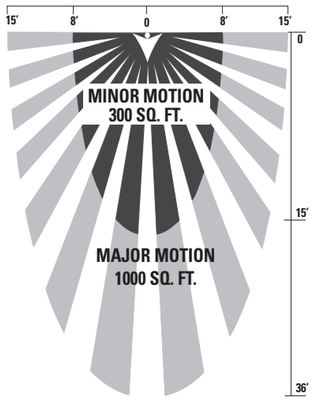
Powering Business Worldwide™

ENGLISH

OS310U Motion Sensor Switch (Auto ON/Auto OFF)
VS310U Motion Vacancy Sensor Switch (Manual ON/Auto OFF)

SPECIFICATIONS
- Single Pole and 3-Way
- 8.3A (1000W), 120V AC 60 Hz.
- For Incandescent, Magnetic Low Voltage (MLV), Electronic Low Voltage (ELV), Fluorescent, Compact Fluorescent, LED, Motors up to 1/6 HP
- Includes Selectable and Dimmable Nightlight
- **NOTE - A Neutral Connection is required in the wallbox where the sensor will be installed**

COVERAGE PATTERN



DESCRIPTION
- This Sensor Wall Switch can replace a standard wall switch in any of the following applications:
  - Single location – one Single Pole switch
  - Two location – one location is the sensor and the other location is a standard 3-way switch
  - Two location – replace both 3-Way switches with sensors
- The OS310U turns on automatically when a person enters the room
- The VS310U requires manual activation to turn on the lights
- Both OS310U and VS310U will automatically turn off lights after a selectable time delay
- OS310U includes a light level adjustment for daylight to prevent motion from turning on the lights
- A green LED indicates the load status and provides a momentary flash to indicate motion

OPERATION INSTRUCTIONS
Auto ON Sensor – OS310U (Occupancy Mode):
- OS310U will turn on lights automatically when a person enters the room
- Lights will turn off automatically when no motion is detected after a selectable time delay
- The selectable time delays are 5 seconds (Test Mode), 5 minutes (factory default), 15 minutes and 30 minutes

Manual ON Sensor – VS310U (Vacancy Mode):
- The VS310U must be turned on manually with the ON/OFF button
- Lights will turn off automatically when no motion is detected after a selectable time delay
- The selectable time delays are 5 seconds (Test Mode), 5 minutes, 15 minutes and 30 minutes (factory default)
- When the lights have turned off due to a lack of motion, the lights will turn ON automatically if motion is detected within 10 seconds

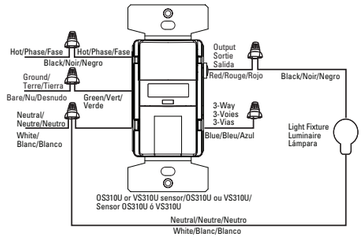
Night Light
- Press the Night Light lens momentarily to turn the Night Light ON or OFF
- When the Night Light is ON, press and hold the Night Light lens to dim the Night Light to the desired brightness. Release when the desired brightness level is reached. Press and hold again to brighten
- The OS310U can also operate as a Manual ON sensor when the Night Lite is ON. Refer to OS310U Special Modes for additional explanation

OS310U SPECIAL MODES
- **Reverse Mode:** The reverse mode is used when the lights must stay OFF in a room while motion is detected. If the lights are ON, a double tap of the ON/OFF button will turn off the lights and put the device into the Reverse Mode. This allows the lights to stay OFF as long as motion is detected. After the time delay is finished the sensor operation goes back to normal
- **Manual ON Only mode:** This mode may be selected to prevent motion from automatically turning on the lights. Press and hold the ON/OFF button for 5 seconds until the indicator LED blinks. Release the button while the LED is blinking. Repeat this procedure to restore normal operation. While the OS310U is in the manual ON mode, it will behave like a VS310U
- **Override Mode:** Turns off all motion sensing and allows the device to be used as a regular ON/OFF switch or in the unlikely event of a failure of the motion sensor. Press and hold the ON/OFF button for 10 seconds until the indicator LED blinks for the second time (the LED will also blink at the 5 second point). Release the button while the LED is blinking. Repeat this procedure to restore normal operation
- **Manual ON Mode with Night Light ON (Child Bedroom mode):** This feature is popular for a child bed room application. When the sensor is in the Automatic mode and the Night Light is ON, the sensor will operate in the Manual ON mode. This feature can be enabled by pressing and holding the Night Light button for 5 seconds while the Night Light is OFF. The Night Light will blink after 5 seconds. Release the button while the night light is blinking. Repeat this procedure to restore normal operation
- **Disable Manual Operation**– In this mode the sensor will function normally with automatic sensing, however the sensor will not respond to pressing the ON/OFF button. This feature only applies to the OS310U when used in the Automatic mode. This feature is enabled by pressing and holding the ON/OFF button for 15 seconds until the LED indicator blinks for the third time (the LED will also blink at the 5 second and 10 second point) and then releasing the button while the LED is blinking. Repeat this procedure to restore normal operation

INSTALLATION INSTRUCTIONS
WARNING:
- **Turn OFF circuit breaker or remove fuse(s) and verify that power is OFF before wiring**
- **Never wire any electrical device with power turned ON. Wiring the device with the power ON may cause permanent damage to the device and void the warranty**
- **If you are unsure about any part of these instructions, or if the wiring does not match the descriptions given, you should call a qualified electrician**

CAUTION:
- Must be installed and used in accordance with all applicable electrical codes
- If a bare copper or green ground connection is not available in the wallbox, contact a qualified electrician for installation
- Do not install without proper ground connections
- Do not exceed maximum device ratings
- For use ONLY with permanently installed fixtures of these types: Incandescent/ Halogen, Magnetic Low Voltage (MLV), Electronic Low Voltage (ELV), Fluorescent, Compact Fluorescent, LED
- May also be used with motors up to 1/6 HP
- To avoid overheating and possible damage to other equipment, do not use to control receptacles
- Use only #14 or #12 copper wire with these devices

DIAGRAM 1: SENSOR IN ONE LOCATION / SCHÉMA 1: DÉTECTEUR EN UN EMPLACEMENT / DIAGRAMA 1: SENSOR EN UNA (1) UBICACIÓN



Installing OS310U & VS310U
Refer to the wiring diagrams and install the sensor according to these directions.
You must verify that a neutral wire is available in the wallbox.
For single pole applications, wire the sensor switch according to wiring diagram #1 using the wire nuts provided.
1. The sensor black wire will connect to the hot wire (black) in the wallbox.
2. The sensor red wire will connect to the wire which goes to the light fixture.
3. The sensor white wire will connect to the neutral wire (white) in the wallbox.
4. The sensor blue wire is not used and should be capped off with a wire nut.
5. The sensor green wire will connect to the ground wire in the wallbox.
6. Install the sensor loosely using the mounting screws provided.
7. Apply power temporarily and verify that the sensor works by pushing the ON/OFF button to verify the lights turn on and off. If the lights do not work, then turn off the power and swap the connections on the sensor black and red wires
8. Apply power again and verify that the sensor works by pushing the ON/OFF button to verify the lights turn on and off.
9. Turn power OFF and go to **COMPLETING THE INSTALLATION**.

DIAGRAM 2A: SWITCH IN LOCATION WITH HOT WIRE / SCHÉMA 2A: INTERRUPTEUR SUR L'EMPLACEMENT AVEC FIL DE PHASE / DIAGRAMA 2: INTERRUPTOR EN UBICACIÓN CON ALAMBRE DE ENERGÍA

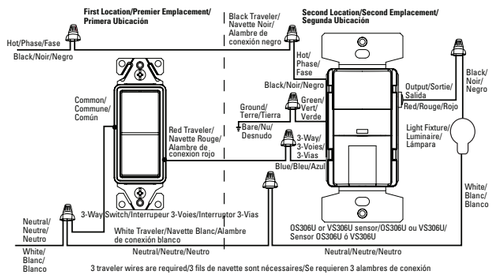
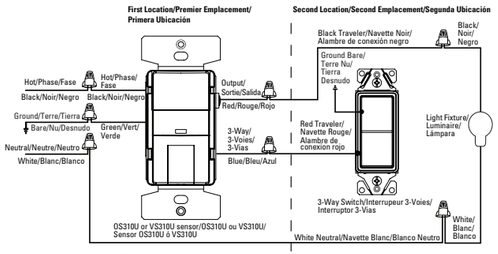


DIAGRAM 2B: SENSOR IN LOCATION WITH HOTWIRE / SCHÉMA 2B: DÉTECTEUR SUR L'EMPLACEMENT AVEC FIL DE PHASE / DIAGRAMA 2B: SENSOR EN UBICACIÓN CON ALAMBRE DE FASE



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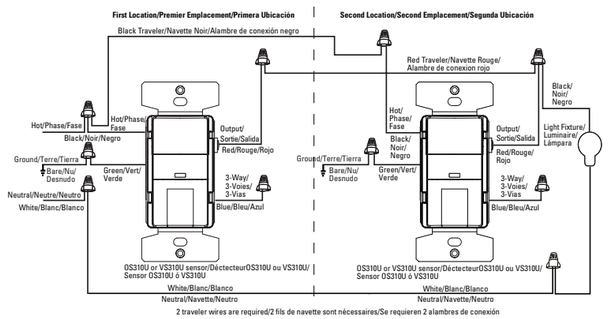
For 3-way applications NOTE that the 3-way switch is NOT wired in the traditional 3-way manner. Wire according to either diagram 2A or 2B using the wire nuts provided. The sensor may be placed at either end of the 3-way circuit.

1. Remove the existing switch in the location where the sensor will be installed.
   a. The sensor black wire will connect to either one of the black wires in the wallbox.
   b. The sensor red wire will connect to the other black wire in the wall box.
   c. The sensor white wire will connect to the neutral wire (white) in the wallbox.
   d. The sensor blue wire will connect to the red traveler wire in the wallbox
   e. The sensor green wire will connect to the ground wire in the wallbox.
   f. Install the sensor loosely using the mounting screws provided.
2. Remove the existing switch in the other 3-way location.
   a. Connect the two black wires together.
   b. Connect the white wires together and also connect the white wires to the common terminal (usually a black screw or a marking such as COM or COMMON near the terminal) on the 3-way switch.
   c. Connect the red wire to either of the other switch terminals.
   d. Re-install the 3-way switch and tighten securely.
3. Apply power and verify that the sensor works by pushing the ON/OFF button. The lights should turn ON and OFF. If the lights do not work, then turn the power off and swap the connections to the sensor black and red wires.
4. Apply power again and verify the sensor works by pushing the ON/OFF button to verify the lights turn ON and OFF.
5. Turn power OFF and go to COMPLETING THE INSTALLATION.

For 2 sensor applications, wire the sensor switches according to wiring diagram #3 using the wire nuts provided.

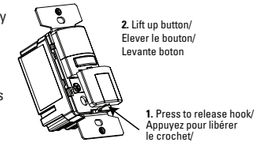
DIAGRAM 3: SENSORS IN BOTH LOCATIONS / SCHÉMA 3: DÉTECTEUR SUR LES DEUX EMPLACEMENTS / DIAGRAMA 3: SENSORES EN AMBAS UBICACIÓNES



1. Remove the existing switch in the 3-way location where the first sensor will be installed.
   a. The sensor black wire will connect to the two black wires in the wallbox.
   b. The sensor red wire will connect to the red wire in the wall box.
   c. The sensor white wire will connect to the neutral wire (white) in the wallbox.
   d. The sensor blue wire is not used and should be capped off with a wire nut.
   e. The sensor green wire will connect to the ground wire in the wallbox.
   f. Install the sensor loosely using the mounting screws provided.
2. Remove the existing switch in the other 3-way location where the second sensor will be installed.
   a. The sensor black wire will connect to the black wire coming from the first wallbox.
   b. The sensor red wire will connect to the red wire coming from the first wallbox and to the black wire going to the light fixture.
   c. The sensor white wire will connect to the neutral wire (white) in the wallbox.
   d. The sensor blue wire is not used and should be capped off with a wire nut.
   e. The sensor green wire will connect to the ground wire in the wallbox.
   f. Install the sensor loosely using the mounting screws provided.
3. Apply power and verify that the sensors work by pressing the ON/OFF buttons on each sensor. The green LEDs on the sensors should turn on and off. If the LED does not work on either or both sensors, you must swap the red and black sensor wire on that sensor.
4. Re-install the sensor loosely, apply power again, and verify the sensor works by pushing the ON/OFF button to verify the green LEDs and the lights turn ON and OFF.
5. Turn power OFF and go to **COMPLETING THE INSTALLATION**.

COMPLETING THE INSTALLATION:
1. Secure sensor into the wall box using two mounting screws provided. Turn the circuit breaker ON.
2. Allow the sensor to stabilize for 10 seconds. The sensor is now ready to detect motion.
3. Verify that Power in ON by pushing the ON/OFF button. Lights and LED should turn ON.
4. NOTE - The sensor time delay is factory preset (OS310U = 5 minutes; VS310U =30 minutes).
5. If you want to change the time delay proceed as follows:
   a. Remove the button from the sensor by pressing in the hooks on the button, and then lift up on the button as shown in Fig. 4.
   b. Set the time delay using the dial on the right side by using a small Phillips screwdriver. Align the arrow on the dial to desired time delay.
   c. To allow the installer to quickly confirm that the sensor is functioning properly the time delay can be set to TEST. This will set a time delay of 5 seconds, which allows quick feedback that the sensor is working properly.

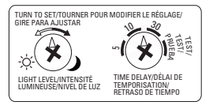
DIAGRAM 4 / SCHÉMA 4 / DIAGRAMA 4:



6. Replace push button by sliding it upward into the slots in the front housing and push down until the button hook snaps into place.
7. Push the ON/OFF button to verify that the lights turn ON/OFF, and that the button operates freely.
8. Install the wallplate.

Daylight Sensing Adjustment (OS310U only):
- The Daylight sensing feature prevents lights from turning ON when the room is adequately illuminated by natural light.
- NOTE - The factory setting for this adjustment is fully clockwise and permits motion detection to turn ON the lights regardless of the ambient light level in the room. If the Night Light is ON the daylight feature is disabled.
- Remove the ON/OFF pushbutton to access the light level adjustment. See Fig. 5.
- This adjustment must be made when the light level in the room is at the desired level for the lights to turn ON.
- From the clockwise position, turn the dial on the left counterclockwise using a small Phillips screwdriver until the Night Light turns ON.
- Step away from the sensor to allow the device to calibrate to the normal light level in the room.
  Do not obstruct the natural light. The calibration process starts when the Night Light turns OFF, and will take approximately 5 seconds. After completion the lights will turn on.
- Replace the ON/OFF push button

DIAGRAM 5 / SCHÉMA 5 / DIAGRAMA 5:



TROUBLESHOOTING:

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Light does not turn ON	1. Circuit breaker or fuse is turned OFF, or fuse is blown 2. Bulb is defective 3. Poor connection 4. Control may be wired incorrectly 5. Daylight sensing prevents lights on 6. Manual ON mode selected	1. Turn circuit breaker ON, or replace fuse 2. Replace light bulb 3. Verify all wiring connections 4. Check wiring 5. Re-adjust daylight sensing level 6. Set device to Automatic ON mode
Light does not automatically turn OFF	1. Motion is still present 2. Time Delay has not expired 3. Control may be wired incorrectly 4. Switch is being triggered by air vent or other heat source	1. Make sure there is no motion during the time delay period 2. No action needed or shorten TIME DELAY 3. Check wiring 4. Move switch to the other switch location (if a 3-Way), or determine the source triggering the switch, and alter the air flow
Light does not automatically turn ON	1. Motion is not detected 2. TIME control is set for too short a delay	1. Create movement in front of the sensor for 5 seconds 2. Set switch TIME control to longer time period
Remote switch does not work	1. Control may be wired incorrectly	1. Check wiring

EATON WIRING DEVICES LIMITED 2 YEAR WARRANTY

Eaton Wiring Devices (Eaton) warrants this device to be free of defects in materials and workmanship in normal use and service for a period of two years from date of original purchase. THIS 2 YEAR LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, OBLIGATIONS, OR LIABILITIES, EXPRESSED OR IMPLIED (INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE THAT IS IN DURATION IN EXCESS OF 2 YEARS FROM THE DATE OF ORIGINAL CONSUMER PURCHASE). NO AGENT, REPRESENTATIVE, OR EMPLOYEE OF EATON HAS AUTHORITY TO INCREASE OR ALTER THE OBLIGATIONS OF EATON UNDER THIS WARRANTY.
To obtain warranty service for any properly installed Eaton device that proves defective in normal use send the defective device prepaid and insured to Quality Control Dept., Eaton Wiring Devices, 203 Cooper Circle, Peachtree City, GA 30269; in Canada: Eaton Wiring Devices, 5925 McLaughlin Road, Mississauga, Ontario L5R 1B8. Eaton will repair or replace the defective unit, at its option. Eaton will not be responsible under this warranty if examination shows that the defective condition of the unit was caused by misuse, abuse, improper installation, alteration, improper maintenance or repair of damage in shipment to Eaton.
EATON SHALL HAVE NO RESPONSIBILITY FOR INSTALLATION OF THE DEVICE, OR FOR ANY PERSONAL INJURY, PROPERTY DAMAGE, OR ANY SPECIAL, INCIDENTAL, CONTINGENT, OR CONSEQUENTIAL DAMAGES OF ANY KIND, RESULTING FROM DEFECTS IN THE DEVICE OR FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT.

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