# LED/CFL/Incandescent Rotary Push On/Off Dimmer

Single Pole (One Location) or 3-Way (Two Location)

Cat. No. RDI 06

600W Incandescent, 150W Dimmable LED & CFL

120VAC, 60Hz

#### INSTALLATION INSTRUCTIONS



DI-000-RDL06-02B

#### **WARNINGS AND CAUTIONS:**

- TO AVOID FIRE, SHOCK, OR DEATH: TURN OFF POWER at circuit breaker or fuse and test that power is Use only one (1) dimmer in a 3 or 4-way circuit. The switch(es) will turn the light on at the brightness level off before wiring or servicina fixture!
- To avoid overheating and possible damage to this device and other equipment. **DO NOT** install to control a receptacle, fluorescent lighting, a motor or a transformer-operated appliance.

Pliers

Ruler

- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- If you are unsure about any part of these instructions, consult an electrician.
- · Use this device with copper or copper clad wire only.

#### **WARNINGS AND CAUTIONS:**

- selected at the dimmer.
- Use with compatible dimmable LED, CFL bulbs, incandescent or 120V halogen fixtures only. For a complete list of compatible LED and CFL bulbs refer to www.leviton.com.
- When multiple bulbs are used with one dimmer **DO NOT** mix bulb types. All bulbs shall be either LED; CFL or incandescent. Using the same make/model of each bulb will enhance dimmer performance.
- · For use with 75 degree C minimum field wiring.

#### Tools needed to install your Dimmer

Slotted/Philips Screwdriver **Electrical Tape** Pencil Cutters

### Removing existing switch:

Remove existing wallplate and switch mounting screws. Carefully pull switch from wall box. DO NOT remove wires attached to the switch at this time.

## Installing Dimmer by itself or with other devices

If installing the dimmer in a single device application, proceed to the INSTALLING YOUR DIMMER section. If installing multiple dimmers is a multi-gang wallbox configuration proceed as follows:

# Step 3

Step 2

Identifying your wiring application (most common):

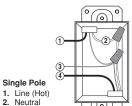
NOTE: If the wiring in the wall box does not resemble any of these configurations, consult an electrician.

### **MULTI-DEVICE APPLICATION:**

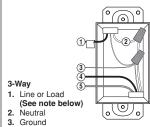
In incandescent applications with multiple dimmers in the same wallbox a reduction of the dimmer's capacity is required. Refer to the chart below for the maximum load per dimmer. No derating is required for use in dimmable CFL or dimmable LED multi-device installations.

MAXIMUM LOAD PER DIMMER FOR MULTI-DEVICE (Incandescent)
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Cat. No.	Single	Two Devices	More than 2 Devices
RDL06	600W	500W	400W



- 1. Line (Hot) 2. Neutral
- 3. Ground
- 4. Load



- 4. First Traveler note color
- 5. Second Traveler note color

**IMPORTANT:** For 3-Way applications, note that one of the screw terminals from the old switch being removed will usually be a different color (Black) or labeled Common. Tag that wire with electrical tape and identify as the common (Line or Load) in both the dimmer wall box and 3-way wall box.

### **INSTALLING YOUR DIMMER**

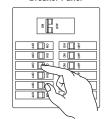
**NOTE:** Use check boxes  $\sqrt{\phantom{a}}$  when steps are completed.

# Step 1

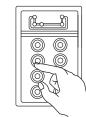
WARNING: TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER at circuit breaker or fuse and test that

power is off before wiring!

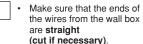
#### **Breaker Panel**



#### **Fuse Panel**



### Preparing and connecting wires:



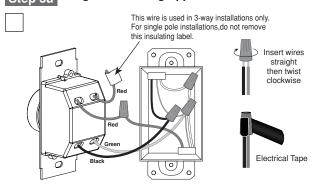
- Remove 5/8" (1.6 cm) of insulation from each wire in the wall box (shown).
- For Single-Pole Application, go to Step 5a.
- For 3-Way Application, go to Step 5b.

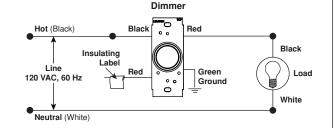
# For non-standard wiring applications, refer to Wire Connector and Number of Conductors Chart

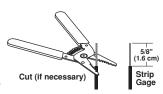
#### WIRE CONNECTOR / # OF COND. **COMBINATION CHART**

1- #12 w/ 1 to 3 #14. #16 or #18 2- #12 w/ 1 or 2 #16 or #18 1- #14 w/ 1 to 4 #16 or #18 2- #14 w/ 1 to 3 #16 or #18

### Single-Pole Wiring Application:







#### Continued: Step 5a

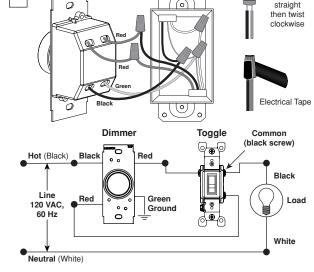
#### Connect wires per WIRING DIAGRAM as follows:

Screw wire connectors on clockwise making sure no bare conductors show below the wire connectors. Secure each connector with electrical tape.

- Green dimmer ground lead to green or bare copper wire in wall box.
- · Black dimmer lead to any wall box wire removed from old switch.
- · Red dimmer lead without insulating label to remaining wall box wire.
- · Remaining red dimmer lead should have red insulation label affixed.
- · Proceed to Step 6.

NOTE: If insulating label is not affixed to red lead, use a small wire connector or electrical tape to cap off.

#### 3-Way Wiring Application: Step 5b



#### Connect wires per WIRING DIAGRAM as follows:

Screw wire connectors on clockwise making sure no bare conductors show below the wire connectors. Secure each connector with electrical tape.

- · Green dimmer ground lead to green or bare copper wire in wall box.
- Black dimmer lead to tagged (common) wall box wire identified when removing old switch.
- Remove red insulating label from red lead.
- Any red dimmer lead to any of the remaining wall box wires.
- · Remaining red dimmer lead to remaining wall box wire.
- Proceed to Step 6.

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## Testing dimmer prior to mounting in wall box:



- · Restore power at circuit breaker or fuse.
- · Carefully holding dimmer as shown proceed as follows:

Push knob and rotate clockwise (Lights should turn ON to brightest level). If lights do not turn ON, refer to the TROUBLESHOOTING section.

# **OPERATION**

ON: Push knob ON: OFF: Push knob OFF. BRIGHTEN: Rotate knob clockwise. **DIM:** Rotate knob counterclockwise.

NOTE: If using the dimmer in a 3-way application, the lights will turn ON at brightness set on the dimmer's rotary knob. The lighting level can be controlled from

the dimmer location and can be switched ON/OFF from either the dimmer or switch location.



#### **TROUBLESHOOTING**

- Lights Flickering
  - Lamp has a bad connection.
- Wires not secured firmly with wire connectors
- · CFL or LED bulb flickers throughout dimming range
  - Please refer to recommended dimmable LED bulbs and CFL bulbs at www.leviton.com.
- Light does not turn ON
- Circuit breaker or fuse has tripped.
- Lamp is burned out.
- Lamp Neutral connection is not wired.

NOTE: If further information is needed in identifying the HOT wire in a 3-Way application, go to Leviton's website at www.leviton.com.



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Step 7

Insert wires

- · Installation may now be completed by carefully positioning all wires to provide room in wall box the for dimmer.
- Mount dimmer into box with mounting screws supplied.
- Remove knob.

WARNING: TO AVOID FIRE, SHOCK, OR DEATH: TURN

- · Attach wallplate.
- · Replace knob by aligning with the "D" shape of the rotary shaft.

# Step 8

#### **Restore Power:**



Restore power at circuit breaker or fuse

Installation is complete.

**Dimmer Mounting:** 

#### FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at Leviton Manufacturing of Canada Ltd to the attention of the Quality Assurance Department, 165 Hymus Blvd. Pointe-Claire (Quebec). Canada H9R 1E9 or by telephone at 1 800 405-5320.

For Technical Assistance Call: 1-800-824-3005 (U.S.A. Only) www.leviton.com

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#### **LIMITED 5 YEAR WARRANTY AND EXCLUSIONS**

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for five years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option. For details visit www.leviton.com or call 1-800-824-3005. This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to five years. Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.