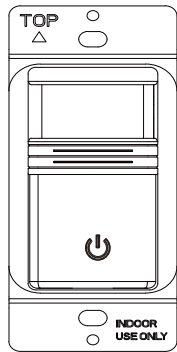


MEW-OVS100W



User Guide

Three-Way 180° Occupancy and Vacancy Sensor Switch Please read all instructions before installing the MEW-OVS100W Sensor switch.



IMPORTANT: If you have any doubts about your specific wiring configuration or installation requirements, please consult a licensed electrician.



SPECS

Voltage	120V/277VAC, 60Hz
Max Lamp Load	120V 800W Incandescent Lamp 800VA Fluorescent Lamp (Rapid Start) 277V 1200VA Fluorescent Lamp (Rapid Start)
Max motor load	1/6 hp
Time Delay Adjustment	Preset intervals of 15 sec (Test), 1 min, 5 min, 15 min, and 30 min
Environment	Indoor use only
Operating Temperature	32° to 131°F (0° to 55°C)
Humidity Range	95% RH, non-condensing
Coverage Range	180° (at optimal temperature of 20° to 25°C)
Coverage Area	720 ft ² (47m ²)

TOOLS NEEDED

You will need an insulated flathead screwdriver, wire strippers, and a small flathead screwdriver to adjust the sensor dials.

DESCRIPTION

The MEW-OVS100W Sensor switch is designed to replace a standard light or fan switch. This device can automatically turn lights or a fan on and off by detecting motion from a heat-emitting source such as a person entering an area. The lights or fan will stay on until no motion is detected and the time delay has expired. This product offers optimal coverage for random traffic areas such as hallways, stairways, or large spaces with multiple entries. Use indoors only.

COVERAGE AREA

- The sensor must have a clear and unobstructed view of the area. If an object blocks the sensor's lens, the sensor may not detect motion and may turn the lights or fan off even if someone is in the area.
Windows, glass doors, and other transparent barriers will obstruct the sensor's view and prevent motion detection.
- The coverage area data is measured under the best temperature condition (20 to 25° C), and a higher or lower temperature may not lead to an ideal coverage area (see figures 1 and 2).

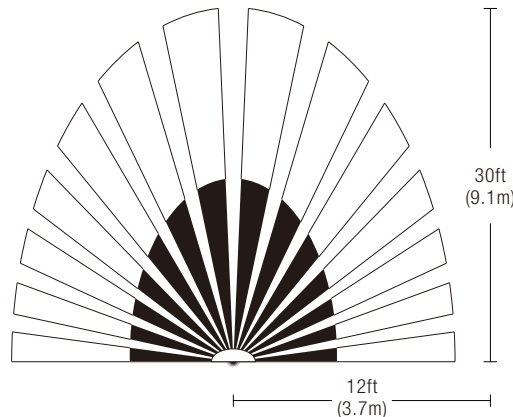


Figure 1: Sensor coverage area (top view)

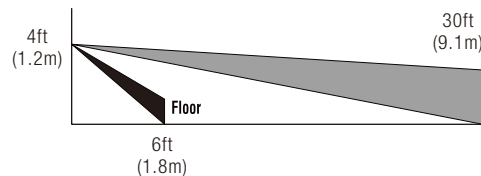


Figure 2: Sensor coverage area (side view)

SWITCH OVERVIEW

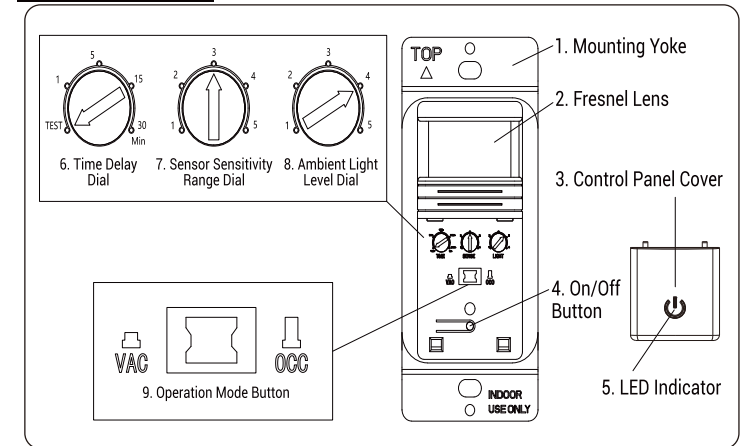


Figure 3: MEW-OVS100W Sensor switch diagram

1. Mounting Yoke	Lets you mount the switch to the wall.
2. Fresnel Lens	Detects motion.
3. Control Panel Cover	Covers the switch's adjustment dials. Remove the cover to see the dials.
4. On/Off Button	Lets you turn the light or fan on or off.
5. LED Indicator	Indicates when the sensor detects motion. The green LED lights the On/Off button while the lights or fan are off. When they are on, the LED turns off.
6. Time Delay Dial	Controls how long the light or fan stays on after no motion is detected.
7. Sensor Sensitivity Range Dial	Adjusts the sensitivity setting to avoid unwanted detection such as hallway traffic or adjacent movement.
8. Ambient Light Level Dial	Prevents the sensor from automatically turning the lights or fan on if the area has enough ambient lighting.
9. Operation Mode Button	The sensor has two positions that correspond to operation modes: vacancy (when the button is pressed) and occupancy (when the button is released).

WARRANTY

Maxxima extends a 1 year limited warranty to the original purchaser that the products purchased are free from defects in material and/or workmanship only. The limited warranty is not transferable. This offer does not constitute in any way a product guarantee and Maxxima does not hereby assume any obligation whatsoever beyond sending a replacement product at no charge during the warranty period.

INSTALLATION AND WIRING



WARNING: Before installing the MEW-OVS100W Sensor switch, disconnect power to the wall switch box by turning off the circuit breaker or removing the fuse for the circuit. **WARNING:** Tightly secure the ground wire to ensure that the sensor functions properly. **IMPORTANT:** A neutral wire is required for the switch to work properly. If the existing wiring does not match the description for a two-pole circuit, or if you do not have a neutral wire, consult a qualified electrician.

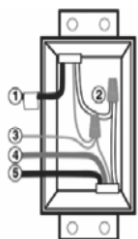
Introduction

You can install the MEW-OVS100W Sensor switch with a regular three-way switch, or you can install two MEW-OVS100W Sensor switches for maximum coverage. When installing with a regular three-way switch, the MEW-OVS100W Sensor switch only works when properly installed on the load side. See the table below.

Line side	Connected to the circuit breaker
Load side	Connected to the light or fan

Prepare the Switch Box

- After the power is turned off at the circuit breaker box, remove the existing wall plate and mounting screws.
- If applicable, pull the old switch out from the wall box with the attached wires. See figure 4 for a three-way wiring application.



- Load (power to light or fan)
- Neutral
- Ground
- First Traveler
- Second Traveler

Prepare the Wires

- Tag the wires currently connected to the existing switch, so you can easily identify them later. **IMPORTANT:** For three-way applications, one of the screw terminals from the switch you're removing may be black or be labeled as Common. Tag this wire with electrical tape and identify as Line or Load in both the sensor wall box and the remote wall box.
- Disconnect the wires. At this point, you have three options. You can install the MEW-OVS100W Sensor switch on its own, with a regular three-way switch or install it with another MEW-OVS100W Sensor switch.

Wiring a MEW-OVS100W Sensor Switch

Determine which electrical box has a load connection. This is the box where you will install the MEW-OVS100W Series sensor switch.

MEW-OVS100W Sensor in a Single Pole Application

- Wire according to the wiring diagram below (see figure 4).

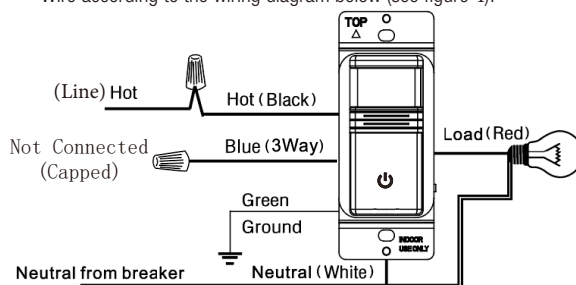


Figure 4: Black to Black, Red to Load, White wires together, Green to Ground, and Blue not connected.

MEW-OVS100W Sensor with a Regular Three-Way Switch

- Wire according to the wiring diagram below (see figure 5).

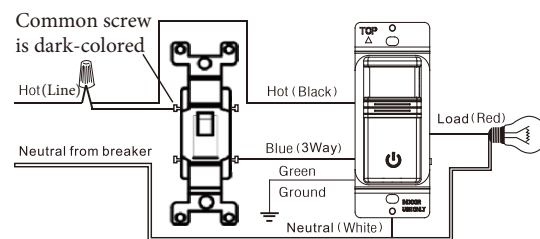


Figure 5: Black to Black and Common, White wires together, Green to Ground, Red to Load and Blue to Traveler.

Two MEW-OVS100W Sensor Switches

- Wire according to the wiring diagram below (see figure 6).

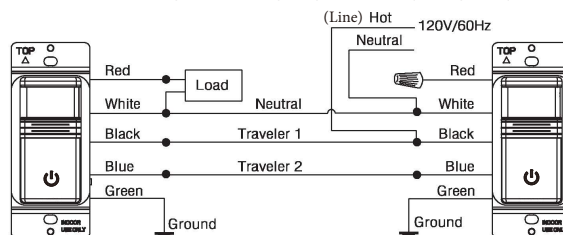


Figure 6: Connect the Black wires together, Blue to Blue, Greens to Ground, White wires together, Cap the Red on the Line Side, and Connected Red on the Load Side to the Load.

Finish Installation

- Insert the switch into the wall box by positioning the lens at the top and the On/Off button at the bottom.
- Secure the switch to the wall box with the screws provided.
- Attach the new cover plate and secure it to the wall box with the screws provided.
- Restore the power to the circuit by turning on the breaker or replacing the fuse.

ADJUSTMENT AND PROGRAMMING

To program the sensor, first remove the cover:

- Insert a small flathead screwdriver into the notch located on the bottom of the cover below the sensor.
- Gently lift the screwdriver upward to unlatch the cover (see figure 7).

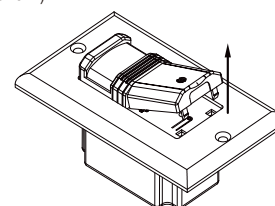


Figure 7: Lift the screwdriver upward to open the cover.

Vacancy: In vacancy mode (manual on/off, auto off), press the On/Off button to turn the light or fan on or off like you would a standard switch. The MEW-OVS100W Sensor switch automatically turns off the lights or fan after the time delay.

Note: In VAC mode, it is closed manually and must be opened manually. If it's sensed in 30 seconds after the automatic closing, it will still be automatically opened. After 30 seconds, need to manually turn on the switch.

Occupancy: In occupancy mode (auto on, auto off with auto reset), the lights or fan turn on automatically when the space is occupied. The MEW-OVS100W Sensor switch automatically turns off the lights or fan after the time delay. If the lights or fan are turned off manually, automatic on is re-enabled when no motion is detected for one minute. This way, the lights or fan will remain off if they were deliberately turned off.

Note: In OCC mode, if the switch is manually turned off, the switch will work after 15 seconds.

IMPORTANT: When installing two MEW-OVS100W Sensor switches, either sensor can turn the lights on. For the lights to turn off, both sensors must time out, or you must manually turn them off.

Adjust the Time Delay

The Time Delay Dial, labeled as TIME, controls how long the light or fan stays on after no motion is detected. The minimum setting is 15 seconds (fully counterclockwise) and the maximum setting is 30 minutes (fully clockwise). Adjust the setting as desired for your area.

Adjust the Sensitivity Range of the Sensor

- The Sensor Sensitivity Range Dial, labeled as SENSE, lets you adjust the sensor to avoid unwanted motion detection such as hallway traffic.
- To decrease sensitivity, turn the setting counterclockwise. To increase sensitivity, turn the setting clockwise. The sensor's default setting is 3 (75%). You can adjust it from setting 1 (50%) to setting 5 (100%).

Adjust the Ambient Light Level

The Ambient Light Level Dial, labeled as LIGHT, lets you adjust the sensor to detect whether other light sources (such as sunlight) are enough to light the space without turning on the lights. If you would like the sensor to consider the amount of ambient light in your area, turn the dial counterclockwise. If you would rather not use the ambient light level, leave it on the maximum, default setting (5). This will allow the sensor to turn the light on and off regardless of ambient light.

TROUBLESHOOTING

Lights or Fan Will Not Turn On

Push the On/Off button. The load should turn on. If not:

- Check the light bulb and/or motor switch on the fan.
- Turn off power to the circuit and check the wire connections.

Lights or Fan Will Not Turn Off

- Ensure that no motion is occurring in the coverage area until the set time period.
- Ensure that the sensor is at least 6 ft (2 m) away from devices that are a significant heat source (e.g., heater, heater vent, and high wattage light bulbs). Hot air currents and heat-radiating devices such as 100W incandescent bulbs can cause false detection.
- Push the On/Off button to Off. If the lights or fan do not turn off, turn off power to the circuit and check wire connections.

Lights or Fan Turn Off Too Quickly

The time delay or sensitivity range may be improperly set. Refer to the Adjustment and Programming section.

Lights or Fan Turn on When Movement Is Detected in Adjacent Areas

If the sensor's location gives it a view of other areas or hallways, the lights will turn on when motion is detected in those areas. Try adjusting the sensitivity range (refer to the Adjustment and Programming section). You may need to move the sensor to another location.

Lights or Fan Turn on When the Area is Unoccupied

The sensor may be mounted too closely to an air conditioning or heating vent. Move the sensor to another location or close the vent.



MEW-OVS100W