

# 0-10V Single room solutions

## Standalone



Diva 0-10V dimmer



Nova T☆ 0-10V dimmer



Maestro 0-10V dimmer sensor

## Wireless



PowPak wireless fixture controller and PowPak fixture sensor



PowPak dimming module with 0-10V control



Maestro Wireless 0-10V dimmer sensor

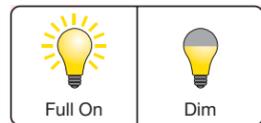
Radio Powr Savr occupancy and daylight sensors, and Pico wireless remote

0-10V is a common control protocol that you can find across the lighting industry. Originally developed for fluorescent ballast control, 0-10V has become one of the most common control protocols in the growing LED market.

Lutron offers a variety of 0-10V control options to give you both high-quality dimming capabilities and additional opportunities to save energy.

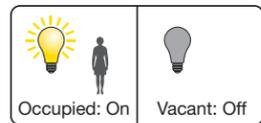
These control options allow you to take advantage of multiple energy-saving strategies.

## Lutron energy-saving strategies



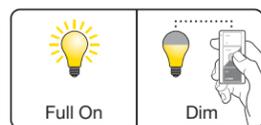
### Dimming

Gives occupants the ability to set the light levels.



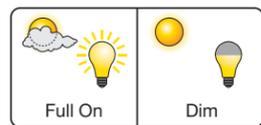
### Occupancy/vacancy sensing

Turns lights on when occupants are in a space and dims lights to a low level or turns lights off when they vacate the space.



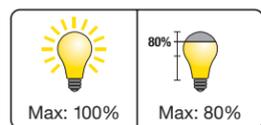
### Personal dimming control

Gives occupants the ability to set the light levels.



### Daylight harvesting

Dims electric light when daylight is available to light the space.



### High-end trim

Sets the maximum light level based on customer requirements in each space.

## Dimming



Diva 0-10V dimmer  
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Nova T☆ 0-10V dimmer  
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## Dimming and sensing



Maestro 0-10V dimmer sensor  
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## Dimming, sensing, personal control, and daylight harvesting



PowPak dimming module with 0-10V control  
**page 10**



Maestro Wireless 0-10V dimmer sensor  
**page 12**

## Individual fixture dimming, sensing, personal control, and daylight harvesting



PowPak wireless fixture controller with 0-10V control and PowPak fixture sensor  
**page 14**



## Divia 0–10V dimmer

- 0–10V dimmer for LED and fluorescent fixtures
- Two models available:
  - DVSTV
    - Controls 120–277V without a power pack
    - Provides 3-way preset switching functionality
  - DDTV
    - Requires a power pack
    - Use with a power pack for Class 2 installations, with wired occupancy sensors, for 347V operation, and for loads greater than 8A

### Models/Price

- DVSTV (gloss): \$97 List
- DVSCSTV (Satin Colors): \$107 List
- DDTV (gloss): \$105 List
- DVSCTV (Satin Colors): \$115 List

### Voltage

- DVSTV/DVSCSTV
  - 8A, 120–277V
- DDTV/DVSCTV
  - 16A with PP-DV, 120–277V
  - 16A with PP-347, 347V

**Ideal for** private offices and conference rooms

### The Lutron Advantage

- Patented technology extends relay life to 10 years
- Low-end and high-end trim in one product
- No derating for 277V installations
- No neutral required

### Energy-saving strategies

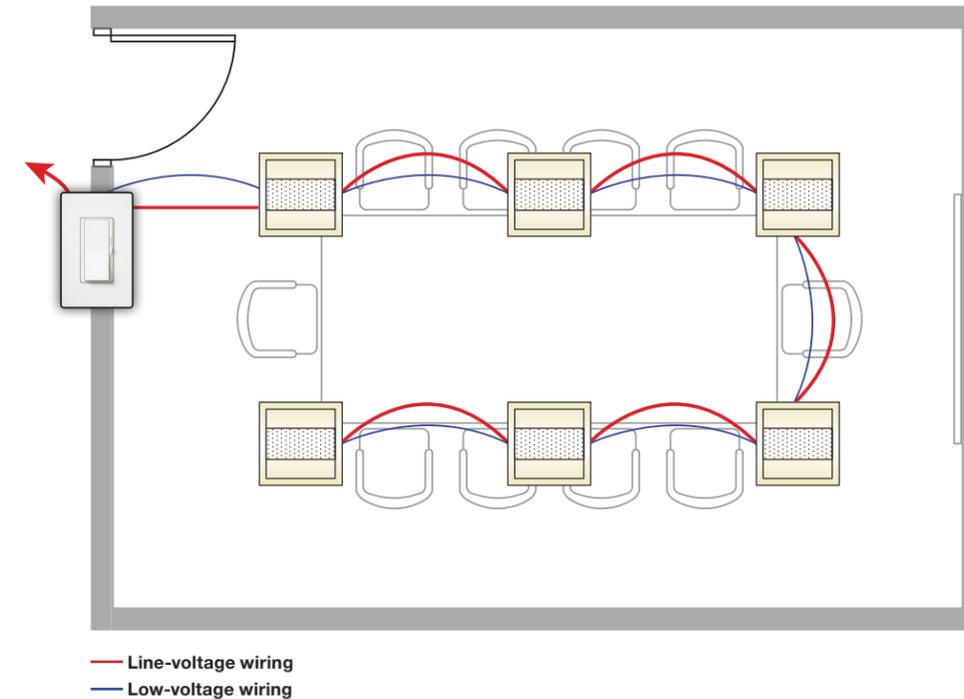
- Dimming
- High-end trim

### Codes met

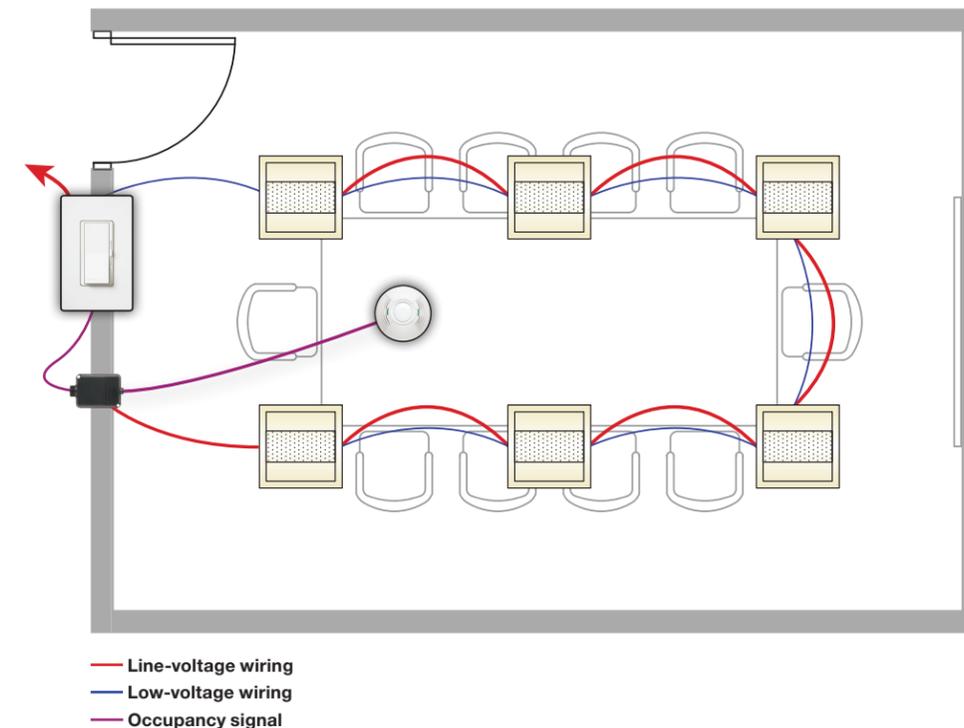
- Automatic shut-off with wired occupancy sensors through a power pack
- Area control
- Multi-level lighting control

## Application examples: Conference room

### Without power pack (DVSTV Only)



### With power pack (DDTV Only)





## Nova T☆ 0–10V dimmer

- 0–10V spec grade dimmer that can switch line voltage for fluorescent ballasts and LED drivers
- Controls 120–277V without a power pack
- Power pack required for Class 2 installations, for 347V operation (Canada), and for loads greater than 8
- Works with wired occupancy/vacancy sensors with the addition of the respective power pack

### Models/Price

NTSTV-DV: \$145 List

### Voltage

- 8A, 120–277V; up to 16A with the addition of a power pack (PP-DV)
- 16 A, 347 V (with power pack PP-347H)

**Ideal for** private offices, conference rooms, and hospitals

### The Lutron Advantage

- Spec grade with heavy-duty components for surge protection and long life
- Low-end and high-end trim in one product
- No derating for 277V installations
- No neutral required

### Energy-saving strategies

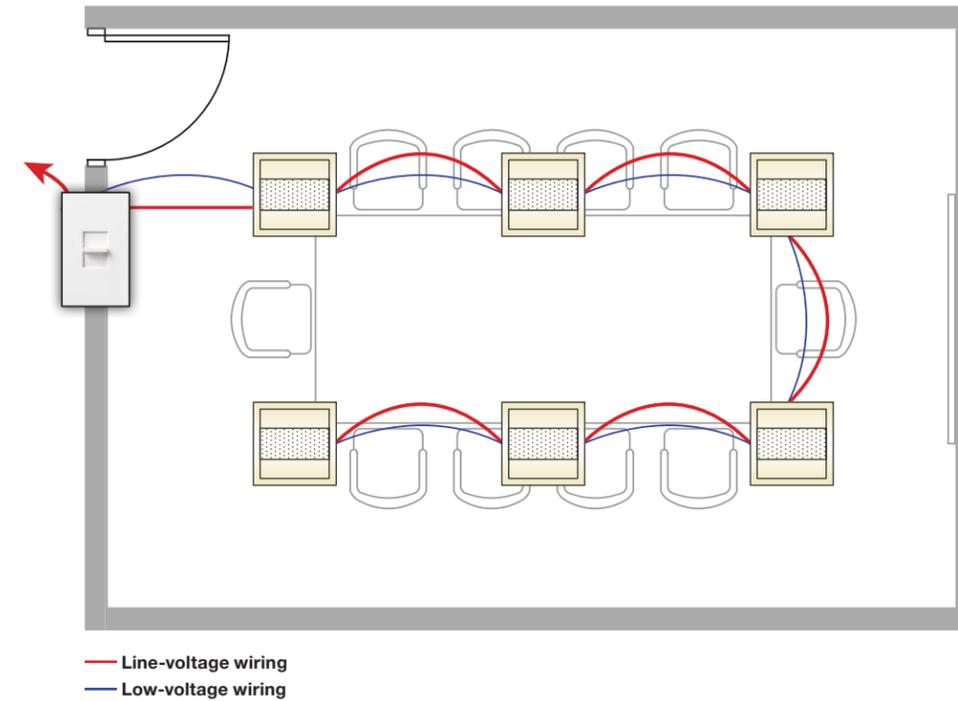
- Dimming
- High-end trim
- Occupancy sensing

### Codes met

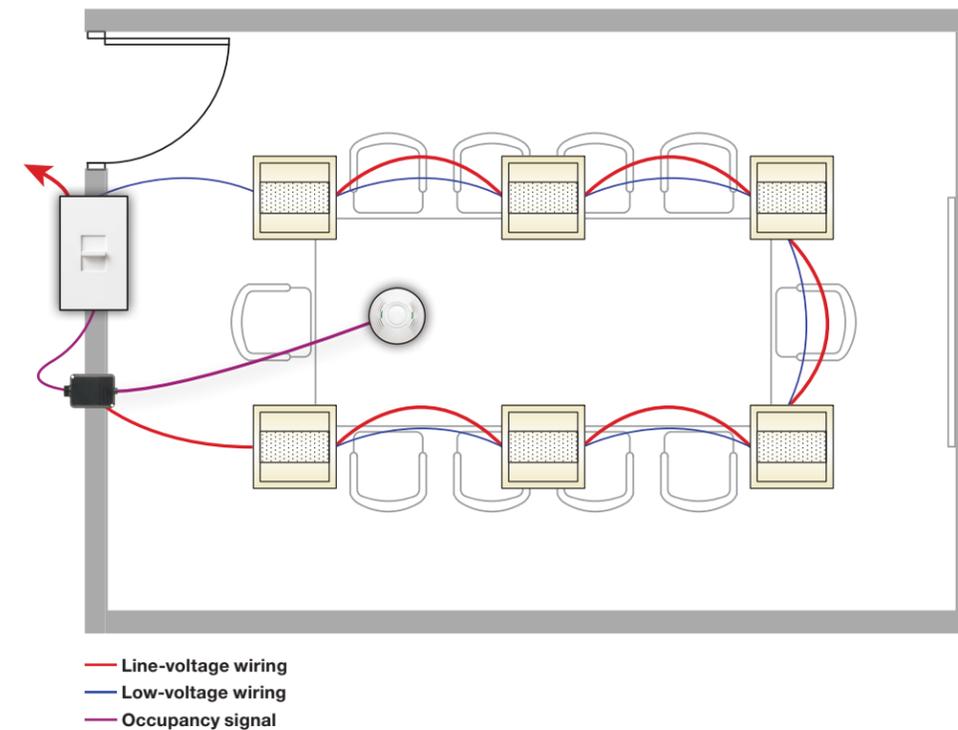
- Automatic shut-off with wired occupancy sensors through a power pack
- Area control
- Multi-level lighting control

## Application examples: Conference room

### Without power pack



### With power pack





## Maestro 0–10V dimmer sensor

- Dims 0–10V LED drivers or electronic fluorescent ballasts
- XCT PIR sensing
- Single pole or 3-way with Maestro companion or mechanical switch
- Neutral connection optional
- Sinking control for sourcing fixtures
- High- and low-end trim

### Models/Price

MS-Z101 (occupancy/vacancy): \$114 List

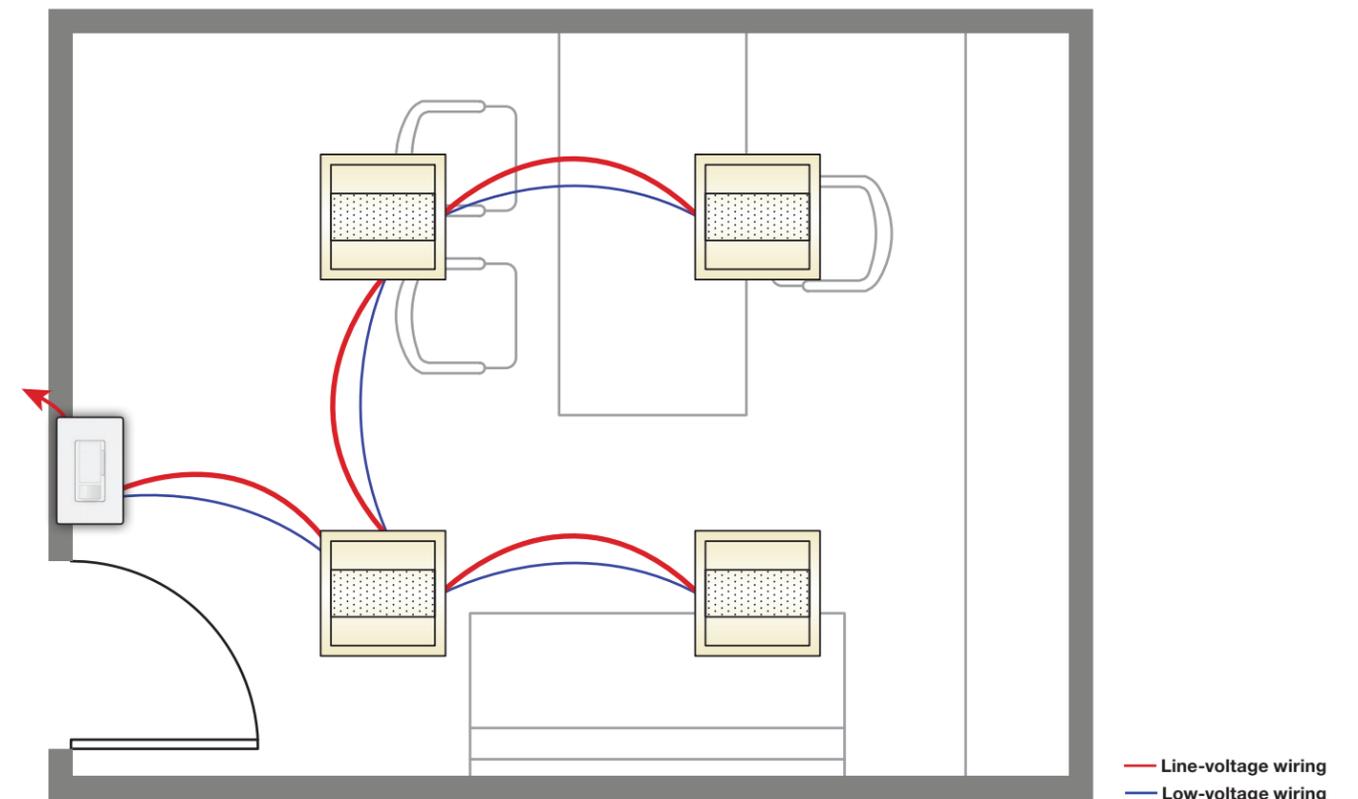
MS-Z101-V (vacancy only): \$114 List

### Voltage

8 A, 120–277V

**Ideal for** small spaces such as private offices, small classrooms, and equipment rooms

## Application example: Private office



### The Lutron Advantage

- Miswire and load incompatibility alert — lens will flash red if control is miswired or connected to an incompatible fixture
- Optimized dimming performance with selectable dimming curve and smooth fade to on and fade to off
- Lutron's XCT sensing technology
- Smart ambient light detection learns users preferred light level and keeps lights off when sufficient daylight is available
- Lutron's Adaptive Zero-Cross Switching extends relay lifetime

### Energy-saving strategies

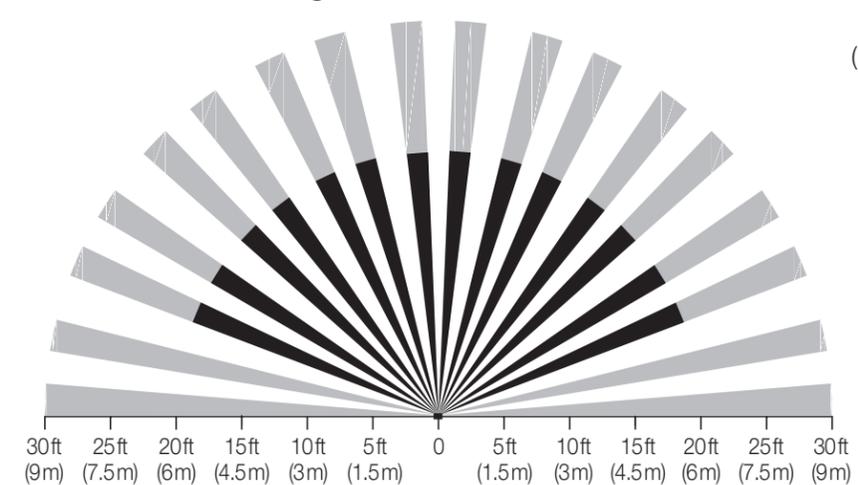
- Occupancy/vacancy sensing
- Dimming
- High-end trim

### Codes met

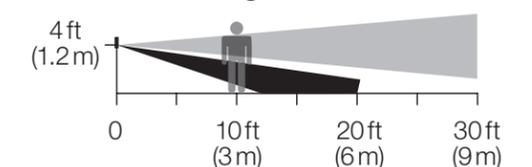
- Automatic shut-off
- Multi-level lighting control
- Area control

## Coverage patterns

### Horizontal Beam Diagram



### Vertical Beam Diagram



- Major motion coverage (900sq ft)
- Minor motion coverage (400sq ft)

# Dimming, sensing, personal control, and daylight harvesting (j-box)

## PowPak dimming module with 0–10V control

- Junction-box mounted dimming module that controls 0–10V fixtures
- Auto adapts to sink/source fixtures

### Models/Price

RMJS-8T-DV-B (connector): \$152 List

RMJS-8TN-DV-B (flying leads): \$152 List

### Voltage

8A, 120–277V

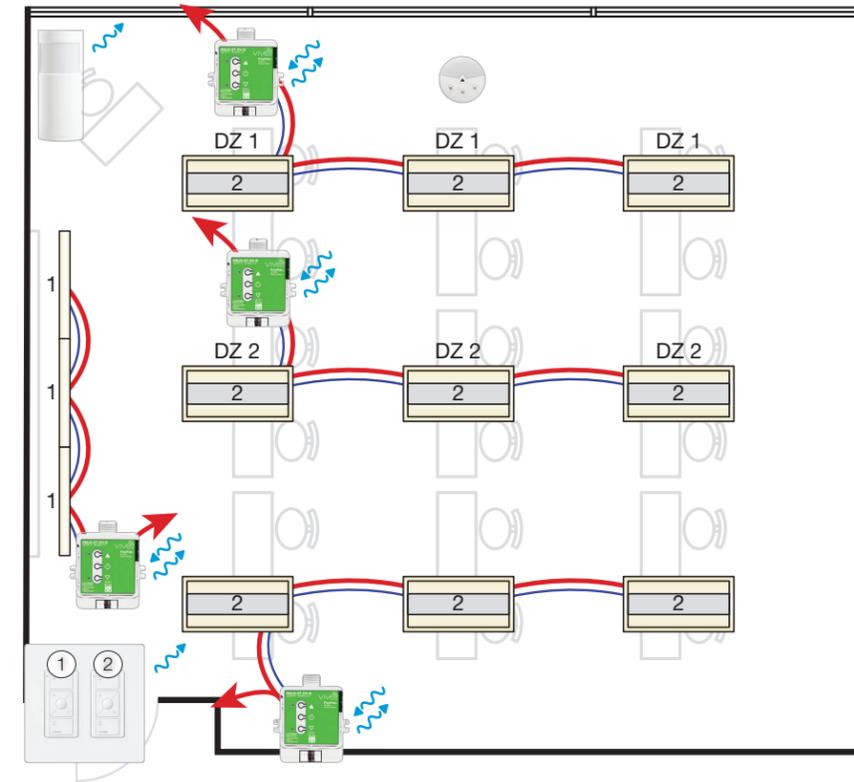
**Ideal for** larger conference rooms, larger classrooms, and training rooms

The PowPak dimming module with 0–10V control is a part of the Vive wireless solution, which includes:

- Radio Powr Savr wireless occupancy/vacancy sensors
- Radio Powr Savr daylight sensors
- Pico wireless remotes
- Maestro Wireless dimmers, switches, and sensors
- PowPak dimming and switching modules
- PowPak receptacle control modules
- Individual wireless fixture controllers



## Application example: Classroom



— Line-voltage wiring  
 — Low-voltage wiring  
 ~ Clear Connect RF Communication  
 DZ 1 & DZ 2 - Daylight Zones

### The Lutron Advantage

- Push-button setup —utilizes simple button-press programming to select and associate wireless devices
- Proven technology means no callbacks — uses Lutron's XCT sensing technology (Radio Powr Savr sensors) and Clear Connect RF wireless communication
- Add/relocate wireless remotes and sensors at any time with no new wiring

### Energy-saving strategies

- Occupancy sensing
- Dimming
- Personal control
- Daylight harvesting
- High-end trim

### Codes met

- Automatic shut-off
- Multi-level daylight control
- Multi-level lighting control
- Area control

## Vive wireless components (work with PowPak dimming module and Maestro Wireless dimmer sensor)



Radio Powr Savr occupancy/vacancy sensors

Radio Powr Savr daylight sensor

Pico wireless remote

Vive hub

# Dimming, sensing, personal control, and daylight harvesting (in-wall)



## Maestro Wireless 0-10V dimmer sensor

- Dims 0-10V LED drivers or electronic fluorescent ballasts
- XCT PIR sensing
- Single pole or multi-location with a Pico wireless remote
- Neutral required
- High-end and low-end trim

### Models/Price

MRF2S-8SD010 (occupancy/vacancy): \$180 List

MRF2S-8SDV010 (vacancy only): \$180 List

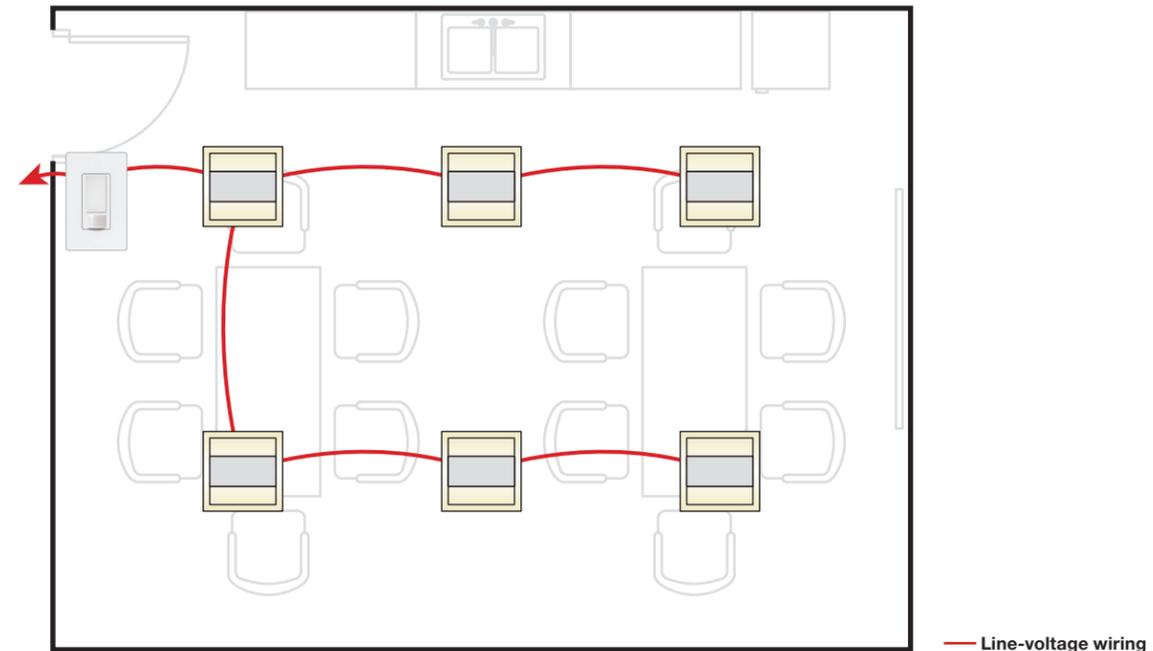
### Voltage

8A, 120/277V

**Ideal for** private offices, classrooms, conference rooms, and equipment rooms

Maestro Wireless 0-10V dimmer sensor is a part of the Vive solution. See pages 10-11 for more information.

## Application example: Breakroom



— Line-voltage wiring

### The Lutron Advantage

- Combines the simplicity of an in-wall sensor with the scalability of a Vive system. You can easily add wireless devices, for another point of control, additional occupancy coverage, or daylight sensing when needed
- Lutron's XCT sensing technology
- Smart ambient light detection learns users preferred light level and keeps lights off when sufficient daylight is available

### Energy-saving strategies

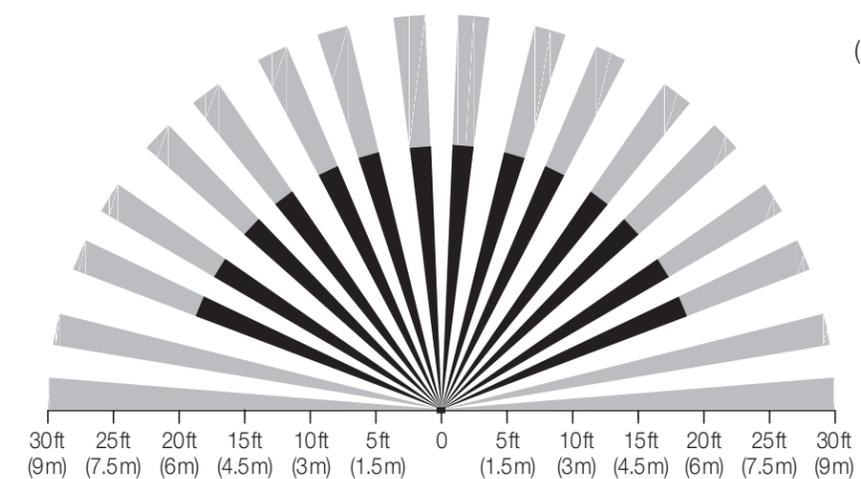
- Occupancy/vacancy sensing
- Dimming
- Personal control
- Daylight harvesting
- High-end trim

### Codes met

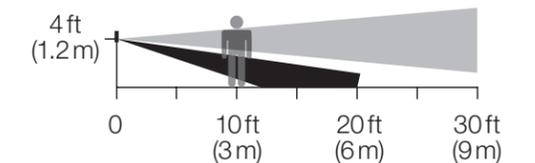
- Automatic shut-off
- Multi-level daylight control
- Multi-level lighting control
- Area control

## Coverage patterns

### Horizontal Beam Diagram



### Vertical Beam Diagram



- Major motion coverage (900 sq ft)
- Minor motion coverage (400 sq ft)

# Individual fixture dimming, sensing, personal control, and daylight harvesting



## PowPak wireless fixture controller with 0-10V control

- Adds wireless control to each individual 0–10V LED or fluorescent fixture in a space
- Enables combined occupancy detection and daylight harvesting at the individual fixture level

### Models/Price

FCJS-010: \$79 List

FCJS-010-BULK8: \$610 List  
(contractor 8-pack, \$76.25 List per unit)

FC-SENSOR: \$35 List

FC-VSENSOR: \$35 List

### Voltage

1A, 120–277V

**Ideal for** open offices and cafeterias

PowPak wireless fixture controller is a part of the Vive solution. See pages 10–11 for more information.

### The Lutron Advantage

- Simple to design and estimate — just count the fixtures
- No additional wiring required — works with existing high-voltage wiring; add more wireless remotes and sensors at any time, and reconfigure zones with no new wiring
- Works out of the box — no complex computer programming; associate Pico wireless remotes with just a button press or green laser
- Proven technology means no callbacks — uses Lutron's XCT sensing technology (fixture sensor) and Clear Connect RF wireless communication

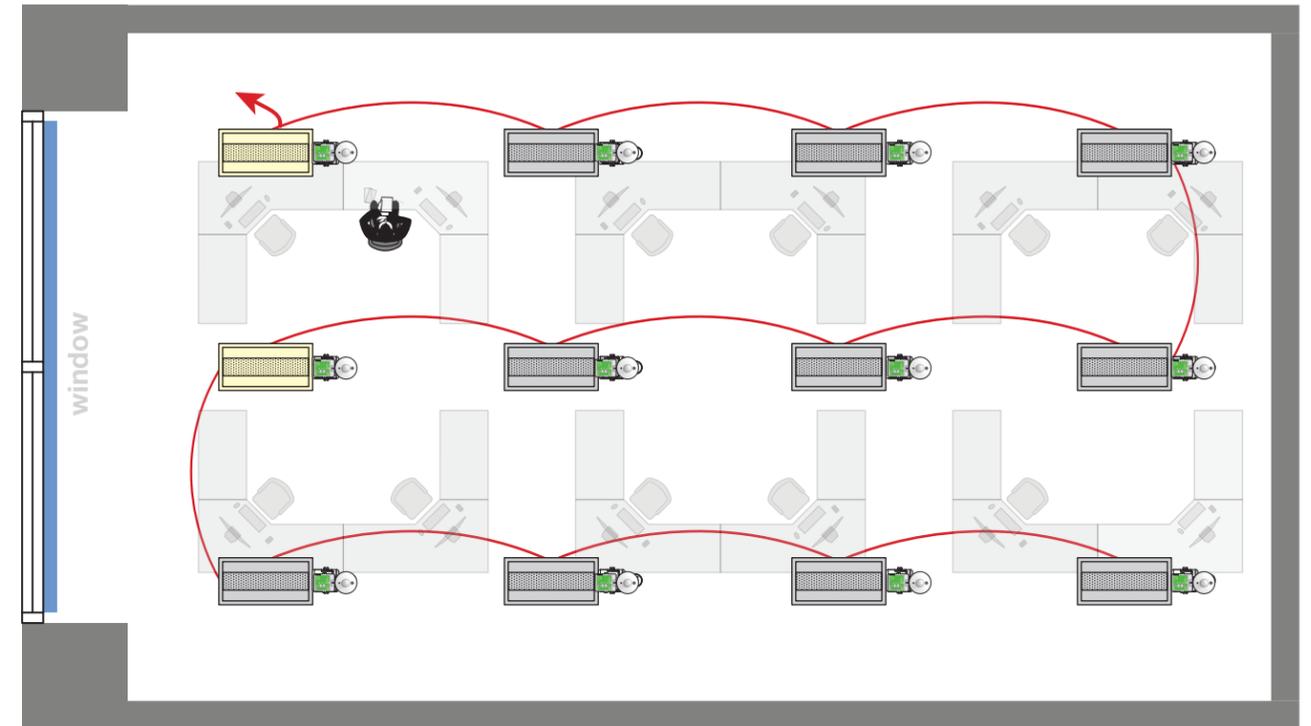
### Energy-saving strategies

- Occupancy sensing
- Dimming
- Personal control
- Daylight harvesting
- High-end trim

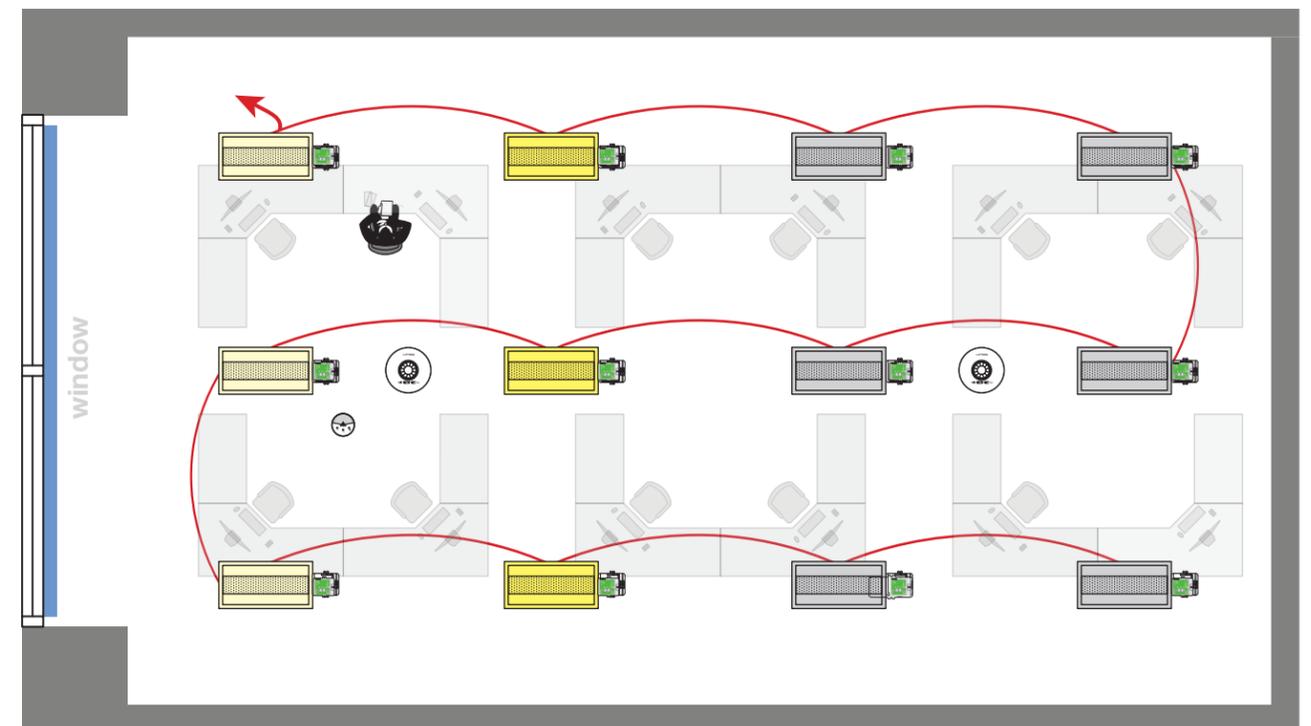
### Codes met

- Automatic shut-off
- Multi-level daylight control
- Multi-level lighting control
- Area control

## Application example: Open offices Individual Fixture Control



## Area Control



# Leader in LED dimming technology

In addition to 0–10V solutions, look to Lutron as your leader in LED dimming technology. We offer superior technology for standalone, as well as system-based dimming, for both analog and digital control.

We also provide the highest quality products across these LED control types, for LED solutions you can count on.

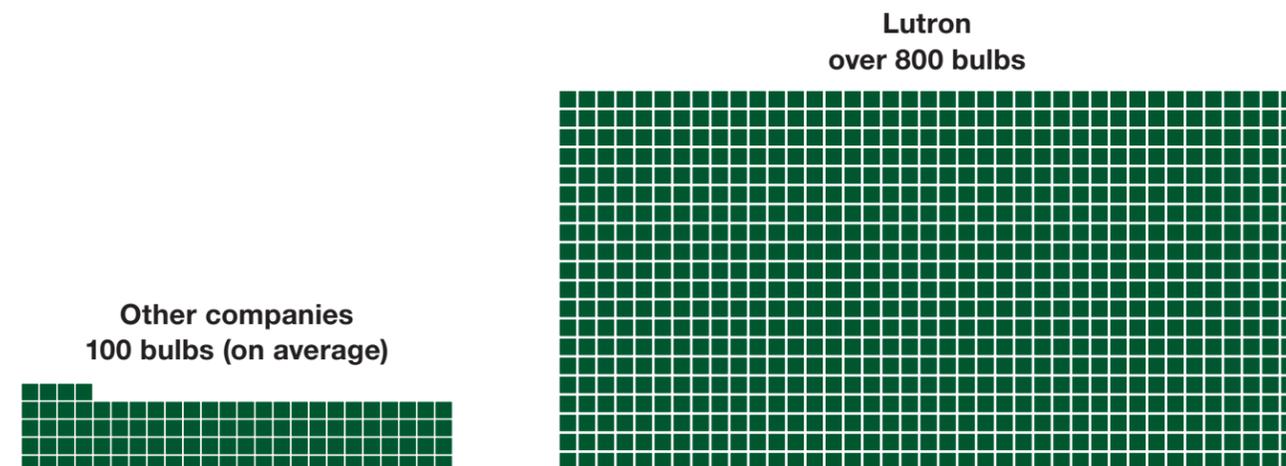
Lutron dimmers with LED+ technology (formerly C•L) fix the issues with lamp compatibility

- Provides superior dimming of LEDs and incandescent/halogen bulbs
- Works with dimmable screw-in LEDs and incandescent/halogen bulbs — even mixed on the same circuit
- Helps future-proof dimmer installations as the bulb landscape changes from incandescent bulbs to LEDs
- High-performance dimming minimizes problems seen with other dimmers, including flicker, shimmer, and pop-on

## Light bulb compatibility

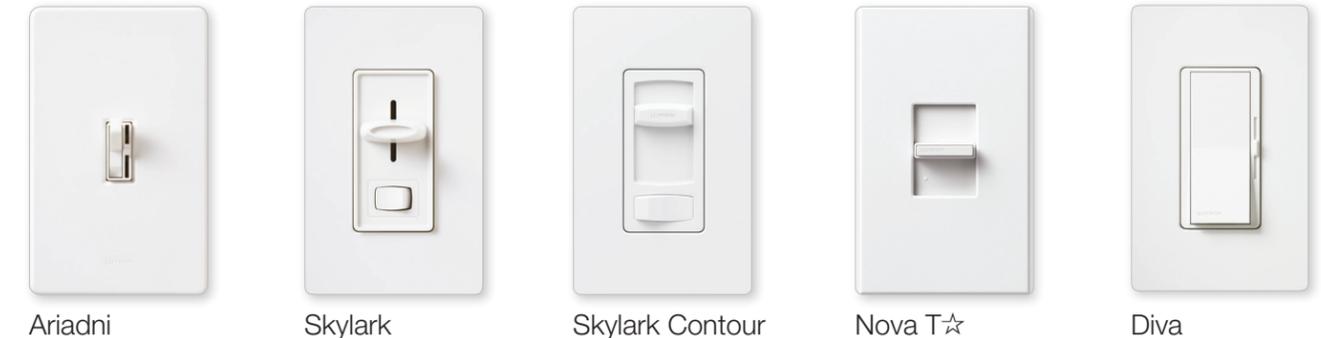
- UL Listed to control over 800 different LED bulbs. Easily find the right LED bulb for your dimmer at [lutron.com/LEDfinder](http://lutron.com/LEDfinder).

■ = unique LED bulb model type



## Lutron dimmers with LED+ technology

### Dimmers



### Dimmer/Sensor



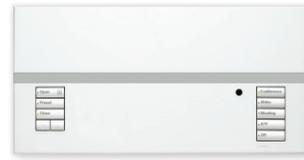
### Wireless controls



## Scaling from a single room to a whole building

### GRAFIK Eye QS

Perfect for conference rooms, GRAFIK Eye QS is a customizable preset lighting control system that allows you to adjust lights and shades for any task.



- Phase control
- 0-10V\*
- EcoSystem

### Vive

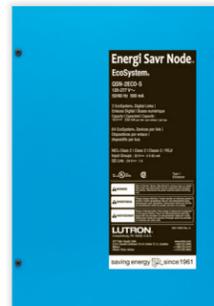
Vive is a simple, scalable, wireless control solution that can be installed in a single space or throughout an entire campus. Designed to be used in new construction or retrofit applications, Vive offers a wide variety of products—including sensors, remotes, load controls, and a software management suite.



- Phase control
- 0-10V
- EcoSystem

### Energi Savr Node Solutions

For open office spaces, Energi Savr Node provides a flexible lighting control system comprised of digital fluorescent dimming ballasts, LED drivers, controls, and sensors.



- Phase control\*
- 0-10V
- EcoSystem

### Panel Solutions

Traditional panel-based systems offer a simple, easy-to-maintain solution for areas with higher wattage lighting zones.



- Phase control
- 0-10V
- EcoSystem

### Quantum

Quantum is a lighting control and energy management system for an entire floor, building, or campus.



- Phase control
- 0-10V
- EcoSystem

\*Requires interface

Model number	Description	List Price (US)*
<b>Diva dimmers</b>		
DVSTV	8A lighting, 120–277 V, 3-way/single pole, no neutral or power pack required (gloss)	97.00
DVSCSTV	8A lighting, 120–277 V, 3-way/single pole, no neutral or power pack required (Satin Colors)	107.00
DVTV	16A lighting, 120–277 V, single pole, power pack required (gloss)	105.00
DVSCTV	16A lighting, 120–277 V, single pole, power pack required (Satin Colors)	115.00
<b>Nova T☆ dimmer</b>		
NTSTV-DV	8A lighting, 120–277 V, no neutral or power pack required	145.00
<b>Maestro dimmer sensors</b>		
MS-Z101	8A lighting, 120–277 V, occupancy/vacancy, multi-location/3-way/single pole	114.00
MS-Z101-V	8A lighting, 120–277 V, vacancy only, multi-location/3-way/single pole	114.00
<b>PowPak dimming module</b>		
RMJS-8T-DV-B	5A lighting, 120–277 V, connector	152.00
RMJS-8TN-DV-B	5A lighting, 120–277 V, flying leads	152.00
<b>Maestro Wireless dimmer sensors</b>		
MRF2S-8SD010	8A lighting, 120/277 V, occupancy/vacancy, multi-location/single pole	180.00
MRF2S-8SDV010	8A lighting, 120/277 V, vacancy only, multi-location/single pole	180.00
<b>PowPak wireless fixture controllers and fixture sensors</b>		
FCJS-010	0–10V control module	79.00
FCJS-010-BULK8	0–10V control module, 8-pack	610.00
FC-SENSOR	Occupancy/daylight sensor	35.00
FC-VSENSOR	Vacancy/daylight sensor	35.00
<b>Radio Powr Savr sensors and Pico wireless remotes</b>		
LRF2-OCR2B-P-WH	Ceiling-mount, 360° field-of-view, occupancy/vacancy sensor	89.00
LRF2-OWLB-P-WH	Wall-mount, 180° field-of-view, occupancy/vacancy sensor	89.00
LRF2-OKLB-P-WH	Corner-mount, 90° field-of-view, occupancy/vacancy sensor	89.00
LRF2-OHLB-P-WH	Hallway, occupancy/vacancy sensor	89.00
LRF2-DCRB-WH	Ceiling-mount daylight sensor	125.00
PJ2-3BRL-GWH-L01	Pico wireless remote with on/off, raise/lower, and favorite button	21.00

\* Price indicated for gloss finish (White)



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[lutron.com](http://lutron.com)

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