

# 0-10V Single room solutions

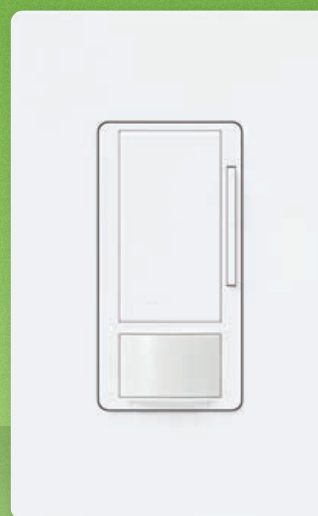
## Standalone



Diva® 0-10V dimmer



Nova T<sup>☆</sup>® 0-10V dimmer



Maestro® 0-10V dimmer sensor

## Wireless



PowPak® wireless fixture control and PowPak fixture sensor



PowPak dimming module with 0-10V control



Radio Powr Savr™ occupancy and daylight sensors, and Pico® wireless remotes



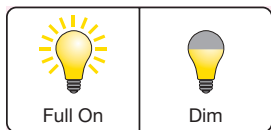
# 0–10V Single room solutions

0–10V is quickly becoming one of the more popular dimming technologies in commercial spaces.

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

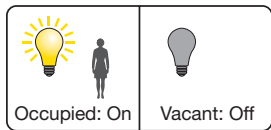
These control options allow you to take advantage of multiple energy-saving strategies.

## Lutron energy-saving strategies



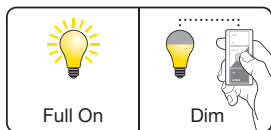
### Dimming

Gives occupants the ability to set the light levels.



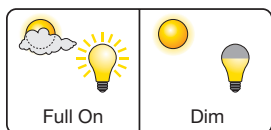
### Occupancy/vacancy sensing

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.



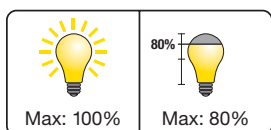
### Personal dimming control

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.

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# Dimming



## Divia® 0–10V

- 0–10V dimmer for fluorescent and LED 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): \$90 List, Satin Colors® - \$96 list  
DDTV (gloss): \$94.50 List, Satin Colors - \$100.50 list

### Voltage

- DVSTV
  - 8A, 120-277V
- DDTV
  - 16A with PP-DV, 120-277V
  - 16A with PP-347, 347V

**Ideal for** applications requiring 0–10V fixtures, such as 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

### Energy-saving strategies

- Dimming
- High-end trim

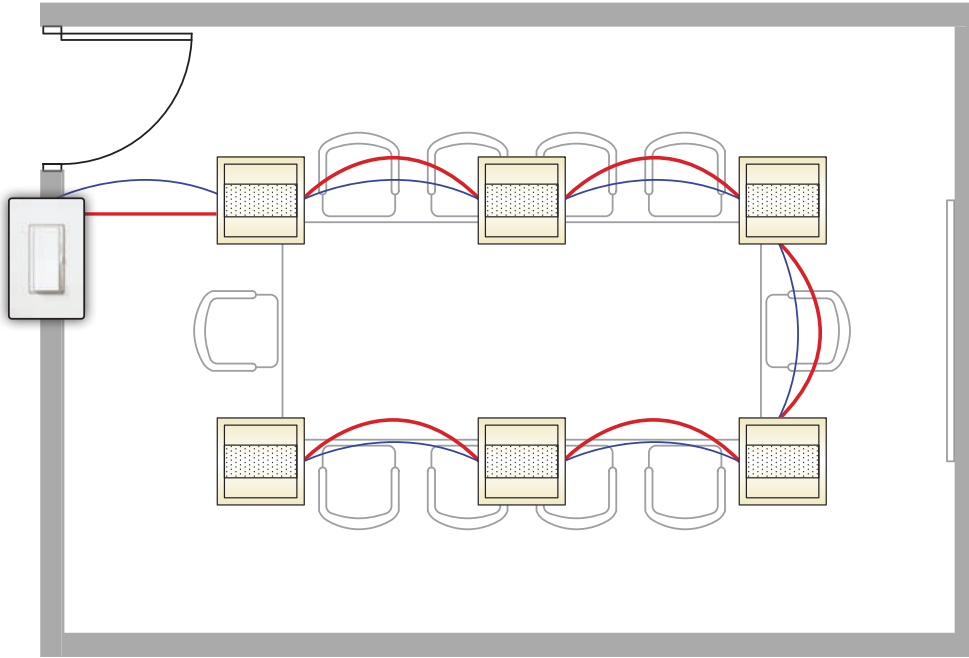
### Codes met

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



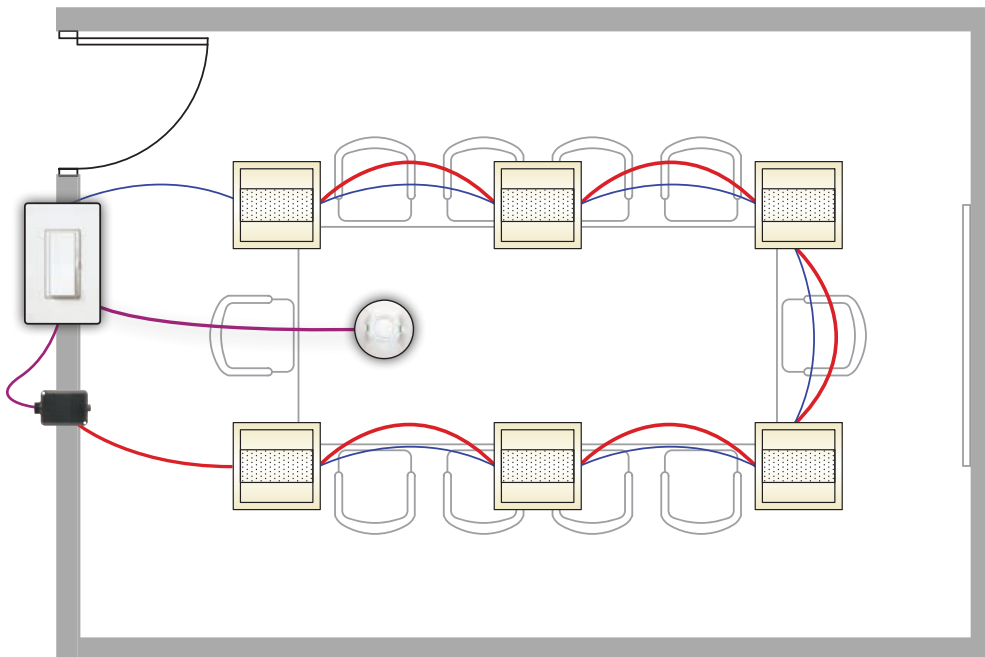
## Application examples: Conference room

Without power pack (DVSTV Only)



- Line-voltage wiring
- Low-voltage wiring

With power pack (DVTV Only)



- Line-voltage wiring
- Low-voltage wiring
- Occupancy signal

# Dimming



## Nova T<sup>☆</sup> 0-10V

- 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 8A
- Works with wired occupancy/vacancy sensors with the addition of the respective power pack

### Models/Price

NTSTV: \$130 List

### Voltage

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

**Ideal for** applications requiring 0-10V fixtures, such as 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

### Energy-saving strategies

- Dimming
- High-end trim
- Occupancy sensing

### Codes met

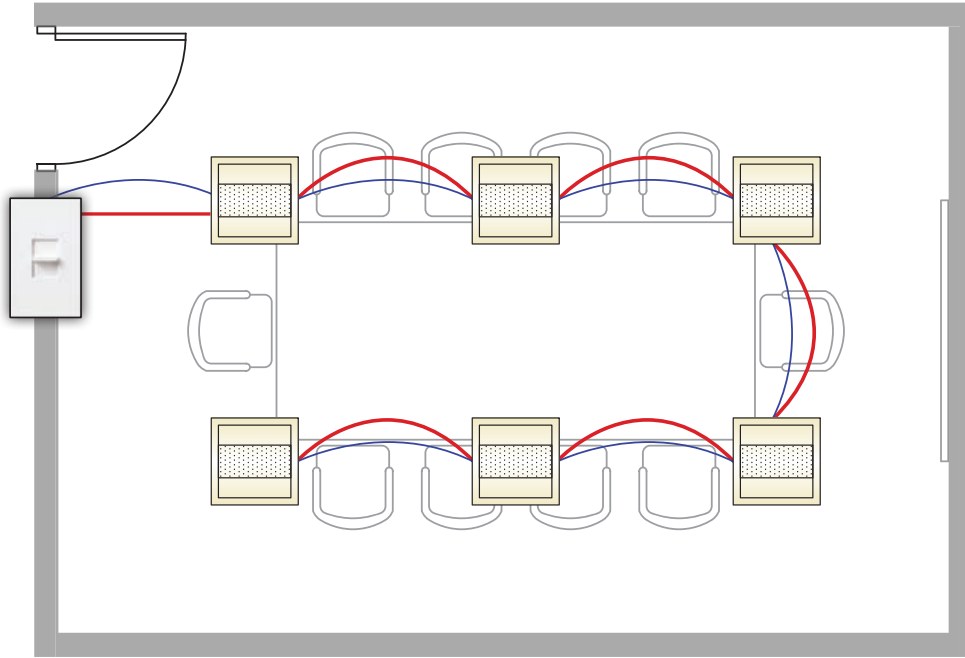
Automatic shut-off with wired occupancy sensors through a power pack

- Area control
- Multi-level lighting control



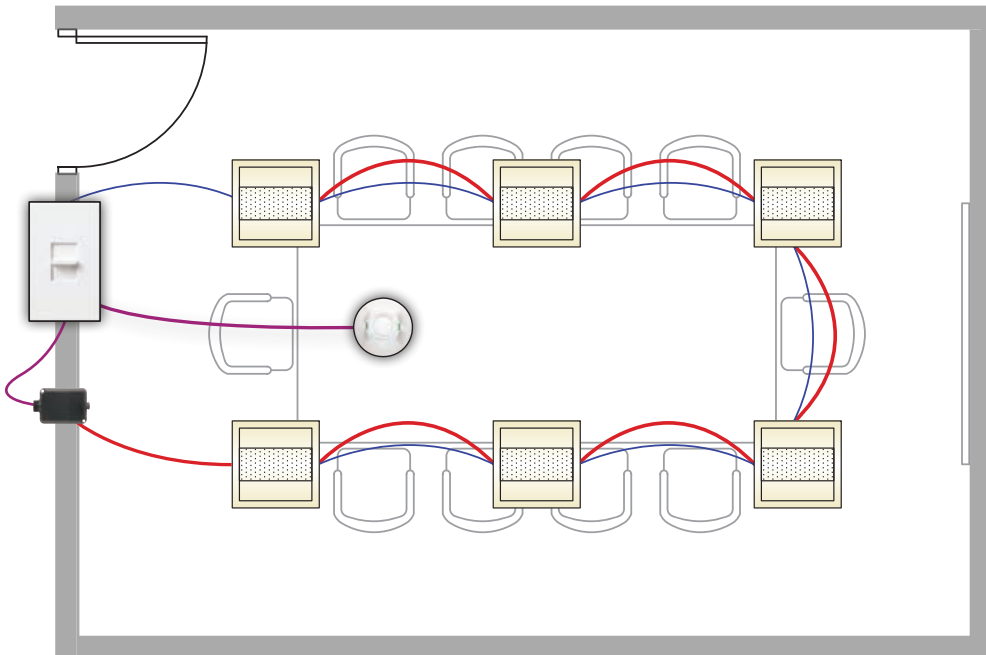
## Application examples: Conference room

Without power pack



- Line-voltage wiring
- Low-voltage wiring

With power pack



- Line-voltage wiring
- Low-voltage wiring
- Occupancy signal

# Dimming and sensing



## 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: \$110 List

MS-Z101-V: \$110 List

### Voltage

8A, 120–277V

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

## 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

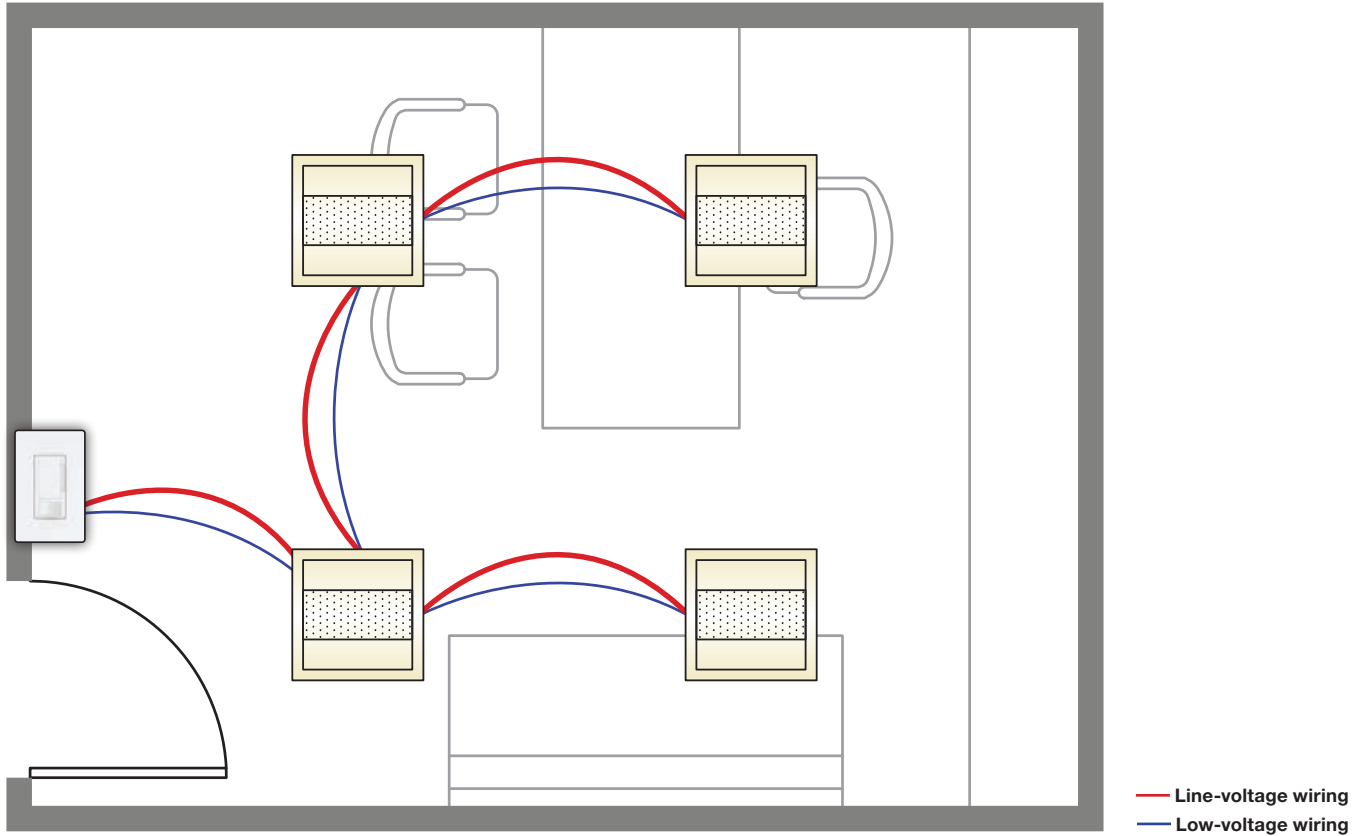
- Occupancy/vacancy sensing
- Dimming
- Area control
- Multi-level lighting control

## Codes met

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

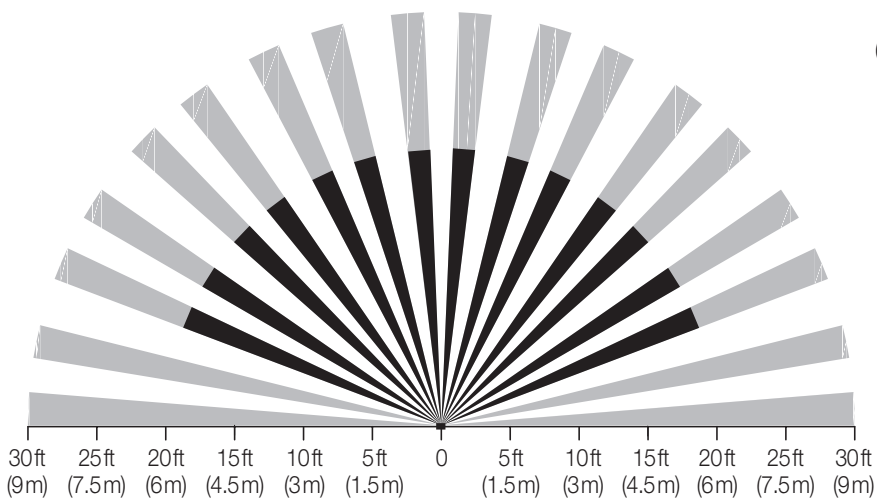


## Application example: Private office

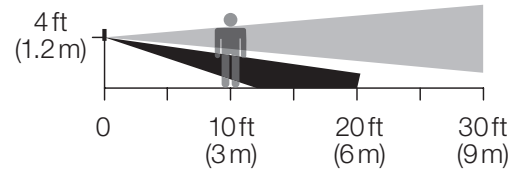


## Coverage patterns

Horizontal Beam Diagram



Vertical Beam Diagram



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

# Dimming, sensing, personal control, and daylighting harvesting



## PowPak® 0–10V

- Junction-box mounted dimming module that controls 0–10V fixtures
- Auto adapts to sink/source fixtures
- PowPak dimming module with EcoSystem® also available

## Models/Price

RMJ-5T-DV-B: \$130 List

## Voltage

120–277 V

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

The PowPak 0–10V dimming module is a part of the Energi TriPak® solution, which includes the following:

- Radio Powr Savr™ wireless occupancy/vacancy sensors
- Radio Powr Savr daylight sensors
- Pico® remote
- Maestro Wireless® dimmers and switches
- Plug-in dimming and appliance modules
- PowPak dimming and switching modules
- PowPak receptacle control modules

## The Lutron Advantage

- XCT™ sensing technology
- Clear Connect® RF technology
- Easy button-press setup
- Wireless sensors can be easily moved

## Energy-saving strategies

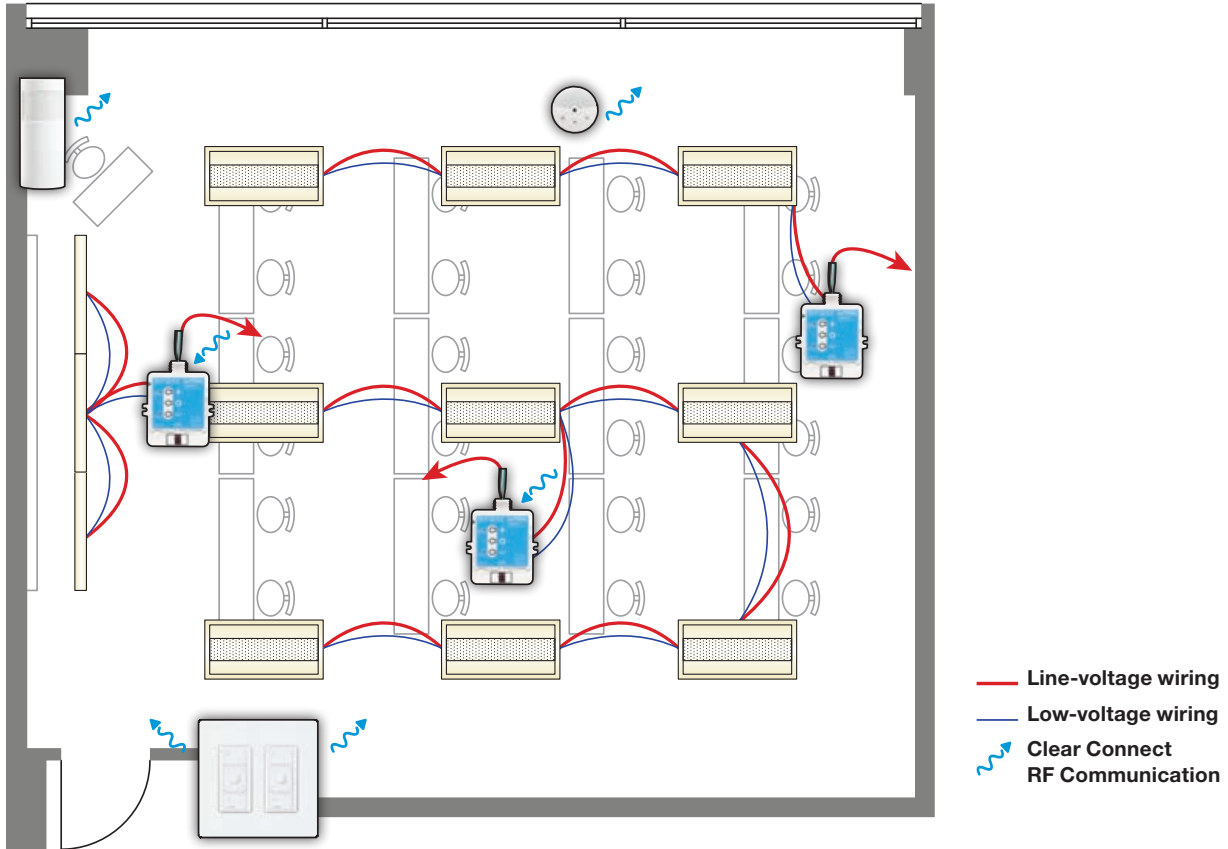
- Occupancy sensing
- Personal control
- Daylight harvesting
- High-end trim

## Codes met

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



## Application example: Classroom



## Energi TriPak® wireless components (works with PowPak® 0–10V)



Radio Powr Savr occupancy/vacancy sensors



Radio Powr Savr daylight sensor



Pico wireless remote

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



## PowPak® wireless fixture control

- Adds wireless control to each individual 0–10 V or EcoSystem® fixture in a space
- Enables combined occupancy detection and daylight harvesting at the individual fixture level
- Works with Lutron's Radio Powr Savr™ wireless sensors and Pico® wireless remotes

### Models/Price

FCJ-010: \$78 List

FCJ-ECO: \$78 List

FCJ-010-BULK8: \$600 List  
(contractor 8-pack, \$75 list per unit)

FCJ-ECO-BULK8: \$600 List  
(contractor 8-pack, \$75 list per unit)

FCJ-SENSOR: \$35 List

FCJ-VSENSOR: \$35 List

### Voltage

120–277V

**Ideal for** open offices and cafeterias

PowPak wireless fixture control is a part of the Energi TriPak® 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/relocate Pico remotes and sensors at any time and reconfigure zones with no new wiring
- Works out of the box – no complex computer programming; associate Pico remotes with just a button press or green laser
- Proven technology means no callbacks – uses XCT™ sensing technology and Clear Connect® RF wireless communication

## Energy-saving strategies

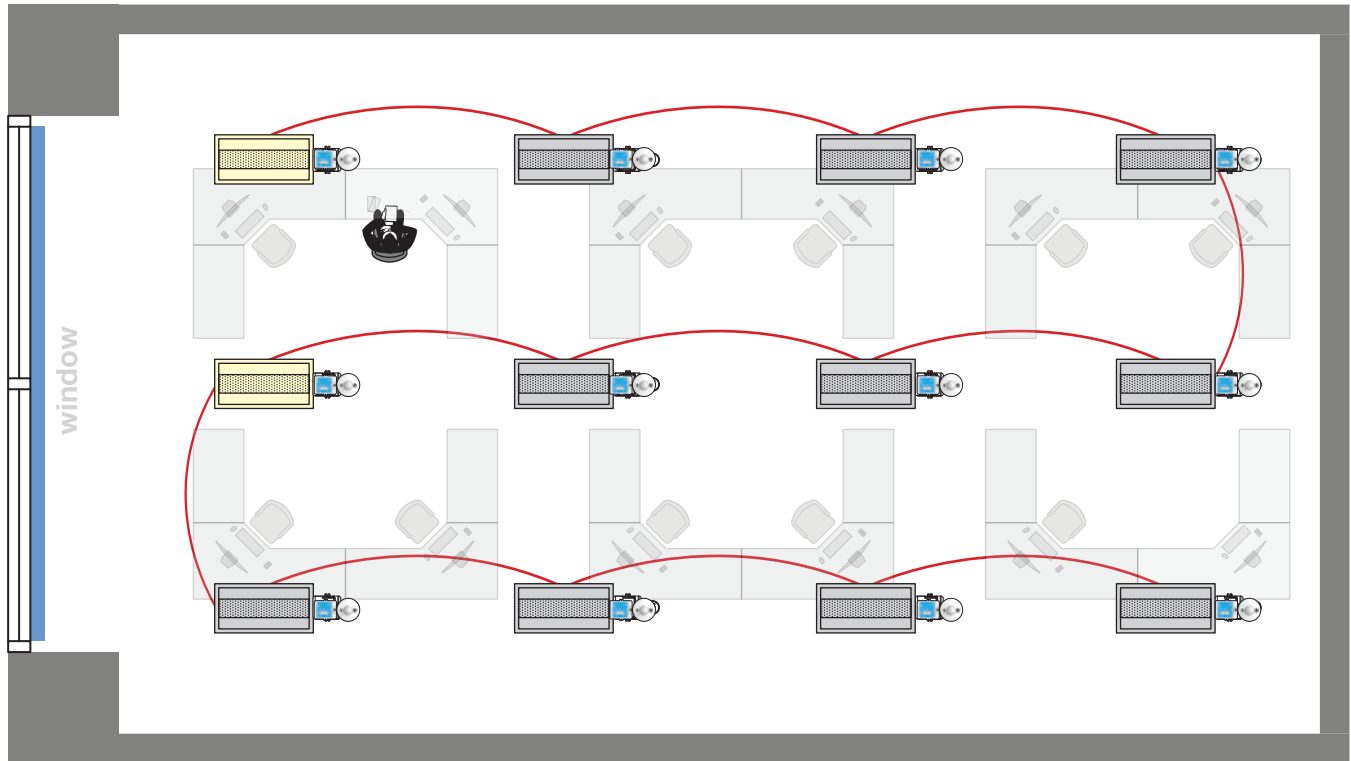
- Occupancy sensing
- Personal control
- Daylight harvesting
- High-end trim

### Codes met

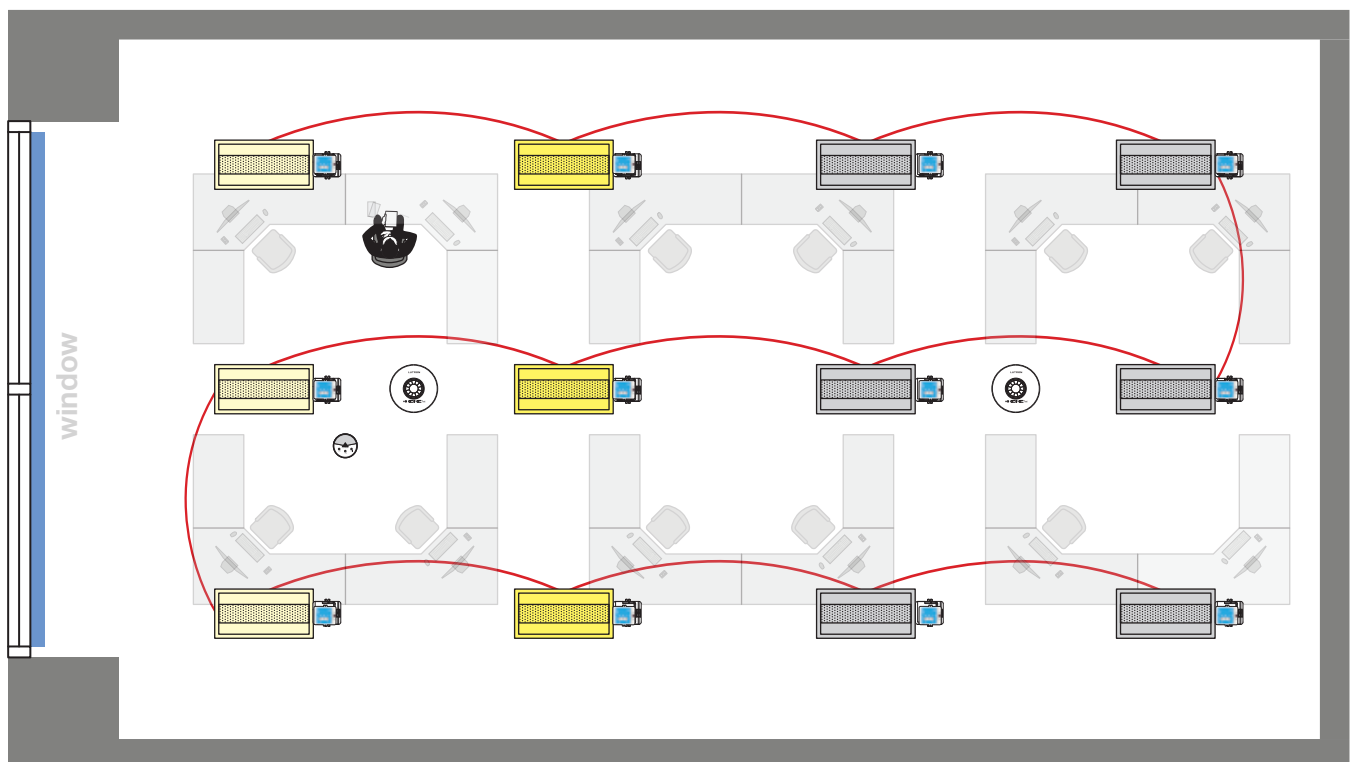
- Automatic shut-off
- Multi-level daylight control
- Multi-level lighting control
- Area control

## 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.

## C·L<sup>®</sup> technology for screw-in bulbs

### Lutron C·L products fix the issues with lamp compatibility.

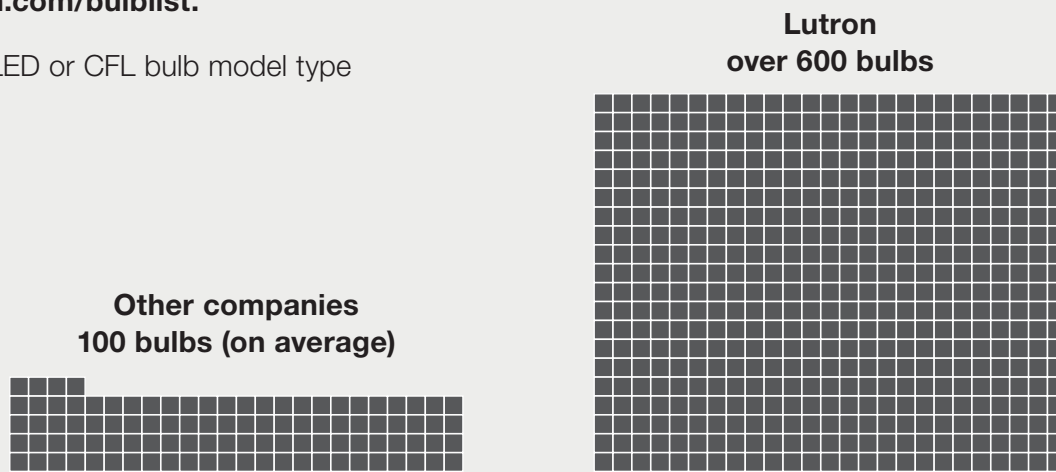
- C·L technology provides superior dimming
- Works with dimmable screw-in LEDs and CFLs, and incandescent/halogen bulbs—even mixed on the same circuit
- Helps future-proof dimmer installations as the bulb landscape changes from incandescent bulbs to LEDs
- High-performance dimming minimizes problems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

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### Light bulb compatibility

- UL Listed to control over 600 different LED and CFL bulbs. The bulb list is available at [www.lutron.com/bulblast](http://www.lutron.com/bulblast).

■ = unique LED or CFL bulb model type



## C·L product line

### Dimmers



Ariadni®



Skylark®



Skylark Contour®



Nova T☆®



Diva®



Maestro®



GRAFIK T™

### Dimmer/Sensor



Maestro occupancy  
sensor C-L dimmer

### Wireless controls



Maestro Wireless® with Radio  
Powr Savr™ wireless occupancy  
sensor and Pico® remote



Caséta® Wireless with  
Pico remote



Caséta Wireless lamp  
dimmer with Pico remote

# Leader in LED dimming technology

## EcoSystem® technology for individual fixture control

### • Simplify your lighting control projects with Lutron EcoSystem

Guaranteed compatibility between Lutron controls, drivers, and sensors—backed by Lutron quality and 24/7 service.

### • Meet stringent energy codes and green building standards†

EcoSystem digital addressability allows you to easily implement automatic shut-off, daylighting, and dimming for multi-level control.

### • Design for change

Digital fixture control means you can easily adapt to change during design and commissioning, as well as during times of churn—without rewiring.

## LED driver options

### 5-Series

- Energy-saving, smooth 5% dimming, without compromising on dimming quality
- Ideal for downlights, troffers, and linear lighting
- Available in K and M case models



### A-Series

- Smooth, 1% dimming for architectural applications
- Ideal for downlight, cove, and linear lighting
- Available in K and M case models
- UL Listed option also available—KL case model



### H-Series

- Provides smooth, continuous 1% dimming
- High-performance solution for any space, in any application
- Available in K and M case models





## Scaling from a single room to a whole building

### GRAFIK T™ Dimmer and Switch

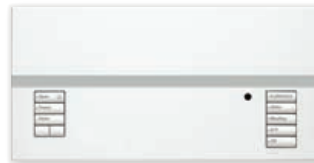
Perfect for executive offices, conference, and board rooms, GRAFIK T reinvents the way we interact with lighting controls—no knobs, sliders, or buttons—just touch. Available in over 40 colors and finishes, including metal and glass, to complement any design and add style to any space.



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

### 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

### 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.

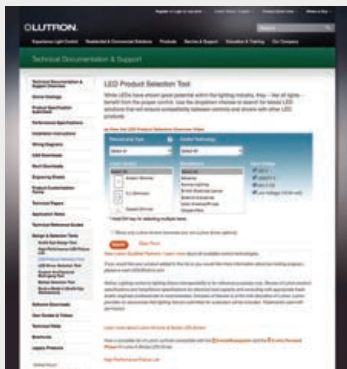


- Phase control
- 0-10V
- EcoSystem

\*Requires interface

# LED Control Center of Excellence

The LED Control Center of Excellence is designed to help you correctly specify, install, and use LEDs. Through the LED Control Center of Excellence we test LEDs on a continuing basis for compatibility with our controls and drivers, providing a level of customer guidance you won't find anywhere else.



## [Lutron.com/LEDTool](#)

Visit the LED Control Center of Excellence to find tested LED solutions that will ensure compatibility between Lutron controls and drivers and other LED products.








## [Lutron.com/FindAFixture](#)

Select fixtures available with Lutron dimming performance, reliability, and guaranteed compatibility for 2-wire forward phase, 3-wire, EcoSystem®, and Eco-embedded control options.





# Ordering Information

	Model number	Description	List Price (US)*
	<b>Diva®</b>		
	DVSTV	8 A lighting, 120–277 V, 3-way/single pole, no neutral or power pack required	90.00
	DVTV	16 A lighting, 120–277 V, single pole, power pack required	94.40
	<b>Nova T<sup>☆</sup> Dimmer</b>		
	NTSTV-DV	8 A lighting, 120–277 V, no neutral or power pack required	130.00
	<b>Maestro® Dimmer Sensors</b>		
	MS-Z101	8 A lighting 120–277 V; occupancy/vacancy; multi-location/3-way/single pole	110.00
	MS-Z101-V	8 A lighting 120–277 V; vacancy only; multi-location/3-way/single pole	110.00
	<b>PowPak dimming module</b>		
	RMJ-5T-DV-B	5 A lighting, 120–277 V	130.00
	<b>PowPak wireless fixture controls</b>		
	FCJ-010	0–10 V control module	78.00
	FCJ-ECO	EcoSystem® control module	78.00
	FCJ-010-BULK8	0–10 V control module, 8-pack	600.00
	FCJ-ECO-BULK8	EcoSystem control module, 8-pack	600.00
	FCJ-SENSOR	Occupancy/daylight sensor	35.00
	FCJ-VSENSOR	Vacancy/daylight sensor	35.00
	<b>Radio Powr™ Savr sensors &amp; Pico® wireless remotes</b>		
	LRF2-OCR2B-P-WH	Ceiling-mount, 360° field-of-view, occupancy/vacancy sensor	85.00
	LRF2-OWLB-P-WH	Wall-mount, 180° field-of-view, occupancy/vacancy sensor	85.00
	LRF2-OKLB-P-WH	Corner-mount, 90° field-of-view, occupancy/vacancy sensor	85.00
	LRF2-OHLB-P-WH	Hallway, occupancy/vacancy sensor	85.00
	LRF2-DCRB-WH	Ceiling-mount daylight sensor	120.00
	PJ2-3BRL-GWH-L01	Pico wireless remote with on/off, raise/lower, and favorite button	21.00

\* Price indicated for gloss finish. (White)

World Headquarters 1.610.282.3800  
 Technical Support 1.800.523.9466 (Available 24/7)  
 Customer Service 1.888.LUTRON1 (1.888.588.7661)

