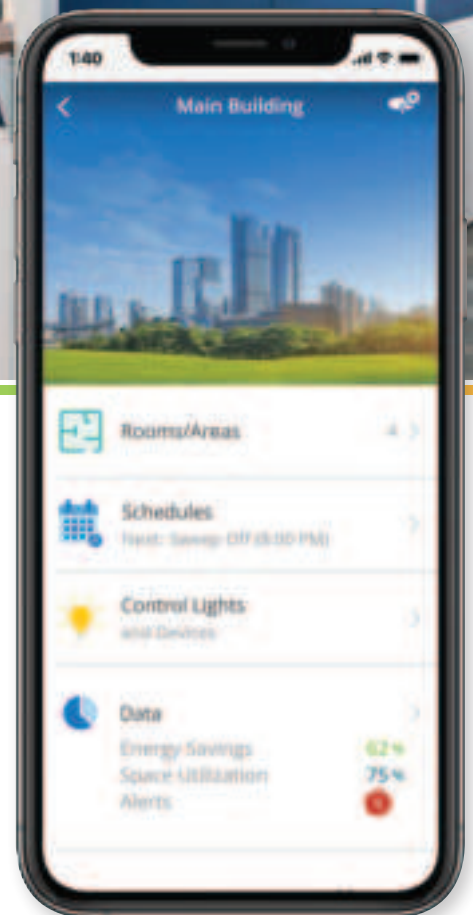




Simple, scalable, wireless
lighting control



Flexible control every step of the way

A simple wireless lighting control solution
for new and existing commercial buildings.





How can you make every office, school, or university campus an efficient, comfortable and productive place to work or learn?

Vive is the answer.

Vive by Lutron is a simple, scalable, wireless control system that can be installed in a single space or throughout an entire campus. It's designed to save energy and create the right environment for the people working or learning in the space.

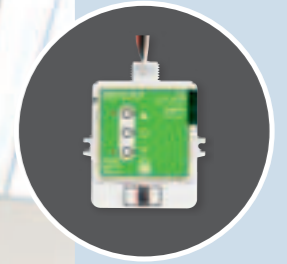
With Vive, adding lighting control to your new construction or retrofit project is easier than ever — and Vive has many options to meet your budgetary needs.

And with a wide family of products— including sensors, remotes, and load controls— Vive provides the capability to select the products you want and handle any on-site challenges with ease.

Vive Installation
Madison College — Madison, Wisconsin



Wireless hub
page 28



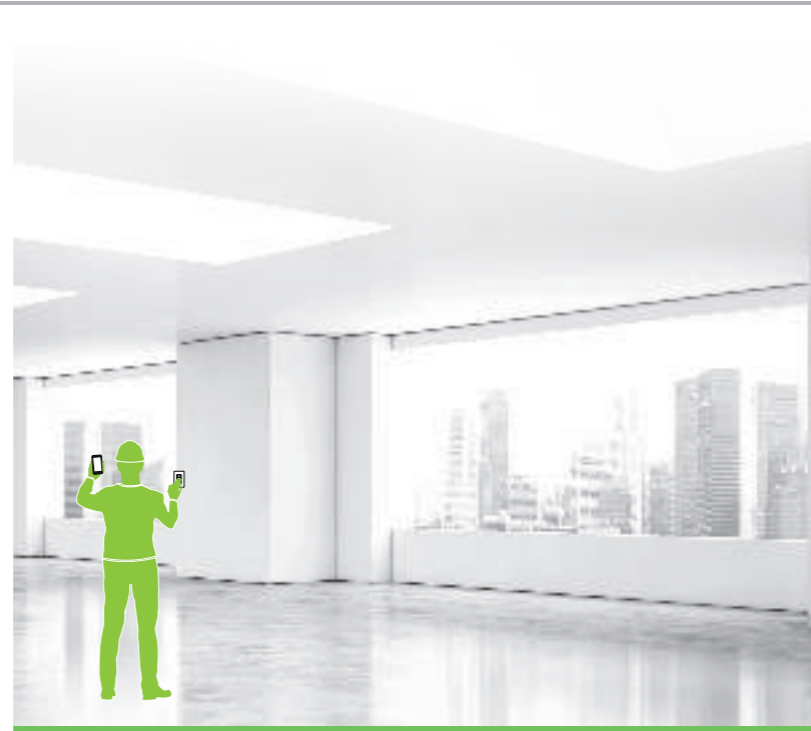
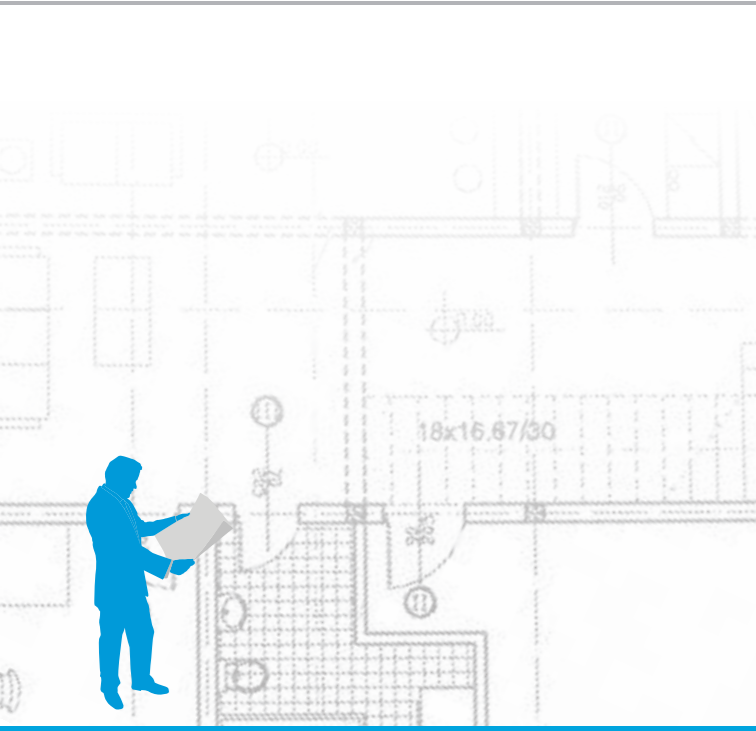
Wireless load controls
page 30



Wireless remotes
page 40



Wireless Sensors
page 44



DESIGN 

The flexibility you need to design your building

Build your system from a full suite of products — specify a simple occupancy sensor solution, or design a fully integrated lighting management system using the same suite of products

Easily match controls to the fixture package — switching, DALI, 0–10V, or any combination

Expand the system at any time — add control options, add new areas, easily upgrade software to add new features

INSTALL 

Wireless simplifies installation and reduces callbacks

Less wiring makes installation faster — reduce labour time by up to 70%¹

Setup is as simple as pushing a button or using your smart device — no manufacturer commissioning required, further reducing time and labour cost (the Lutron services team is always available if you want some additional support)

Start small and expand at any time — with no new wiring — meet budget requirements and changing space needs

Eliminate callbacks — Lutron’s proven reliability helps you stay within budget and reduces your time on the job

MAINTAIN 

Maximise productivity and building performance

Monitor, adjust, and manage your system from any smart device — easily adjust the lighting control to accommodate building churn, improve occupant comfort, and enhance energy efficiency

Energy savings — lighting uses more electricity than any other building system. Lutron solutions can save up to 60%² or more of that lighting energy

Minimise down time — wireless controls install quickly to minimise disruption to building occupants

Expand capability — add new controls or upgrade software at any time without replacing the existing system

Simplify integration — using BACnet protocol, connect with other building systems at the time of initial installation or whenever you expand the system



Vive wireless hub

Vive software

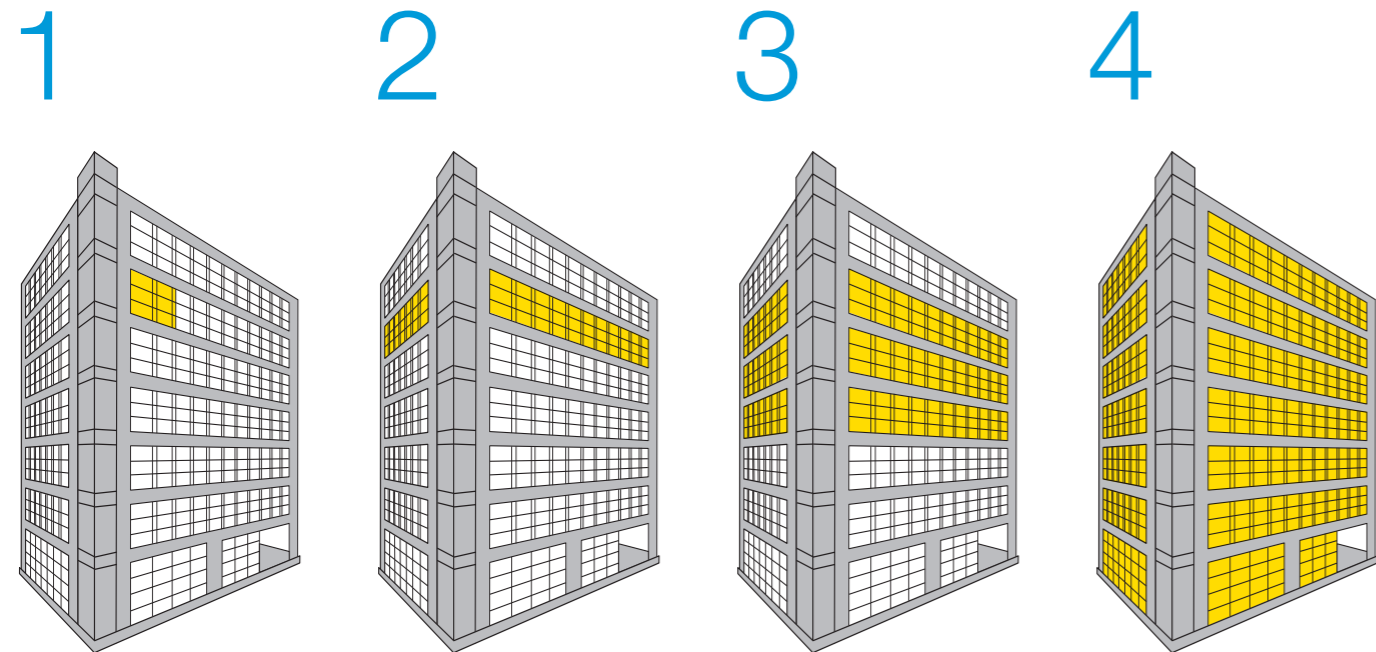
The Vive wireless family gives you the right solution now and for years to come

- Flexible budgets
- Area, fixture and sensor controls
- Meet latest building regulations and standards
- No factory setup required

When you choose Lutron solutions, you can be confident that the system just works, and it will keep working.



Vive wireless solutions offer a multi-strategy approach that accommodates your budget and performance needs now, and for the future of your building.



1
Single office space

Start by adding control in a single space and expand as budgets and occupant schedules allow.

2
Single floor

Expand to new areas or an entire floor at any time without reprogramming or replacing existing equipment.

3
Multiple floors

Duplicate the success of one floor across other floors as your business expands or tenants change. Control can be independent on each floor, or linked via Vive wireless hubs.

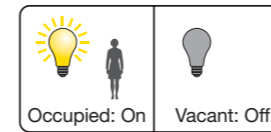
4
Entire building

Vive offers seamless integration to other building management systems to control every light in your building.

Combine lighting control strategies to maximize efficiency

What is the savings opportunity?

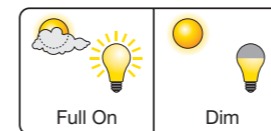
Lutron solutions can save 60%³ or more lighting energy.



Occupancy/vacancy sensing turns lights on when occupants are in a space and off when they vacate the space.

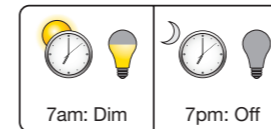
Potential savings

20–60%
Lighting⁴



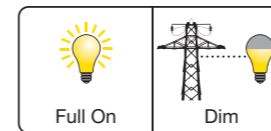
Daylight harvesting dims electric lights when daylight is available to light the space.

25–60%
Lighting⁵



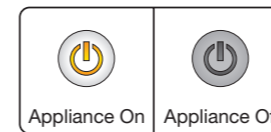
Scheduling provides pre-programmed changes in light levels based on time of day.

10–20%
Lighting⁶



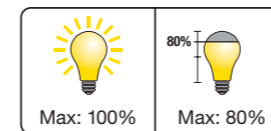
Demand response automatically reduces lighting loads during peak electricity usage times.

30–50%
Peak Period⁷



Plug load control automatically turns off loads after occupants leave a space.

15–50%
Controlled Load⁸



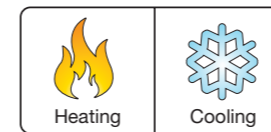
High-end trim sets the maximum light level based on customer requirements in each space.

10–30%
Lighting⁹



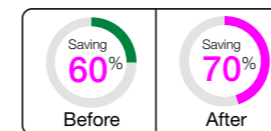
Personal dimming control gives occupants the ability to adjust the light level.

10–20%
Lighting¹⁰



HVAC integration controls heating, ventilation, and air conditioning systems through contact closure, or BACnet protocol.

5–15%
HVAC¹¹

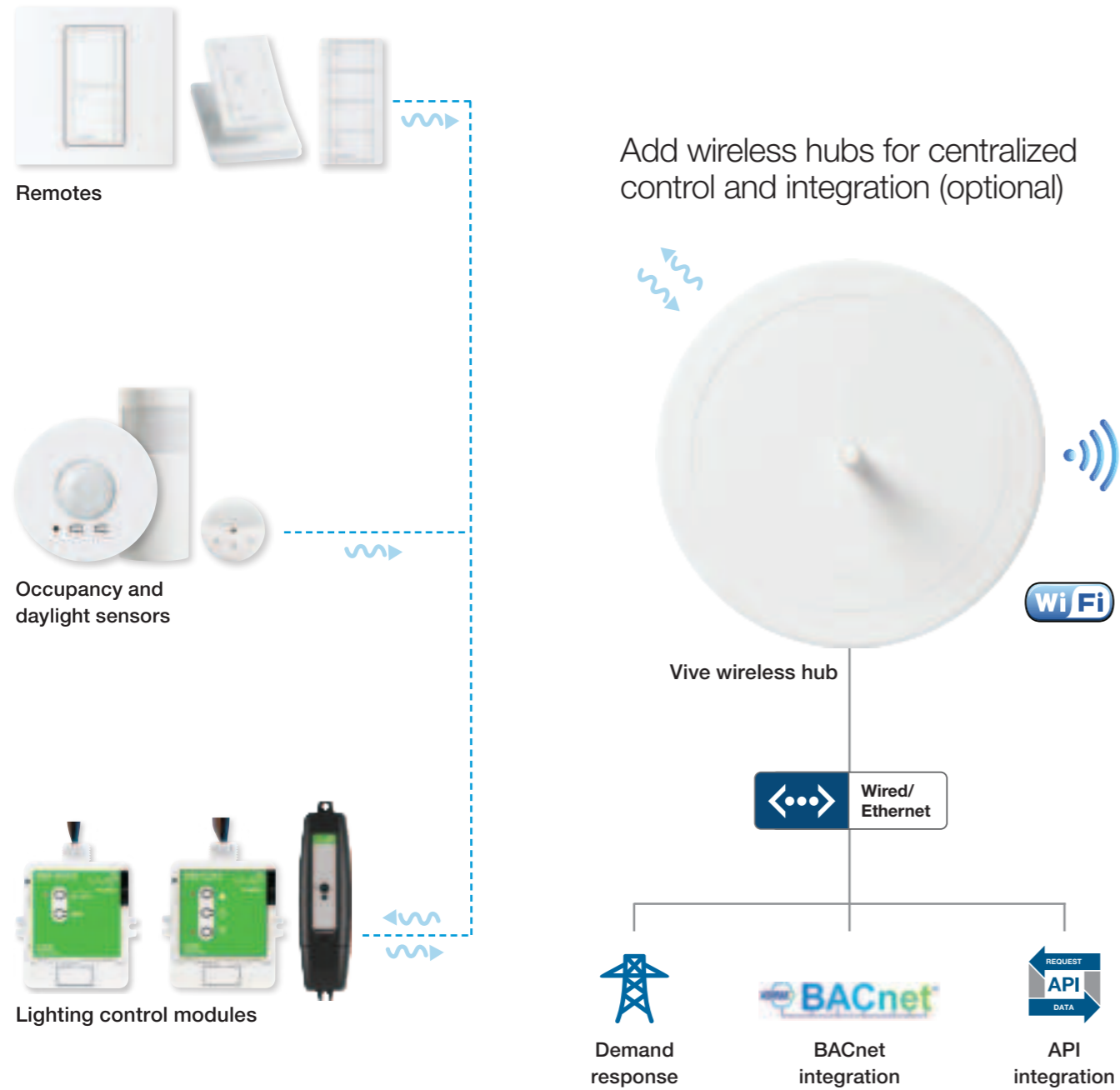


System Optimization Service from Lutron identifies important lighting control adjustments to save additional energy and create a more productive work environment on an ongoing basis.

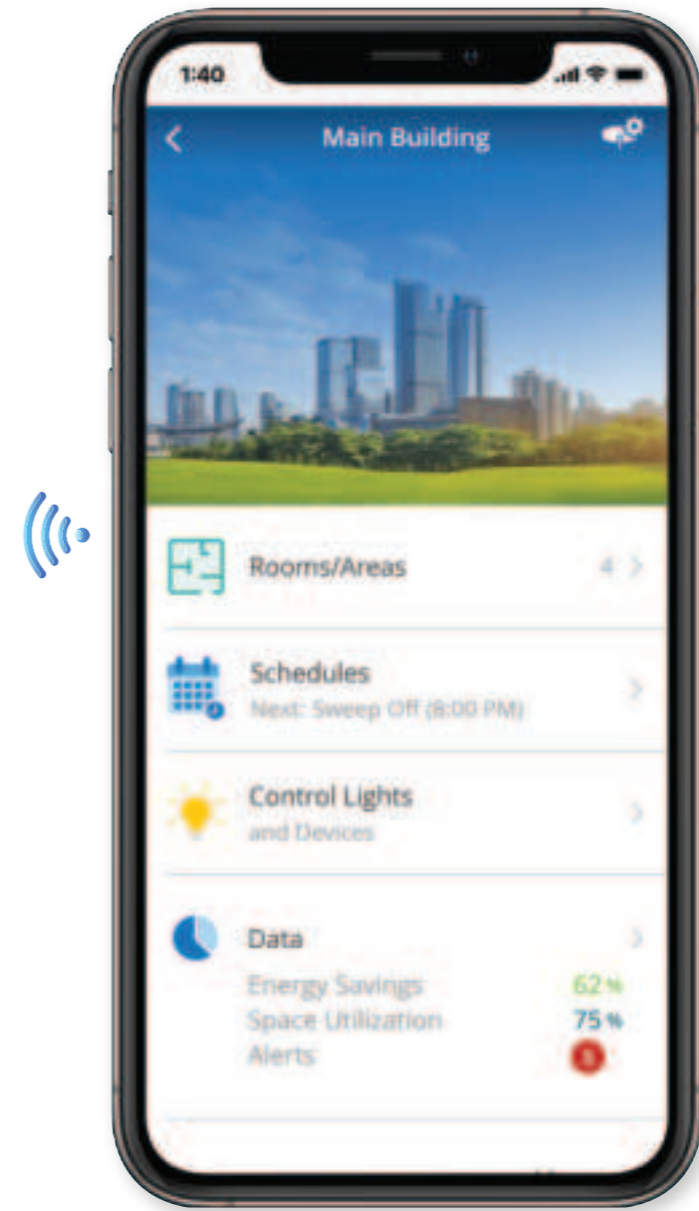
Variable

For a list of sources please visit lutron.com/references.

Wireless controls and sensors



Simple-to-use software



Vive software

Communication protocols



Communicate via RF to control components



Communicate via WiFi to smart devices



Communicate via wired Ethernet to Vive hub

The right control in the right space

The Vive product family lets you personalise control to each space in your building without locking you into more or less control than you need.

Simple switching

Classroom

Occupancy sensors control all lights together by switching lights on and off in response to room occupancy.



Wireless remote | PowPak | Occupancy sensor

Simple switching



Area dimming and sensing

Open office

Dim a group of lights together while also providing manual control. Save additional energy with daylight harvesting.



Dimming module | Occupancy sensor | Daylight sensor | Pico remote

Area dimming and sensing





Wireless Remote
Mount anywhere

No wires —
Put it where it is most accessible
10-year battery life



Wireless Load Control
Electrical box

Easy Retrofit —
PowPak modules mount
on a standard electrical box or
marshalling box in the ceiling
to control a group of lights



**Wireless Daylight
Sensor**
Ceiling mount

No wires —
10-year battery life



Wireless Occupancy Sensor
Corner/ceiling/wall mount

No wires —
Easily mount it anywhere
10-year battery life



Vive Wireless Hub

- Add a Vive Hub to any job for simple set-up, control and monitoring
- Each hub wirelessly communicates with devices in a 929m² (10,000 ft²) area

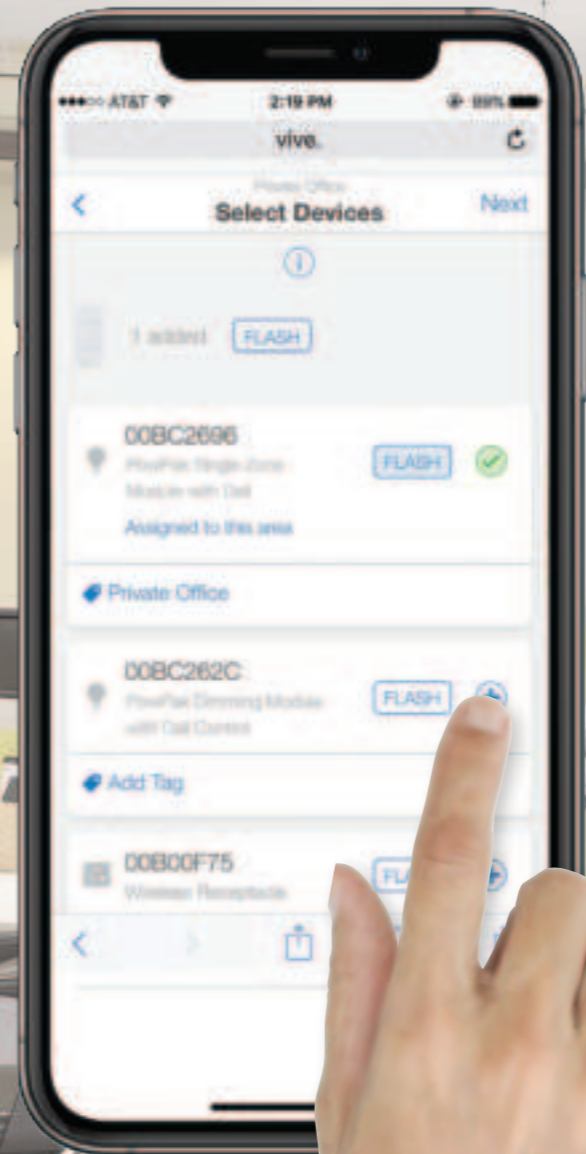
Simple setup and programming options with the Vive wireless hub

Mobile phone setup

Using Vive software on any smart device you can wirelessly connect system controls and program system settings — no ladder required. Lutron's patent pending RF signal strength detection automatically finds nearby devices, making job setup faster.

1 Press and hold on wireless device

2 Automatic fixture identification
Lutron patent-pending technology automatically finds and sorts the wireless devices closest to the control.



For systems without a Vive wireless hub

Push-button set up

Use simple button-press programming to select and associate wireless devices — it's as easy as setting a station on your car radio.



PowPak

Press and hold for 6 seconds



Occupancy sensor

Press and hold for 6 seconds

It works! Sensor now talks to the wireless dimmer



Energy savings and space utilization

Quickly view and display energy usage information to drive decision making and demonstrate savings.



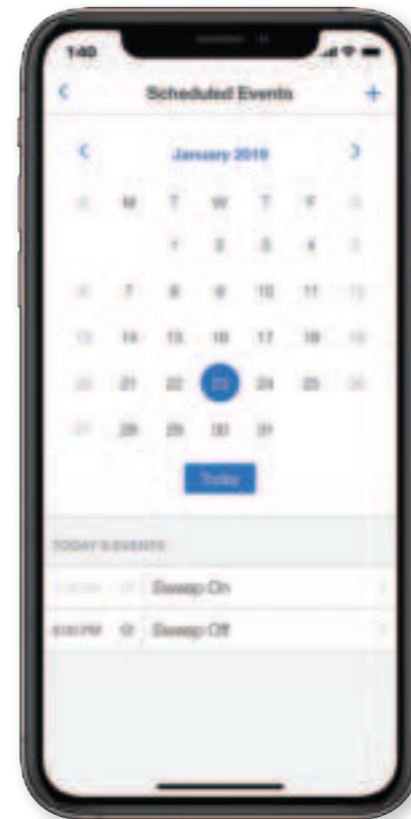
Load shed Open ADR Compatible

Easily set lighting reduction levels that automatically respond during peak electricity usage times.



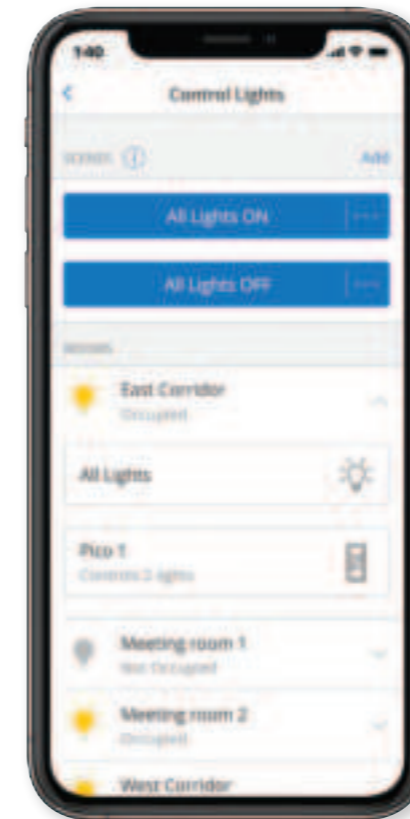
Schedules

Use a 365-day calendar to automatically adjust lights based on time of day, including single day and holiday events.



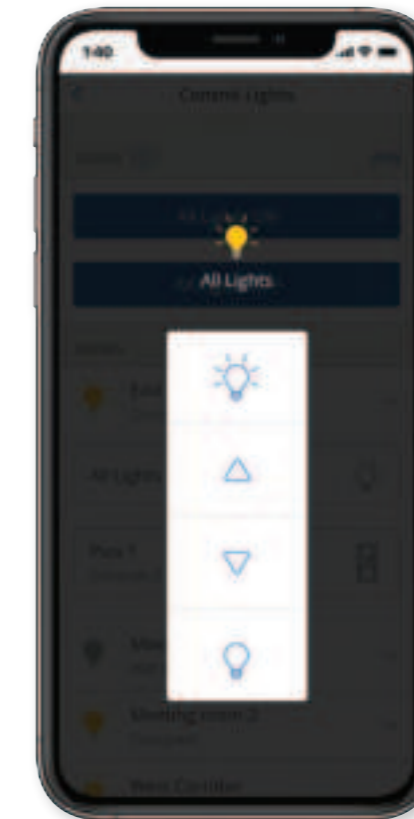
Scene Control

Create and configure scenes to control individual devices, areas, or groups of areas on demand.



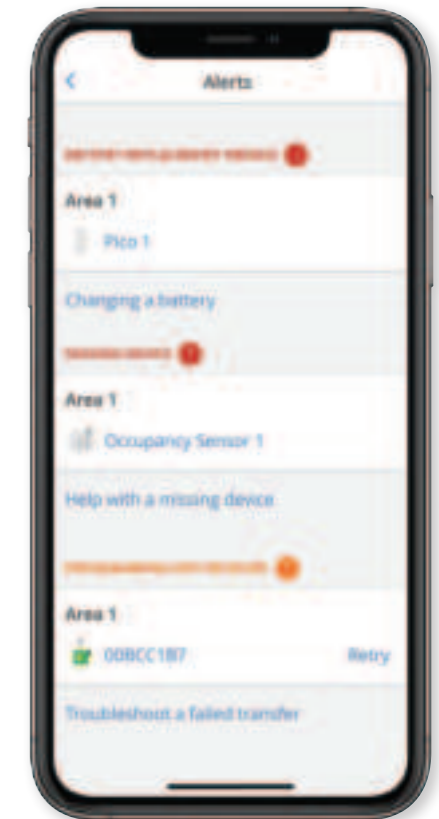
Light Control

Directly adjust the light levels remotely from any smart device. Easily respond to occupant requests without needing to be in the physical space.



Alerts

View proactive alerts that show issues such as low batteries or inactive devices to help improve building maintenance efficiency.



Seamlessly integrate with your building system

The BACnet/IP protocol is the primary means of integration. BACnet is embedded or native in the Vive wireless hub, which means no external interfaces or gateways are required in order to communicate with other systems.

API integration, native on the Vive hub, enables integration with third party devices, systems, and software. RESTful APIs are available over the ethernet.



Building/Energy Management Systems (BMS/EMS)

HVAC

Energy Dashboards and Analytics Packages

Audio & Video

API

IT

Vive Vue software

Vive Vue software now provides the ability to tie multiple Vive hubs together in one software interface. Built with the simple, scalable, wireless building blocks of the Vive Wireless system, Vive Vue software now delivers the advanced intelligence necessary for today's smart buildings and the IoT. A smart building is now easier than ever to achieve.



Intuitive control

View status, control lights, and optimize your building quickly and efficiently with a graphical floorplan.



Optimize your space

Improve building layout based on actual occupancy and usage information. With space utilization reports, you can quickly identify over-used and under-used spaces to improve building efficiency without expanding the building footprint.



Save energy purposefully

Energy reports allow you to view and monitor your energy savings. With trending energy information over time, and easily customizable reports, Vive Vue software helps you demonstrate the energy-saving advantages of wireless lighting control.

Manage data and operations for multiple Lutron lighting and blind control solutions

- A single data and management platform for your connected buildings
- The system interface delivers a simple, consistent user experience from any PC or tablet
- Open, easy integration with BACnet and web APIs leverages the IoT to enhance smart-building performance

Enterprise Vue



Enterprise Vue home screen



We build security into the product and the process from conception to installation, and through the lifetime of the system.

Everything we do is backed by Lutron's first, and guiding, principle — Take Care of the Customer with Superior Goods and Services. Every product, every system, and every solution is designed, manufactured and tested to work as expected.

Security by design

When building any new system, Lutron utilizes a dedicated security team to ensure best practices are implemented. Security is built in. It is not an afterthought or add-on.

Examples of security features designed into Vive include:

1. Isolated wired and wireless architecture which strictly limits the possibility of the Vive Wi-Fi or Clear Connect being used to access the corporate network to gain confidential information
2. A distributed security architecture — each hub has its own unique keys
3. NIST-recommended best practices for securing passwords, including salting and use of SCrypt
4. AES 128-bit encryption for network communications
5. HTTPS (TLS 1.2) protocol for securing connections to the hub over the wired network
6. WPA2 technology for securing connections to the hub over the Wi-Fi network

Third-party validation

Security is complicated. Lutron has a dedicated team of internal experts, but we also leverage external experts to double- and triple-check our work.

1. Multiple external experts engaged during design process
2. Third-party penetration testing to identify and fix potential vulnerabilities before they reach the field

Continuous monitoring and improvements

Security is a constantly moving target. Lutron uses a dedicated security team to continuously monitor the market for potential threats and, when needed, send out security patches to update installed systems.

Ongoing support

Lutron has the resources you need to answer questions about security when they arise.

1. IT deployment guides
2. Guidance from our world-class 24/7 technical support organization with IT expertise throughout the product lifecycle

Clear Connect wireless technology

All Lutron wireless products utilize Lutron patented Clear Connect wireless technology, which operates in an uncongested radio frequency band. The result is ultra-reliable communication and smooth dimming performance with no flicker or delay. Other devices will not interfere with the Lutron lighting control system.

Clear Connect

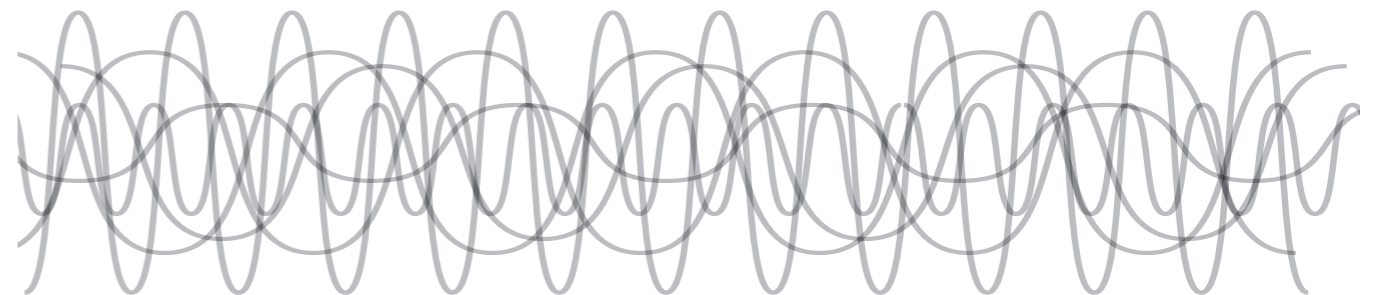


865 MHz: Lutron Clear Connect wireless technology

Lutron devices operate in an uncongested frequency band, providing ultra-reliable operation.



Other frequency bands



2.4 GHz: Cordless phones | Bluetooth devices | Wireless security cameras

Other devices operate in congested frequency bands, creating a high potential for wireless interference.



XCT sensing technology

Lutron's occupancy sensing will not leave occupants in the dark and eliminates callbacks

- Lutron sensors provide exceptional prevention of false-ons and false-offs
- Superior sensitivity – recognises the difference between fine human motion and background noise



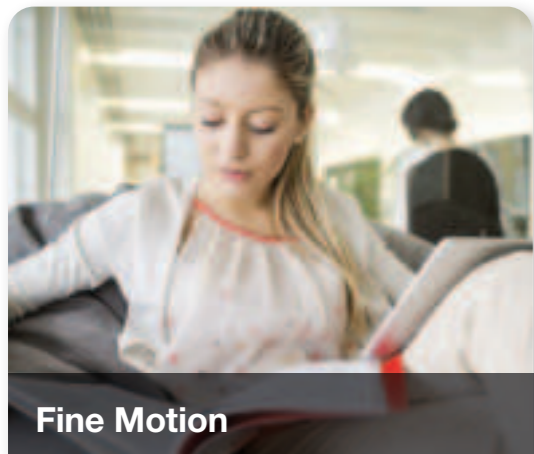
Major Motion

Person walking 1 metre (3 feet)



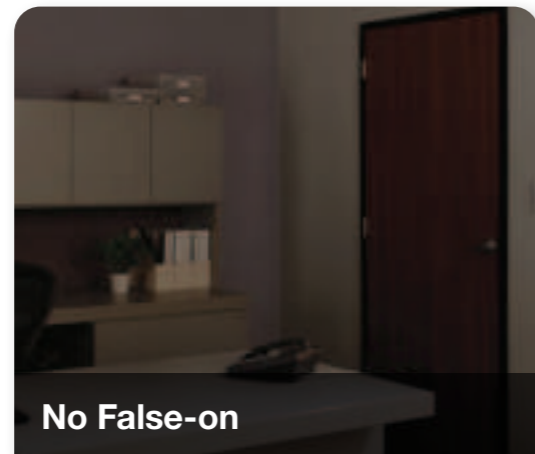
Minor Motion

Movements like extending our arms



Fine Motion

Small movements like flipping pages of a book



No False-on

Lights stay off when room is unoccupied

Access to tools and resources at your fingertips.

Exclusive access and quick answers keep your project moving.

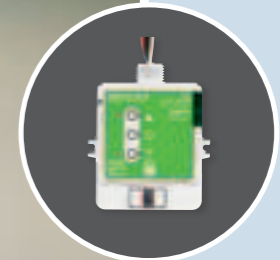


Designer+ for Vive

Lutron Designer+ for Vive is an intuitive, easy-to-use software tool that allows you to design a Lutron Vive lighting control system with visual “drag and drop” layout and connections. It also allows you to generate comprehensive system design documentation, including bills of materials, one-line diagrams, and sequence of operations. For **free** access please contact myLutronSupport@lutron.com.



Wireless hub
page 28



Wireless load controls
page 30



Wireless remotes
page 40



Wireless Sensors
page 44

Vive Installation
Suncrest Bank — Visalia, California



Vive wireless hub

Dimensions

W: 165 mm (6.5")
 H: 38 mm (1.5")
 D: 71 mm (2.8")



Vive hub power supply

Dimensions

W: 90 mm (3.54")
 H: 90 mm (3.54")
 D: 61 mm (2.4")

Mount using 35mm DIN in enclosure



Features and benefits

- Communicates with controls on a floor using Lutron wireless Clear Connect technology (range radius of 22 m [71 ft])
- Distributed system architecture
 - Pico remote controls and sensors communicate directly with the load devices they control and must be located within 9 m (30 ft) of the device with which they are associated
- Supports timeclock events based on both sunrise and sunset or fixed time-of-day
- Two contact closure inputs to enable load shed from other devices for Title 24 compliance and utility integration
- Open ADR 2.0b compatible for integration with utilities for demand response/loadshed and code compliance
- Each hub provides an individual dashboard for its coverage area and allows you to link to other hub dashboards from the mobile application
- API integration, native on the Vive hub, to enable integration with third party devices, systems, and software. RESTful APIs are available over the ethernet.
- Proactive alerts to inform batteries are low or devices may not be working to ensure system operates as expected.
- Scene control allows creating and configuring scenes to control individual devices, or groups of areas on demand and may be activated with the second contact closure input, API integration, or manual activation in the app.

Product options

Vive wireless hub models

Starter (up to 75 devices)

HNS-0-FM	Flush mount
----------	-------------

Standard

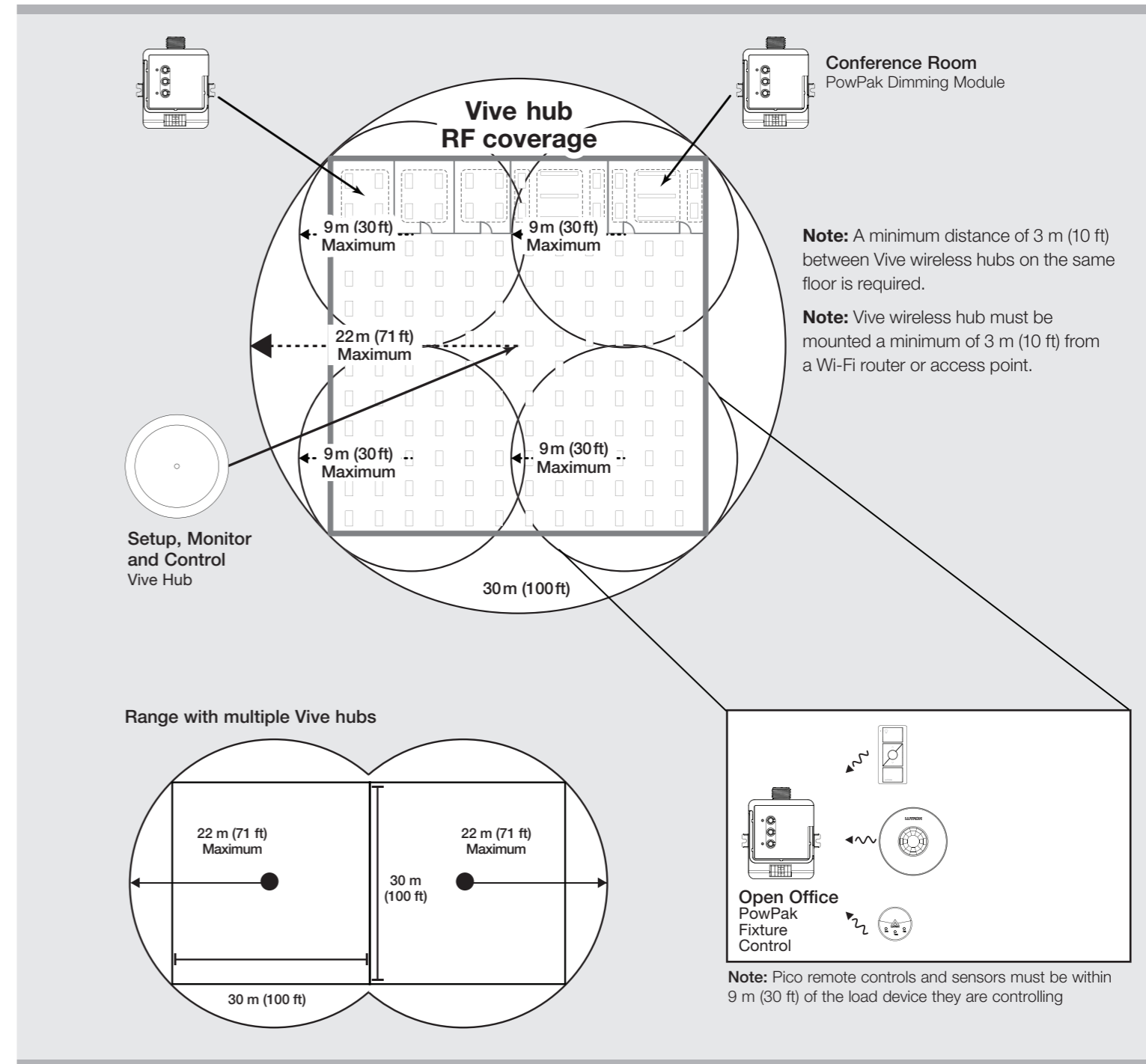
HNS-1-FM	Flush mount
HNS-1-SM	Surface mount
H-MOUNT-SM	Surface-mount installation adapter

Premium (with BACnet and API)

HNS-2-FM	Flush mount
HNS-2-SM	Surface mount
HNS-UPDATE	Software upgrade license to add BACnet or API capability to Hub
HNS-DEVICES	Software upgrade license expands device limit to 700 devices

How it works

All wireless devices to be associated to the Vive wireless hub must be within 71 ft (22 m) of the Vive wireless hub and must be on the same floor as the Vive wireless hub.



Note: A corporate Wi-Fi network can interfere with the Wi-Fi on the Vive wireless hub. Where a corporate Wi-Fi network exists, it is recommended to connect the Vive wireless hub to the corporate network using the Ethernet connection on the hub, and disable the hub's Wi-Fi.



PowPak relay module

Dimensions

W: 72 mm (2.89")
H: 87 mm (3.44")
D: 32 mm (1.25")

How to design and specify

- **One relay module**
For each controlled lighting zone in the space
- **Control**
Select appropriate model based on the size of the connected load
16A: 3840 W or 6A Motor
- **Contact closure output**
For sending occupancy information to third-party equipment such as HVAC systems
- **Input** 220-240V

Product options

16A models

RMNS-16R-DV-B



In-line dimmer

Dimensions

W: 46 mm (1.8")
H: 153 mm (6.0")
D: 32 mm (1.25")

How to design and specify

- **One in-line dimmer**
For each controlled phase dimmable LED, incandescent, halogen, or ELV lighting zone in the space.
- **Control**
1A:150W: Trailing edge capable, phase dimmable LED
1A: 250W: Incandescent, halogen, ELV loads
- **Input** 220–240 V~ 50/60 Hz

Product options

In-line dimmer

RMNS-250NE Trailing edge capable, phase dimmable LED, incandescent, halogen, ELV loads



PowPak dimming module with 0-10V control

Dimensions

W: 72mm (2.89")
H: 87mm (3.44")
D: 32mm (1.25")

How to design and specify

- **One dimming module with 0-10V control**
For each controlled 0-10V lighting zone in the space
- **Control**
8A: 0-10V controlled fixtures and switches compatible with third-party 0-10V fluorescent ballasts, LED drivers, and fixtures
- **Input** 220-240V
- **0-10V Link:** Communicates with up to 60 mA of fixtures

Product options

8A models with 0-10V control

RMNS-8T-DV-B



PowPak dimming module with DALI control

Dimensions

W: 72 mm (2.89")
H: 87 mm (3.44")
D: 32 mm (1.25")

How to design and specify

- **One control module with DALI**
For each controlled DALI lighting zone in the space
- **Control**
Select appropriate model based on the number of connected drivers/ballasts
- **Input** 220–240V 50/60Hz
- **DALI Link**
Guaranteed Supply Current: 8 mA (4-driver/ballast model)
64 mA (32-driver/ballast model)
Maximum Supply Current: 250 mA
DALI-2 Certified

Product options

4-driver/ballast model

RMNS-DAL4-SZ

32-driver/ballast model

RMNS-DAL32-SZ



PowPak contact closure output module

Dimensions

W: 72mm (2.89")

H: 87mm (3.44")

D: 32mm (1.25")

How to design and specify

- **One contact closure output module**
For each additional contact closure output you require

Product options

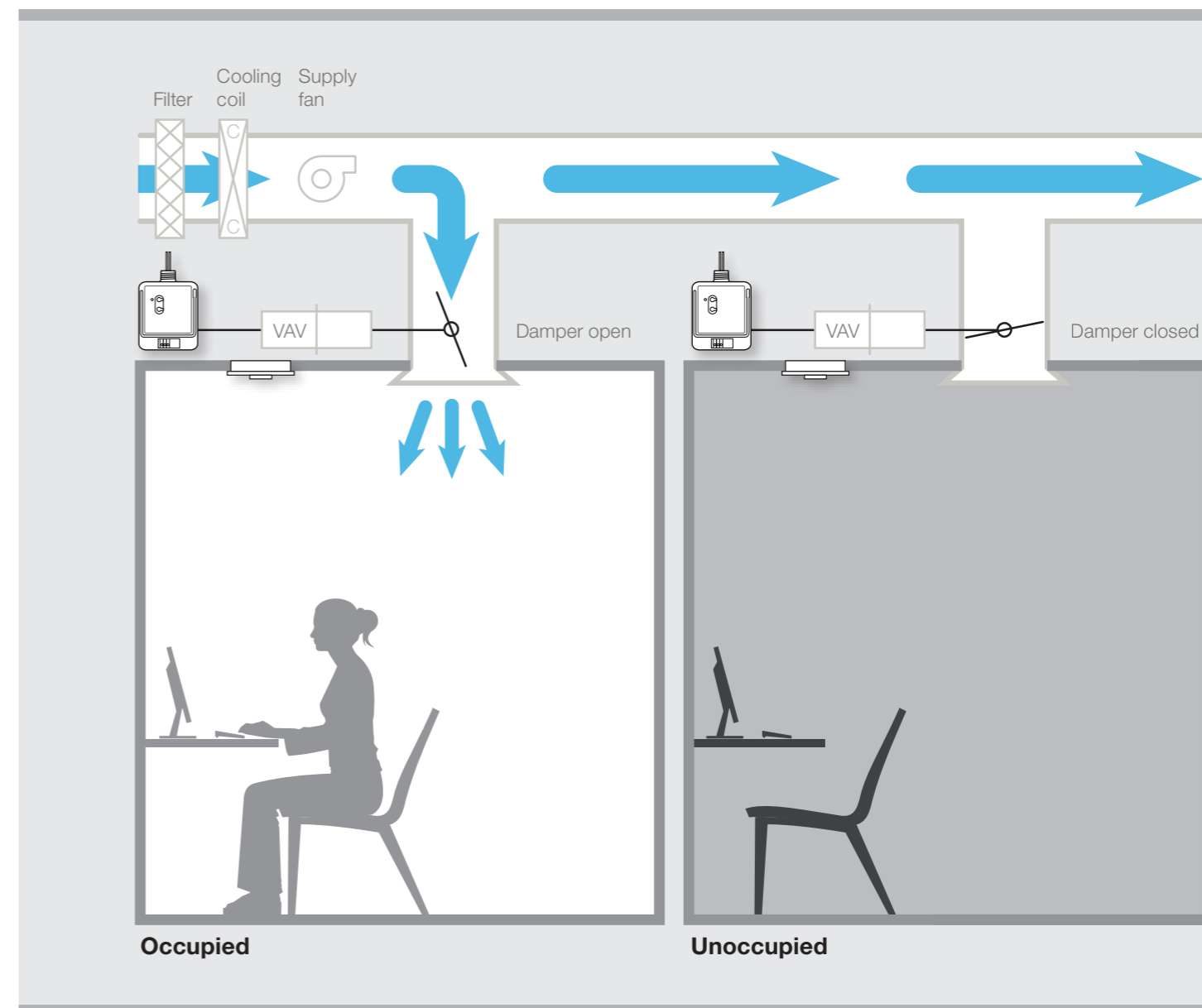
Standard

RMNS-CCO1-24-B Contact closure output

Note: If using a relay module with the contact closure output, you do not need to add a contact closure output module unless a second contact closure output is needed

How it works

In response to information received from a Radio Powr Savr occupancy/vacancy sensor, the PowPak contact closure output module communicates room occupancy to the VAV terminal unit. By not heating or cooling an unoccupied room, the electricity consumed by the HVAC system can be reduced.



Radio Powr Savr occupancy/vacancy sensor (ceiling mount)



PowPak contact closure output module

Remotes: Pico wireless remotes



Pico wireless remotes

3-button with raise/lower



2-button with raise/lower

Dimensions

W: 33mm (1.28")
H: 66mm (2.60")
D: 8mm (0.33")

How to design and specify

- Select one 2-button Pico wireless remote to add a location with ON/OFF control
 - Select one 3-button Pico wireless remote to add a location with ON/OFF control and one preset
 - Select one 2-button with raise/lower Pico wireless remote to add a location with ON/OFF and BRIGHTEN/DIM control
 - Select one 3-button with raise/lower Pico wireless remote to add a location with ON/OFF, BRIGHTEN/DIM control and one preset
- Note:** Spaces with a PowPak relay or dimming module will not have a local control in the room unless a Pico is added

Product options

2-button remotes

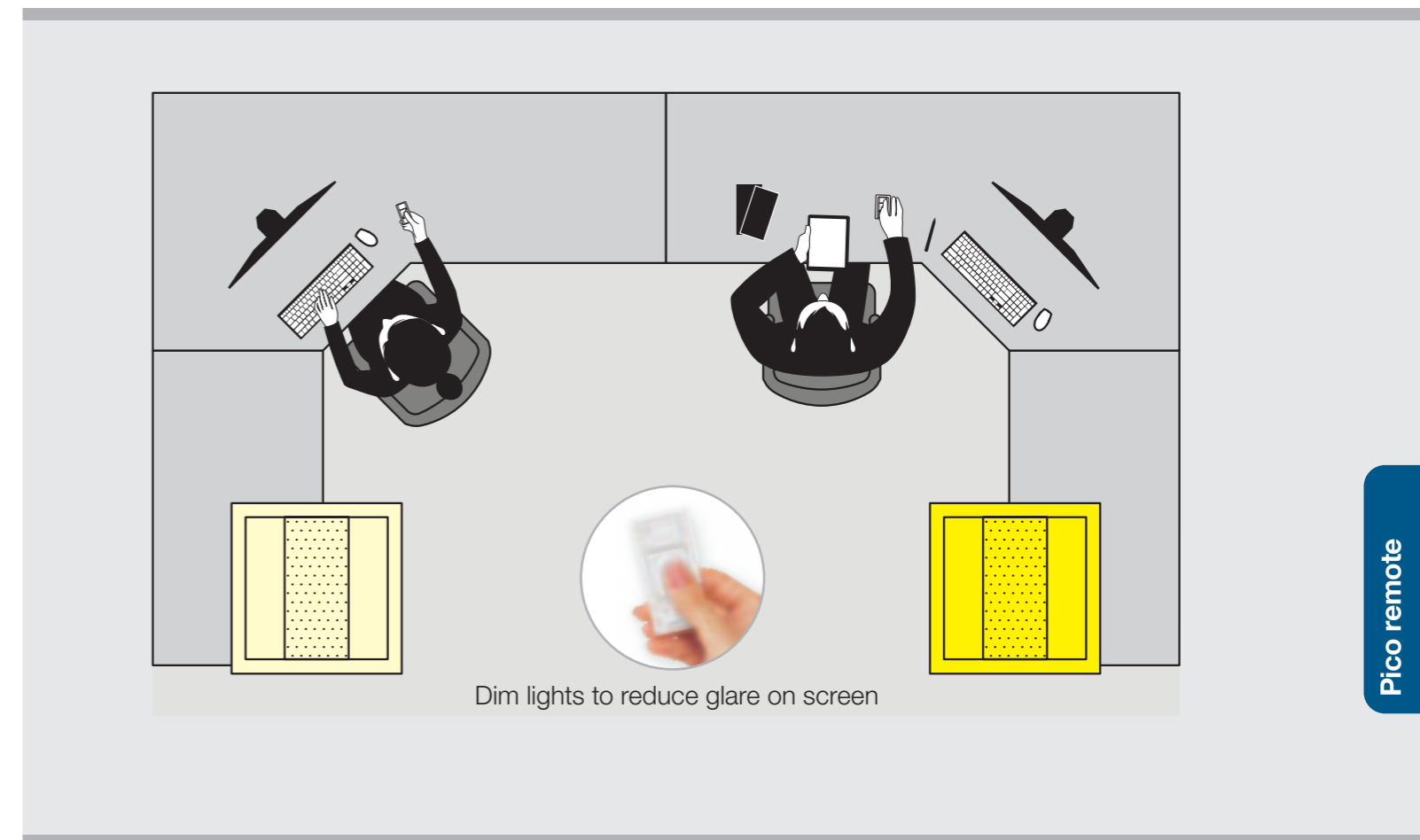
PN2-2BRL-TXX-L01	2-button with raise/lower wireless remote
PN2-2B-TXX-L01	2-button wireless remote

3-button remotes

PN2-3BRL-TXX-L01	3-button with raise/lower wireless remote
PN2-3B-TXX-L01	3-button wireless remote

How it works

- No wires—put it where it's most accessible
- Pedestal mount for tabletop use
- Surface mount anywhere with Claro wallplate
- 10-year battery life



Pico wall mounted (in a wallplate) — Add a new point of control anywhere with absolutely no wires



Raise lights for reading visibility

Pico remote

(XX in the model number represents colour/finish code)

Remotes: Pico wireless remotes and accessories



Pico wireless remotes

4-button 2-group control 4-button zone control 4-button scene control

Dimensions

W: 33mm (1.28")
H: 66mm (2.60")
D: 8mm (0.33")

How to design and specify

- The Pico wireless remote is a flexible and easy-to-use device that allows the user to control Lutron wireless load-control devices from anywhere in the space. This battery-operated control requires no external power or communication wiring.

Product options

4-button remotes

PN2-4B-TXX-L21P	2-group control
PN2-4B-TXX-L01	Zone control
PN2-4B-TXX-L31	Scene control

- Custom-engraved models for Zone control keypads (-L01, -S01) and Scene control keypads (-L31, -S31) are available but require a different set of button marking codes when ordering

Note: 2-Group (-L21, -S21, -LS21) and 4-Group Toggle (-L41) controls are not offered with the custom engraving option).

Button Marking Codes	Standard Engraving	Custom Engraving
Zone Control		
Lights	-L01	-EL1
Blinds	-S01	-ES1
Scene Control		
Lights	-L31	-EL2
Blinds	-S31	-ES2



Tabletop accessories

How to design and specify

- Select one Pico pedestal for each tabletop location based on the number of Pico remotes at each location

Product options

Tabletop accessories

L-PED1-XX	pedestal for one Pico remote
L-PED2-XX	pedestal for two Pico remotes
L-PED3-XX	pedestal for three Pico remotes



Wall-mount accessories

Pico wallplate adapter and wallplate

Dimensions

W: 89mm (3.50")
H: 89mm (3.50")
D: 10mm (0.38")

How to design and specify

- Select one Pico wallbox adapter for each Pico that you would like wall mounted with a wallplate

Product options

Wall-mount accessories

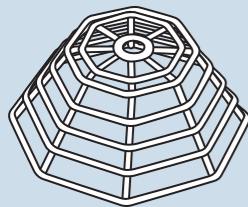
LPFP-S1-TXX	International Pico 1 column wallplate
LPFP-S2-TXX	International Pico 2 column wallplate



Wireless occupancy/vacancy sensors

Dimensions

W: 91 mm (3.57")
 H: 91 mm (3.57")
 D: 29 mm (1.13")



Wire cage guard

Dimensions

W: 178 mm (7.0")
 D: 83 mm (3.25")

How to design and specify

- A single occupancy sensor can communicate to all control devices in the room
- Use in small rooms or areas with medium to high partitions
- For 2.4 m (8 ft) ceilings: 44.9m² (484 ft²)
- For 3.7 m (12 ft) ceilings: 62.4 m² (676 ft²)
- Settings adjustable to change behaviour including occupancy to vacancy sensing, occupied and unoccupied levels
- Timeout options include: 30 min, 15 min (default), 5 min

Product options

Ceiling-mount sensors

LRF5-OCR2B-P-WH Occupancy/vacancy

Accessories

L-CMDPIRKIT Ceiling-mount sensor lens masking kit

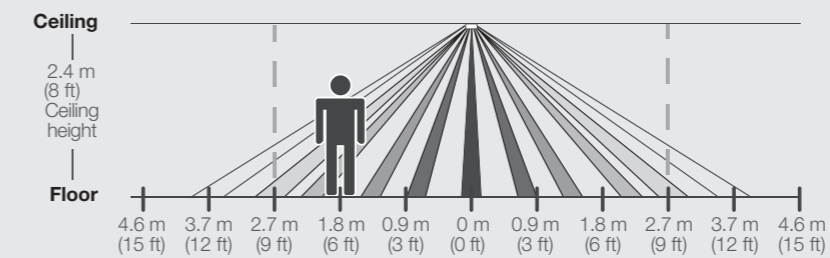
L-CRMK-WH Ceiling-mount sensor recess-mounting bracket

L-WIRECAGE-C Wire guard for ceiling-mount sensor

Sensor coverage diagrams

Ceiling mount, 360°

Floor view

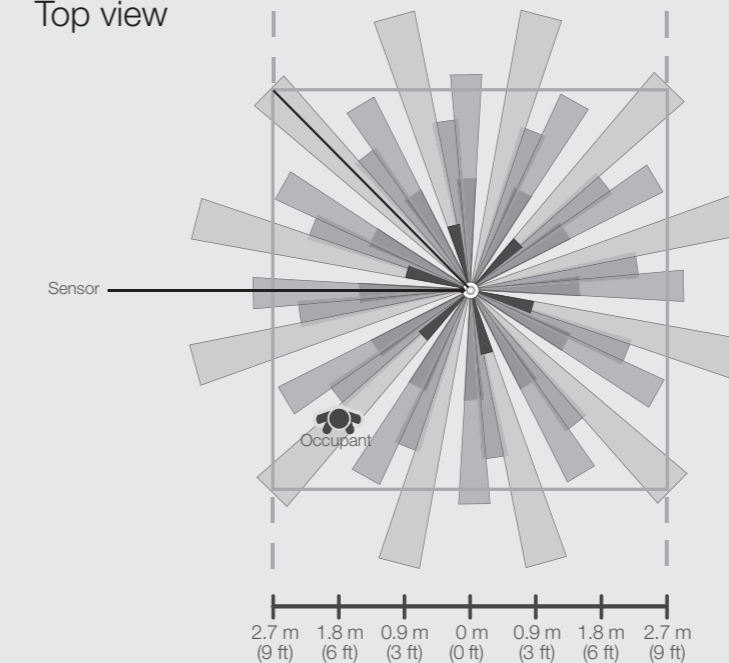


Coverage varies by ceiling height

Key:

- Minor motion
- Major motion

Top view



Ceiling-mount sensor coverage chart (for sensor mounted in centre of room)

Ceiling height	Maximum room dimensions for complete floor coverage	Radius of coverage at floor
2.4 m (8 ft)	5.5 x 5.5 m (18 x 18 ft) 30.2 m ² (324 ft ²)	4.0 m (13 ft)
2.7 m (9 ft)	6.1 x 6.1 m (20 x 20 ft) 37.2 m ² (400 ft ²)	4.4 m (14.5 ft)
3.0 m (10 ft)	6.7 x 6.7 m (22 x 22 ft) 44.9 m ² (484 ft ²)	4.9 m (16 ft)
3.7 m (12 ft)**	7.9 x 7.9 m (26 x 26 ft) 62.4 m ² (676 ft ²)	5.8 m (19 ft)

* Sensor mounting shown at 2.1 m (7 ft). Mounting height should be between 1.6 and 2.4 m (6 and 8 ft).
 ** 3.7 m (12 ft) is the maximum mounting height allowed.

Sensors: Wall-/Hall-/Corner-mount occupancy/vacancy sensors



Radio Powr Savr Wireless sensors

Dimensions

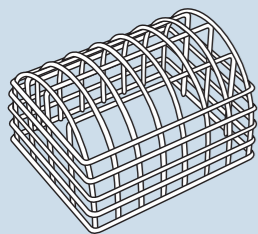
W: 46mm (1.8")
H: 110mm (4.35")
D: 34mm (1.35")



Flexible armature mounting kit

Dimensions

W: 92mm (3.62")
H: 55mm (2.18")



Wire cage guard

Dimensions

W: 178mm (7.0")
H: 146mm (5.75")
D: 114mm (4.5")

How to design and specify

- A single occupancy sensor can communicate to all control devices in the room

Product options

Wall-mount sensors

- Use in large open rooms with few tall obstructions
- Coverage: 278.7 m² (3,000 ft²)

LRF5-OWLB-P-WH Occupancy/vacancy

Corner-mount sensors

- Use in medium to large open rooms with few tall obstructions
- Coverage: 232 m² (2,500 ft²)

LRF5-OKLB-P-WH Occupancy/vacancy

Hallway sensors

- For a 1.82 m (6 ft) wide hallway: 15.24 m (50 ft) coverage
- For a 3.0 m (10 ft) wide hallway: 45.72 m (150 ft) coverage

LRF5-OHLB-P-WH Occupancy/vacancy

Accessories

LRF-ARM-WH Flexible armature mounting kit for Radio Powr Savr wall, hall, corner sensors

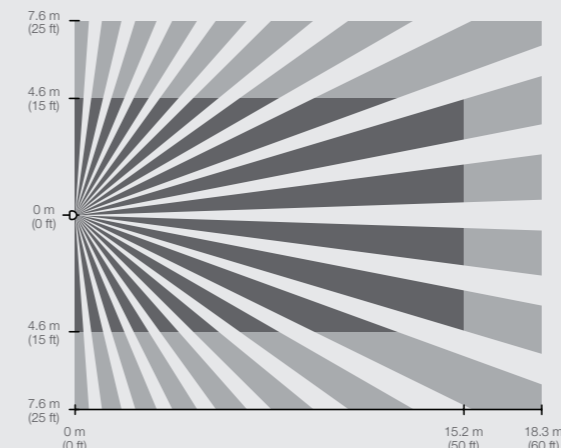
L-WIRECAGE-W Wire guard for in-wall sensor

Sensor coverage diagrams

Wall mount*, 180°

139.4 m² (1,500 ft²)—minor motion
278.7 m² (3,000 ft²)—major motion

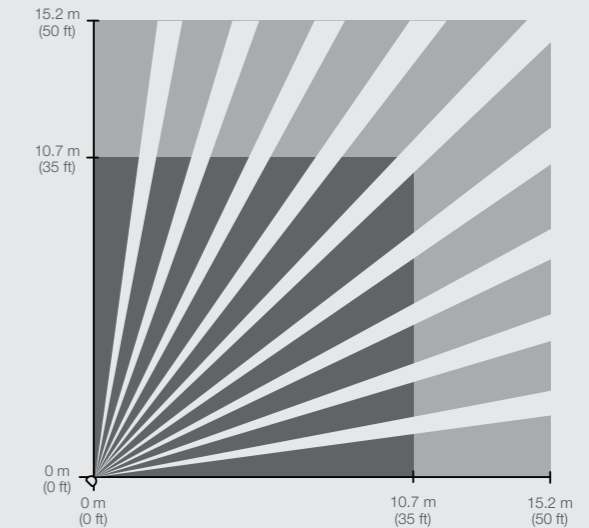
Top view



Corner mount*, 90°

113.8 m² (1,225 ft²)—minor motion
232.3 m² (2,500 ft²)—major motion

Top view



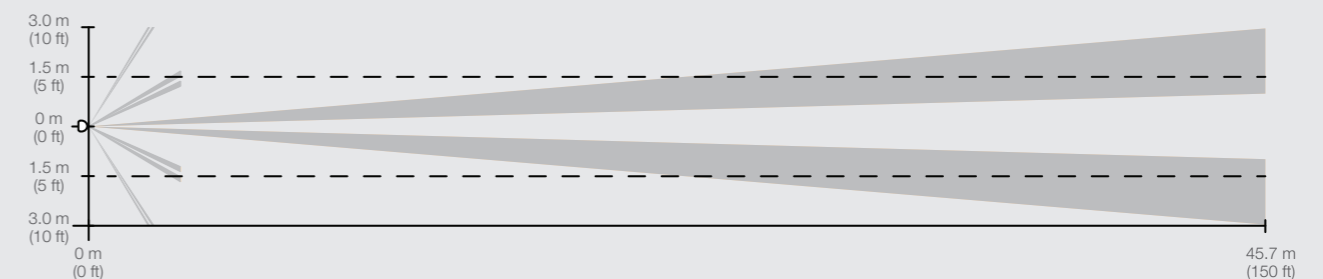
Key:

- Minor motion
- Major motion

Hallway*, long narrow field of view

Coverage varies by hallway width and length

Top view



Hallway sensor maximum recommended length chart (sensor centered within hallway)

Width of hallway	Length of hallway
1.8m (6ft) or less	15.2m (50ft)
2.4m (8ft)	30.5m (100ft)
3.0m (10ft) or more	45.7m (150ft)

* Sensor mounting shown at 2.1 m (7 ft). Mounting height should be between 1.6 and 2.4 m (6 and 8 ft).

** 3.7 m (12 ft) is the maximum mounting height allowed.



Wireless daylight sensors

Dimensions

W: 41 mm (1.6")

H: 41 mm (1.6")

D: 17 mm (0.7")

How to design and specify

- A single daylight sensor is capable of controlling:
 - All PowPak switching zones
 - All PowPak dimming modules with DALI or 0–10 V control

Product options

Daylight sensor

TRF5-DCRB-WH	Daylight sensor
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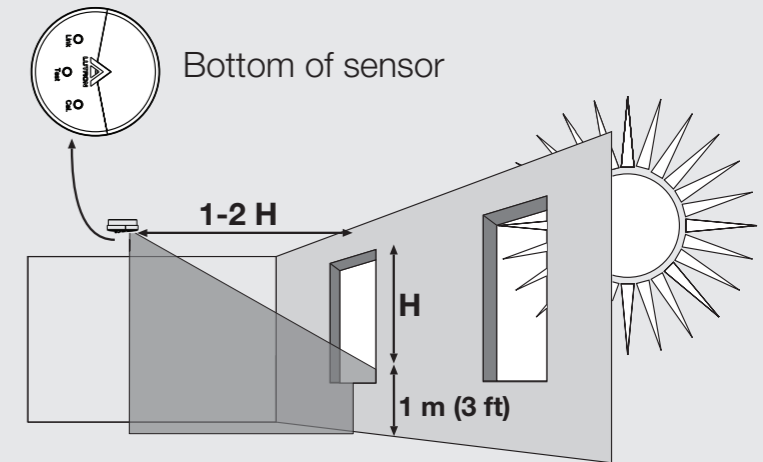
* Sensor mounting shown at 7 ft (2.1 m). Mounting height should be between 6 and 8 ft (1.6 and 2.4 m).

** 12 ft (3.7 m) is the maximum mounting height allowed.

Sensor coverage diagrams

Location for average size areas

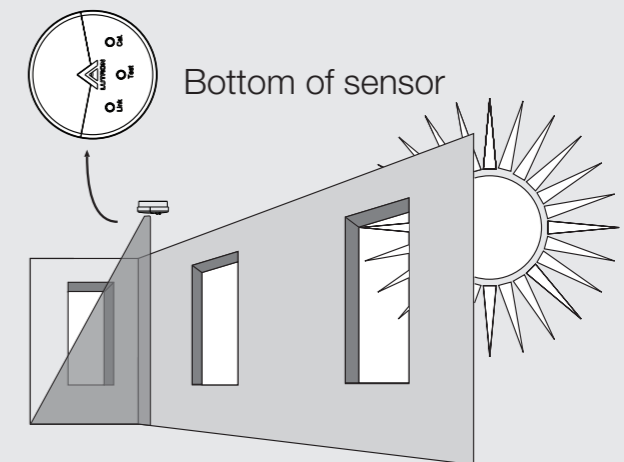
Arrow points towards the area viewed by the sensor (towards windows).



H = Effective Window Height

Location for narrow areas (corridors, private offices)

Arrow points towards the area viewed by the sensor (away from window).





Full-scope startup

- Onsite
- Remote

Available startup services

Onsite full-scope startup

- Lutron Service Representative onsite to ensure proper system startup and configuration
- Train facilities staff to best utilise and maintain the lighting control assets
- Reduce risk and keep your Installation team small by having Lutron do the setup for you.
- Includes a Commercial System Limited Warranty
- Onsite startup enhancements available

Product options

Setup service models

Full scope startup

LSC-OS-SU-VIVE	Onsite full-scope startup
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Startup enhancements (Available with onsite full-scope startup)

LSC-AH-SU	Startup performed at night or weekends (weekend work available in certain locations)
LSC-SENS-LT	Sensor layout & tuning
LSC-SPV-DOC	System performance — verification documentation

Commercial System Limited Warranty 1 year limited warranty. The customer can register the product to increase the warranty period from 1 year to 5 years.



Operational services

- Solution training
- System optimisation
- Onsite reconfiguration

Available Operational Services

- Support from Lutron to maximise system potential
- Reprogram the system as space needs change over time
- Support retro-commissioning requirements
- Pre-purchase with the system to capture costs in capital budget

Product options

Operational service models

Operational services

LSC-TRAINING	Customer-site solution training
LSC-SYSOPT	System optimisation service
LSC-OS-PROG8-EN	8 hours of onsite reconfiguration support
LSC-OS-PROG4-EN	4 hours of onsite reconfiguration support

Onsite services are also available for purchase after the system is in operation at hourly, half-day and full-day rates; contact Lutron at lscwarranty@lutron.com for more information.

Model Number	Description
Vive wireless hub	
H-MOUNT-SM	Surface-mount installation adapter
HNS-0-FM	Starter Vive wireless hub, flush mount
HNS-1-FM	Standard Vive wireless hub, flush mount
HNS-1-SM	Standard Vive wireless hub, surface mount
HNS-2-FM	Premium Vive wireless hub, flush mount
HNS-2-SM	Premium Vive wireless hub, surface mount



Vive Vue Dashboard Software	
VIVE-VUE	Vive Vue Software Dashboard License
HNS-UPDATE	Software upgrade license to add BACnet or API capability to Hub
HNS-DEVICES	Software upgrade license expands device limit to 700 devices

In-line dimmer	
RMNS-250NE	Controls up to 150 W of phase dimmable LED & up to 250 W of incandescent, halogen, or ELV loads



PowPak relay module	
RMNS-16R-DV-B	16A relay



PowPak dimming module	
RMNS-8T-DV-B	8A 0-10 V controller-connector
RMNS-DAL32-SZ	32-driver/ballast model
RMNS-DAL4-SZ	4-driver/ballast model

PowPak contact closure output module	
RMNS-CCO1-24-B	One contact closure output



Model Number	Description
Pico wireless remotes	
PN2-2BRL-TXX-L01	2-button with raise/lower
PN2-2B-TXX-L01	2-button
PN2-3BRL-TXX-L01	3-button with raise/lower
PN2-3B-TXX-L01	3-button
PN2-4B-TXX-L21	4-button with 2 group control
PN2-4B-TXX-L01	4-button with zone control
PN2-4B-TXX-L31	4-button with scene control



(XX in the model number represents colour/finish code)

Pico accessories	
L-PED1-XX	Pico wireless remote single pedestal
L-PED2-XX	Pico wireless remote double pedestal
L-PED3-XX	Pico wireless remote triple pedestal



(XX in the model number represents colour/finish code)

Pico Colours

Colours

- White (AW)
- Black (BL)

WORLDWIDE HEADQUARTERS

Lutron Electronics Co., Inc.
7200 Suter Road
Coopersburg, PA 18036-1299
USA
Toll-free: 1 888 LUTRON1
TEL: +1 610 282 3800
FAX: +1 610 282 1243
intsales@lutron.com

EUROPEAN HEADQUARTERS

Lutron EA Ltd.
4th Floor
52 Leadenhall Street
London EC3A 2EB, UK
Phone: +44 (0)20 7702 0657
Toll Free: 0800 282 107
Fax: +44 (0)20 7480 6899
lutronlondon@lutron.com

ASIAN HEADQUARTERS

Lutron GL Ltd.
390 Havelock Road
#07-04 King's Centre
Singapore 169662
TEL: +65 6220 4666
FAX: +65 6220 4333
lutronsea@lutron.com

INTERNATIONAL OFFICES

Brazil: São Paulo

TEL: +55 11 3257 6745

China: Beijing

TEL: +86 10 5925 1340

China: Guangzhou

TEL: +86 20 2885 8378

China: Hong Kong

TEL: +852 2104 7733

China: Shanghai

TEL: +86 21 6165 0990

Colombia: Bogotá

TEL: +57 1 467 2760

France: Paris

TEL: +33 1 56 59 16 64

Germany: Berlin

TEL: +49 309 710 4590

India: Bangalore

TEL: +91 80 6759 0485

India: Mumbai

TEL: +91 22 4070 0867

India: Gurgaon (New Delhi)

TEL: +91 124 439 0130

Italy: Milan

Tel: +39 800 979 208

Japan: Tokyo

TEL: +81 3 6866 8444

Mexico: Chihuahua

TEL: +1 610 282 6701

Russia: Moscow

TEL: +7 495 649 6094

Saudi Arabia: Riyadh

TEL: +966 1 466 1546

South Africa: Johannesburg

TEL: +27 (0) 83 731 0066

Spain Madrid

TEL: +34 915 678 479

UAE: Dubai

TEL: +971 4 299 1224

For all the resources including videos
for Vive wireless solutions, please visit
lutron.com/vive

lutron.com

Lutron Electronics Co., Inc., 7200 Suter Road, Coopersburg, PA 18036-1299

Customer Assistance

Online: lutron.com/help

Email: support@lutron.com

Phone: 1.844.LUTRON1 (588.7661) — includes 24/7 technical support

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