



MAESTRO WMS-A102 Dual Technology Sensor Switch Installation Guide

[Home](#) » [MAESTRO](#) » MAESTRO WMS-A102 Dual Technology Sensor Switch Installation Guide 

MAESTRO

Dual Technology Sensor Switch Installation Guide

| | |
|----------|------------|
| MS-A102 | MS-A102-V |
| WMS-A102 | WMS-A102-V |

- Occupancy: Vacancy**
Lighting : 120 – 277 V~ 50 / 60 Hz 6 A
Fan : 120 V~ 50 / 60 Hz 4.4 A 1/6 HP
Combined lighting and fan load : 120 V~ 50 / 60 Hz 4.4 A
Major motion coverage: 30 ft × 30 ft (9 m × 9 m) [900 ft² (81 m²)]
Minor motion coverage: 20 ft × 20 ft (6 m × 6 m) [400 ft² (36 m²)]

LUTRON



P/N 032565 Rev. A
10/2020
For additional features, wiring help, troubleshooting, and product information please visit:
www.lutron.com/DTMaestroInstall

Contents

- [1 Important Notes](#)
- [2 Troubleshooting](#)
- [3 Wiring](#)
- [4 Select Custom Settings](#)
- [5 Change Settings](#)
- [6 Additional Settings](#)
- [7 Limited Warranty](#)
- [8 Documents / Resources](#)
- [9 Related Posts](#)

Important Notes

Please read before installing.

1. A ground connection is required for product to function. Connect green-sleeved wire to ground only in retrofit and replacement applications. When neutral connection is available, remove green sleeve and connect to neutral. If neither wire is present, consult a licensed electrician.
2. When power is applied, the sensor switch can be manually turned on or off after the first 10 seconds and will automatically control the load after 2 minutes.
3. The sensor switch requires an unobstructed view of the room and line-of-sight to detect motion.
4. Hot objects or moving air currents can affect the performance of the sensor switch and may cause the sensor to turn on unexpectedly or maintain its current state longer than desired.
5. CAUTION: To reduce the risk of overheating and possible damage to other equipment, DO NOT use to control receptacles.
6. Install in accordance with all national and local electrical codes.
7. For indoor use only. Operate between 32 °F and 104 °F (0 °C and 40 °C).
8. Clean with a soft damp cloth only. **DO NOT** use any chemical cleaners.

Troubleshooting

| Symptoms | Possible Solutions |
|---|--|
| After installation: • Sensor switch does not respond to button presses OR • Sensor switch worked only once or doesn't work at all | • Black wire is not connected to Line / Hot. Swap black and red wires. • Check wiring; ground wire must be connected for product to function. • Wait 10 seconds. |
| Not all of my sensor modes are available while programming | • Sensor modes are limited in the Vacancy model (MS-A102-V). |
| Lights do not turn ON when space is occupied | • Off-While-Occupied mode is Enabled and the timeout has not expired. • Sensor mode is set to Vacancy. • You may have the Vacancy model (MS-A102-V). • Sensor is set to one of the Ambient Light Detection (ALD) settings and the room is too bright for the current light level setting. • Sensor does not have full view of the room. Move objects blocking line-of-sight. |

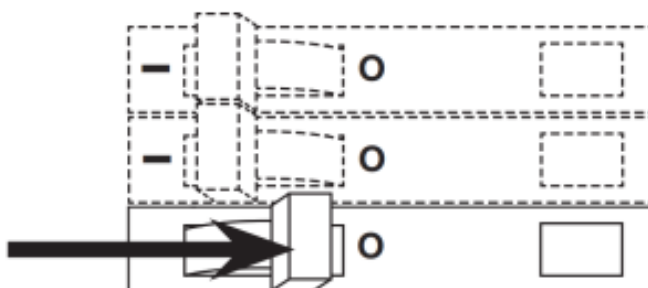
For additional features, wiring help, troubleshooting, and product information please visit:
www.lutron.com/DTMaestroInstall

Wiring

1. Turn power OFF

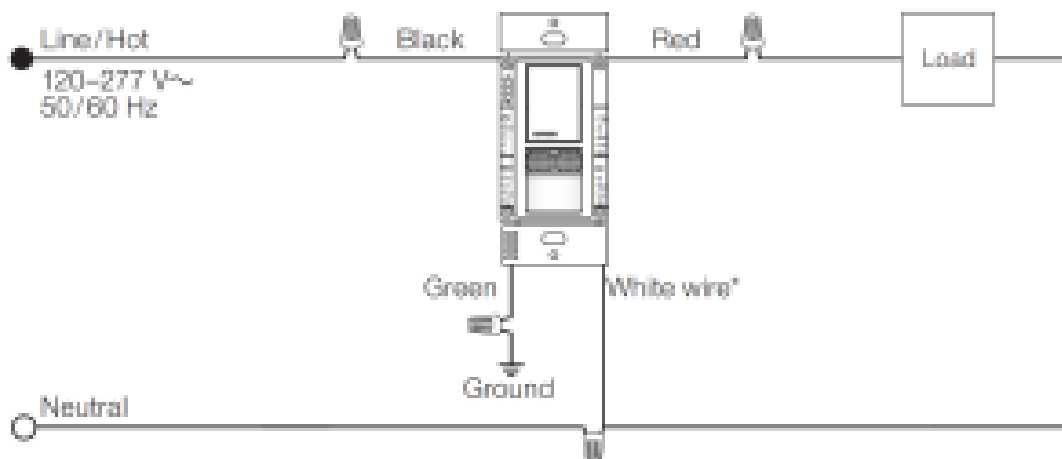


WARNING! Shock Hazard. May result in serious injury or death. Turn power OFF at circuit breakers before installing the unit.

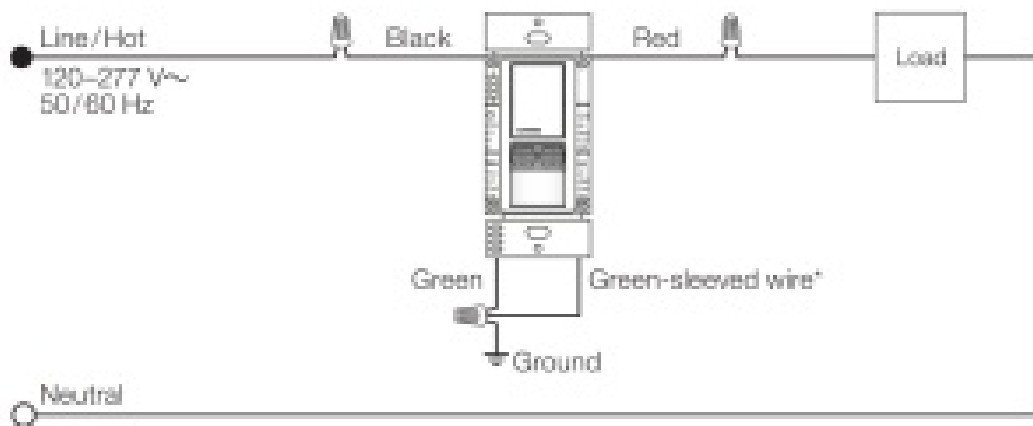


2. Connect sensor switch

A. When neutral is present in outlet box: remove green sleeve, connect white wire to neutral



B. If no neutral is present, connect the green-sleeved wire to ground



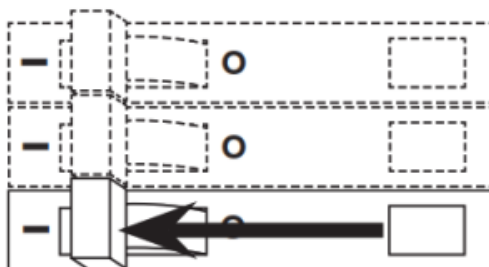
* The green-sleeved wire can be changed to a white wire by removing the green sleeve.

- For additional wiring instructions, please visit www.lutron.com/DTMaestroInstall
- Before installing wallplate, program all desired settings. See back for programming instructions.

3. Turn Power ON



CAUTION! Risk of Electric Shock. Leakage current present. Earth connection required before connecting power.



4. Wait for 2 minutes

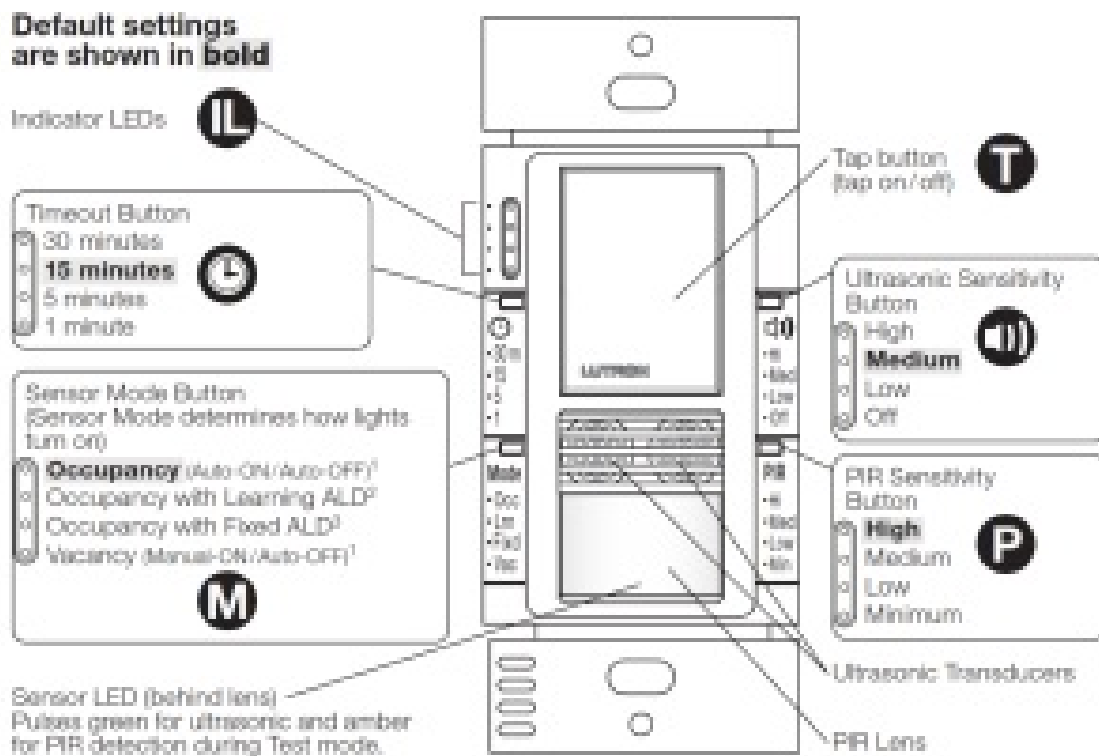
- The sensor switch will manually control the load after the first 10 seconds.
- Once power has been restored, the sensor switch will automatically control the load after the first 2 minutes.

Select Custom Settings

To display current settings tap the Timeout (⌚), Sensor Mode (M), Ultrasonic Sensitivity (🔊), or PIR Sensitivity (P) button. The indicator LED (IL) that corresponds to the current setting will illuminate.

Change Settings

1. Press and hold the desired programming button (⌚, M, 🔊, or P) until an IL begins to flash (about 3 seconds).
2. Tap the same programming button to cycle to your desired setting.
3. Press and hold the same programming button until the IL goes solid to lock your selection (about 3 seconds).



- Sensor Mode is locked as “Vacancy” in the MS-A102-V (Vacancy model).
- Learning ALD (Ambient Light Detection) mode: Lights remain off if enough natural light is present. If the lights turn on and the user doesn’t want that much light, the user can tap the button within 5 seconds of entering the room. Similarly, if the lights don’t turn on when entering a space and the user wants more light, the user can tap the button within 5 seconds of entering the room. Over time, the sensor will learn the user’s preferred light level.
- Fixed ALD mode: Lights turn on only when there is less than a set amount of natural light available. The set level can be adjusted in “Fixed ALD Level” settings.

Additional Settings

Note: All programming options and additional information are available at www.lutron.com/DTMaestroInstall

Test Mode:

Test Mode is a short timeout (less than 15 seconds) that will test the coverage of the sensor at the current settings.

To enable Test Mode:

1. Wait 2 minutes after initial power up.
2. Press and hold **T** until the PIR lens flashes (about 7 seconds).
3. The device will exit Test Mode automatically after 5 minutes of inactivity, or when any button is pressed.

Note: An amber LED flashes to indicate PIR detection, a green LED flashes to indicate ultrasonic detection. You may hold **P** or for **11** seconds while in test mode to test the current sensitivity of that specific technology.

Restore Default Settings:







Press and hold **11** and **P** until all **IL** blink slowly (about 7 seconds). This will restore ALL of the sensor’s settings back to their defaults.

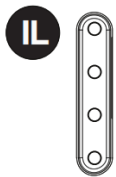
Off-While-Occupied

When Off-While-Occupied is Enabled: After manual shutoff, the sensor will keep lights off as long as the space is occupied and the timeout has not expired. This setting is best for rooms where presentations are given and lights may be kept off during occupancy. This is the default setting.

When Off-While-Occupied is Disabled: After manual shutoff, the sensor will keep lights off for 25 seconds before looking for motion. If motion is detected, the lights will turn back on. This setting is best for high-traffic areas like bathrooms and hallways.

Change Setting:

1. Press and hold  and  at the same time until an  begins to flash (about 3 seconds).
2. Tap  to cycle to your desired setting.
3. Press and hold  until the  goes solid to lock your selection.










Off-While-Occupied Disabled

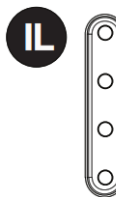
Off-While-Occupied Enabled

Setting Fixed ALD Level:

The light level you set will determine when a unit set in “ALD Fixed” sensor mode will turn lights on, or keep lights off, upon detecting occupancy. This setting only affects the behavior of a sensor in “ALD Fixed” mode.

Change Setting:

1. Press and hold  and  until an  begins to flash (about 3 seconds).
2. The Ambient Light Detect light level will now be displayed on the . Tap  to cycle to your desired setting.
3. Press and hold  until the  goes solid to lock your selection.



Light Level

High: turns lights ON unless room is very bright Medium

Low (Default when in ALD Fixed mode)

Minimum: turns lights ON only when room is dark

Limited Warranty

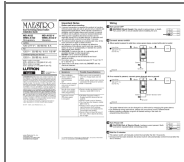
(Valid only in U.S.A., Canada, Puerto Rico, and the Caribbean). Lutron will, at its option, repair or replace any unit that is defective in materials or manufacture within five years after purchase. For warranty service, return unit to place of purchase or mail to Lutron at 7200 Suter Rd., Coopersburg, PA 18036-1299, postage pre-paid. This warranty is in lieu of all other express warranties, and the implied warranty of merchantability is limited to FIVE years from purchase. This warranty does not cover the cost of installation, removal or reinstallation, or damage resulting from misuse, abuse, or damage from improper wiring or installation. This warranty does not cover incidental or consequential damages. Lutron's liability on any claim for damages arising out of or in connection with the manufacture, sale, installation, delivery, or use of the unit shall never exceed the purchase price of the unit. This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitation on how long an implied warranty may last, so the above limitations may not apply to you. Lutron and Maestro are trademarks or registered trademarks of Lutron Electronics Co., Inc. in the US and/or other countries.

Lutron Electronics Co., Inc.
7200 Suter Road
Coopersburg, PA 18036-1299
www.lutron.com/support

LUTRON

Customer Assistance: www.lutron.com/support
U.S.A., Canada, Caribbean: **1.844.LUTRON1** (588.7661)
Mexico: **+1.888.235.2910**
Others: **+1.610.282.3800**

Documents / Resources



[MAESTRO WMS-A102 Dual Technology Sensor Switch](#) [pdf] Installation Guide
MS-A102, WMS-A102, WMS-A102 Dual Technology Sensor Switch, Dual Technology Sensor Switch

Manuals+