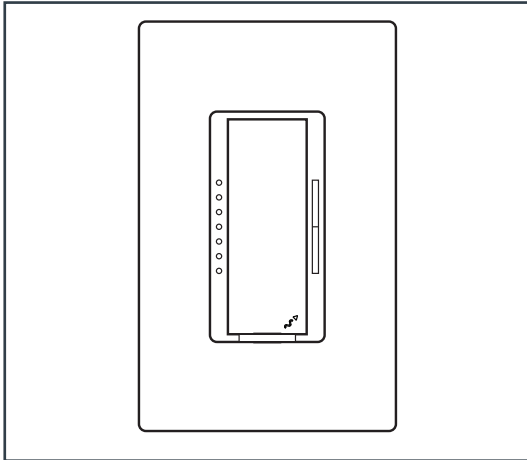


MAESTRO® WIRELESS WALLBOX DIMMER (WBD-MLV120, WBD-ELV120)



APPLICATIONS

- Small offices
- Conference rooms
- Lounges
- Classrooms

SPECIFICATIONS

ELECTRICAL	
Regulatory Approvals	<ul style="list-style-type: none"> • UL_® Listed • cUL_® Listed (WBD-MLV120) • CSA Certified (WBD-ELV120) • FCC Approved. Complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules • Industry Canada Certified • The following model numbers have been tested and found compliant with UL 2043 for use in air handling spaces: WBD-MLV120
Power	• Operating Voltage: 120V \ominus 50/60 Hz
SYSTEM	
System Communication and Capacity	<ul style="list-style-type: none"> • Wireless controls communicate with the wireless switches and wireless sensors through radio frequency (RF) • Receives wireless inputs from up to 10 wireless switches, 10 occupancy / vacancy sensors and 1 daylight sensor • Wallbox dimmers must be located within 60ft (18m) line-of-sight or 30ft (9m) through walls, of wireless sensors and wireless switches
All RF Local Controls	<ul style="list-style-type: none"> • Tested to withstand electrostatic discharge without damage or memory loss, in accordance with IEC 61000-4-2 • 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 • Controls always operate locally and do not require system control • Uses conventional 3-way and 4-way wiring • Requires a one-gang U.S. wallbox; 3.5in (89mm) deep recommended, 2.25in (57mm) deep minimum
ENVIRONMENTAL	
Ambient Operating Temp	32°F to 104°F (0°C to 40°C)
Relative Humidity	Maximum 90% non-condensing; indoor use only

OVERVIEW

The AirLink™ wireless solution incorporates load controls, wireless sensors, and wireless switches, which provide a system that delivers energy savings, convenience, and ease of installation.

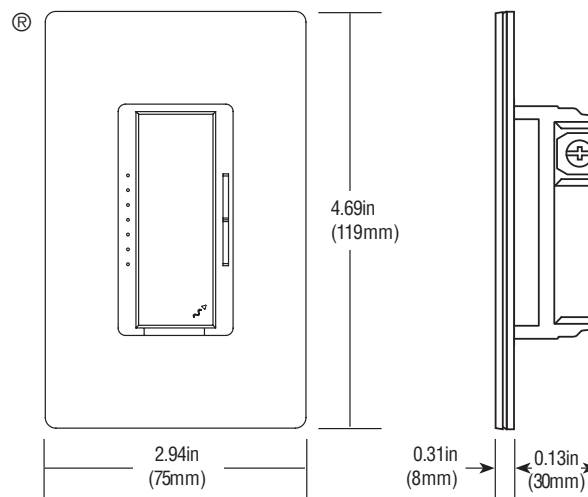
Maestro wireless wallbox dimmers use Lutron patented Clear Connect RF Technology, which enables wireless communication with wireless sensors and switches for light control and general switched loads.

These products are also compatible with the wireless hub which enables a simple setup process using a standard web browser on any Wi-Fi enabled phone, tablet or computer. It also enables control and monitoring of all wireless devices. The wireless hub can be added at any time. System reprogramming required.

FEATURES

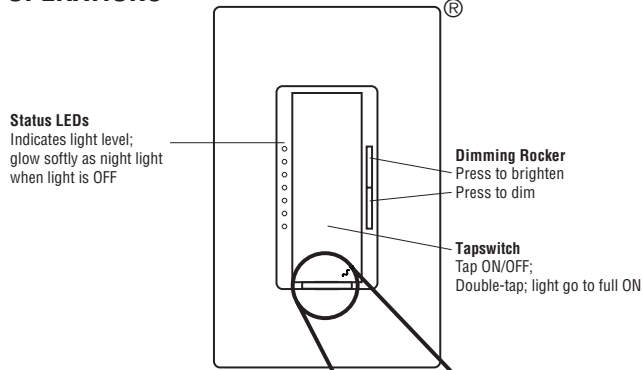
- The AirLink™ wireless solution provides dimming/switching of multiple load types, occupancy/vacancy sensing, daylight harvesting, and high-end trim
- Lutron patented Clear Connect RF Technology works through walls and floors
- Incorporates advanced features such as fade ON / fade OFF, high-end trim, and rapid full-ON
- Controls include Front Accessible Service Switch (FASS™) for safe lamp replacement
- Two-wire dimmers and switches available for retrofit applications
- Power failure memory: If power is interrupted, the control will return to its previously set level prior to interruption
- On a single-tap, lights fade UP or DOWN.
- On a double-tap, lights go to full ON.
- When ON, press and hold to engage 20-second fade to OFF.
- Light levels can be fine-tuned by pressing and holding the dimming rocker until the desired light level is reached.
- Two-wire dimmers available.

DIMENSIONS



MAESTRO[®] WIRELESS WALLBOX DIMMER (WBD-MLV120, WBD-ELV120)

OPERATIONS



FASS[™] Front Accessible Service Switch

Important Notice: To service load, remove power by pulling the FASS out completely on the Dimmer. After servicing load, push the FASS back in fully to restore power to the control.

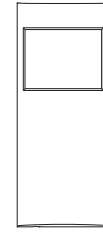


RECEIVING DEVICES

Sensors



Wireless occupancy sensors

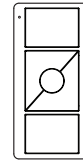


Wireless hall/wall/corner-mount occupancy and vacancy sensors



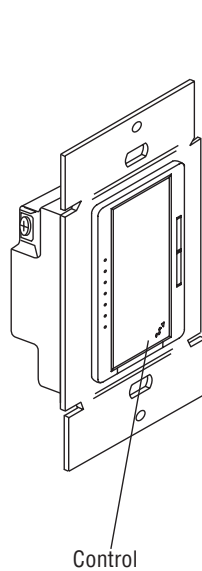
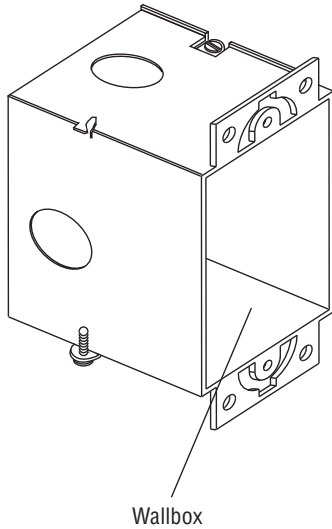
Wireless daylight sensors

Switches



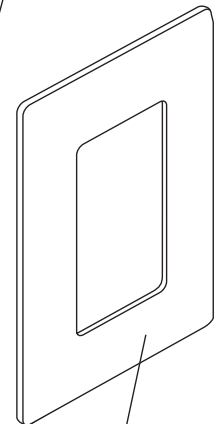
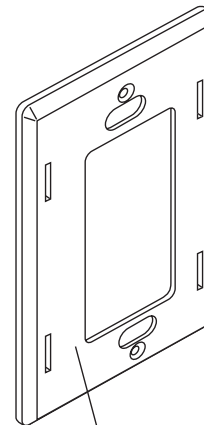
Wireless switches

MOUNTING



Control Mounting Screws

Adapter Mounting Screws



Wallplate & Wallplate adapter sold separately



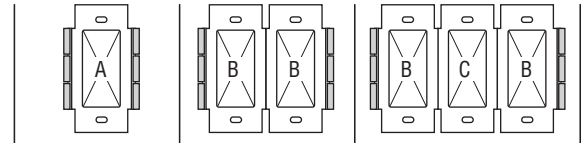
MAESTRO® WIRELESS WALLBOX DIMMER (WBD-MLV120, WBD-ELV120)

GANGING AND DERATING

When combining controls in the same wallbox, derating is required (see below for Load Type and Capacity tables)

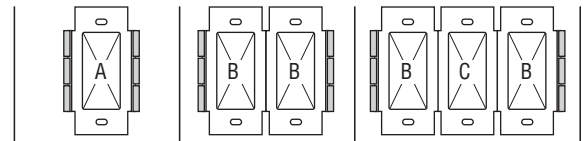
DIMMER LOAD TYPE AND CAPACITY

No Neutral Required



Control	Voltage	Load Type	Minimum Load	Maximum Load		
				A. Not Ganged	B. End of Gang	C. Middle of Gang
WBD-MLV120 ^{1,2}	120V \ominus	CFL/LED, Incandescent	50 W (see lamp list)	See Mixing Lamp Types below		
		MLV ²	50 W / VA	450 W / 600 VA	400 W / 500 VA	300 W / 400 VA

Neutral Required



Control	Voltage	Load Type	Minimum Load	Maximum Load		
				A. Not Ganged	B. End of Gang	C. Middle of Gang
WBD-ELV120	120V \ominus	ELV	5 W	600 W	500 W	400 W

NOTE: do not mix ELV and MLV load types on a single control

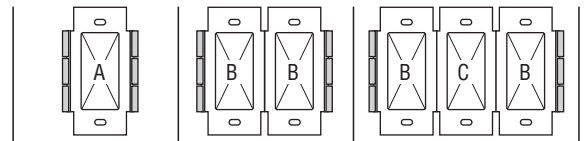
¹ Dimmer Load Type:

- MRF2S-6CL is designed for use with permanently-installed incandescent, CFL, LED, or tungsten halogen only.

² Low-Voltage Applications:

- Use MRF2S-6CL with magnetic (core and coil) low-voltage transformers only. Not for use with electronic (solid-state) low-voltage transformers.

Do not remove outside fins on ends of ganged controls (shaded area below)



MIXING LAMP TYPES

Mixing lamp types (using a combination of CFL / LED, and Incandescent / Halogen bulbs) and ganging with other dimmers or electronic switches may reduce maximum wattage, as shown. Example: If fins from one side of dimmer are removed and you have two 24 W bulbs installed (total CFL Wattage = 48 W), you may add up to 300 W of incandescent or halogen lighting.

Total CFL/LED Wattage	Total Incandescent / Halogen Wattage		
	A. Not Ganged	B. End of Gang	C. Middle of Gang
WBD-MLV			
0 W	+ 50 W – 600 W	OR 50 W – 500 W	OR 50 W – 400 W
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
Maximum Load			
Total MLV Wattage	600 W	500 W	400 W

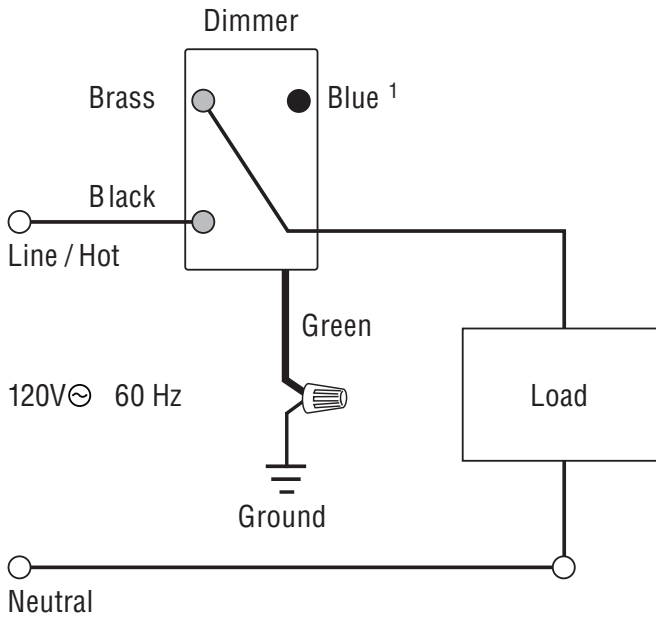
EXAMPLE: If a dimmer is installed in location “B” above and there are two 24 W CFL bulbs installed (Total CFL Wattage = 48 W), you may add up to 300 W of incandescent or halogen lighting



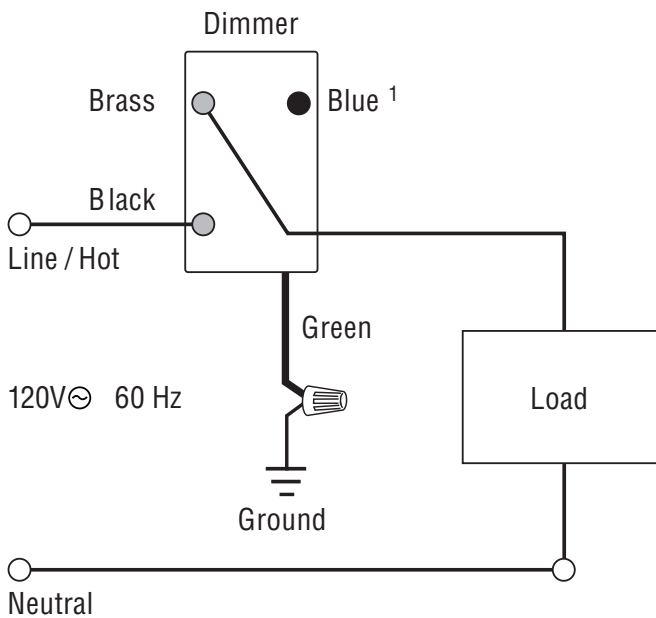
MAESTRO® WIRELESS WALLBOX DIMMER (WBD-MLV120, WBD-ELV120)

WIRING DIAGRAM

Single-location Dimmer Installation without Neutral – WBD-MLV120



Single-location Dimmer Installation with Neutral – WBD-ELV120



¹ When using controls in single location installations, tighten the blue terminal without any wires attached. Do not connect the blue terminal to any other wiring or to ground

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