

**Installation Guide** 

E3T-M04-SB24 (450 sq. ft.) E3T-M15-SB24 (1500 sq. ft.) Self-powered Wireless Occupancy Sensor



### Overview

The ILLUMRA Self-powered Wireless Occupancy Sensor provides fast and simple installation of automatic OFF controls. Such controls ensure lights and devices are turned off in unoccupied areas of a building, decreasing electricity consumption. The occupancy sensor is intended to be mounted on ceiling tiles, but may also be mounted on drywall ceilings. This device is powered by ambient light available in a room and may optionally be powered using 3 AAA batteries.

### **Compatible Devices**

- E3R-R12-3HOBP; 120V 3-wire Relay Receiver
- E3R-R24-3HOBP; 240V 3-wire Relay Receiver
- E3R-R27-3HOBP; 277V 3-wire Relay Receiver
- E3R-R12-5IBBP; 120V 5-wire Relay Receiver
- E3R-R24-5IBBP; 240V 5-wire Relay Receiver
- E3R-R27-5IBBP; 277V 5-wire Relay Receiver
- E3X-R12-5IBBP; 120V 5-wire Relay Receiver + Repeater
- E3X-R24-5IBBP; 240V 5-wire Relay Receiver + Repeater
- E3X-R27-5IBBP; 277V 5-wire Relay Receiver + Repeater
- E3R-D12GP; Plug-in Dimmer/Relay Receiver
- E3X-MRCFP-04; Room Controller (0 input, 4 outputs)
- E3X-MRCFP-13; Room Controller (1 input, 3 outputs)
- E3X-MRCFP-22; Room Controller (2 inputs, 2 outputs)
- E3X-D01FP; 0-10V LED Dimmer
- E3X-D02FP; 24VDC LED Dimmer

#### Components Included

The following items are included with this product:

- A -- (1) ILLUMRA Self-powered Wireless Occupancy Sensor
- B -- (1) mounting bolt
- C -- (1) large mounting washer
- D -- (1) mounting nut

### **Tools Needed for Installation**

- Phillips screwdriver
- Drill
- 11/16" drill bit
- Pencil
- Rules
- 5/16" drill bit (for drywall mounting)
- (2) Plastic wall anchors (for drywall mounting)
- (2) Suitable screws (for drywall mounting)

### Installation

To mount the Self-powered Wireless Occupancy Sensor, choose one of the following mounting options below. For receiver installation instructions, see appropriate installation guide.

#### OPTION A:

## **Ceiling Tile Mounting**

- Step 1: Read all mounting steps for this option before taking any action to mount the occupancy sensor.
- Step 2: Remove ceiling tile from location in ceiling.
- Step 3: Drill one 11/16" hole in ceiling tile. Position hole at least 3" from walls or other obstacles.
- Step 4: Insert mounting bolt (B) through hole in ceiling tile.
- Step 5: On hidden side of ceiling tile place large mounting washer (C) onto mounting bolt (B) and secure the washer by threading mounting nut (C) onto mounting bolt.
- Step 6: Return ceiling tile to proper location in ceiling.
- Step 7: Place occupancy sensor (A) over visible portion of mounting bolt (B). Rotate occupancy sensor 90 degrees; the occupancy sensor should snap firmly into position.

#### OPTION B:

# **Drywall Mounting**

- Step 1: Read all mounting steps for this option before taking any action to mount the occupancy sensor.
- Step 2: Drill 2 5/16" holes in drywall or stud leaving 1 3/4" of space between the holes.
- Step 3: If holes were drilled in drywall, insert plastic wall anchors (not included) into holes. If holes were drilled in stud, anchors are not required.
- Step 4: Insert suitable screws into anchors or holes in stud. Leave about 1/8" of screw protruding from ceiling (in addition to head of screw).
- Step 5: Place occupancy sensor (A), solar cells face down, over screw heads protruding from ceiling. Screw heads will insert into cutouts in top of occupancy sensor. Slide occupancy sensor about 1/2"; the sensor should snap into place.

# **Programming**

- Step 1: Read all programming steps before associating this transmitter with a receiver.
- Step 2: Use this transmitter with a compatible receiver. See list: "Compatible ILLUMRA Devices".
- Step 3: Follow programming instructions found in the installation guide for the appropriate ILLUMRA receiver.
- Step 4: At the point in the receiver programming instructions where a radio signal must be transmitted from the occupancy sensor to the receiver, use the tip of a pencil to press the "LEARN" button on the occupancy sensor. (Found under front plastic tab; use slotted screwdriver to pry tab open. See image below.)



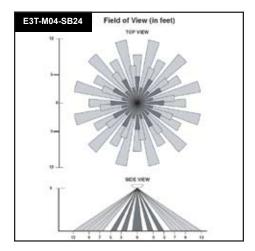
tep 5: Upon completing the receiver programming instructions, replace front plastic tab on occupancy sensor. (Insert non-slotted end first. Next, snap in slotted end.)

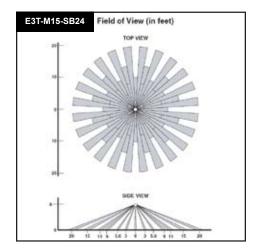


# **Specifications**

	E3T-M04-SB24	E3T-M15-SB24
Operating Temperature Range	32°F to 104°F (0°C to 40°C)	
Storage Temperature Range	32°F to 104°F (0°C to 40°C)	
Relative Humidity	0% to 95%, non-condensing	
Usage	Indoors only	
Frequency	315 MHz	
Coverage Area	450 sq. ft.	1500 sq. ft.
Transmit Range	50-150 feet (typical)	
Dimensions	2.7"W x 5.83"H x 1.27"D	
Listings	CEC Title 24 Compliant, FCC Certified for wireless communication	

# Field-of-View







Contains FCC ID: QGH-WSC Contains IC: 2473A-WSC

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

Always follow local electrical codes when installing this device. Installation should be performed by a qualified electrician.

This device or certain aspects thereof is protected by at least one U.S. or international patent or has at least one such patent application pending.



ILLUMRA is a trademark of Ad Hoc Electronics, LLC. Other trademarks herein are the property of their respective owners.

