SCHLAGE®

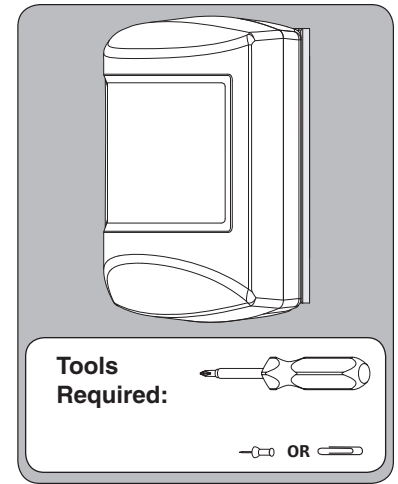|||||||||||||||||||||||||||||||||

P516-486

SPEAKS ⓩWAVE®

Motion Sensor Installation Instructions

Product Overview
- Wireless Z-Wave™ enabled motion sensor
- Detection area is approximately 30 x 39' area (9 x 12 meters)

Product Specifications
- For indoor use only
- 90° wide angle detection pattern
- Features pet immunity settings (see Maintenance for more information)
- Operating frequency: 908.42 MHz
- Operation range: Up to 100 feet (30.5 meters) line-of-sight
- Operating temperature: 0° – 49°C, 32° – 120°F
- Battery type required: 3V Lithium CR123A
- Battery life approximately 3 years

❗ *Note: Performance of this product is dependent upon proper installation, and product will not perform as intended if not installed pursuant to these instructions.*
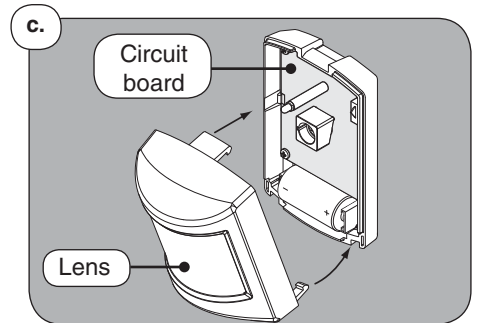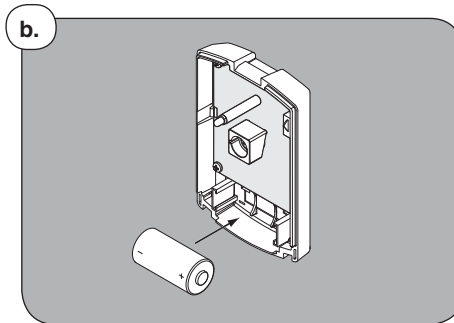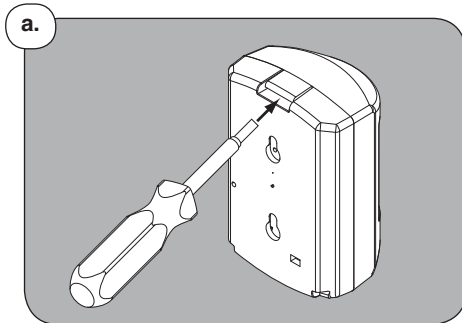
Tools Required:

❗

Caution: This product is dependent upon self-monitoring and uses Z-Wave technology to communicate data wirelessly to other products. This product is not monitored by a third party and radio communication (including Z-Wave) is not 100% reliable. Therefore, this product should not be solely relied upon for the protection of life or valuables.

Caution: Exposure to water will damage this product and can make it inoperable.

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1 **Install a Battery in the Motion Sensor**

   a. Lift the tab on top of the Sensor cover and remove the cover (see figure a. below).
   b. Insert a new 3V CR123A battery into the battery compartment. Observe polarity (see figure b. below).

   A light in the Sensor's lens will blink slowly to indicate Sensor is connected to power and is not enrolled. If the light does not blink, check that the battery is new and is inserted with correct polarity.

   c. After observing the slow blinking LED, replace the Sensor cover (see figure c. below). ***Do not press on the lens.***

a.   **b.**   **c.** Circuit board / Lens

⚡ ATTENTION! Electrostatic Sensitive!

Use care to avoid touching the circuit board when installing the battery.

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2 **Prepare the Nexia Bridge for Enrollment. Choose and follow the easiest option for you shown below.**

Battery powered Bridge:
- Disconnect Ethernet and power to the Bridge.
- Install a new, high-quality 9-volt battery into the Bridge.
- Move the Bridge to within 6 feet (1.8 meters) of the Sensor. Keep the Bridge in this position during the entire enrollment process.
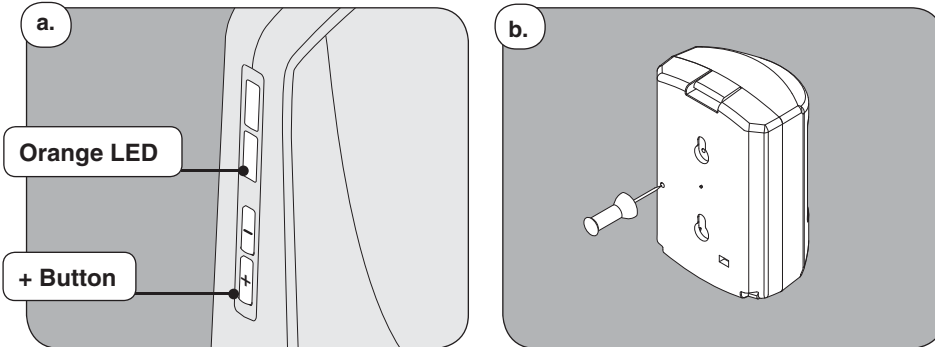
AC powered Bridge:
- Move the Sensor to the Nexia Bridge for enrollment.
- Keep the Sensor within 6 feet (1.8 meters) of the Nexia Bridge during the entire enrollment process.

For more information, refer to the Nexia Bridge User Guide.

3 **Enroll the Sensor**
   a. Press and release the "+" button on the Bridge. The orange LED will blink slowly to indicate enrollment mode.
      The Bridge will remain in enrollment mode for 30 seconds before timeout.
   b. Use a pin or paper clip to press the program button on the back of the Sensor case.
   c. During enrollment, the Bridge's LED will change from slow to rapid blinking.
   d. When enrollment is successful, the Bridge's orange LED will light solid, and the Sensor's LED will turn off.
   e. If the Bridge LED never blinks rapidly and enrollment mode times out (after 30 seconds), and the Sensor's LED does not turn off,
      then repeat step a–d.

a.

Orange LED

+ Button

b.

4 **Verify the Motion Sensor is added to the Nexia Bridge**

! *Remove the 9-volt battery from the Nexia Bridge, if installed.*
   a. Connect the Bridge to AC power and to your router (Ethernet).
   b. Login to your online Nexia account.
   c. Click on "Security & Sensors", then "Sensors", then "Setup Device". *(See Figures 1 – 3 below.)*

   Note: Browser feedback is not immediate. The online display may take 5 seconds to 1 minute to change. Be sure to allow time for the browser to refresh.
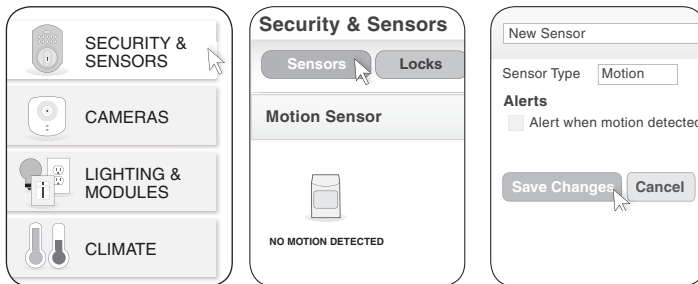
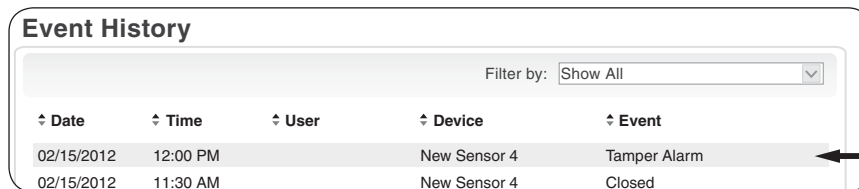|	
SECURITY & SENSORS	
CAMERAS	
LIGHTING & MODULES	
CLIMATE	

Security & Sensors

Sensors   Locks

Motion Sensor

NO MOTION DETECTED

New Sensor

Sensor Type   Motion

Alerts
   Alert when motion detected

Save Changes   Cancel

    Figure 1   **Figure 2**   **Figure 3**

   d. Check that a "motion detected" condition is indicated on the Nexia portal online display.

5 **Test Tamper Indication (Optional)**
   • If the Sensor's cover is removed, the Sensor's LED will light solid for up to ten (10) seconds, and a "tamper condition" message will be
     sent to the Nexia Bridge.
   • Check that the tamper condition is indicated on the Nexia portal online display. (Refer to the example below.)

Event History

Filter by: Show All

⇕ Date	⇕ Time	⇕ User	⇕ Device	⇕ Event
02/15/2012	12:00 PM		New Sensor 4	Tamper Alarm
02/15/2012	11:30 AM		New Sensor 4	Closed

Note: Browser feedback is not immediate. The online display may take 5 seconds to 1 minute to change. Be sure to allow time for the browser to refresh.

6 Determine Motion Sensor Placement

- Place the Sensor so that the detection zone will cover the area to be monitored. (Refer to coverage diagram below.)
- Do not install the Sensor on a metal wall.
- Do not install the Sensor in a location where large metal objects (i.e., kitchen appliances) may limit the wireless signal.
- Avoid placing the Sensor in a location that is facing direct sunlight, where the temperature may change rapidly, or where air ducts or other considerable airflow is nearby.

  Note: An optional Schlage Z-Wave repeater (RP100, RP200) can improve performance.

7 Install the Mounting Bracket and Motion Sensor

! Install the Sensor 6½ to 7½ feet (2 to 2.3 meters) above the floor.

! Mounting Bracket may be installed using either adhesive tape or screws (included). Follow steps for the preferred method:
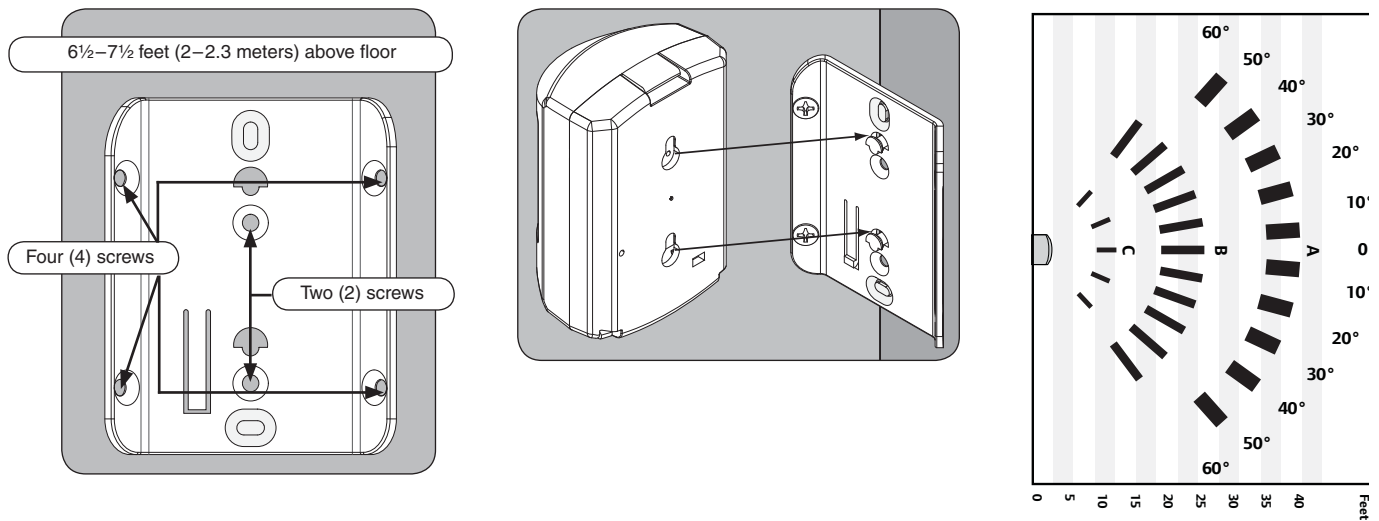
Install Mounting Bracket with screws
Attach the Mounting Bracket to the wall using four screws (included) when mounted against a corner, or with two screws (included) when mounted against a flat surface.

OR with adhesive tape
Attach the Mounting Bracket to the wall using a strip of double-sided adhesive tape (included). *Note: Extended use of double-sided tape may damage paint or wall material.*

Install the Sensor
Align holes on the back of Sensor with tabs on Mounting Bracket. Push down on Sensor to secure it to the Mounting Bracket.

6½–7½ feet (2–2.3 meters) above floor

Four (4) screws

Two (2) screws

Solid areas on the diagram (above, right) represent positive detection capability.

8 Motion Sensor Test and Operation

The Sensor detects motion and sends a status to the Nexia Portal. (The Sensor is not intended to operate as a Z-Wave repeater.)

Before normal use, verify proper operation of the Motion Sensor.

- **a.** Clear the motion detection zone for 4 minutes.
- **b.** Move in the coverage area. Check that the LED on the Motion Sensor blinks once.
- **c.** When motion is detected, a message is sent to the Nexia Bridge and the Sensor remains in an active state until no further motion occurs for a period of 4 minutes. Any motion detected before 4 minutes will cause the timer to reset for another 4 minutes. (*Note: Motion reset time may be changed for test purposes. See Maintenance for more information.*)
- **d.** Check that the Nexia portal indicates motion was detected with "motion detected" message (see example below).
- **e.** After 4 minutes with no motion detected, the Sensor will return to normal operation, and transmit a "no motion detected" message.
- **f.** Check that the Nexia portal indicates "no motion detected".

Event History

Filter by: Show All

⇕ Date	⇕ Time	⇕ User	⇕ Device	⇕ Event
02/15/2012	12:00 PM		New Sensor 4	MOTION DETECTED

Maintenance

Change the Sensor Battery
a. Lift the tab on the top of the Sensor and remove the cover. (See Step 1 for diagrams.)
b. Remove old battery. ***Use care to avoid touching circuit board when handling battery.***
c. Insert a new 3V CR123A battery. Observe polarity.
d. Replace the Sensor cover. (See Step 1 for diagrams.)

Note: Sensor enrollment is not required after battery change.

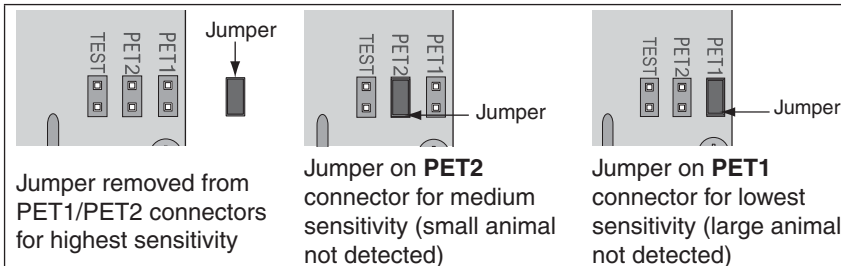*Note: Failure to properly and timely change battery will impair sensor performance.*

⚠ **SAFETY HAZARD!**
BATTERY MAY EXPLODE IF NOT PROPERLY HANDLED. DO NOT RECHARGE, DISASSEMBLE OR DISPOSE OF IN FIRE.

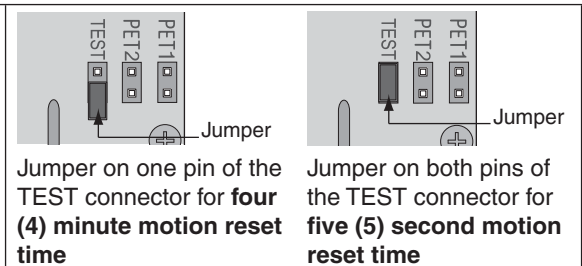### Adjust Pet Immunity Setting or Motion Reset Time

*Pet Immunity factory default is **PET1**. Motion Reset Time factory default is **four-minute** setting.*
a. Remove the Sensor cover as shown at Step 1.
b. Change position of the circuit board jumper as shown below.
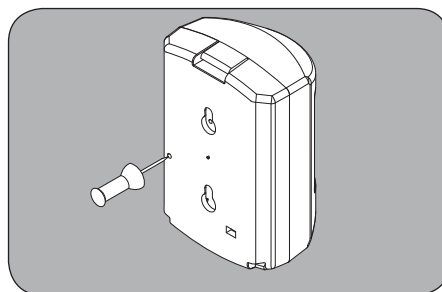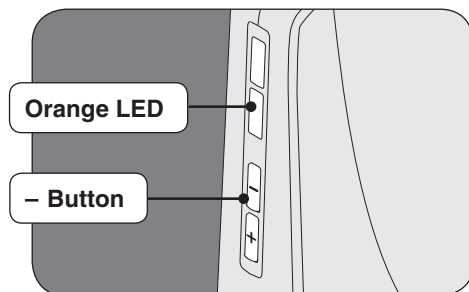c. Replace the Sensor cover.

Pet Immunity Settings

Jumper removed from PET1/PET2 connectors for highest sensitivity

Jumper on **PET2** connector for medium sensitivity (small animal not detected)

Jumper on **PET1** connector for lowest sensitivity (large animal not detected)

Motion Reset Time Settings

Jumper on one pin of the TEST connector for **four (4) minute motion reset time**

Jumper on both pins of the TEST connector for **five (5) second motion reset time**

If necessary to remove a Sensor from the Nexia account, follow these steps to exclude the Sensor from a Z-Wave Network:
a. Hold the Nexia Bridge within 6 feet (1.8 meters) of the Sensor during the entire exclusion process.
b. Press and release the "–" button on the Bridge.
c. Use a pin or paper clip to press the program button on the back of the Sensor case.
d. Observe lights on the Bridge. The orange light will blink while exclusion is taking place. Exclusion is complete when the orange light becomes solid.
e. Remove the battery from the Sensor after exclusion is complete.

For more information, refer to the Nexia Bridge Users Guide.

Orange LED

– Button

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