1. INTRODUCTION

The INSTEON Motion Sensor is an indoor/outdoor motion sensor that will turn INSTEON-controlled lights on and off in response to movement around your home. The sensor also contains a photocell, allowing you to configure the unit to only turn your lights on at night. Pair the Motion Sensor with INSTEON software for almost limitless automation possibilities.

In this package you will find the Motion Sensor, a 9V battery, a swivel mount and 2 screws.

2. OPERATION

WHEN MOTION IS SENSED
1. When motion is sensed, the Motion Sensor will send an ON command to up to 30 linked INSTEON responders and flash its LED (unless it is daytime and unit is in night-only mode).
2. Sensor will begin its automatic countdown.
3. Whenever motion is sensed during countdown, the countdown will be reset to easily allow you to create "occupied" versus "unoccupied" modes for your home.
4. When countdown expires the Sensor will send an OFF command to all linked responders (unless it is in on-only mode).

APPLICATIONS
1. Turn on driveway or front step lights when visitors approach.
2. Have your fountain always on when you are around (and off when you are away).
3. Save money by having HVAC and lighting automatically go into energy-saving mode when no one is around.

3. SETUP

INSERT BATTERY
Use a small Phillips screwdriver to remove screw and cover from battery compartment on back of unit. Attach the included 9V battery. Do not replace compartment cover until instructed to do so later in this manual. Wait 5 minutes for the circuit to stabilize. Then, to confirm unit is functioning, tap the Set button a couple of times while watching the front of the unit. Each time you tap the Set button, a red LED behind the sensor lens will flash. Don't worry if the LED flashes when you are not tapping the Set button; it is simply indicating that motion is being detected.

ACCESS POINTS
Motion Sensor requires at least one INSTEON Access Point (#2443) or other dual-band product installed in your home. To confirm the Motion Sensor is within RF range of your Access Point, have a friend watch the LED on the side of your Access Point while you tap the Set button on the Sensor (while holding it where you plan to install it). Access Point's LED will flash a couple times every time you tap the Set button if it is within range.

4. SETUP INSTEON DEVICE CONTROL

LINKING TO INSTEON RESPONDERS
1. Press and hold the Set button on Motion Sensor for 5 seconds (until red LED behind sensor lens begins steady blinking). You now have 4 minutes to complete step 2.
2. Press and hold the Set button on the INSTEON responder (e.g. SwitchLinc) you would like the Motion Sensor to control for 5 seconds (an LED may blink and the connected load/bulb may flash).
3. Repeat this procedure for up to 32 responders you wish Motion Sensor to control.
4. For multi-button responders (e.g., KeypadLinc), tap the button you wish to control before pressing and holding its Set button.

5. DETECTING AREA

DETECTING AREA: (Unit= Meter)

5. DETECTING AREA

6. PLACEMENT TIPS

BEST LOCATIONS
Select a detector location that will provide the coverage required while keeping in mind the following potential problems:
1. Reflective surfaces - Do not aim the detector at reflective surfaces such as mirrors or windows as this may distort the coverage pattern or reflect sunlight directly onto the detector.
2. Air flow - Avoid locations that are subject to direct high air flow such as near an air duct outlet.
3. Moisture - Do not place the detector near sources of steam or oil.
4. Sunlight - Do not aim the detector such that it will receive direct or reflected (mirror) sunlight.
5. Obstruction - Do not limit the coverage with large objects within the detection area such as plants or filing cabinets.
6. Pet rejection - Do not aim the detector at a stairway which a pet has access to and do not place furniture or objects higher than 3 ft./0.9 m, which a pet can climb onto (e.g. a cat on a couch), closer than 6 ft./1.8 m to the detector.
7. Fireplace - Do not place the detector near a fireplace due to the light and heat.
8. Snow or ice – Snow or ice on the Fresnel lens may interfere with Motion Sensor's ability to detect motion.
9. Dirt – Dirt on the Fresnel lens may interfere with Motion Sensor's ability to detect motion.

AIMING and SENSITIVITY
1. Tap the Set button on Motion Sensor until the linked responder(s) turn off.
2. Within 10 seconds walk well out of detection area.
3. Wait 20 seconds.
4. Walk into and near your detection area. Your linked responders will turn on (LED will flash upon initial motion, then once every 8 seconds during motion).
   a. If LED does not flash while you are moving within the desired detection area, re-aim Sensor (usually means pointing the Sensor “up”).
   b. If LED flashes while you're moving outside detection area:
      i. Aim Sensor to decrease range (usually means aiming the Sensor “down”).
      ii. If aiming sensor does not generate desired results place jumper 1 on both pins (see section Setup Modes).
6. PLACEMENT TIPS

A. Aim Motion Sensor towards the area in which you wish to detect motion (detection area).
2. Slide Motion Sensor onto the swivel mounting bracket (sliding the unit to the right) until you hear a click.
3. Aim Motion Sensor towards the area in which you wish to detect motion (detection area).
4. Test by walking through the area. Linked responders should turn on when motion is sensed, and off 1 minute after last motion sensed.

7. MOUNT SENSOR

MOUNTING (See Locating Tips for Help)
1. Use the two small screws (included) to secure the swivel mounting bracket at your desired location.

8. ADJUST DETECTION AREA
## 9. SETUP MODES (OPTIONAL)

### SET JUMPERS

Jumpers are small plastic "boxes" that act as a switch. When installed on 2 pins, the switch is "on." When installed on 1 pin (or missing), the switch is "off."

**Jumper 1 – Sensitivity**

To reduce Sensor’s detection range by approximately 33%, use needle-nose pliers to carefully remove Jumper 1 (the left-most jumper) from the single pin it is installed on and reinstall it on both pins. Tap the Set button once, wait 10 seconds and activate motion to establish the new setting.

**Jumper 2 – Disable LED**

If you wish to disable the LED (will still operate during setup), install Jumper 2 on both pins. Tap the Set button once, wait 10 seconds and activate motion to establish the new setting.

**Jumper 3 – Night-Only Mode**

If you wish to have the Sensor operate only when dark, install Jumper 3 on both pins. Tap the Set button once, wait 10 seconds and activate motion to establish the new setting. **Note:** It takes 3.5 minutes (or 7 Set button taps) to detect the difference between day and night. See **Day/Night Threshold** below for details.

**Jumper 4 – On-Only Mode**

If you wish to disable the automatic countdown "Off," install Jumper 4 on both pins and the Motion Sensor will only send "On." Tap the Set button once, wait 10 seconds, and activate motion to establish the new setting.

**Jumper 5 – Remote (Software) Management**

If you wish to manage all of Motion Sensor’s settings via INSTEON software (such as HouseLinc 2), install jumper 5 on both pins. Then, press and hold the Set button on Motion Sensor to put the unit in linking mode and allow the INSTEON software to access its settings.

### ADJUST DIALS

**Left Dial – Adjust Automatic "Off" Countdown**

Using a small Phillips screwdriver, adjust to the desired time duration in which you want Motion Sensor to send an OFF command after the last motion sensed. Turning the dial all the way counter-clockwise sets the countdown to 30 seconds; turning the dial all the way clockwise sets it to 2 hours. Anywhere in between results in a proportional difference between 30 seconds and 2 hours.

**Right Dial – Day/Night Threshold**

Using a small Phillips screwdriver, adjust the day/night threshold to desired light level. Turning the dial clockwise increases the light level of the threshold; turning the dial counter-clockwise decreases the light level of the threshold. For example, when you turn the dial all the way clockwise, Motion Sensor will read “night” no matter how bright it is. Likewise, turning the dial all the way counter-clockwise will make Motion Sensor read “day” no matter how dark it is. Turning the dial anywhere in between will choose the specific light level which Motion Sensor uses to determine “night” vs. “day.” To test, set Motion Sensor to night-only mode (see above) and tap the Set button 7 times. If it reads the current light level as “night,” it will turn on its linked responders on both pins. If it reads “day,” the LED will flash on first motion, but it will not turn on its linked responders.

## 10. ADJUST MODES

**11. TROUBLESHOOTING**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor won’t link to responders</td>
<td>Move a dual-band INSTEON device (e.g., Access Point) closer to the Motion Sensor</td>
</tr>
</tbody>
</table>
| Sensor won’t control linked responders | a) Make sure LED flashes to confirm it has power and is sensing motion  
b) Sensor is in night-only mode (and it is “day”)  
c) Move a dual-band INSTEON device (e.g., Access Point) closer to the Motion Sensor  
d) Sensor is in its 1 minute countdown |
| LED flashing rapidly after motion is detected | Sensor did not receive an acknowledgement from one or more linked devices. If this occurs repeatedly you may need to move a dual-band INSTEON device closer to the Sensor or you may need to unlink a device which is no longer in use in your home. If the INSTEON responders are no longer available, you may either use a software application or perform a factory reset to remove the unwanted links. |
| LED not flashing upon motion. | a) You may need to wait up to 8 seconds to see the flash  
b) Battery may need to be replaced |
| Not sensing motion | a) Light detected and unit is in night-only mode  
b) Motion Sensor aimed too low  
c) Temperature too high, or low (sensor needs to be able to distinguish between what is being sensed and its surroundings)  
d) See Placement Tips section |
| LED is double flashing upon motion | Low battery warning—replace with fresh battery |

## 12. REMOVE CONTROL OF INSTEON

**UNLINKING FROM INSTEON RESPONDERS**

1. Press and hold the Set button on Motion Sensor for 5 seconds (until red LED behind sensor lens begins blinking).
2. Press and hold the Set button on Motion Sensor for another 5 seconds (until the LED changes its blink pattern – it will now be on longer than off).
3. Press and hold the Set button on the INSTEON responder you would like to unlink (until its LED blinks).  
4. The Motion Sensor LED will stop blinking (if not, try step 3 again).  
5. Test by tapping the Set button on Motion Sensor. Taps should no longer control the Unlinked device.

**RETURN UNIT TO FACTORY SETTINGS**

1. If possible, unlink from all responders before proceeding.  
2. Remove battery.  
3. Wait 15 seconds.  
4. While pressing and holding the Set button, reattach the battery and continue holding the Set button.  
5. After around 2 seconds, the LED will turn off. Keep pressing the Set Button for 5 seconds and then release the Set Button. The LED will turn off after about 2 seconds.

## 13. FACTORY RESET

**FCC**

This device complies with FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d’Industrie Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes: (1) l’appareil ne doit pas produire de brouillage, et (2) l’utilisateur de l’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.

**WARNING**

Changes or modifications to this unit void the user’s authority to operate this product and the manufacturer’s warranty.

## 14. FCC

**TECHNICAL SUPPORT**

Skylink has contracted with INSTEON for support of the INSTEON Motion Sensor. Customers should contact INSTEON for technical support.

1. Call INSTEON Support Line at 800-762-7845
2. Visit [www.insteon.com](http://www.insteon.com)