Lutron MS-Z101-BL

Lutron MS-Z101-BL Dimmer Occupancy Sensor Instruction Manual

Model: MS-Z101-BL

Product Overview

The Lutron MS-Z101-BL Dimmer Occupancy Sensor is designed to provide automatic lighting control and dimming capabilities. This device integrates occupancy sensing with dimming functionality to enhance energy efficiency and convenience in various indoor environments. It operates in both manual and automatic modes, offering flexibility in lighting management.



Figure 1: Front view of the Lutron MS-Z101-BL Dimmer Occupancy Sensor. This image displays the device's faceplate, including the main dimming control, the occupancy sensor lens, and various adjustment dials for time delay, mode, and PIR sensitivity. Labels such as '30m', '15', '5', '1' for time delay, 'Occ', 'Lrn', 'Fixd', 'Vac' for mode, and 'Hi', 'Med', 'Low', 'Min' for PIR sensitivity are visible alongside the 'Alt' button.

Setup and Installation

Important Safety Information: Installation should only be performed by a qualified electrician or according to local electrical codes. Always turn off power at the circuit breaker before installation.

1. **Power Disconnection:** Locate the circuit breaker controlling the light fixture and turn off the power. Verify power is off using a voltage tester.
2. **Wiring:** Connect the sensor's wires to the appropriate household wiring. The device uses a screw connector type and is designed for 1-way circuits. Refer to the wiring diagram provided in the product packaging for specific connections.
3. **Mounting:** Secure the sensor into the wall box using the provided screws. Ensure it is flush with the wall surface.
4. **Faceplate Installation:** Attach the decorative faceplate (sold separately, if applicable) over the sensor.
5. **Power Restoration:** Turn the power back on at the circuit breaker.

The device is designed for 120-277V operation, 50/60 Hz, and 8A. Ensure your electrical system matches these specifications.

Operating Instructions

The Lutron MS-Z101-BL offers flexible control over your lighting. Familiarize yourself with the controls shown in Figure 1.

- **Main Dimming Control:** The large central button acts as a push-button actuator for on/off control and a touch control for dimming. Press to turn lights on/off. Press and hold to adjust brightness.
- **Operation Mode (Mode Dial):**
  - **Occ (Occupancy):** Lights turn on automatically when motion is detected and turn off after a set time delay when the space is vacant.
  - **Lrn (Learn):** The sensor learns typical occupancy patterns to optimize its behavior.
  - **Fixd (Fixed):** Maintains a fixed light level when occupied.
  - **Vac (Vacancy):** Lights must be turned on manually. They will turn off automatically after a set time delay when the space is vacant.
- **Time Delay (Timer Dial):** This dial sets how long the lights remain on after the last detected occupancy. Options typically include:
  - **30m:** 30 minutes
  - **15:** 15 minutes
  - **5:** 5 minutes
  - **1:** 1 minute
- **PIR Sensitivity (PIR Dial):** Adjusts the sensitivity of the Passive Infrared (PIR) sensor to detect motion.
  - **Hi (High):** Most sensitive, detects minor movements.
  - **Med (Medium):** Standard sensitivity.
  - **Low (Low):** Less sensitive, requires more significant movement.
  - **Min (Minimum):** Least sensitive.
- **Alt Button:** The function of the 'Alt' button may vary depending on the specific configuration or system integration. Refer to advanced programming guides if applicable.

Maintenance

The Lutron MS-Z101-BL Dimmer Occupancy Sensor requires minimal maintenance.

- **Cleaning:** To clean the sensor, gently wipe the surface with a soft, damp cloth. Do not use abrasive cleaners, solvents, or harsh chemicals, as these can damage the finish or internal components.
- **Sensor Lens:** Ensure the sensor lens is kept clear of dust and obstructions for optimal performance.
- **No User-Serviceable Parts:** There are no user-serviceable parts inside the unit. Do not attempt to open or repair the device.

Troubleshooting

If you experience issues with your Lutron MS-Z101-BL sensor, consider the following common solutions:

- **Lights Not Turning On Automatically:**
  - Check the 'Mode' dial. Ensure it is set to 'Occ' (Occupancy) if automatic turn-on is desired.
  - Verify the 'PIR Sensitivity' is not set too low ('Min'). Adjust to 'Med' or 'Hi'.
  - Ensure there are no obstructions blocking the sensor's view.
  - Confirm power is supplied to the unit.
- **Lights Not Turning Off:**
  - Check the 'Time Delay' setting. A longer delay will keep lights on for a longer period after vacancy.
  - Ensure there is no continuous motion within the sensor's detection range.
  - Verify the 'Mode' dial is not set to a mode that overrides automatic shut-off (e.g., if manually forced on in certain advanced configurations).
- **Dimming Not Working:**
  - Ensure the connected light fixtures are dimmable.
  - Confirm the wiring is correct for dimming functionality.
- **Resetting the Sensor:** If issues persist, try turning off the power at the circuit breaker for a few minutes, then restore power. This can sometimes resolve minor operational glitches.

For further assistance, contact Lutron customer support.

Specifications

Feature	Detail
Brand	Lutron
Model Number	MS-Z101-BL
Operation Mode	MANUAL-AUTOMATIC
Control Method	Touch
Actuator Type	Push Button
Voltage	120-277V
Frequency	50/60 Hz

Current Rating	8A
Circuit Type	1-way
Connector Type	Screw
Terminal Type	Screw
Contact Type	Normally Open
Contact Material	Copper
International Protection Rating	IP00
Connectivity Protocol	X-10
Dimensions (L x W x H)	6 x 6.9 x 2.4 inches
Item Weight	4.8 ounces
Included Components	Dimmer, lights, sensors (as per product listing)
Batteries Required?	No
Certifications	CSA Certified, FCC, RoHS Compliant
Date First Available	January 15, 2015

Warranty and Support

Lutron products are designed for reliability and performance. For specific warranty details, please refer to the warranty card included with your product or visit the official Lutron website.
For technical support, product inquiries, or assistance with installation and operation, please contact Lutron customer service:

- **Website:** www.lutron.com
- **Phone:** 1-890-523-9466 (Please verify this number with official Lutron sources for accuracy)

When contacting support, please have your product model number (MS-Z101-BL) and purchase information readily available.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question