

# LX Occupancy Sensor (FT and LP Version) Installation and Setup Instructions

## **Hubbell Building Automation, Inc.**

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## Overview

This document provides instructions for installing, connecting, and programming the LX Occupancy Sensor.

## **Precautions**

- Read and understand all instructions before beginning installation
- For installation by a licensed electrician in accordance with National and/or local Electrical Codes and the following instructions.
- Do not install or service unit with power applied. This may result in damage to unit and void of warranty.
- Use only approved materials and components as appropriate for installation.
- · For indoor use only.
- NOTICE: Do not install unit if any damage to product is noticed.

# **Components**

See Figure 1.

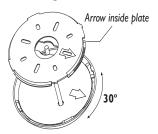
#### Installation

- 1. Prepare the installation site as necessary. Rough-in and route power supply and LON Network leads to the installation site. See section on using the Infrared Mask below for more information.
- 2. Install the Cover Plate on the ceiling using either Mounting Method 1 or 2. (See Figure 2.)
- 3. Assign Network Node Address as described below.
- 4. Run the sensor wires through the ceiling tile. Attach sensor body to the cover plate by aligning arrows and twist locking into place.
- 5. With power off, connect Red and Black leads to the 24 VAC/VDC power supply. (FT Version Only.)
- 6. Connect the Blue wires to the LON Network.
- 7. Apply power to the sensor and program lighting control functionality and sensitivity levels as described below.

# **Assigning Network Node Address**

The sensor's network address is set via three rotary dials located under the product label. Each sensor is factory set to network address 001 prior to shipping. To set the address, rotate the appropriate dial(s) with a small, flat blade screwdriver until the indicator points to the appropriate number. Assign each sensor its address according to the type of network (LX-only Network or LonWorks Open System Network) and as delineated in the project plans and/or Sensor Address Log. Dial "A" sets the most significant digit of the node address and Dial "C" sets the least significant digit of the node address.

Figure 1: LX Occupancy Sensor Components



Match arrows to twist and lock. Cover plate allows for 30<sup>0</sup> adjustment.

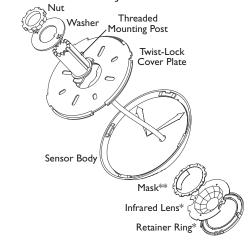
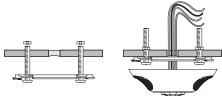
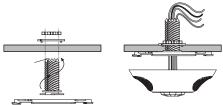


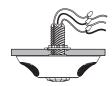
Figure 2: LX Occupancy Sensor Installation



Mounting Method 1: Screw and mount twist-lock cover plate.



Mounting Method 2: Twist and lock threaded mounting post into cover plate. Drill into ceiling tile.



For example, address 001 is set by Dial A = "0", Dial B = "0" and Dial C = "1". Factory default is 001.

LX-only Networks - Each sensor on the network will need to be assigned a unique network address. Addresses must be assigned in sequential order starting with address 001.

LonWorks Open System Networks – Each sensor on the network will need to be assigned address 000. This will place each sensor into LonMark compatible mode.

Note: If the address is changed with power applied, the power must be cycled off then back on for the address to become effective.

## **Programming the Sensor**

For LX-only Mode (Address 001-999), program the sensor via the Touch Tablet Graphical User Interface. On the Tablet's Main Screen, select "System Inputs" then select "Motion Sensors". Make selections as necessary to program the sensor's name (if desired), lighting control functions, and sensitivity level(s) as applicable. Verify system functionality by walking into, out-of, and through the sensing zone with the Tablet's "Test Mode" feature activated. The "Test Mode" feature is located on the Tablet in the menu path Special Functions -> Diagnostics -> System Devices -> Motion Sensors -> Unit Test.

For LonMark Mode (Address 000), a LX Occupancy Sensor plug-in is available from Hubbell Building Automation, Inc. at www.hubbell-automation.com.

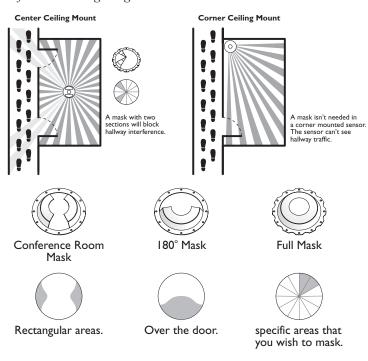
# **Resetting the Occupancy Sensor**

If needed, the sensor can be reset to an unconfigured state or to factory default settings (except network address) by pressing and holding the Service Button located under the sensor's IR Lens retainer or end cap (US-only versions). For LX-only Mode (Address 001-999), hold the Service Button for three seconds to reset configuration data to factory defaults. When set to LonMark Mode (Address 000), hold the Service Button for 20 seconds to put the sensor into an unconfigured state. When reset, the sensor's programmed data (name and lighting control functions) are erased and its sensitivity settings are reset to factor default.

# Using the Infrared Mask (if applicable).

• See Figure 3.

Figure 3: Infrared Masking Diagram.





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