### Wireless Lighting Control

# Vive PowPak CCO Module

The PowPak CCO Module is a low-voltage radio frequency (RF) control that provides a single dry contact closure output based on input from Pico remote controls and Radio Powr Savr occupancy and daylight sensors. It can be powered by to 24 V~ or 24 V=== for easy connection and integration into building management, HVAC, VAV, and other 3rd-party systems.

Communication with RF input devices, such as Pico remote controls and Radio Powr Savr sensors, is accomplished using Lutron Clear Connect RF Technology.

These products are also compatible with the Vive hub which enables a simple setup process using a standard web browser on any Wi-Fi enabled phone, tablet or computer. It also enables control and monitoring of all Vive devices. The Vive hub can be added at any time. System reprogramming will be required. For a complete list of features supported with the Vive hub, see specification submittal 369902.

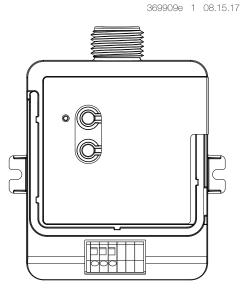
**Note for Replacement:** RMJ<u>S</u>/URMJ<u>S</u> - the "S" model can replace the non-"S" model.

#### Features

- Single contact closure output including both normally open (NO) and normally closed (NC) dry contacts
- Maintained output type

Job Number:

- Operates at 24 V∼ or 24 V=
- Receives wireless inputs from up to 10 Pico remote controls, 10 Radio Powr Savr occupancy/vacancy sensors, and 1 Radio Powr Savr daylight sensor
- Utilizes Lutron Clear Connect RF Technology refer to model number chart below for frequency band data
- Screw tabs provided for surface mounting (recommended); or mounts to a U.S. style junction box through a standard size knockout



RMJS-CCO1-24-B model shown

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# Job Name: Model Numbers:

## Models

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Model Number	Region	Operating Voltage	Frequency Band
RMJS-CCO1-24-B	U.S.A., Canada, Mexico	24 V~ or 24 V===	431.0-437.0 MHz
URMJS-CC01-24B	U.S.A. (BAA Compliant)	24 V~ or 24 V===	431.0-437.0 MHz

**NOTE:** Contact Lutron for frequency band compatibility for your geographic region if it is not indicated above.

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# Specifications

# **Regulatory Approvals**

# RMJS-/URMJS- models

- UL® Listed (U.S.A.)
- FCC approved. Complies with the limits for a Class B device, pursuant to Part 15 of the FCC rules. (U.S.A.)
- Complies with requirements for use in other spaces used for environmental air (plenums) per NEC<sub>®</sub> 2014 300.22(C)(3)
- Listed in accordance to CAN/ULC S102.2-2010 with a Flame Spread Rating of 0 and a Smoke Developed Classification of 40, with a minimum spacing of 6 ft (1.83 m) off center
- CSA and IC (Canada) (RMJS- only)
- COFETEL (Mexico) (RMJS- only)

#### Power

- IEC PELV/NEC® Class 2
- Operating voltage: 24 V~/24 V===
- Operating current, nominal: 45 mA (24 V~) 35 mA (24 V==)
- Standby Power Consumption (all models): < 1.0 W

#### System Communication

- Operates using Clear Connect RF Technology for reliable wireless communication; refer to model number chart on page 1 for frequency band details
- RF range is 30 ft (9 m) for RMJS- and URMJSmodels
- Wireless sensors and controls must be located within 60 ft (18 m) line of sight, or 30 ft (9 m), through walls, of the associated control module. The 60 ft (18 m) range is not reduced by a ceiling tile obstruction.
- Contact Lutron first for applications using foil-backed or metallic ceiling tiles.

#### Environment

- Ambient operating temperature: 32 °F to 131 °F (0 °C to 55 °C)
- 0% to 90 humidity, non-condensing
- For indoor use only
- All drivers and ballasts used with Vive wireless controls must comply with the limits for a Class A device pursuant to Part 15 of the FCC Rules

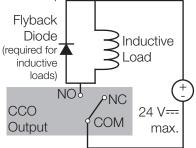
#### **Contact Closure Output**

 Accepts input voltages of 0–24 V~/0–24 V==; see chart below for load switching capacities

Switching Voltage	Resistive Load
0-24 V===	1.0 A
0-24 V~	0.5 A

- Provides both normally open (NO) and normally closed (NC) dry contacts
- Maintained output type
- CCO terminals accept 20 AWG to 16 AWG (0.5 mm<sup>2</sup> to 1.5 mm<sup>2</sup>) solid or stranded wire
- Output is latching
- The CCO is not rated to control unclamped, inductive loads. Inductive loads include, but are not limited to, relays, solenoids, and motors. To control these types of equipment, a flyback diode must be used (DC voltages only). See diagram below. For more information, please see Application Note #434 (p/n 048434).

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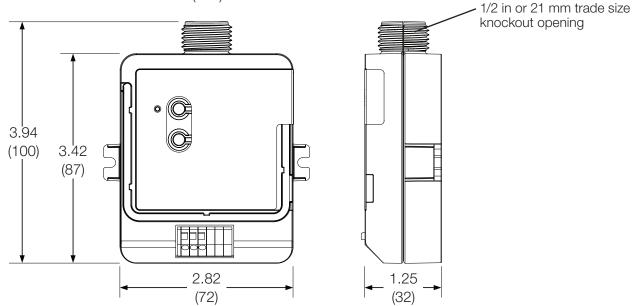
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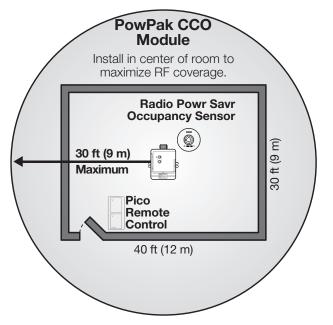
### Dimensions

Dimensions are shown as: in (mm)



# **Range Diagrams**

RMJS- and URMJS- models



• Contact Lutron first for applications using foil-backed or metallic ceiling tiles.

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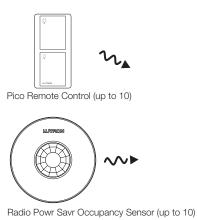
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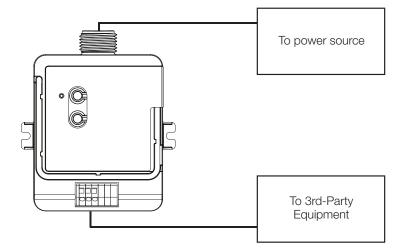
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# System Diagram





Radio Powr Savr Daylight Sensor (up to 1)



# **Default Operation**

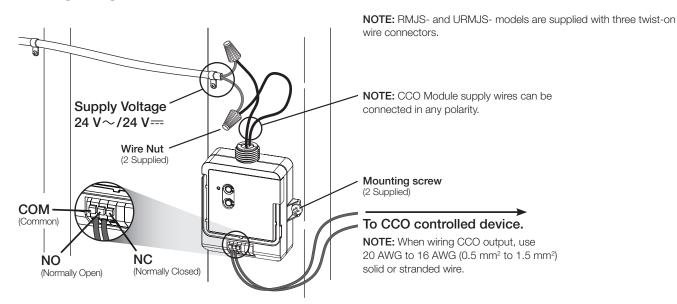
Transmitting Device	Transmitted Command	CCO Default Action
Pico	On	NO = Close, NC = Open
Remote Control	Off	NO = Open, NC = Close
	Raise	NO = Close, NC = Open
	Lower	No Action
	Preset	NO = Close, NC = Open
Radio Powr Savr	Occupied	NO = Close, NC = Open
Occupancy Sensor	Unoccupied	NO = Open, NC = Close
Radio Powr Savr Vacancy Sensor	Occupied	No Action
	Unoccupied	NO = Open, NC = Close
Radio Powr Savr Daylight Sensor	Ambient Light Below Target Level	NO = Close, NC = Open
	Ambient Light Above Target Level	NO = Open, NC = Close

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#### Wireless Lighting Control

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#### Wiring Diagram (Recommended)



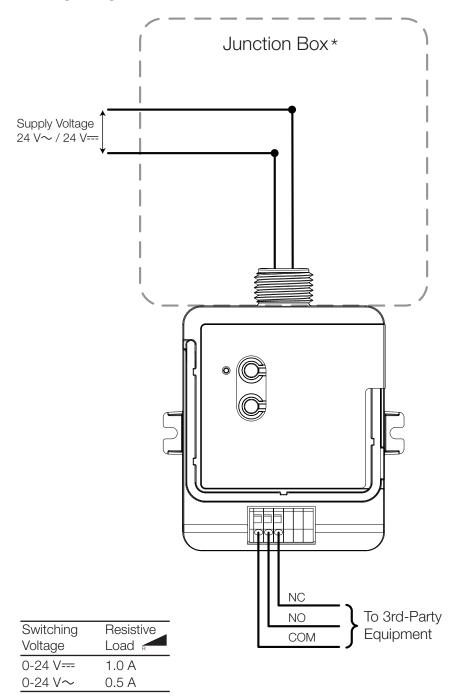
NOTE: The CCO output may be wired using either the NO or NC terminal. Refer to the Default Operation chart on page 6 for more information regarding the behavior of the CCO output terminals.

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#### Wiring Diagram (Junction Box Optional)



\* NOTE: Some applications (in U.S.A.) require the PowPak module to be installed inside an additional junction box. For information about how to perform this installation, please visit www.lutron.com, Application Note #423 (P/N 048423). Please consult all local and national electric codes for proper installation methods.

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