

PowPak 20 A Receptacle Control Relay Module

The PowPak 20 A Relay Receptacle Control Module is a radio-frequency (RF), receptacle switching solution that is capable of controlling 20 A receptacles based on input from Pico remote controls and Radio Powr Savr occupancy sensors.

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

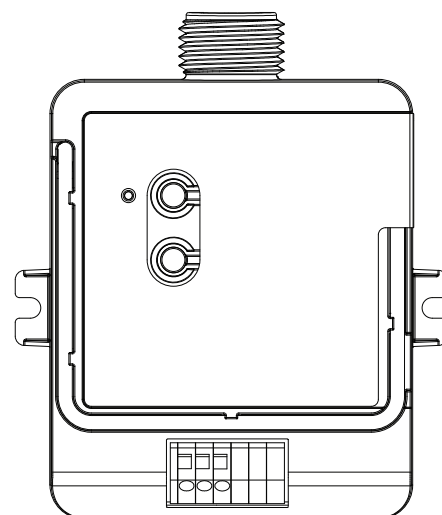
These products are also compatible with the Vive hub which enables a simple setup process using a standard web browser on any Wi-Fi enabled phone, tablet or computer. The hub also enables control and monitoring of all Vive devices. The Vive hub can be added at any time. System reprogramming will be required.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

Note for Replacement: RMJS-20R-DV-B or RMJS-20RCCO1DV-B can replace RMJ-H20R-DV-B.

NOTE: Not intended for control of permanently installed lighting fixtures.

Features

- Softswitch: Lutron patented technology prevents arcing of relay contacts, extending product lifetime
- Optional low-voltage dry contact closure output provides integration to HVAC, VAV, etc.
- Receives wireless inputs from up to 10 Pico remote controls, and 10 Radio Powr Savr occupancy/vacancy sensors
- RoHS Compliant



RMJS-20RCCO1DV-B model shown

- Able to control 20 A receptacles
- Capable of switching general-purpose loads
- Utilizes Lutron Clear Connect RF Technology
- Mounts to a U.S. style junction box through a standard 1/2 in (12.7 mm) size knockout
- Includes required controlled outlet labels for code compliance

Model Numbers

Description	Model Number	Region	Operating Voltage	Frequency Band
PowPak 20 A Receptacle Control Relay Module	RMJS-20R-DV-B	USA, Canada, Mexico (TAA/NAFTA approved)	120/277 V~	431.0–437.0 MHz
PowPak 20 A Receptacle Control Relay Module with Contact Closure Output	RMJS-20RCCO1DV-B	USA, Canada, Mexico (TAA/NAFTA approved)	120/277 V~	431.0–437.0 MHz

Job Name:	Model Numbers:
Job Number:	

Specifications

Regulatory Approvals

- UL® 508 Listed (USA)
- FCC approved. Complies with the limits for a Class B device, pursuant to Part 15 of the FCC rules. (USA)
- IC (Canada)
- CSA compliant (Canada)
- NOM and COFETEL compliant (Mexico)
- Complies with requirements for use in other spaces used for environmental air (plenums) per NEC® 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

Power

- Operating voltage:
120/277 V~ 50/60 Hz
- Standby Power Consumption (all models): < 1.25 W

Load Type	Relay Ratings
	120–277 V~ single phase only RMJS-20R-DV-B RMJS-20RCCO1DV-B
Tungsten	20 A
AC General Use	20 A
Resistive	20 A
Inductive	20 A
Motor	1.0 HP 120 V~ 2.0 HP 277 V~

System Communication

- Operates using Clear Connect RF Technology for reliable wireless communication.
- RF range is 30 ft (9 m)
- 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.

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

Softswitch

- Patented Softswitch circuit eliminates relay arcing at mechanical contacts
- Output is non-latching

Job Name:	Model Numbers:
Job Number:	

Specifications (continued)

Load

- 20 A; No minimum load requirements. Rated to control 20 A receptacles.
- Motor rating:
1.0 HP (120 V~), 2.0 HP (277 V~)
- The 20 A Receptacle Control Relay Module may be used with, but is not limited to, the following:
 - Monitors – Fans
 - Humidifiers – Printers

NOTE: Refer to the manufacturer’s guidelines for acceptable switching methods.

- The 20 A Receptacle Control Relay Module may NOT be suitable for use with devices that require any of the following:
 - Shut-down process before power is interrupted, such as computers.
 - Cool-down process before power is interrupted, such as projectors.
 - Programming, such as clocks or DVRs.
 - Long warm-up cycle.

- **Not for use with loads that present a hazard if automatically energized. For example, heaters.**
- **Any receptacles that are controlled by an automatic control device must be marked with “⚡” located on the controlled receptacle outlet where visible after installation as stated in 2014 NEC® Article 406.3(E).**

NOTE: Labels with this marking “⚡” are included with the product.

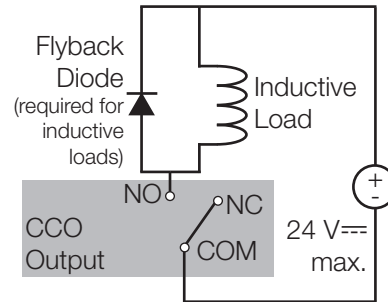
Key Design Features

- LED status indicator illuminates when a button is pressed and turns off 2 seconds after the button is released
- Power failure memory: If power is interrupted, connected receptacles will return to the state prior to the power interruption.

Contact Closure Output (CCO version only)

- Provides occupancy status to 3rd-party equipment such as building management systems, HVAC, and VAV controllers
- Provides both normally open (NO) and normally closed (NC) dry contacts
- Maintained output type
- CCO terminals accept 20 AWG to 16 AWG (0.5 mm² to 1.5 mm²) solid or stranded wire
- Output is latching
- Not for voltages greater than 24 V=
- 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) www.lutron.com/TechnicalDocumentLibrary/048434a.pdf

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

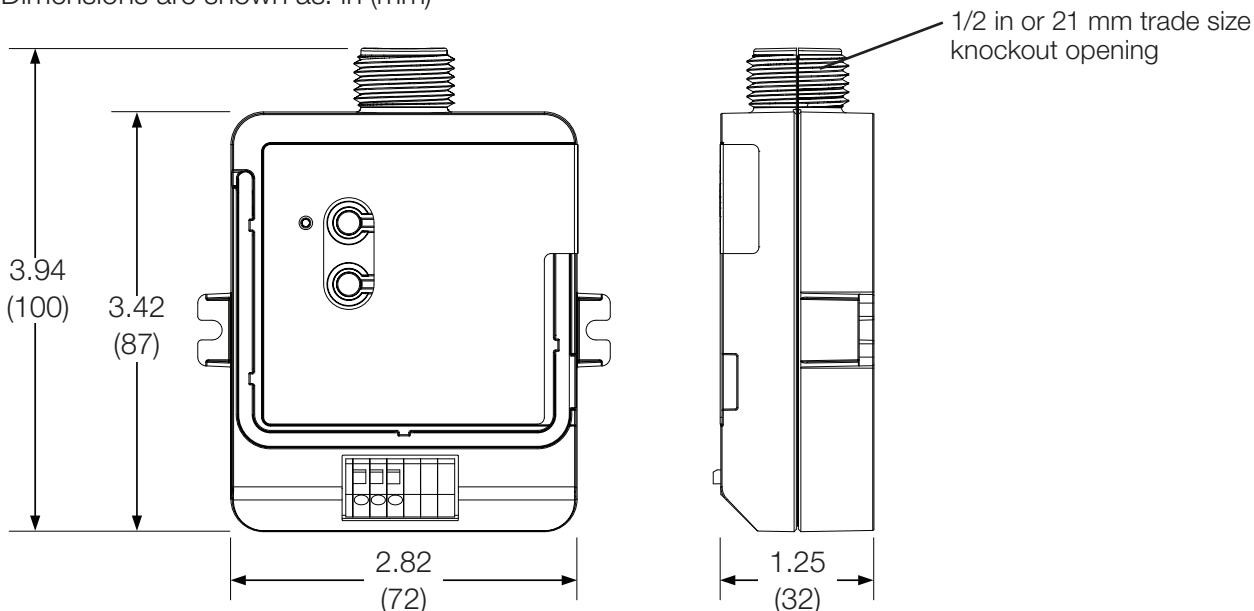


NOTE: Do not tie the CCO to ground.

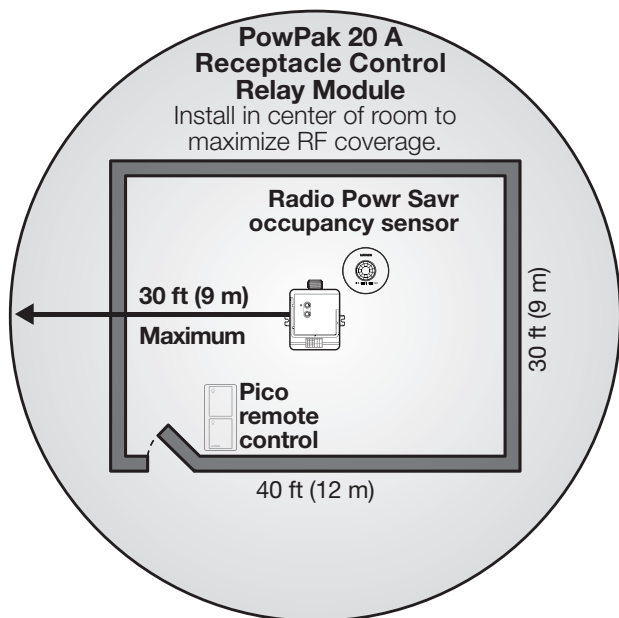
Job Name:	Model Numbers:
Job Number:	

Dimensions

Dimensions are shown as: in (mm)



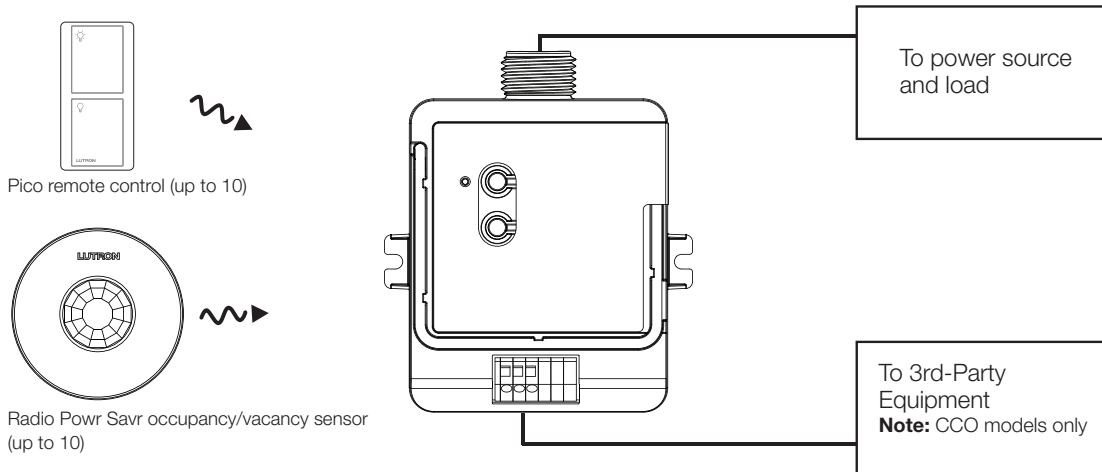
Range Diagrams



NOTE: 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.

Job Name:	Model Numbers:
Job Number:	

System Diagram

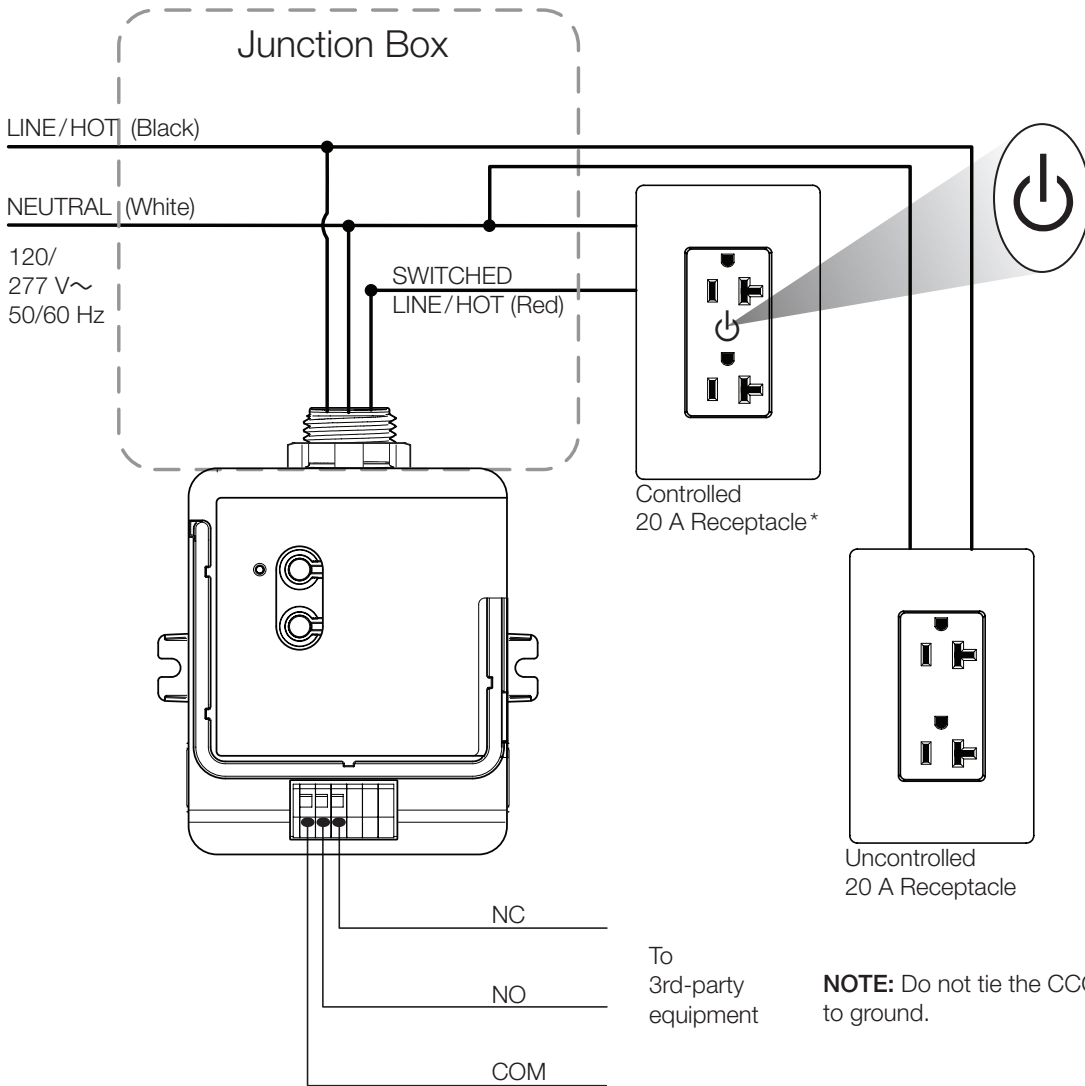


Default Operation

Transmitting Device	Transmitted Command	Softswitch Relay Default Action	CCO Default Action
Pico remote control	On	Close	No Action
	Off	Open	No Action
	Raise	No Action	No Action
	Lower	No Action	No Action
	Preset	Close	No Action
Radio Powr Savr occupancy sensor	Occupied	Close	NO = Close, NC = Open
	Unoccupied	Open	NO = Open, NC = Close
Radio Powr Savr vacancy sensor	Occupied	Close	NO = Close, NC = Open
	Unoccupied	Open	NO = Open, NC = Close

Job Name:	Model Numbers:
Job Number:	

Wiring Diagram - for Duplex Receptacle



ATTENTION INSTALLER

Any receptacles that are controlled by an automatic control device must be marked with “⏻” located on the controlled receptacle outlet where visible after installation as stated in 2014 NEC, Article 406.3(E).

NOTE: Labels with this marking “⏻” are included with the product.

NOTE: Do not tie the CCO to ground.

NOTE: Some applications (in USA) require the PowPak 20 A Receptacle Control Relay Module to be installed inside an additional junction box. For information about how to perform this installation, please see Application Note #423 (P/N 048423) www.lutron.com/TechnicalDocumentLibrary/048423.pdf
Please consult all local and national electric codes for proper installation methods.

* Important Note

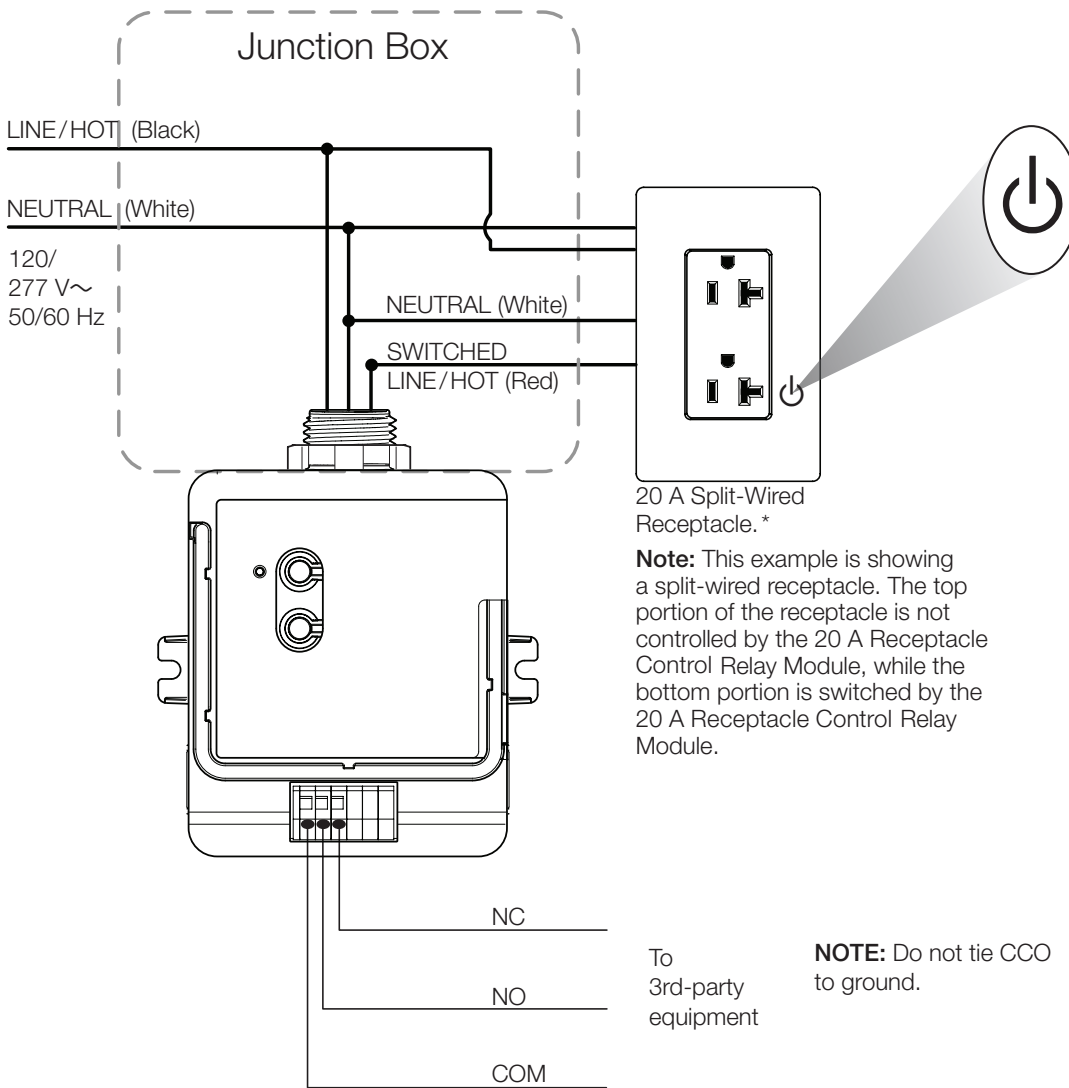
WARNING: Entrapment Hazard. To avoid the risk of entrapment, serious injury, or death, these controls must not be used to control equipment which is not visible from every control location or which could create hazardous situations such as entrapment if operated accidentally.

WARNING: Fire Hazard. To avoid the risk of fire, serious injury, or death, these controls must not be used to control equipment which is not visible from every control location or which could create hazardous situations such as fire if operated accidentally.

Examples of such equipment which must not be operated by these controls include (but are not limited to) motorized gates, industrial doors, space heaters, etc. It is the installer’s responsibility to ensure that the equipment being controlled is visible from every control location and that only suitable equipment is connected to these controls. Failure to do so could result in serious injury or death.

Job Name:	Model Numbers:
Job Number:	

Wiring Diagram - for Split-Wired Duplex Receptacle



ATTENTION INSTALLER

Any receptacles that are controlled by an automatic control device must be marked with “⏻” located on the controlled receptacle outlet where visible after installation as stated in 2014 NEC Article 406.3(E).

NOTE: Labels with this marking “⏻” are included with the product.

Note: This example is showing a split-wired receptacle. The top portion of the receptacle is not controlled by the 20 A Receptacle Control Relay Module, while the bottom portion is switched by the 20 A Receptacle Control Relay Module.

NOTE: Do not tie CCO to ground.

NOTE: Some applications (in USA) require the PowPak 20 A Receptacle Control Relay Module to be installed inside an additional junction box. For information about how to perform this installation, please see Application Note #423 (P/N 048423).

www.lutron.com/TechnicalDocumentLibrary/048423.pdf

Please consult all local and national electric codes for proper installation methods.

* Important Note

WARNING: Entrapment Hazard. To avoid the risk of entrapment, serious injury, or death, these controls must not be used to control equipment which is not visible from every control location or which could create hazardous situations such as entrapment if operated accidentally.

WARNING: Fire Hazard. To avoid the risk of fire, serious injury, or death, these controls must not be used to control equipment which is not visible from every control location or which could create hazardous situations such as fire if operated accidentally.

Examples of such equipment which must not be operated by these controls include (but are not limited to) motorized gates, industrial doors, space heaters, etc. It is the installer’s responsibility to ensure that the equipment being controlled is visible from every control location and that only suitable equipment is connected to these controls. Failure to do so could result in serious injury or death.

Lutron, Lutron, PowPak, Pico, Clear Connect, and Softswitch are trademarks of Lutron Electronics Co., Inc. registered in the U.S. and other countries.

Vive and Radio Powr Savr are trademarks of Lutron Electronics Co., Inc.

NEC is a registered trademark of the National Fire Protection Association, Quincy, Massachusetts.

Job Name:	Model Numbers:
Job Number:	