Wireless Occupancy Sensor with Photocell

Cat. No. ZC015-BIW

Ratings: 12-24V DC, 2.4 GHz

WARNINGS:

- **TO AVOID FIRE, SHOCK, OR DEATH, TURN OFF POWER AT CIRCUIT BREAKER OR FUSE, AND TEST THAT THE POWER IS OFF BEFORE WIRING!**
- **TO AVOID INJURY OR DEATH, DO NOT RECHARGE, DISASSEMBLE OR INCINERATE BATTERY, OR HEAT IT ABOVE 212°F (100°C).**
- Replace battery with an approved Lithium 3.6V non-rechargeable battery - Jauch ER14505J-S, EVE ER14505V, or SAFT LS14500. Use of another battery may present a risk of fire or explosion.

CAUTIONS:

- Dispose of used battery promptly. DO NOT dispose of battery in normal household waste. Please contact your local waste provider or recycling facility for proper disposal of used battery.
- For indoor applications only.
- To be installed and/or used in accordance with electrical codes and regulations.
- If you are not sure about any part of these instructions, consult an electrician.

DI-000-ZC015-02B

INSTALLATION INSTRUCTIONS **ENGLISH**

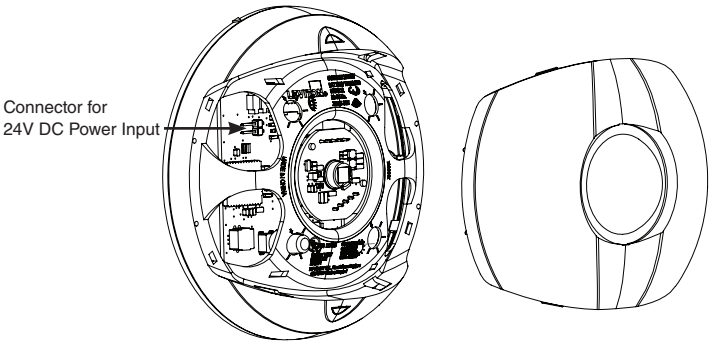
Product Description

The occupancy sensor is a 2.4 GHz wireless communication device, which transmits a wireless message to the Leviton room controller or wireless keypad. This communication occurs each time there is a change to the occupation status or change in light level. You can configure occupancy and vacancy time delays and daylighting actions, which are maintained in the controller and load control devices. The controller then routes the message to the load control device to take the assigned action.

You can power this sensor by battery (observe proper polarity) or a +24V DC power supply, such as OPP20. Refer to the image below.

Purpose of Control: Energy Management of Equipment

Pollution Degree: 2.



Compatible Devices

- GreenMAX® DRC Wireless Keypad
- Zigbee 3.0 Room Controller

NOTES:

- Requires GreenMAX DRC Wireless Keypad or a Zigbee 3.0 Room Controller to program and control communication to other devices.
- Mount the sensor after it has been programmed.

Quick Start: Enrollment and Verification

Enrollment

1. Remove "Battery Pull Tab" (on bottom) to activate device.

2. Place the sensor within 16 ft (5 m) from the desired receiver to program it.

3. Enroll sensor.

Press and hold button for 15 seconds until the LED indicator blinks White three (3) times, then release immediately.

The device resets, and the LED indicator blinks Green approximately once per second for 60 seconds to indicate the start of the join process.

3a. To enroll sensor via QR code and mobile app:

- Use the camera on your mobile device to scan the QR code.
- Continue and save the sensor enrollment in the controller via the app.
- After enrollment, use refresh option on app to show device successfully enrolled.

3b. To enroll sensor on a network:

Start Zigbee enrollment process for network controller.

4. To find and bind enrolled sensor (step for non-Leviton controllers that need to discover capability of sensor):

- Press and hold button for 10 seconds until the LED indicator blinks White twice, then release immediately.
- The LED blinks Green approximately once per second as the sensor identifies for up to 180 seconds.
- Start Find and Bind: Initiates the controller to enroll the identified sensor.

Verification of Enrollment Process

Press and hold button up to 5 seconds, then release.

NOTES:

- If network enrollment is successful, LED indicator blinks Green once.
- If network enrollment is incomplete, LED indicator blinks Green twice.
- If there is no network connection, LED indicator blinks Blue once.

LED Indicator Operation

The occupancy sensor uses LED light colors to indicate occupancy status and programming status, as shown in the table below.

Button Action	LED Color	Blink Rate	Sensor Status
No action.	Green	Rapid	Searching for network (up to 60 seconds); Enrollment in process
Pressed and held for fewer than 5 seconds.	Green	1 Time	Enrolled in active Zigbee network.
		2 Times	Enrolled in active Zigbee network, but not commissioned completely.
		3 Times	Enrolled in Zigbee network, but no communication from network.
	Blue	1 Time	Not enrolled in Zigbee network.
No action.	Blue	1 Time	Power up on battery.
		2 Times	Power up on 24V DC source.
Pressed and held for 5 to 9 seconds.	White	1 Time	Awake for 60 seconds before it reverts to power save mode.
Pressed and held for 10 to 14 seconds.	White	2 Times	Leaves current network, if connected, and triggers Find and Bind: Target for enrollment for 180 seconds.
Pressed and held for 15 to 19 seconds.	White	3 Times	Leaves current network, if connected and performs Sensor Factory Reset. Searches for network to enroll in up to 60 seconds.
Pressed and held for more than 20 seconds.	N/A	N/A	N/A
No action.	Red	1 Time	Occupancy detected.
		2 Times	Battery replacement needed.

Operation Testing

1. Once joined to the network, configure the sensor to control loads in required locations.

2. Confirm occupancy detection (Red LED blinks), then cover the occupancy sensor to avoid further detection. Verify that the sensor times out and load turns OFF.

3. Uncover the occupancy sensor to verify Auto-ON responds and energizes loads.

Field-of-View and Sensitivity Testing

- Perform an FOV (Field-of-View) walk test of the coverage area and confirm the Red LED blinks and detects occupancy within the coverage area.
- Use the app to adjust the sensor's sensitivity, as needed, to increase or decrease the FOV.

Photocell Adjustment: Use the app to configure daylighting settings.

Installation

Do not mount sensor until it has been programmed to communicate with Room Controller. Equipment needed for installation:

- Ceiling tile stem, nut, and washer (included)
- Double-sided foam mounting tape (included)
- Screws (included) and wall anchors (not included)

Reset to Factory Default Settings

Press and hold button for 15 seconds until LED indicator blinks White three (3) times, then release immediately.

NOTES:

- When reset is complete, LED blinks Green once per second, as sensor searches to join the network.
- If you press the Green button for more than 20 seconds, the indicator times out, and no functions are performed.

WEB VERSION

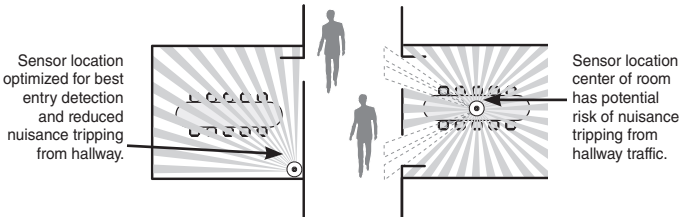
Location

Select the location to mount the sensor and the appropriate method:

- Tile stem
- Screws
- Mounting tape

NOTES:

- Sensor location is important to ensure correct operation within each unique space.
- Correct location improves Auto-ON response and reduces the risk of false tripping from external motion (example, hallway traffic).
- Do not locate sensor on a mounting surface within 6 feet of air ducts, moving machinery or heat sources.
- When used for daylighting, the sensor must be installed in the daylighting zone.

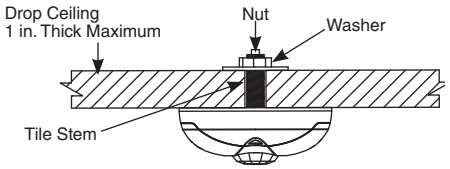


Ceiling Tile Mount

1. Connect the included ceiling tile stem to the sensor's back cover and twist to secure. Refer to **Diagram A** for details.
2. When sensor is in desired location, push the ceiling tile stem through the ceiling tile and install the washer and nut above the ceiling tile to secure.

   NOTE: The sensor's back cover and front body are keyed with arrows to lock and separate it easily. To lock the sensor's body to the back cover, push back cover into front body and rotate until the arrows do not align. To separate, rotate sensor until the arrows are aligned, and pull apart.

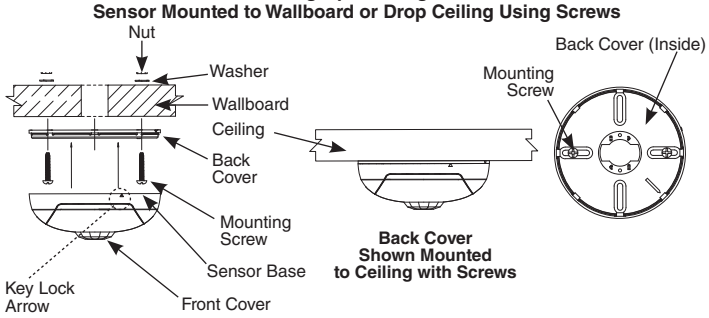
Diagram A
Sensor Mounted to Drop Ceiling with Tile Stem



Surface Mount Using Screws

1. Remove the back cover of the sensor: Locate the alignment arrow on the edge of the back cover and on the edge of the front body, then rotate the back cover and front body until the two arrows line up, and pull apart. Refer to **Diagram B**.
2. Use the included screws, nuts, and washers, or screws with commercially available wall anchors to install the back cover. If necessary, drill pilot holes.
3. Secure the sensor's body to the back cover: Push back cover into front body and rotate until the arrows do not align.

Mounting Option Diagram B
Sensor Mounted to Wallboard or Drop Ceiling Using Screws

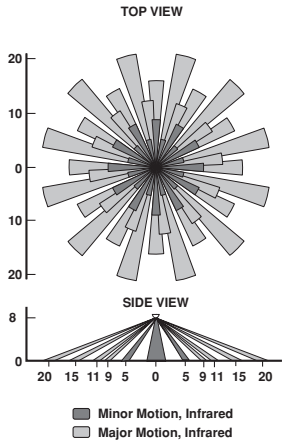


Surface Mount Using Tape

1. Remove backing material and apply double-sided mounting tape to the sensor base.
2. Press and hold the sensor to your desired mounting surface for a few seconds.

   NOTE: The sensor's back cover and front body are keyed with arrows to lock and separate it easily. To lock the sensor's body to the back cover, push back cover into front body and rotate until the arrows do not align. To separate, rotate sensor until the arrows are aligned, and pull apart.

Passive Infrared Field-of-View



What to do if...

Load does not turn ON.

- Make sure the Red LED blinks every 15 seconds if there is occupancy. If not, separate the device from other noisy electronics, such as personal computers, electronic ballasts, and machinery.
- Use app to communicate to room controller and verify device is in the occupancy mode. Press and hold device button for 5-9 seconds until LED blinks White once. Select Device Identify icon (magnifying glass) to have device LED flash Green repeatedly. If unable to verify, confirm that all devices on the network are within specified RF range.
- Ensure that control devices are located properly to optimize RF design within installation location.
- Remove device and re-enroll it to the network.
- Reset sensor to its factory default settings.
- Check if sensor is actively daylighting (holding the lights OFF).

FCC STATEMENT

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.

FCC SUPPLIER'S DECLARATION OF CONFORMITY

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. Any changes or modifications not expressly approved by Leviton Manufacturing Co., could void the user's authority to operate the equipment. Leviton Manufacturing Co., Inc. 201 North Service Road, Melville, NY 11747, www.leviton.com.

IC STATEMENT

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

RF EXPOSURE COMPLIANCE INFORMATION

To ensure compliance with FCC's and ISED Canada's RF exposure requirements this device must be installed to provide a minimum of 20 cm between the device and people.

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FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada ULC** to the attention of the **Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9 or by telephone at 1 800 405-5320.**

LIMITED 2 YEAR WARRANTY AND EXCLUSIONS

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for two years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option. **For details visit www.leviton.com or call 1-800-824-3005.** This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. **There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose**, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to two years. **Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation**. The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort, or otherwise.

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For Technical Assistance Call: 1-800-824-3005 (USA Only) or 1-800-405-5320 (Canada Only) www.leviton.com

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