



# HOMEWORKS HQRA-PRO Architectural RF Maestro Local Controls Installation Guide

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**HOMEWORKS HQRA-PRO Architectural RF Maestro Local Controls**



If dimming LED or CFL bulbs, they must be Lutron compatible for optimal performance!  
For the compatible bulb list, please visit [www.lutron.com/ledfinder](http://www.lutron.com/ledfinder)

#### **Help**

Use our mobile friendly self-paced installation tool:

[www.lutron.com/wiringwizard](http://www.lutron.com/wiringwizard)

Find more product information:

- Videos
- Frequently Asked Questions
- Online Chat (8 am – 5 pm EST)

#### **Call us:**

U.S.A. | Canada | Caribbean

1.844.LUTRON1 (588.7661) (24/7)

Mexico

+1.888.235.2910

Others

+1.610.282.3800

[www.lutron.com/support](http://www.lutron.com/support)

#### **Limited Warranty:**

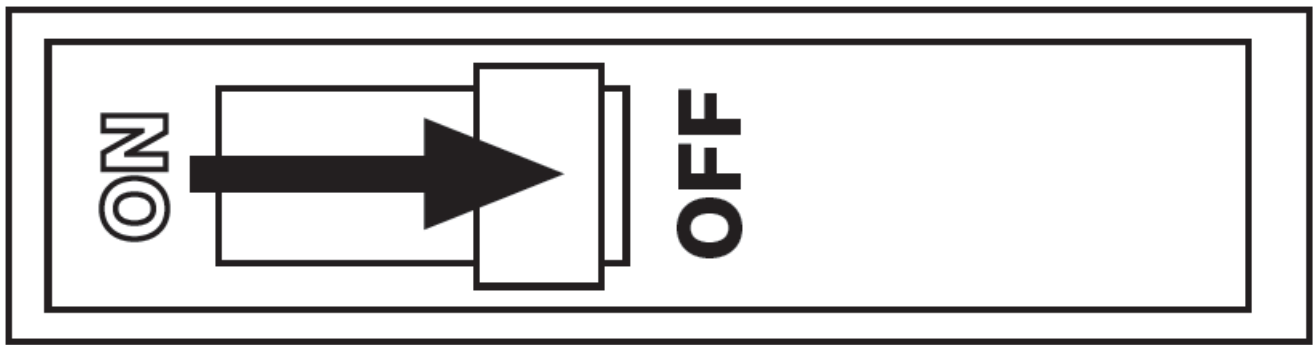
[www.lutron.com/TechnicalDocumentLibrary/Warranty.pdf](http://www.lutron.com/TechnicalDocumentLibrary/Warranty.pdf)

#### **For FCC/IC information:**

Please visit: [www.lutron.com/fcc-ic](http://www.lutron.com/fcc-ic)

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**Turn power OFF at circuit breaker**



**WARNING:**

**ELECTRIC SHOCK HAZARD.**

May result in Serious Injury or Death. Turn off power at circuit breaker or fuse before installing.

**Load Types and Operation**

Load Type	Minimum Load	Maximum Load			Neutral	Required Phase Mode 3
		Single Gang	End of Gang	Middle of Gang		
LED	1 bulb 2	250 W	200 W	150 W	Optional 1	Either
CFL	1 bulb 2	250 W	200 W	150 W	Optional 1	Forward
MLV Transformer with LEDs	See Application Note #559 (P/N 048559) at <a href="http://www.lutron.com">www.lutron.com</a> 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 2	500 W	400 W	300 W	Optional 1	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) 20 drivers max.	No Derating Required		Required	Forward
PHPM-PA / 3F and GRX-TVI	1 interface	3 interfaces	No Derating Required		Required	Forward

1. Neutral is recommended for best dimming performance, if available, but is not required for this load type.
2. Minimum load shown is for neutral connected operation. If no neutral is used, minimum load is 2 LED / CFL bulbs, or 25 W of Incandescent / Halogen.
3. See Section 6C on page 2 of this guide for phase-select instructions.

**Note:**

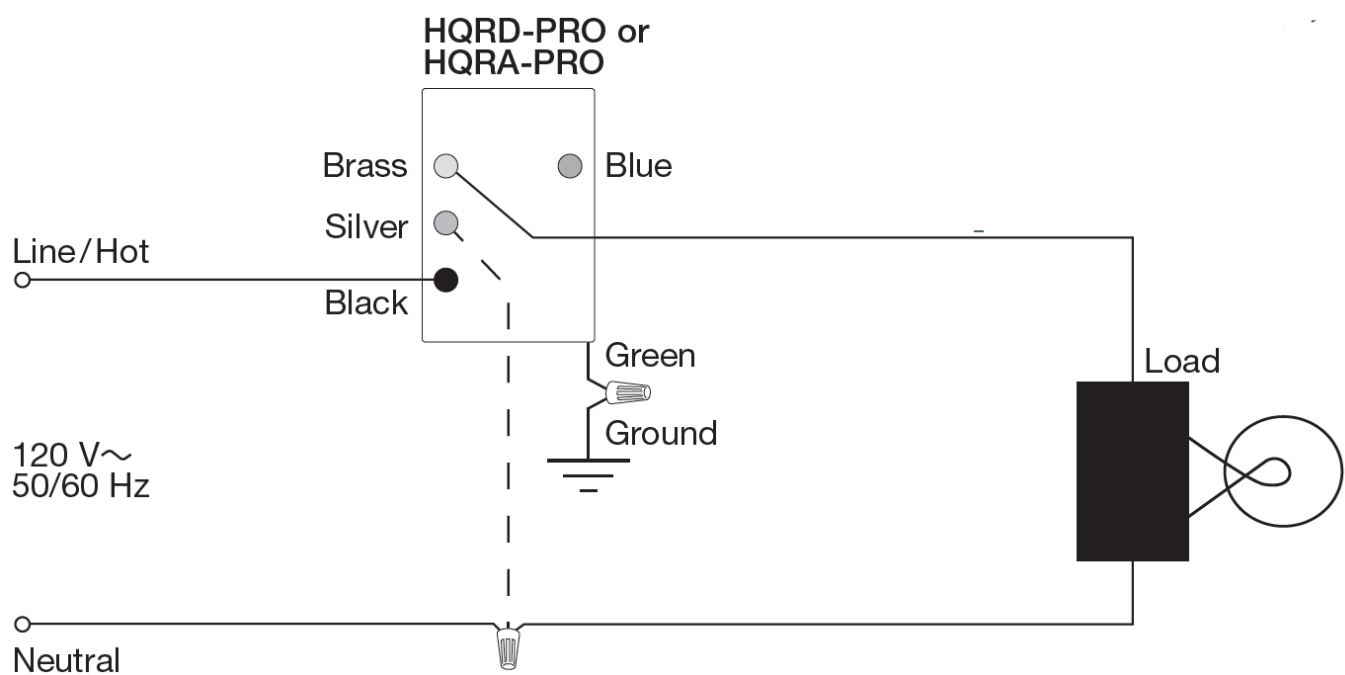
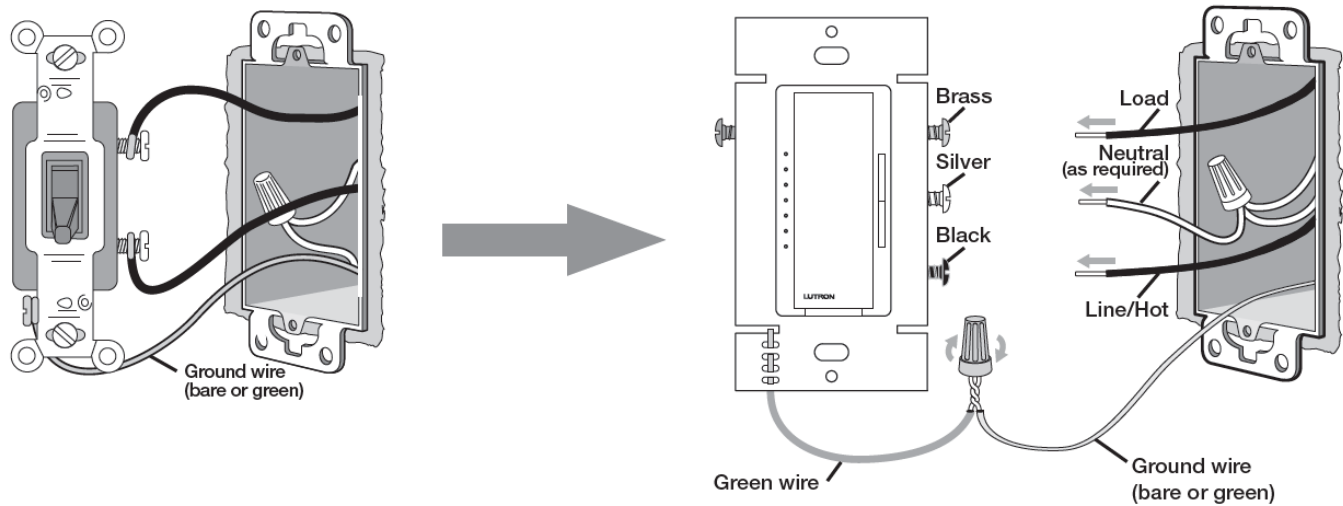
For dimming MLV fixtures, the maximum lamp wattage is typically 70%-85% of the transformer's VA rating. For actual transformer efficiency, contact the manufacturer. The total VA rating of the transformer(s) shall not exceed the VA rating of the dimmer.

**IMPORTANT**

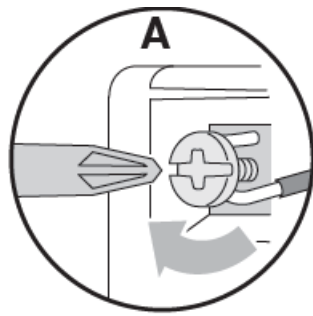
1. **CAUTION:** Use only with permanently installed fixtures with dimmable screw-in LED, dimmable self-ballasted compact fluorescent, halogen, or incandescent lamps. Use only to control the primary side of permanently installed transformer supplied low-voltage lighting, or in combination with incandescent lamps. To reduce the risk of overheating and possible damage to other equipment DO NOT use to control receptacles, fluorescent lighting fixtures, non-ballasted or externally ballasted compact fluorescent lamps, motor operated appliances or transformer supplied appliances.
2. If connecting loads other than Incandescent / Halogen, screw-in CFLs, or screw-in LEDs, the neutral wire must be connected. See the Load Types and Operation chart for more information.
3. Neutral is highly recommended for CFLs.
4. Install in accordance with all national and local electrical codes.
5. When no "grounding means" exist within the wall box, the NEC® 2011, Article 404.9 allows a dimmer without a grounding connection to be installed as a replacement, as long as a plastic, noncombustible wall plate is used. For this type of installation, twist a wire connector onto the green ground wire or remove the green ground wire on the dimmer and use an appropriate wall plate such as Claro or Satin Colors series wall plates by Lutron.
6. Protect the dimmer from dust and dirt when painting or spackling the wall.
7. This dimmer is not compatible with standard 3-way or 4-way switches. Use only with Lutron companion dimmers listed above.
8. In any 3-way / 4-way circuit use only one dimmer with up to 9 companion dimmers.
9. Maximum wire length between the dimmer and the farthest companion dimmer is 150 ft (45 m).
10. Operate between 32 °F and 104 °F (0 °C and 40 °C).
11. It is normal for the dimmers to feel warm to the touch during operation.
12. Clean the dimmer with a soft damp cloth only. Do not use any chemical cleaners.
13. For indoor use only.
14. Tighten screw terminals securely to 5 in-lb (0.55 N•m).

**Determine wiring configuration**

For lights switched from one location:

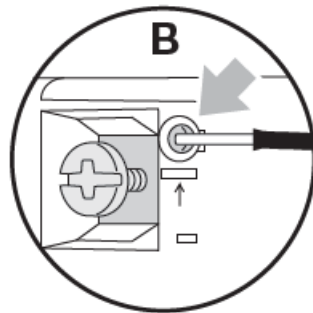


- Fully wrap the wires around the screw and tighten (A), or strip insulated wires to 1/2 in (13 mm) and insert into the push-in terminals (B). Solid copper wire only.



14/12 AWG  
(1.5/4.0 mm<sup>2</sup>)

**OR**



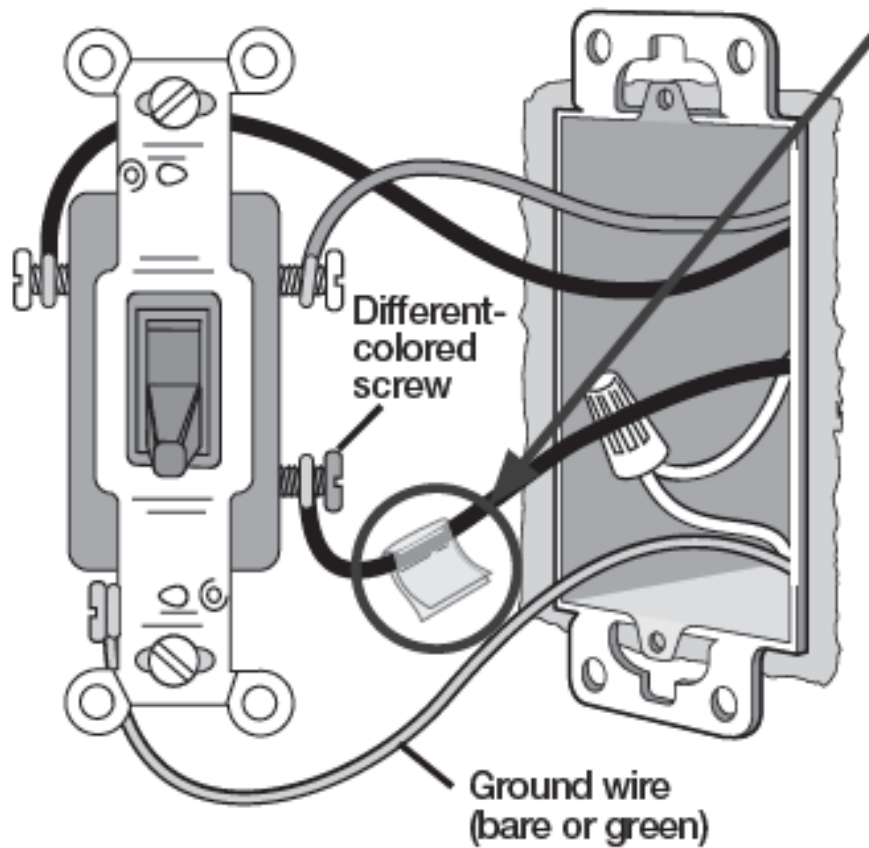
14 AWG **ONLY**  
(1.5 mm<sup>2</sup>)



For lights switched from two locations:

**NOTE:**

Only one dimmer can be used per circuit.

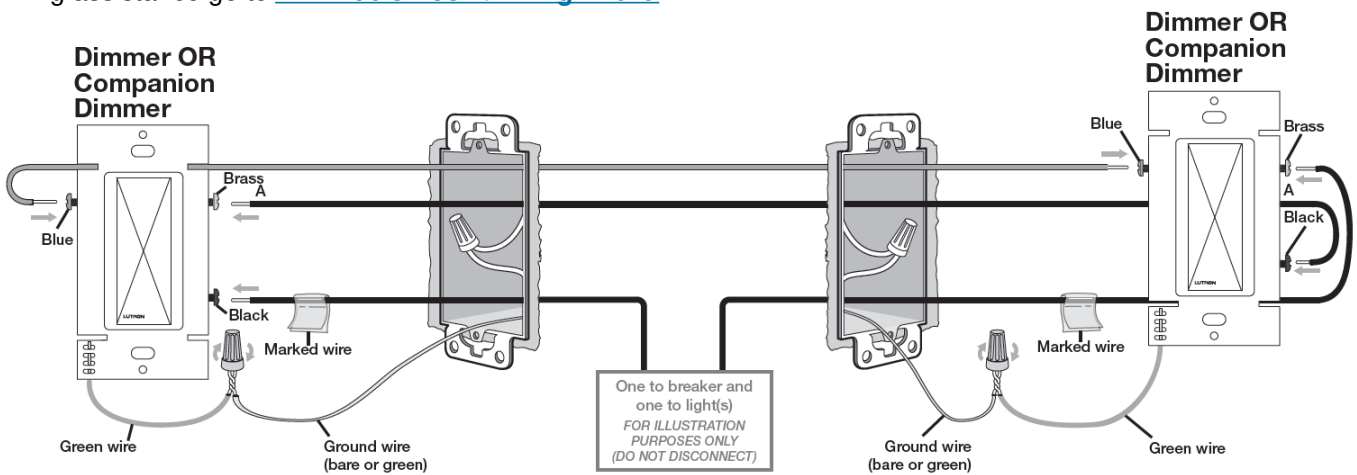


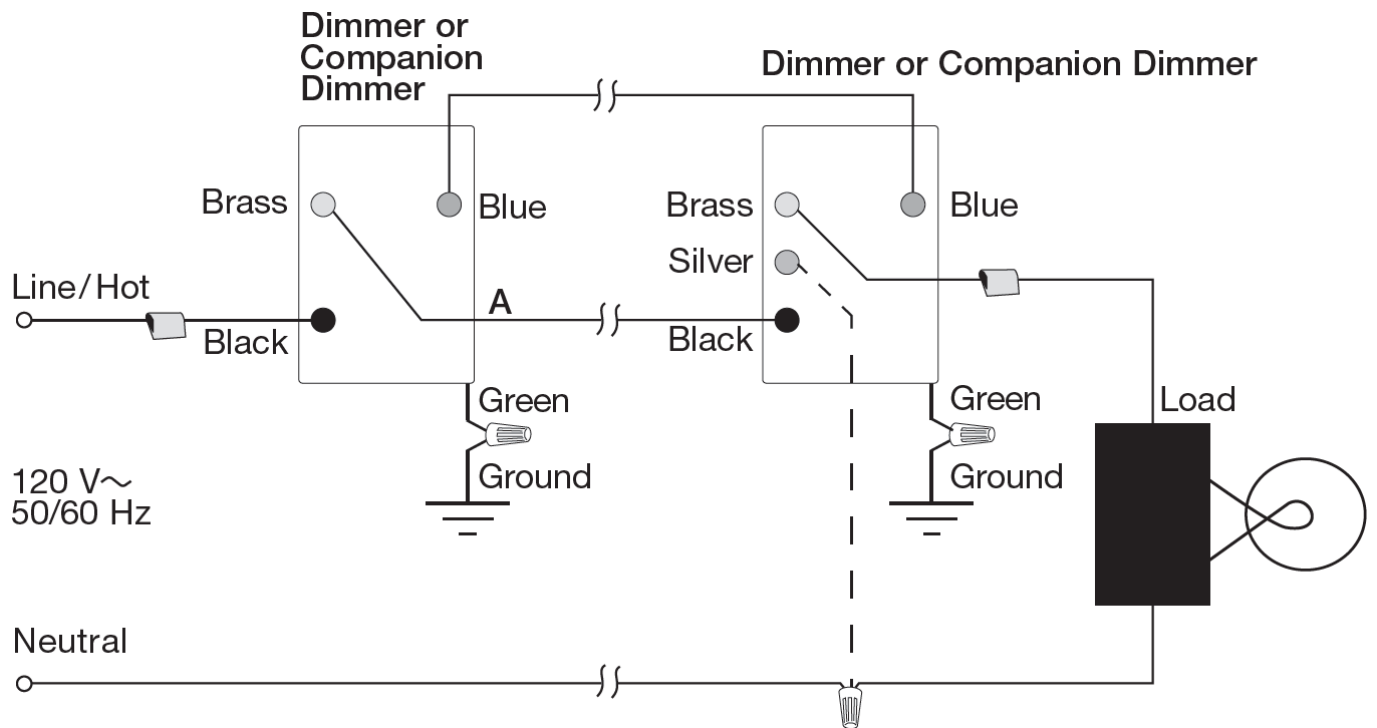
**IMPORTANT:**

Tag or mark the common wire on both existing devices. This is usually connected to a darker (or different) colored screw than the others. This does NOT include the ground screw.

**NOTE:**

Dimmer may be wired on the line side, load side, or in the middle. Neutral has been excluded from this diagram for clarity. Connect Neutral to the dimmer as required. Up to nine companion dimmers may be used. For additional wiring assistance go to [www.lutron.com/wiringwizard](http://www.lutron.com/wiringwizard)

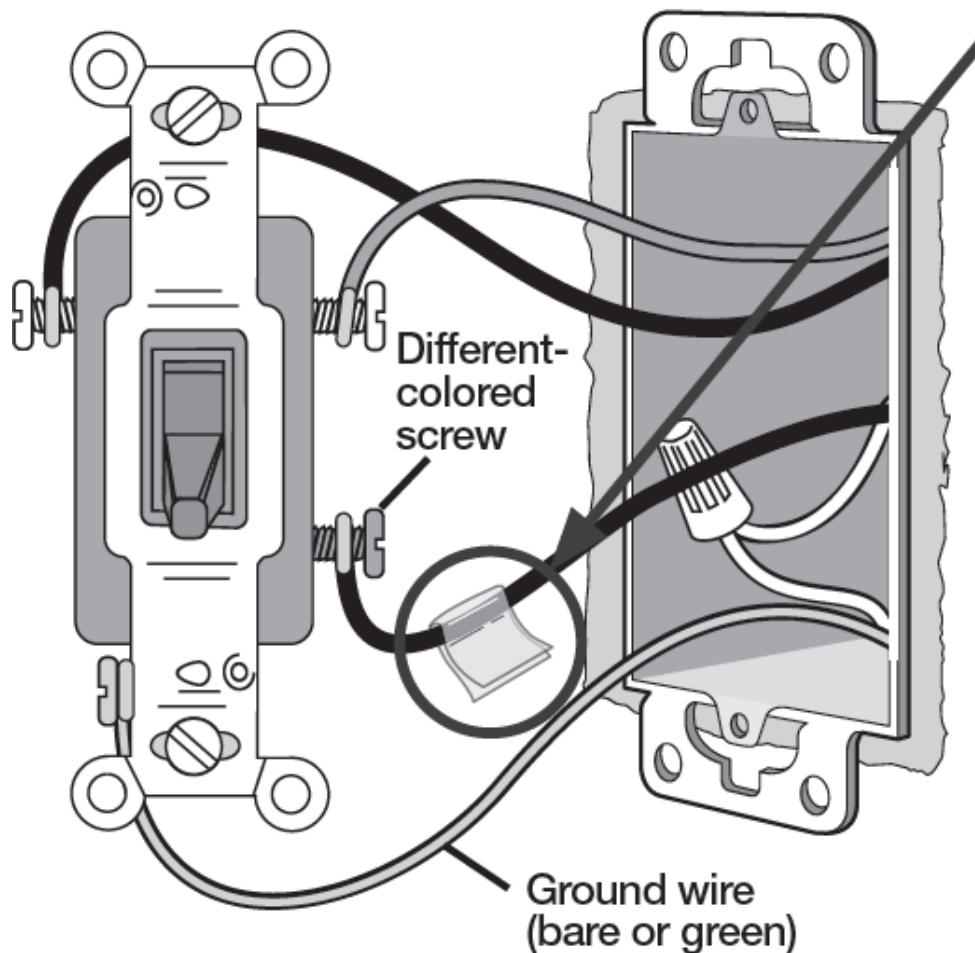




For lights switched from three or more locations:

**NOTE:**

Only one dimmer can be used per circuit.



**IMPORTANT:**

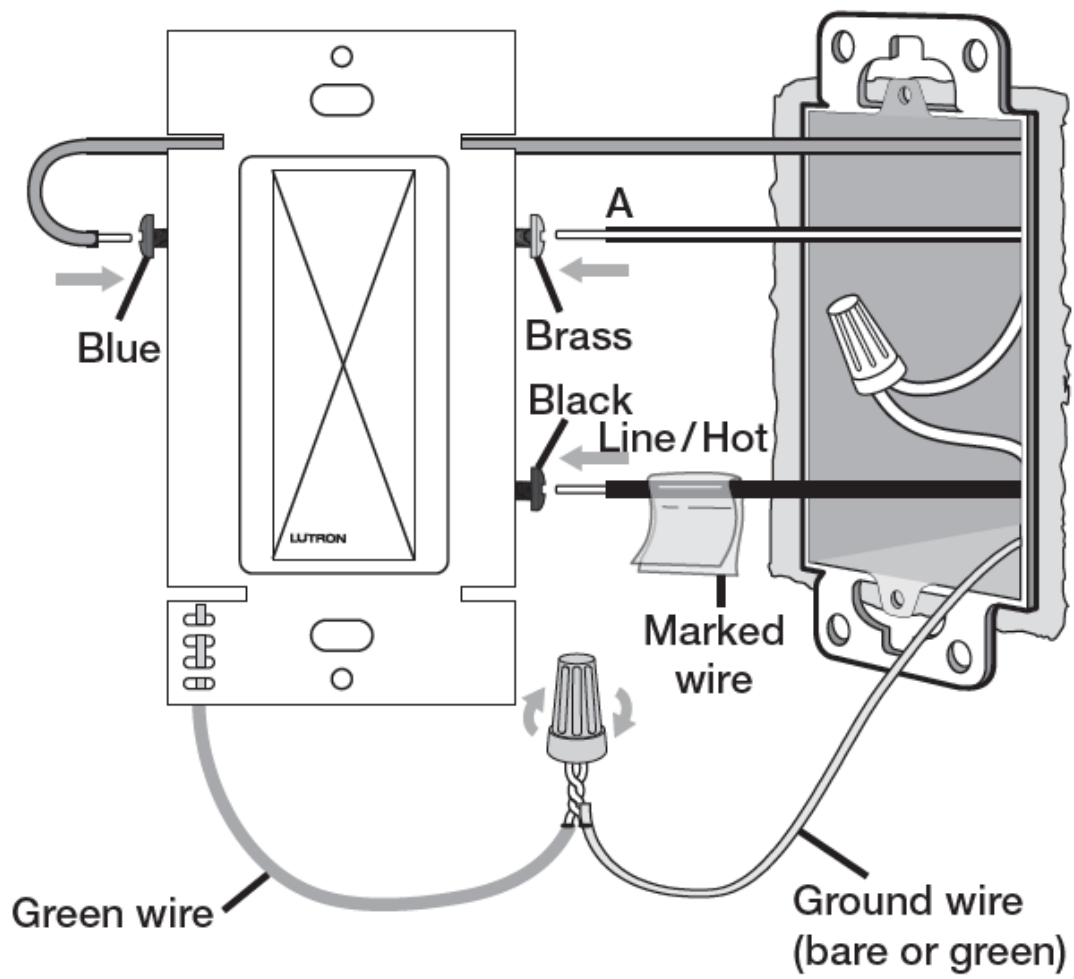
Tag or mark the common wire on existing 3-way devices. This is usually connected to a darker (or different) colored screw than the others. This does NOT include the ground screw.

**NOTE:**

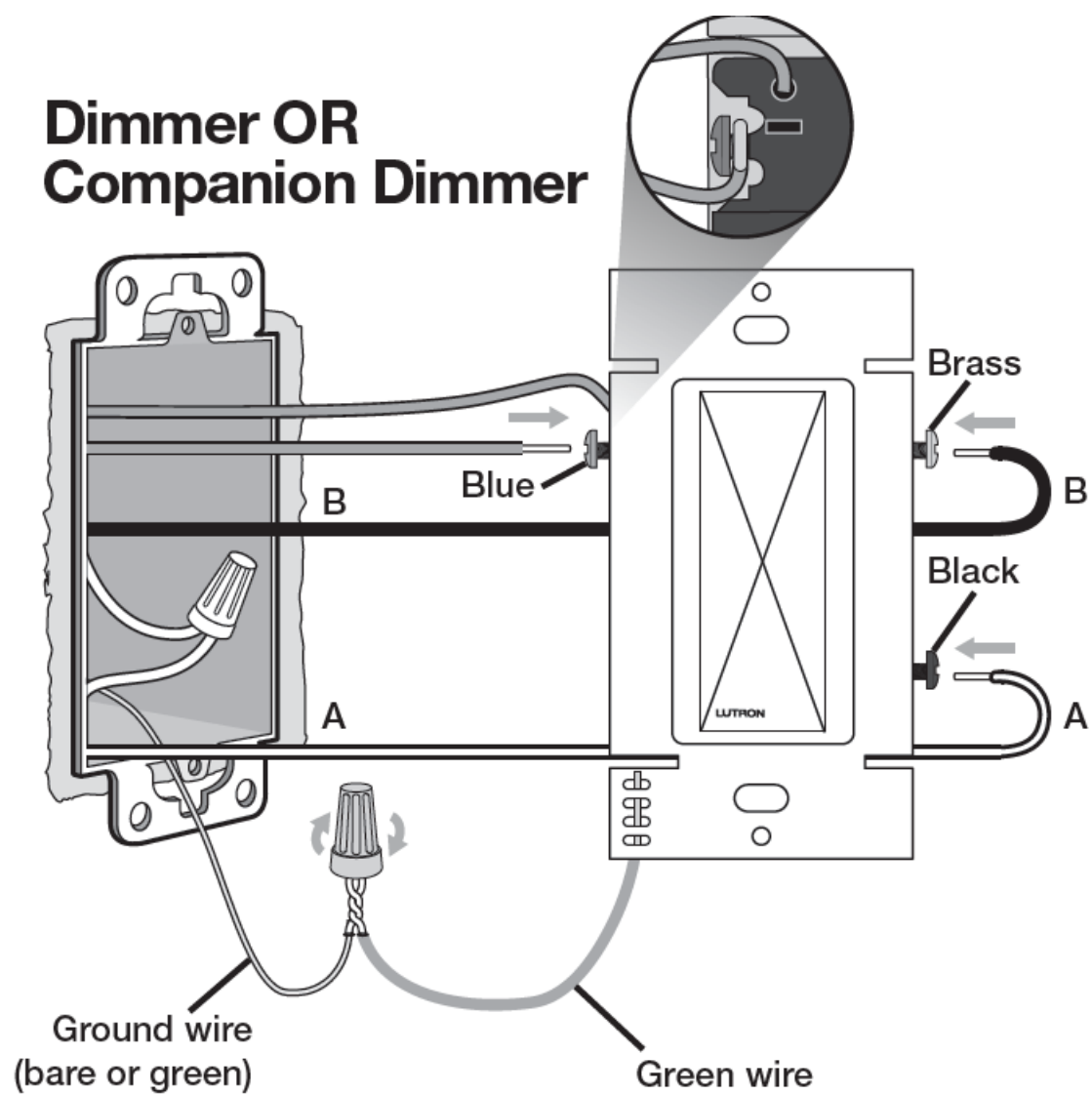
Dimmer may be wired on the line side, load side, or in the middle. Neutral has been excluded from this diagram for clarity. Connect Neutral to the dimmer as required. Up to nine companion dimmers may be used. For additional wiring assistance go to [www.lutron.com/wiringwizard](http://www.lutron.com/wiringwizard)



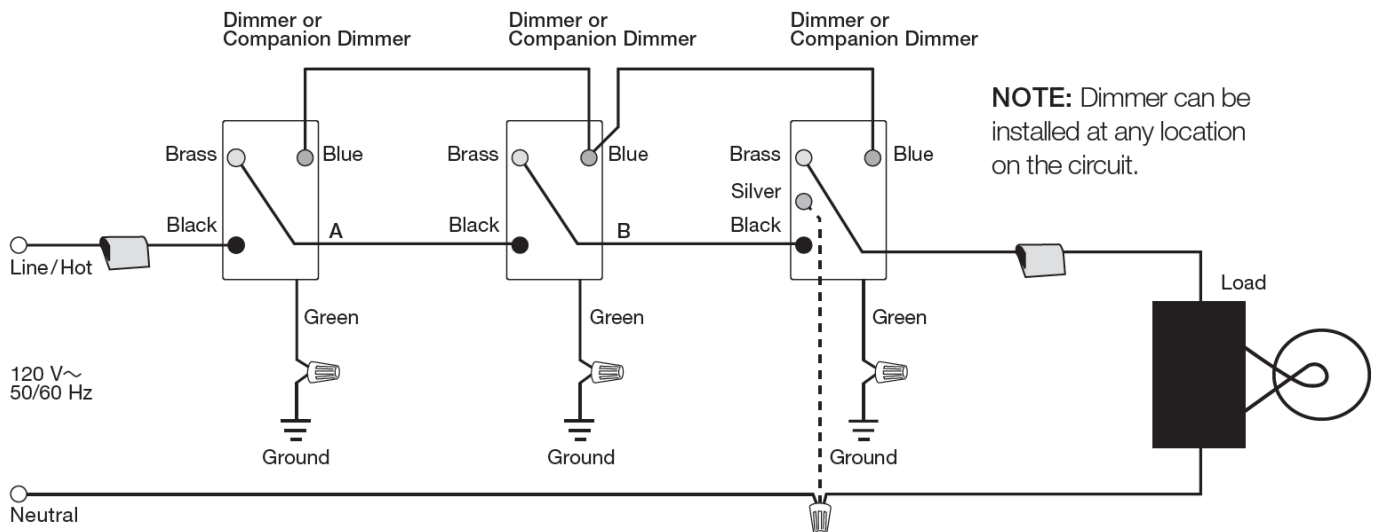
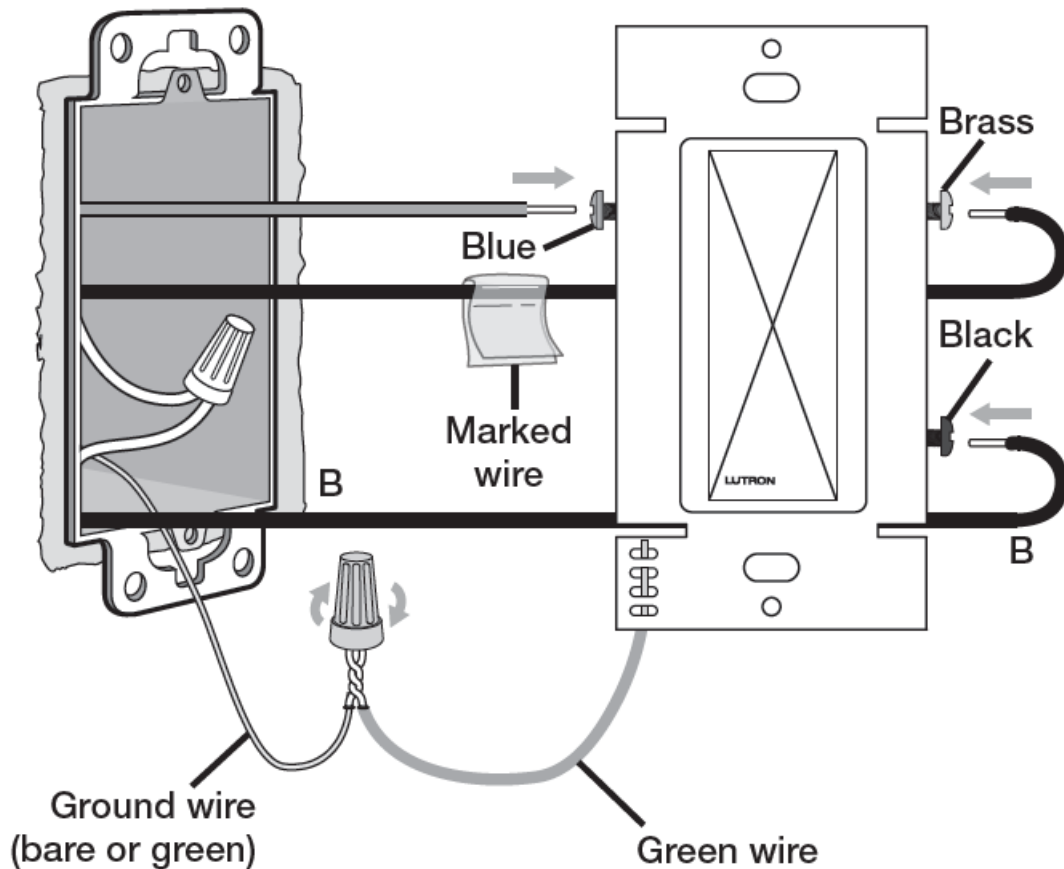
# Dimmer OR Companion Dimmer



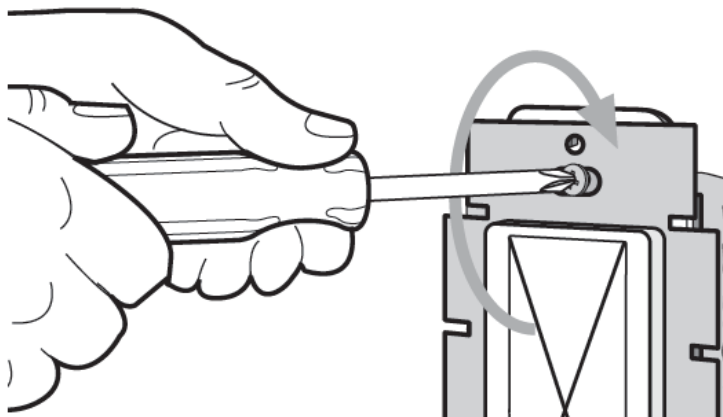
# Dimmer OR Companion Dimmer



# Dimmer OR Companion Dimmer



**Mount all devices using the provided screws**



**Turn power ON at circuit breaker**



1. Open the Front Accessible Service Switch (FASS).
2. Press and hold . Close the Front Accessible Service Switch (FASS) and continue to hold for 5 seconds.

**Note:**

The current phase selection will illuminate:

IL7 Forward-phase

IL4 Phase auto-select – Default with no neutral\*

IL1 Reverse-phase – Default with neutral

3. Press the / button to choose the desired selection.
4. Press T to exit Phase-Select mode.

- LED phase auto-select defaults to reverse-phase unless the LED load cannot operate correctly. It will then switch to forward-phase automatically. LED phase auto-select is only available when no neutral wire is connected.

### Setup for use WITH a system

**NOTE:**

If setting up as part of system, phase settings and low-end trim levels made on the dimmer will be over-written by the system software. This control can be used in a Home

Works system for control from keypads, Pico wireless controls, schedules, and more.

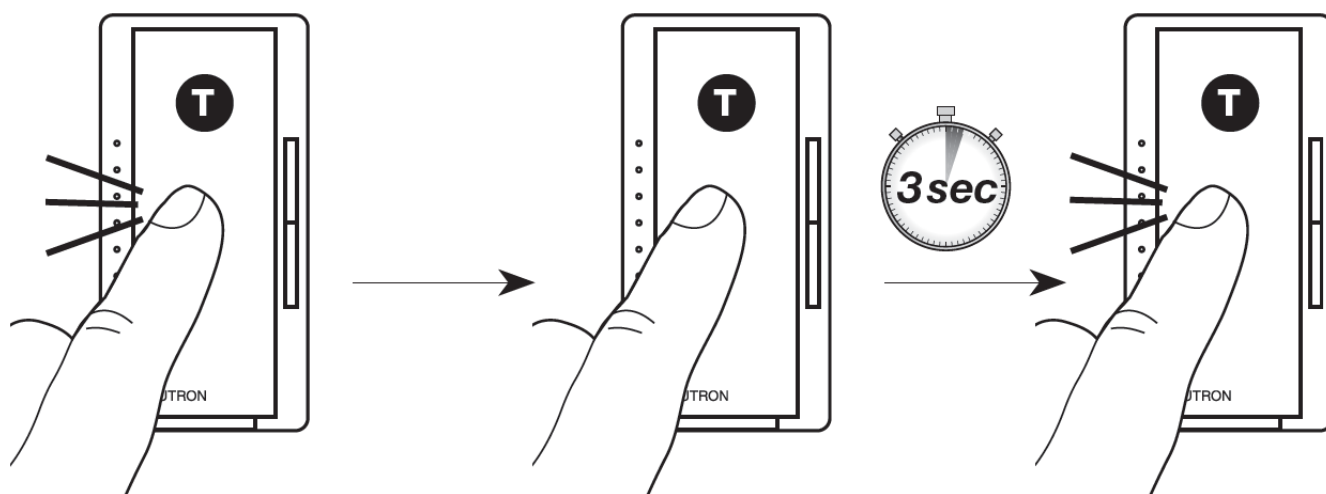
For Home Works, use the system programming software to set up the system (training is required to access the software).

### Return to Factory Settings

**NOTE:**

Resetting a device to its factory settings will remove it from the system and erase all of its programming.

- **Step 1:** Triple tap T .
- **Step 2:** Press and hold T . Continue to hold T for approximately 3 seconds until the indicator lights flash up and down.
- **Step 3:** Triple tap T . Load (light) will turn OFF and turn back ON to full intensity. This indicates a successful factory reset.



### Troubleshooting

Symptoms	Cause and Action
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LEDs do not operate well or they flicker/buzz.	<ul style="list-style-type: none"> <li>Is the load from the Lutron compatible lamp tool? Please visit <a href="http://www.lutron.com/ledfinder">www.lutron.com/ledfinder</a></li> <li>See Phase-Select Mode. • Adjust low-end trim. • Connect Neutral wire.</li> </ul>
LEDs do not dim low enough.	<ul style="list-style-type: none"> <li>Perform low-end trim adjustment in Step 7.</li> </ul>
ILs 1 and 7 are flashing.	<p>Over Voltage Protection</p> <ul style="list-style-type: none"> <li>Verify that the control is set correctly for the load. • Check Phase-Select Mode setting.</li> </ul>
Bottom three ILs 1, 2, and 3 are flashing.	<p>Shorted FET Detection</p> <ul style="list-style-type: none"> <li>Wiring error. Product may be permanently damaged. • Check wiring to be sure it matches installation instructions and wiring diagrams.</li> </ul>
All ILs are flashing.	<p>Over Current Protection Mode</p> <ul style="list-style-type: none"> <li>Check Phase-Select Mode setting. • Verify that no bulbs are blown out. • Verify that product is wired properly</li> <li>Cycle power to the unit using the Front Accessible Service Switch (FASS) to reset. <ul style="list-style-type: none"> <li>If using LED or CFL bulbs, verify that they are Lutron compatible bulbs, please visit <a href="http://www.lutron.com/ledfinder">www.lutron.com/ledfinder</a></li> </ul> </li> </ul>
Load is OFF and there is no indicator on the dimmer.	<p>Power Not Present</p> <ul style="list-style-type: none"> <li>Circuit breaker OFF or tripped. Verify that product is wired properly. • Load is not installed or connected. Dimmer must have a load to operate.</li> <li>Front Accessible Service Switch (FASS) is in the OFF position. Move Front Accessible Service Switch (FASS) to the ON position by pushing it in.</li> </ul>
	<p>Wiring Error</p> <ul style="list-style-type: none"> <li>Check wiring to be sure it matches installation instructions and wiring diagrams.</li> </ul>

Light turns ON and OFF continuously.	<p>Improper load type or less than the required minimum load</p> <ul style="list-style-type: none"> <li>Recommended minimum load is 10 W/ 10 VA or one compatible LED lamp listed at <a href="http://www.lutron.com/ledfinder">www.lutron.com/ledfinder</a> • Connect Neutral wire.</li> </ul>
Middle IL is flashing.	<p>Over Temperature Condition</p> <ul style="list-style-type: none"> <li>Load may exceed maximum load rating. • Ambient temperature may exceed maximum product rating. • Cycle power to the unit using the Front Accessible Service Switch (FASS) to reset.</li> </ul>
Dimmer IL is ON but load cannot be turned ON or cannot be turned OFF.	<p>Wiring Error</p> <ul style="list-style-type: none"> <li>Check wiring to be sure it matches installation instructions and wiring diagrams.</li> </ul>
	<p>Lamps Burned Out or Not Installed</p> <ul style="list-style-type: none"> <li>Replace or install lamps.</li> </ul>
ILs 3 and 7 are flashing.	<p>Line / Load Miswire Detected</p> <ul style="list-style-type: none"> <li>Swap wires on Black and Brass screw terminals.</li> </ul>
Lights don't turn ON/OFF from a keypad or from other remote device.	<p>Improper programming</p> <ul style="list-style-type: none"> <li>Refer to the Home Works software to ensure proper programming.</li> </ul>
	<p>Out of RF range</p> <ul style="list-style-type: none"> <li>Reposition to be within 30 ft (9 m) of an RF signal repeater.</li> </ul>

## Documents / Resources

	<p><a href="#">HOMEWORKS HQRA-PRO Architectural RF Maestro Local Controls</a> [pdf] Installation Guide</p> <p>0143, JPZ0143, HQRA-PRO Architectural RF Maestro Local Controls, HQRA-PRO, HQRD-PRO, Architectural RF Maestro Local Controls</p>
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## References

-  [Lutron: Beautiful light. Intelligent Shades. Powerful Controls](#)
-  [lutron.com/fcc-ic](#)
-  [LED Compatibility Tool | Lutron](#)
-  [Lutron Support Center | Lutron](#)
-  [How to Install a Dimmer Switch | Dimmer Switch Wiring | Lutron Web Tools](#)

Manuals+.