# **Instruction Bulletin**

# **Centralite™ EMS Motion Sensor**

# for Use with Centralite™ Energy Management Systems

## INTRODUCTION

The Centralite<sup>™</sup> Energy Management System (EMS) is comprised of EMS Thermostats, Door Sensors, Motion Sensors, and Ethernet Coordinators (ECs). The EMS reduces energy costs by minimizing HVAC usage when a guest room is unrented or vacant. The EMS allows continuous monitoring of all online devices within the property.

Motion Sensor (PIR)

The motion sensor uses a Passive Infrared (PIR) sensor to detect heat patterns in the room. Motion will be signaled to the thermostat if the heat pattern changes. The thermostat combines PIR motion sensor signals in a logic sequence with door switch signals to determine whether a room is occupied or unoccupied. The PIR is wireless and can be mounted in the best location. The motion sensor uses a CR-2 lithium battery.

Figure 1: Centralite™ EMS Motion Sensor



NOTE: Using this product in any manner other than outlined in this document voids your warranty. Centralite Systems is not responsible for any damage incurred as a result of misuse or abuse of this product. The Motion Sensor must be installed by qualified personnel.

#### Figure 2: Motion Sensor (Interior view)

- KEY:
- A. LED
- B. Programming button C. Sensor
- D. Battery location



## MOUNTING THE MOTION SENSOR

Listed below are two methods for mounting the motion sensor.

Method 1 - Using a Drywall Screw	Method 2 - Using Double-sided Removable Tabs
<ol> <li>Remove the cover of the motion sensor and remove the battery if necessary.</li> <li>Select a suitable location to mount the motion sensor. This location should provide good unobstructed coverage of the area for which the sensor will cover.</li> <li>Insert a 1 in. (25.4 mm) sheetrock screw (not provided) into the pilot hole in the sensor's back plate (located in the battery compartment) and install motion sensor onto the wall.</li> </ol>	<ol> <li>Remove the cover of the motion sensor and remove the battery (if installed).</li> <li>The Motion Sensor base should be mounted using Double-sided Removable Tabs by 3M<sup>®</sup> (or equivalent). Follow the mounting tab manufacturer's instructions for adhering or removing the tabs to/from the back of the unit and mounting surface.</li> <li>Select a mounting area for the Motion Sensor that is free of heavy dust or high humidity and provides a good unobstructed coverage of the desired coverage area.</li> </ol>

After sensor is mounted install the battery and replace the outer cover.

# PROGRAMMING

The Motion Sensor must be restored to the factory default state before capturing it to the Room Area Network (RAN).

#### **Restoring Sensors to Factory Default State**

Follow the steps below to reset the Motion Sensor to the factory default state. 1. Open the Motion Sensor by pressing the access release tabs on the sides

of the sensor.

2. Remove and retain the battery (if installed).

3. Locate the Programming Button found on the center of the circuit board. While pressing and holding the Programming Button, install the battery. The LED will blink.

4. After the LED stops blinking, release the button. The Motion Sensor is now restored to the factory default state.

#### Capturing the Sensor to the Room Area Network (RAN)

1. With the thermostat Room Area Network (RAN) open for capturing, press the Programming Button 3 times. The LED should begin to flash several times. Verify that the sensor is successfully captured and indicated on the thermostat.

2. Test the sensor using the thermostat diagnostic/test screen to make sure the sensor is reporting accurate occupancy messages.

Replace the cover and verify that it is snapped fully onto the base. Refer to the Centralite<sup>TM</sup> Energy Management System User's Guide for more information on programming.

### **SPECIFICATIONS**

Power	3V CR-2 Lithium Battery
Temperature range	-4° F to 140°F (-20°C to +60°C)
Communications	2.4 GHz, 16 channel spread spectrum radio frequency



Figure 3: Centralite Motion Sensor Coverage Pattern

# CENTRALITE MOTION SENSOR DIMENSIONS

Component	Dimensions
Motion Sensor	1.9 x 1.9 x 1.2 in. (48.3 x 48.3 x 28.4 mm)

## STANDARDS

The Motion Sensor complies with the following Standards: Table 1: U.S. FCC Regulations

Standards/Regulations	Title
FCC Part 15	Class B Digital Device for Home or Office Use

FCC ID: T3L-MS001

\*FCC ID number appearing on the product

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#### **CLASS B FCC STATEMENT**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications to this device that are not expressly approved by Centralite could void the user's authority to operate this equipment.

#### **CUSTOMER SERVICE**

Contact the customer and technical support by phone at 1-800-466-5483 You may also find helpful information on our web site at <u>www.centralite.com</u>

**Centralite Systems Inc.** 6420 Wall Street, Mobile, AL 36695 1-800-466-5483. Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Centralite for any consequences arising out of the use of this material.

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