

\_\_\_\_\_ Project name  
 \_\_\_\_\_ Prepared by  
 / / Date



## AirLink™ Maestro® Wireless Wallbox Dimmer

enabled by Lutron®



Catalog #: **WBD XLV120**  
 Part #: **632720 (for MLV models)**  
 or **632726 (for ELV models)**

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.

### Applications



Small offices



Conference rooms



Classrooms



Lounges

### Features

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

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

- 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 (FASSTM) for safe lamp replacement
- Two-wire dimmers and switches available for retrofit
- 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

### Specifications

#### Regulatory Approvals

- 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

### Certifications & Affiliations





**Specifications Continued**

**System Communication & Capacity**

- 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

**Power and Performance**

- Operating voltage: 120V $\ominus$  50/60 Hz

**Environmental**

- Ambient operating temp: 32°F to 104°F (0°C to 40°C)
- Relative humidity: maximum 90% non-condensing; indoor use only

**All RF Local Controls**

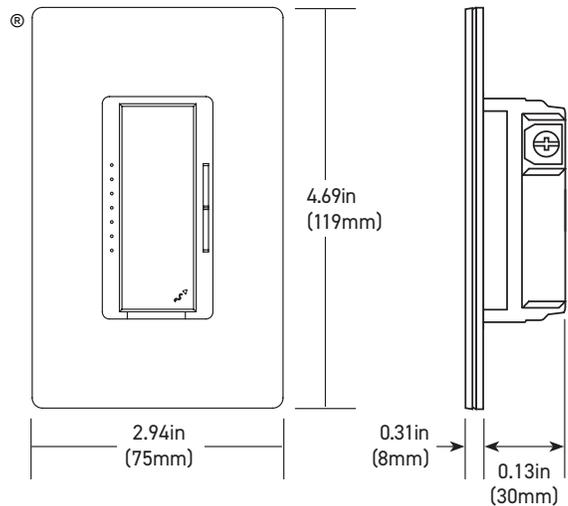
- Tested to withstand electrostatic discharge without damage or memory loss, in accordance with IEC 61000-4-2
- Tested to withstand surge voltages without damage or loss of operation, in accordance with IEEE C62.41-1991 Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits
- Controls 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

**Warranty**

- 1-year Limited Warranty

**Dimensions**



**Ordering Information**

All switches and wall kits available in White (WHT/WH), Ivory (IV), and Light Almond (LA) Example: 632720WHT or WBD MLV120 WH

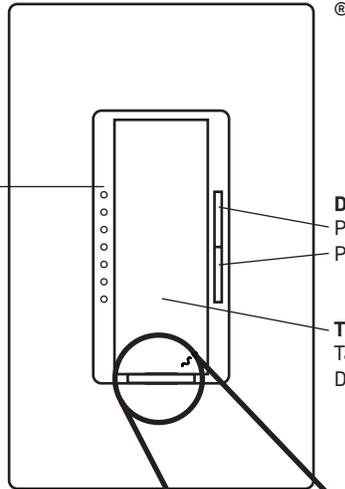
Part #	Catalog #	Description
632720WHT	WBD MLV120 WH	Maestro® Wireless Wallbox Dimmer — 1000 INC HAL Magnetic Low Voltage 120V in White
632720IV	WBD MLV120 IV	Maestro® Wireless Wallbox Dimmer — 1000 INC HAL Magnetic Low Voltage 120V in Ivory
632720LA	WBD MLV120 LA	Maestro® Wireless Wallbox Dimmer — 1000 INC HAL Magnetic Low Voltage 120V in Light Almond
665155WHT	WBD ELV120 WH	Maestro® Wireless Wallbox Dimmer — 600 W Electric Low Voltage 120V in White
665155IV	WBD ELV120 IV	Maestro® Wireless Wallbox Dimmer — 600 W Electric Low Voltage 120V in Ivory
665155LA	WBD ELV120 LA	Maestro® Wireless Wallbox Dimmer — 600 W Electric Low Voltage 120V in Light Almond



**Operations**

**Status LEDs**

Indicates light level;  
glow softly as night light  
when light is OFF



**Dimming Rocker**

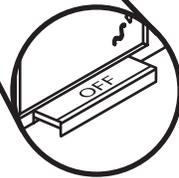
Press to brighten  
Press to dim

**Tapswitch**

Tap ON/OFF;  
Double-tap; light go to full ON

**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.



**FASS**

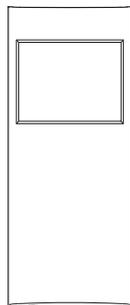
Front Accessible  
Service Switch

**Receiving Devices**

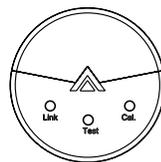
**Sensors**



Wireless  
occupancy  
sensors

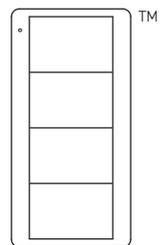
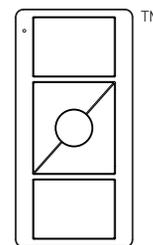


Wireless hall/wall/  
corner-mount  
occupancy and  
vacancy sensors



Wireless  
daylight sensors

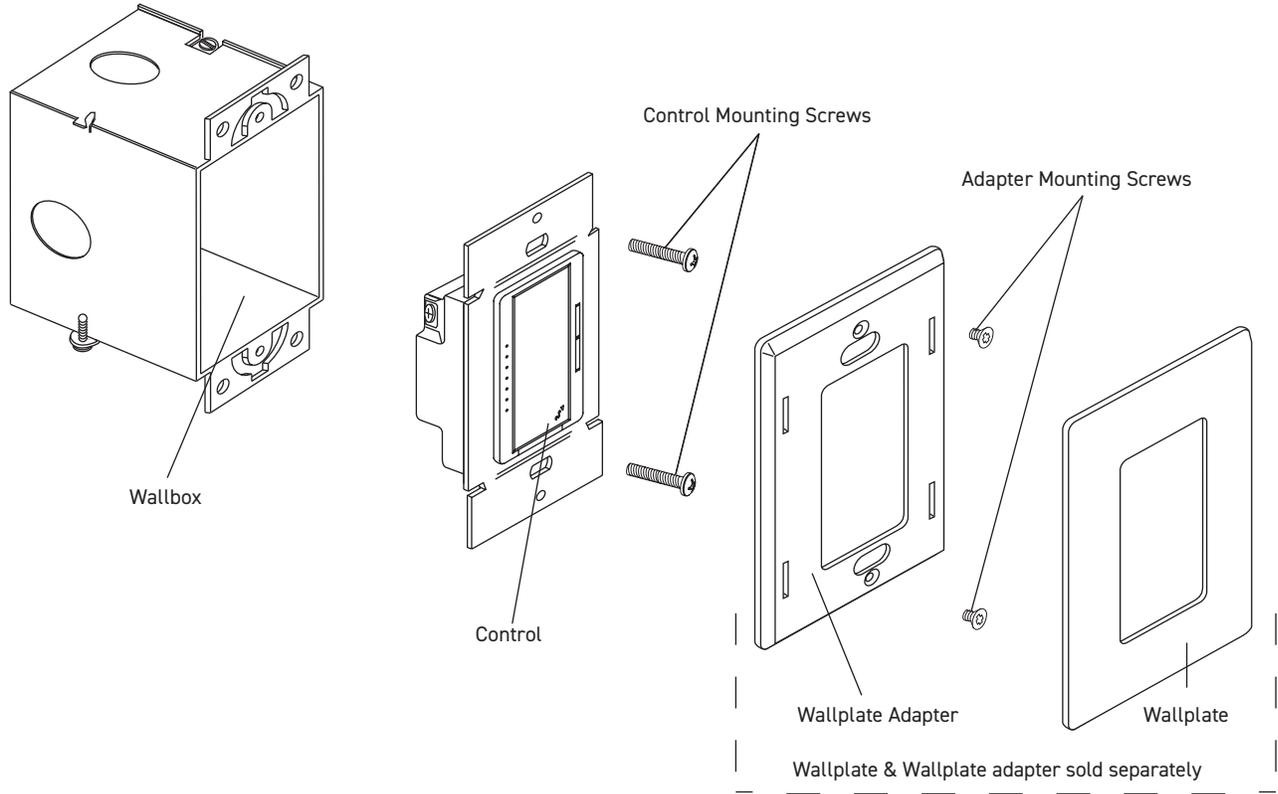
**Switches**



Wireless switches

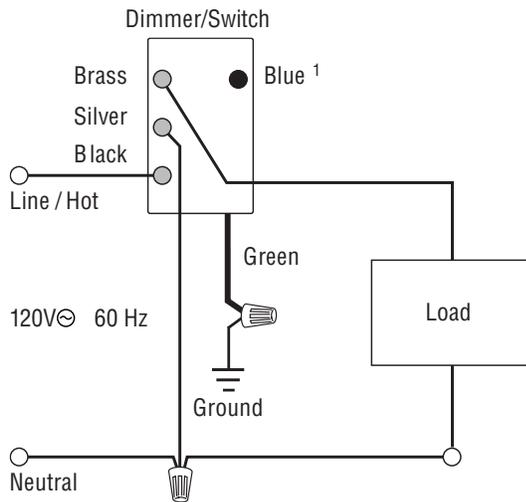


### Mounting

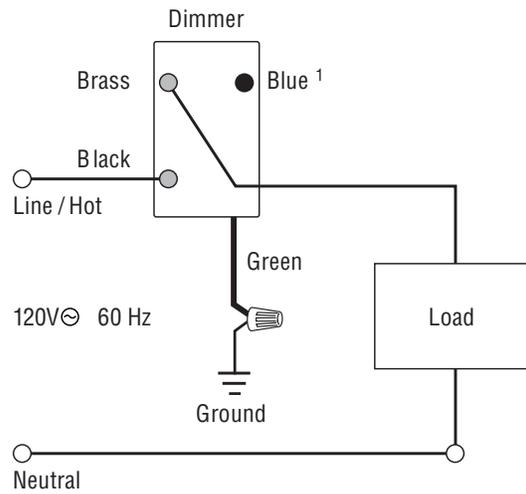


### Wiring

Single-location Dimmer Installation without Neutral - WBD MLV120



Single-location Dimmer Installation with Neutral - WBD ELV120



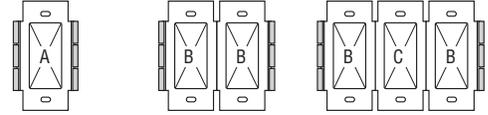
<sup>1</sup> When using controls in single location installations, tighten the blue terminal without any wires attached. Do not connect the blue terminal to any other wiring or to ground



### Ganging and Derating

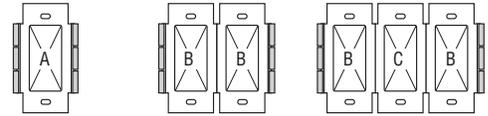
When combining controls in the same wallbox, derating is required (see below for Load Type and Capacity tables)

#### Dimmer Load Type and Capacity



#### No Neutral Required

Control	Voltage	Load Type	Min. Load	Max. Load		
				A. Not Ganged	B. End of Gang	C. Middle of Gang
WBD MLV120 <sup>1,2</sup>	120V ⊖	MLV <sup>2</sup>	50 W/VA	450 W/600 VA	400 W/500 VA	300 W/400 VA
		CFL/LED, Incandescent	50 W (see lamp list)	See mixing lamps below		

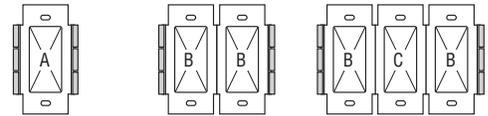


#### Neutral Required

Control	Voltage	Load Type	Min. Load	Max. Load		
				A. Not Ganged	B. End of Gang	C. Middle of Gang
WBD ELV120 <sup>1,2</sup>	120V ⊖	ELV	5 W	600 W	500 W	400 W

#### 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
<b>WBD MLV</b>			
0 W	+ 50 W – 600 W	or 50 W – 500 W	or 50 W – 400 W
1 W – 2.5 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
50 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>Max. Load</b>		
<b>Total MLV Wattage</b>	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



**AirLink™**  
enabled by Lutron®

# Maestro® Wireless Wallbox Dimmer

## The AirLink System

### Wireless controls & sensors



Wireless remotes & switches



Occupancy/Vacancy & Daylight sensors



AirLink-integrated Fixtures

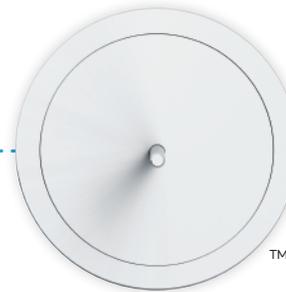


AirLink-compatible Fixtures



Plug load controllers

### Centralized control & integration



Wireless hub

Wired / Ethernet



Demand Response



BACnet integration

### Simple-to-use software



Lighting control web app

## Contact LSI Controls



**Sales**

controls.sales@lsi-industries.com



**Support**

controls.support@lsi-industries.com  
1 (800) 436-7800 (support, option 8)



**More information**

For more information on AirLink, visit our website at [www.lsi-airlink.com/airlink](http://www.lsi-airlink.com/airlink)