



# 3-Way Motion Sensing Switch

The 3-Way Motion Sensing Switch (MSS) detects motion to turn on lights for an adjustable amount of time. A built-in photo cell can be set to keep lights off when the lights aren't needed. The unit has excellent sensitivity and a wide 150° detection range. It can be used with incandescent lighting as well as rapid start fluorescent lighting.

The MSS can be used to replace either a 3-way wall switch or a single pole switch. Some codes require installation by a qualified electrician.

- Features include:
- 150° motion detection angle
  - Adjustable on-time from 5 sec. to 20 min.
  - Adjustable photocell
  - Works with incandescent and rapid start fluorescent lighting
  - Works with motors up to 1/8 hp.
  - Slide switch selectable OFF, ON AND AUTO modes.

Included are: • The sensor switch • Cover plate • 4 wire connectors • 2 large screws • 2 small screws.

## INSTALLATION

WARNING: For indoor use only.

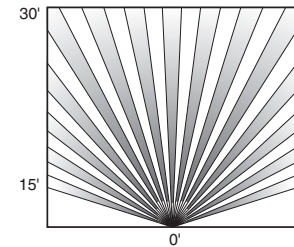
### SELECT A LOCATION

#### NEW APPLICATION

Choose a location where the motion sensor has a clear view of the entire area where occupant motion may occur.

#### RETROFIT APPLICATION

Motion sensing switch will replace existing wall switch. Use only where the existing switch location provides a clear view of the occupied area.



Typical Plan View of Coverage

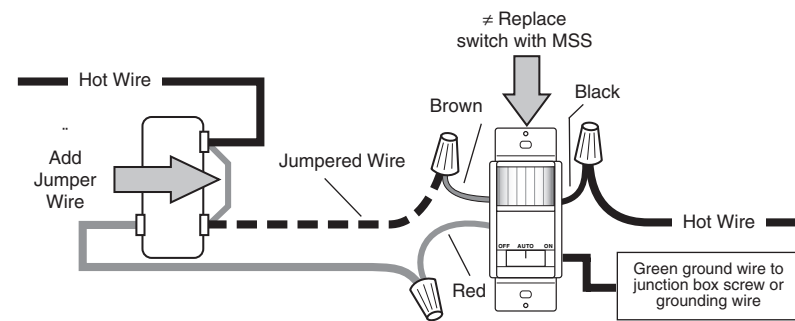
### GENERAL APPLICATION INFORMATION

The detector is more sensitive to motion across the front of the sensor than to motion towards the sensor.

The detector senses heat in motion and possible heat sources that change temperature quickly. Therefore, to avoid false triggering, avoid placing the sensor where it will be aimed at air conditioners, heaters, and other sources of heat or cold.

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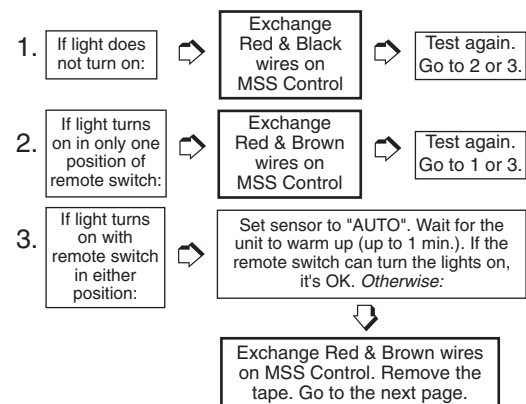
• Connect the 3-Way Motion Sensing Switch as shown in the diagram below:



3-Way Motion Sensor Wiring Diagram

- Mount the MSS into the junction box with the two junction box screws.
- Turn the circuit breaker back on.
- Preset the controls: Time to min. (fully CCW), Photo Adjustment fully clockwise. Cover the lens with masking tape.
- With the motion sensor in the "ON" position, turn the remote switch on and off several times. Go to step 1, 2, or 3, depending on results.

WARNING: Shut off all power at fuse box or circuit breaker before beginning installation.



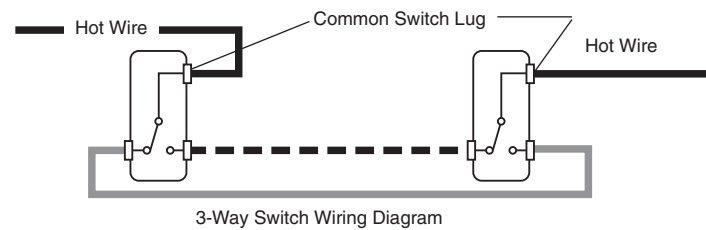
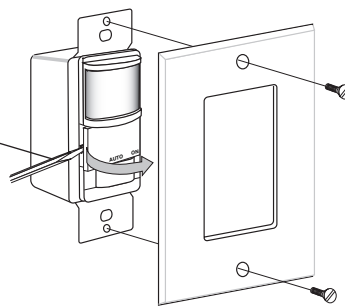
- 5 -

## INSTALLING THE SWITCH 3-Way With One Motion Sensing Switch

WARNING: Turn power off at the circuit breaker before wiring.

Note: a "3-way" circuit controls lights from two separate switches. If you want to use this product in a single switch circuit or if you want to install more than one motion sensing wall switch, see page 6

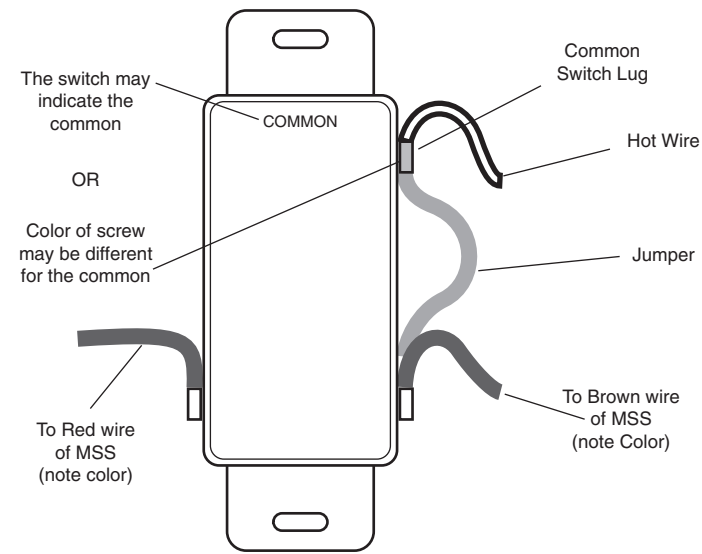
- Remove the decorative coverplate (secured by two screws).
- Remove Control Cover. (Press in with screwdriver. Swing out cover to remove.)
- Choose which switch will be replaced and remove it.
- For easier re-wiring later, mark the house wiring with tape indicating where the wire had been connected.



Questions? Call 1-800-435-4448 8:00 AM to 6:30 PM Eastern Time, weekdays

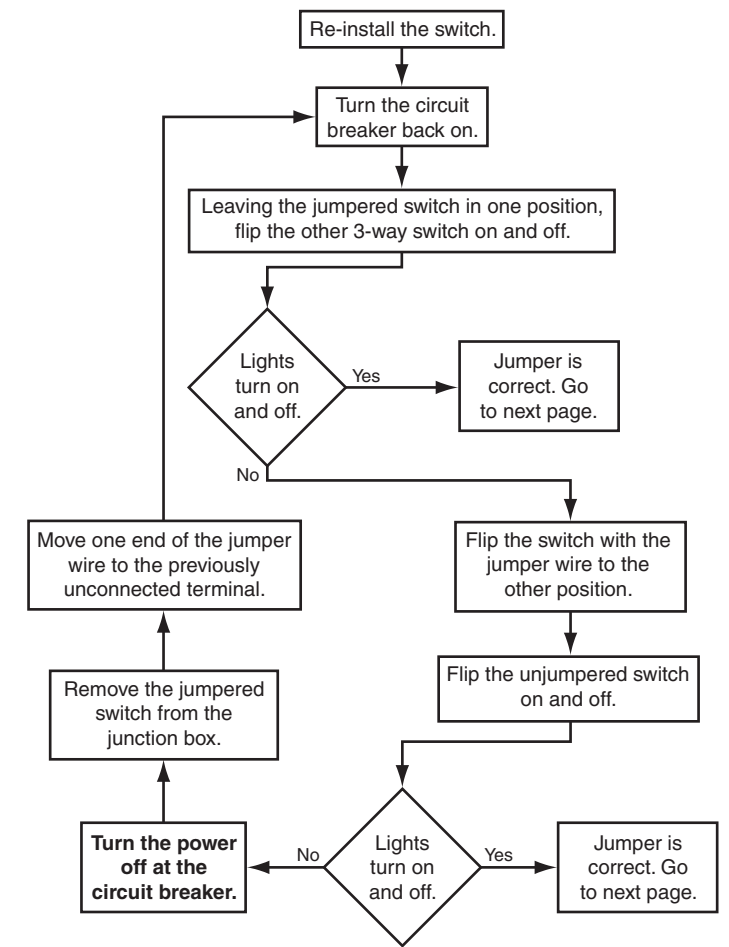
- 2 -

- Remove remaining 3-way switch from the junction box.
- Add the jumper wire to the common lug and to either one of the two switched lugs. If you're not sure which lug is common, install the jumper on any two of the three wires, and test the jumper as explained on the next page.



- 3 -

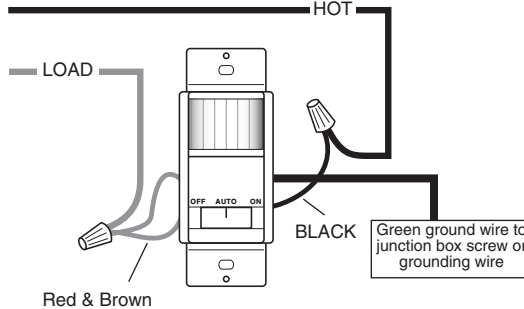
## Test for correct common wire connection:



- 4 -

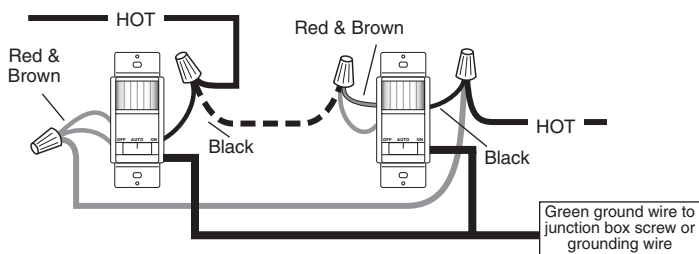
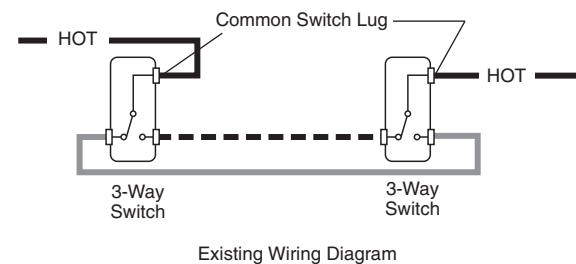
## Single Switch Installation

- For single switch installations, connect the wall switch as shown here.



## 3-Way with Two Motion Sensors

If you want to have motion sensors at both 3-way switches, connect them as shown below. The minimum wattage may increase to 100 W for fluorescent and 50 W for incandescent lighting.



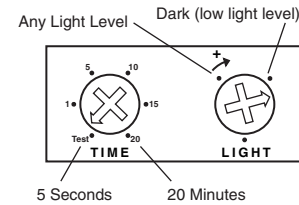
Dual 3-Way Motion Sensor Wiring Diagram

- 6 -

## ADJUSTMENTS

### TIME

There are 6 preset selections for the amount of time the lights stay on: Test (5 seconds), 1, 5, 10, 15, and 20 minutes. Use a small, phillips screw driver to adjust the TIME control (see Figure 4). Turn the TIME control until it "snaps" into the desired time position.



### LIGHT LEVEL

The sensor can be prevented from turning on lights when there is already enough light in the room. Use a small phillips screw driver to set the light level using this diagram as a guide. In the fully clockwise position, the sensor turns on lights even in full daylight. In the fully counter-clockwise position, the sensor only turns on lights when the surrounding light level is very low.

- To adjust the photocell:
- When the light in the room is at the level you want the lights to turn on, set the switch to the AUTO position.
  - Put the TIME control to the 5 second position.
  - Put the LIGHT control to the minimum dark (fully counter-clockwise) position.
  - Wait for the lights to turn off. Turn the LIGHT adjustment clockwise in very small steps and wait 2 seconds before moving your hand in front of the sensor. Repeat until the lights controlled by the sensor come on. The light will now come on when the light level is at or below the present level and motion is detected.

### Complete Installation

- Replace control panel cover and install the decorative wall plate. In installations where the GE motion sensor switch is combined with other switches or outlets on an expanded box, a combination wall plate will need to be purchased. Various combination wall plates are available at Home Centers and Electrical Supply Stores.

- Slide the switch a couple of times to make sure it operates freely.

### USE

MODE Selection Switch  
Moving the switch selects one of three modes of operation: OFF, AUTO, ON

OFF: Lights stay off.

AUTO: Lights come on for time set when motion is detected and the light level is below the set level or when 3-way switch is manually switched.

ON: Lights stay on continuously. Flipping 3-way switch has no effect.

- 7 -

## TROUBLESHOOTING

If you have a problem with your Wall Switch, first follow this guide. If the problem persists, call the customer service hotline at 1-800-435-4448 between 8:00 AM and 6:30 PM ET weekdays.

SYMPTOM	POSSIBLE CAUSE	SYMPTOM	POSSIBLE CAUSE
Light does not come on in the AUTO mode.	<ol style="list-style-type: none"> <li>1. Circuit breaker or fuse is turned off.</li> <li>2. If the lamp being controlled has another switch, it may be turned off.</li> <li>3. Bulb is defective.</li> <li>4. LIGHT control is set too far toward the DARK position.</li> <li>5. MODE switch is set to OFF instead of AUTO.</li> <li>6. Poor connection.</li> </ol>	Light does not turn off.	<ol style="list-style-type: none"> <li>1. Incorrect wiring.</li> <li>2. MODE switch is set to ON instead of AUTO.</li> <li>3. Motion is still present.</li> <li>4. Delay set by TIME control has not expired.</li> </ol>
Lights do not stay on in the Auto mode.	<ol style="list-style-type: none"> <li>1. Motion has stopped in the room.</li> <li>2. TIME control is set for too short a delay.</li> </ol>	Light comes on for no reason in the Auto mode.	<ol style="list-style-type: none"> <li>1. Heating or cooling objects (such as air vents, appliances, or drafts through the wall box) are causing false triggering.</li> <li>2. Switch on the sensor has been turned off and back on.</li> <li>3. There was a momentary power interruption. The light will turn off automatically when the "on" time expires.</li> </ol>

## SPECIFICATIONS

Electrical input.....	120V, 60 Hz
Fluorescent Load.....	(2) 30 Watt minimum 400 Watt maximum Rapid Start Motor Load.....
Incandescent.....	Adjustable approximately 5 sec. to 20 min. Photocell Sensor.....
On-Time.....	From dull daylight to less than 1 FC. Coverage.....
	up to 15 ft. at 150°, up to 30 ft. in front of the sensor

**WARNING**

**Risk of electric shock**

- Shut off power at fuse box or circuit breaker before installation
- Use indoors only

**Risk of fire**

- Do not exceed electrical ratings

Res. #8143555

- 8 -