

## HomeWorks Wired Maestro Local Controls

HomeWorks Wired Maestro local controls function much like standard dimmers and switches, but can be controlled as part of the whole-house 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.

Wired Maestro dimmers incorporate advanced features such as fade on/fade off, long fade off, and rapid full on. In addition, the local controls may be programmed similar to a keypad button press with single and double tap functions, turning multiple lights on or off.

Wired Maestro local controls include a Front Accessible Service Switch (FASS™) for safe lamp replacement. Wired Maestro local controls install in single-pole, 3-way, or 4-way applications.

### Model Numbers

#### Dimmers

##### Incandescent/Magnetic Low-voltage

HWD-6D-XX 600 W/600 VA Dimmer  
 HWD-6ND-XX 600 W/600 VA Neutral Dimmer  
 HWD-10D-XX 1000 W/1000 VA Dimmer  
 HWD-10ND-XX 1000 W/1000 VA Neutral Dimmer

##### Electronic Low-voltage

HWD-5NE-XX 500 W Neutral Dimmer

#### Fan Speed Control

##### Single ceiling paddle fan only

HWD-2ANF-XX 2 A Neutral Fan Speed Control

#### Switch

##### Lighting and motor loads

HWD-8ANS-XX 8 A Lighting, 5.8 A Motor  
 Neutral Electronic Switch

#### Accessory Controls

HD-RD-XX Accessory Dimmer  
 HD-RS-XX Accessory Switch

“XX” in the model number represents color/finish code.

Dimmer



Fan Speed Control



Accessory Dimmer



Switch



Accessory Switch



Job Name:	Model Numbers:
Job Number:	

## Colors and Finishes

### Gloss Finishes



White  
WH



Ivory  
IV



Hot  
HT



Merlot  
MR



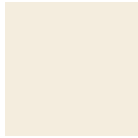
Plum  
PL



Turquoise  
TQ



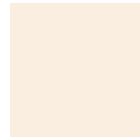
Almond  
AL



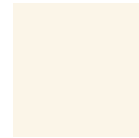
Light  
Almond  
LA



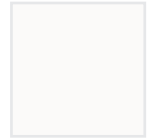
Taupe  
TP



Eggshell  
ES



Biscuit  
BI



Snow  
SW



Gray  
GR



Brown  
BR



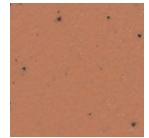
Palladium  
PD



Midnight  
MN



Sienna  
SI



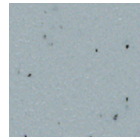
Terracotta  
TC



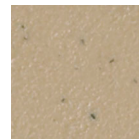
Black  
BL



Greenbriar  
GB



Bluestone  
BG



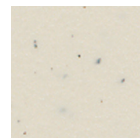
Mocha  
Stone  
MS



Goldstone  
GS



Desert Stone  
DS



Stone  
ST



Limestone  
LS

- 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- CG-CK-1

Satin Finishes - SC-CK-1

### Metal Finish (wallplate only)



Stainless  
Steel SS

When using Stainless Steel wallplates, it is recommended to order the controls in Black (BL) or Midnight (MN).

Job Name:	Model Numbers:
Job Number:	

## Load Type and Capacity

Control	Load Type	Minimum Load	Not Ganged	End of Gang	Middle of Gang	Neutral Connection
HWD-6D <sup>1</sup>	Incand.	50 W	600 W	500 W	400 W	—
	MLV <sup>2</sup>	50 W/VA	450 W/ 600 VA	400 W/ 500 VA	300 W/ 400 VA	
HWD-6ND <sup>1,5</sup>	Incand.	10 W	600 W	500 W	400 W	YES
	MLV <sup>2</sup>	10 W/VA	450 W/ 600 VA	400 W/ 500 VA	300 W/ 400 VA	
HWD-10D <sup>1</sup>	Incand.	50 W	1000 W	800 W	650 W	—
	MLV <sup>2</sup>	50 W/VA	800 W/ 1000 VA	600 W/ 800 VA	500 W/ 650 VA	
HWD-10ND <sup>1,5</sup>	Incand.	10 W	1000 W	800 W	650 W	YES
	MLV <sup>2</sup>	10 W/VA	800 W/ 1000 VA	600 W/ 800 VA	500 W/ 650 VA	
HWD-5NE	ELV/Incand.	10 W	500 W	450 W	400 W	YES
HWD-8ANS <sup>3</sup>	Lighting	10 W	8 A	6.5 A	5 A	YES
	Motor	0.083 A	1/4 HP 5.8 A	5.8 A	5 A	
HWD-2ANF <sup>4</sup>	Ceiling Fan	0.083 A	2 A	2 A	2 A	YES

<sup>1</sup> Dimmer Load Type: -6D, -6ND, -10D and -10ND are designed for use with permanently installed incandescent, magnetic low-voltage, or tungsten halogen only. Do not install dimmers to control receptacles or motor-operated appliances.

<sup>2</sup> Low-Voltage Applications: Use -6D, -6ND, -10D and -10ND with magnetic (core and coil) low-voltage transformers only. Not for use with electronic (solid-state) low-voltage transformers. To control electronic low-voltage transformers, use the HWD-5NE 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 quickly as possible.
- Use transformers that incorporate thermal protection or fused transformer primary windings to prevent transformer failure due to overcurrent.

<sup>3</sup> Switch Load Type: -8ANS is designed for use with all permanently installed lighting loads and with motor loads up to 1/4 HP (5.8 A).

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

**DO:**

- 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:**

- Do not use to control fans that use shaded-pole motors (i.e. bath exhaust fans).
- Do not use to control fans that have integrated fan speed controls (i.e. 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 (i.e. light kit).

\* See Application Note # 217 — "HomeWorks® Maestro® Controls Reference" for more information.

<sup>5</sup> Can control the following power boosters/load interfaces: Power Booster (NGRX-PB-WH), Electronic Low-Voltage Interface (ELVI-1000), Fluorescent Interface (GRX-FDBI-16A), Hi-Power® Boosters (HP-2, HP-4, HP-6), 0-10 Volt Interface (GRX-TVI), Minimum Load Interface (LUT-LBX).

Job Name:	Model Numbers:
Job Number:	

## Specifications

### Regulatory Approvals

- UL Listed and CSA Certified.
- NOM Certified.

### Power

Operating voltage:  
120 V~ 50/60 Hz

### Key Design Features

#### Dimmers

- On a single-tap, lights fade ON or OFF.
- On a double-tap, lights go to full ON.
- When ON, press and hold to engage long 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.
- Electronic low voltage dimmer available.

#### Switch

- On a single-tap, lights or motors turn ON or OFF.
- Requires a neutral connection.

#### Fan Speed Control

- On a single-tap, fan turns ON or OFF.
- Fan speeds can be selected by pressing and holding the 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 (i.e. bath exhaust fans)
- Provides four (4) quiet speeds plus OFF.
- Not for use with fans that have integrated fan speed and/or light control modules.
- Requires a neutral connection.

#### All Wired 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 operate locally and do not require system control.
- Power failure memory: should power be interrupted, the control will return to its previously set level prior to the interruption when power is restored.
- Uses conventional 3-way and 4-way wiring.
- Multiple location control from Dimmer/Switch/Fan Speed Control and up to 9 Remote Dimmer(s)/Switch(es).
- 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.
- Supports color change kits (except -5NE).
- Requires a 1-gang U.S. wallbox. 3½ in (89 mm) deep recommended, 2¼ in (57 mm) deep minimum.

### System Communications and Capacity

- Wired Local Controls are wired to a *HomeWorks* Dimmer Hub (HWI-H48). One pair twisted shielded 22 AWG to 18 AWG (0.5 mm<sup>2</sup> to 1.0 mm<sup>2</sup>) NEC® Class 2/IEC PELV wiring.
- Each *HomeWorks* Dimmer Hub (HWI-H48) is capable of directly controlling up to 48 Wired *Maestro* Local Controls. Up to 8 Wired Local Controls may be wired to a single bus on the HWI-H48. Refer to Class 2/PELV Wiring.

### Environment

- Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C), 0%-90% humidity, non-condensing. Indoor use only.

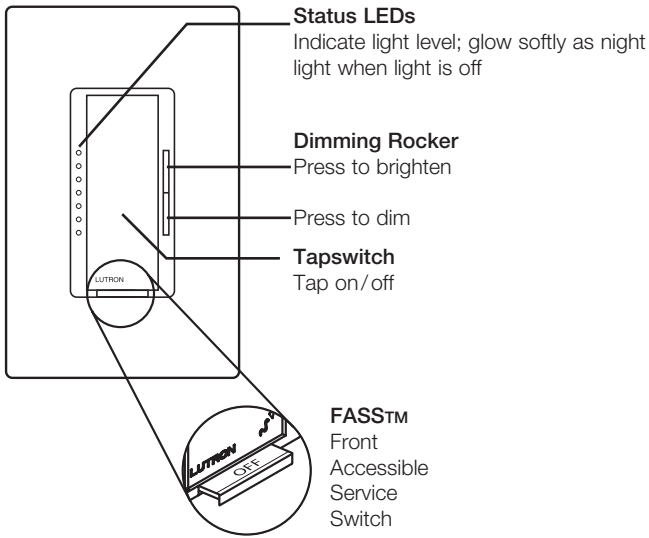
### Warranty

- 8 Year Limited Warranty.  
Visit <http://www.lutron.com/resiinfo>

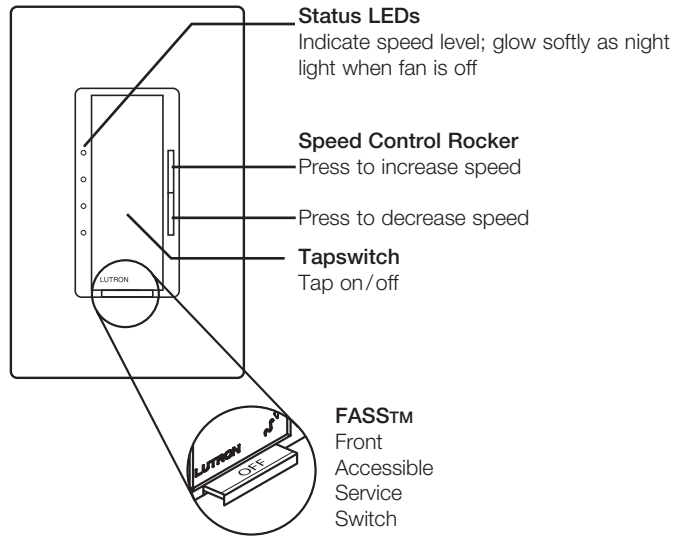
Job Name:	Model Numbers:
Job Number:	

### Operation

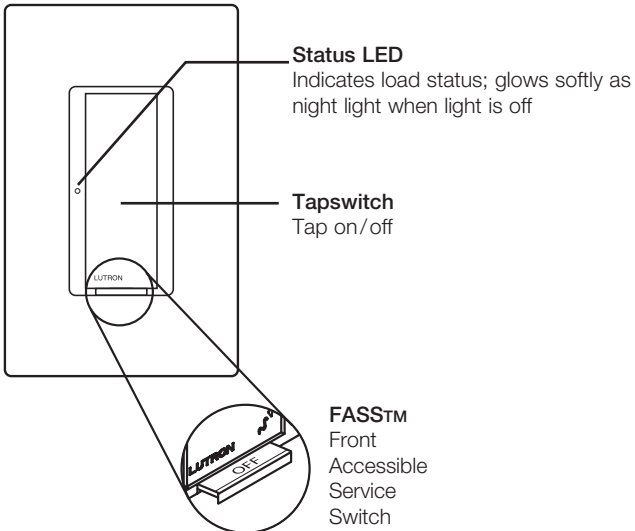
Dimmer



Fan Speed Control

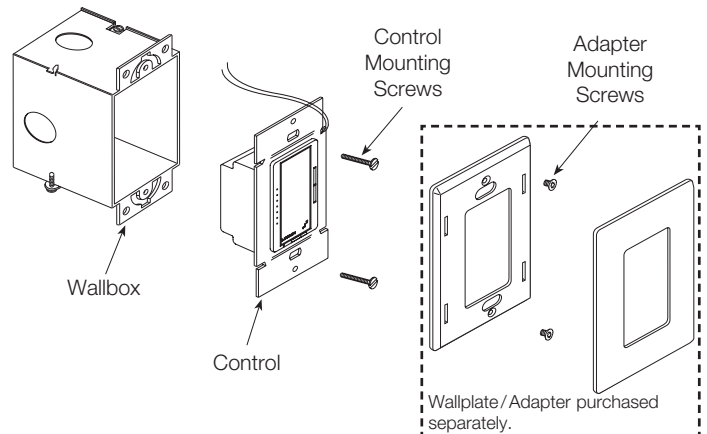


Switch



**IMPORTANT NOTICE:**  
**FASS** - Front Accessible Service Switch  
To replace bulb or clean fan, remove power by pulling the FASS switch out fully (or slide to the left on the -5NE) on both the Dimmer/Fan Speed Control and Remote Dimmer(s). After replacing bulb, push the FASS switch back in fully (slide to the right on the -5NE) to restore power to the control.

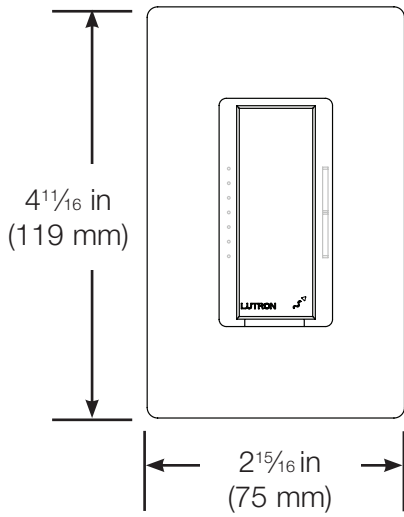
### Mounting



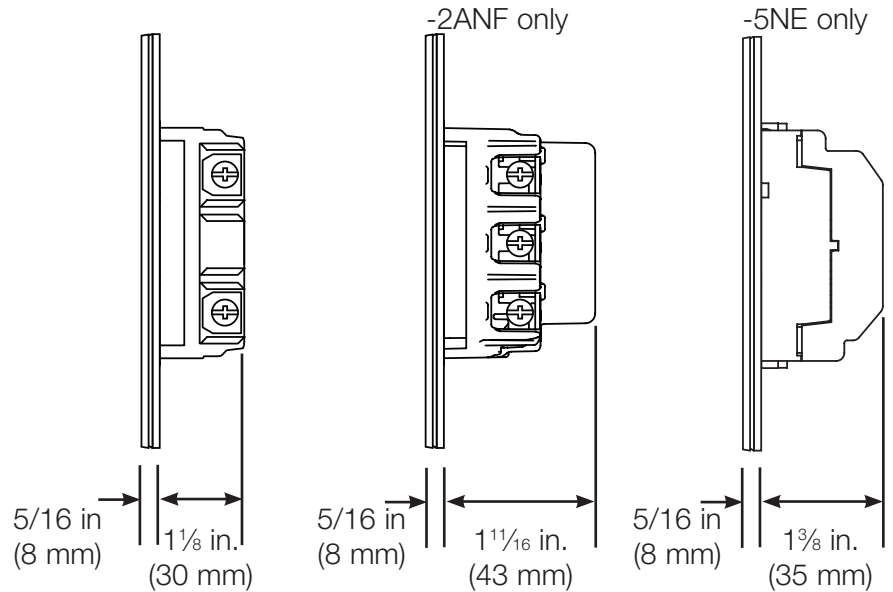
Job Name:	Model Numbers:
Job Number:	

## Dimensions

Front View



Side View



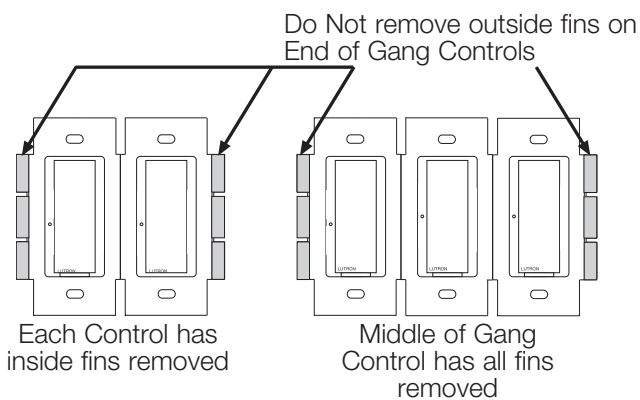
## Ganging and Derating

When ganging with other controls in the same wallbox, derating is required. See Load Type and Capacity chart. Only -8ANS controls have fins that need to be removed for multigang installations. No other controls have fins, but they must still be derated in multigang installations.

## Terminal/Wire Color

The HWD-5NE dimmer does not have terminals—it has wires. Refer to the chart below for wire color equivalents when viewing the wiring diagrams for the -5NE.

Terminal Color	-5NE Wire Color
Black	Black
Brass	Yellow
Silver	White
Blue	Blue

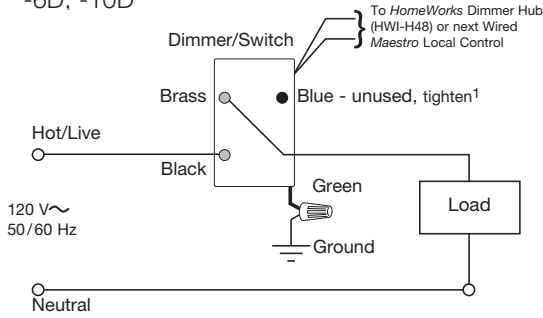


Job Name:	Model Numbers:
Job Number:	

## Wiring Diagrams

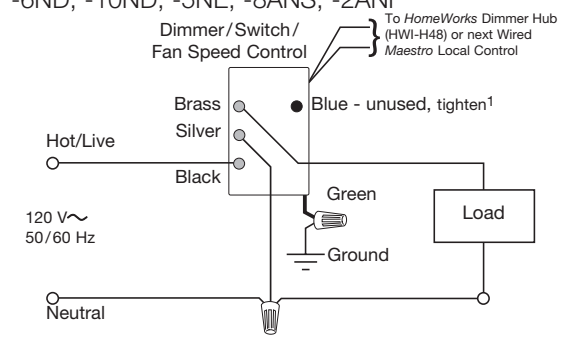
### Single Location Installation

-6D, -10D



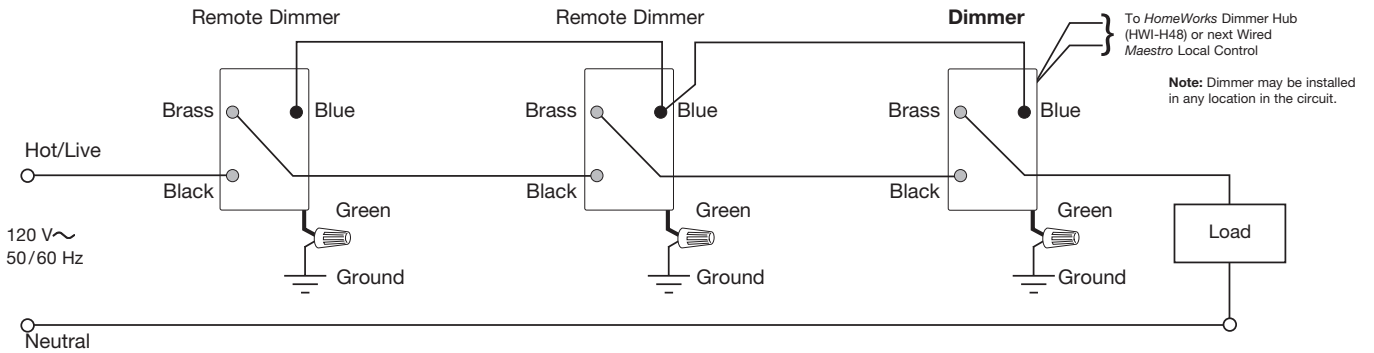
### Single Location Installation with Neutral

-6ND, -10ND, -5NE, -8ANS, -2ANF



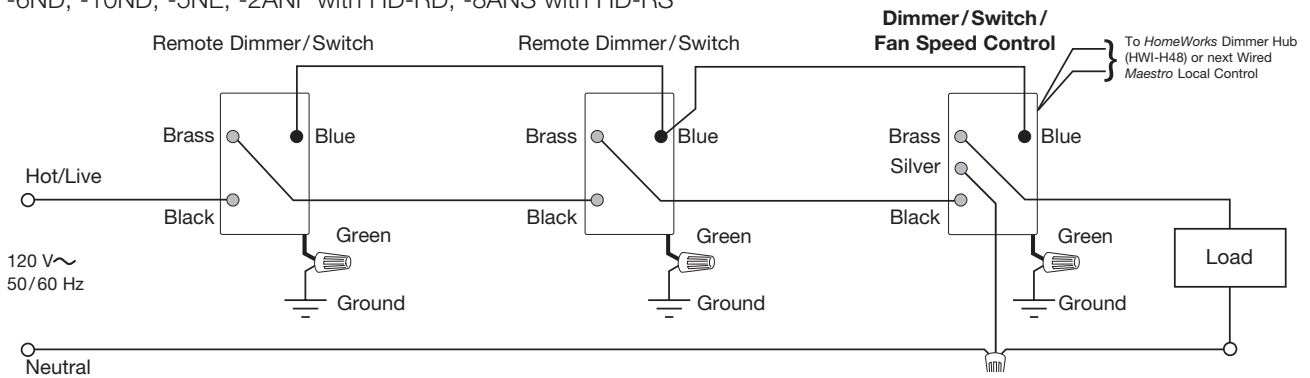
### Multi-Location Installation<sup>2</sup>

-6D, -10D with HD-RD



### Multi-Location Installation with Neutral<sup>2,3</sup>

-6ND, -10ND, -5NE, -2ANF with HD-RD; -8ANS with HD-RS



<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.

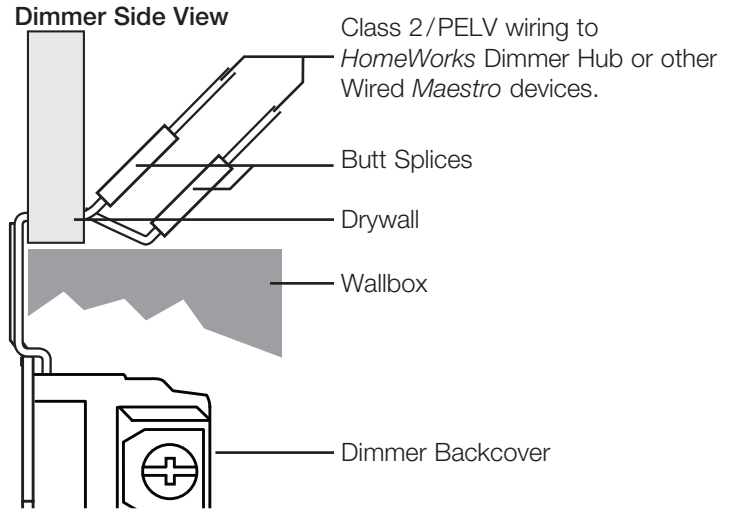
<sup>2</sup> Up to 9 HomeWorks Maestro Remote Dimmers/Switches may be connected to the HomeWorks Wired Maestro Dimmer/Switch/Fan Speed Control. Total blue terminal wire length may be up to 250 ft. (76 m).

<sup>3</sup> Neutral wire Dimmers/Switches/Fan Speed Controls must be connected on the Load side of a multi-location installation.

Job Name:	Model Numbers:
Job Number:	

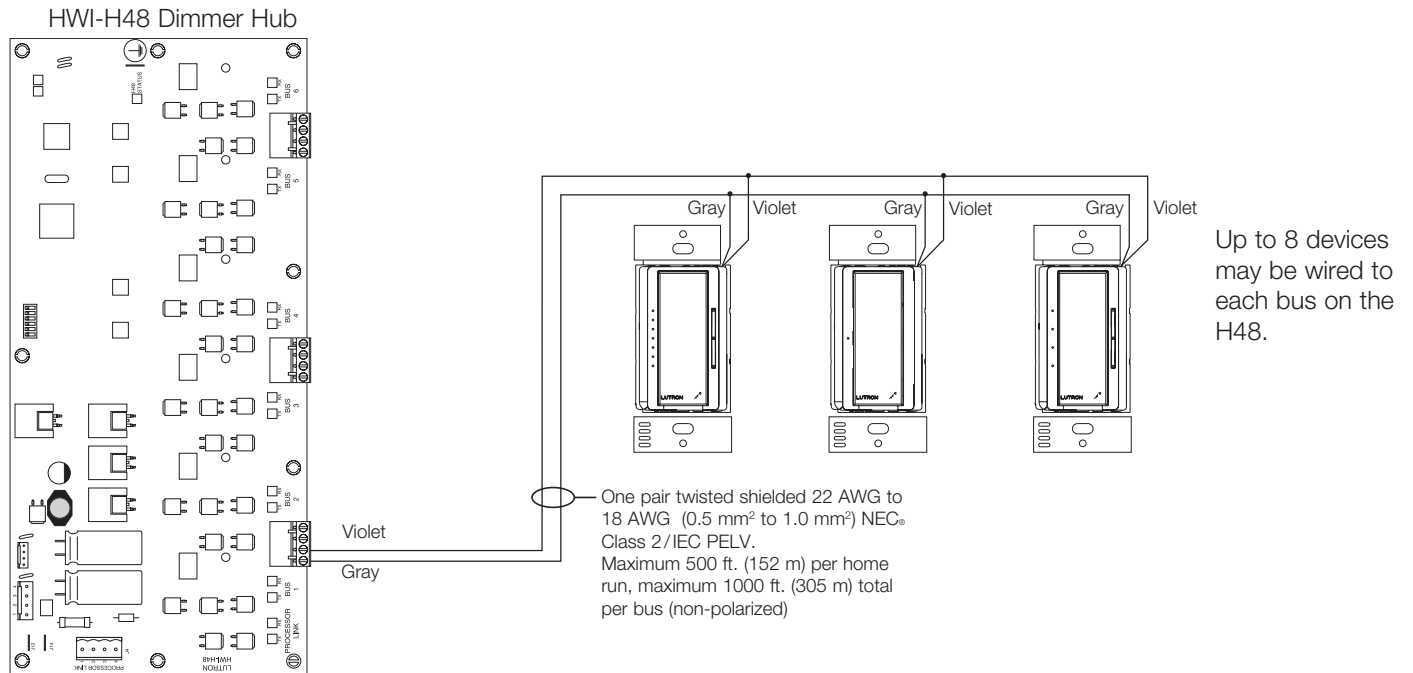
## Class 2/PELV Wiring

Dimmer communications wiring may be in a daisy-chain, star, or t-tap configuration. Each home run on a bus may be up to 500 ft. (152 m) and may contain up to 8 devices. The total length of wire on each bus (all home runs) may be up to 1000 ft. (305 m). Up to 48 *HomeWorks* Wired *Maestro* Local Controls may be wired to the *HomeWorks* Dimmer Hub (HWI-H48). Up to four HWI-H48s may be placed on each processor link configured as an H48 link in the *HomeWorks* software.



## Class 2/PELV Wire Type

One pair twisted shielded 22 AWG to 18 AWG (0.5 mm<sup>2</sup> to 1.0 mm<sup>2</sup>) NEC® Class 2/IEC PELV wiring.



Job Name:	Model Numbers:
Job Number:	