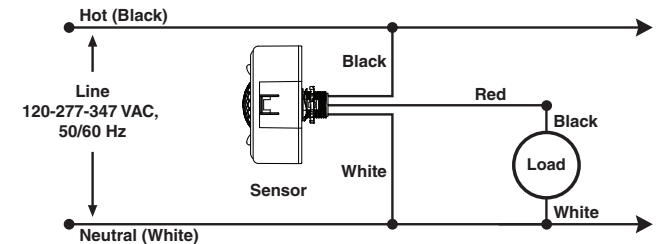
NOTE: After power is turned ON, allow one minute for the unit to warm up before it will perform the settings.



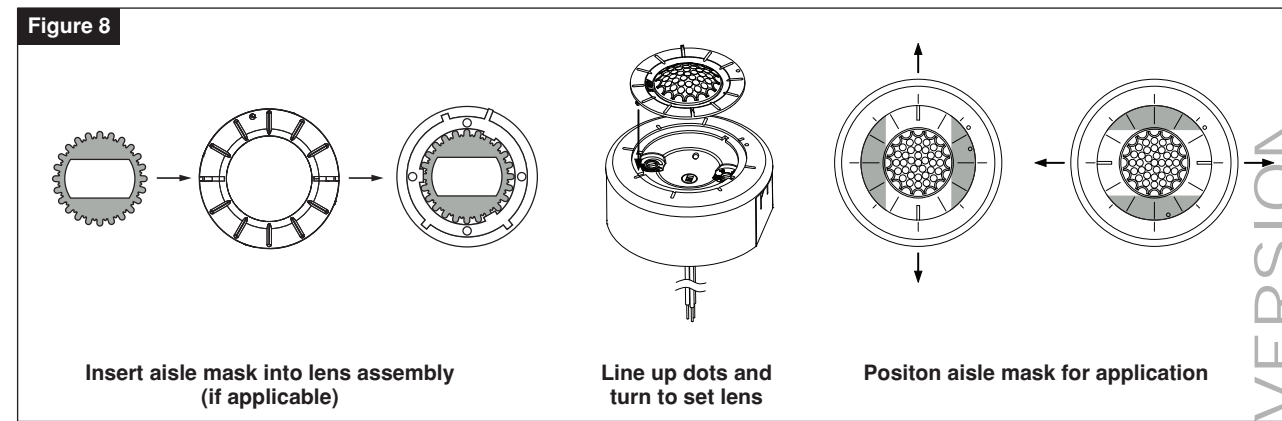
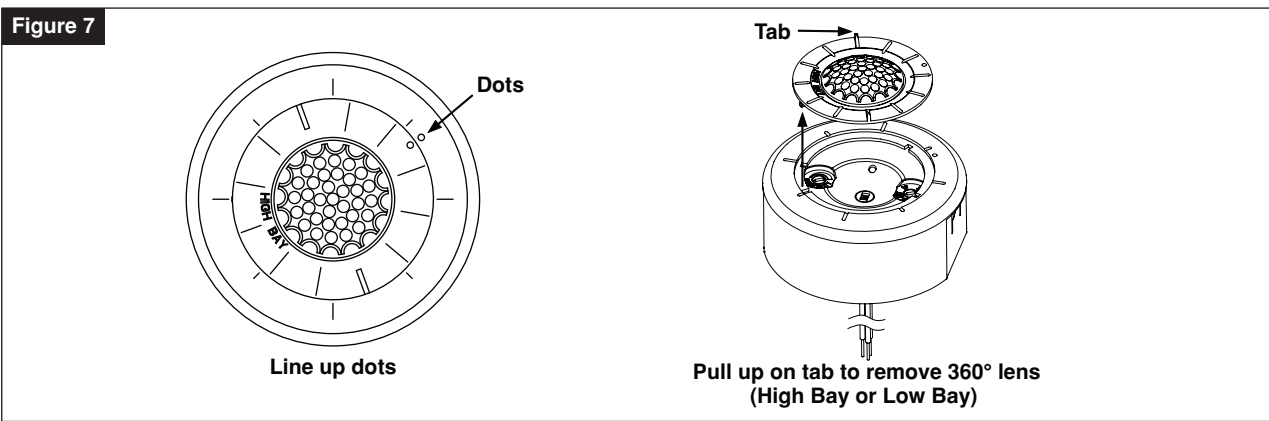
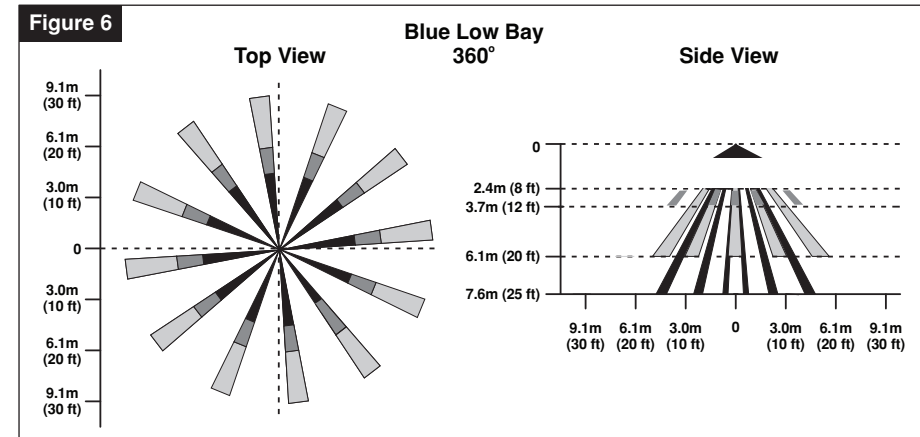
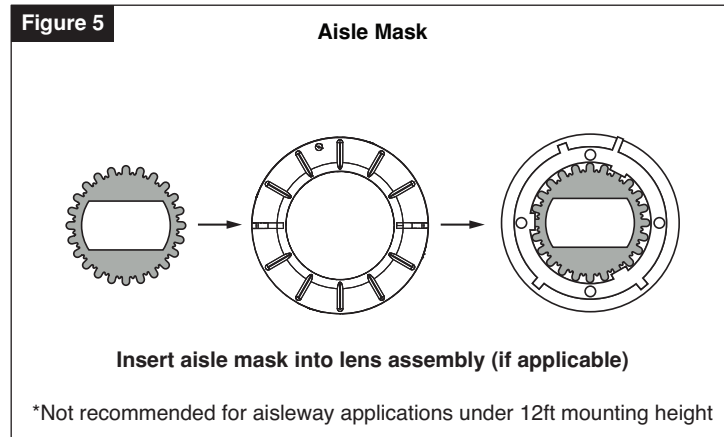
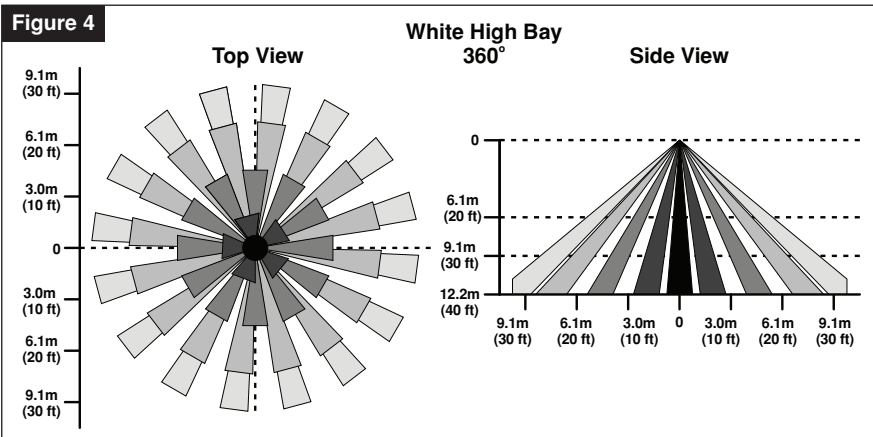
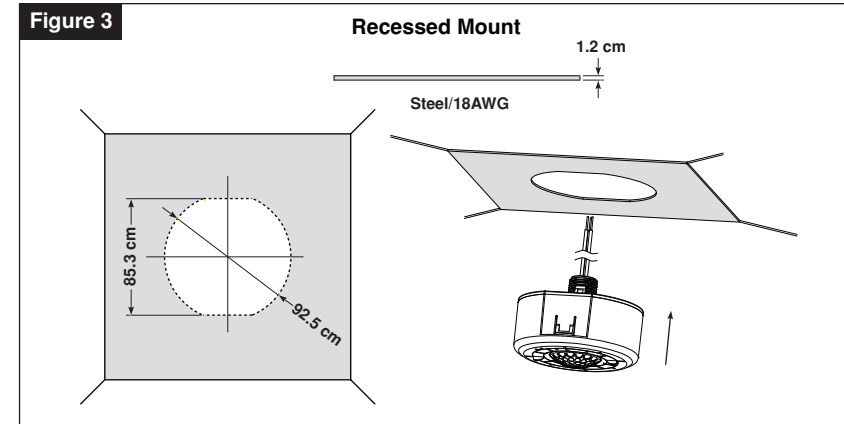
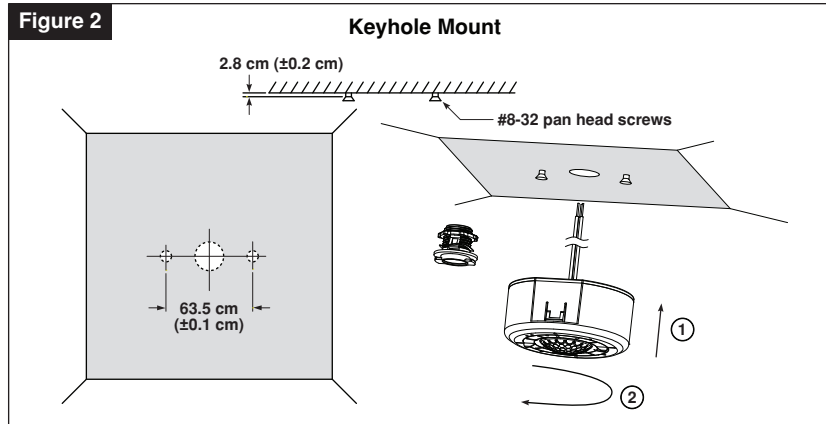
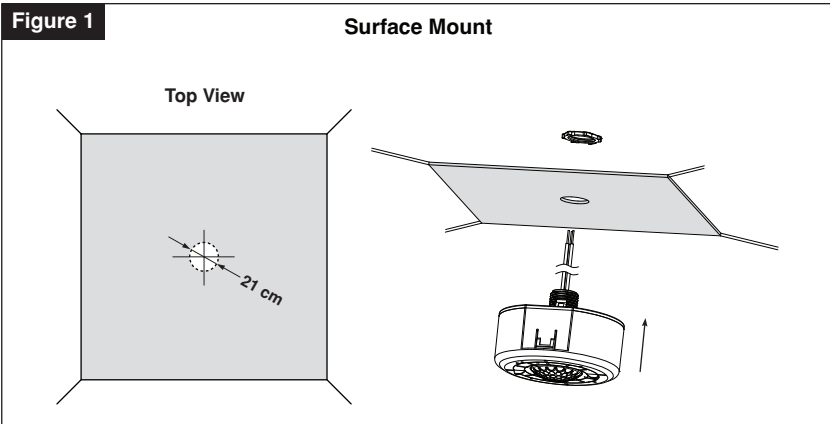
TROUBLESHOOTING

- **Lights will not turn ON**
 - **Site or application interference:** Verify LED is flashing and check for manual override switches or obstacles blocking PIR and FOV.
 - **Circuit breaker or fuse is OFF:** Turn the breaker ON. Ensure the lights being controlled are in working order (i.e., working bulbs, ballasts, etc.)
 - **Sensor is wired incorrectly or may be defective:** Confirm that the sensor's wiring is done correctly and inspect visually for problems.
 - **Lens is dirty or obstructed:** Inspect the lens visually and clean if necessary, or remove the obstruction.
- **Lights will not turn OFF**
 - **Site or application interference:** check for moving fixture, moving parts/items/devices within the FOV.
 - **Sensor is wired incorrectly or may be defective:** Confirm that the sensor's wiring is done correctly and inspect visually for problems.
 - **Sensor may be mounted too closely to an air conditioning or heating vent:** Move the sensor or close the vent.
 - **The line voltage has dropped:** Perform the necessary tests to ensure the line voltage has not dropped beneath 100V.
- **Lights turn OFF and ON too quickly**
 - **Sensor may be mounted too closely to an air conditioning or heating vent:** Move the sensor to another location or close the vent.
 - **Time delay set improperly:** Adjust the TIME DELAY.
- **Lights shut OFF while occupied (False OFF)**
 - Increase TIME DELAY.
- **Lamps are being replaced too often**
 - 10 minutes is optimal for lamp life and energy savings. Increase TIME DELAY to greater than 10 minutes.

Wiring Diagram



WEB VERSION



FCC Statement: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC CAUTION

Any changes or modifications not expressly approved by Leviton Manufacturing Co., could void the user's authority to operate the equipment.

IC Statement: This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

FCC Suppliers Declaration of Conformity (sDoC): Model OSFHS-lxW is manufactured by Leviton Manufacturing, Inc., 201 N Service Road, Melville, NY 11747. www.Leviton.com. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.