

Vive Application Guide

Wireless lighting control solutions at an affordable price



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Why Lutron?

Lutron is a global organisation committed to delivering value to its customers. We developed the first solid state dimmer. Today, we continue to develop innovative, energy-saving lighting control solutions that provide flexibility, ambiance, and comfort in residential and commercial applications.

The company offers:

- Proven technology: 2,500 active patents
- · Upfront project service support
- · After-sales support
- · Reduced end-user callbacks
- Products designed and manufactured for reliability with 100% pre-shipment inspection
- Significant portfolio to cover all your project requirements: +15,000 SKUs

Why Invest in Lighting Controls?

Occupant comfort - Increased productivity and well being

Meet demand — Lighting controls are growing in popularity to improve the aesthetics, functionality, and value of any space

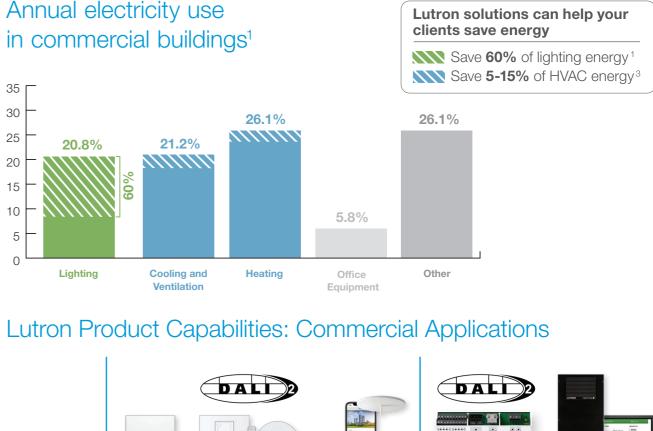
Increase revenue — Lighting controls provide an additional revenue opportunity for the contractor

Comply with legislation — Evolving rules are requiring stricter requirements for energy efficiency, while allowances are also being made for lighting controls

Energy-saving lighting control strategies

Strategy		Potential savings
Auto On Auto Off	Occupancy/vacancy sensing turns lights on when occupants are in a space and off when they vacate the space.*	20–60% Lighting
Full On Dim	Daylight harvesting dims electric lights when daylight is available to light the space.*	25–60% Lighting
7am: Dim Jogo P 7am: Off 7pm: Off	Scheduling provides scheduled changes in light levels based on the time of day.*	10–20% Lighting
Full On Dim	Load shedding automatically reduces lighting loads during peak electricity usage times.*	30–50% During peak period
Max: 100%	High-end trim/tuning sets the maximum light level based on customer requirements in each space.*	10–30% Lighting
Full On Dim	Personal dimming control gives occupants the ability to set the light level.*	10–20% Lighting
Heating Cooling	HVAC integration controls heating, ventilation, and air conditioning systems through a contact closure.*	5–15% HVAC

Annual electricity use in commercial buildings¹





		_				
			Local Solution	IS	Panel Sol	utions
		Wallbox	Vive	Vive with wireless hub*	Energi Savr Node	Quantum
St	Occupancy sensing	۲	۲	۲	۲	۲
Strategies for code/standards	Multi-level lighting control		۲	۲	۲	۲
for cod	Daylight harvesting		۲	۲	۲	۲
e/star	Timeclock				•**	۲
	Demand response			•	•	۲
compliance	Energy monitoring			۲		۲
Ce	BACnet integration					۲

* For the latest information on products compatible with the Vive wireless hub go to lutron.com/vive-europe.

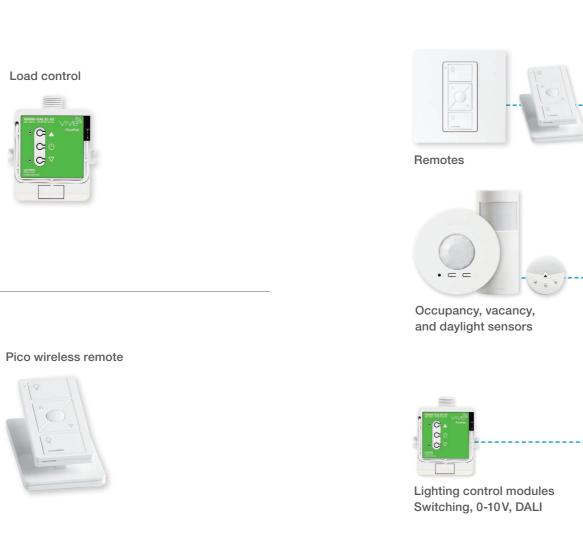
** Requires QS timeclock.

[†] Automated Demand Response capability requires signal from a third-party device.

Define your space

The appropriate control solution is defined by the needs of the space and its occupants. Use the following steps to plan and design an ideal energy-saving solution.

Flexible, wireless controls and sensors for simple, scalable design



· Select the controller appropriate for the loads on your job • Options available for:

Control your loads

- 0–10V, DALI

Step 🧲

• Simply wire control with power into your circuit.



⊢ Contact Closure

Switching

Dimming

Corner

Wall

 \bigcirc

Ceiling

H





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



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





Add wireless hubs for centralised control and integration (optional)



This application guide is designed to help specifiers and contractors understand Lutron controls in a simple manner. Each of the pages will lay out different spaces, the corresponding lighting control products for those spaces, and the way the system is set up in the space.

For Specifiers

Use this application guide for design suggestions, to understand the way the system operates and to specify the relevant products for each space.

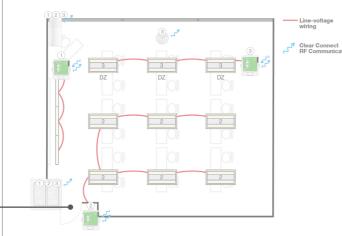
For Contractors

Use this application guide to understand how the system is installed, the way the system must operate, and to order the correct products for each application.

> Understand how the products are laid out in the space

Room type

Type of solution



		Qty
RMNS-DAL32-SZ	PowPak Single Zone Module with DALI	1
RMNS-DAL4-SZ	PowPak Single Zone Module with DALI	2
LRF5-OKLB-P-WH	Radio Powr Savr Wireless Corner Occupancy Sensor	1
LRF5-DCRB-P-WH	Radio Powr Savr Wireless Daylight Sensor	1
PN2-3BRL-TAW-L01	Pico Wireless Control On/Off and Raise/Lower	2
LPFP-S2-TAW	Pico Wireless Faceplate (Dual)	1

This guide offers up to three solutions per space type. Switching: Basic functionality and energy savings. S Dimming: Increased control, ambiance, and energy savings.

Visible System Components





Radio Powr Savr daylight sensor

Control Functionality



When Occupied:

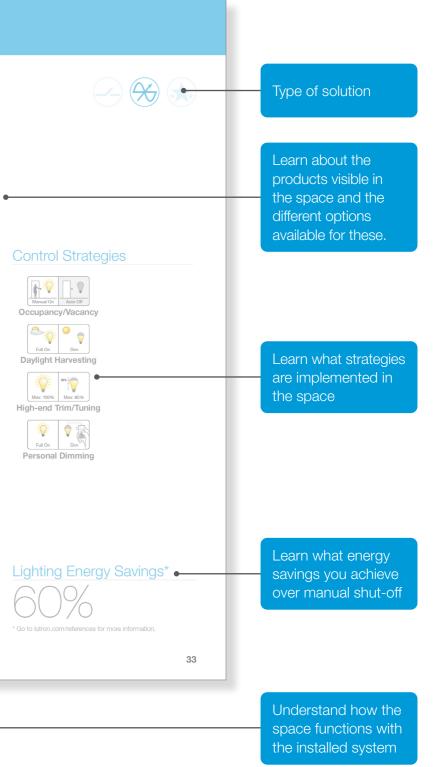
Pico wireless control

Automatic: Overhead lights dim/brighten based on daylight availability. There is one perimeter davlight zone.

Manual: Occupant uses wall dimmers to set desired light levels for both general and whiteboard lights.

Occupant Exits: All lights automatically shut off 15 minutes (by default) after all occupants exit.

Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.



Learn more about the products used in the space

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6

The **Recommended Solutions** have advanced functionality for greater comfort and energy savings.

Vive Local Solutions Layout

This is a high-level overview of the local solutions layout. For individual room requirements refer to the detailed room type solutions in this guide. A single PowPak module can control single or multiple fixtures. The products shown here are representative of local solutions. Multiple product options are available to meet the needs of the space.



Vive wireless hub*



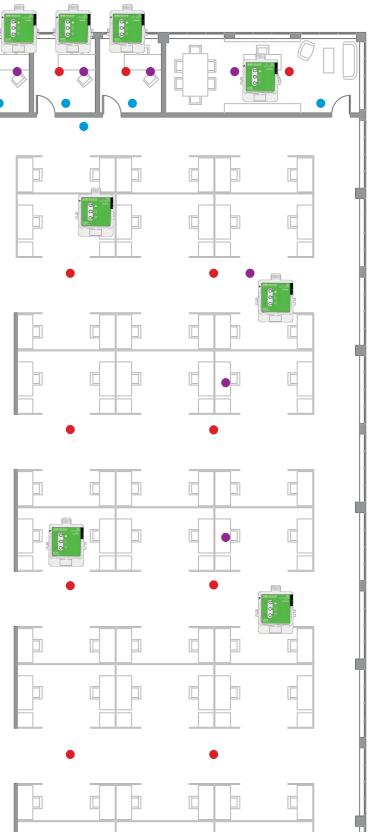
PowPak module

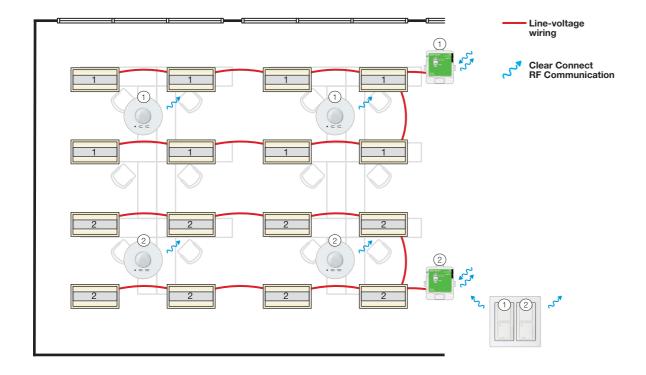
- Occupancy sensor
- Pico wireless remote control
- Daylight sensor

Vive wireless hub features:

- Central control, management, and monitoring of Vive devices via web browser
- Supports astronomic and time-of-day events
- Two contact closure inputs for third-party integration, such as Automatic Demand Response
- Wi-Fi access for easy commissioning
- Control up to 929 m²(10,000 sq. ft.) with a single hub
- Optional BACnet integration
- * Go to lutron.com/vive-asia for complete compatibility and design details.







Symbol	Model Number	Description	Qty
	RMNS-16R-DV-B	PowPak 16A Relay Module	2
	LRF5-OCR2B-P-WH	Radio Powr Savr Wireless Ceiling Occupancy Sensor	4
	PN2-2B-TAW-L01	Pico Wireless Control 2 Button On/Off	2
	LPFP-S2-TAW	Pico Wireless Faceplate (Dual)	1





Pico wireless control

Radio Powr Savr wireless ceiling-mount occupancy sensor

Lighting Functionality

Occupant Enters:

All lights automatically turn on.

When Occupied:

Manual: Occupant uses wall switches to turn zones on and off.

Occupant Exits:

All lights automatically shut off 15 minutes (by default) after all occupants exit.

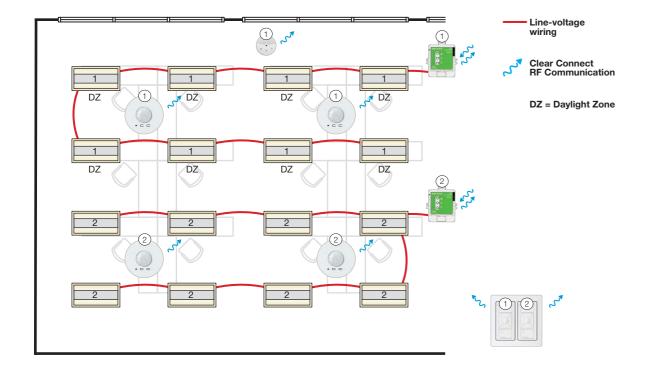
Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.



Control Strategies







Symbol	Model Number	Description	Qty
	RMNS-DAL32-SZ	PowPak Single Zone Module with DALI	2
	LRF5-OCR2B-P-WH	Radio Powr Savr Wireless Ceiling Occupancy Sensor	4
	LRF5-DCRB-P-WH	Radio Powr Savr Wireless Daylight Sensor	1
	PN2-3BRL-TAW-L01	Pico Wireless Control On/Off and Raise/Lower	2
	LPFP-S2-TAW	Pico Wireless Faceplate (Dual)	1





Pico wireless control

Radio Powr Savr wireless ceiling-mount occupancy sensor and daylight sensor

Lighting Functionality

Occupant Enters:

All lights automatically turn on to maximum light level. Maximum light level is set to 80%.

When Occupied:

Automatic: Overhead lights dim/brighten based on daylight availability. There is one perimeter daylight zone.

Manual: Occupant uses wall dimmers to set desired light levels for all lights.

Occupant Exits:

All lights automatically shut off 15 minutes (by default) after all occupants exit.

Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.



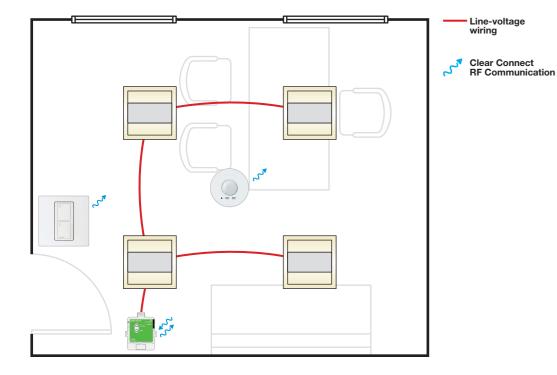


Control Strategies









Symbol	Model Number	Description	Qty
	RMNS-16R-DV-B	PowPak 16A Relay Module	1
	LRF5-OCR2B-P-WH	Radio Powr Savr Wireless Ceiling Occupancy Sensor	1
F	PN2-2B-TAW-L01	Pico Wireless Control 2 Button On/Off	1
	LPFP-S1-TAW	Pico Wireless Faceplate (Single)	1





Pico wireless switch

Radio Powr Savr wireless ceiling-mount occupancy sensor

Control Functionality

Occupant Enters:

Lights do not automatically turn on when an occupant enters the space; lights must be turned on manually.

When Occupied:

Manual: Occupant uses wall switch to turn on and turn off all lights.

Occupant Exits:

All lights automatically shut off 15 minutes (by default) after all occupants exit.

Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.

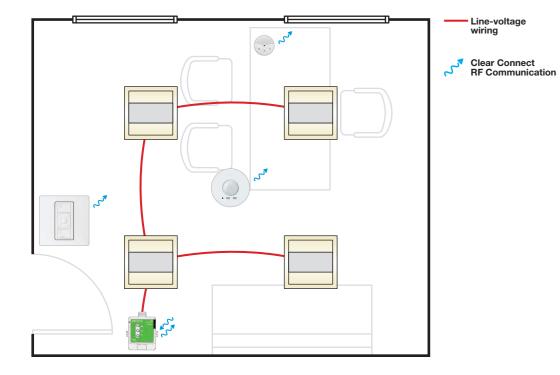


Control Strategies



Occupancy/Vacancy





Symbol	Model Number	Description	Qty
	RMNS-DAL4-SZ	PowPak Single Zone Module with DALI	1
	LRF5-OCR2B-P-WH	Radio Powr Savr Wireless Ceiling Occupancy Sensor	1
	LRF5-DCRB-P-WH	Radio Powr Savr Wireless Daylight Sensor	1
	PN2-3BRL-TAW-L01	Pico Wireless Control On/Off and Raise/Lower	1
	LPFP-S1-TAW	Pico Wireless Faceplate (Single)	1





Pico wireless control

Radio Powr Savr wireless ceiling-mount occupancy sensor and daylight sensor

Control Functionality

Occupant Enters:

Lights do not automatically turn on when an occupant enters the space; lights must be turned on manually.

When Occupied:

Automatic: Overhead lights dim/brighten based on daylight availability.

Manual: Occupant uses wall dimmer to set desired light levels for all lights.

Occupant Exits:

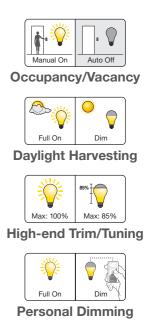
All lights automatically shut off 15 minutes (by default) after all occupants exit.

Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.

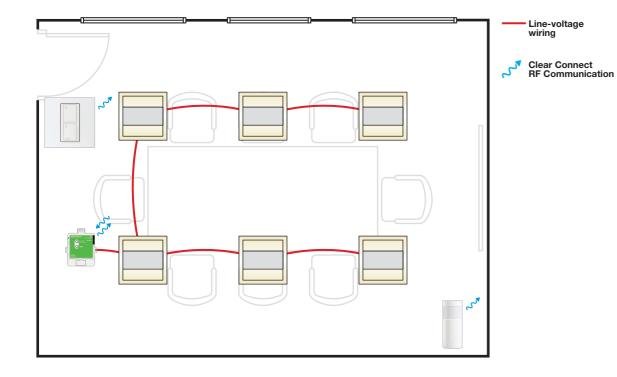




Control Strategies







Symbol	Model Number	Description	Qty
	RMNS-16R-DV-B	PowPak 16A Relay Module	1
	LRF5-OKLB-P-WH	Radio Powr Savr Wireless Corner Occupancy Sensor	1
	PN2-2B-TAW-L01	Pico Wireless Control 2 Button On/Off	1
	LPFP-S1-TAW	Pico Wireless Faceplate (Single)	1





Pico wireless switch

Radio Powr Savr wireless ceiling-mount occupancy sensor

Control Functionality

Occupant Enters:

Lights do not automatically turn on when an occupant enters the space; lights must be turned on manually.

When Occupied:

Manual: Occupant uses wall switch to turn on and turn off all lights.

Occupant Exits:

All lights automatically shut off 15 minutes (by default) after all occupants exit.

Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.

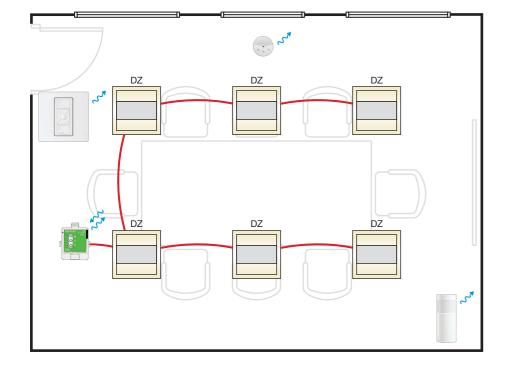


Control Strategies



Occupancy/Vacancy





Symbol	Model Number	Description	Qty
	RMNS-DAL32-SZ	PowPak Single Zone Module with DALI	1
	LRF5-OKLB-P-WH	Radio Powr Savr Wireless Corner Occupancy Sensor	1
$\overline{\cdots}$	LRF5-DCRB-P-WH	Radio Powr Savr Wireless Daylight Sensor	1
	PN2-3BRL-TAW-L01	Pico Wireless Control On/Off and Raise/Lower	1
	LPFP-S1-TAW	Pico Wireless Faceplate (Single)	1



Line-voltage wiring

Clear Connect RF Communication

DZ = Daylight Zone



Pico wireless control

Radio Powr Savr wireless corner-mount vacancy sensor and daylight sensor

Control Functionality

Occupant Enters:

Lights do not automatically turn on when an occupant enters the space; lights must be turned on manually.

When Occupied:

Automatic: Overhead lights dim/brighten based on daylight availability.

Manual: Occupant uses wall dimmer to set desired light levels for all lights.

Occupant Exits:

All lights automatically shut off 15 minutes (by default) after all occupants exit.

Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.

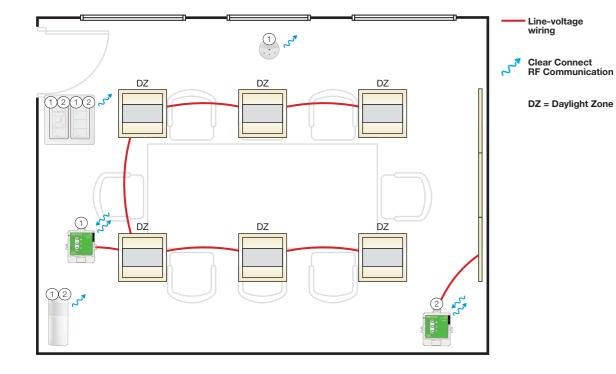


Control Strategies



Personal Dimming





Symbol	Model Number	Description	Qty
	RMNS-DAL32-SZ	PowPak Single Zone Module with DALI	1
	RMNS-DAL4-SZ	PowPak Single Zone Module with DALI	1
	LRF5-OKLB-P-WH	Radio Powr Savr Wireless Corner Occupancy Sensor	1
$\overline{\cdots}$	LRF5-DCRB-P-WH	Radio Powr Savr Wireless Daylight Sensor	1
	PN2-3BRL-TAW-L01	Pico Wireless Control On/Off and Raise/Lower	1
	PN2-4B-TAW-L01	Pico Wireless Control 4 Button	1
	LPFP-S2-TAW	Pico Wireless Faceplate (Dual)	1





Pico wireless control

Radio Powr Savr wireless corner-mount vacancy sensor and daylight sensor

Control Functionality

Occupant Enters:

Lights do not automatically turn on when an occupant enters the space; lights must be turned on manually.

When Occupied:

Automatic: Overhead lights dim/brighten based on daylight availability.

Manual: Occupant uses wall dimmer to set desired light levels for all lights.

Occupant Exits:

All lights automatically shut off 15 minutes (by default) after all occupants exit.

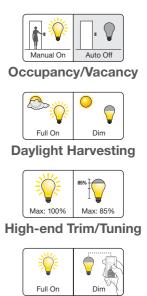
Advanced Functionality:

Set the right lighting by using the 4 button Pico, which can be easily configured manually or through the Hub.

Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.

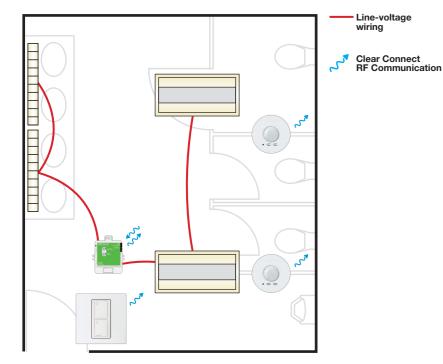


Control Strategies



Personal Dimming





Symbol	Model Number	Description	Qty
	RMNS-16R-DV-B	PowPak 16A Relay Module	1
	LRF5-OCR2B-P-WH	Radio Powr Savr Wireless Ceiling Occupancy Sensor	2
[*]	PN2-2B-TAW-L01	Pico Wireless Control 2 Button On/Off	1
	LPFP-S1-TAW	Pico Wireless Faceplate (Single)	1





Pico wireless switch

Radio Powr Savr wireless ceiling-mount occupancy sensor

Control Functionality

Occupant Enters:

All lights automatically turn on.

When Occupied:

Manual: Occupant uses wall switch to turn all lights off.

Occupant Exits:

All lights automatically shut off 15 minutes (by default) after all occupants exit.

Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.

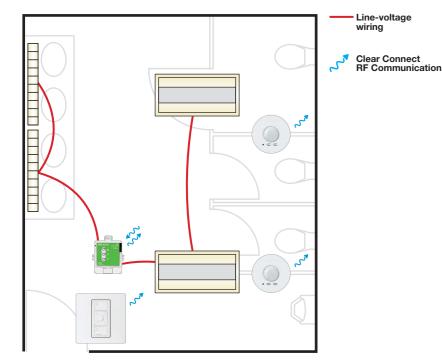


Control Strategies



Occupancy/Vacancy





Symbol	Model Number	Description	Qty
	RMNS-DAL4-SZ	PowPak with DALI	1
	LRF5-OCR2B-P-WH	Radio Powr Savr Wireless Ceiling Occupancy Sensor	2
	PN2-3BRL-TAW-L01	Pico Wireless Control On/Off and Raise/Lower	1
	LPFP-S1-TAW	Pico Wireless Faceplate (Single)	1





Pico wireless control

Radio Powr Savr wireless ceiling-mount occupancy sensor

Control Functionality

Occupant Enters:

All lights automatically turn on to maximum light level. Maximum light level is set to 80%.

When Occupied:

Manual: Occupant uses wall dimmer to set desired light levels for all lights.

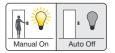
Occupant Exits:

All lights automatically shut off 15 minutes (by default) after all occupants exit.

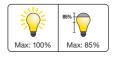
Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.



Control Strategies

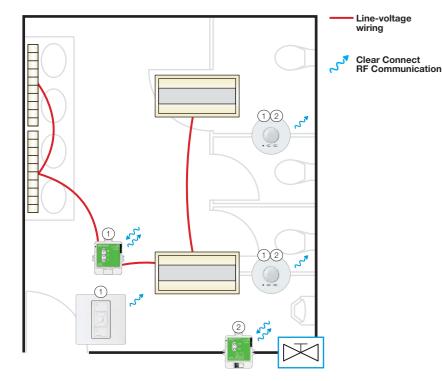


Occupancy/Vacancy



High-end Trim/Tuning





Symbol	Model Number	Description	Qty
	RMNS-DAL4-SZ	PowPak with DALI	1
	RMNS-CCO1-24-B	PowPak CCO Module	1
	LRF5-OCR2B-P-WH	Radio Powr Savr Wireless Ceiling Occupancy Sensor	2
	PN2-3BRL-TAW-L01	Pico Wireless Control On/Off and Raise/Lower	1
	LPFP-S1-TAW	Pico Wireless Faceplate (Single)	1





Pico wireless control

Radio Powr Savr wireless ceiling-mount occupancy sensor

Control Functionality

Occupant Enters:

All lights automatically turn on to maximum light level. Maximum light level is set to 80%.

When Occupied:

Manual: Occupant uses wall dimmer to set desired light levels for all lights.

Occupant Exits:

All lights automatically shut off 15 minutes (by default) after all occupants exit.

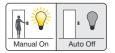
Advanced Functionality:

The CCO PowPak triggers the solenoid for an automatic flush.

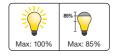
Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.



Control Strategies

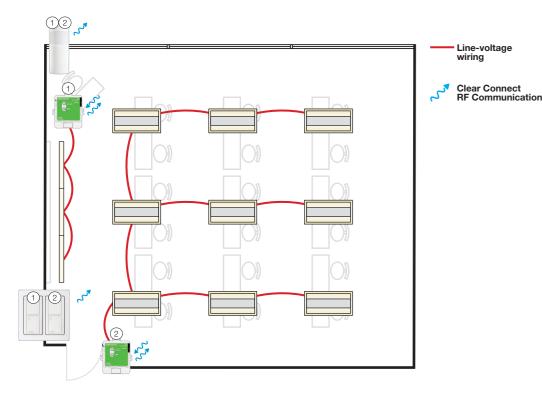


Occupancy/Vacancy



High-end Trim/Tuning





Symbol	Model Number	Description	Qty
	RMNS-16R-DV-B	PowPak 16A Relay Module	2
	LRF5-OKLB-P-WH	Radio Powr Savr Wireless Corner Occupancy Sensor	1
	PN2-2B-TAW-L01	Pico Wireless Control 2 Button On/Off	2
	LPFP-S2-TAW	Pico Wireless Faceplate (Dual)	1





Pico wireless control

Radio Powr Savr wireless corner-mount vacancy sensor

Control Functionality

Occupant Enters:

Lights do not automatically turn on when an occupant enters the space; lights must be turned on manually.

When Occupied:

Manual: Occupant uses wall switches to turn on and turn off general and whiteboard lights.

Occupant Exits:

All lights automatically shut off 15 minutes (by default) after all occupants exit.

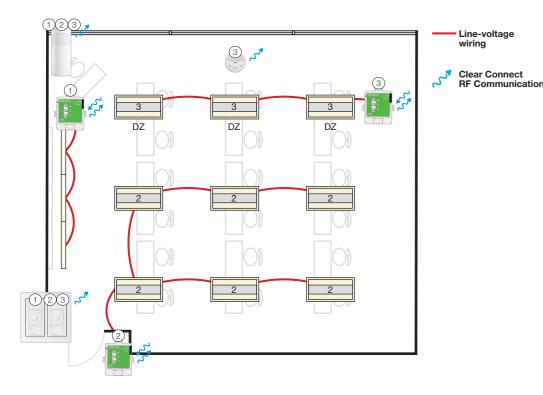
Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.



Control Strategies







Symbol	Model Number	Description	Qty
	RMNS-DAL32-SZ	PowPak Single Zone Module with DALI	1
	RMNS-DAL4-SZ	PowPak Single Zone Module with DALI	2
	LRF5-OKLB-P-WH	Radio Powr Savr Wireless Corner Occupancy Sensor	1
	LRF5-DCRB-P-WH	Radio Powr Savr Wireless Daylight Sensor	1
	PN2-3BRL-TAW-L01	Pico Wireless Control On/Off and Raise/Lower	2
	LPFP-S2-TAW	Pico Wireless Faceplate (Dual)	1





Pico wireless control

Radio Powr Savr wireless corner-mount vacancy sensor and daylight sensor

Control Functionality

Occupant Enters:

Lights do not automatically turn on when an occupant enters the space; lights must be turned on manually. Maximum light level is set to 80%.

When Occupied:

Automatic: Overhead lights dim/brighten based on daylight availability. There is one perimeter daylight zone.

Manual: Occupant uses wall dimmers to set desired light levels for both general and whiteboard lights.

Occupant Exits:

All lights automatically shut off 15 minutes (by default) after all occupants exit.

Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.

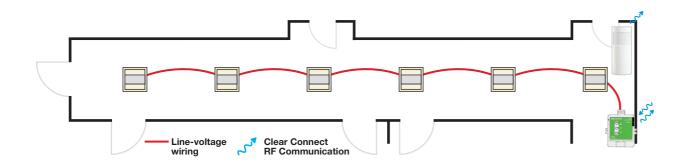


Control Strategies



Personal Dimming





Symbol	Model Number	Description	Qty
	RMNS-DAL32-SZ	PowPak Single Zone Module with DALI	1
	LRF5-OKLB-P-WH	Radio Powr Savr Wireless Corner Occupancy Sensor	1



Radio Powr Savr wireless corner-mount occupancy sensor

Control Functionality

Occupant Enters:

All corridor lights automatically turn on.

Occupant Exits:

Corridor lighting remains on while connected rooms are occupied..

Emergency Mode:

All corridor lights automatically shut off 15 minutes after all occupants exit corridor and all connected rooms.

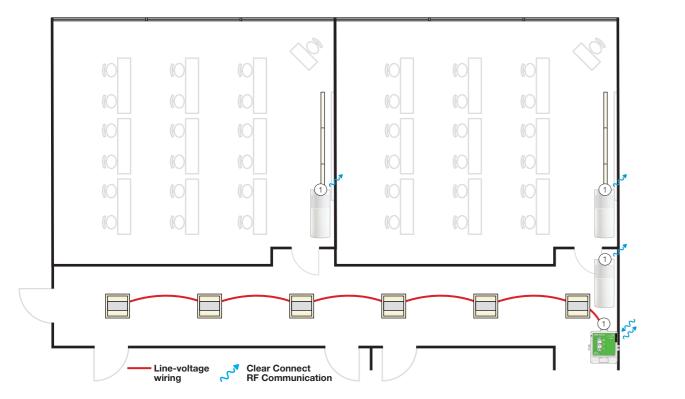
Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.



Control Strategies







Symbol	Model Number	Description	Qty
	RMNS-DAL32-SZ	PowPak Single Zone Module with DALI	1
	LRF5-OKLB-P-WH	Radio Powr Savr Wireless Corner Occupancy Sensor	3



Radio Powr Savr wireless corner-mount occupancy sensor

Control Functionality

Occupant Enters:

All corridor lights automatically turn on.

Occupant Exits:

Corridor lighting remains on while connected rooms are occupied..

Emergency Mode:

All corridor lights automatically shut off 15 minutes after all occupants exit corridor and all connected rooms.

Advanced Functionality:

The lights in the corridor stay on while the classrooms are being used.

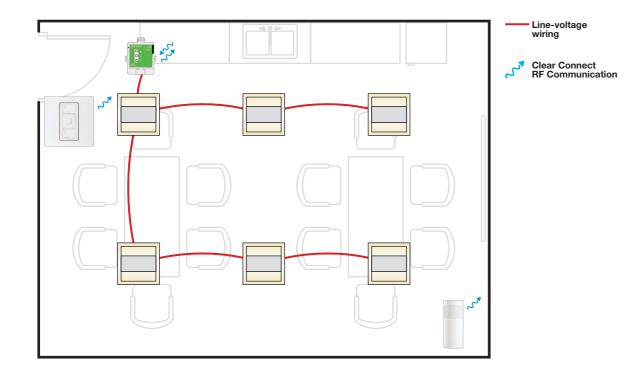
Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.



Control Strategies







Symbol	Model Number	Description	Qty
	RMNS-DAL32-SZ	PowPak Single Zone Module with DALI	1
	LRF5-OKLB-P-WH	Radio Powr Savr Wireless Corner Occupancy Sensor	1
	PN2-3BRL-TAW-L01	Pico Wireless Control On/Off and Raise/Lower	1
	LPFP-S1-TAW	Pico Wireless Faceplate (Single)	1





Pico wireless switch

Radio Powr Savr wireless corner-mount occupancy sensor

Control Functionality

Occupant Enters:

Lights do not automatically turn on when an occupant enters the space; lights must be turned on manually.

When Occupied:

Manual: Occupant uses wall switch to turn all lights off.

Occupant Exits:

All lights automatically shut off 15 minutes (by default) after all occupants exit.

Add a Vive wireless hub to enable simple setup and rezoning, system monitoring, timeclock functionality, and advanced integration.



Control Strategies







Further Information

Please visit **lutron.com/vive-asia** for more information, including videos and our Vive Wireless online training courses.

For more information or to join Vive training near you, please contact Lutron.

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