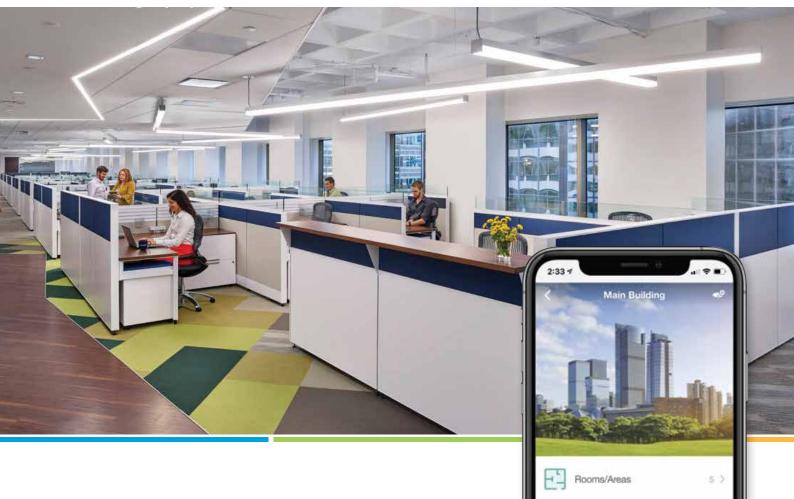


Simple, scalable, wireless

# lighting control



Energy

Schedules

Load Shed

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 is easier than ever in new construction or retrofit situations, and has options to meet your budgetary needs.

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

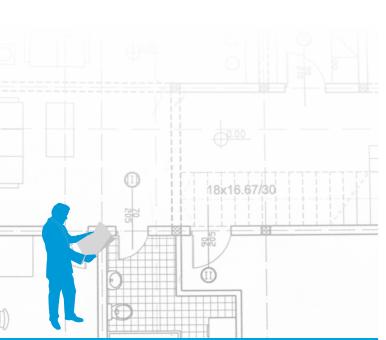
Vive Installation
Madison College — Madison, Wisconsin

















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 (2)



Maximise productivity and building performance

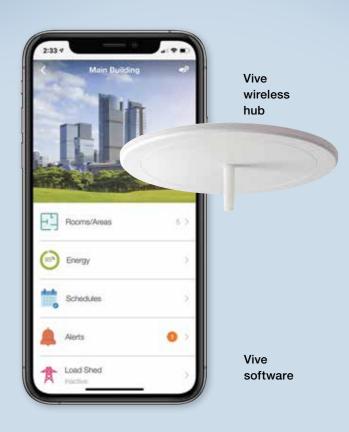
Monitor, adjust, and manage your system from any smart device - easily adjust the lighting control to accommodate building churn, improve occupant comfort, and enhance energy efficiency

Energy savings — lighting uses more electricity than any other building system. Lutron solutions can save up to 60%<sup>2</sup> 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

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



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

- · Any budget
- · 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.

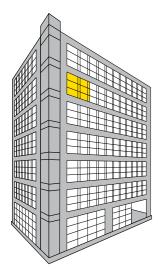
## Energy-saving control strategies





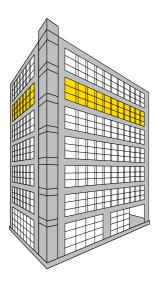


Vive wireless solutions offer a multi-strategy approach that accommodates your budget and performance needs now, and for the future of your building.



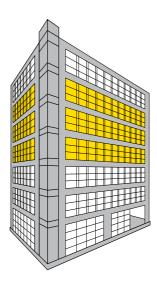
## Single office space

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



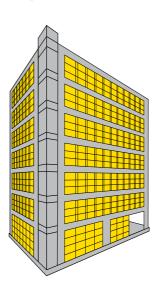
#### Single floor

Expand to new areas or an entire floor at any time without reprogramming or replacing existing equipment. By connecting to a Vive wireless hub.



#### 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.



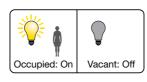
## Entire building

Vive offers seamless integration to other building management systems through BACnet.

## Combine lighting control strategies to maximise efficiency

#### What is the savings opportunity?

Lutron solutions can save 60% or more lighting energy.



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

20-60% Lighting

**Potential savings** 





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

25-60% Lighting





**High-end trim** sets the maximum light level based on customer requirements in each space. 10 - 30%Lighting







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

10 - 20%Lighting





Scheduling provides pre-programmed changes in light levels based on time of day. 10-20% Lighting





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

5 - 15%**HVAC** 





Load shedding automatically reduces lighting loads during peak electricity usage times. 30 - 50%Peak Period



System Optimisation 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. 6 Lutron Lutron 7







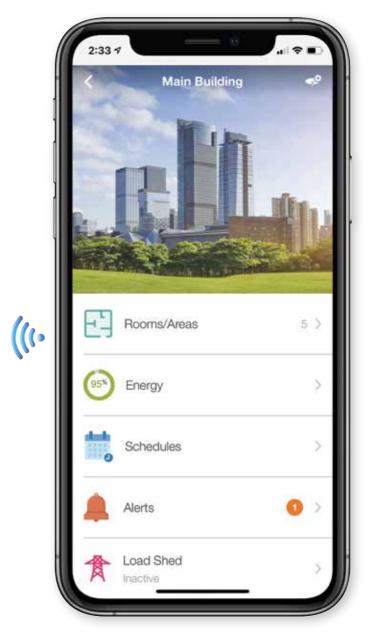
## Wireless controls and sensors



Centralised control and integration



## 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

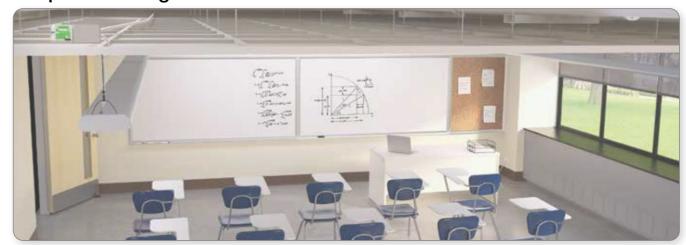
#### Classroom

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



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

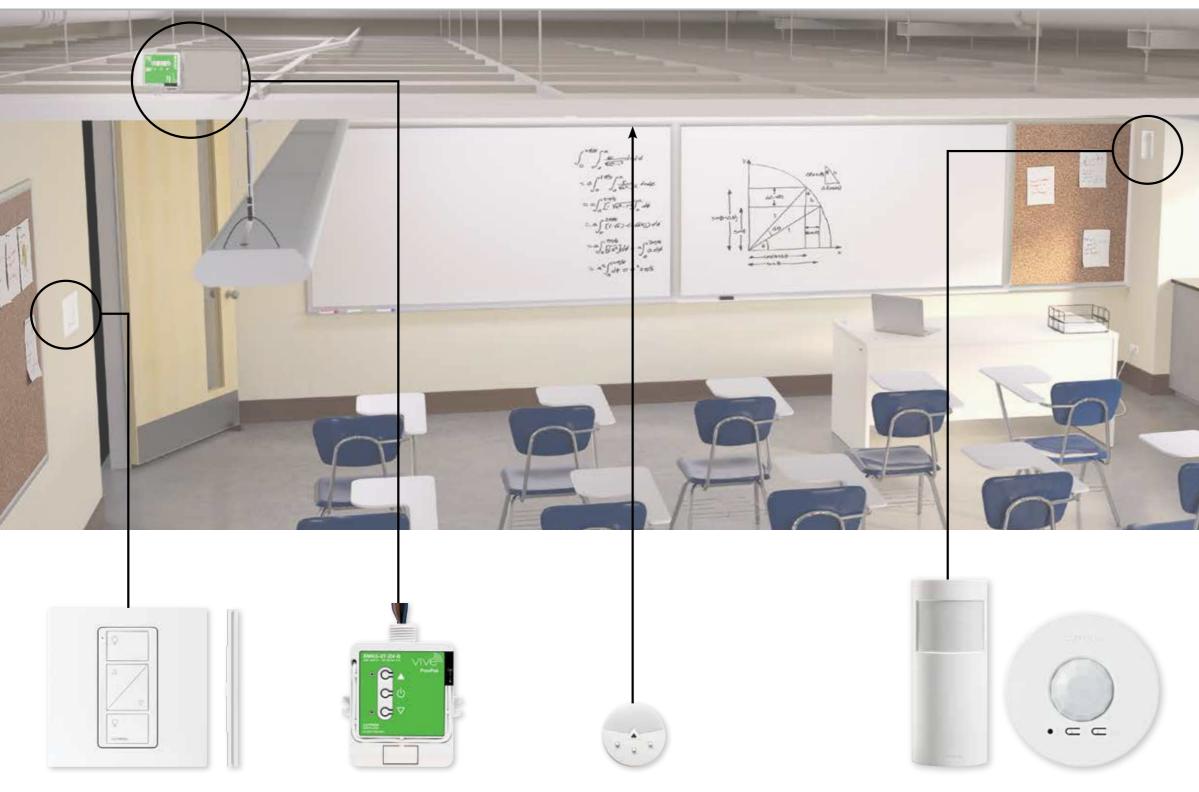


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No wires -

Put it where it is most accessible 10 year battery life

#### **Wireless Load Control** Junction box

Easy Retrofit —

PowPak modules mount on a standard junction 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



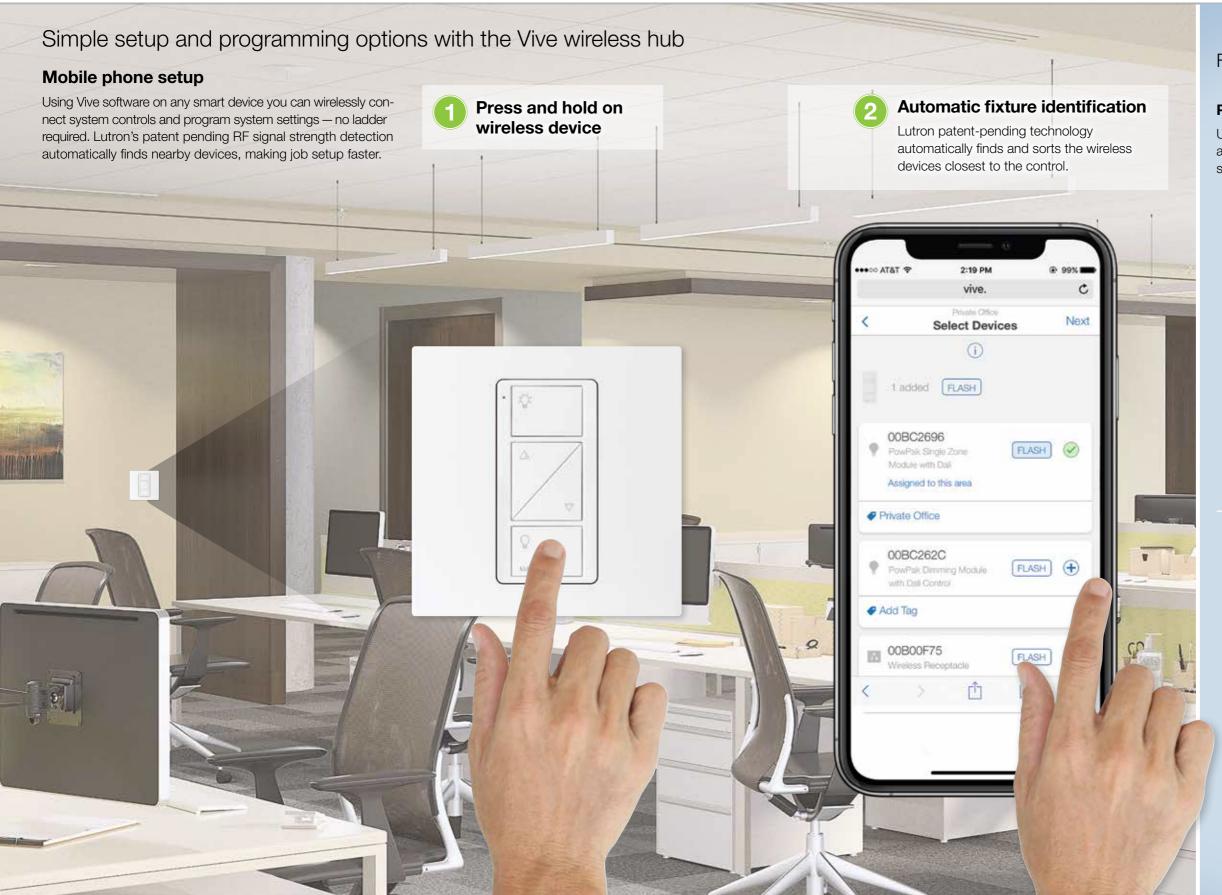
#### **Vive Wireless Hub**

- Add a Vive Hub to any job for simple set-up, control and monitoring
- Each hub wirelessly communicates with devices in a 929 m<sup>2</sup> (10,000 ft<sup>2</sup>) area

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## 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.



Press and hold for 6 seconds



Occupancy sensor

Press and hold for 6 seconds

It works! Sensor now talks to the wireless dimmer









#### **Energy Reporting**

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



#### Schedules

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



#### **Light Control**

Directly adjust the light levels.





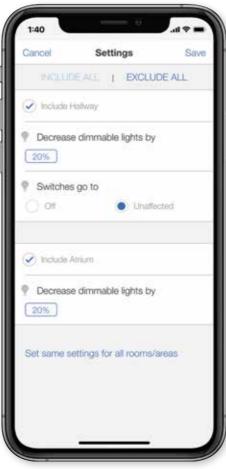
#### **Load Shed**

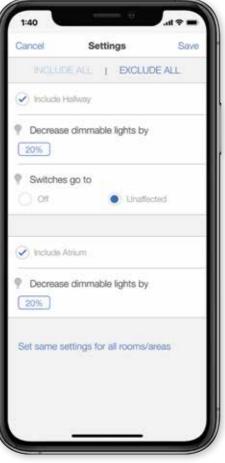
Easily set lighting reduction levels that automatically respond during peak electricity usage times.

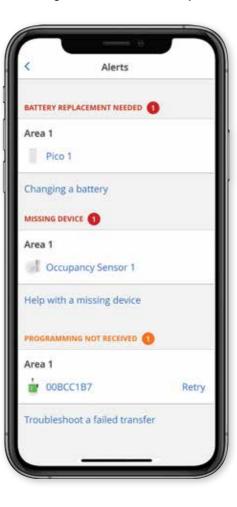


#### Alerts

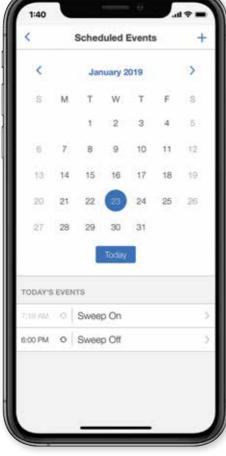
View proactive alerts that show issues such as low batteries or inactive devices to help improve building maintenance efficiency.

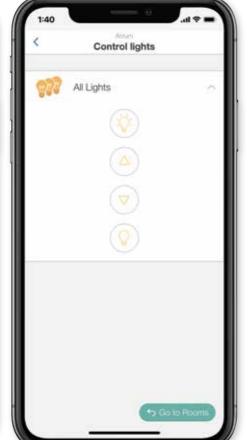






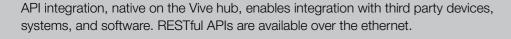






## Seamlessly integrate with your building system

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.



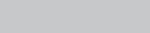






**Building/Energy Management** Systems (BMS/EMS)







**Energy Dashboards and Analytics Packages** 



Audio & Video



IT

16 Lutron Lutron 17 Lutron security

## Lutron reliability









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 utilises 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:

- 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. Best practices for securing passwords, including salting and use of SCrypt recommended by the International Standards Organization (ISO)
- 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

## **3rd-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. 3rd-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 organisation with IT expertise throughout the product lifecycle

## Clear Connect wireless technology

All Lutron wireless products utilise 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

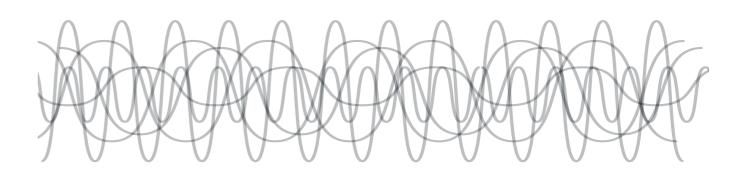


#### 868 MHz: Lutron Clear Connect wireless technology

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.

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## 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



Person walking 1 metre (3 feet)



Movements like extending our arms



Small movements like flipping pages of a book



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.** 

## Create flexible designs

Use these simple documents to specify and design Vive wireless systems for common applications.

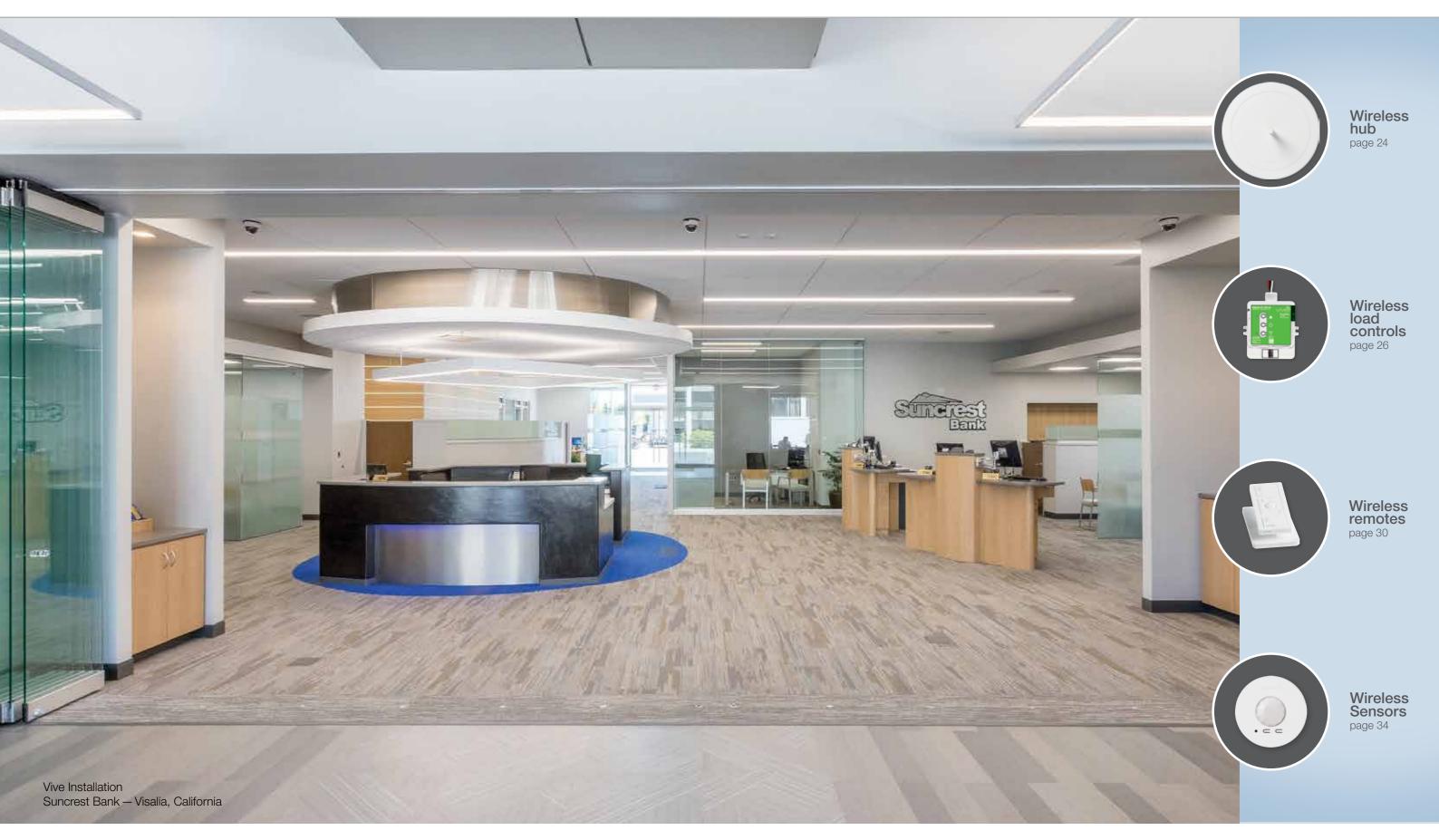


#### Application guide for typical installations

Simple room based graphical layouts demonstrate how to apply Vive components to different spaces in your building

Available online at lutron.com/vive-chinese









#### Vive wireless hub

#### **Dimensions**

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



#### Vive hub power supply

#### **Dimensions**

**W:** 102 mm (4.0") **H:** 43 mm (1.7") **D:** 71 mm (2.8")



## 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 9m (30ft) of the device with which they are associated
- · Supports timeclock events based on both sunrise and sunset or fixed time-of-day
- Integrated multi-colour LED provides feedback on what mode the hub is in
- Two contact closure Inputs initiating demand response/loadshed
- · 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
- · Proactive alerts to inform batteries are low or devices may not be working to ensure system operates as expected.

## Product options

#### Vive wireless hub models

#### Starter (up to 75 devices)

HMS-0-FM Flush mount Standard (up to 700 devices)

HMS-1-FM	Flush mount
HMS-1-SM	Surface mount

#### Premium with BACnet (up to 700 devices)

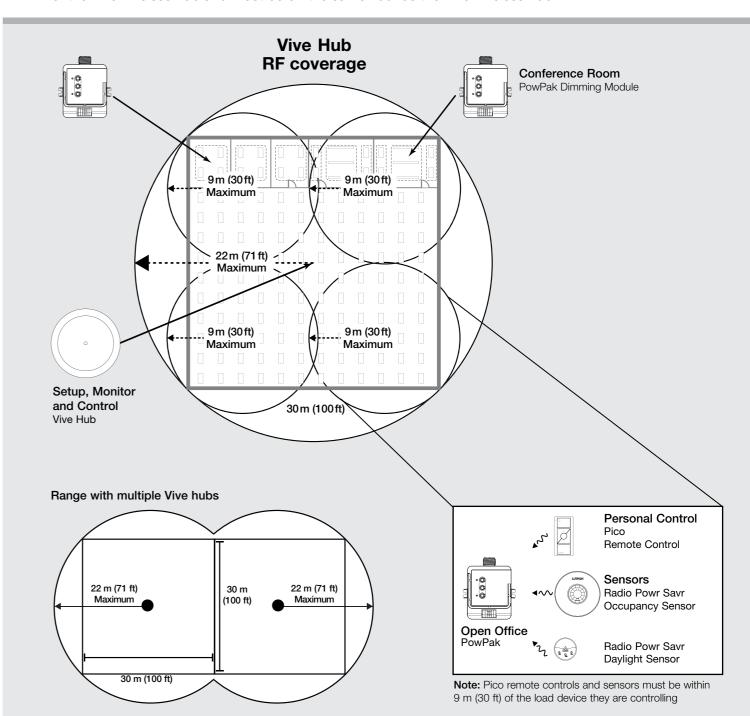
HMS-2-FM	Flush mount
HMS-2-SM	Surface mount

#### Notes:

- A minimum distance of 3 m (10 ft) between Vive wireless hubs on the same floor is required.
- 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 Ether net connection on the hub, and disable the hub's Wi-Fi.
- Vive wireless hub must be mounted a minimum of 3 m (10 ft) from a Wi-Fi router or access point.

#### How it works

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





#### PowPak relay module

#### **Dimensions**

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



#### PowPak dimming module with 0-10V control

#### **Dimensions**

W: 72mm (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:** 3840W or 6A Motor

5A: 1200W

#### · Contact closure output

For sending occupancy information to third-party equipment such as HVAC systems

• Input 220/240 V

## Product options

16A models

RMMS-16R-DV-B

5A models

RMMS-5R-DV-B

## 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

8AX switching and 60mA of 0-10V LED 220-240V

• Input 220-240V

· 0-10V Link

Communicates with up to 60 mA of fixtures

## Product options

8A models with 0-10V control

RMMS-8T-DV-B



#### PowPak dimming module with DALI control

#### **Dimensions**

In-line dimmer

**W:** 46mm (1.8")

**H:** 153 mm (6.0")

**D:** 32 mm (1.25")

**Dimensions** 

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

#### · One control module with DALI For each controlled DALI lighting zone in the space

How to design and specify

Select appropriate model based on the number of connected drivers/ballasts

• **Input** 220–240 V 50/60 Hz

· 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

RMMS-DAL4-SZ

32-driver/ballast model

RMMS-DAL32-SZ

## 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

1 A: 250W: Trailing edge capable, phase dimmable LED, incandescent, halogen, ELV loads

220-240 V~ 50/60 Hz Input

## Product options

In-line dimmer

**RMMS-250NE** Trailing edge capable, phase dimmable LED,

incandescent, halogen, ELV loads





PowPak contact closure output module

#### **Dimensions**

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

## How to design and specify

· One contact closure output module For each additional contact closure output you require

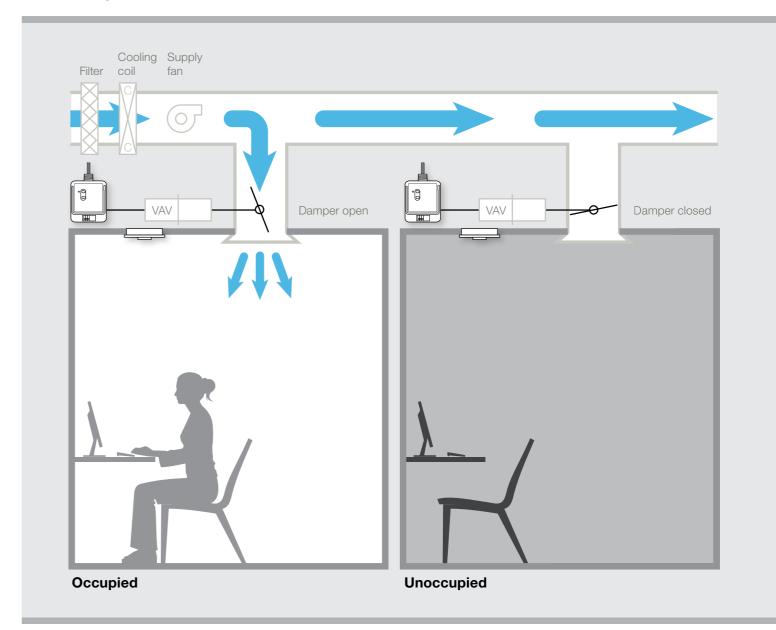
## Product options

#### Standard

RMMS-CC01-24-B Contact closure output

## 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







#### Pico wireless remotes

3-button 3-button with raise/ lower





2-button with raise/lower

2-button

#### **Dimensions**

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

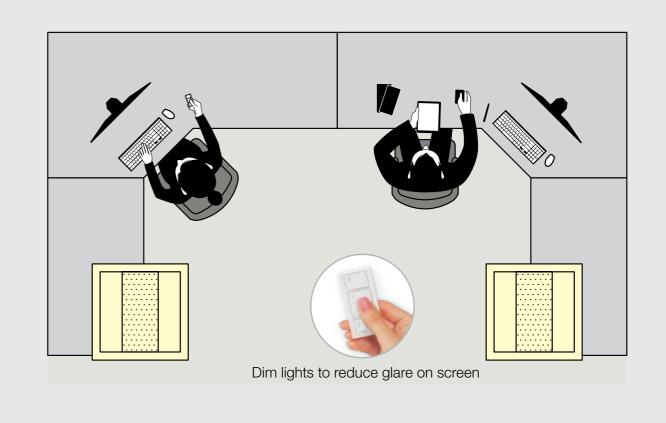
## Product options

#### 2-button remotes

PM2-2BRL-TXX-L01	2-button with raise/lower wireless remote
PM2-2B-TXX-L01	2-button wireless remote
3-button remotes	
3-button remotes PM2-3BRL-TXX-L01	3-button with raise/lower wireless remote

## How it works

- No wires put it where it's most accessible
- · Pedestal mount for tabletop use
- Surface mount anywhere with a 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

Lutron 33









#### Pico wireless remotes

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

4-button scene control

#### **Dimensions**

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

PM2-4B-TXX-L21P	2-group control
PM2-4B-TXX-L01	Zone control
PM2-4B-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
Scene Control		
Lights	-L31	-EL2







#### Wall-mount accessories

Pico wallplate adapter and wallplate

#### **Dimensions**

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

## 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

## 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")

## 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: 44.9 m<sup>2</sup> (484 ft<sup>2</sup>)
- For 3.7 m (12 ft) ceilings: 62.4 m<sup>2</sup> (676 ft<sup>2</sup>)
- · Settings adjustable to change behaviour including occupancy to vacancy sensing, occupied and unoccupied levels
- · Timeout options include: 30 min, 15 min (default), 5 min

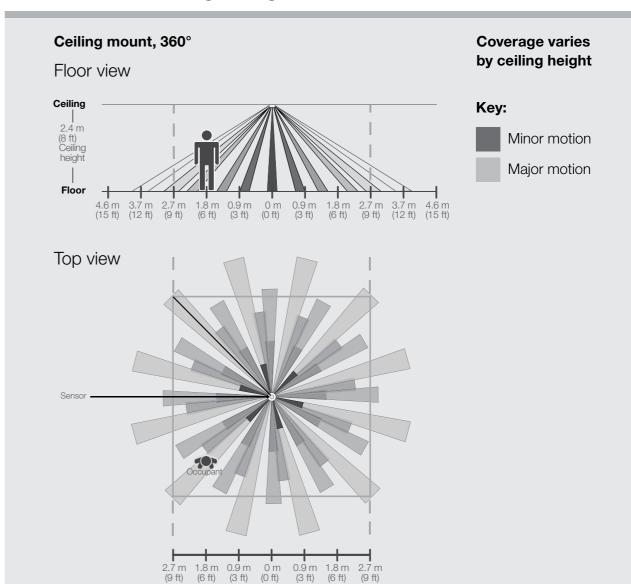
## Product options

Ceiling-mount sensors

LRF4-OCR2B-P-WH

Occupancy/vacancy

## Sensor coverage diagrams



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

Ceiling height	Maximum room dimension for complete floor coverage		Radius of coverage at floor
2.4 m (8 ft)	5.5 x 5.5 m (18 x 18ft)	30.2 m <sup>2</sup> (324 ft <sup>2</sup> )	4.0m (13ft)
2.7 m (9 ft)	6.1 x 6.1 m (20 x 20 ft)	37.2 m² (400 ft²)	4.4m (14.5ft)
3.0m (10ft)	6.7 x 6.7 m (22 x 22 ft)	44.9 m² (484 ft²)	4.9m (16ft)
3.7 m (12 ft)**	7.9 x 7.9 m (26 x 26 ft)	62.4 m <sup>2</sup> (676 ft <sup>2</sup> )	5.8m (19ft)

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

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<sup>\*\* 3.7</sup> m (12 ft) is the maximum mounting height allowed.







Radio Powr Savr Wireless sensors

#### **Dimensions**

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



Flexible armature mounting kit

#### **Dimensions**

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

## 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 m<sup>2</sup> (3,000 ft<sup>2</sup>)

LRF4-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)

LRF4-OKLB-P-WH

Occupancy/vacancy

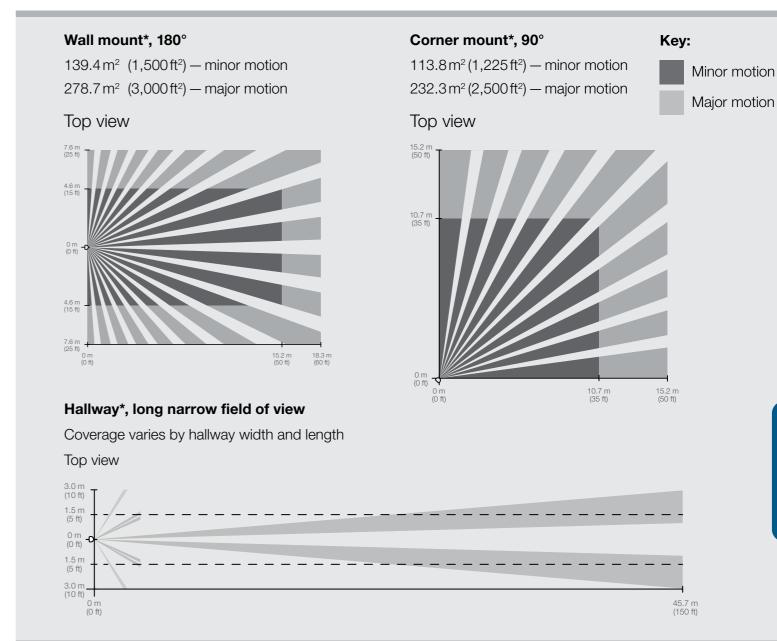
#### Hallway sensors

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

LRF4-OHLB-P-WH

Occupancy/vacancy

## Sensor coverage diagrams



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

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

<sup>\*\* 3.7</sup> 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 0-10V control

## Product options

#### Daylight sensor

LRF4-DCRB-WH

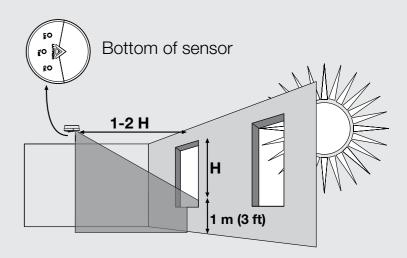
Daylight sensor

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

## Sensor coverage diagrams

## Location for average size areas

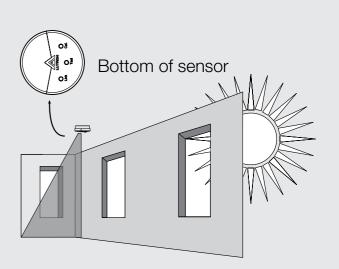
Arrow points towards the area viewed by the sensor (towards windows).



**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	
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	



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 **Iscwarranty@lutron.com** for more information.



## Commercial System Limited Warranty

The commercial system limited warranty offers 5 years of parts coverage, 2 years of first-available onsite/remote response time for system issues, and 24/7 technical support. Warranty included with onsite full-scope startup & available with remote full-scope startup

## Product options

#### **Vive Limited Warranty**

LSC-B2	Commercial System	
2-Year Limited		

## Technology Support Plans (TSPs)

All Lutron Technology Support Plans provide 100% parts and diagnostic labour coverage for up to 10 years. Optional response-time guarantees and preventive maintenance visits enable the coverage to be customized to meet the facility's needs. TSPs are available for any Vive system; a warranty audit visit will be included with the purchase of a TSP when full-scope startup is not purchased.

## Product options

#### **Vive Technology Support Plans**

LSC-SILV-IW	Silver Level Technology Support Plan
LSC-GOLD-IW	Gold Level Technology Support Plan
LSC-PLAT-IW	Platinum Level Technology Support Plan
LSC-WARR-AUD	Warranty Audit Visit

Note: For detailed warranty and technology support plan descriptions see lutron.com/services

#### **Vive Warranty information**

Vive wireless solutions are all covered by a 5-year parts warranty with registration of the product. Additional technology support options are available to meet your project needs. See the options below.

Support Options	Commercial System Limited Warranty	Silver (TSP)	Gold (TSP)	Platinum (TSP)
Duration up to 10 years of coverage		•	•	•
100% Replacement Parts	• (5 yrs)	•	•	•
Diagnostic Labour — First Available Response	• (2 yrs)	•		
Diagnostic Labour — 72-Hour Response			•	
Diagnostic Labour — 24-Hour Response				•
Annual Preventive Maintenance Visit			•	•

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## Ordering Information





## Model Number Description

Vive wireless hub	
HMS-0-FM	Starter Vive wireless hub, flush mount
HMS-1-FM	Standard Vive wireless hub, flush mount
HMS-1-SM	Standard Vive wireless hub, surface mount
HMS-2-FM	Premium Vive wireless hub, flush mount
HMS-2-SM	Premium Vive wireless hub, surface mount
H-MOUNT-SM	Surface Mounting kit for hub
H-MOUNT-FM	Flush mounting kit for hub



#### PowPak relay module

RMMS-16R-DV-B 16 A relay



#### PowPak dimming module with 0-10V control

RMMS-8T-DV-B Controls up to 30, 0–10 V controlled fixtures



#### PowPak dimming module with DALI control

RMMS-DAL4-SZ Controls up to 4 DALI fixtures

RMMS-DAL32-SZ Controls up to 32 DALI fixtures



#### **In-line dimmer**

RMMS-250NE Controls up to 250 W of phase dimmable LED, incandescent, halogen, or ELV loads



#### PowPak contact closure output module

RMMS-CC01-24-B One contact closure output



#### Model Number Description

Pico wireless remotes	
PM2-2BRL-TXX-L01	2-button with raise/lower
PM2-2B-TXX-L01	2-button
PM2-3BRL-TXX-L01	3-button with raise/lower
PM2-3B-TXX-L01	3-button
PM2-4B-TXX-L21	4-button with 2-group control
PM2-4B-TXX-L01	4-button with zone control
PM2-4B-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)

# Ordering Information



Description



Radio Powr Savr occupancy/vacancy sensors*			
LRF4-OCR2B-P-WH	Ceiling-mount, 360° field-of-view, occupancy/vacancy sensor		
LRF4-OWLB-P-WH	Wall-mount, 180° field-of-view, occupancy/vacancy sensor		
LRF4-OKLB-P-WH	Corner-mount, 90° field-of-view, occupancy/vacancy sensor		
LRF4-OHLB-P-WH	Hallway, occupancy/vacancy sensor		



## Radio Powr Savr daylight sensor

LRF4-DCRB-WH Ceiling-mount daylight sensor



Wallplates*	
LPFP-S1-TXX	Pico 1-column wallplate
LPFP-S1-TXX	Pico 2-column wallplate

 $<sup>^{\</sup>star}\,$  (XX in the model number represents colour/finish code)



Vive Startup Services		
LSC-OS-SU-VIVE	Onsite full-scope startup	
LSC-AH-SU	After hours startup	
LSC-SENS-LT	Sensor layout & tuning	
LSC-SPV-DOC	System performance-verification documentation	

Notes		

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For a list of all Vive wireless solutions product model numbers lutron.com/vive-china

