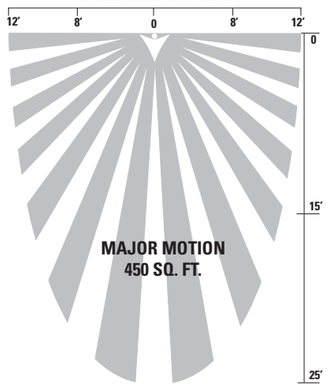
Powering Business Worldwide™

ENGLISH

OS306U Motion Sensor Switch (Auto ON/Auto OFF)
VS306U Motion Vacancy Sensor Switch (Manual ON/Auto OFF)

SPECIFICATIONS
- 120V/AC, 60 Hz
- Incandescent/Tungsten/Halogen/LED/Electronic Low Voltage (ELV) — 600W
- Magnetic Low Voltage — 600VA
- Fluorescent, Compact Fluorescent — 5.0A/600W
- Motor Load — 1/6 HP
- **NOTE - A Ground 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 OS306U turns ON automatically when a person enters the room
- The VS306U requires manual activation to turn ON the lights
- Both OS306U and VS306U will automatically turn OFF lights after a selectable time delay
- OS306U includes a light level adjustment for daylight to prevent motion from turning ON the lights

OPERATION INSTRUCTIONS

Auto ON Sensor – OS306U:
- OS306U 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), 10 minutes, 20 minutes and 30 minutes

Manual ON Sensor – VS306U:
- The VS306U 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, 10 minutes, 20 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 30 seconds

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**

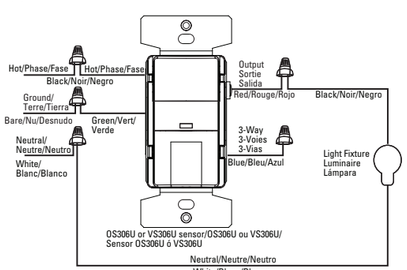
CAUTION:
- Must be installed and used in accordance with all applicable electrical codes
- If a bare copper or green ground connection is not available in the wallbox, contact a qualified electrician for installation. **Do not install without proper ground connections**
- Do not exceed maximum device ratings
- For use ONLY with permanently installed fixtures of these types: Incandescent/Tungsten/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

Installing OS306U & VS306U

Refer to the wiring diagrams and install the sensor according to these directions

For single pole applications, wire the sensor switch according to wiring diagram #1 using the wire nuts provided.

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



1. The sensor black wire will connect to the hot wire in the wallbox.
2. The sensor red wire will connect to the wire which goes to the light fixture.
3. The sensor blue wire is not used and should be capped off with a wire nut.
4. The sensor green wire will connect to the ground wire in the wallbox.
5. Install the sensor loosely using the mounting screws provided.
6. Apply power and wait one minute. Verify that the sensor works by pushing the ON/OFF button to verify the lights turn ON and OFF. You must wait 2 seconds between button presses. If the lights do not work, then turn OFF the power and swap the connections on the sensor black and red wires.
7. Apply power again and verify that the sensor works by pushing the ON/OFF button to verify the lights turn ON and OFF.
8. Turn power OFF and go to **COMPLETING THE INSTALLATION.**

For 3-way applications, wire the sensor switch according to wiring diagram #2A or 2B using the wire nuts provided. The sensor may be placed at either end of the 3-way circuit.

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

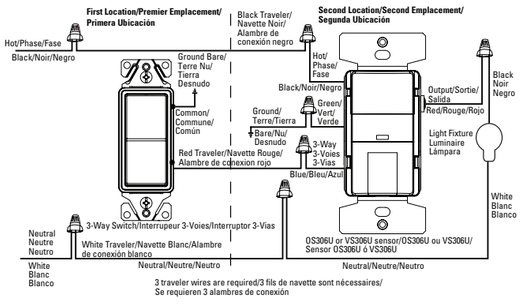
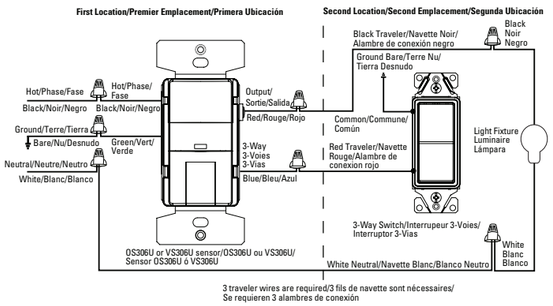


DIAGRAM 2B: SENSOR IN LOCATION WITH HOTWIRE / SCHÉMA 2B: DÉTECTEUR SUR L'EMPLACEMENT AVEC FIL DE PHASE / DIAGRAMA 2B: SENSOR EN UBICACIÓN CON ALAMBRE DE FASE



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 blue wire will connect to the red traveler wire in the wallbox
   d. The sensor green wire will connect to the ground wire in the wallbox.
   e. 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 bare ground wire in the wallbox 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 wait one minute. Verify that the sensor works by pushing the ON/OFF button. You must wait 2 seconds between button presses. 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.

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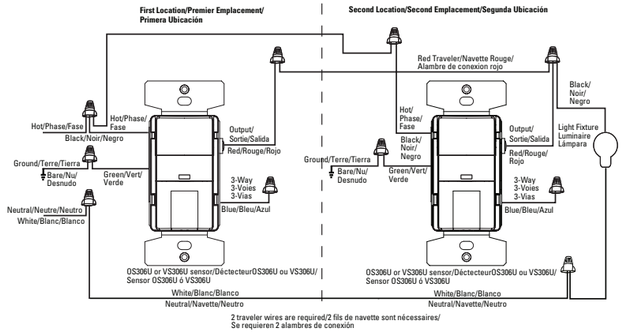
DIAGRAM 3: SENSORS IN BOTH LOCATIONS / SCHÉMA 3: DÉTECTEUR SUR LES DEUX EMPLACEMENTS / DIAGRAMA 3: SENSORES EN AMBAS UBICACIÓNES



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 wallbox.
   c. The sensor blue wire is not used and should be capped off with a wire nut.
   d. The sensor green wire will connect to the ground wire in the wallbox.
   e. 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 blue wire is not used and should be capped off with a wire nut.
   d. The sensor green wire will connect to the ground wire in the wallbox.
   e. Install the sensor loosely using the mounting screws provided.
3. Apply power and wait one minute. Verify that the sensors work by pressing the ON/OFF buttons on each sensor. If the light does not turn ON and OFF from 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, an verify the sensor works by pushing the ON/OFF button to verify the lights turn ON and OFF. You must wait 2 seconds between button presses.
5. NOTE - The light will turn OFF when both sensors time out or when the user manually turns OFF both sensors.
6. 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 one minute. The sensor is now ready to detect motion.
3. Verify that Power is ON by pushing the ON/OFF button. Lights should turn ON.
4. NOTE - The sensor time delay is factory preset (OS306U = 5 minutes; VS306U = 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 hook 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.
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 buttonoperates freely.
8. Install the wallplate.

Daylight Sensing Adjustment (OS306U 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 counterclockwise, which permits motion detection to turn the lights ON regardless of the ambient light level in the room
- This adjustment requires a small Phillips screwdriver and **must be made when the light level in the room is at the desired level for the lights to turn ON**

1. Remove the ON/OFF pushbutton to access the light level adjustment (See Figure 4)
2. Turn the LIGHT LEVEL dial to the full clockwise position.
3. Turn the TIME DELAY dial to the TEST position and hold the screwdriver on the dial. Do not move for 5 seconds until the light turns OFF. Immediately turn the dial back to the full counterclockwise position. The light should stay OFF.
4. Stand to the side of the sensor to allow the device to sense the normal light level in the room.
5. Move your hand continually back and forth about 2 feet in front of the sensor while slowly turning the LIGHT LEVEL dial counterclockwise until the light turns ON.
6. Adjust the Time delay to the desired setting.
7. The Light Level adjustment is now complete. Replace the ON/OFF pushbutton.

DIAGRAM 4 / SCHÉMA 4 / DIAGRAMA 4:

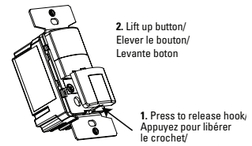
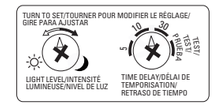


DIAGRAM 5 / SCHÉMA 5 / DIAGRAMA 5:



TROUBLESHOOTING:

If you have a problem with your Motion Sensor, first follow this guide. If the problem persists, call the customer service hotline at 1-866-853-4293 between 8:00 A.M. and 6:00 P.M. EST weekdays.

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Light does not automatically turn ON **For OS306U only**	1. Circuit breaker is turned OFF or fuse is blown 2. Bulb is defective 3. Poor ground connection 4. Control may be wired incorrectly 5. Daylight sensing prevents lights ON	1. Turn circuit breaker ON, or replace fuse 2. Replace light bulb 3. Verify all wiring ground connections including to ground wire align 4. Check wiring 5. Re-adjust daylight sensing level
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, ground wire should be connected 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 stay 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

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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.

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EIS-0153-E (REV.A)

OS310U & VS310U Advanced Installation

Purpose

Describes how to install the OS310U or VS310U Motion Sensor in a 3Way switch configuration, where the light is located between the two switches.

Initial Configuration

The light load is located between the two 3Way switches as shown below in Figure 1. For simplicity the diagram does not show ground connection for the switch boxes.

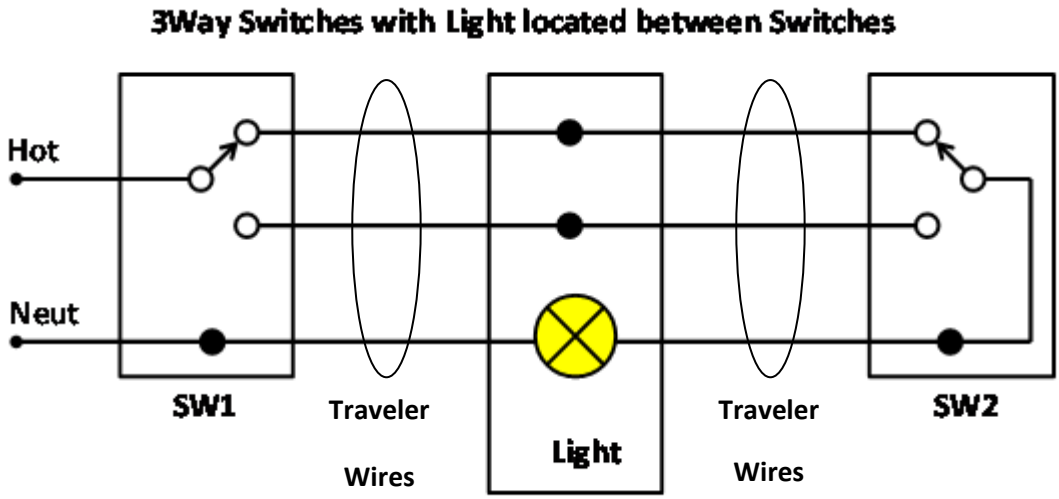

Figure 1

Replacement of Switch 1 with Motion Sensor

The first switch (SW1) is connected directly to the power (Hot /Neutral). Switch 1 is replaced with the sensor and is wired as shown in Fig 2.

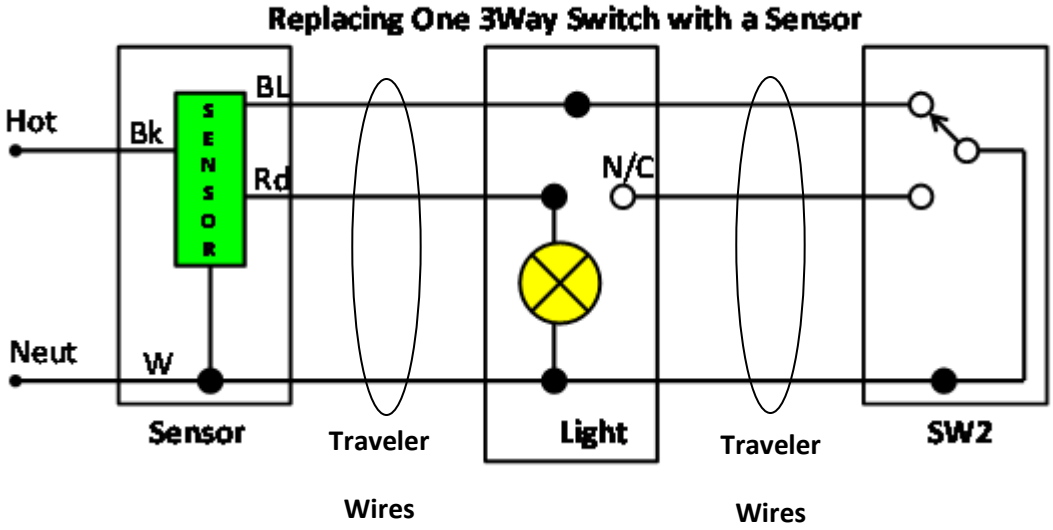

Figure 2

Notes

- The sensor must be located in the position of Switch 1.
- Switch 2 must be rewired as shown. The second output of the 3Way Switch is not used.
- No connection is required to the second traveler wire that connects to Switch 2.
- For simplicity the ground connections are not shown. Care must be taken to ensure ground wires are properly connected as defined in the original product documentation.

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