

High Frequency Occupancy Sensor

Cat. No. OSM3D

800W @ 120VAC - Tungsten 1000VA @ 120VAC - Driver/Ballast 1200VA @ 277VAC - Driver/Ballast, 50/60 Hz
 Operating Temperature: 0°C to 70°C Relative Humidity: 20% to 90% non-condensing



DI-000-OSM3D-25A

INSTALLATION INSTRUCTIONS

INSTALLATION

ENGLISH

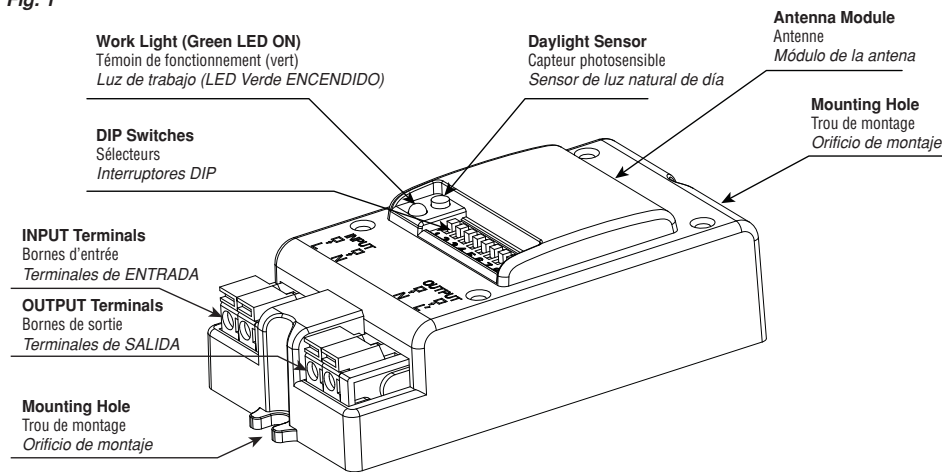
WARNINGS & CAUTIONS:

- **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER** at circuit breaker or fuse and test that the power is off before wiring or servicing luminaire or changing bulbs!
- **TO AVOID FIRE, SHOCK, DEATH, OR DAMAGE TO PROPERTY, DO NOT** control a load in excess of the specified ratings. Check your load ratings to determine the unit's suitability for your application.
- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- If you are not sure about any part of these instructions, consult an electrician.
- Sensor **MUST BE** installed directly in a luminaire.
- **DO NOT** attempt to disable or repair.
- Use this device with **COPPER OR COPPER CLAD WIRE ONLY**.

FEATURES

- Microwave detection technology.
- 5.8 GHz high frequency Microwave
- Zero-crossing point operation: helps protect the sensor against in-rush current.
- 2-hole INPUT and 2-hole OUTPUT push-in-terminals, easy assembly.
- 2 types of installation, base-mounting and surface-mounting, suitable for different luminaires.
- Detection area, Hold time and daylight sensor can be precisely set via DIP switches.
- 50,000h life time, 5 year warranty.

Fig. 1



DESCRIPTION

OSM3D is a line voltage high frequency innovative motion sensor. It will switch lights ON with detection of movement, and switch lights OFF after a hold time when there is no motion detected. A built-in daylight sensor reads brightness value, so that the sensor will not switch the lights ON if there is sufficient natural light present. This sensor uses microwave technology (similar to ultrasonic technology) Microwave is extremely sensitive, omni-directional and will penetrate through most building construction materials. Microwaves do not pass through metal and is the one material used to control the direction of the microwave detection.

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 or servicing luminaire or changing bulbs!
2. Mount in a suitable location. Two types of installation, base-mounting and surface-mounting, suitable for different luminaires.
3. Connect wires per appropriate **Wiring Diagram (Fig. 5)** as follows:
INPUT: Strip wires approx. 3/8" (.95 cm) and insert into push-in-terminals.
 Line Hot wire to INPUT terminal marked L; Line Neutral wire to INPUT terminal marked N.
OUTPUT: Strip wires approx. 3/8" (.95 cm) and insert into push-in-terminals.
 Load Hot wire to OUTPUT terminal marked L; Load Neutral wire to OUTPUT terminal marked N.
NOTE: Push-in-terminals accept #22-#16 AWG wire.
4. Restore power at circuit breaker or fuse.

NOTE: For Installation in a Listed Junction box or enclosure, only.
NOTE: Allow approximately two minutes for charge-up. If the lights turn ON and the LED blinks when a hand is waved in front of the sensor, then the unit was installed properly. If the operation is different, refer to the Troubleshooting Section. The Sensor is factory preset to work without any adjustments.

SETTINGS

Adjust the DIP switches as needed for you specific application.

Detection Area: DIP sw # 1-2

The sensitivity can be reduced from 100% to 75%, 50% or 25% by selecting the correct combination of DIP switch settings shown (fig. 2).

Hold Time: DIP sw # 3-5

The amount of time the lights remain ON after no motion is detected can be adjusted from 30min to 20min, 3min, 90s, 30s, and 10s by selecting the correct combination of DIP switch settings shown (fig. 2).

Daylight Sensor: DIP sw # 6-9

The sensor can be set to only allow the luminaire to illuminate below a defined ambient brightness threshold. When set to Disable mode, the daylight sensor will switch ON the luminaire when motion is detected regardless of the ambient light level (fig. 2).

Fig. 2

ON ↑	Detection Area		Hold Time			Daylight Sensor				Lux
	1	2	3	4	5	6	7	8	9	
ON	ON	100%	ON	ON	ON	ON	ON	ON	ON	5 lux
-	ON	75%	-	ON	ON	-	ON	ON	ON	10 lux
ON	-	50%	ON	-	ON	ON	-	ON	ON	25 lux
-	-	25%	-	-	ON	-	-	-	ON	50 lux
-	-	-	ON	ON	-	-	-	-	ON	Disable
-	-	-	-	-	-	-	-	-	ON	30min

TROUBLESHOOTING

- **Lights will not turn ON**
 - Sensor is wired incorrectly: Confirm that the sensor's wiring is done correctly and inspect visually for problems.
- **Lights will not turn OFF**
 - Sensor is wired incorrectly: Confirm that the sensor's wiring is done correctly and inspect visually for problems.
 - Detection area set improperly: Adjust DIP switches 1-2.
- **Lights turn OFF and ON too quickly**
 - Detection area set improperly: Adjust DIP switches 1-2.
 - Hold time set improperly: Adjust DIP switches 3-5.

FCC COMPLIANCE STATEMENT

Contains FCC ID : QGH-OSM3D

This device complies with Part 15 of the FCC Rules. Operation is subject to 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 of the device.

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.
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FCC CAUTION

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

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.

DETECTION AREA / AIRE DE DÉTECTION / ÁREA DE DETECCIÓN

The coverage area, or field of view, of the OSM3D is designed to cover a 20-26 ft. radius space when mounted at a typical 10-13 ft. above the floor. This monitored space is in the form of a cone radiating from the center of the sensor.

Fig. 3

Ceiling Pattern (8 - 33 ft. height)
 Champ de vision du plafond (hauteur de 8 à 33 pi)
 Patrón de techo (2.4 - 10.5 m de altura)

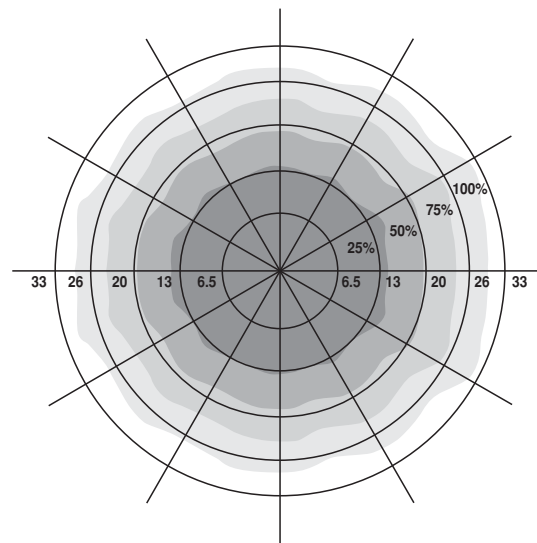
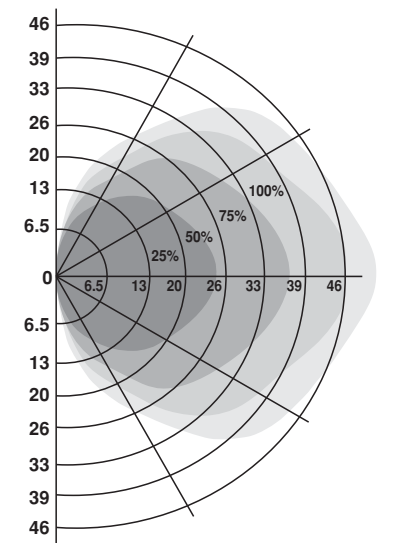


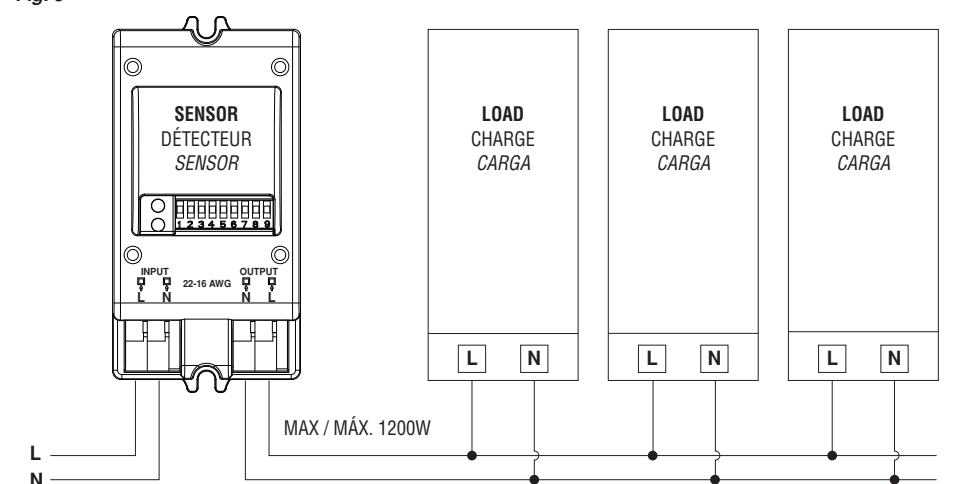
Fig. 4

Wall Pattern (3 - 6 ft. height)
 Champ de vision du mur (hauteur de 3 à 6 pi)
 Patrón de pared (.91 - 1.3 m de altura)



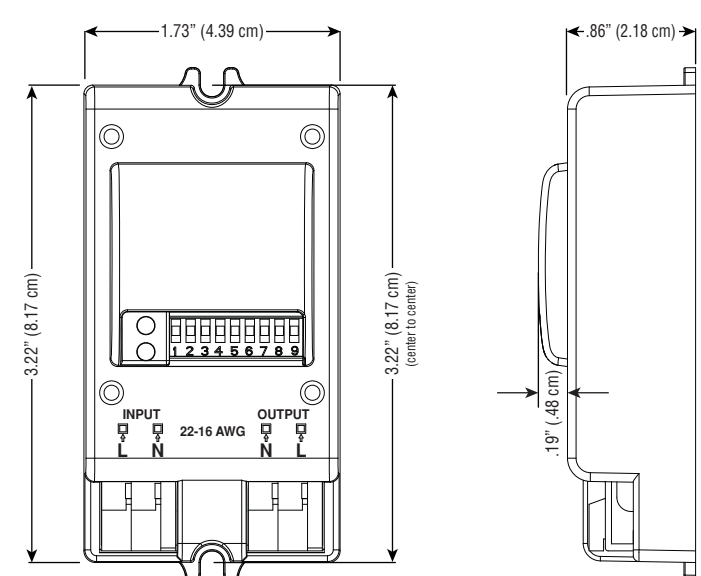
WIRING DIAGRAM / SCHÉMA DE CÂBLAGE / DIAGRAMA DE CABLEADO

Fig. 5



DIMENSIONS / DIMENSIONS / DIMENSIONES

Fig. 6



WEB VERSION

