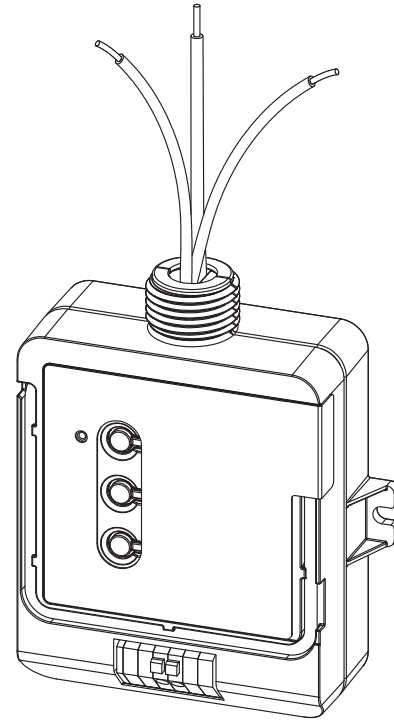


## RF Dimming Module with 0–10 V<sub>DC</sub> Control

### Compatible with RA2 Select, RadioRA 2, RadioRA 3, and HomeWorks systems

The RF dimming module with 0–10 V<sub>DC</sub> control is a radio frequency (RF) control that operates 0–10 V<sub>DC</sub> controlled fluorescent ballasts or LED drivers based on input from RA2 Select, RadioRA 2, RadioRA 3, and HomeWorks systems.

- 0–10 V<sub>DC</sub> control link automatically sources or sinks up to 60 mA to third-party fixtures.
- Switches line voltage up to 5 A.
- Configurable high- and low-end trim.
- Various operating voltages available — refer to **Models** chart below for details on voltage requirements.
- Utilizes Lutron Clear Connect RF technology— refer to **Models** chart below for frequency band data and Lutron system compatibility.
- RadioRA 2, RadioRA 3, or HomeWorks software required for system functionality.
- Mounts to an electrical junction box through a 1/2 in (21 mm) knockout opening.
- Complies with requirements for use in a compartment handling environmental air (plenum) per NEC® 2011 300.22(C)(3) (LMJ- model only).



LMJ-5T-DV-B model shown

### Models

| Model Number | Region                 | Operating Voltage      | Frequency Band  | Compatible Systems                                   |
|--------------|------------------------|------------------------|-----------------|--|
| LMJ-5T-DV-B  | U.S.A., Canada, Mexico | 120/277 V <sub>~</sub> | 434 MHz         | RA2 Select,<br>RadioRA 2,<br>RadioRA 3,<br>HomeWorks |
| LMK-5T-DV-B  | Europe, U.A.E.         | 220–240 V <sub>~</sub> | 868 MHz         |  |
| LMM-5T-DV-B  | China                  |                        | 868 MHz Limited |  |
| LMN-5T-DV-B  | India                  |                        | 865 MHz         |  |
| LMQ-5T-DV-B  | Hong Kong, Israel      |                        | 434 MHz Limited |  |

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

## RF Dimming Module with 0–10 V<sub>DC</sub> Control

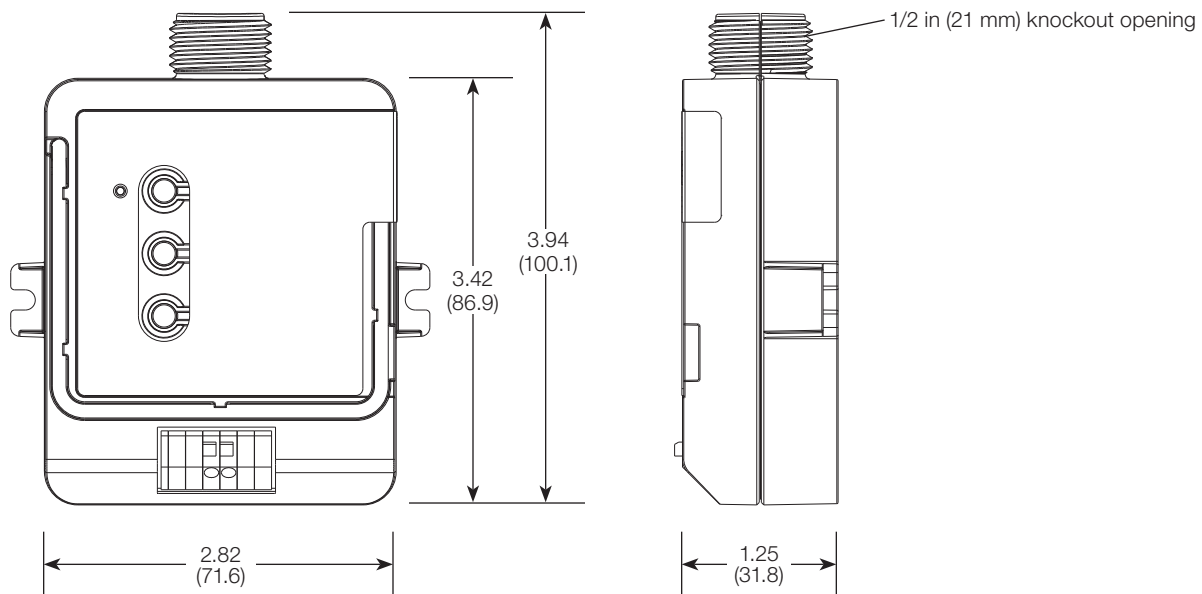
### Specification

|                                  |   |
|----------------------------------|---|
| <b>Power</b>                     | 120/277 V <sub>AC</sub> 50/60 Hz 5 A (LMJ- model)<br>220–240 V <sub>AC</sub> 50/60 Hz 5 A (LMK-, LMM-, LMN-, LMQ- models)   |
| <b>Typical Power Consumption</b> | < 1.0 W<br>Typical power test conditions: all loads off   |
| <b>Regulatory Approvals</b>      | cULus <sup>®</sup> , UL 2043 Plenum Rated, FCC Approved. Complies with the limits for a Class B device, pursuant to Part 15 of the FCC rules:<br>IC, NOM, ANATEL (LMJ- model)<br>CE, TRA, CITC (LMK- model)<br>WPC (LMN- model)   |
| <b>Environment</b>               | Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C)<br>Ambient operating humidity: 0% to 90% humidity, non-condensing.<br>Indoor use only.   |
| <b>Communications</b>            | 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) from repeaters. Contact Lutron for applications using foil-backed or metallic ceiling tiles.  |
| <b>Load</b>                      | 0–10 V <sub>DC</sub> Control Link Maximum Load: 60 mA, source or sink automatically configures. Control link compatible with ANSI E1.3 2001 (R2006), IEC 60929 Annex E.<br>Switched Maximum Load: 5 A lighting. No minimum load requirements.<br>Load types include, but are not limited to: MLV, ELV, Incandescent, Magnetic fluorescent, Electronic fluorescent and LEDs. |
| <b>Surge Protection</b>          | Tested to withstand surge voltages without damage or loss of operation, in accordance with IEEE C62.41-1991 Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits.  |
| <b>Mounting</b>                  | Mounts to an electrical junction box through a 1/2 in (21 mm) knockout opening.   |
| <b>Warranty</b>                  | <a href="http://www.lutron.com/TechnicalDocumentLibrary/Warranty.pdf">www.lutron.com/TechnicalDocumentLibrary/Warranty.pdf</a><br><a href="http://www.lutron.com/TechnicalDocumentLibrary/Intl_Warranty.pdf">www.lutron.com/TechnicalDocumentLibrary/Intl_Warranty.pdf</a>  |

## RF Dimming Module with 0–10 V<sub>DC</sub> Control

### Dimensions

Dimensions are shown as: in (mm)



Dimensions for all models. Model LMJ-5T-DV-B shown.

# RF Dimming Module with 0–10 V<sub>DC</sub> Control

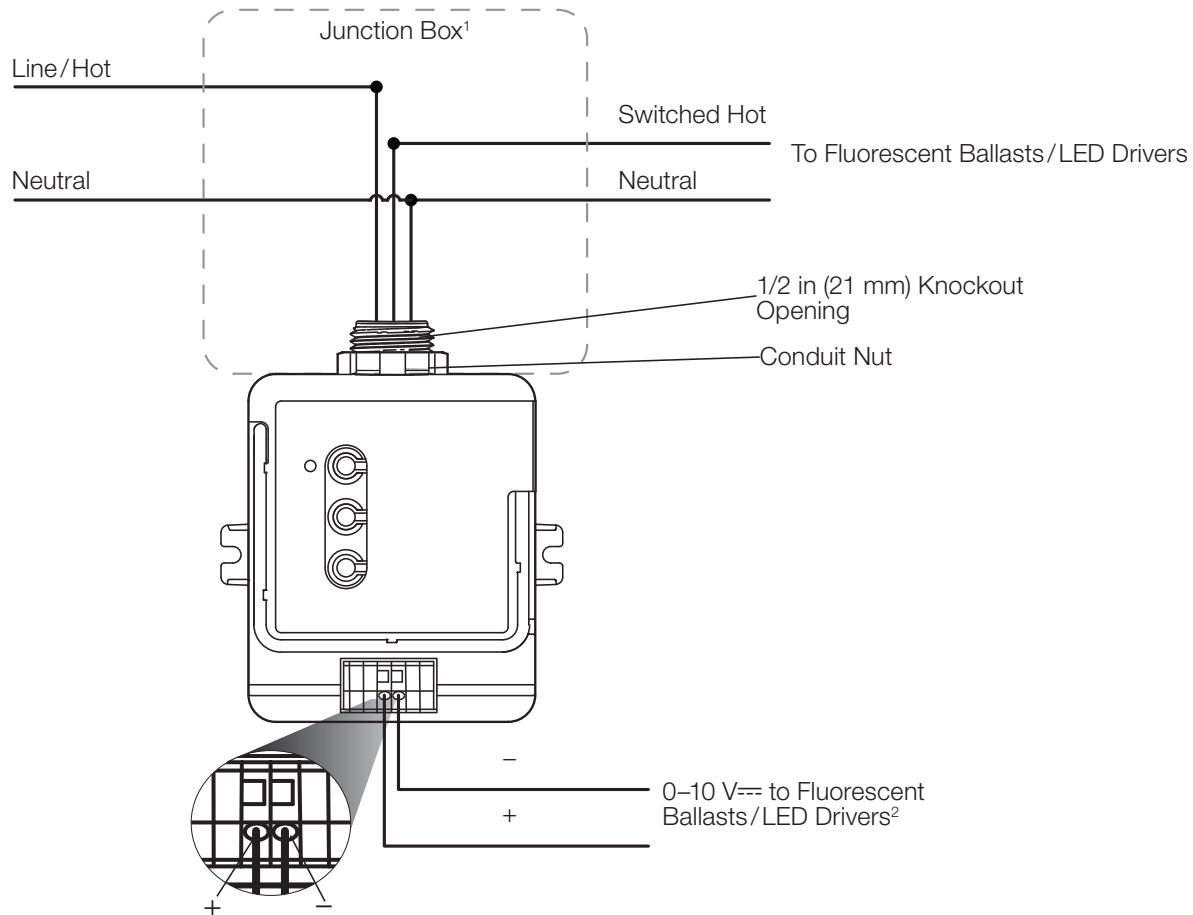
## Wiring Schematics

### LMJ- and LMQ- models:

Use the supplied conduit nut and wire the module as shown.

**120/277 V<sub>~</sub> 50/60 Hz (LMJ- model)**

**220–240 V<sub>~</sub> 50/60 Hz (LMQ- model)**



<sup>1</sup> Some applications (in the U.S.A.) require the RF module to be installed inside an additional junction box. For information about how to perform this installation see Application Note #423 (P/N 048423) at [www.lutron.com](http://www.lutron.com). Please consult all local and national electric codes for proper installation methods.

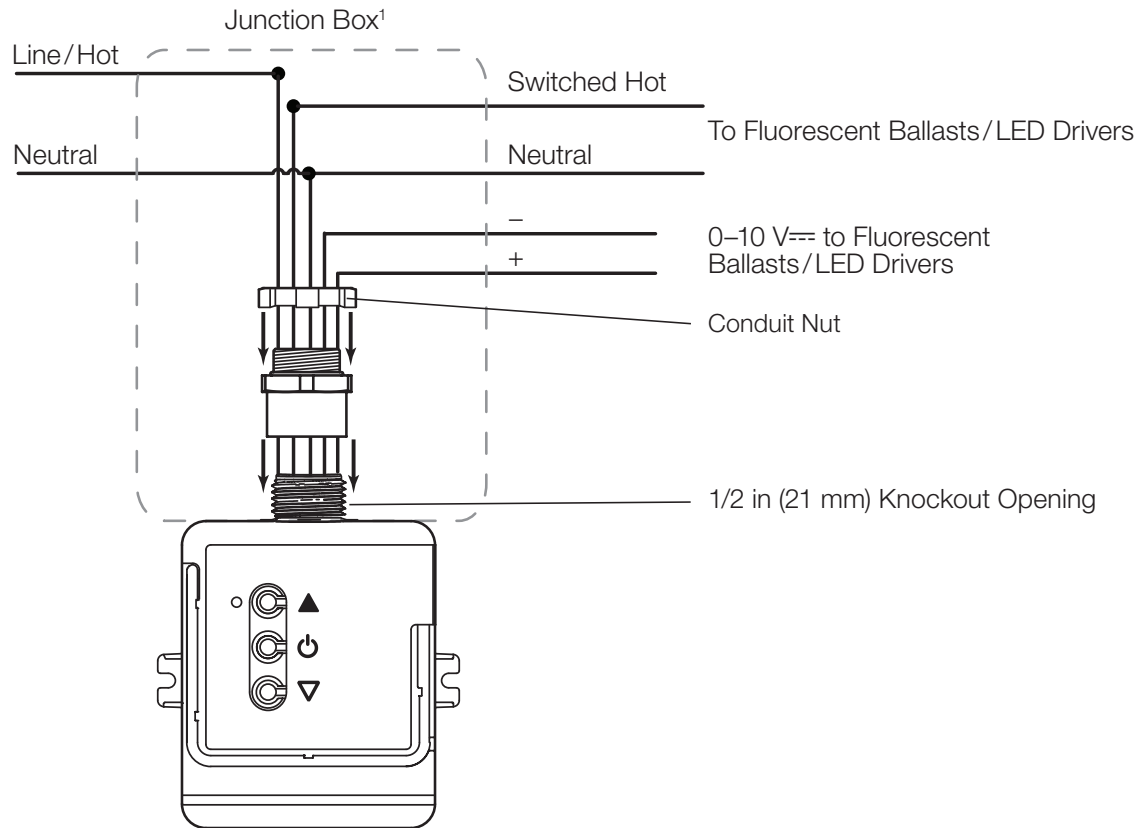
<sup>2</sup> Use 18 AWG to 16 AWG (0.75 mm<sup>2</sup> to 1.5 mm<sup>2</sup>) solid wire only

## RF Dimming Module with 0–10 V<sub>DC</sub> Control

### Wiring Schematics (continued)

LMK-, LMM-, and LMN- models:

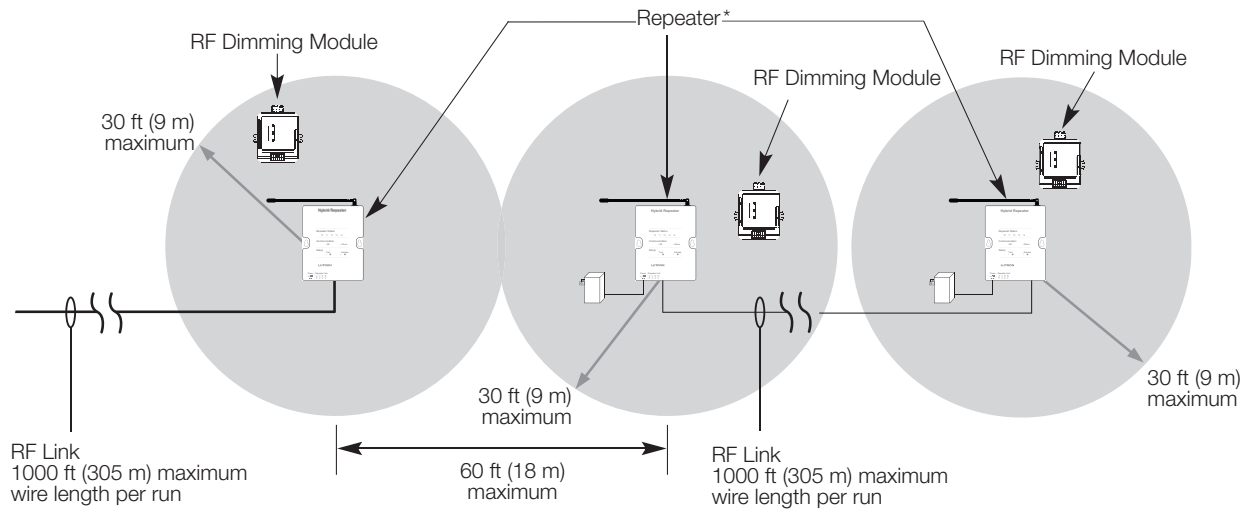
220–240 V<sub>AC</sub> 50/60 Hz



<sup>1</sup> RF module can be installed in a junction box or marshalling box. Please consult all local and national electric codes for proper installation methods.

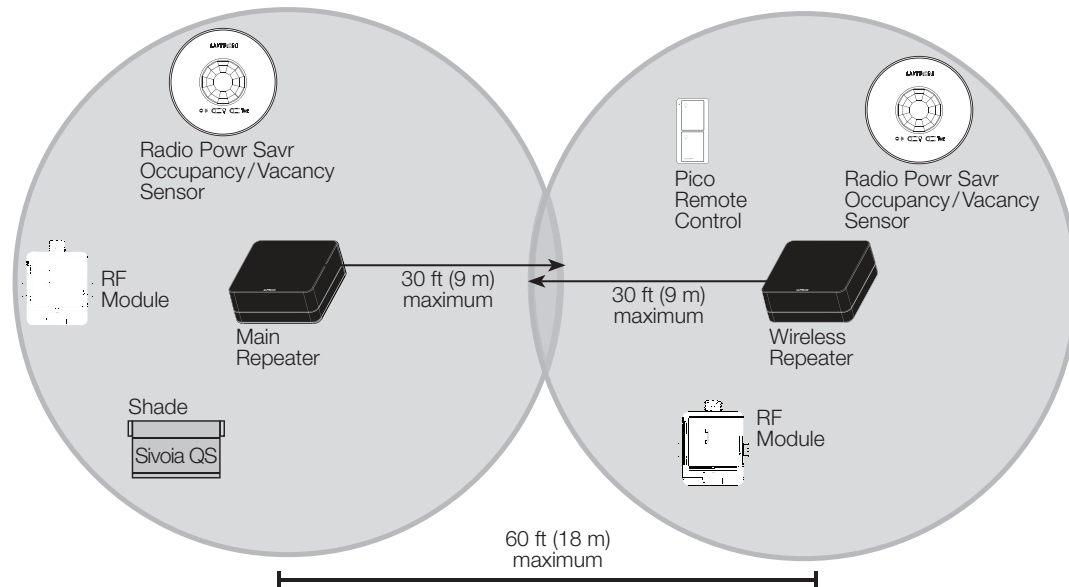
# RF Dimming Module with 0–10 V<sub>DC</sub> Control Communications

## Wired and RF Configuration (RadioRA 2 and HomeWorks)



\* In HomeWorks systems, use Hybrid Repeaters for range extension. In RadioRA 2, the repeater shown may be either a main repeater (1 required) or auxiliary repeater (up to 4 permitted).

## RA2 Select RF Range

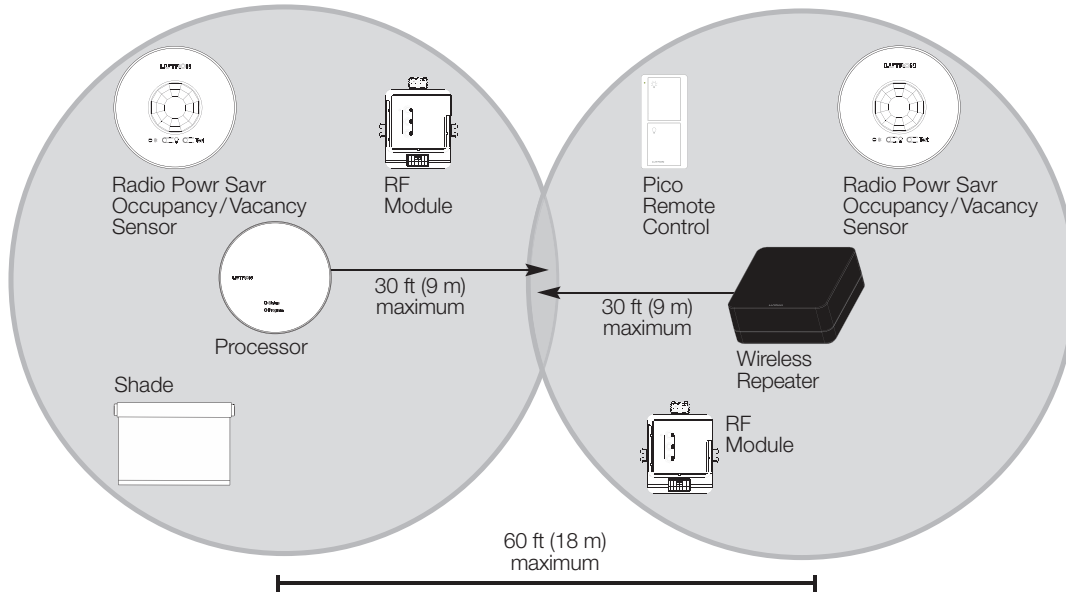


All devices must be located within 30 ft (9 m) of a repeater. The range can be extended with up to 4 Lutron wireless repeaters (Lx-REPPRO).

# RF Dimming Module with 0–10 V<sub>DC</sub> Control

## Communications (continued)

### RadioRA 3 RF Range



All devices must be located within 30 ft (9 m) of a RadioRA 3 processor or wireless repeater. The range can be extended with up to 4 wireless repeaters on a single RF link.

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