Maestro® 0–10 V Dimmer Sensor
Setting the new standard for 0–10 V control

• Simple and cost-effective means more jobs
  – Fewer parts than a typical dimming and sensing solution
  – Less time spent on installation

• Easy
  – Quick installation
  – Works right out of the box—no programming required

• Reliable
  – No false-ons or false-offs

0–10 V Dimmer
Sinking control for 0–10 V fluorescent and LED fixtures

Passive Infrared (PIR) Sensor
Fine motion detection with exclusive Lutron XCT™ technology

Maestro 0–10 V Dimmer Sensor

LUTRON®
Simple and cost-effective

Three-in-one
- One product—not three—for code compliant design
- Saves on product cost
- Saves on installation time—so you’re in and out of a job fast

**Lutron 0–10 V Dimming & Sensing**

**Typical 0–10 V Dimming & Sensing**

<table>
<thead>
<tr>
<th>Components</th>
<th>1 component</th>
<th>3 components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>budget friendly</td>
<td>costly</td>
</tr>
<tr>
<td>Installation Time*</td>
<td>20 minutes</td>
<td>50 minutes</td>
</tr>
</tbody>
</table>

* Installation estimations provided by two certified electrical contractors in distinct U.S. markets
Works right out of the box

- No programming required
- Optimized for ideal sensitivity
- Settings are simple to adjust—**no dip switches or dials**
- Neutral optional—one model has you covered with the option to connect the neutral
- 3-way—works with a Maestro® accessory switch or mechanical switch

Know the facts

- **0–10 V** is the most widely available dimming technology for commercial spaces
- ASHRAE 90.1.2010 and Title 24, the leading energy-efficiency standards, require **occupancy sensing and multi-level lighting control** in small spaces.
- Most manufacturers require **three components** in order to deliver occupancy sensing combined with 0-10V control

Adjustable sensor settings

- **Timeout**: Adjust to 1, 5, 15*, or 30 minutes
- **Mode** (sensor modes): Lights automatically turn off in all sensor modes
  - Occ - Occupancy mode*
  - Lrn - Occupancy with learning ALD mode
  - Fixd - Occupancy with fixed ALD mode
  - Vac - Vacancy mode (no ALD)
- **Sensitivity**: High*, medium, low, minimum

*Default settings designed for most common applications

Adjustable dimmer settings

- **High- and low-end trim**: The user has the option to set high-end and low-end light level
- **Adjustable fade time**
  - fade-to-on: .75 – 15 seconds
  - fade-to-off: .75 – 15 seconds
- **Selectable dimming curve**: Optimizes driver performance
  - Linear*
  - Square Law (logarithmic)
Superior sensing technologies

XCT™ technology with cross-correlation—won’t leave you in the dark

Lutron sensors detect fine motion better than other PIR sensors

- Provides exceptional prevention of false-ons and false-offs
- Superior sensitivity—recognizes the difference between fine human motion and background noise

![Motion Detection Examples](image)

Person walking 3 feet
Movements like extending your arms
Small movements like flipping pages of a book
Lights stay off when room is unoccupied

Smart Ambient Light Detection (ALD) mode

Smart ALD learns your light level preference over time and adapts accordingly.

- If you want more light in the room, you can manually turn the lights on
- If you think there is too much light in the room, you can manually turn the lights off

![Light Sensitivity](image)

ALD keeps lights off when there is ample daylight in the space. Lights turn on only when natural light in the room is below the set threshold.
Superior dimming technologies

Miswire and load incompatibility alert

Maestro 0–10V dimmer sensor is a sinking control.
• Most fixtures are sourcing and require a sinking control, per standards as specified by IEC 60629.

Lens will flash if
• 0–10V control wire polarity is reversed
• Wired to sinking fixture
  In either case, the sensor acts as a switch until wired correctly.

Optimized dimming performance

• Selectable dimming curve ensures optimal performance
  – Linear*
  – Square Law (logarithmic)
• Smooth fade-to-on and fade-to-off

*Default settings designed for most common applications

Did you know...
There are two types of dimming: linear and logarithmic.
You may not know which type of dimming your driver uses.
Lutron's dimmer sensor allows you to select the appropriate type of dimming for optimized performance.
Lutron sensors are engineered with robust components and combined with award-winning aesthetics.

- **Extended relay lifetime** uses Lutron's patent-pending adaptive zero-cross switching.
- **Tamper-resistant lens**
- **Available in 27 colors**

Largest line of colors available

**Sensors are available in 27 colors; 7 gloss and 20 Satin Colors.**
- Gloss colors ship in 2 days
- Satin colors ship in 2-10 days

Limestone  
Paladium  
Stone
Maestro® 0–10 V Dimmer Occupancy Sensor

<table>
<thead>
<tr>
<th>Model number</th>
<th>Description</th>
<th>Voltage</th>
</tr>
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<tbody>
<tr>
<td>MS-Z101-XX*</td>
<td>Occupancy/vacancy single-pole/multi-location 8 A Auto-on/auto-off or manual-on/auto-off</td>
<td>120-277 V~</td>
</tr>
<tr>
<td>MS-Z101-V-XX*</td>
<td>Vacancy single-pole/multi-location 8 A Manual-on/auto-off only</td>
<td>120-277 V~</td>
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* XX denotes color suffix

0–10 V dimmers

- Nova T®
- Diva®

In-wall Maestro sensor switches and dimmers for additional applications

- PIR sensor switch
- PIR dual-circuit sensor switch
- PIR sensor C-L® dimmer
- Dual-tech sensor switch
- Dual-tech, dual-circuit sensor switch

Flexible, wireless energy-saving solutions for occupancy and daylight sensing

- Radio Powr Savr® ceiling sensor
- Wall, corner, hall sensor
- Daylight sensor
- 0–10 V PowPak®
- Pico® wireless remote
Coverage patterns

**Horizontal Beam Diagram**

- 15 ft (4.5 m)
- 10 ft (3 m)
- 5 ft (1.5 m)
- 0

**Vertical Beam Diagram**

- 4 ft (1.2 m)
- 10 ft (3 m)
- 20 ft (6 m)
- 30 ft (9 m)

- Major motion coverage 900 ft² (83 m²)
- Minor motion coverage 400 ft² (37 m²)