

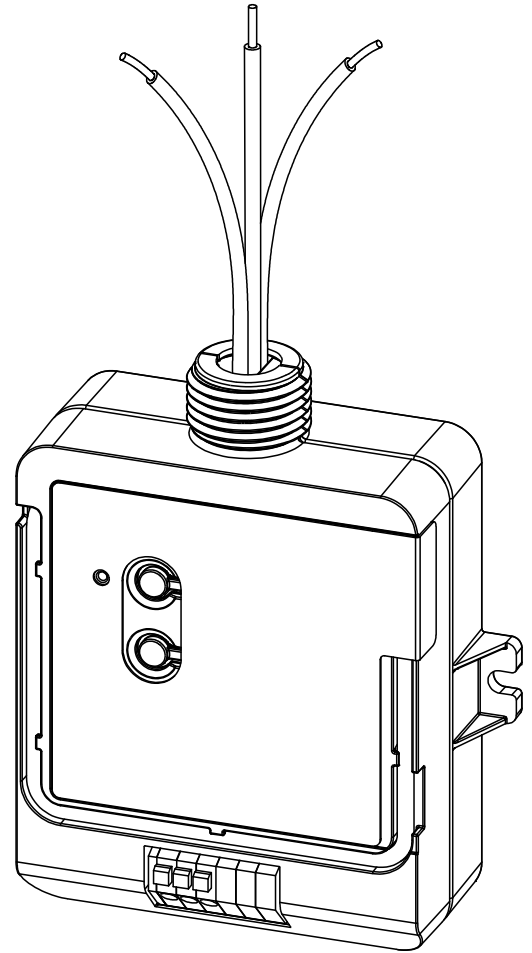
PowPak™ Relay Module with SoftSwitch®

The PowPak™ Relay Module with SoftSwitch® is a radio frequency (RF) device that uses Lutron patented SoftSwitch® technology to control up to 16 A of general-purpose load based on input from Pico® controls and Radio Powr Savr™ occupancy and daylight sensors. An optional, low-voltage dry contact closure output is available to communicate occupancy status to 3rd-party systems such as HVAC controllers.

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

Features

- SoftSwitch®: Lutron patented technology prevents arcing of relay contacts, extending product lifetime
- Various operating voltages available — refer to model number chart below for details on voltage requirements
- Capable of switching 16 A of general-purpose loads
- Optional low-voltage dry contact closure output provides integration to building management systems, HVAC, VAV, etc.
- Receives wireless inputs from up to nine Pico® controls, six Radio Powr Savr™ occupancy/vacancy sensors, and one Radio Powr Savr™ daylight sensor
- Utilizes Lutron Clear Connect™ RF Technology – refer to model number chart below for frequency band data
- Mounts to a junction box through a standard half-inch (NPT trade size) knockout
- Complies with requirements for use in a compartment handling environmental air (plenum) per NEC® 2011 300.22(C)(3)



| Description | Model Number | Operating Voltage | Frequency Band | Region |
|--|------------------|-------------------|---------------------|------------------------|
| PowPak™ Relay Module with SoftSwitch® | RMJ-16R-DV-B | 120/277 V~ | 431.0 – 437.0 MHz | U.S.A., Canada, Mexico |
| | RMQ-16R-DV-B | 220-240 V~ | 433.05 – 434.79 MHz | Hong Kong |
| PowPak™ Relay Module with SoftSwitch® and Occupancy-Status CCO | RMJ-16RCCO1-DV-B | 120/277 V~ | 431.0 – 437.0 MHz | U.S.A., Canada, Mexico |
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Note: Contact Lutron for frequency band compatibility for your geographic region if it is not indicated above.

LUTRON® SPECIFICATION SUBMITTAL

Page

| | |
|-------------|----------------|
| Job Name: | Model Numbers: |
| Job Number: | |

Specifications

Regulatory Approvals

RMJ- models only

- UL Listed
- UL 2043 Plenum Rated
- FCC approved. Complies with the limits for a Class B device, pursuant to Part 15 of the FCC rules.
- CSA and IC
- COFETEL
- NOM (expected Q1 2012)

Power

- Operating voltage:
RMJ- models 120/277 V~ 50/60 Hz
RMQ- models 220-240 V~ 50/60 Hz

System Communication

- Operates using Clear Connect™ RF Technology for reliable wireless communication; refer to model number chart on page 1 for band frequency details
- RF range is 30 ft (10 m)

Environment

- Ambient operating temperature: 32 °F to 131 °F (0 °C to 55 °C)
- 0% to 90% humidity, non-condensing
- For indoor use only

SoftSwitch®

- Patented SoftSwitch® circuit eliminates relay arcing at mechanical contacts
- Extends relay life to an average of 1 million cycles
- Output is non-latching

Load


- Maximum load: 16 A general purpose. No minimum load requirements.
- Load types include (but are not limited to): Incandescent, MLV, ELV, Resistive, Inductive, Magnetic fluorescent, Electronic fluorescent
- Motor rating:
RMJ- models 0.5 HP (120 V~), 1.5 HP (277 V~)
RMQ- models 1.5 HP (220-240 V~)

Key Design Features

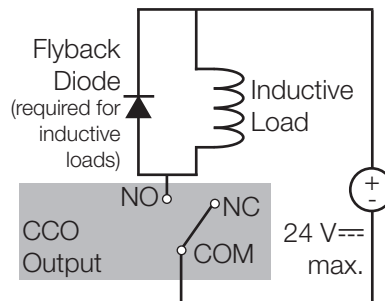
- LED status indicator shows current load status and provides programming feedback
- Power failure memory: If power is interrupted, connected loads will return to the previous level prior to interruption
- Daylighting can be overridden by pressing the ON button on any associated Pico®
 – Daylighting will be re-enabled after 2 hours or after the area becomes unoccupied

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 to 16 AWG (0.5 to 1.5 mm²) solid or stranded wire
- Output is latching
- Not for voltages greater than 24 V

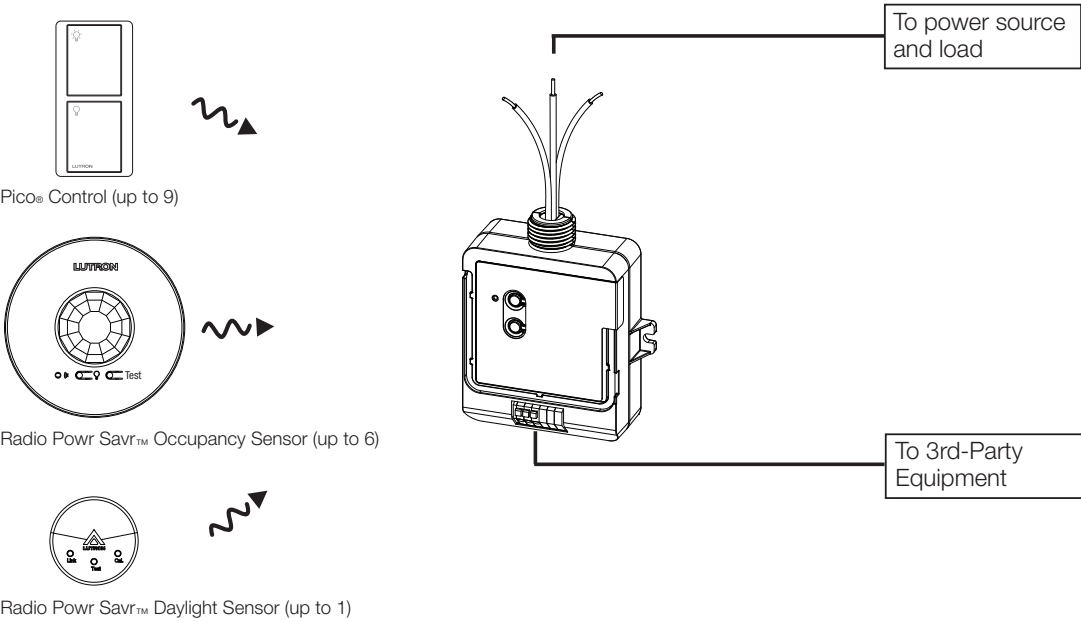
| Switching Voltage | Resistive Load  |
|-------------------|--|
| 0-24 V== | 1.0 A |
| 0-24 V~ | 0.5 A |

- 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).

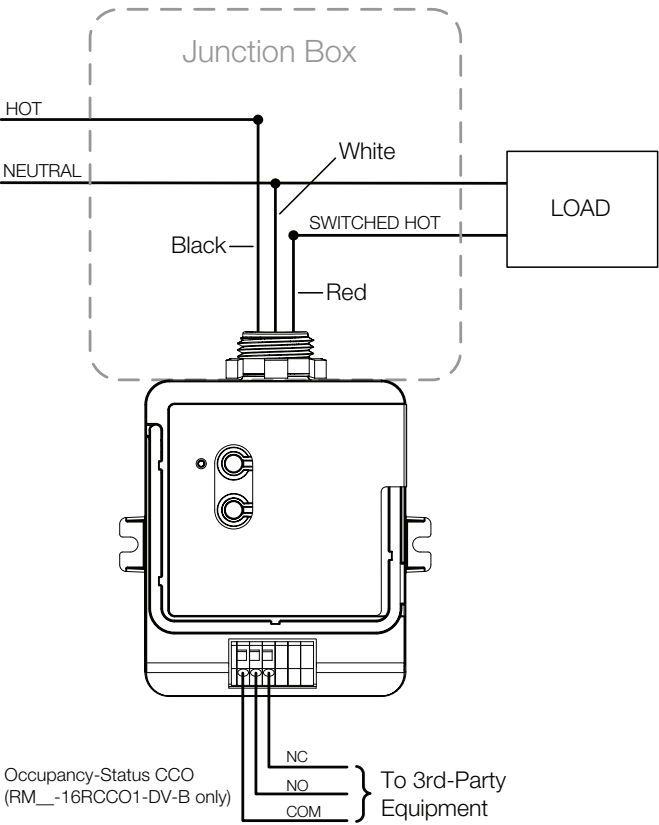


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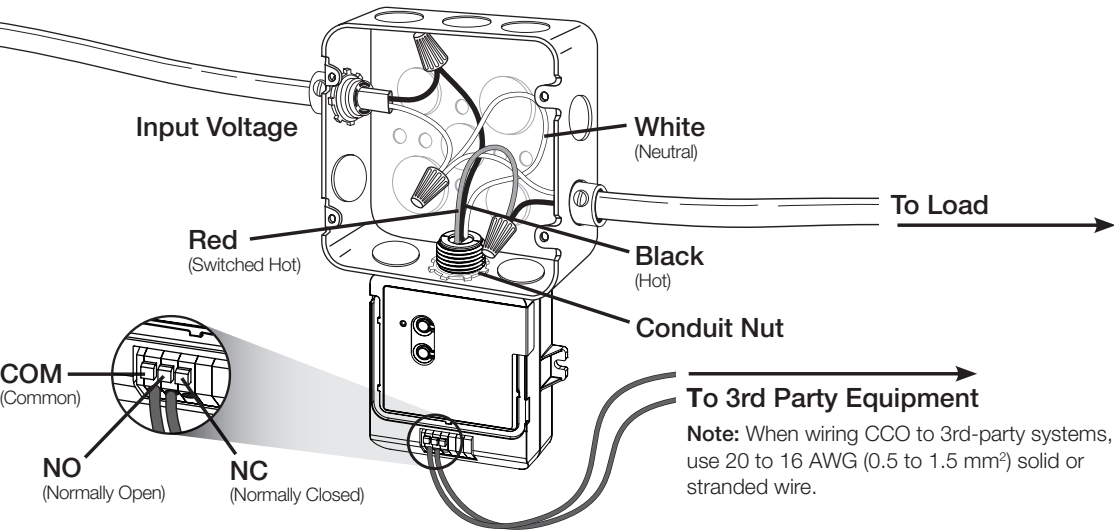
System Diagram



Wiring Diagram

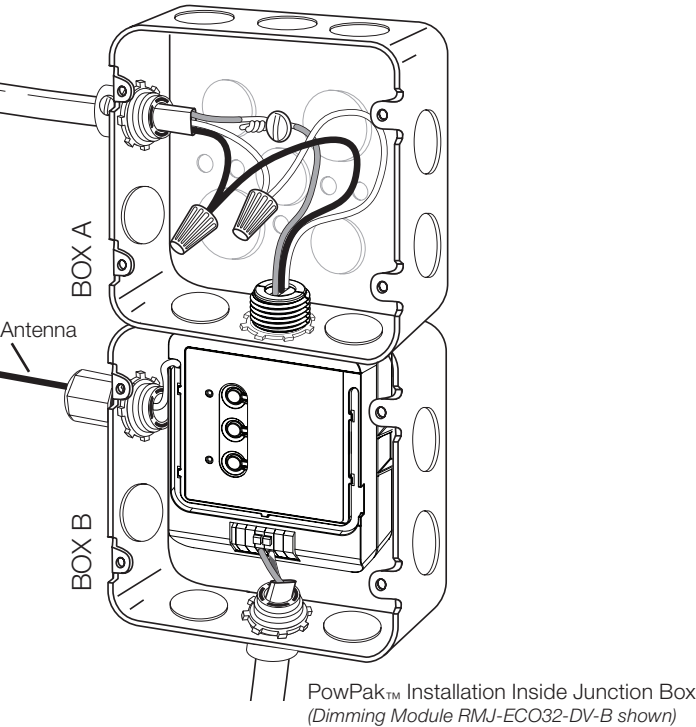


Wiring Diagram



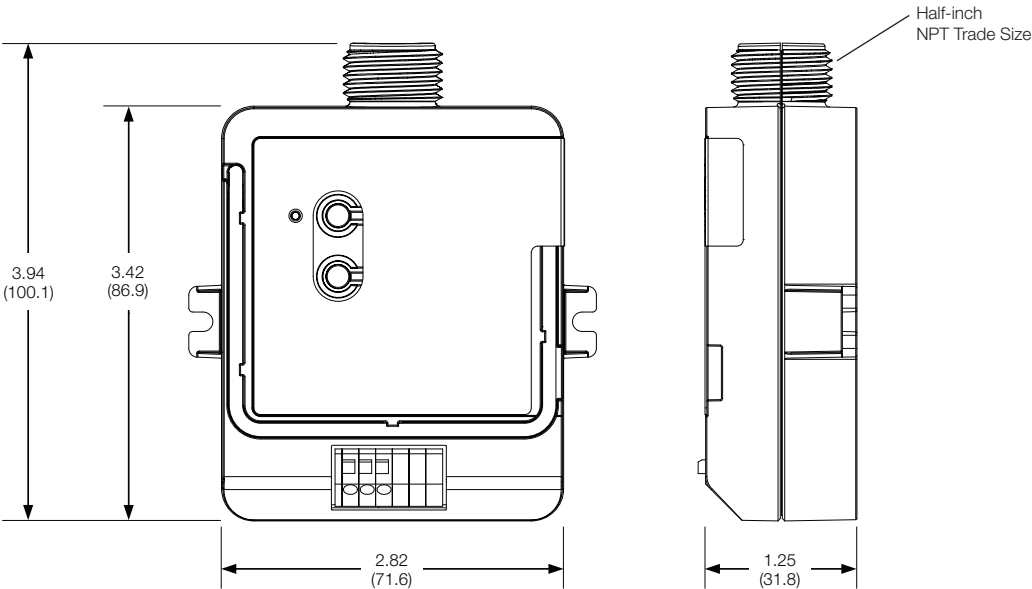
CCO operation affected only by associated occupancy or vacancy sensors.
Room Occupied: NO = Close NC = Open
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In some applications, a PowPak™ module can be installed inside a 4 in x 4 in (102 mm x 102 mm) junction box. For information about how to perform this installation, please see Application Note #423 (p/n 048423).

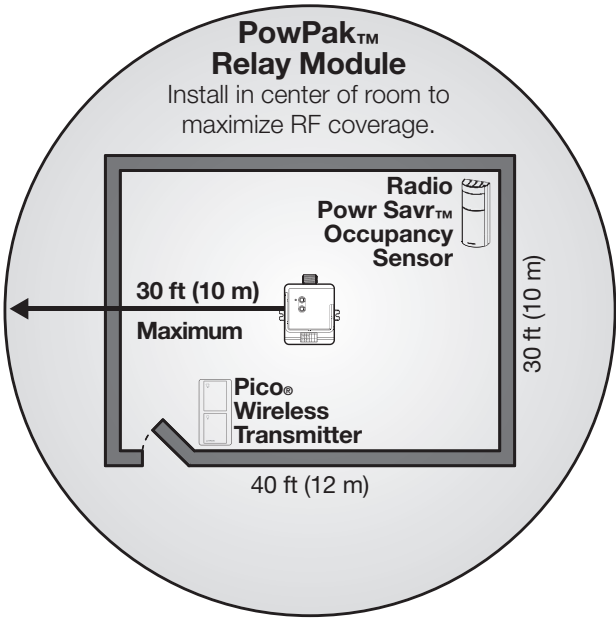


Dimensions

Dimensions are shown as: in (mm)



Range Diagram



All Wireless Transmitters must be installed within 30 ft (10 m) of the PowPak™ Relay Module.

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

Default Operation

| Transmitting Device | Transmitted Command | SoftSwitch® Relay Default Action | CCO Default Action |
|--------------------------------------|-------------------------------------|----------------------------------|-----------------------|
| Pico® | 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 | No Action | NO = Close, NC = Open |
| | Unoccupied | Open | NO = Open, NC = Close |
| Radio Powr Savr™ Daylight Sensor | Ambient Light Below Target Level | Close | No Action |
| | Ambient Light Above Target Level | Open | No Action |

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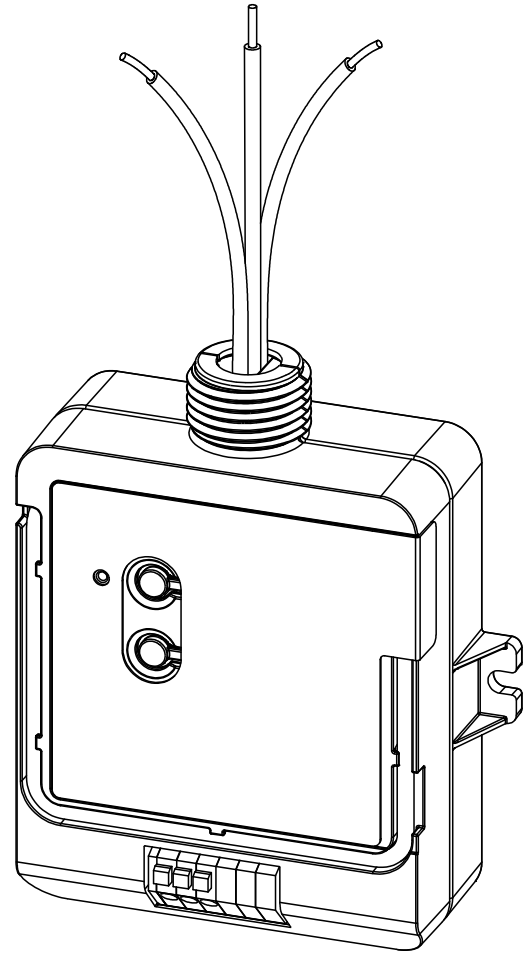
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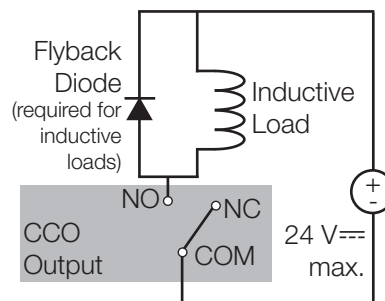
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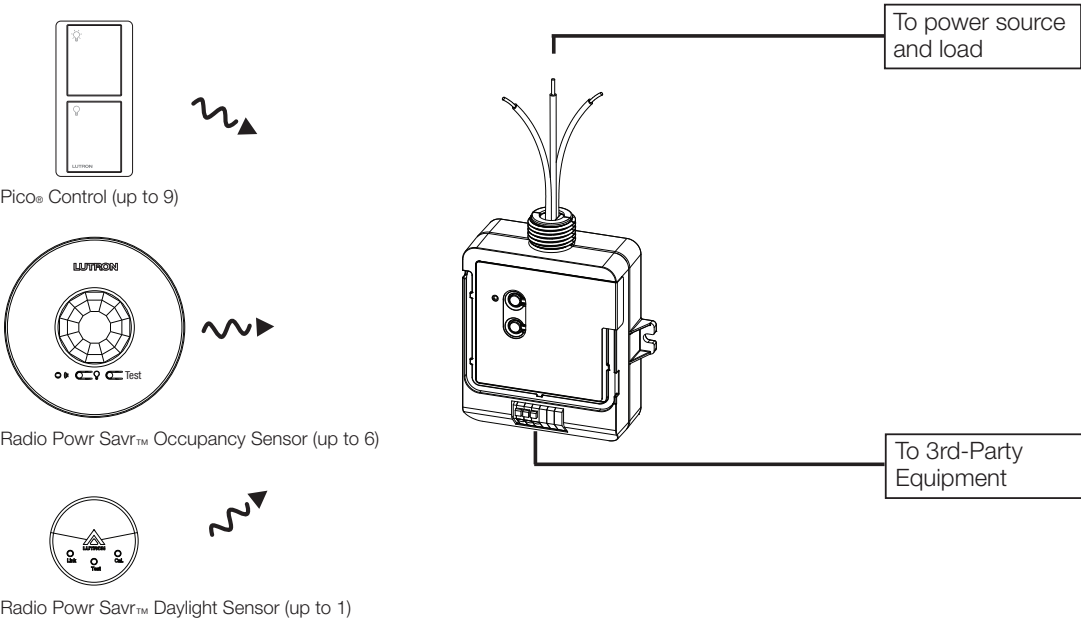


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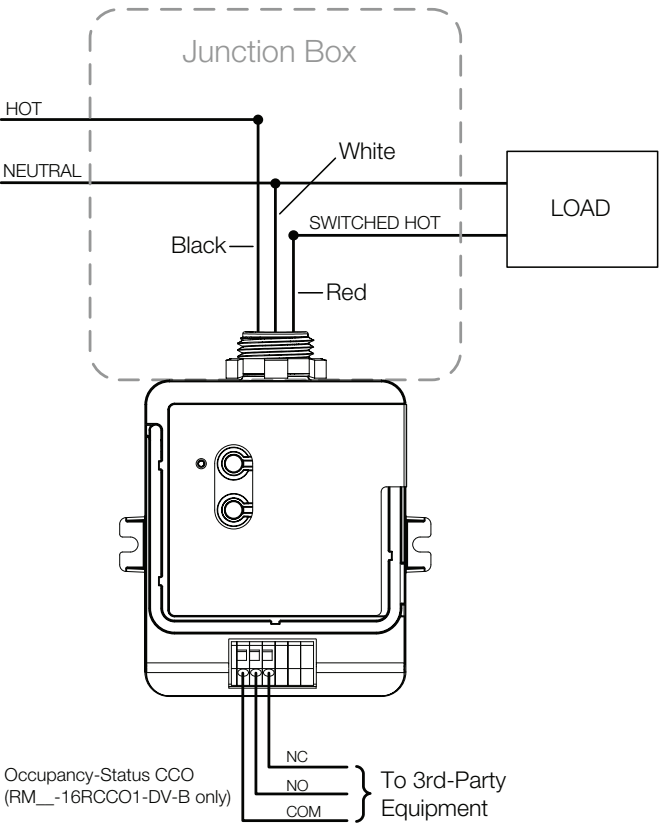
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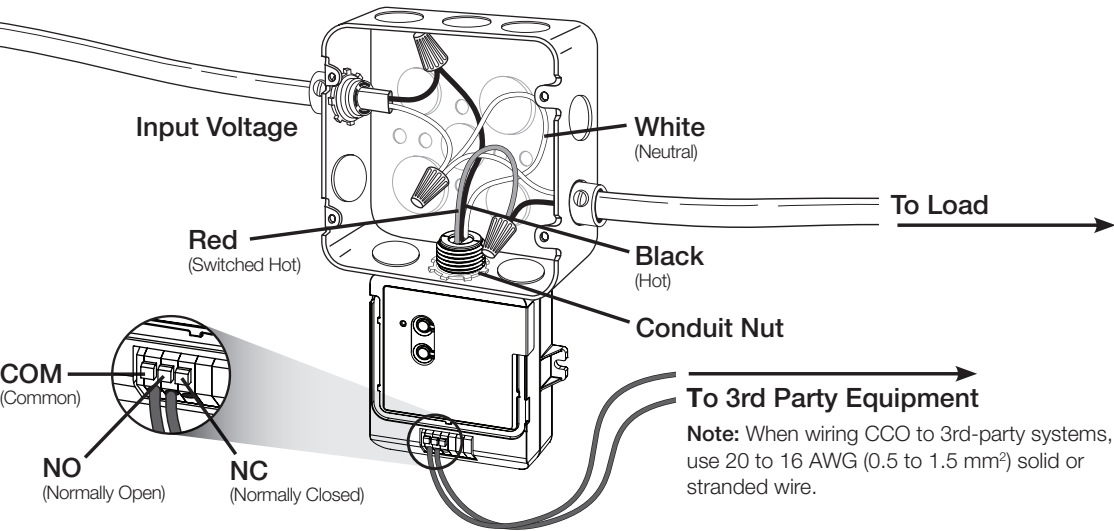
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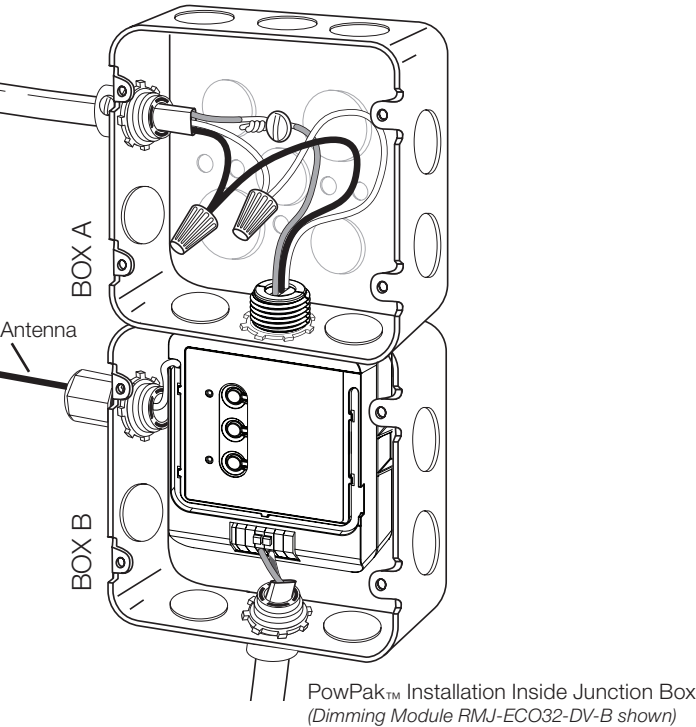


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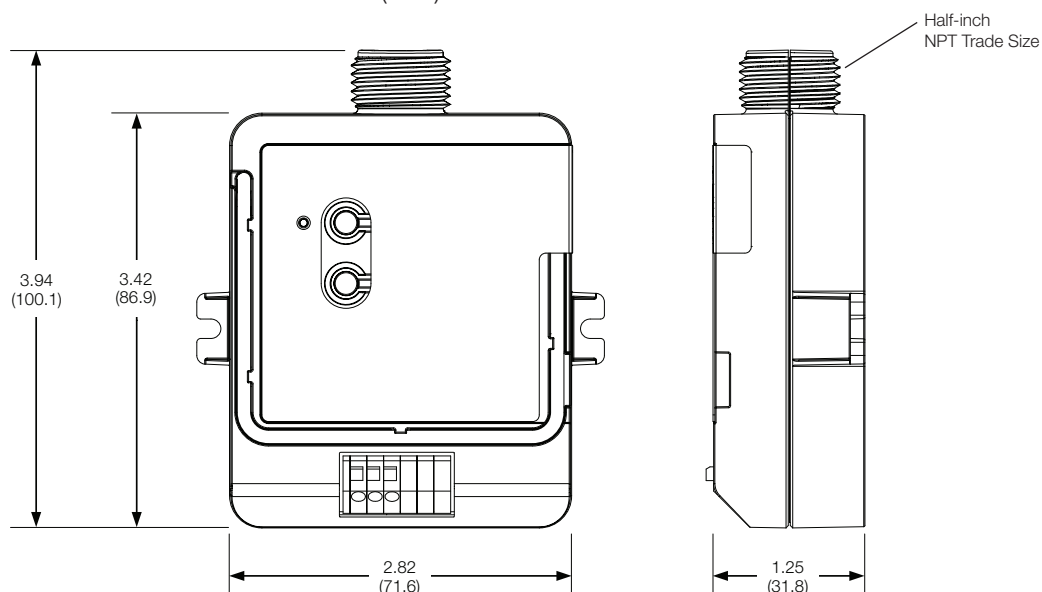
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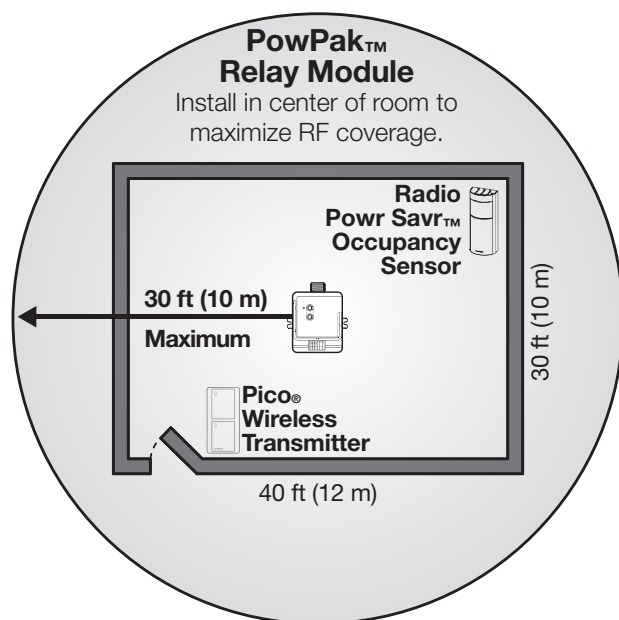


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