Lumina™ RF Wireless Occupancy Sensor
Cat. Nos. ZSC04 & ZSC15

PK-A3251-10-00-0A

INSTALLATION AND QUICK START SHEET

ENGLISH

WARNINGS
- **TO AVOID FIRE, SHOCK OR DEATH, DO NOT RECHARGE, DISASSEMBLE OR INCINERATE BATTERY, NOR HEAT IT ABOVE 100° C (212° F).** Dispose of used battery promptly. DO NOT dispose of battery in normal household waste. Keep away from children. Please contact your local waste provider or recycling facility for proper disposal of used battery.

CAUTIONS
- Replace battery with Panasonic, Energizer, Sony, Duracell, Rayovac or Maxell CR2450 only. Use of another battery may present a risk of fire or explosion.
- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- If you are unsure about any part of these instructions, consult an electrician.
- For indoor applications only.
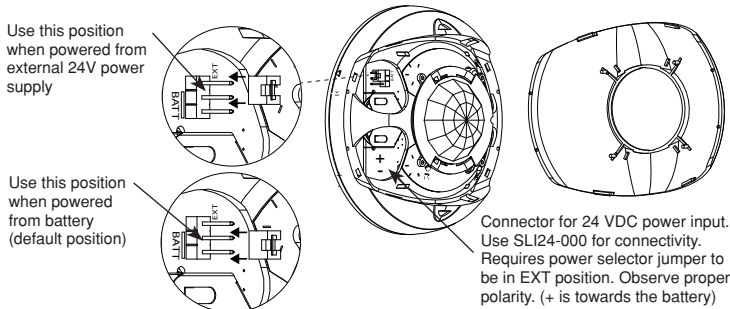- Save these instructions.

COMPATIBLE DEVICES
- Lumina™ gateway
- Lumina™ RF Room Controller

NOTES
- Requires Lumina™ gateway or Lumina™ RF Room Controller for programming and control communication to other devices.
- Do not mount the sensor until after it has been programmed to communicate with all appropriate receivers.

DESCRIPTION
This sensor is primarily intended to be powered via battery, however, it may be powered by at +24VDC supply, ex: OPB15, OSP20. When powering from an external source, the battery must be removed and discarded, and SLI24-000 jumper should be used to connect to the 24V supply.

Use this position when powered from external 24V power supply

Use this position when powered from battery (default position)

Connector for 24 VDC power input. Use SLI24-000 for connectivity. Requires power selector jumper to be in EXT position. Observe proper polarity. (+ is towards the battery)

The occupancy sensor is a 2.4GHz wireless communication device which transmits a wireless message to the Lumina™ gateway or Lumina™ RF Room Controller. This communication occurs each time an occupancy change occurs in a room, occupied to unoccupied or unoccupied to occupied. The gateway/controller then routes the message to the load control device to take assigned action. Occupancy/Vacancy time delays are configured and maintained in the controller and load control devices; this improves the design and efficiency of the wireless system.

QUICK START: ENROLLMENT, FACTORY DEFAULT, AND VERIFICATION

NOTE: Remove "Battery Pull Tab" to activate device.
Make sure the sensor is within 16 feet (5 meters) of the desired receiver when programming.

• **To enroll device to network:**

Press and hold green button for 10 seconds until LED indicator blinks amber. On release, LED indicator will blink green rapidly indicating start of join process. On successful enrollment, LED indicator will blink green 3 times.

• **To factory reset device:**

NOTE: If green button is pressed for more than 25 seconds, the indicator times out and no functions are performed.

Press and hold green button for 20 seconds. Amber LED will start blinking once every two seconds between 10 and 20 seconds, then, at 20 seconds start blinking rapidly. When LED starts blinking rapidly, release.

LED indicator will blink green 5 times when reset process is completed successfully.

• **To verify device enrollment status:**

Press green button
LED indicator will blink green 3 times if network enrollment is successful
LED indicator will blink red 2 times if network enrollment is incomplete
LED indicator will blink red 1 time if no network is enrolled

OPERATION
LED Indicator
The Lumina™ RF occupancy sensor uses a LED indicator that flashes red to indicate proper occupancy status. This LED is also used during programming.

OPERATION TESTING
1. Once joined into a network, confirm occupancy detection (RED LED will blink), then cover the occupancy sensor so no further detection is detected.
   a. Verify timeout and load turns OFF accurately
2. Uncover the occupancy sensor to verify Auto-ON responds and energizes load(s).

FIELD OF VIEW & SENSITIVITY TESTING
- Perform a FOV walk test of the coverage area and confirm the RED LED blinks and detects within the responsible space.
- Adjust the sensitivity POT as necessary to increase or decrease the detection sensitivity within the field of view.

PIR SENSITIVITY ADJUSTMENT: This can increase or decrease the sensitivity within the field of view. Use the red knob to increase or decrease sensitivity. When complete, **push the green button** to save the setting.

INSTALLATION

Do not mount the sensor until after it has been programmed to communicate with all appropriate receivers. Equipment needed for installation:
- Ceiling Tile Stem, Nut, & Washer (included)
- Double Sided Foam Mounting Tape (included)
- Screws (included) with Wall Anchors (not included)

Location: (Choose location to mount the sensor and the appropriate method - Tile Stem, Screws, Mounting Tape)
1. Sensor location is very important to ensure correct operation within each unique space.
2. Improve performance to Auto-ON response and reduce risk of false tripping from external motion (example: hallway traffic) by choosing the best location.
3. Do not locate a sensor on a mounting surface within 6 feet of - air ducts, moving machinery, heat sources.
4. Included PIR shields can be used to decrease field of view. 180° shield is provided, and a full shield is provided which can be cutout to your specific needs.

Sensor location optimized for best entry detection and reduced nuisance tripping from hallway
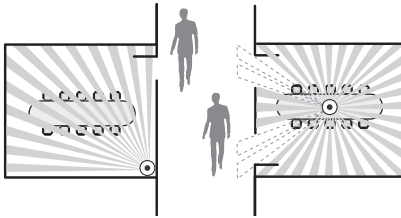
Sensor location center of room has potential risk of nuisance tripping from hallway traffic

CEILING TILE MOUNT

1. Use the included ceiling tile stem, connect the stem to the back cover and twist to secure, reference figures below for details.
2. In desired location, press the ceiling tile stem through the ceiling tile and install the washer and nut above the ceiling tile to secure.

   NOTE: The sensor back cover and front body are keyed with arrows for ease of separation. To lock the sensor body to the back cover, align arrows and press back cover to the front body, then rotate until the arrows are not aligned.
3. Rotate the sensor to the desired orientation.

Mounting Option Diagram A
Sensor Mounted to Drop Ceiling Using Tile Stem

Drop Ceiling 1" thick maximum

Nut   Washer

Tile Stem
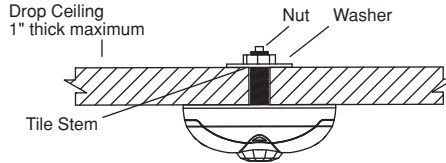
SURFACE MOUNT USING SCREWS

1. To remove the back cover of the sensor, locate alignment arrow on the edge of the back cover and on the edge of the front body, rotate the back cover and front body until the two arrows line up and pull apart.
2. Install back cover of the ceiling sensor to desired location using the included screws (nuts and washers), or screws in combination with commercially available wall anchors. If necessary, drill pilot holes.
3. Secure the sensor body to the back cover by aligning the arrows. Lock it by turning the sensor such that the arrows do not line up.
4. Rotate the sensor to the desired orientation.

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

Nut
Washer
Wallboard Ceiling
Sensor Back Cover
Mounting Screw
Key lock Arrow
Sensor Base
Sensor Front Cover

Back Cover (inside)
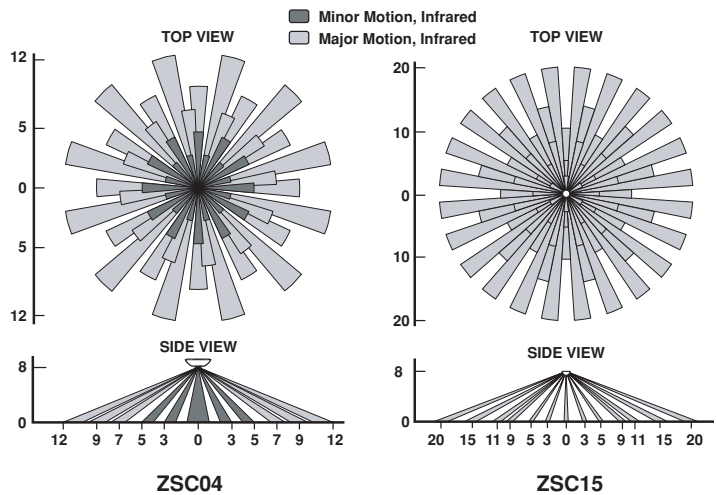Mounting Screw
Back Cover shown mounted to ceiling with screws

SURFACE MOUNT USING TAPE

1. Remove backing material and apply double sided mounting tape to the Sensor Base.
2. Press and hold the Wireless occupancy sensor to the desired mounting surface for a few seconds before releasing. **NOTE:** The sensor back cover and front body are keyed with arrows for ease of separation. To lock the sensor body to the back cover, align arrows and press back cover to the front body, then rotate until the arrows are not aligned.
3. Rotate the sensor to the desired orientation.

TROUBLESHOOTING

- Verify red LED is blinking every 15 seconds with occupancy. This indicates the device is working properly and detecting occupancy.
- Separate the device from other noisy electronics (example: personal computers, electronic ballasts, machinery).
- Ensure the RF design is within specified range.
- Ensure that the control devices are located properly to optimize RF design within buildings (example: building construction compared to line of sight).
- Remove the device and re-enroll to the network.
- Reset to factory defaults.

PASSIVE INFRARED FIELD OF VIEW

■ Minor Motion, Infrared
■ Major Motion, Infrared

TOP VIEW   TOP VIEW

SIDE VIEW   SIDE VIEW

ZSC04   ZSC15

WEB VERSION