Manuals+ — User Manuals Simplified.

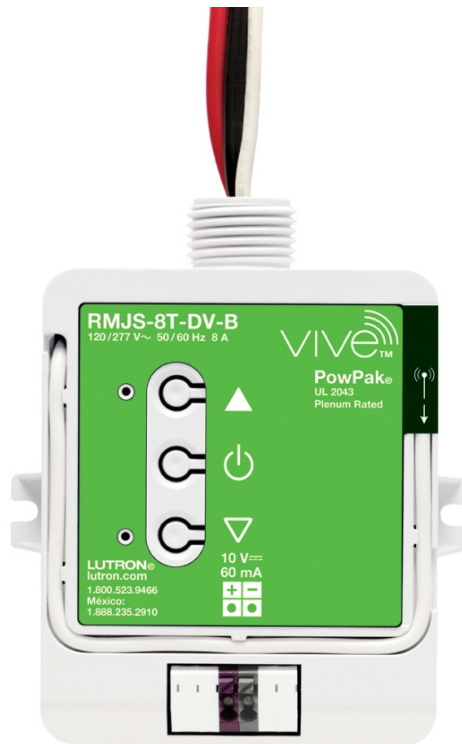# LUTRON RMJS8T-DV-B PowPak dimming module with 0-10 V control User Manual

LUTRON

Contents

LUTRON RMJS8T-DV-B PowPak dimming module with 0-10 V control

PowPak | Installation

Dimming Module with 0 –10 V $---$

RMNS-8T-DV-B
220 – 240 V~ 50 / 60 Hz 8 A

0 –10 V $---$ Control: 10 V $---$ 60 mA
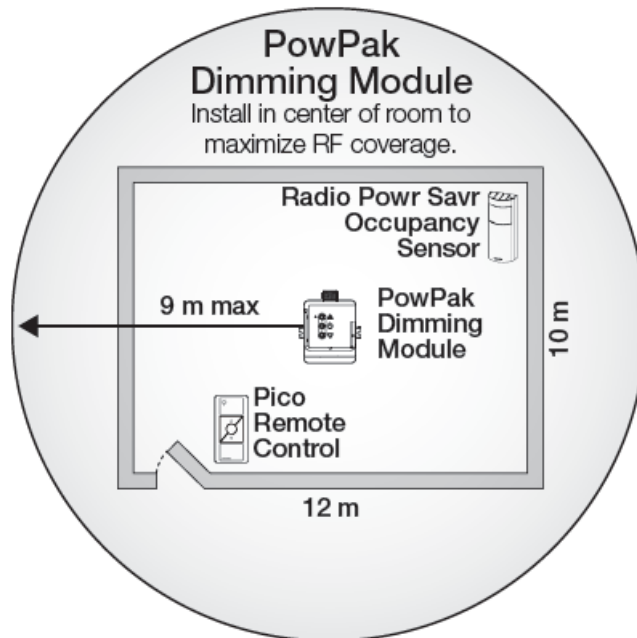Compatible with IEC 60929 Annex E

Note for Replacement:
RMxS – the "S" model can replace the non-"S" model

Important Notes: Please read before installing.
For installation by a qualified electrician in accordance with all local and national electrical codes.

- Note: Use copper conductors only.
- Check to see that the device type and rating is suitable for the application.
- DO NOT install if the product has any visible damage.
- If moisture or condensation is evident, allow the product to dry completely before installation.a
- Operate between 0 °C and 40 °C ambient.
- 0% to 90% humidity, non-condensing.
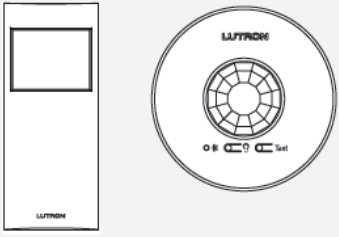- For indoor use only.

PowPak
Dimming Module
Install in center of room to
maximize RF coverage.

Radio Powr Savr
Occupancy
Sensor

9 m max   PowPak
Dimming
Module

10 m

Pico
Remote
Control

12 m

All Wireless Transmitters must be installed within 9 m
of the PowPak Dimming Module with 0–10 V⎓.

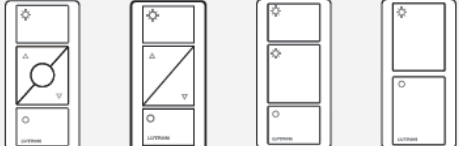## Default Functionality

Default Functionality

Occupancy Sensors

Occupied: All lights 100%.
Unoccupied: All lights off.

Daylight Sensor

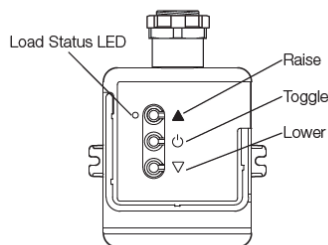All lights dim in response to daylight.

Wireless Controls

On	All lights 100%
Favorite	All lights 50%
Off	All lights off

Required Components

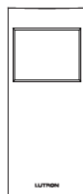For each system, ensure that you have:

One PowPak Dimming Module   At least one Wireless Transmitter

Load Status LED   Raise
                         Toggle
                         Lower

PowPak Dimming Module with 0–10 V⎓
(1 maximum)

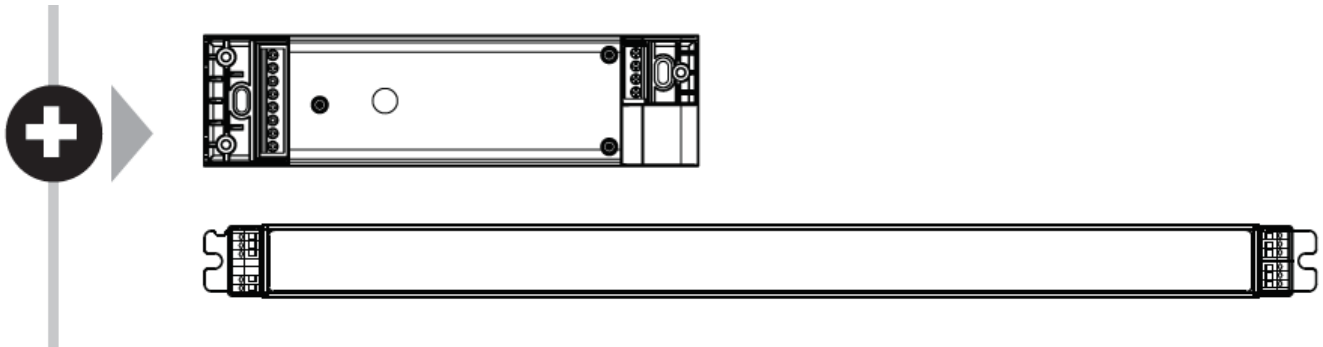Radio Powr Savr Occupancy/Vacancy Sensor
(10 maximum)

Pico Remote Control
(10 maximum)

Radio Powr Savr Daylight Sensor
(1 maximum)

At least one 0 –10 V ⎓ LED Driver or Fluorescent Ballast

Consult third-party 0 –10 V ⎓ fixtures installation guide for fixture-specific wiring.
For mounting and wiring, best practices see Lutron Application Note #620 (P/N 048620).

60 mA maximum for the control lines. Switches up to 8 A total. May be pre-installed in light fixture.
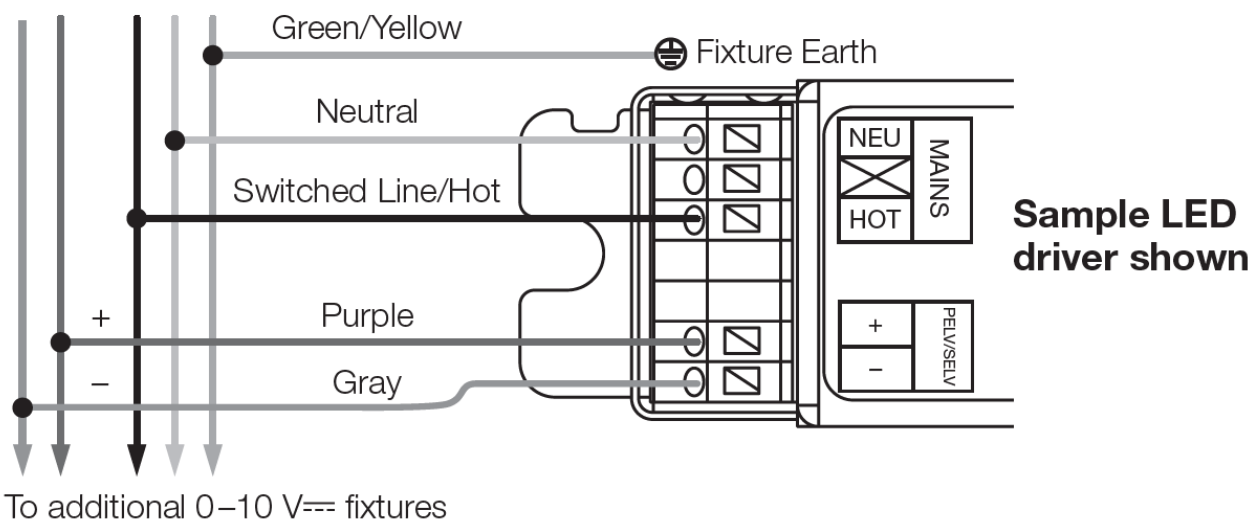
Start Here

1. **Mount, Wire, and Install 0 –10 V ⎓ Devices and Lighting Fixtures**

    Consult third-party device installation guide

    WARNING! Shock Hazard. May result in serious injury or death. Turn off power at circuit breaker before installing the unit.

    A Connect mains wiring (switched hot, neutral) to each fixture.

    B Connect 0 –10 V- control (+ and –) to each fixture.

2. **Install PowPak Dimming Module with 0 –10 V ⎓**

    Suggested Installation Location: Center of room to ensure proper RF coverage of area.

    A Install the 1/2 in NPT to 20 mm conduit adapter (provided) onto the PowPak Dimming Module with 0 –10 V ⎓.

    B The PowPak Dimming Module with 0 –10 V ⎓ can be installed in a junction box or marshalling box using the conduit nut (provided) or with mounting screws (not provided). Please consult local and national electric codes for proper installation.

    C Once installed, energize the PowPak Dimming Module with 0 –10 V ⎓.

**D** Use the Toggle button " ⏻ " to toggle between ON and OFF to verify LED driver / ballast wiring.

E Use the Raise " ▲ " and Lower "Δ" buttons to verify control wiring.

Line/Hot (Red)

Switched Line (Yellow)

Neutral (Black)

Neutral (Black)　　　　To Fixtures

– (Gray)

+ (Purple)　　　　0–10 V⎓ to Fixtures

Wiring a Lever Operated Connector
When wiring lever operated connectors (2 supplied) use 2.5 mm² to 4.0 mm² (14 AWG to 12 AWG) solid or stranded copper wire.

10 mm

Conduit Nut

1/2 in NPT to 20 mm Conduit Adapter
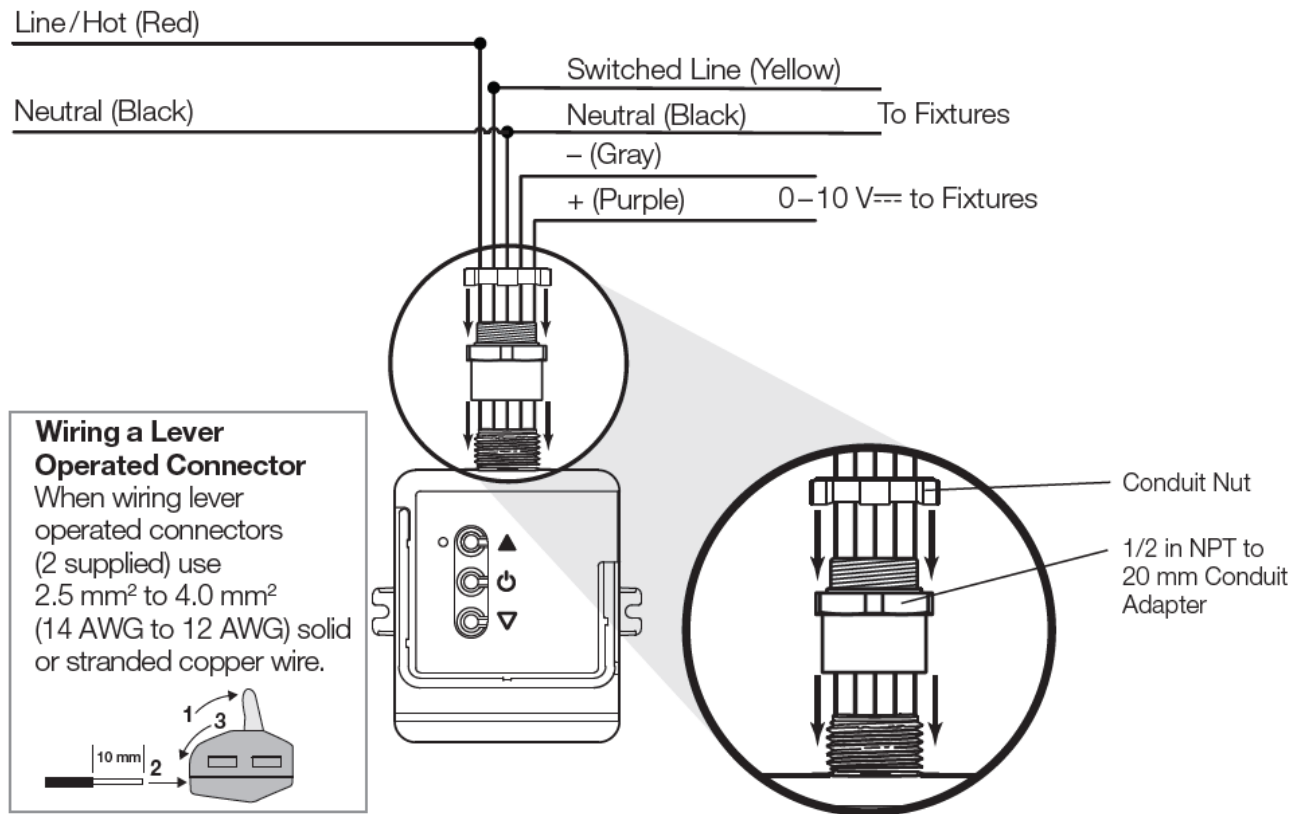
3. **Programming with a Vive Hub**

   1. Use and iOS or Android-compatible device.
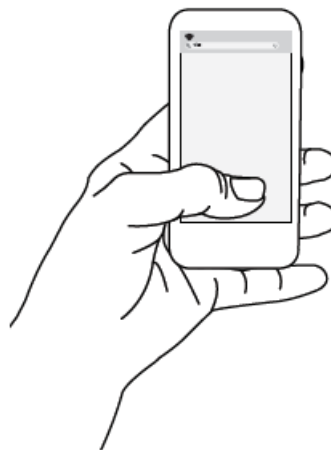
   2. Download the Lutron Vive app.

      Download on the App Store

      GET IT ON Google Play

   3. Open the app and follow the instructions.
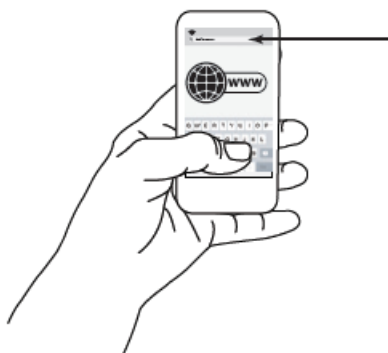
Note: For further information on set up, programming, and troubleshooting with a Vive system, please refer to the installation instructions included with the Vive hub or visit **www.lutron.com/vive-asia**

Note: For programming the PowPak Relay Module with 0 –10 V- without a Vive hub see reverse side.

Troubleshooting

Ballasts cannot be controlled locally from PowPak Dimming Module with 0 –10 V-.	• Ensure that the breaker(s) to the PowPak Dimming Module with 0 –10 V $\overline{}$ are energized. • Ensure that the PowPak Dimming Module with 0 –10 V $\overline{}$ switched hot lead is wired to the lighting fixture(s). • Ensure that the PowPak Dimming Module with 0 –10 V $\overline{}$ control lines are wired to the lighting fixture(s).
	Reset to factory defaults.
Lights do not dim as expected.	• Ensure that 0 –10 V $\overline{}$ control lines are wired properly. • Ensure that fixture -does not require an inverted signal (10 – 0 V $\overline{}$ control).
Lights do not respond to Wireless Transmitter(s).	• Ensure that the breaker(s) to the PowPak Dimming Module with 0 –10 V $\overline{}$ and ballasts are energized. • Ensure that Wireless Transmitters are associated to the PowPak Dimming Module with 0 –10 V $\overline{}$.
	Reset to factory defaults.
Lights are unstable at low-end or flash/flicker at turn-on or turn-off.	• Adjust the low-end trim.
Wireless Transmitter(s) cannot be associated to PowPak Dimming Module with 0 –10 V-.	• The maximum number of Wireless Transmitters have been associated to the PowPak Dimming Module with 0 –10 V $\overline{}$. To remove a previously set up Wireless Transmitter, tap a Wireless Transmitter button three times; on the third tap hold for three seconds and then tap three more times.

Programming without a Vive Hub

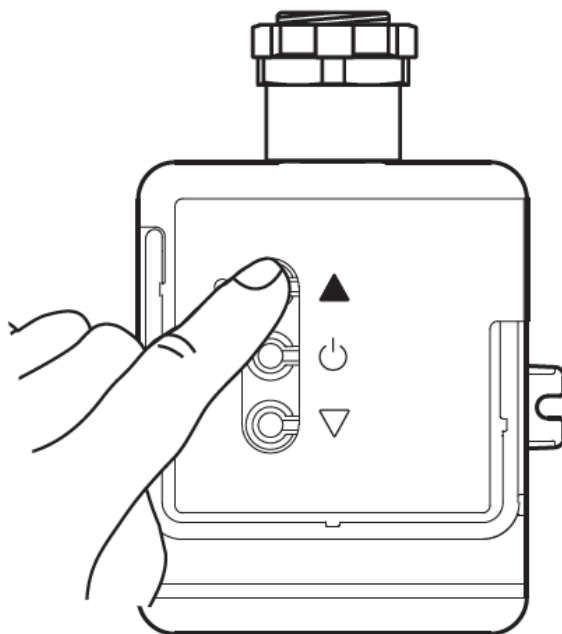**Dimming Module with 0 –10 V ⎓**

Part of the Vive Family

Start Here

1. Associate Wireless Transmitters to PowPak Dimming Module with 0 –10 V ⎓

   Before beginning this step, make sure that there are no other PowPak modules being set up within the same building. It is possible that wireless transmitters from other systems can be incorrectly associated to this module.

   A On PowPak Dimming Module with 0 –10 V-, hold Toggle button "⏻" for 6 seconds until lights flash. The Load Status LED will begin flashing twice per second.

   B Hold the indicated button on each transmitter for 6 seconds. Lights will flash to show that wireless transmitters have been associated.
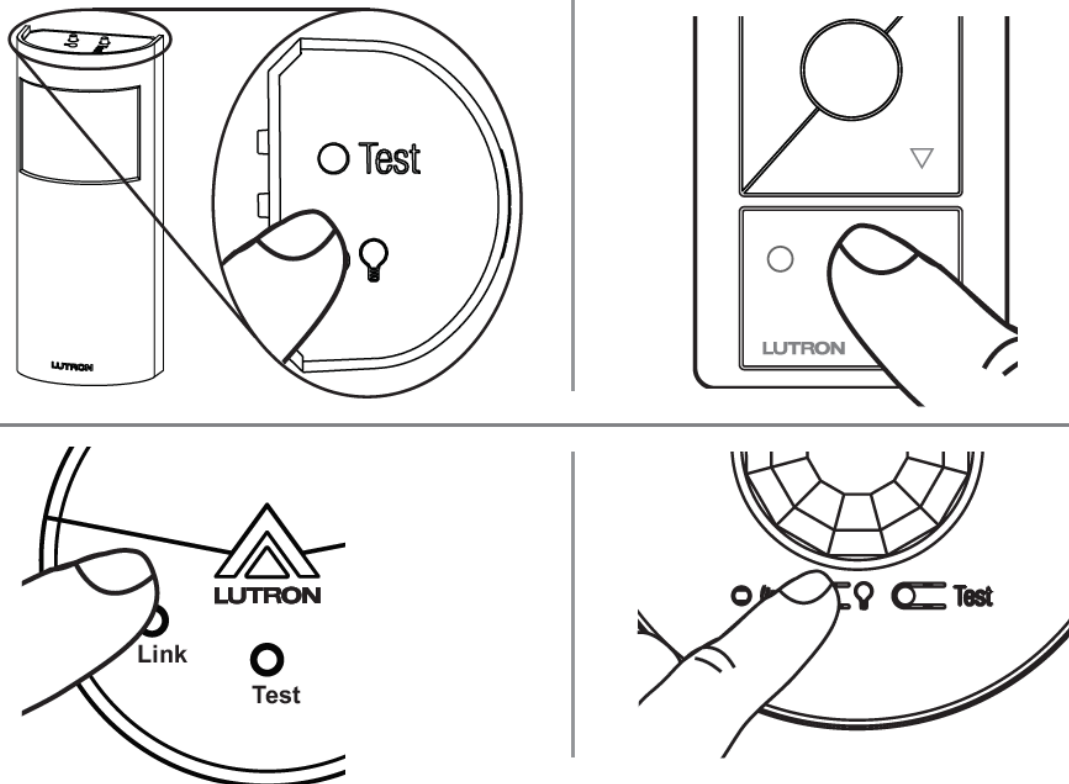
C On PowPak Dimming Module with 0 –10 V-, hold the Toggle button "⏻" for 6 seconds to save association. Lights will flash and LED will quickly blink for 2 seconds.

D Permanently install wireless transmitters (consult individual component installation guides for information).

Reset Factory Defaults

Note: In some instances, it may be necessary to reset the PowPak Dimming Module with 0 –10 V === and connected devices back to factory default settings. Before beginning, make sure that all devices are connected and powered.

A Rapidly tap the Toggle button " u" on the PowPak Dimming Module three times and hold on the fourth time until the LED begins to flash at a rate of approx. blinks every 1 second; then release the Toggle button.
B Within 3 seconds of the start of flashing of the LED on the PowPak, rapidly tap the Toggle button on the PowPak Dimming Module three times again. Make sure to release the Toggle button after the third press.
C The LED will flash at a rate of 2 blink/3 seconds and the connected load will cycle 3 times to indicate the unit has been reset to factory defaults. Note: Any associations or programming previously set up with the unit will be lost and will need to be re-programmed.

Calibrate the Radio Powr Savr Daylight Sensor
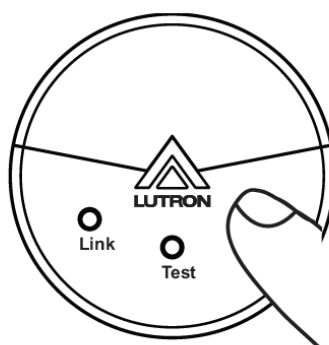
The daylight Sensor will control all wired fixtures equally.

A Press and release the "Cal." button on the Daylight Sensor.

B Set lights in room to the desired light level.

C Press and hold the "Cal." button for 6 seconds.

D Exit room for 5 minutes to complete calibration.

Note: When calibration has completed, all lights will flash and begin to respond to daylight.

Multiple Daylight Rows (Optional)

For every row of daylighting a separate PowPak Dimming Module with 0 –10 V- must be used. For detailed setup refer to the tuning section of the Radio Powr Savr Daylight Sensor installation guide.
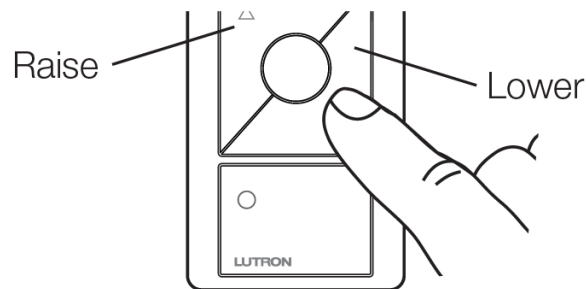
- Select the PowPak Dimming Module with 0 –10 V $=$ that you want to adjust by pressing the Toggle button.

Set a Favorite Light Level (Optional)

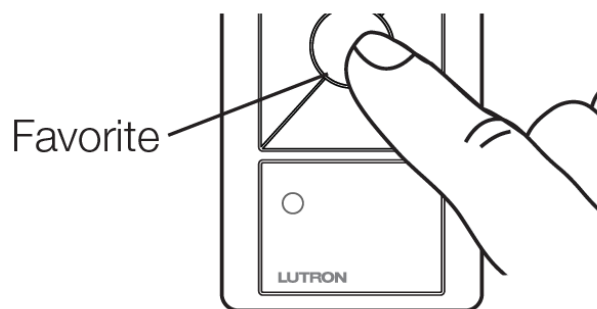For Pico remote controls with a Favorite Button.

A Adjust lights to desired level:

Use the **Raise** "▲" and **Lower** ∇ on the Pico remote control.

B Save favorite level:

Press and hold the Favorite button for 6 seconds.

The load will flash 3 times to confirm that the Favorite level is saved.
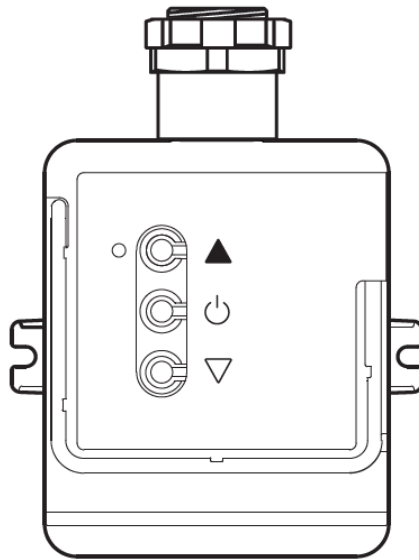

Set Low-End Trim and High-End Trim (Optional)

For best results, minimize the amount of sunlight entering the room before performing the following procedures.

Notes

Depending on the fixture manufacturer or load, low-end trim and high-end trim may need to be adjusted.

- Trim low-end to ensure a stable light level because some loads will flicker or drop out if trimmed too low.
- Be sure that you can turn on the lights to the low-end trim level without any abnormal operation.
- The factory default high-end trim is suitable for most applications but can be adjusted as desired.

Low-End Trim

A Enter low-end trim adjustment mode:
Press and hold the **Lower button** on the fixture control for 12 seconds. The lights will flash and the load status LED will begin flashing.

B Adjust the low-end trim:
Use the Raise button "▲" and Lower button ▽ on the fixture control to adjust and set the lights to the desired low-end (1 to 45%).

C Save the low-end trim:

Press and hold the Toggle button "⏻" for 6 seconds to save setting.
The load status LED will begin flashing and then turn solid to indicate new level has been saved.

High-End Trim

A Enter high-end trim adjustment mode:
Press and hold the Raise button "▲" on the fixture control for 12 seconds. The lights will flash and the load status LED will flash.

B Adjust the high-end trim:
Use the Raise button "▲" and Lower button ▽ on the fixture control to adjust and set the lights to the desired high-end (55 to 100%).

C Save the high-end trim:

Press and hold the Toggle button "⏻" for 6 seconds to save setting.
The load status LED will begin flashing and then turn solid to indicate new level has been saved.

Set Minimum Light Level (Optional)

Certain applications (e.g., hallways), may require that the lights never turn off. For these areas, activate Minimum Light Level mode.

A Enter minimum light level adjustment mode:

Press and hold Toggle button "⏻" and Lower button "Δ" for 12 seconds. Lights will flash high-low-high and LED will begin flashing.
If lights stop flashing and go to high-end, the minimum light level is set to OFF (default).
If lights stop flashing and go to low-end, the minimum light level is ON and set to the low-end.

B Change the minimum light level:
Press Raise button "▲" to set the minimum light level to low-end.

Press Lower button ▽ to set minimum light level to OFF.

C Save the minimum light level:

Press and hold Toggle button "⏻" for 6 seconds. LED will quickly flash to indicate that new level has been saved.

**Set Occupancy Light Levels (Optional)**

Note: Unoccupied light level is always the minimum light level and cannot be adjusted.

A Set desired occupancy light levels:

Use Raise/Lower buttons "▲ / ▽" on the PowPak Dimming Module with 0 –10 V $=$ or Raise/Lower buttons "▲ / ▽" on all associated Pico Remote Controls.

B Save occupancy light levels:
Press and hold **Test** button for 6 seconds on any associated Radio Powr Savr Occupancy Sensor without a **Lights On** button. Release when Sensor lens starts to flash.
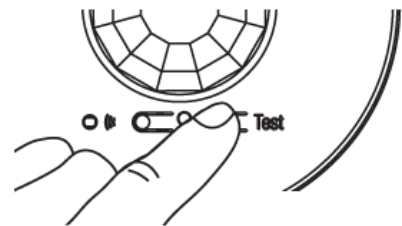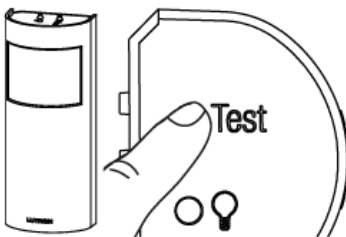
Customer Assistance:
India: +91.124.4390130
Other Countries: +1.610.282.3800 **www.lutron.com/support**

Limited Warranty: www.lutron.com/asia/ResourceLibrary/warranty/Limited%20Comm.pdf

Hereby, Lutron Electronics Co., Inc. declares that the radio equipment type RMNS-8T-DV-B is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address:
www.lutron.com/cedoc

Documents / Resources

LUTRON RMJS8T-DV-B PowPak dimming module with 0-10 V control [pdf] User Manual
RMJS-8T-DV-B PowPak dimming module with 0-10 V control, RMJS-8T-DV-B PowPak, dimming module with 0-10 V control, module with 0-10 V control, control

References

- 🌐 **Vive Reconnect | Lutron**
- ✳ **Lutron: Beautiful light. Intelligent Shades. Powerful Controls**
- ✳ **CE Declarations of Conformity Page**
- ✳ **Lutron Support Center | Lutron**
- ✳ **Vive - Commercial Wireless Lighting Control System | Lutron**