

# INSTALLATION INSTRUCTIONS | 4- and 6-Inch LED Downlights: R4RM/R6RM Remodel Series

**Note:** Before attempting installation please refer to your local electrical code.

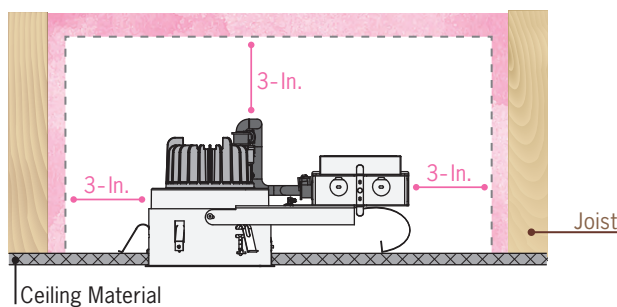
## IMPORTANT SAFETY INSTRUCTIONS:

- Read Instructions before installation; save Instructions for later use.
- Product should be installed by a Qualified Electrician.
- All electrical connections must be in accordance with local and National Electrical Code (NEC) standards. If you are unfamiliar with proper electrical wiring connections, obtain the services of a qualified electrician.
- Before starting the installation, disconnect the power by turning off the circuit breaker or by removing the appropriate fuse at the fuse box. Turning the power off using the light switch is not sufficient to prevent electrical shock.
- Product must be grounded to avoid potential electric shock and any other potential hazards.
- Product must be mounted in locations and at heights and in a manner consistent with its intended use, and in compliance with National Electrical Code and local codes. Use of accessory equipment is not recommended.
- Do not mount near gas or electric heaters.
- Equipment should be mounted in locations and at heights where it will not readily be subject to tampering by unauthorized personnel.
- **WARNING: RISK OF SHOCK**
  - Turn off the power at fuse or circuit breaker box before installation or maintenance work.
  - Wear rubber soled shoes and work on a sturdy wooden or non-conductive ladder.
- Ground the fixture to avoid potential electric shocks and to ensure reliable starting.
- Double check all connections, making sure they are tight and correct.
- **WARNING: RISK OF FIRE**
  - Most dwellings built before 1985 have supply wire rated at 60°C
  - Supply conductors (power wires) connecting the fixture must be rated at minimum of 90°C
  - Consult a qualified electrician before installation
- Installing contrary to instructions may cause unsafe conditions.
- If the product has any visible damage do not install it.
- Avoid hazards to children: account for all parts and properly dispose of all packing materials.
- Call the Technical Support department at ConTech Lighting with any installation questions: 847.559.5500.
- **WARRANTY**
  - ENERGY STAR® Products are covered for three (3) years by a full replacement guarantee after date of installation. In addition, ConTech LED products carry a five (5) year limited warranty from date of purchase.

## INSTALLATION

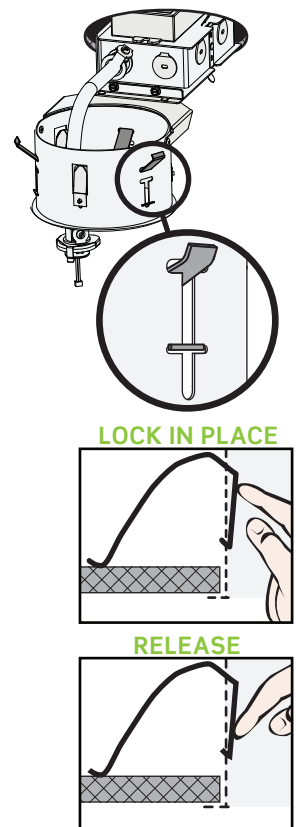
**FIGURE 1**

- **Housing can NOT be installed in direct contact with insulation**
- Do not install insulation within 3-inches of luminaire sides, module or wiring compartment, nor above complete housing in such a manner to entrap heat



**FIGURE 2**

- Using supplied template, scribe circle on ceiling in desired location and accurately cut hole in ceiling
- Make all necessary electrical connections (See “Electrical Connection” section of this instruction sheet)
- With clips seated properly in can, insert housing through ceiling opening, Junction Box first, until it is flush with ceiling
- Hold housing up against ceiling and push clip through slot in can
- To lock clip into place, push flat portion against ceiling and push clip through slot in can
- To complete installation, push up clip with screwdriver until it snaps into place
- To release, pull down on clip



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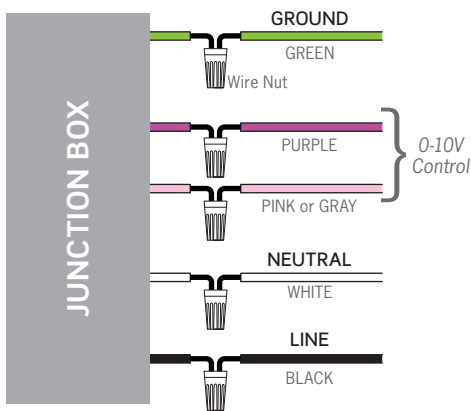
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## ELECTRICAL CONNECTION

- Provide electrical service with flexible cable only. Pass cable through ceiling opening and wire fixture in accordance with NEC or local electrical code.
- Remove the Junction Box cover
- Follow the proper wiring diagram for the selected electrical/dimming option
- Ensure wiring is the correct voltage for the fixture – either 120V, 277V or 347V
- Close Junction Box cover after wiring; ensure all wires are safely within Junction Box before closing

**WIRING DIAGRAM 1**



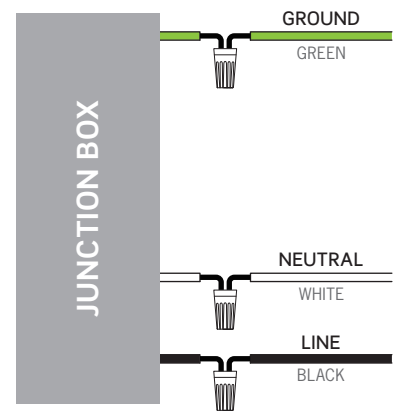
**DIMMING OPTIONS:** 12D, 27D, 34D2, 12D6, 27D6, 12D8, 27D8

**ELECTRICAL:** 120V, 277V or 347V

**DIMMING TYPE:** TRIAC, ELV and 0-10V

- TRIAC or ELV Dimming requires Purple and Pink/Gray wires to be capped
- When dimming with 0-10V, Class 1 wiring (300V wiring inside conduit) is required; consult factory for additional details

**WIRING DIAGRAM 2**

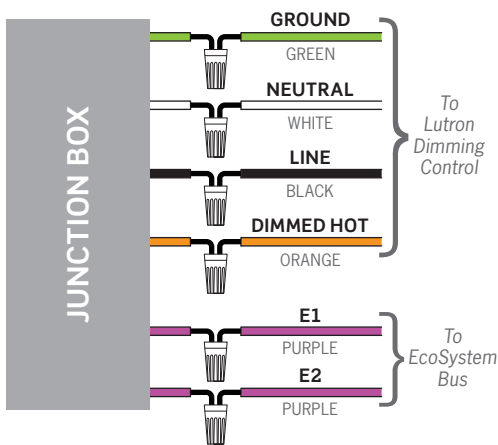


**DIMMING OPTIONS:** 12D3

**ELECTRICAL:** 120V Only

**DIMMING TYPE:** Lutron Hi-lume

**WIRING DIAGRAM 3**

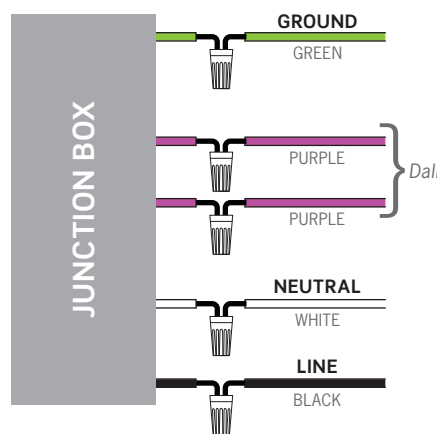


**DIMMING OPTIONS:** 12D4, 27D4

**ELECTRICAL:** 120V or 277V

**DIMMING TYPE:** Lutron EcoSystem

**WIRING DIAGRAM 4**

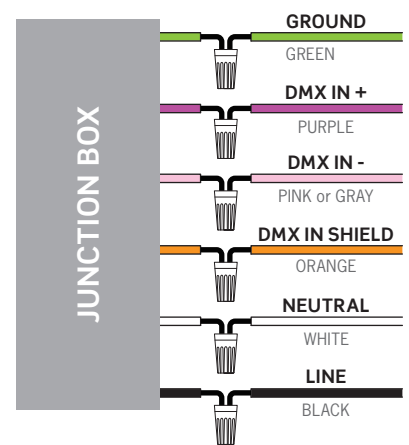


**DIMMING OPTIONS:** 12D7, 27D7, 12D9, 27D9

**ELECTRICAL:** 120V or 277V

**DIMMING TYPE:** Dali

**WIRING DIAGRAM 5**



**DIMMING OPTIONS:** 12DMX, 27DMX, MVDMMX

**ELECTRICAL:** 120V or 277V

**DIMMING TYPE:** DMX

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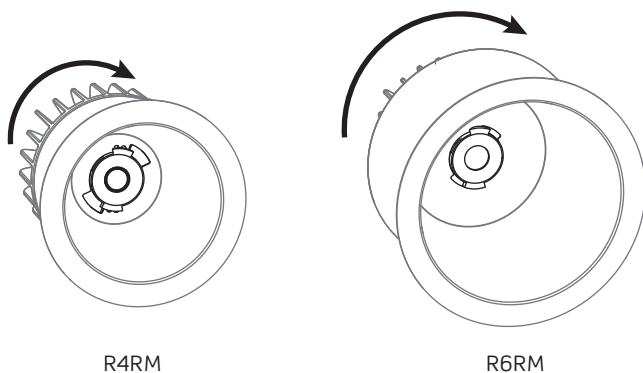
## INSTALLATION INSTRUCTIONS | 4- and 6-Inch LED Downlights: R4RM/R6RM Remodel Series

**Note:** Before attempting installation please refer to your local electrical code.

### TRIM AND LED MODULE INSTALLATION:

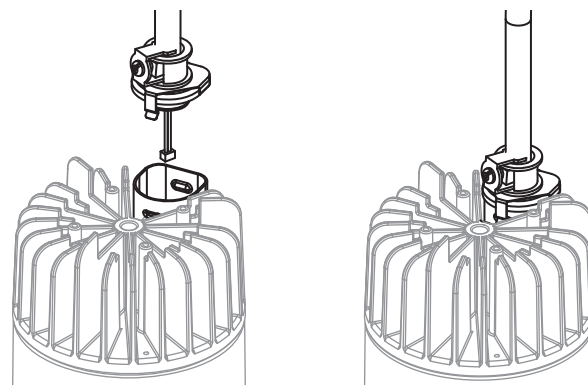
**FIGURE 4**

- Remove protective cover from LED Module.
- If using a decorative trim assembly with separate trim ring, place ring on reflector prior to assembly.
- Attach reflector to LED Module by aligning tabs, then twist and lock into place



**FIGURE 5**

Make the LED Module electrical connection



- For two-piece Trim Assemblies with Lenses, install upper Reflector with a twist and lock, then complete the Trim Assembly simply by pushing the lower Assembly into the LED Module
- Friction Clips secure Lower Assembly in LED Module
- Push LED Module with assembled Reflector through the hole in plaster frame until flush with ceiling
- Module is held securely in place with Spring Clips on housing frame

### REPLACEMENT OF LED DRIVER:

**LED Driver should be replaced by a qualified electrician.**  
**Turn off power at fuse or circuit breaker box before replacing the LED Driver.**

**FIGURE 6**

- Pull and drop the Trim and LED Module from the Frame
- Disconnect the electrical connection (FIGURE 5)
- Complete Housing can be removed from ceiling by reversing installation procedure, or Remodel Plate Screws can be removed so Junction Box/Driver Assembly can be pulled through fixture aperture
- Remove the Junction Box cover with Driver attached to it by releasing Retention Spring on top of Junction Box
- Disconnect Driver from line voltage input wiring in Junction Box
- Disconnect LED Driver from the LED leads (leads are terminated by crimp connectors)
- Reinstall Factory Approved LED Driver by reversing this procedure

