Flexible control every step of the way

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

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

Wireless simplifies installation and reduces callbacks

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

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

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% 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

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.
Scalable solutions — start small and grow

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.

Energy-saving control strategies

Combine lighting control strategies to maximize efficiency

What is the savings opportunity?
Lutron solutions can save 60% or more lighting energy.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Potential savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupancy/vacancy sensing</td>
<td>20 – 60% Lighting⁴</td>
</tr>
<tr>
<td>Daylight harvesting</td>
<td>25 – 60% Lighting⁴</td>
</tr>
<tr>
<td>Scheduling</td>
<td>10 – 20% Lighting⁴</td>
</tr>
<tr>
<td>Demand response</td>
<td>30 – 50% Peak Period⁷</td>
</tr>
<tr>
<td>High-end trim</td>
<td>10 – 30% Lighting⁹</td>
</tr>
<tr>
<td>Personal dimming control</td>
<td>10 – 20% Lighting⁹</td>
</tr>
<tr>
<td>HVAC integration</td>
<td>5 – 15% HVAC¹¹</td>
</tr>
<tr>
<td>System Optimization Service</td>
<td>Variable</td>
</tr>
</tbody>
</table>

For a list of sources please visit lutron.com/references.
Transform existing buildings with wireless lighting controls

**Wireless controls and sensors**

- Remotes
- Occupancy and daylight sensors
- Lighting control modules

Add wireless hubs for centralized control and integration (optional)

**Vive wireless hub**

- Wired/Ethernet
- BACnet integration
- API integration

**Communication protocols**

- Communicate via RF to control components
- Communicate via WiFi to smart devices
- Communicate via wired Ethernet to Vive hub

**Simple-to-use software**

Vive software

- Rooms/Areas
- Energy
- Schedules
- Alerts
- Load Shedning

**Remotes**

**Occupancy and daylight sensors**

**Lighting control modules**
Selecting and installing wireless controls is easy

**Area Control**

**Step 1**

Control your loads

- Select the controller appropriate for the loads on your job
- Options available for:
  - switching, 0-10V, DALI, contact closure
- Simply wire one load controller for each group of lights you want to control together

**Step 2**

Control your lights where you need to

- Wireless devices can be mounted to any surface with no wiring needed
- Controls communicate wirelessly to the controls in the ceiling
- 10 year battery life

**Step 3**

Add sensors to your job

- Occupancy/vacancy sensors turn lights on and/or off for convenience and energy savings
- Wireless devices can be mounted to any surface with no wiring needed
- Controls communicate wirelessly to the controls in the ceiling
- 10 year battery life

Wireless occupancy/vacancy sensors

Pico wireless remotes

Switching
Dimming
Contact Closure

Ceiling
Scene
Wall
Corner
Selecting and installing wireless controls is easy

Area Control

Step 4
Add daylight harvesting to save energy
- Save energy by dimming the lights when natural light is available
- Wireless devices can be mounted to any surface with no wiring needed
- 10 year battery life

Daylight sensor

Step 5
System software and control (optional)
- Timeclock
- Demand response
- BACnet
- Energy and Occupancy information

See easy programming setup

Vive Software
Easy system programming

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.

- **Press and hold for 6 seconds**
- **Occupancy sensor**
  It works! Sensor now talks to the wireless dimmer
Save energy and improve building performance

Energy Reporting
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.

Light Control
Directly adjust the light levels.

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)
Energy Dashboards and Analytics Packages
HVAC
Audio & Video
IT

Lutron

Lutron Lutron | 15
A smart building is now simple

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.
Enterprise Vue—Connected campus

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
Lutron system security

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

Lutron reliability

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

434 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.
Vive product catalog

Wireless hub page 26

Wireless load controls page 28

Wireless remotes page 38

Wireless Sensors page 42

Vive Installation
Suncrest Bank — Visalia, California
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.

Product options

Vive wireless hub models

<table>
<thead>
<tr>
<th>Type</th>
<th>Mount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starter</td>
<td>HJS-0-FM</td>
</tr>
<tr>
<td>Standard</td>
<td>HJS-1-FM</td>
</tr>
<tr>
<td></td>
<td>HJS-1-SM</td>
</tr>
<tr>
<td></td>
<td>H-MOUNT-SM</td>
</tr>
<tr>
<td>Premium</td>
<td>HJS-2-FM</td>
</tr>
<tr>
<td></td>
<td>HJS-2-SM</td>
</tr>
<tr>
<td></td>
<td>HJS-UPDATE</td>
</tr>
<tr>
<td></td>
<td>HJS-DEVICES</td>
</tr>
</tbody>
</table>

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: Minimum distance is required for wireless hub placement.
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.
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
  - **16 A**:
    - 1920 W or 1/2 HP @ 120 V
    - 4432 W or 1 1/2 HP @ 277 V
  - **5 A**:
    - 600 W or 1/6 HP @ 120 V
    - 1385 W or 1/3 HP @ 277 V

- **Contact closure output**
  For sending occupancy information to third-party equipment such as HVAC systems

- **Input**: 120/277 V

**Product options**

**16 A models**

- RMJS-16R-DV-B
- RMJS-16RCCO1-DV-B One contact closure output

**5 A models**

- RMJS-5R-DV-B
- RMJS-5RCCO1-DV-B One contact closure output

---

How to design and specify

- **One single zone controller**
  For each EcoSystem/DALI lighting zone in the space

- **Control**
  EcoSystem/DALI: up to 32 drivers per controller
  - Multiple drivers/balasts connected to control module will always work together as single zone

- **Input**: 120/277 V

**Product options**

- **EcoSystem single zone**
  RMJS-ECO32-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

- **Input**: 220–240 V~ 50/60 Hz

**Product options**

- **In-line dimmer**
  RMQS-250NE: Trailing edge capable, phase dimmable LED, incandescent, halogen, ELV loads
Load controllers: J-box mounted switches and dimmers

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**: 120/277V
- **0-10V Link**: Communicates with up to 60 mA of fixtures

Product options

**8A models with 0-10V control**

- RMJS-8T-DV-B
- RMJS-8TN-DV-B

How it works

Two versions of the PowPak 0-10V are available that optimize for different wiring practices. The -8T model has a connector on the back of the box which is optimized for Class 2 wiring outside of the standard conduit. The -8TN model has the 0-10V wires coming out of the threaded end, optimized for wiring inside a junction box and used for when the 0-10V wires are run in the cable or conduit with the Class 1 wiring. Both versions can have the 0-10V control wires be installed using NEC® Class 1 or Class 2 wiring methods.

**Wiring Schematic**

*NOTE*: The control module mounts to the exterior of a UK-style junction box.
Load controllers: J-box mounted switches and dimmers

How to design and specify

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

**Product options**

**Standard**

| RMUS-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.

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**Dimensions**

- **W:** 72mm (2.89")
- **H:** 87mm (3.44")
- **D:** 32mm (1.25")
Load controllers: Plug load control

How to design and specify

- **One relay module**
  For each 20 A receptacle circuit you want to control

- **Input** 120/277 V

Product options

<table>
<thead>
<tr>
<th>20 A models</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMJS-20R-DV-B</td>
<td>General purpose switch 120-277 V receptacles</td>
</tr>
<tr>
<td>RMJS-20RCC01-DV-B</td>
<td>General purpose switch 20 A, 120-277 V receptacles with one contact closure output</td>
</tr>
</tbody>
</table>

How it works

Plug loads, such as task lighting, computer monitors, and printers, account for greater than 5% of commercial electricity usage\(^1\). Many energy codes now require control of receptacles for compliance.

The occupancy/vacancy sensor wirelessly communicates room occupancy to the relay module. Based on the occupancy status received, the relay module switches the power to the receptacles on or off, reducing the amount of energy consumed.

For a list of sources please visit lutron.com/references.
Load controllers: Wireless individual fixture control

How to design and specify

- **One PowPak wireless fixture control**
  For each fixture in the space
- **Controls** 1A of load or up to three drivers/ballasts/per fixture
- **Select either** Area sensing or individual fixture sensing
- **PowPak fixture sensor** Combined occupancy/daylight sensor

Product options

**0-10V control models**

- FCJS-010
- FCJS-010-BULK8 8-pack

**EcoSystem control models**

- FCJS-ECO
- FCJS-ECO-BULK8 8-pack

**Sensor models**

- FC-SENSOR  Occupancy/Daylight sensor
- FC-VSENSOR  Vacancy/Daylight sensor

How it works

Install the fixture control directly to a fixture or on a junction box nearest to the fixture. Install the sensor on the ceiling near the fixture to optimize coverage in the desired area.

**Note:** Avoid mounting the fixture sensor in direct sunlight or in the light which is cast from the fixture.

Fixture sensor coverage diagrams

**Applies to both products**

**Clear Connect (RF)**

- Pico remote control (up to 10)
- Radio Powr Savr occupancy sensor (up to 10)
- Radio Powr Savr daylight sensor (1 maximum)

**XCT Occupancy/Vacancy sensing**

**Range Diagrams**

- Ceiling
  - 2.7 m (9 ft)

- Floor
  - 4.6 m (15 ft)
  - 2.7 m (9 ft)
  - 0.9 m (3 ft)
  - 2.7 m (9 ft)
  - 4.6 m (15 ft)

- 3.65 m (12.0 ft)
Remotes: Pico wireless remotes

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

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQ2-2BRL-TXX-L01</td>
<td>2-button with raise/lower wireless remote</td>
</tr>
<tr>
<td>PQ2-2B-TXX-L01</td>
<td>2-button wireless remote</td>
</tr>
</tbody>
</table>

3-button remotes

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQ2-3BRL-TXX-L01</td>
<td>3-button with raise/lower wireless remote</td>
</tr>
<tr>
<td>PQ2-3B-TXX-L01</td>
<td>3-button wireless remote</td>
</tr>
</tbody>
</table>

Dimensions

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

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

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

- PQ2-4B-TXX-L21P 2-group control
- PQ2-4B-TXX-L01 Zone control
- PQ2-4B-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

<table>
<thead>
<tr>
<th>Control Type</th>
<th>Standard Engraving</th>
<th>Custom Engraving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lights</td>
<td>-L01</td>
<td>-EL1</td>
</tr>
<tr>
<td>Blinds</td>
<td>-S01</td>
<td>-ES1</td>
</tr>
<tr>
<td>Scene Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lights</td>
<td>-L31</td>
<td>-EL2</td>
</tr>
<tr>
<td>Blinds</td>
<td>-S31</td>
<td>-ES2</td>
</tr>
</tbody>
</table>

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

Dimensions

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>89 mm (3.50&quot;)</td>
</tr>
<tr>
<td>H</td>
<td>89 mm (3.50&quot;)</td>
</tr>
<tr>
<td>D</td>
<td>10 mm (0.38&quot;)</td>
</tr>
</tbody>
</table>

Pico remote 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

Dimensions

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>33 mm (1.28&quot;)</td>
</tr>
<tr>
<td>H</td>
<td>66 mm (2.60&quot;)</td>
</tr>
<tr>
<td>D</td>
<td>8 mm (0.33&quot;)</td>
</tr>
</tbody>
</table>
Sensors: Ceiling occupancy/vacancy sensors

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 m² (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

LRF7-OCR2B-P-WH  Occupancy/vacancy

Sensor coverage diagrams

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

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

* 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

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)
  LRF7-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)
  LRF7-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
  LRF7-OHLB-P-WH Occupancy/vacancy

Sensor coverage diagrams

Wall mount*, 180°
139.4 m² (1,500 ft²)—minor motion
278.7 m² (3,000 ft²)—major motion

Corner mount*, 90°
113.8 m² (1,225 ft²)—minor motion
232.3 m² (2,500 ft²)—major motion

Hallway*, long narrow field of view
Coverage varies by hallway width and length

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

<table>
<thead>
<tr>
<th>Width of hallway</th>
<th>Length of hallway</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8 m (6 ft) or less</td>
<td>15.2 m (50 ft)</td>
</tr>
<tr>
<td>2.4 m (8 ft)</td>
<td>30.5 m (100 ft)</td>
</tr>
<tr>
<td>3.0 m (10 ft) or more</td>
<td>45.7 m (150 ft)</td>
</tr>
</tbody>
</table>

* 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: Daylight sensors

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

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRF7-DCRB-WH</td>
<td>Daylight sensor</td>
</tr>
</tbody>
</table>

* 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).
### Ordering information

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vive wireless hub</strong></td>
<td></td>
</tr>
<tr>
<td>H-MOUNT-SM</td>
<td>Surface-mount installation adapter</td>
</tr>
<tr>
<td>HJS-0-FM</td>
<td>Starter Vive wireless hub, flush mount</td>
</tr>
<tr>
<td>HJS-1-FM</td>
<td>Standard Vive wireless hub, flush mount</td>
</tr>
<tr>
<td>HJS-1-SM</td>
<td>Standard Vive wireless hub, surface mount</td>
</tr>
<tr>
<td>HJS-2-FM</td>
<td>Premium Vive wireless hub, flush mount</td>
</tr>
<tr>
<td>HJS-2-SM</td>
<td>Premium Vive wireless hub, surface mount</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Model Number</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual fixture controller</strong></td>
<td></td>
</tr>
<tr>
<td>FCJS-010</td>
<td>0-10V Control Module</td>
</tr>
<tr>
<td>FCJS-ECO</td>
<td>Ecosystem Control Module</td>
</tr>
<tr>
<td>FC-SENSOR*</td>
<td>Occupancy/ Daylight Sensor</td>
</tr>
<tr>
<td>FC-VSENSOR</td>
<td>Vacancy/ Daylight Sensor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Model Number</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pico wireless remotes</strong></td>
<td></td>
</tr>
<tr>
<td>PQ2-2BRL-TXX-L01</td>
<td>2-button with raise/lower</td>
</tr>
<tr>
<td>PQ2-2B-TXX-L01</td>
<td>2-button</td>
</tr>
<tr>
<td>PQ2-3BRL-TXX-L01</td>
<td>3-button with raise/lower</td>
</tr>
<tr>
<td>PQ2-3B-TXX-L01</td>
<td>3-button</td>
</tr>
<tr>
<td>PQ2-4B-TXX-L21</td>
<td>4-button with 2 group control</td>
</tr>
<tr>
<td>PQ2-4B-TXX-L01</td>
<td>4-button with zone control</td>
</tr>
<tr>
<td>PQ2-4B-TXX-L31</td>
<td>4-button with scene control</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th><strong>Model Number</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pico accessories</strong></td>
<td></td>
</tr>
<tr>
<td>L-PED1-XX</td>
<td>Pico wireless remote single pedestal</td>
</tr>
<tr>
<td>L-PED2-XX</td>
<td>Pico wireless remote double pedestal</td>
</tr>
<tr>
<td>L-PED3-XX</td>
<td>Pico wireless remote triple pedestal</td>
</tr>
</tbody>
</table>

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

### Pico Colours

<table>
<thead>
<tr>
<th>Colour</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>White (AW)</td>
<td></td>
</tr>
<tr>
<td>Black (BL)</td>
<td></td>
</tr>
</tbody>
</table>
## Ordering Information

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Radio Powr Savr occupancy/vacancy sensors</strong>*</td>
<td></td>
</tr>
<tr>
<td>LRF7-OCR2B-P-WH</td>
<td>Ceiling-mount, 360° field-of-view, occupancy/vacancy sensor</td>
</tr>
<tr>
<td>LRF7-OWLB-P-WH</td>
<td>Wall-mount, 180° field-of-view, occupancy/vacancy sensor</td>
</tr>
<tr>
<td>LRF7-OKLB-P-WH</td>
<td>Corner-mount, 90° field-of-view, occupancy/vacancy sensor</td>
</tr>
<tr>
<td>LRF7-OHLB-P-WH</td>
<td>Hallway, occupancy/vacancy sensor</td>
</tr>
<tr>
<td><strong>Radio Powr Savr daylight sensor</strong></td>
<td></td>
</tr>
<tr>
<td>LRF7-DCRB-WH</td>
<td>Ceiling-mount daylight sensor</td>
</tr>
<tr>
<td><strong>Wallplates</strong>*</td>
<td></td>
</tr>
<tr>
<td>LPFP-S1-TXX</td>
<td>Pico 1 column wallplate</td>
</tr>
<tr>
<td>LPFP-S1-TXX</td>
<td>Pico 2 column wallplate</td>
</tr>
</tbody>
</table>

* (XX in the model number represents colour/finish code)
For a list of all Vive wireless solutions product model numbers and pricing see lutron.com/vive

Questions?
call us 24-7
1.844.588.7661

lutron.com
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