



Ceiling Mount Occupancy Sensor

Cat. No. ODC0S-I1

Rated: 120VAC, 60Hz

Incandescent
1000W @ 120V

Inductive Fluorescent
1000VA @ 120V

Power Consumption: 4W

Cat. No. ODC0S-I7

Rated: 277VAC, 60Hz

Fluorescent
2700VA @ 277V

Power Consumption: 4W

Installation Instructions



DI-000-ODC0S-02B

LIMITED FIVE 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, if within such five year period the product is returned prepaid, with proof of purchase date, and a description of the problem to: **Leviton Manufacturing Co., Inc., Att: Quality Assurance Department, 59-25 Little Neck Parkway, Little Neck, New York 11362-2591.** 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 of 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 (U.S.A. Only)
www.leviton.com



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FEATURES

- Sensor has a 360° field-of-view with 530 sq. ft. of coverage.
- LED indicator light blinks when sensor detects motion.
- Cat. Nos. ODC0S-I1 and ODC0S-I7 have four 14AWG 6" pre-stripped color coded leads.
- Screw on cover plate shields mounting hardware and adjustment control.

DESCRIPTION

The Leviton Passive Infrared Ceiling Mount Occupancy Sensor, Cat. Nos. ODC0S-I1 and ODC0S-I7, monitors rapid changes in temperature within its field-of-view (**see Figures 3 and 4**) and is designed to turn lights ON when temperature changes (such as a person entering a room) is detected, and OFF when occupancy is no longer detected and the scheduled time-delay setting has expired.

Since Cat. Nos. ODC0S-I1 and ODC0S-I7 respond to temperature changes, care should be taken not to mount the sensor directly above a heat source, or where hot/cold drafts (i.e. from an HVAC duct) will blow directly on the sensor, or where adjacent traffic, (i.e. hallway activity) will be within the sensor's field-of-view.

In addition, it is also recommended NOT to mount the Occupancy Sensor directly under a large light source. Large wattage bulbs (greater than 100W incandescent) give off a lot of heat and switching the bulb causes a temperature change that can be detected by the device. Mount the Occupancy Sensor at least 6 ft. away from large bulbs.

INSTALLATION INSTRUCTIONS

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 A QUALIFIED ELECTRICIAN.

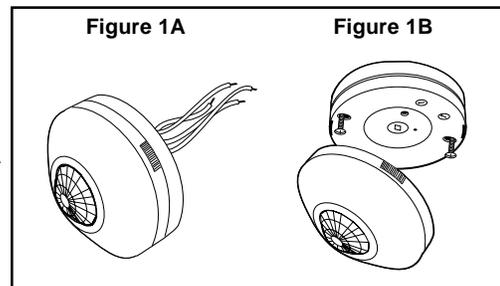
WARNING: TO AVOID OVERHEATING AND POSSIBLE DAMAGE TO THIS DEVICE AND OTHER EQUIPMENT, DO NOT INSTALL TO CONTROL A TRANSFORMER-OPERATED DEVICE(S) OTHER THAN APPROPRIATE LOW-VOLTAGE LIGHTING.

OTHER CAUTIONS:

1. USE THIS DEVICE ONLY WITH COPPER OR COPPER CLAD WIRE. WITH ALUMINUM WIRE USE ONLY DEVICES MARKED CO/ALR OR CU/AL.
2. DO NOT ATTEMPT TO DISASSEMBLE OR REPAIR. DISCONNECT POWER WHEN SERVICING OR CHANGING BULBS. CLEAN OUTER SURFACE WITH DAMP CLOTH ONLY.

TO INSTALL:

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. Determine the best location for the sensor. Install the sensor at least 3 ft. away from fluorescent ballasts and HVAC ducts, and at least 4 ft. away from incandescent fixtures and HVAC diffusers. Install in a standard NEMA single-gang box.
3. Cut a 2-1/2" diameter hole in the ceiling beneath the single-gang box installed.
4. Remove approximately 5/8" (1.6 cm) of insulation from circuit wires.
5. Connect wires per appropriate WIRING DIAGRAM as follows: 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. Secure each wire connector with electrical tape.
6. Remove the face plate and set it aside (**see Figures 1A and 1B**). Set Time-Delay and Ambient Light as detailed in the SETTINGS section. Mount unit to single-gang box using two screws provided. Replace face plate.
7. Restore power at circuit breaker or fuse.
INSTALLATION IS COMPLETE.



SETTINGS

Time-Delay: Settings should be determined during the installation period. This adjustment controls the amount of time the lights stay ON after the last detected motion. You may select settings varying from 20 seconds (-) to 15 minutes (+) and any time in between.

NOTE: After power is turned ON from the circuit breaker or fuse, the unit will enter a FIVE minute test period. The time delay is set at around 10 seconds during this period, and is not user adjustable. After the test period, the time delay settings can be performed.

Ambient Light: This adjustment allows you to determine at what minimum Ambient light level the device will operate. You may select settings from always operating (day and night) to operating only when the Ambient Light level is less than 3 lux, or anywhere in between. The lights will turn ON when the unit senses motion and the Ambient Light reaches your desired level.

Perform the following steps for a more precise Ambient Light adjustment (see Figure 4):

1. Make the adjustment when the actual ambient light is at the level where no artificial light is required.
2. Turn the Ambient Light adjustment to the (-) position (minimum light).
3. Turn the Time-Delay adjustment to the (-) position (at 20 seconds) and leave the monitored space.
4. Re-enter the monitored space after the lights go OFF and the lights will remain OFF.
5. Slowly turn the Ambient Light adjustment knob towards (+) until the lights go ON.
6. Slightly turn the Ambient Light adjustment knob back towards (-) and leave the monitored space.
7. When you return to the monitored space, the lights should remain OFF. If the lights come ON, repeat **step 6** until the lights remain OFF when you re-enter the monitored space, at the desired ambient light level.
8. Reset the Time-Delay adjustment back to the desired position.

Figure 3A - Field-of-View (Horizontal)

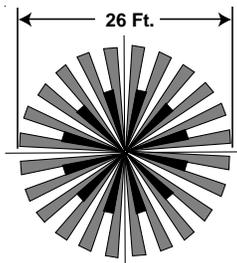


Figure 3B - Field-of-View (Vertical)

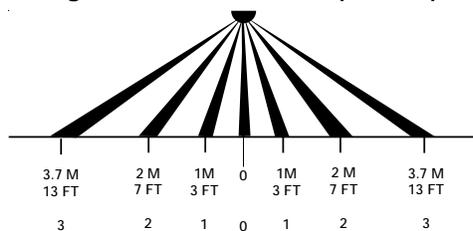
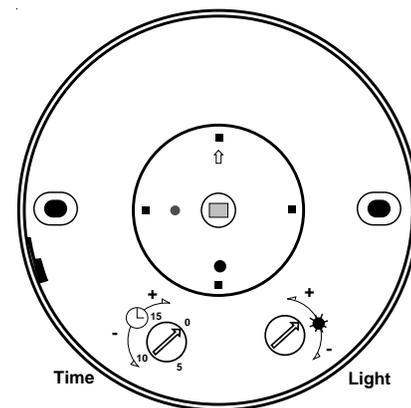


Figure 4



TROUBLESHOOTING

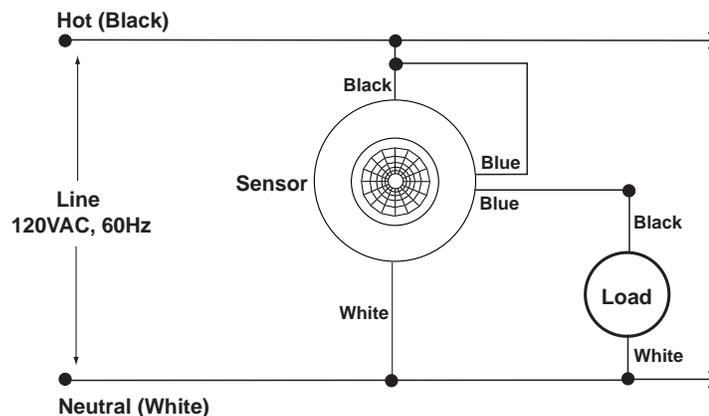
LIGHTS WILL NOT TURN ON

- **Circuit breaker or fuse is OFF:** Turn the breaker ON. Ensure that lights being controlled are in working order (i.e., working bulbs, integral switches ON, etc.).
- **Sensor is wired incorrectly or may be defective:** Confirm that the sensor's wiring is done exactly as shown in the diagram and/or inspect it visually for problems.
- **Lens is dirty or obstructed:** Inspect the lens visually and clean if necessary, or remove the obstruction.
- **Ambient light setting is for a darker background than that present:** Adjust the Ambient light setting.

LIGHTS WILL NOT TURN OFF

- **Sensor is wired incorrectly or may be defective:** Confirm that the sensor's wiring is done exactly as shown in the diagram and/or inspect it visually for problems.
- **Sensor may be mounted too closely to an air conditioning or heating vent, or traffic in an adjacent area is affecting sensor:** Move the sensor to another location, or close the vent.
- **The line voltage has dropped:** Perform the necessary tests to ensure the line voltage has not dropped beneath 100V (applicable to ODC0S-I1, 120VAC version only). If it has dropped, check for operation of any large appliances on the circuit, and turn them off.
- **Light is being reflected from an object:** Check the area for any white or shiny surfaces that might be reflective, and correct the situation.
- **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.
- **Light being reflected from an object:** Check the area for any white or shiny surfaces that might be reflective, and correct the situation.
- **Time delay set improperly:** Adjust the TIME DELAY (see **SETTINGS** section).

Wiring Diagram 1 - Cat. No. ODC0S-I1



Wiring Diagram 2 - Cat. No. ODC0S-I7

