

## RadioRA 2 RF Maestro Local Controls

RadioRA 2 Maestro local controls function much like standard dimmers and switches, but can be controlled as part of a lighting control system. Local lighting controls are useful in locations where single circuits of lighting need to be dimmed or switched. Local fan speed controls are useful in locations where control of a single ceiling paddle fan is needed.

RadioRA 2 Maestro dimmers incorporate advanced features such as fade-on/fade-off, delayed long fade-to-off, and rapid full-on.

RadioRA 2 Maestro local controls include a Front Accessible Service Switch (FASS) for safe lamp replacement. RadioRA 2 Maestro local controls install in single pole or multi-location applications. Remote dimmers/switches are available for multi-location control.

Use Lutron Designer (Claro or Satin Colors) wallplates or designer-style wallplates from other manufacturers. Wallplates are sold separately. Lutron Claro and Satin Colors wallplates snap on with no visible means of attachment. RadioRA 2 Maestro local controls support color change kits.



*Dimmer*



*Switch*



*Fan Speed*



*Remote Dimmer*



*Remote Switch*

## RadioRA 2 RF Maestro Local Controls

### Model Numbers

#### Dimmers

##### *Incandescent / Halogen / MLV (120 V~)*

RRD-6CL-XX      600 W / 600 VA (Incandescent / Halogen / MLV) or 150 W (CFL / LED)  
Two-Wire Dimmer\*

RRD-6ND-XX      600 W / 600 VA Neutral Wire Dimmer

RRD-10D-XX      1000 W / 1000 VA Dimmer

RRD-10ND-XX      1000 W / 1000 VA Neutral Wire Dimmer

##### *Incandescent / Halogen / MLV / ELV (120 V~)*

RRD-6NA-XX      600 W / 600 VA Neutral Wire Adaptive Dimmer

##### *3-Wire Fluorescent / LED (120–277 V~)*

RRD-F6AN-DV-XX      6 A Neutral Wire Dimmer

##### *LED / CFL / Incandescent / Halogen / MLV / ELV / Mark 10 Ballasts / Hi-Lume LTE Drivers*

RRD-PRO-XX      250 W (CFL / LED) or 500 W / VA Incandescent / Halogen / ELV or 400 VA MLV  
Phase Selectable, Neutral Optional dimmer\*

#### Switches

##### *Lighting and Motor Loads (120 V~)*

RRD-8ANS-XX      8 A Light, 1/4 HP 5.8 A Motor Neutral Wire Electronic Switch

##### *Lighting and Motor Loads (120–277 V~)*

RRD-8S-DV-XX      8 A Light, 1/10 HP 3 A Motor Two-Wire Electronic Switch

#### Fan Speed Control

##### *Single ceiling paddle fan only (120 V~)*

RRD-2ANF-XX      2 A Fan Speed Control

\* Go to [www.lutron.com/ledfinder](http://www.lutron.com/ledfinder) to see all compatible CFL / LED lamps.

**Note:** "XX" in the model number represents color / finish code. See **Colors and Finishes** at end of document.

## RadioRA 2 RF Maestro Local Controls

### Model Numbers

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#### Dimmers

##### Remotes (for multi-location installations)

|              |   |
|--------------|---|
| RD-RD-XX     | Remote Dimmer (120 V~)                              |
| RD-RS-XX     | Remote Switch (120 V~)                              |
| RD-RD-277-XX | Remote Dimmer (277 V~) (for use with -F6AN-DV only) |
| RD-RS-277-XX | Remote Switch (277 V~) (for use with -8S-DV only)   |

#### Color Change Kits

|          |  |
|----------|--|
| RK-D-XX  | Dimmer (-6CL, -6ND, -10D, -10ND, -6NA, -PRO, -F6AN-DV) |
| RK-S-XX  | Switch (-8ANS, -8S-DV)                                 |
| RK-AD-XX | Remote Dimmer (-RD)                                    |
| RK-AS-XX | Remote Switch (-RS)                                    |
| RK-F-XX  | Fan Speed Control (-2ANF)                              |

#### Color Change Kit Bulk Packs (Quantity 10)

|             |  |
|-------------|--|
| RK-D-10-XX  | Dimmer (-6CL, -6ND, -10D, -10ND, -6NA, -PRO, -F6AN-DV) |
| RK-S-10-XX  | Switch (-8ANS, -8S-DV)                                 |
| RK-AD-10-XX | Remote Dimmer (-RD)                                    |
| RK-AS-10-XX | Remote Switch (-RS)                                    |
| RK-F-10-XX  | Fan Speed Control (-2ANF)                              |

**Note:** "XX" in the model number represents color/finish code. See **Colors and Finishes** at end of document.

## RadioRA 2 RF Maestro Local Controls

## Specifications

|                                  |  |
|----------------------------------|--|
| <b>Model Numbers</b>             | <b>Dimmer:</b> RRD-6CL, RRD-6ND, RRD-10D, RRD-10ND, RRD-6NA, RRD-F6AN-DV, RRD-PRO<br><b>Switch:</b> RRD-8ANS, RRD-8S-DV<br><b>Fan Speed Control:</b> RRD-2ANF<br><b>Remote:</b> RD-RD, RD-RS, RD-RD-277, RD-RS-277   |
| <b>Power</b>                     | <b>120 V~ 50/60 Hz:</b> -6CL, -6ND, -10D, -10ND, -6NA, -2ANF, -8ANS, -RD, -RS, -PRO<br><b>120–277 V~ 50/60 Hz:</b> -F6AN-DV, -8S-DV<br><b>277 V~ 50/60 Hz:</b> -RD-277, -RS-277  |
| <b>Typical Power Consumption</b> | <b>Dimmer / Switch / Fan Speed Control:</b> 0.6 W<br>Test conditions: load is off and nightlight mode is enabled.<br><b>Remote Dimmer / Switch:</b> 0 W<br>Test conditions: load is off.   |
| <b>Regulatory Approvals</b>      | UL, CSA (all except -6CL, -6NA and -PRO), cUL (-6CL, -6NA and -PRO only), NOM, FCC, IC, COFETEL, ANATEL (all except -6NA, -6CL and Remotes)  |
| <b>Environment</b>               | Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C), 0% to 90% humidity, non-condensing. Indoor use only.   |
| <b>Communications</b>            | Dimmers and switches communicate with the system through Radio Frequency (RF) and must be located within 30 ft (9 m) of a repeater. Remote dimmers/switches are not required to be within a specific range of a repeater. System devices operate on frequencies between 431.0 MHz and 437.0 MHz. |
| <b>ESD Protection</b>            | Tested to withstand electrostatic discharge without damage or memory loss, in accordance with IEC 61000-4-2.   |
| <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>RTISS Equipped</b>            | Circuitry compensates in real time for incoming line-voltage variations (neutral connection required). -PRO only.  |
| <b>Power Failure</b>             | Power failure memory: should power be interrupted, the control will return to its previous state when power is restored.   |
| <b>Mounting</b>                  | Requires a U.S. wallbox. 3½ in (89 mm) deep recommended, 2¼ in (57 mm) deep minimum.   |
| <b>Wiring</b>                    | Use only remote dimmers (-RD/-RD-277) and remote switches (-RS/-RS-277) with dimmers/switches/fan speed controls. Up to 9 -RD/-RD-277 or -RS/-RS-277 may be used with controls.  |
| <b>Warranty</b>                  | <a href="http://www.lutron.com/TechnicalDocumentLibrary/Warranty.pdf">www.lutron.com/TechnicalDocumentLibrary/Warranty.pdf</a>   |

## RadioRA 2 RF Maestro Local Controls

### Design Features

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#### Dimmer

- On a single-tap, lights fade ON or OFF.
- On a double-tap, lights go to full ON.
- When ON, press and hold the tapswitch to engage the delayed long fade to OFF.
- Light levels can be fine-tuned by pressing and holding the dimming rocker until the desired light level is reached.
- Neutral and two-wire dimmers available.

#### Switch

- On a single-tap, lights or motors turn ON or OFF.
- Neutral and two-wire switches available.

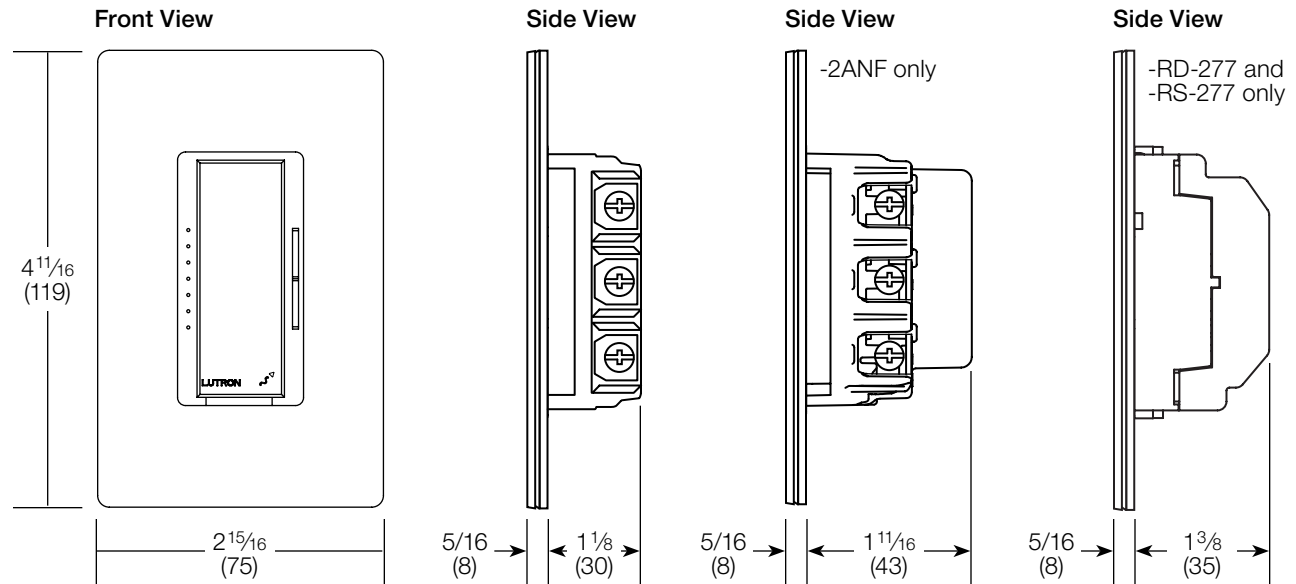
#### Fan Speed Control

- On a single-tap, fan turns ON or OFF.
- Fan speeds can be selected by pressing and holding the fan speed control rocker until the desired fan speed is reached.
- Controls one paddle-type ceiling fan (Permanent split-capacitor motor) up to 2 A. Not for use with shaded-pole type motors (e.g., bath exhaust fans).
- Provides 4 quiet speeds plus OFF.
- Not for use with fans that have integrated fan speed and/or light control modules.
- Requires a neutral connection.

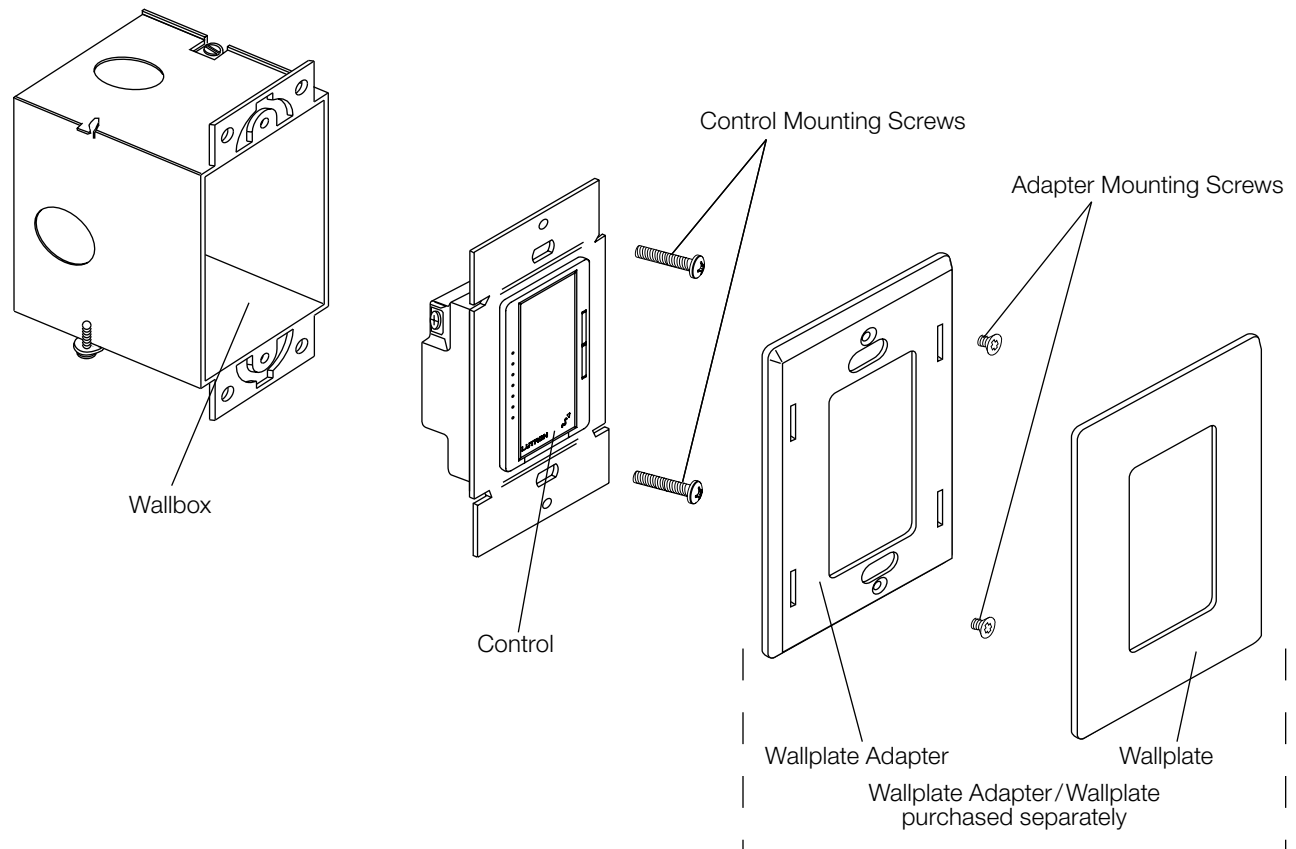
## RadioRA 2 RF Maestro Local Controls

### Dimensions

All dimensions are shown as: in (mm)



### Mounting and Parts Identification


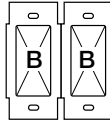
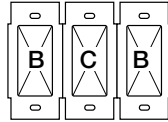


## RadioRA 2 RF Maestro Local Controls

### Ganging and Derating

When combining controls in the same wallbox, derating is required (see **Load Type and Capacity**). No derating is required for remote dimmers, remote switches, or fan speed controls.

### Load Type and Capacity

|   |  |  |  |  |                    |
|---|--|---|--|---|--------------------|
| Load Type                                 | Minimum Load                           | A<br>Not Ganged   | B<br>End of Gang   | C<br>Middle of Gang   | Neutral Connection |
| RRD-6CL <sup>1</sup>                      |  |   |  |   |                    |
| Incandescent/Halogen/CFL/LED              | see <i>Mixing Lamp Types</i> , page 10 |   |  |   | No                 |
| MLV <sup>2,3</sup>                        | 50 W/VA                                | 450 W/600 VA  | 400 W/500 VA   | 300 W/400 VA  |                    |
| RRD-6ND <sup>1,4</sup>                    |  |   |  |   |                    |
| LED                                       | Varies <sup>5</sup>                    | 150 W   | 150 W  | 150 W   | Yes                |
| Incandescent / Halogen                    | 10 W                                   | 600 W   | 500 W  | 400 W   |                    |
| MLV <sup>2,3</sup>                        | 10 W/VA                                | 450 W/600 VA  | 400 W/500 VA   | 300 W/400 VA  |                    |
| RRD-10D <sup>1</sup>                      |  |   |  |   |                    |
| Incandescent / Halogen                    | 50 W                                   | 1000 W  | 800 W  | 650 W   | No                 |
| MLV <sup>2</sup>                          | 50 W/VA                                | 800 W/1000 VA   | 600 W/800 VA   | 500 W/650 VA  |                    |
| RRD-10ND <sup>1,4</sup>                   |  |   |  |   |                    |
| LED                                       | Varies <sup>5</sup>                    | 150 W   | 150 W  | 150 W   | Yes                |
| Incandescent / Halogen                    | 10 W                                   | 1000 W  | 800 W  | 650 W   |                    |
| MLV <sup>2,3</sup>                        | 10 W/VA                                | 800 W/1000 VA   | 600 W/800 VA   | 500 W/650 VA  |                    |
| RRD-6NA <sup>1,4</sup>                    |  |   |  |   |                    |
| LED                                       | Varies <sup>5</sup>                    | 150 W   | 150 W  | 150 W   | Yes                |
| Incandescent / Halogen / ELV <sup>2</sup> | 5 W                                    | 600 W   | 500 W  | 400 W   |                    |
| MLV <sup>2,3</sup>                        | 5 W/VA                                 | 450 W/600 VA  | 400 W/500 VA   | 300 W/400 VA  |                    |

<sup>1</sup> Dimmer Load Type:

- -6CL: designed for use with permanently-installed incandescent, MLV, tungsten halogen, CFL, or LED only.
- -6ND, -10D, -10ND: designed for use with permanently-installed incandescent, LED, MLV, or tungsten halogen only.
- -6NA: designed for use with permanently-installed incandescent, LED, ELV, MLV, or tungsten halogen only.

**Note:** Do not install dimmers to control receptacles or motor-operated appliances.

<sup>2</sup> Low-Voltage Applications:

- -6CL, -6ND, -10D, -10ND: use with magnetic (core and coil) low-voltage transformers only. Not for use with electronic (solid-state) low-voltage transformers.
- -6NA: use with electronic (solid-state) or magnetic (core and coil) transformers; do not mix ELV and MLV load types on a single control. Operation of a low-voltage circuit with lamps inoperative or removed may result in transformer overheating and premature failure. Lutron strongly recommends the following:
  - Do not operate low-voltage circuits without operative lamps in place.
  - Replace burned-out lamps as soon as possible.
  - Use transformers that incorporate thermal protection or fused transformer primary windings to prevent transformer failure due to overcurrent.

<sup>3</sup> Do not mix CFL or LED loads with MLV loads.


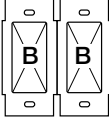
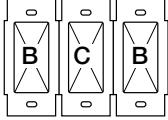
<sup>4</sup> Power Boosters/Load Interfaces: -6ND, -10ND, -6NA can be used to control power boosters/load interfaces. For a list of compatible power boosters/load interfaces see **Compatible Power Boosters and Load Interfaces**, page 11.

<sup>5</sup> Minimum load depends on lamp and is not limited to a particular wattage. Refer to the LED Product Selection Tool at [www.lutron.com/ledtool](http://www.lutron.com/ledtool)

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## RadioRA 2 RF Maestro Local Controls

## Load Type and Capacity (continued)

|                                     |  |  |  |  |                       |                     |
|-------------------------------------|--|---|---|--|-----------------------|---------------------|
| Load Type                           | Minimum Load   | A<br>Not Ganged   | B<br>End of Gang  | C<br>Middle of Gang  | Neutral Connection    | Required Phase Mode |
| <b>RRD-PRO</b>                      |  |   |   |  |                       |                     |
| LED                                 | 1 bulb <sup>2</sup>  | 250 W   | 200 W   | 150 W  | Optional <sup>1</sup> | Either              |
| CFL                                 | 1 bulb <sup>2</sup>  | 250 W   | 200 W   | 150 W  | Optional <sup>1</sup> | Forward             |
| MLV Transformer with LEDs           | See Application Note #559 (P/N 048559) at <a href="http://www.lutron.com">www.lutron.com</a><br>No Derating Required |   |   |  | Required              | Forward             |
| ELV Transformer with LEDs           |  |   |   |  |                       | Reverse             |
| MLV Transformer with Halogen        | 10 W   | 400 VA (300 W)  | No Derating Required  |  | Required              | Forward             |
| ELV Transformer with Halogen        | 10 W   | 500 W   | 400 W   | 300 W  | Required              | Reverse             |
| Incandescent/Halogen                | 5 W <sup>2</sup>   | 500 W   | 400 W   | 300 W  | Optional <sup>1</sup> | Either              |
| Dimmable Fluorescent Ballast        | 1 ballast  | 3.3 A (400 VA)  | No Derating Required  |  | Required              | Forward             |
| Hi-lume 1% 2-wire (LTE) LED Driver  | 1 driver   | 3.3 A (400 W)<br>20 drivers max.  | No Derating Required  |  | Required              | Forward             |
| PHPM-PA/3F and GRX-TVI <sup>3</sup> | 1 interface  | 3 interfaces  | No Derating Required  |  | Required              | Forward             |

**Notes for dimming MLV fixtures:**

- The total VA rating of the transformer(s) shall not exceed the VA rating of the dimmer. The VA rating of the transformer should be written on the nameplate label or determined by contacting the manufacturer. The maximum halogen lamp wattage is typically 70%- 85% of the transformer's VA rating.
- MLV transformer loads powered by utility power and emergency backup generators should have a minimum 1 second delay between switching power sources. Rapid non-synchronous switching can cause the transformers to draw high currents which would cause breakers to trip or the dimmers controlling them to trip a protection.

<sup>1</sup> Neutral is recommended for best dimming performance, if available, but is not required for this load type.

<sup>2</sup> Minimum load shown is for neutral connected operation. If no neutral is used, minimum load is 2 bulbs LED/CFL, or 25 W Incandescent/Halogen.

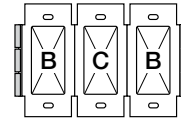
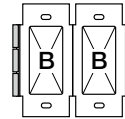
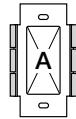
<sup>3</sup> Power Boosters/Load Interfaces: -RRD-PRO can be used to control power boosters/load interfaces. For a list of compatible power boosters/load interfaces see **Compatible Power Boosters and Load Interfaces**, page 11.



## RadioRA 2 RF Maestro Local Controls

## Load Type and Capacity (continued)

-8ANS, -8S-DV, -RD-277, and -RS-277 have fins that need to be removed for multigang installations.  
Do not remove outside fins on ends of ganged controls (shaded areas).



| Load Type                    | Minimum Load | A<br>Not Ganged | B<br>End of Gang              | C<br>Middle of Gang | Neutral Connection |
|------------------------------|--------------|-----------------|-------------------------------|---------------------|--------------------|
| RRD-F6AN-DV <sup>1,2,3</sup> |              |                 |                               |                     |                    |
| Fluorescent / LED Drivers    | 0.05 A       | 6 A             | 5 A                           | 3.5 A               | Yes                |
|                              | 1 ballast    | 60 ballasts     | 50 ballasts                   | 35 ballasts         |                    |
| RRD-2ANF <sup>4</sup>        |              |                 |                               |                     |                    |
| Ceiling Fan                  | 0.083 A      | 2 A             | 2 A                           | 2 A                 | Yes                |
| RRD-8ANS <sup>1,5</sup>      |              |                 |                               |                     |                    |
| Lighting                     | 10 W         | 8 A             | 6.5 A                         | 5 A                 | Yes                |
| Motor                        | 0.08 A       | 1/4 HP 5.8 A    | 1/4 HP 5.8 A                  | 1/6 HP 4.4 A        |                    |
| RRD-8S-DV <sup>5,6</sup>     |              |                 |                               |                     |                    |
| Lighting                     | 40 W/VA      | 8 A             | 8 A (2-gang);<br>7 A (3-gang) | 7 A                 | No                 |
| Motor                        | 0.4 A        | 1/10 HP 3 A     |                               |                     |                    |

**Note:** Do not install dimmers to control receptacles or motor-operated appliances.

<sup>1</sup> Power Boosters/Load Interfaces: -F6AN-DV, -8ANS can be used to control power boosters/load interfaces. For a list of compatible power boosters/load interfaces see **Compatible Power Boosters and Load Interfaces**, page 11.

<sup>2</sup> Fluorescent Dimmer Load Type: -F6AN-DV: designed for use with permanently installed 3-wire 120 V~ or 277 V~ line voltage control fluorescent ballasts or LED drivers. Use with only Hi-lume, Hi-lume 3D, Hi-lume Compact SE, Eco-10, or EcoSystem (H3D-, FDB-, ECO-, HL3-, EC5-, L3D). Do NOT use with any other ballasts or drivers. Do not install to control receptacles or motor-operated appliances.

<sup>3</sup> Maximum Load: The maximum load for the -F6AN-DV is either the derated load or the number of ballasts, whichever is LESS.

<sup>4</sup> Ceiling Fan Application: -2ANF

- Use to control one paddle-type ceiling fan (permanent split-capacitor).
- Use the ceiling fan's pull chain to set its speed to the highest setting.
- Do not use to control fans that use shaded-pole motors (e.g., bath exhaust fans).
- Do not use to control fans that have integrated fan speed controls (e.g., fans that have a remote control) unless the integrated control is removed from the ceiling fan.
- Do not connect to any other motor-operated appliance or to any lighting load type.
- Do not use to control a fan lighting load (e.g., light kit).

<sup>5</sup> Switch Load Type:

- -8ANS, -8S-DV: designed for use with permanently installed 120 V~ incandescent, MLV, ELV, tungsten halogen, fluorescent, CFL, LED, or motor loads.

- -8S-DV can also be used with permanently installed 277 V~ MLV or fluorescent loads.

<sup>6</sup> Shunt Capacitor: Some -8S-DV installations may require the use of a shunt capacitor; this is especially necessary for load types sensitive to leakage current (e.g., fluorescent ballasts). If load flickers, install a shunt capacitor. Optional shunt capacitor must be installed inside the load fixture or in a separate J-box. For shunt capacitor installation see Wiring Diagram 4, 9, or 10. If controlling Type B TLED bulbs, consult Application Note #812 (P/N 048812) on [www.lutron.com](http://www.lutron.com)


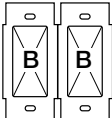
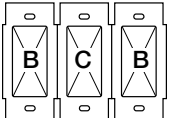
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# RadioRA 2 RF Maestro Local Controls

## Mixing Lamp Types

Mixing lamp types (using a combination of CFL/LED, Incandescent/Halogen bulbs) and ganging with other dimmers or electronic switches may reduce maximum wattage as shown in the chart below.

Example: If you have two dimmers ganged together and you have two 24 W bulbs installed (total CFL Wattage = 48 W), on one dimmer, you may add up to 300 W of incandescent or halogen lighting to that one dimmer. Repeat the exercise for the other dimmer with which it is ganged.

|                              |                                    |   |                  |   |                     |  |                    |
|------------------------------|------------------------------------|---|------------------|---|---------------------|--|--------------------|
|                              |                                    |  |                  |  |                     |  |                    |
| Total CFL/LED Wattage        | Total Incandescent/Halogen Wattage |   |                  |   |                     |  | Neutral Connection |
|                              | A<br>Not Ganged                    |   | B<br>End of Gang |   | C<br>Middle of Gang |  |                    |
| <b>RRD-6CL<sup>1,2</sup></b> |                                    |   |                  |   |                     |  |                    |
| 0 W                          | +                                  | 50 W–600 W  | Or               | 50 W–500 W  | Or                  | 50 W–400 W   | No                 |
| 1 W–25 W                     | +                                  | 0 W–500 W   | Or               | 0 W–400 W   | Or                  | 0 W–300 W  |                    |
| 26 W–50 W                    | +                                  | 0 W–400 W   | Or               | 0 W–300 W   | Or                  | 0 W–200 W  |                    |
| 51 W–75 W                    | +                                  | 0 W–300 W   | Or               | 0 W–200 W   | Or                  | 0 W–100 W  |                    |
| 76 W–100 W                   | +                                  | 0 W–200 W   | Or               | 0 W–100 W   | Or                  | 0 W–50 W   |                    |
| 101 W–125 W                  | +                                  | 0 W–100 W   | Or               | 0 W–50 W  | Or                  | 0 W  |                    |
| 126 W–150 W                  | +                                  | 0 W   | Or               | 0 W   | Or                  | 0 W  |                    |
| <b>RRD-PRO</b>               |                                    |   |                  |   |                     |  |                    |
| 0 W                          | +                                  | 5 W <sup>3</sup> –500 W   | Or               | 5 W <sup>3</sup> –400 W   | Or                  | 5 W <sup>3</sup> –300 W  | Optional           |
| 1 W–50 W                     | +                                  | 0 W–400 W   | Or               | 0 W–300 W   | Or                  | 0 W–200 W  |                    |
| 51 W–100 W                   | +                                  | 0 W–300 W   | Or               | 0 W–200 W   | Or                  | 0 W–100 W  |                    |
| 101 W–150 W                  | +                                  | 0 W–200 W   | Or               | 0 W–100 W   | Or                  | 0 W  |                    |
| 151 W–200 W                  | +                                  | 0 W–100 W   | Or               | 0 W   | Or                  | 0 W  |                    |
| 201 W–250 W                  | +                                  | 0 W   | Or               | 0 W   | Or                  | 0 W  |                    |

<sup>1</sup> Dimmer Load Type -6CL is designed for use with permanently-installed incandescent, CFL, LED, MLV, or tungsten halogen only. Do not install dimmers to control receptacles or motor-operated appliances.

2 Do not mix CFL and LED loads with MLV loads.

3 Minimum load shown is for neutral connected operation. If no neutral is used, minimum load is 2 bulbs CFL/LED, or 25 W Incandescent/Halogen.

## RadioRA 2 RF Maestro Local Controls

### Compatible Power Boosters and Load Interfaces

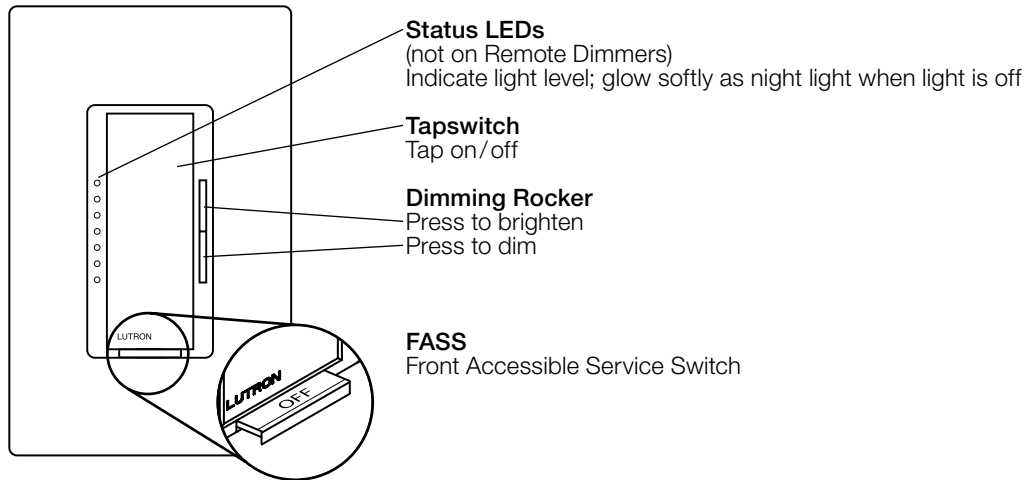
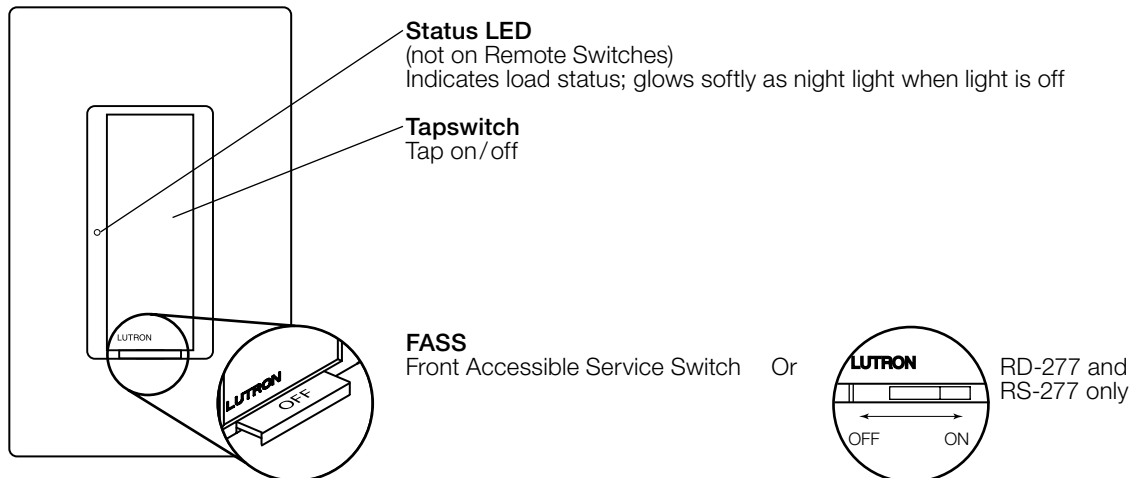
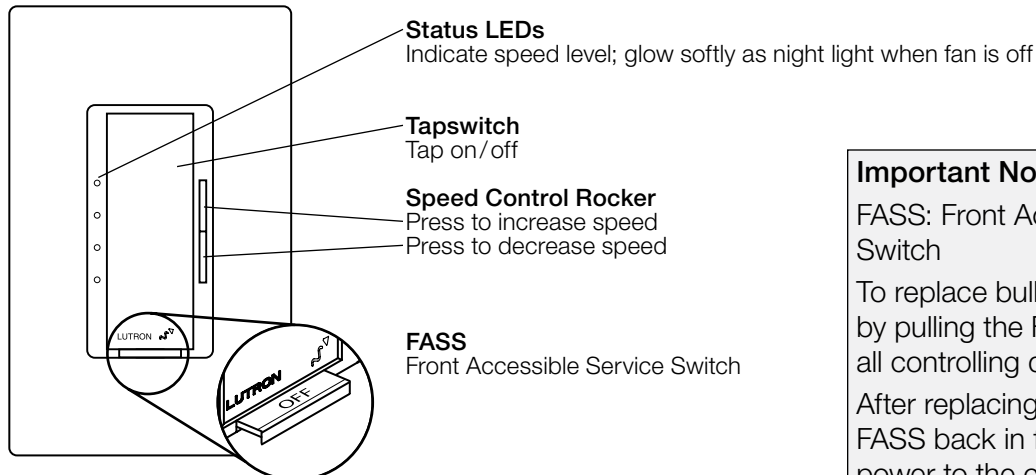
Some local controls can be used to control power boosters or load interfaces. Up to three power boosters or load interfaces can be used with one control. See table below for a list of controls and compatible power boosters and load interfaces.

| Control                  | Phase Adaptive Power Modules:<br>PHPM-PA-120-WH;<br>PHPM-PA-DV-WH | 3-wire Fluorescent Power Modules:<br>PHPM-3F-120-WH;<br>PHPM-3F-DV-WH | Switched Power Module:<br>PHPM-SW-DV-WH | 0–10 V $\overline{\sim}$ Interface and Switching Module: GRX-TVI |
|--------------------------|---|---|---|--|
| RRD-6ND                  | ✓   | ✓   |   | ✓  |
| RRD-10ND                 | ✓   | ✓   |   | ✓  |
| RRD-6NA                  | ✓   | ✓   |   | ✓  |
| RRD-F6AN-DV <sup>1</sup> | ✓   | ✓   |   | ✓  |
| RRD-8ANS                 |   |   | ✓                                       |  |
| RRD-PRO                  | ✓   | ✓   |   | ✓  |

<sup>1</sup> Only the GRX-TVI is compatible with the RRD-F6AN-DV at 277 V $\overline{\sim}$ . All other power modules are 120 V $\overline{\sim}$  only.

## RadioRA 2 RF Maestro Local Controls

## Operation

*Dimmer**Switch**Fan Speed Control***Important Notice**

**FASS: Front Accessible Service Switch**

To replace bulb, remove power by pulling the FASS out fully on all controlling devices.

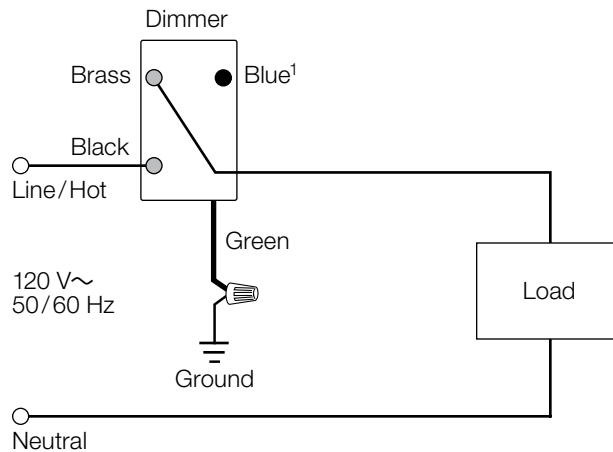
After replacing bulb(s), push the FASS back in fully to restore power to the control(s).

## RadioRA 2 RF Maestro Local Controls

## Wiring Diagrams

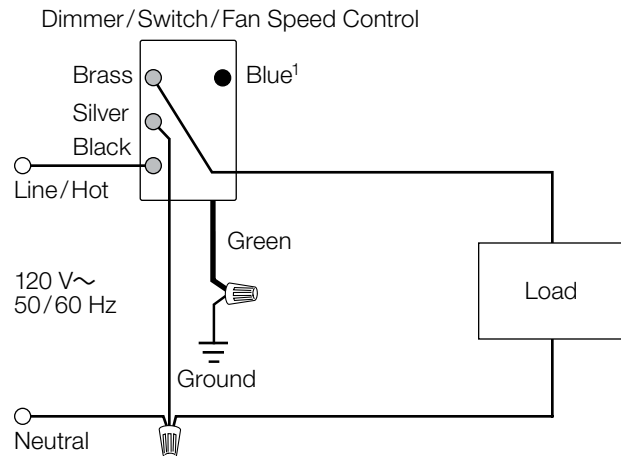
## Wiring Diagram 1

Single-Location Installation without Neutral<sup>1</sup>  
-6CL, -10D, -PRO



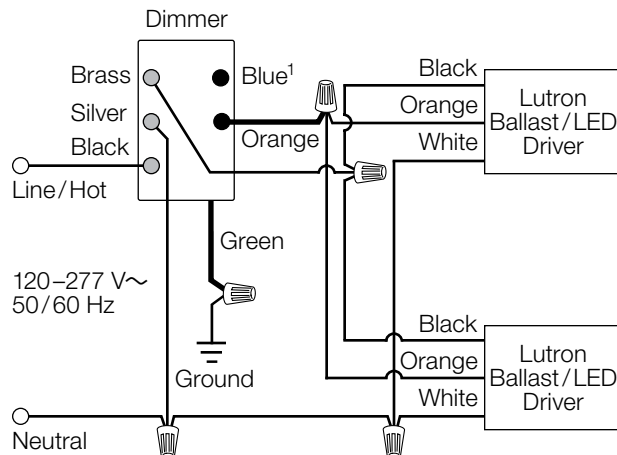
## Wiring Diagram 2

Single-Location Installation with Neutral<sup>1</sup>  
-10ND, -6ND, -6NA, -2ANF, -8ANS, -PRO



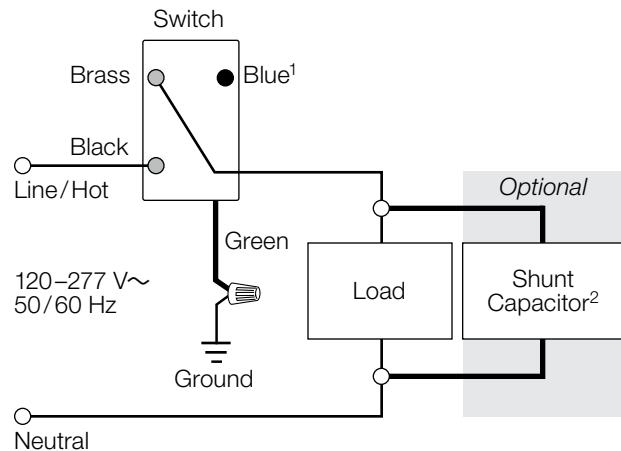
## Wiring Diagram 3

Single-Location Fluorescent Dimmer Installation<sup>1</sup>  
-F6AN-DV with Lutron Ballast/LED Driver



## Wiring Diagram 4

Single-Location 2-Wire Switch Installation<sup>1</sup>  
-8S-DV with Optional Shunt Capacitor<sup>2</sup>



**Note:** Bolded lines in diagrams indicate leads on products.

<sup>1</sup> When using controls in single-location installations, tighten the blue terminal. Do not connect the blue terminal to any other wiring or to ground.

<sup>2</sup> Optional Shunt Capacitor must be installed inside the load fixture or in a separate J-box. Shunt capacitor is included with -8S-DV. If controlling Type B TLED bulbs, consult Application Note #812 (P/N 048812) on [www.lutron.com](http://www.lutron.com)

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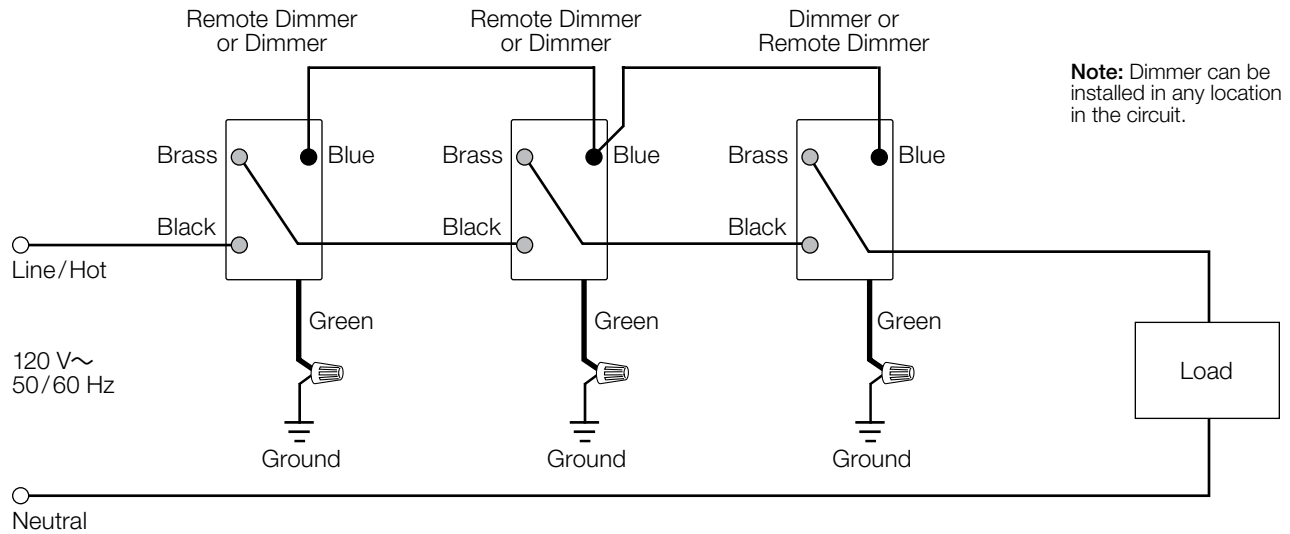
## RadioRA 2 RF Maestro Local Controls

## Wiring Diagrams (continued)

## Wiring Diagram 5

Multi-Location Installation without Neutral<sup>1</sup>

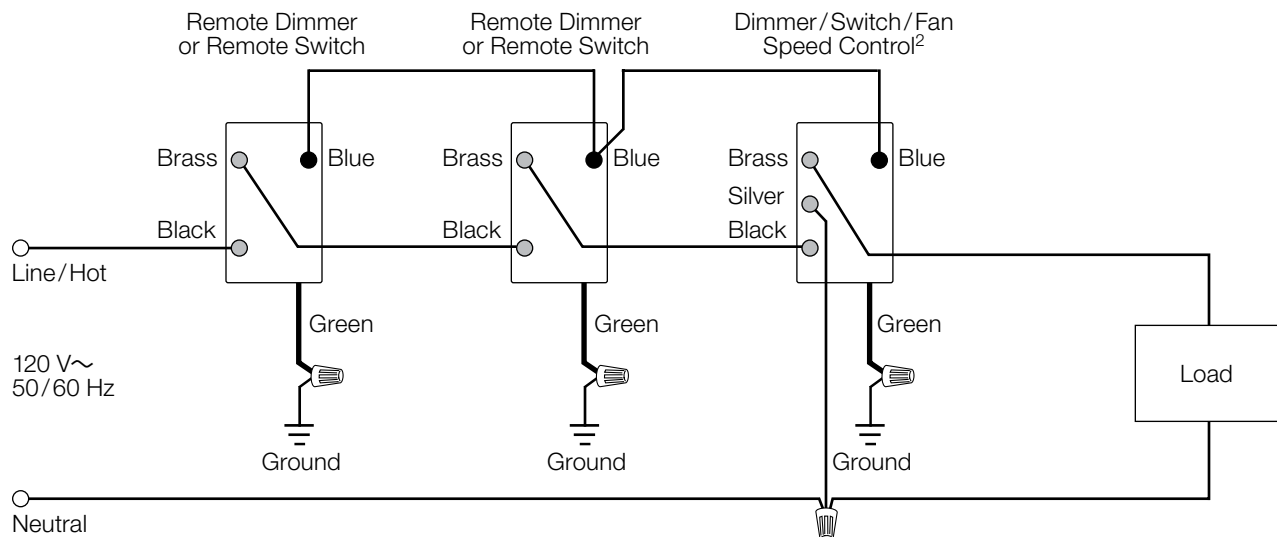
-6CL, -10D, and -PRO with RD-RD



## Wiring Diagram 6

Multi-Location Installation with Neutral<sup>1,2</sup>

-10ND, -6ND, -6NA, -PRO, and -2ANF with RD-RD; -8ANS with RD-RS

**Note:** Bolded lines in diagrams indicate leads on products.<sup>1</sup> Up to 9 Remote Dimmers/Remote Switches may be connected to the Dimmer/Switch/Fan Speed Controls. Total blue terminal wire length may be up to 250 ft (76 m), except for -PRO which is 150 ft (45 m).<sup>2</sup> Neutral-Wire Dimmers/Switches/Fan Speed Controls must be connected on the Load side of a multi-location installation, except -PRO which can be connected in any position.

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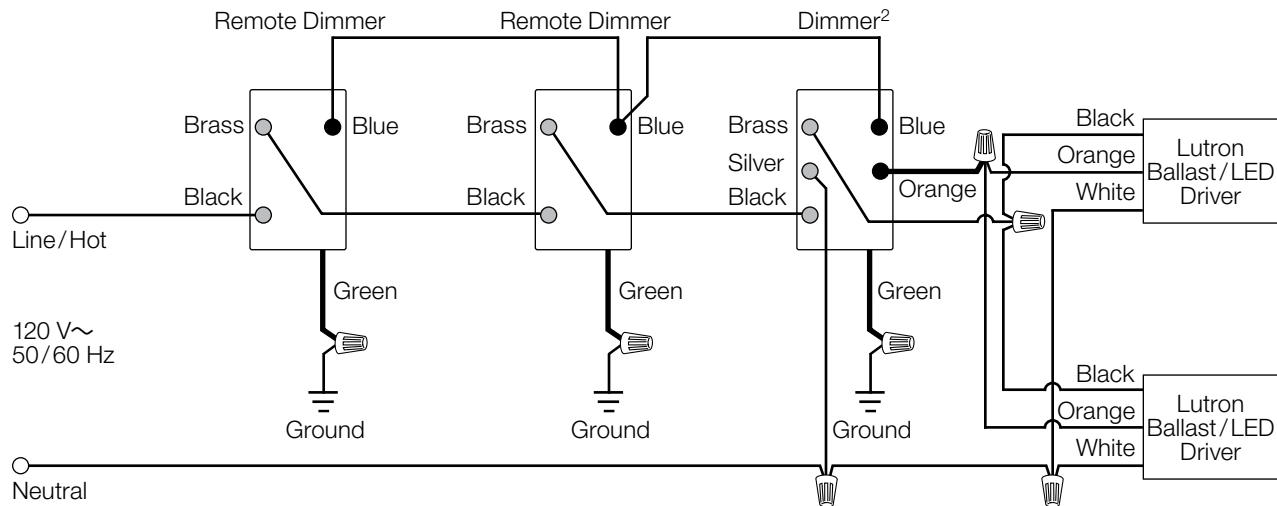
## RadioRA 2 RF Maestro Local Controls

## Wiring Diagrams (continued)

## Wiring Diagram 7

Multi-Location Fluorescent Dimmer Installation<sup>1,2</sup> (120 V~)

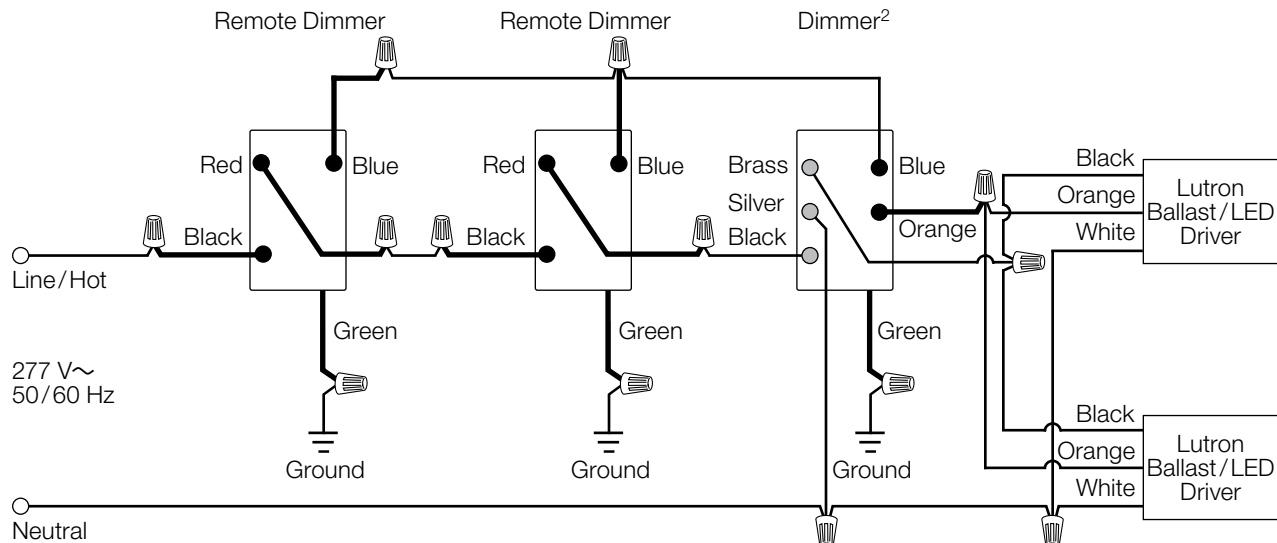
-F6AN with RD-RD and Lutron Ballast/LED Driver



## Wiring Diagram 8

Multi-Location Fluorescent Dimmer Installation<sup>1,2</sup> (277 V~)

-F6AN with RD-RD-277 and Lutron Ballast/LED Driver

**Note:** Bolded lines in diagrams indicate leads on products.<sup>1</sup> Up to 9 Remote Dimmers/Remote Switches may be connected to the Dimmer/Switch/Fan Speed Controls. Total blue terminal wire length may be up to 250 ft (76 m), except for -PRO which is 150 ft (45 m).<sup>2</sup> Neutral-Wire Dimmers/Switches/Fan Speed Controls must be connected on the Load side of a multi-location installation, except the -PRO which can be connected in any position.

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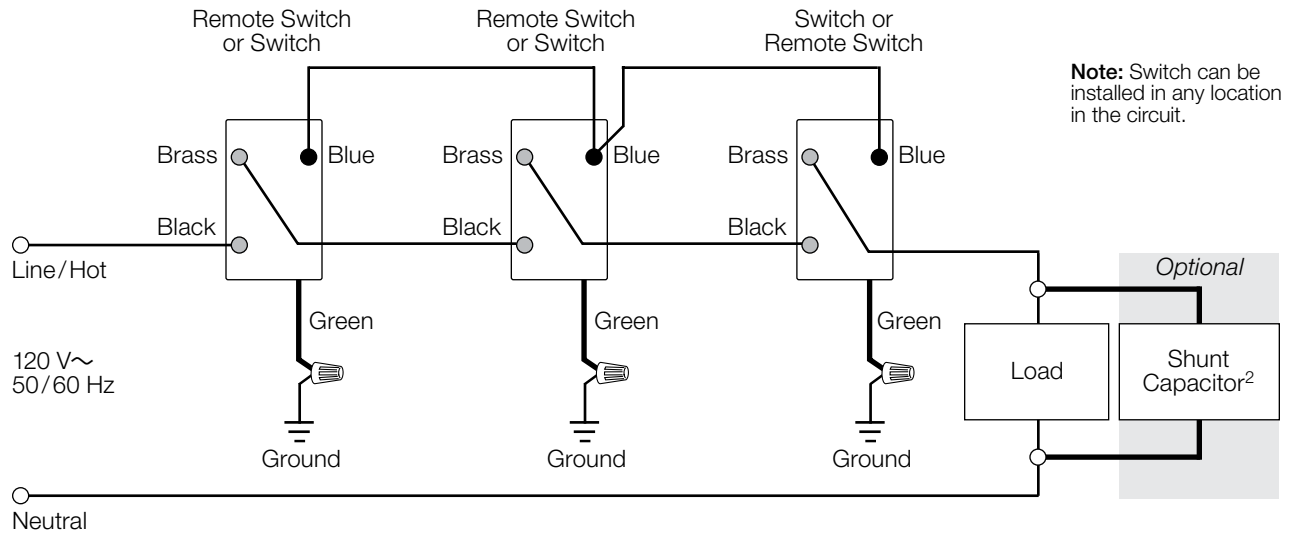
## RadioRA 2 RF Maestro Local Controls

## Wiring Diagrams (continued)

## Wiring Diagram 9

Multi-Location 2-Wire Switch Installation<sup>1</sup> (120 V~)

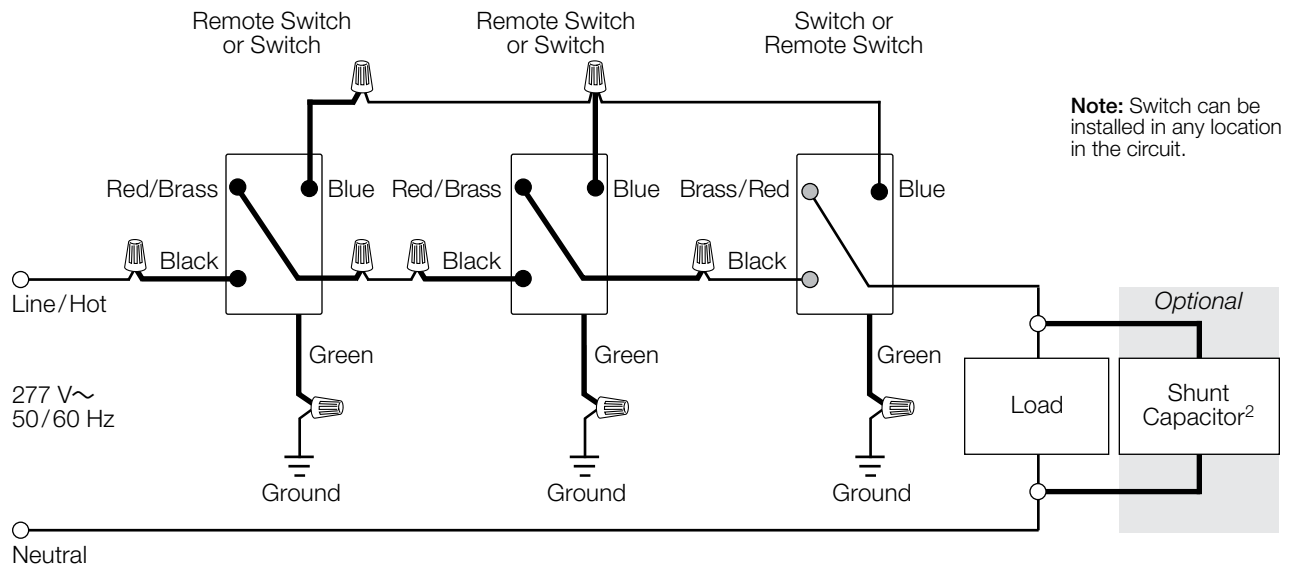
-8S-DV with RD-RS and Optional Shunt Capacitor



## Wiring Diagram 10

Multi-Location 2-Wire Switch Installation<sup>1</sup> (277 V~)

-8S-DV with RD-RS-277 and Optional Shunt Capacitor

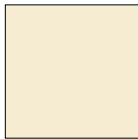
**Note:** Bolded lines in diagrams indicate leads on products.<sup>1</sup> Up to 9 Remote Dimmers/Remote Switches may be connected to the Dimmer/Switch/Fan Speed Controls. Total blue terminal wire length may be up to 250 ft (76 m), except for -PRO which is 150 ft (45 m).<sup>2</sup> Optional Shunt Capacitor must be installed inside the load fixture or in a separate J-box. Shunt capacitor (LUT-MLC) is included with 8S-DV. If controlling Type B TLED bulbs, consult Application Note #812 (P/N 048812) on [www.lutron.com](http://www.lutron.com)



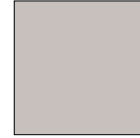
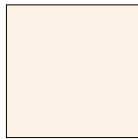
## RadioRA 2 RF Maestro Local Controls

## Colors and Finishes

## Gloss Finishes

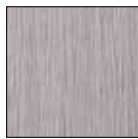
White  
WHIvory  
IVAlmond  
ALLight Almond  
LAGray  
GRBrown  
BRBlack  
BL

## Satin Finishes

Snow  
SWMidnight  
MNTaupe  
TPBiscuit  
BIPalladium  
PDHot  
HT

For the latest color offerings see our website:  
<http://www.lutron.com/satincolors>

## Metal Finish (wallplate only)

Stainless Steel  
SS

When using Stainless Steel wallplates,  
it is recommended that you order the  
control in Midnight (MN).

- Due to printing limitations, colors and finishes shown cannot be guaranteed to perfectly match actual product colors.
- Color chip keychains are available for more precise color matching:  
Gloss Finishes: DG-CK-1  
Satin Finishes: SC-CK-1

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