

WARNINGS:

- **TO AVOID FIRE, SHOCK, OR DEATH: TURN OFF POWER** at circuit breaker or fuse and test that power is off before wiring or servicing fixture!
- **TO AVOID FIRE, SHOCK, OR DEATH:** use only with the appropriate LED 0-10V dimmable power supplies/drivers, Advance Transformer 120/277V Mark 7® 0-10V ballasts or OSRAM Sylvania QUICKTRONIC® Helios™ electronic ballasts.
- **TO AVOID FIRE, PERSONAL INJURY OR PROPERTY DAMAGE, DO NOT** install to control a receptacle, a motor or a transformer-operated appliance, or any other lighting sources than those specified.
- 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**.

CAUTIONS:

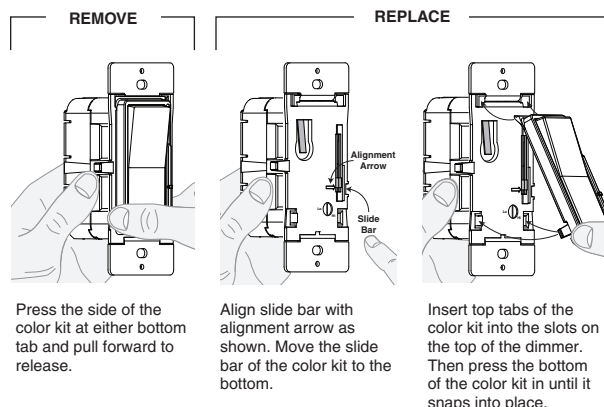
- When retrofitting dimming ballasts into fixtures that originally had Instant Start ballasts, the sockets **MUST** be replaced with Rapid Start sockets to allow proper dimmer operation and prevent damage to the dimming ballast. Refer to the instructions provided with the ballast.
- Use only one (1) dimmer in a 3 or 4-way circuit. The switch(es) will turn the light ON at the brightness level selected at the dimmer.
- To avoid damage to the product, **DO NOT** use disinfecting products, including foggers, sprays or other types of atomized cleaning agents. **DO NOT** spray liquid onto the product. To clean use a damp cloth with mild soap.

Tools needed to install your Dimmer

Slotted/Philips Screwdriver Electrical Tape Ruler
Pliers Pencil Cutters

Changing the color of your Dimmer

If a color change kit is provided with your device, proceed with the following step before wiring the device if you need to change the color. Otherwise, proceed with the "Installing Dimmer by itself or with other devices" section.



Installing Dimmer by itself or with other devices

No derating is required in multi-device applications.

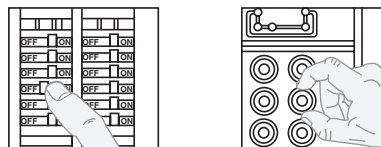
MAXIMUM BULB WATTAGE:

0-10VDC ballasts are rated in Volt-Amps (VA). The maximum number of ballast per dimmer is based on the load VA rating. The maximum bulb wattage is determined by the efficiency of the ballast. Ballast efficiencies will vary from different manufacturers; consider 80% efficient as average. Use the chart to determine maximum bulb wattage for typical ballast efficiency ratings. Use with Leviton's OPP20 Power Pack to increase the switch rating to 20 Amps for 120 and 277 VAC Ballast.

MAXIMUM BULB WATTAGE AT 80% EFFICIENCY				
Volts	Rating	Single	Two Devices	More than 2 Devices
120V	1200VA	960W	960W	960W
277V	1500VA	1200W	1200W	1200W

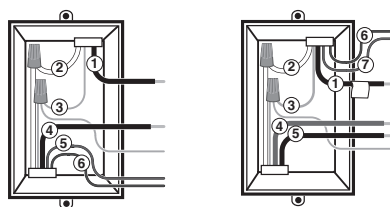
Installing your Dimmer

- 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 or servicing fixture!



- 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.



Single Pole

1. Line (Hot)
2. Neutral
3. Ground
4. Load
5. Pink (-) or Gray (-)
6. Violet (+)

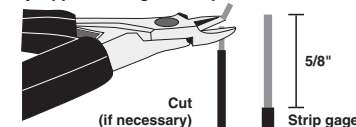
3-Way

1. Load (See note below)
2. Neutral
3. Ground
4. First Traveler – note color
5. Second Traveler – note color
6. Pink (-) or Gray (-)
7. Violet (+)

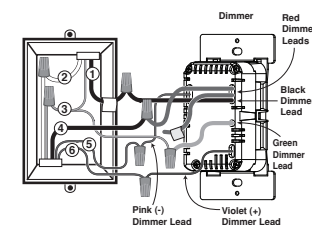
NOTE: For 3-Way applications, note that one of the screw terminals from the old switch being removed will usually be a different color (Black) or labeled Common. Tag that wire with electrical tape and identify as the common (Line or Load) in both the dimmer wall box and 3-way wall box.

Step 3 **Preparing and connecting wires:**

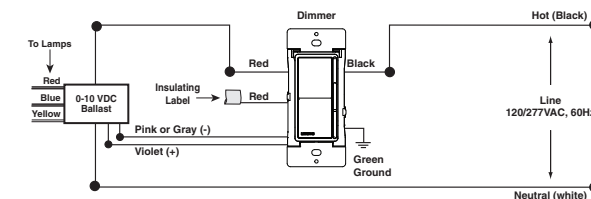
- Make sure that the ends of the wires from the wall box are straight (**cut if necessary**).
- Remove 5/8" (1.6 cm) of insulation from each wire in the wall box.
- **For Single-Pole Application, go to Step 4a.**
- **For 3-Way Application, go to Step 4b.**



Step 4a **Single Pole Wiring Application:**



Wiring Diagram 1



Connect wires per WIRING DIAGRAM as follows:

- Green or bare copper wall box wire to **GREEN** dimmer lead.
- Line Hot wall box wire to **BLACK** dimmer lead.
- Load wall box wire to **RED** dimmer lead.
- Remaining **RED** Dimmer lead should have a label affixed. **DO NOT REMOVE** this label in a single pole application.
- **NOTE:** If the insulating label is not affixed to the second **RED** lead use electrical tape or a wire connector to cover.
- Violet dimmer lead to (+) Violet connection on ballast.
- Pink dimmer lead to (-) Pink or (-) Gray connection on ballast.

Proceed to Step 5.

Wiring Diagram 2

3-Way Switch

Dimmer

Hot (Black)

Line 120/277VAC, 60Hz

Black Screw (common)

Red

Red

Green Ground

Violet

Pink

Black

Green Ground

Pink or Gray

Violet

To Additional Ballasts

To Lamps

Black

White

Primary Side

0-10 VDC Ballast

Red

Blue

Yellow

Neutral (White)

- Green or bare copper wall box wire to **GREEN** dimmer lead.
- Common (Load) wire to **BLACK** dimmer lead.
- Remove insulating label and connect the first traveler wire to the **RED** dimmer lead.
- Connect the second traveler wire to the remaining **RED** dimmer lead.
- **VIOLET** dimmer lead to (+) Violet connection on ballast.
- **PINK** dimmer lead to (-) Pink or (-) Gray connection on ballast.

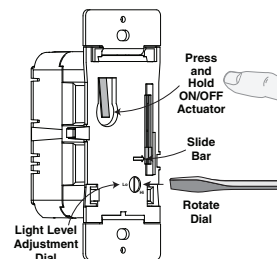
- Restore power at circuit breaker or fuse.
- Carefully holding dimmer, move slider control lever to highest position and press the top of the Decora® rocker. Lights should turn ON to brightest level.

A line drawing of a hand using a screwdriver to remove the top screw from the front panel of the device. The front panel is shown with a central rectangular opening and two side handles. The top screw is being turned counter-clockwise.

Attach wallplate.

Restore power at circuit breaker or fuse.
Installation is complete.

1. Press bottom of Decora® rocker to turn the dimmer OFF and move the slide bar to the bottom.
2. Remove color kit (see Changing the color of your Dimmer section on page 1).
3. Press and hold the on/off actuator.
4. Rotate the light adjustment dial clockwise to increase the minimum light level or counter-clockwise to decrease the minimum light level.
5. Release the on/off actuator.
6. Replace color kit (see Changing the color of your Dimmer section on page 1).



3-Way Switch

Hot (Black)

Line 120/277VAC, 60Hz

Black Screw (common)

Green Ground

Dimmer

Red

Violet

Pink

Red

Green Ground

OPP20

Blue

Black

White

Pink or Gray

Yellow/Orange

White/Blue

Blue

Red

Black

Primary Side

Black

White

0-10 VDC Ballast

Red

Blue

Yellow

To Lamps

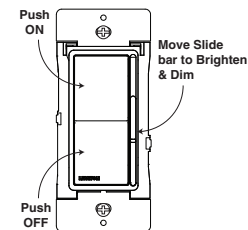
NOTE: Leviton OPP20 Power Pack shown, wire colors can vary on other Power Packs.

NOTE: Power Pack and the load switched by the power pack MUST be fed from the same phase.

Figure 1: Typical wiring diagram for a 120/277 VAC, 60Hz system.

The diagram illustrates the electrical connections for a lighting system. It shows two main power inputs: a 120/277 VAC, 60Hz source and a 277 VAC source. These inputs feed into a series of ballasts and power packs. The 120/277 VAC source is connected to a 6-10 VDC Ballast, which then feeds into a 0-10 VDC Ballast. The 277 VAC source is connected to a 6-10 VDC Ballast, which then feeds into a 0-10 VDC Ballast. The 0-10 VDC Ballast is connected to a 0-10 VDC Ballast, which then feeds into a 0-10 VDC Ballast. The diagram includes color-coded wiring for various components like OPP20, OPP20, and 0-10 VDC Ballast, and notes that wire colors can vary on other power packs.

Move slide bar
- Lights will BRIGHTEN or DIM.



- **Lights flickering**
 - Lamp has bad connection.
 - Wires not secured firmly with wire connectors.
- **Light does not turn ON**
 - Circuit breaker or fuse has tripped.
 - Lamp or ballast has burned out.
 - Lamp sockets are not Rapid Start type.
 - Lamp Neutral connection is not wired.

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For Technical Assistance Call: 1-800-824-3005 (USA Only) or 1-800-405-5320 (Canada Only) www.leviton.com