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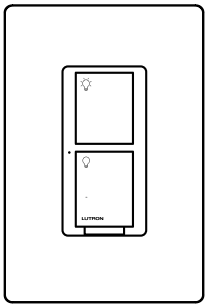
# Caséta® Wireless Load Controls

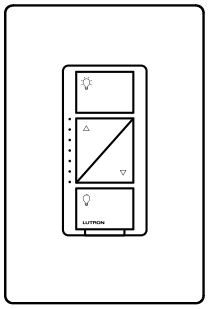
The Caséta® Wireless family of Dimmers and Switches can be controlled directly and remotely when paired with Pico® Remote Controls providing a system that delivers convenience and ease of installation.

Caséta® Wireless Dimmers and Switches use Lutron® patented Clear Connect® RF Technology which enables wireless communication with Pico® Remote Controls and the Lutron® Smart Bridge and Smart Bridge PRO.

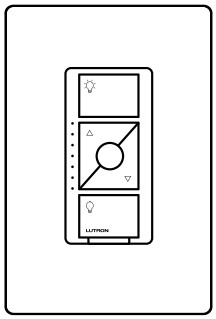
Caséta® Wireless
In-Wall Switch



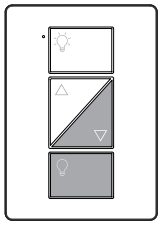
Caséta® Wireless
In-Wall Dimmer



Caséta® Wireless
ELV+ Dimmer



Caséta® Wireless
Plug-In Lamp Dimmer



## Features

- Works with Pico® Remote Control
- Works with the Lutron® App (via a Smart Bridge or Smart Bridge PRO)[1]
- Lutron® patented Clear Connect® RF Technology works through walls and floors
- Includes Front Accessible Service Switch (FASS™) for safe lamp replacement
- Works with Lutron® Radio Powr Savr™ Occupancy and Vacancy Sensors in standalone applications (sensors do not work with Smart Bridge or Smart Bridge PRO)

Note: Certain models or load types will require a neutral connection. (see Load Types and Capacity sections)

[1] The Lutron® App is required for setup and usage with the Smart Bridge and Smart Bridge PRO. The Lutron® App is compatible with iOS® devices version 8.0 or later and Android™ devices 4.0 or later.
iOS is a registered trademark of Cisco in the U.S. and other countries and is used under license.
Android is a trademark of Google Inc.



| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

# Specifications

## Regulatory Approvals

- cULus Listed
- NOM Certified
- FCC Approved. Complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules
- Industry Canada Certified
- IFTEL Certified
- NEMA 410 (-6ANS, -5WS, -10NXD, and -5NE)

## Power

Operating voltage:

- 120 V~ 50/60 Hz: -3PCL, -6WCL, -10NXD, -6ANS, -5NE
- 120/277 V~ 50/60 Hz: -5WS-DV

## Key Design Features

- 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.
- Load controls always 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.
- PD-5WS-DV, PD-6ANS, and PD-10NXD use conventional 3-way wiring.
- Uses Lutron® Claro® Wallplates or designer-style wallplates from other manufacturers. Wallplates are sold separately.
- Lutron® Claro® Wallplates snap on with no visible means of attachment.
- Requires a 1-gang U.S. wallbox. 3½ in (89 mm) depth recommended, 2¼ in (57 mm) depth minimum.
- Green status LED(s) to indicate load status.

## System Communications and Capacity

- Caséta® Wireless In-Wall Switches and Dimmers communicate with Pico® remote controls and the Lutron® Smart Bridge/Smart Bridge PRO through Radio Frequency (RF).
- The Caséta® Wireless In-Wall Switches and Dimmers communicate with Lutron® Radio Powr Savr™ Occupancy and Vacancy Sensors in a standalone application. Sensors do not work with Smart Bridge or Smart Bridge PRO.
- The Caséta® Wireless In-Wall Switches and Dimmers must be located within 60 ft (18 m) line-of-sight or 30 ft (9 m) through walls, of Pico® remote controls and Lutron® Smart Bridge devices.

## Device limits

- Pico® Remote Controls and Radio Powr Savr™ Occupancy Sensors: up to 10 devices (total) may be paired to each Caséta® Wireless In-Wall Switch/ Dimmer (with no Smart Bridge installed).
- Smart Bridge or Smart Bridge PRO system: up to 50 total wireless devices (Caséta® Wireless Dimmers/ Switches, Pico® Remote Controls, and Shades) are supported per system. Smart Bridge or Smart Bridge PRO counts as one device.

## Environment

- Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C), 0% to 90% humidity, non-condensing. Indoor use only.
- PD-5WS-DV, PD-6ANS, and PD-10NXD can be used with mechanical switch in 3-way applications.



| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

## Features

| | PRO Dimmer PD-10NXD | Plug-In Dimmer PD-3PCL | In-Wall Dimmer PD-6WCL | ELV+ Dimmer PD-5NE | 2-wire Switch PD-5WS-DV | Neutral Switch PD-6ANS |
|---|---|---|---|---|---|---|
| Simple two-wire installation (no neutral wire required) | √[1] | | √ | | √ | |
| Capable of dimming loads | √ | √ | √ | √ | | |
| Favorite button (user defined one touch light level) | | | | √ | | |
| Works with Hi-lume® 1% 2-Wire LED Drivers (Forward-phase only) | √ | | | √ | √ | √ |
| Works with Power Interfaces (PHPM and GRX TVI) | √ | | | √ | | |
| Works with Power Interfaces (PHPM-SW) | | | | | | √ |
| No wiring required | | √ | | | | |

[1] In some low-wattage applications the PD-10NXD will require a neutral wire connection.



| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

# Load Type and Capacity - Switches

| Model Number | Description | Voltage | Load Type | Minimum Load | Maximum Load[3] | | |
|---|---|---|---|---|---|---|---|
| | | | | | Not Ganged | End of Gang | Middle of Gang |
| PD-5WS-DV[1] | Two-wire switch | 120 V~ | Incandescent/Halogen | 25 W | 600 W | 450 W | 350 W |
| | | 277 V~ | Incandescent/Halogen | 25 W | 1350 W | 1100 W | 800 W |
| | | 120 V~ | MLV | 25 W | 600 VA/475 W | 450 VA/350 W | 350 VA/275 W |
| | | 277 V~ | MLV | 25 W | 1350 VA/1075 W | 1100 VA/875 W | 800 VA/625 W |
| | | 120 V~ | General Purpose Fan | 0.4 A | 3 A | 3 A | 3 A |
| | | 120/277 V~ | LED | Use LUT-MLC[2] | 5 A | 4 A | 3 A |
| | | 120/277 V~ | Fluorescent | Use LUT-MLC[2] | 5 A | 4 A | 3 A |
| | | 120 V~ | ELV | Use LUT-MLC[2] | 600 W | 450 W | 350 W |
| | | 277 V~ | ELV | Use LUT-MLC[2] | 1350 W | 1100 W | 800 W |
| PD-6ANS | Neutral-wire switch (neutral connection required) | 120 V~ | Incandescent/Halogen | 10 W | 720 W | 720 W | 600 W |
| | | | MLV | 10 W | 720 VA | 720 VA | 600 VA |
| | | | Fan | 0.1 A | 3.6 A | 3.6 A | 3.6 A |
| | | | LED | 1 bulb | 6 A | 6 A | 5 A |
| | | | Fluorescent | 1 ballast | 6 A | 6 A | 5 A |
| | | | ELV | 10 W | 720 VA | 720 VA | 600 VA |
| | | | PHPM-SW | 1 interface | 3 interfaces | 3 interfaces | 3 interfaces |

1 No neutral wire required.

2 To ensure proper operation of the switch with LED, fluorescent, and ELV loads, a LUT-MLC may be required, especially at lower wattages. If the status LED on the switch is flashing or solid red in color, a LUT-MLC must be installed. To guarantee best performance, installing a LUT-MLC with these load types regardless of wattage is recommended. Rarely, some load types may still flicker or glow in the off state even with the LUT-MLC installed, in which case a different load may be required or more than one LUT-MLC is required.

3 See “Ganging and Derating” section.

# Load Type and Capacity - Dimmers

| Model Number | Description | Voltage | Load Type | Minimum Load | Maximum Load | | |
|---|---|---|---|---|---|---|---|
| | | | | | Not Ganged | End of Gang | Middle of Gang |
| PD-10NXD | Wireless In-Wall Dimmer PRO (neutral connection required for certain load types)[4] | 120 V~ | Incandescent/ Halogen | 10 W with neutral (25 W without neutral) | 1000 W | 800 W | 600 W |
| | | | MLV Halogen | 10 W | 1000 VA | 800 VA | 600 VA |
| | | | MLV LED | See Application Note #559 | | | |
| | | | CFL/LED (120 V~ Rated)[3] | 1 bulb[3] | 250 W | 250 W | 250 W |
| | | | Hi-lume® 1% 2-Wire LED drivers | 1 driver | 1000 W (13 drivers) | 800 W (13 drivers) | 600 W (13 drivers) |
| | | | Dimmable Ballasts[5] | 1 ballast | 1000 VA | 800 VA | 600 VA |
| | | | PHPM-PA/3F and GRX-TVI[4] | 1 interface | 3 interface | 3 interface | 3 interface |
| PD-3PCL[1] | Wireless Plug-In Lamp Dimmer | 120 V~ | Incandescent/ Halogen | 10 W | 300 W | N/A | N/A |
| | | | CFL/LED (120 V~ Rated)[3] | 1 bulb[3] | 100 W | N/A | N/A |
| PD-5NE | Phase Selectable Dimmer (neutral connection required) | 120 V~ | Incandescent/ Halogen | 10 W | 500 W | 400 W | 300 W |
| | | | CFL/LED (120 V~ Rated)[3, 6, 7] | 1 bulb[3] | 250 W | 250 W | 250 W |
| | | | MLV Halogen[2, 6, 7] | 10 W | 400 VA | 400 VA | 400 VA |
| | | | ELV Halogen | 10 W | 500 W | 400 W | 300 W |
| | | | Hi-lume® 1% 2-Wire LED drivers[6, 7] | 1 driver | 400 W (20 drivers) | 400 W (20 drivers) | 400 W (20 drivers) |
| | | | Dimmable Ballasts[5, 6, 7] | 1 ballast | 400 VA | 400 VA | 400 VA |
| | | | PHPM-PA/3F and GRX-TVI[6, 7] | 1 interface | 3 interfaces | 3 interfaces | 3 interfaces |
| | | | ELV LED | See Application Note #559 | | | |
| | | | MLV LED | See Application Note #559 | | | |
| PD-6WCL | Wireless In-Wall Dimmer | 120 V~ | Incandescent/ Halogen | 25 W | 600 W | 500 W | 400 W |
| | | | CFL/LED (120 V~ Rated)[3] | 1 bulb[3] | 150 W | 150 W | 150 W |

1 Cannot be ganged.
2 Need to change load type to MLV. See www.casetawireless.com/change_phase
3 See bulb list at www.lutron.com/led
4 For PD-10NXD, a neutral connection is required for MLV loads, LED drivers, dimmable ballasts, and power modules (PHPM-PA, PHPM-3F, and GRX-TVI).
5 Compatible dimmable ballasts include Tu-Wire®, Mark X, and PowerSense®.
6 These loads are best operated using a forward-phase control. Consult www.lutron.com/bulblist to ensure the appropriate phase for bulb models used.
7 SSL7 compliant when in forward-phase.

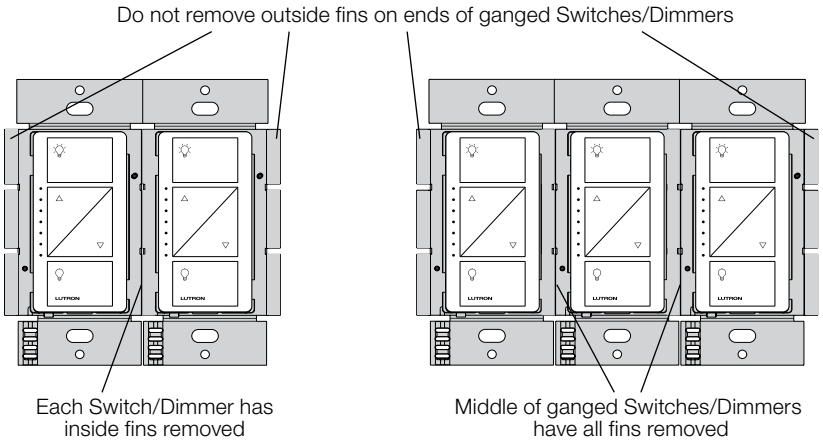
PowerSense is a registered trademark of Osram Sylvania.

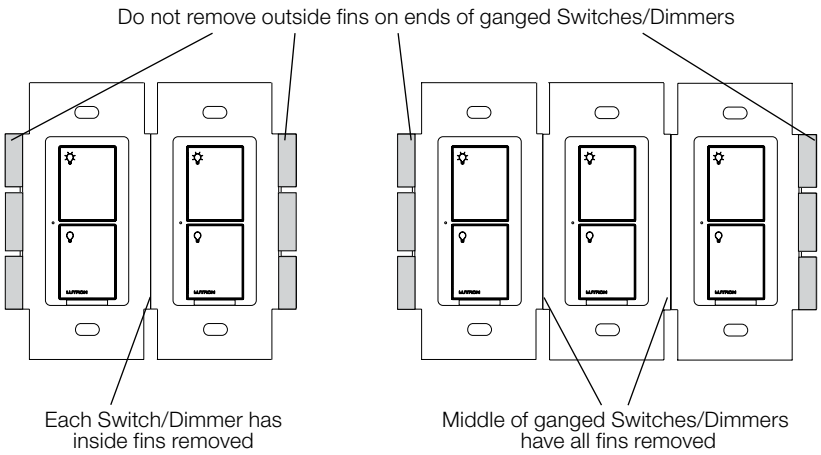


| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

## Ganging and Derating

When ganging with other Switches/Dimmers in the same wallbox, derating is required. See “Load Type and Capacity” charts.



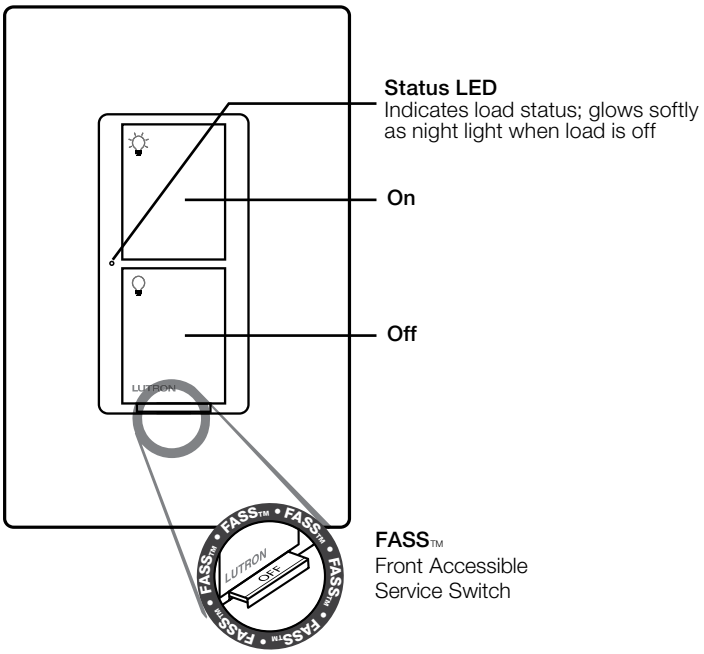





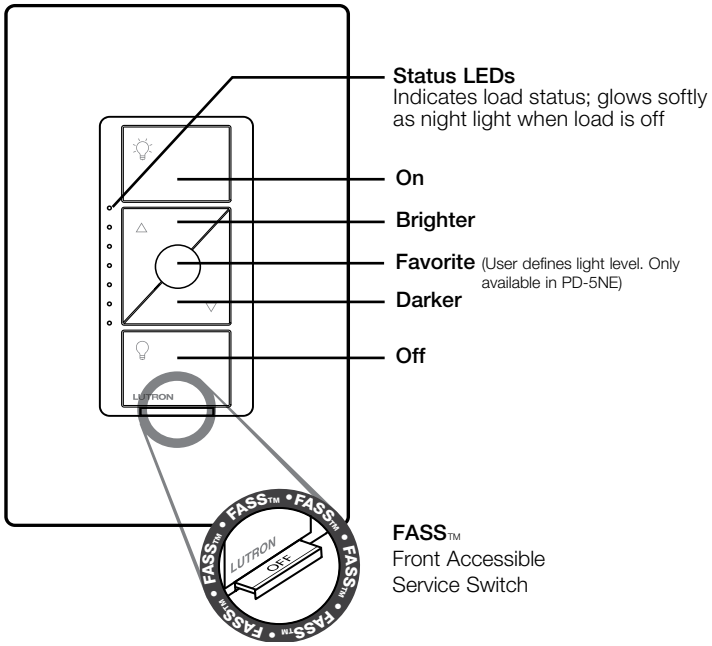

| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

# Operation

In-Wall Switch



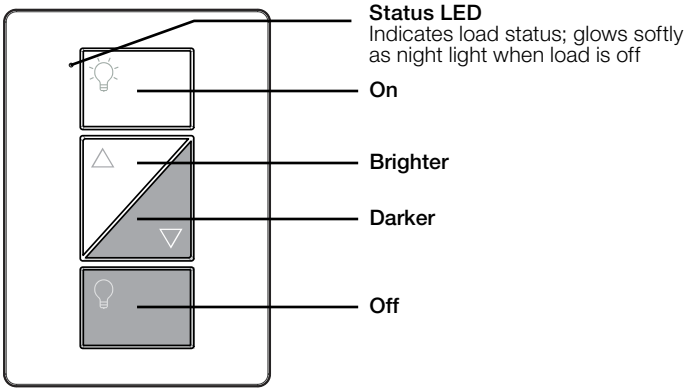

ELV+ Dimmer and In-Wall Dimmer




**FASS™ — Front Accessible Service Switch**

**Important Notice:** To service load, remove power by pulling out the FASS™ as far as possible. To restore power after servicing load, push the FASS™ back in completely.

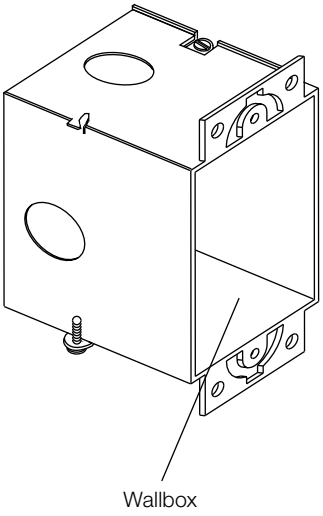
Plug-In Dimmer

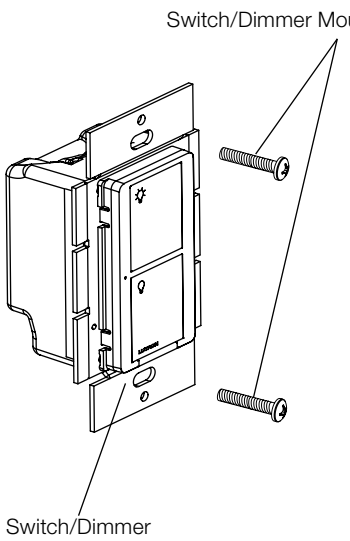


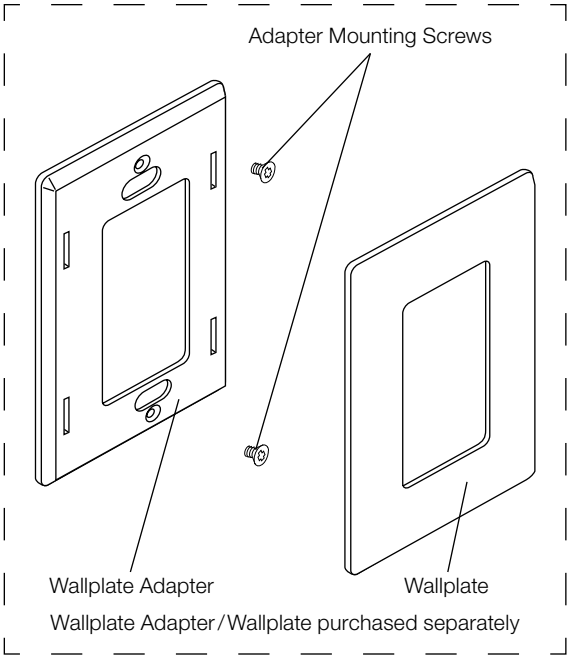



| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

## Mounting



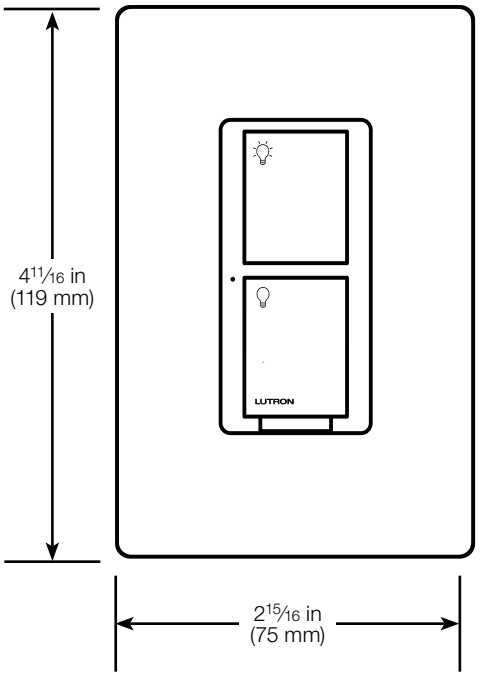



| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

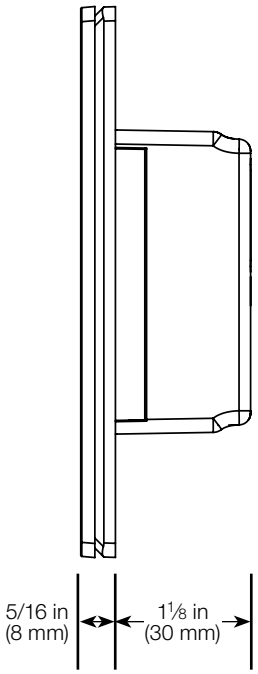
# Dimensions

## In-Wall Switches and Dimmers

**Front View**

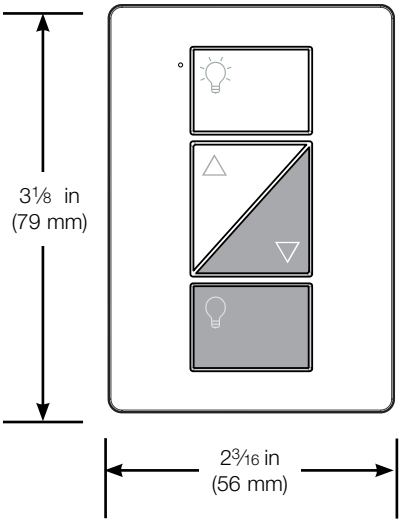



**Side View**

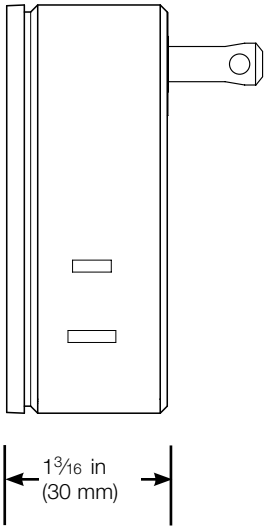



## Plug-In Dimmer

**Front View**




**Side View**



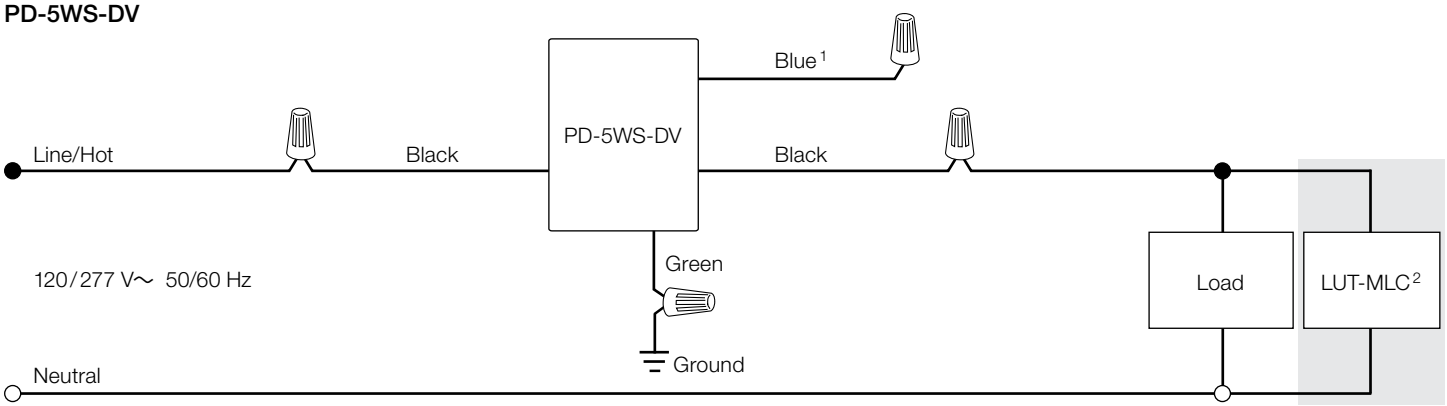



| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

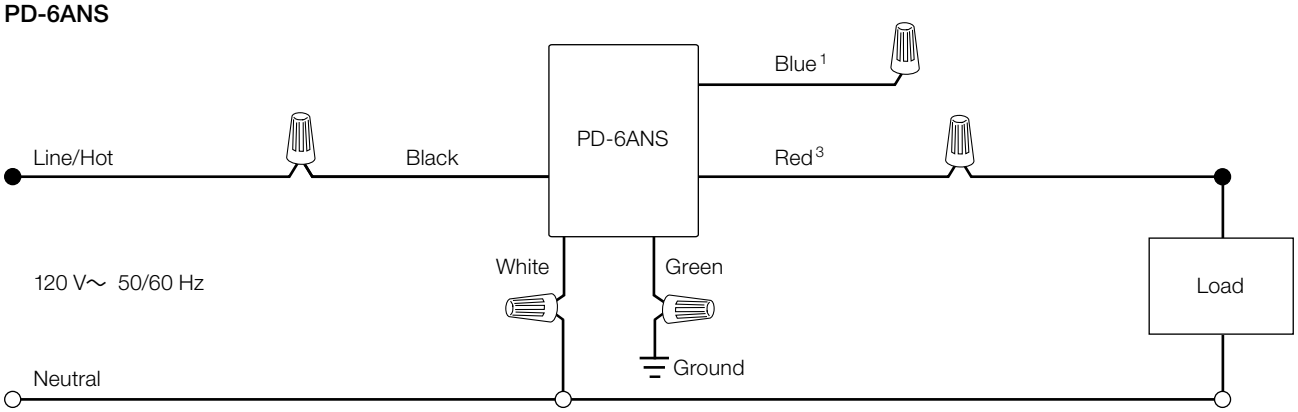
# Wiring Diagrams - Switches

## Single Location Installation

### PD-5WS-DV




### PD-6ANS




1 When using controls without a mechanical 3-way switch, cap the blue terminal. **Do not** connect the blue wire to any other wiring or to ground.

2 A LUT-MLC ensures proper function when LED, fluorescent, or ELV loads are used. Install the LUT-MLC inside a load fixture or in a separate junction box within the circuit.

3 The red wire must be connected to the load and the black wire must be connected to Line/Hot. The switch will not work if the wires are reversed.

(continued on next page…)



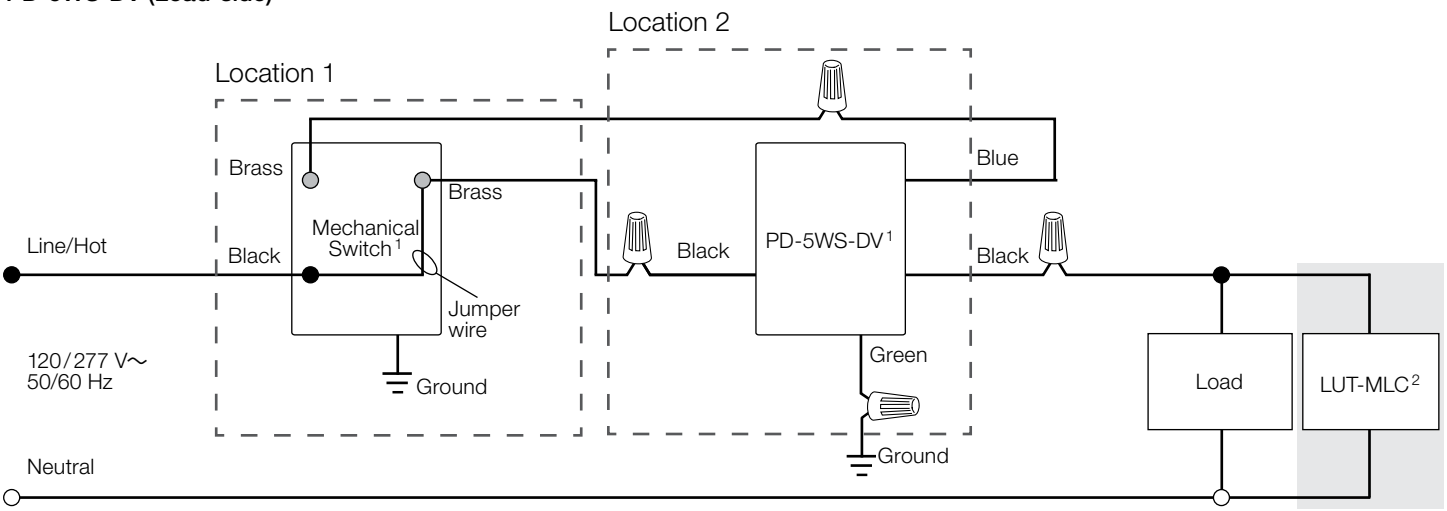
| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

# Wiring Diagrams - Switches (cont.)

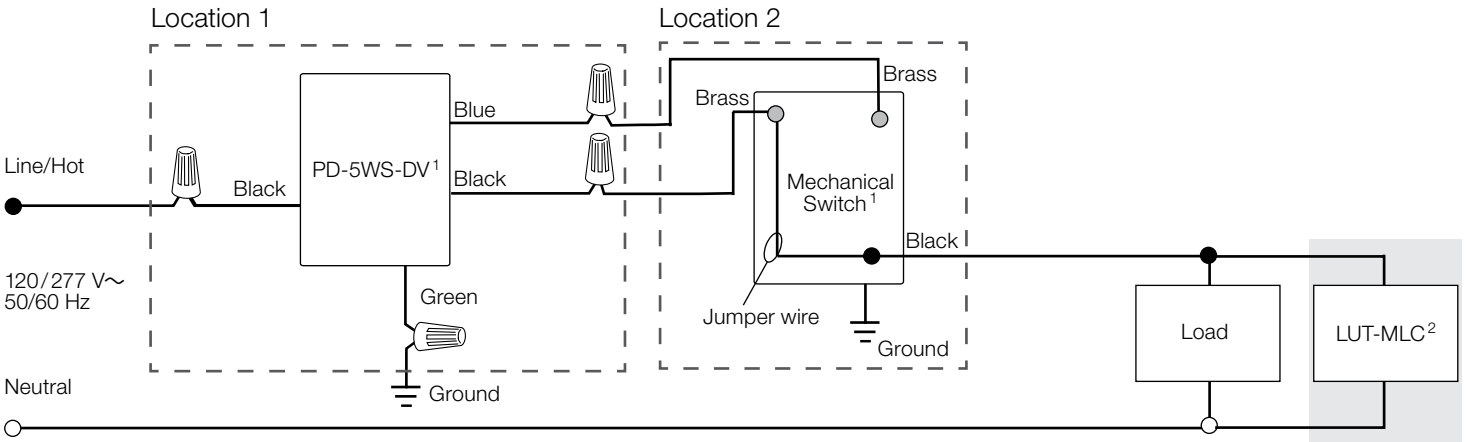
## 3-Way Installation (with mechanical switch)

Option 1

**PD-5WS-DV (Load-side)**




**PD-5WS-DV (Line-side)**




1 Location of Caséta® Wireless In-Wall Switch and mechanical switch may be reversed.

2 A LUT-MLC ensures proper function when LED, fluorescent, or ELV loads are used. Install the LUT-MLC inside a load fixture or in a separate junction box within the circuit.

(continued on next page…)



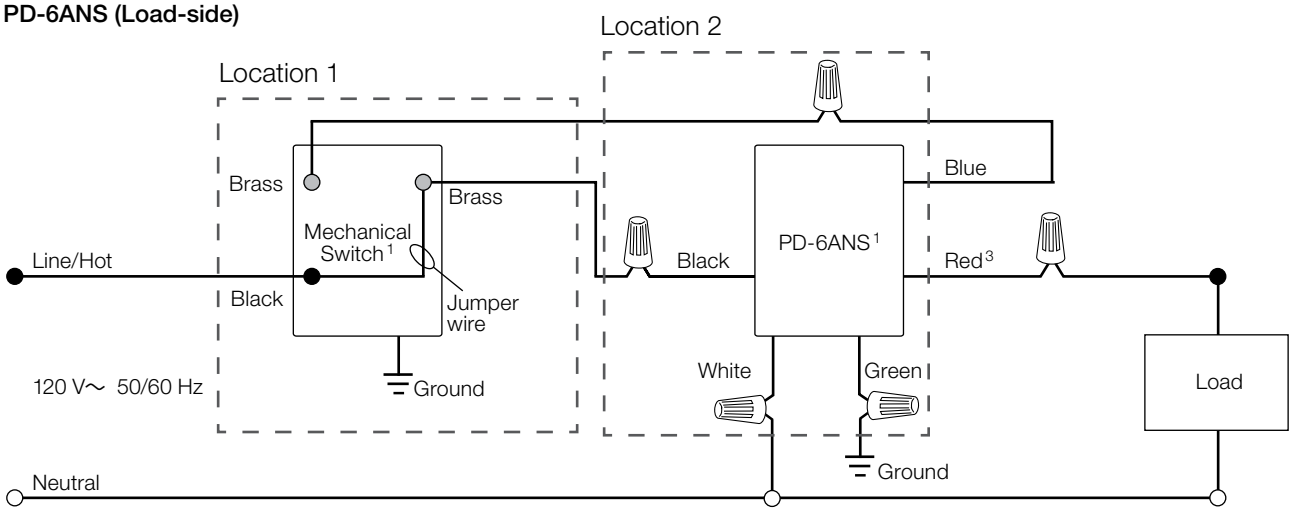
| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

# Wiring Diagrams - Switches (cont.)

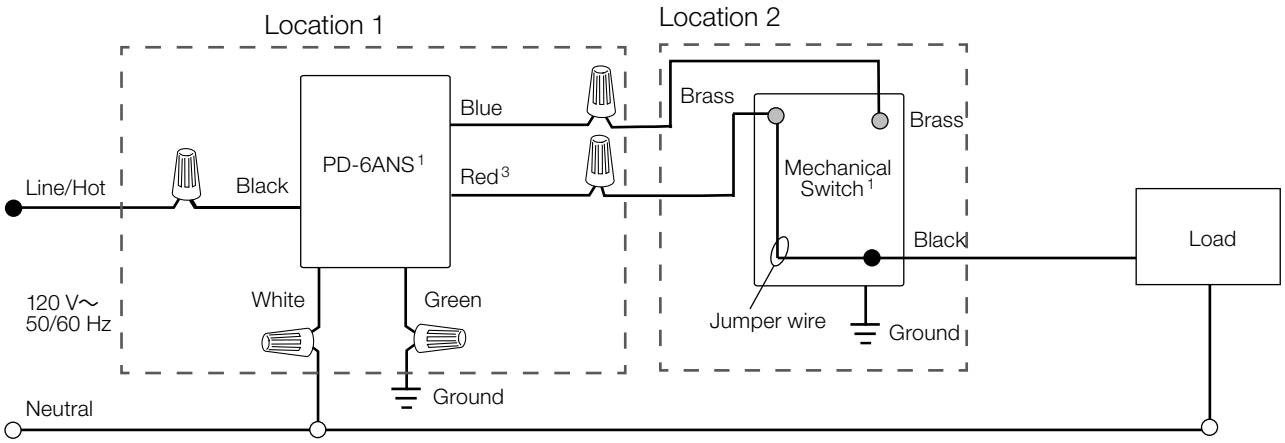
## 3-Way Installation (with mechanical switch)

Option 1 (cont.)

**PD-6ANS (Load-side)**




**PD-6ANS (Line-side)**




1 Location of Caséta® Wireless In-Wall Switch and mechanical switch may be reversed.
2 A LUT-MLC ensures proper function when LED, fluorescent, or ELV loads are used. Install the LUT-MLC inside a load fixture or in a separate junction box within the circuit.
3 The red wire must be connected to the load and the black wire must be connected to Line/Hot. The switch will not work if the wires are reversed.



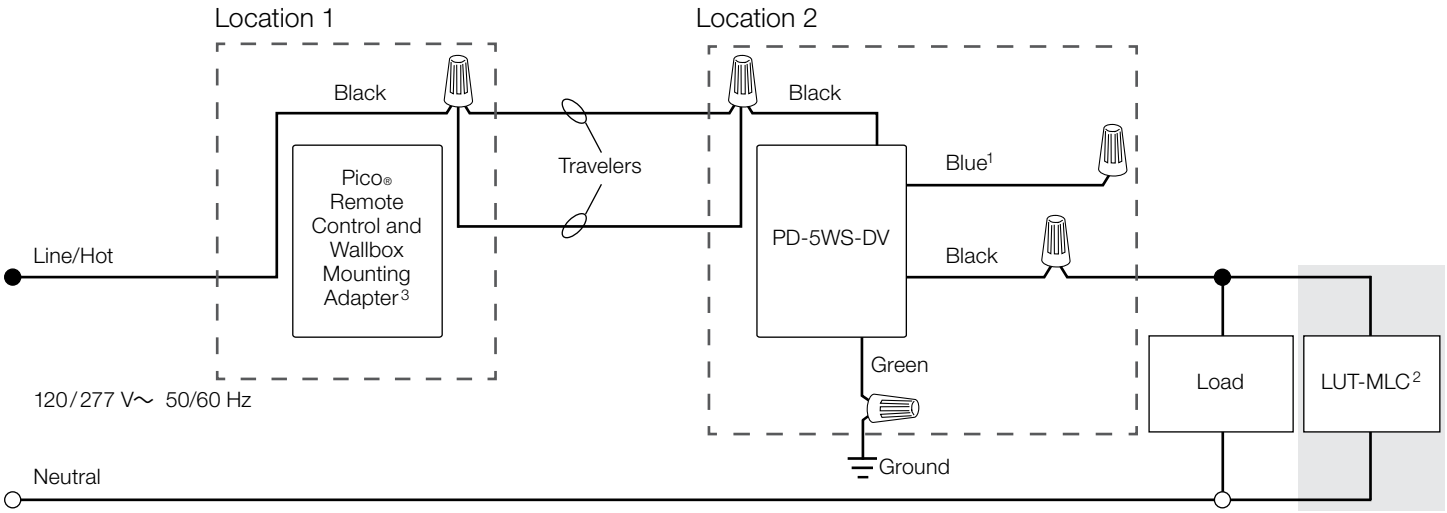
| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

# Wiring Diagrams - Switches (cont.)

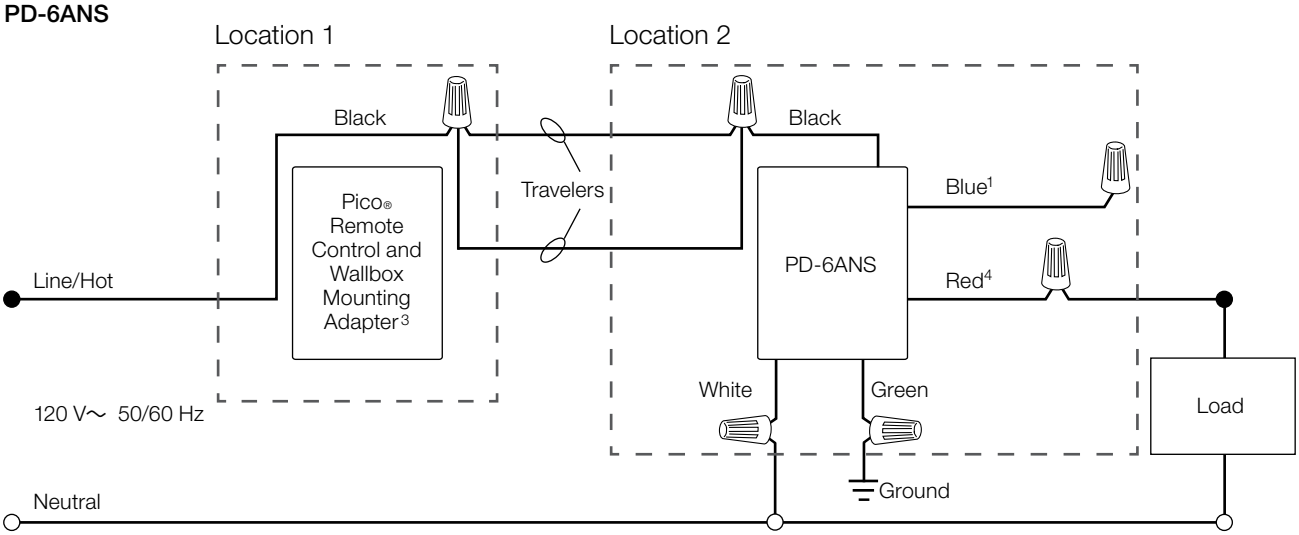
## 3-Way Installation (with Pico® remote controls)

Option 2: PJ2-2B-xx and wallbox mounting adapters (PICO-WBX-ADAPT)

**PD-5WS-DV**




**PD-6ANS**




1 When using controls without mechanical 3-way switch, cap the blue terminal. **Do not** connect the blue wire to any other wiring or to ground.

2 A LUT-MLC ensures proper function when LED, fluorescent, or ELV loads are used. Install the LUT-MLC inside a load fixture or in a separate junction box within the circuit.

3 The mechanical switch will need to be removed so the Pico® Remote Control can be installed.

4 The red wire must be connected to the load and the black wire must be connected to Line/Hot. The switch will not work if the wires are reversed.

(continued on next page…)



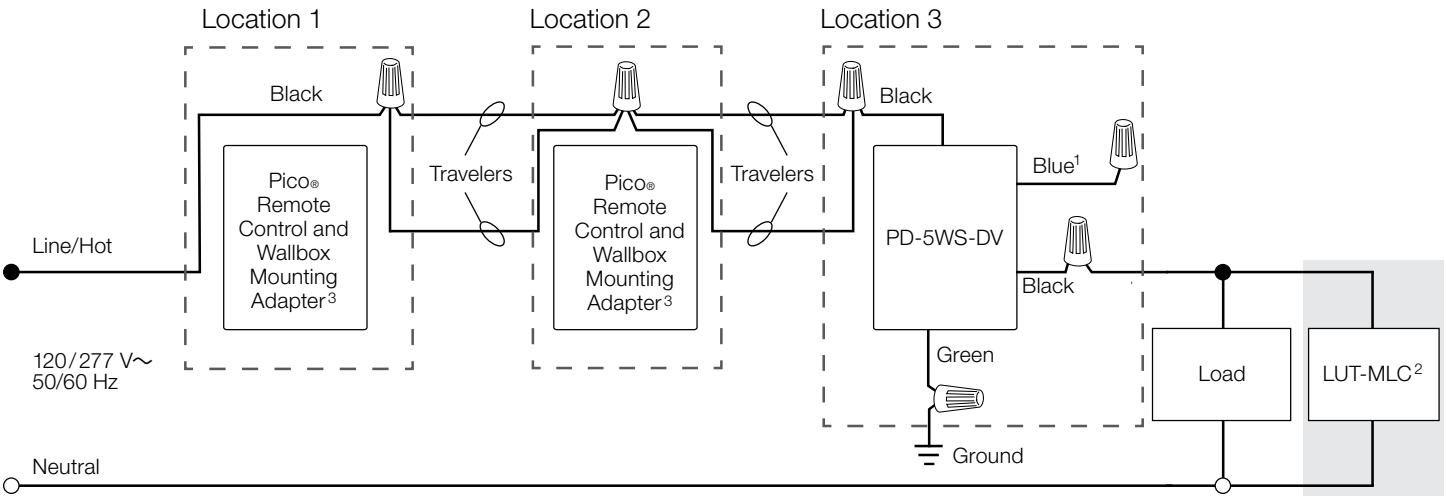
| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

# Wiring Diagrams - Switches (cont.)

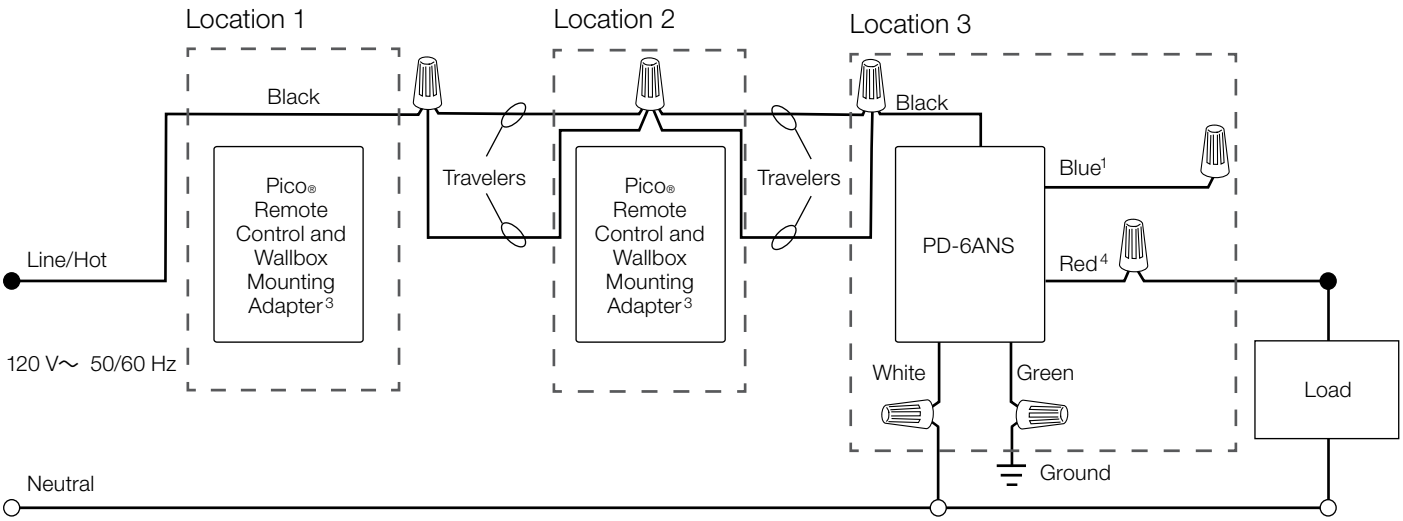
**Multi-location Installation** (3 or more switches control the load)

With Pico® remote controls (PJ2-2B-xx) and wallbox mounting adapters (PICO-WBX-ADAPT)

**PD-5WS-DV**




**PD-6ANS**




1 When using controls without mechanical 3-way switch, cap the blue terminal. **Do not** connect the blue wire to any other wiring or to ground.

2 A LUT-MLC ensures proper function when LED, fluorescent, or ELV loads are used. Install the LUT-MLC inside a load fixture or in a separate junction box within the circuit.

3 The mechanical switch will need to be removed so the Pico® Remote Control can be installed.

4 The red wire must be connected to the load and the black wire must be connected to Line/Hot. The switch will not work if the wires are reversed.

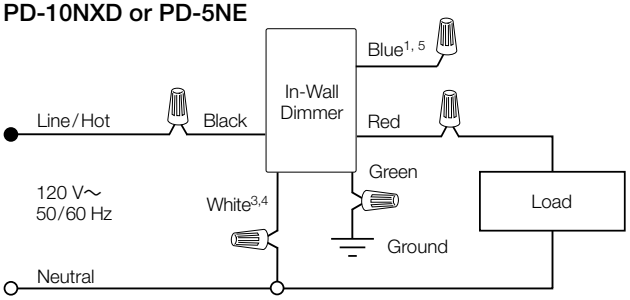


| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

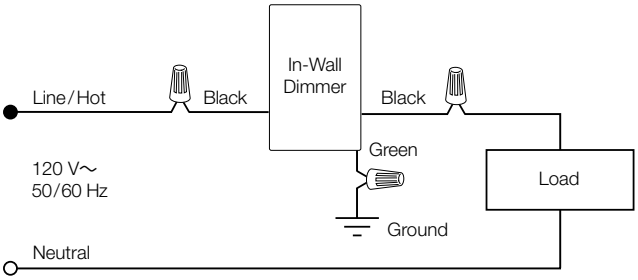
# Wiring Diagrams - Dimmers

## Single Location Installation

### PD-10NXD or PD-5NE




### PD-6WCL




[1] When using controls without mechanical 3-way switch, cap the blue terminal. **Do not** connect the blue wire to any other wiring or to ground.
[2] Location of Caséta® Wireless In-Wall Dimmer PRO and mechanical switch may be reversed.
[3] For PD-10NXD only, neutral connection optional except for MLV loads, LED drivers, and power modules (PHPM-PA, PHPM-3F, and GRX-TVI).
[4] For PD-5NE, neutral is required.
[5] Blue wire is only present on the PD-10NXD model.



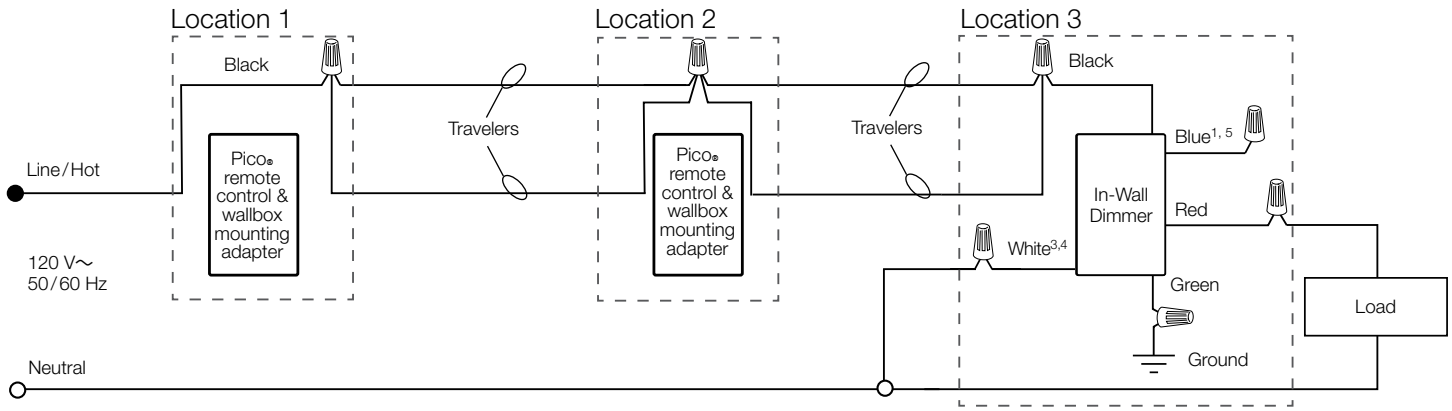
| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

# Wiring Diagrams - Dimmers (cont.)

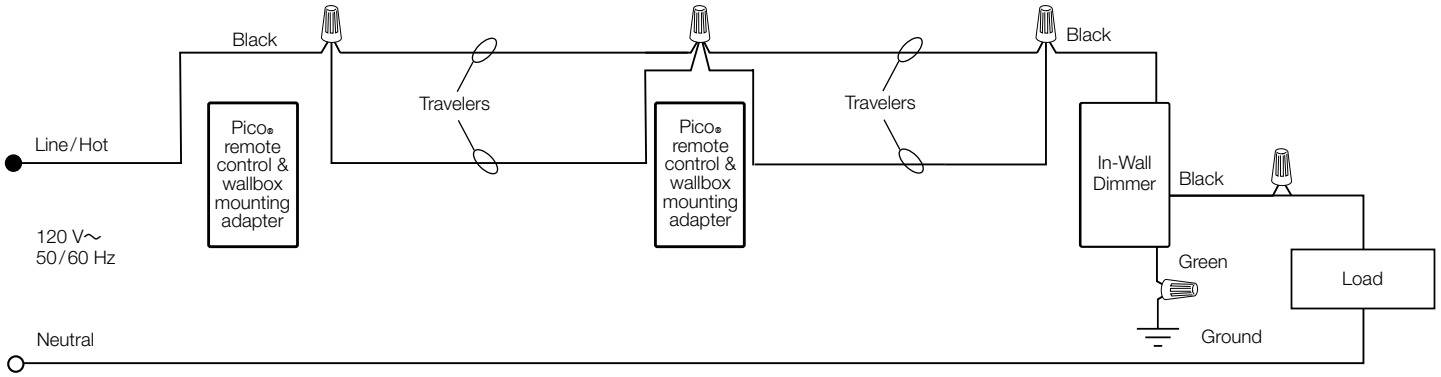
## Multi-Location Installation

With Pico® remote controls (PJ2-XX-XX) and wallbox mounting adapters (PICO-WBX-ADAPT)

**PD-10NXD and PD-5NE**




**PD-6WCL**




1 When using controls without mechanical 3-way switch, cap the blue terminal. **Do not** connect the blue wire to any other wiring or to ground.
2 Location of Caséta® Wireless In-Wall Dimmer PRO and mechanical switch may be reversed.
3 For PD-10NXD only, neutral connection optional except for MLV loads, LED drivers, and power modules (PHPM-PA, PHPM-3F, and GRX-TVI).
4 For PD-5NE, neutral is required.
5 Blue wire is only present on the PD-10NXD model.



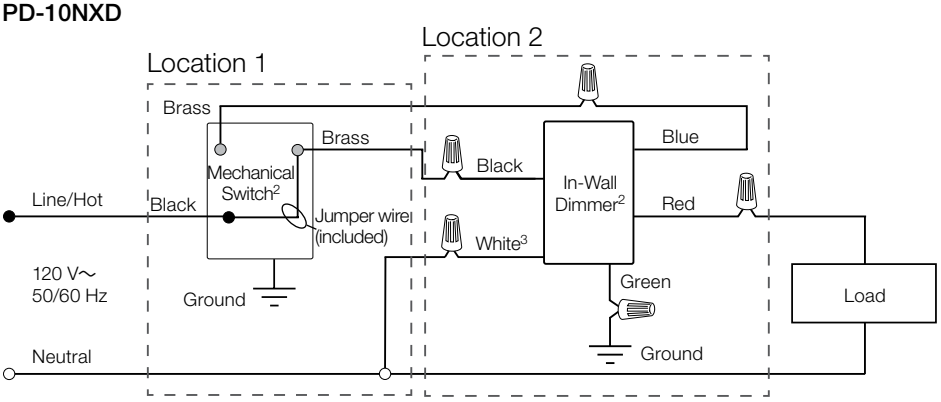
| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

# Wiring Diagrams - Dimmers (cont.)

## 3-Way Installation

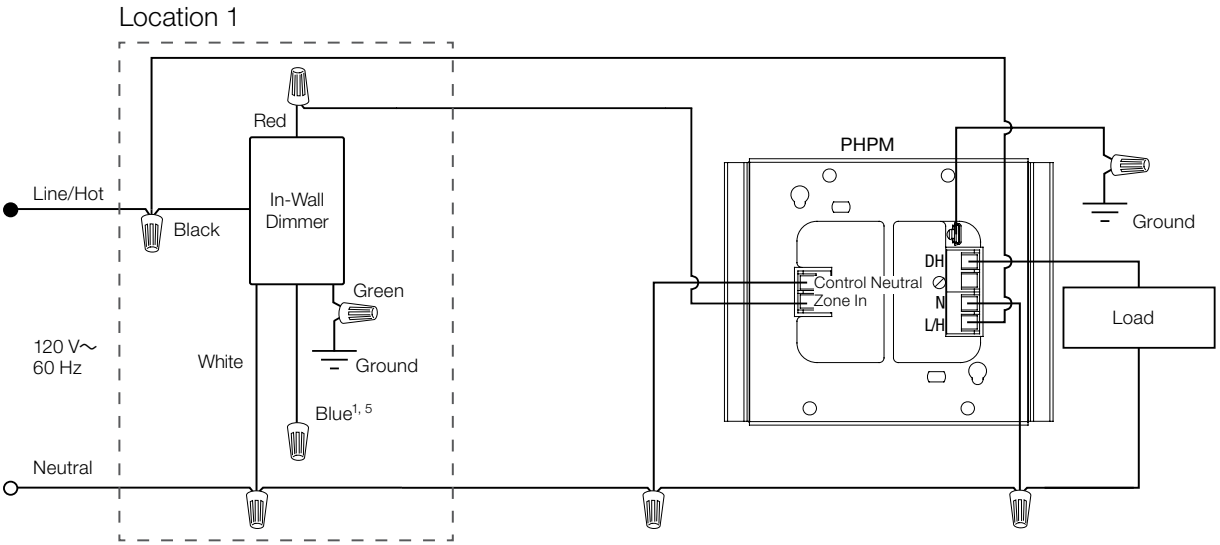
With mechanical switch

**PD-10NXD**




## Installation with PHPM - Neutral required[4]

**PD-10NXD and PD-5NE**




[1] When using controls without mechanical 3-way switch, cap the blue terminal. **Do not** connect the blue wire to any other wiring or to ground.

[2] Location of In-Wall Dimmer and mechanical switch may be reversed.

[3] Neutral connection optional except for MLV loads, LED drivers, and power modules (PHPM-PA, PHPM-3F, and GRX-TVI).

[4] See Lutron® P/Ns 369356 and 369355 for additional wiring diagrams.

[5] Blue wire is only present on the PD-10NXD model.

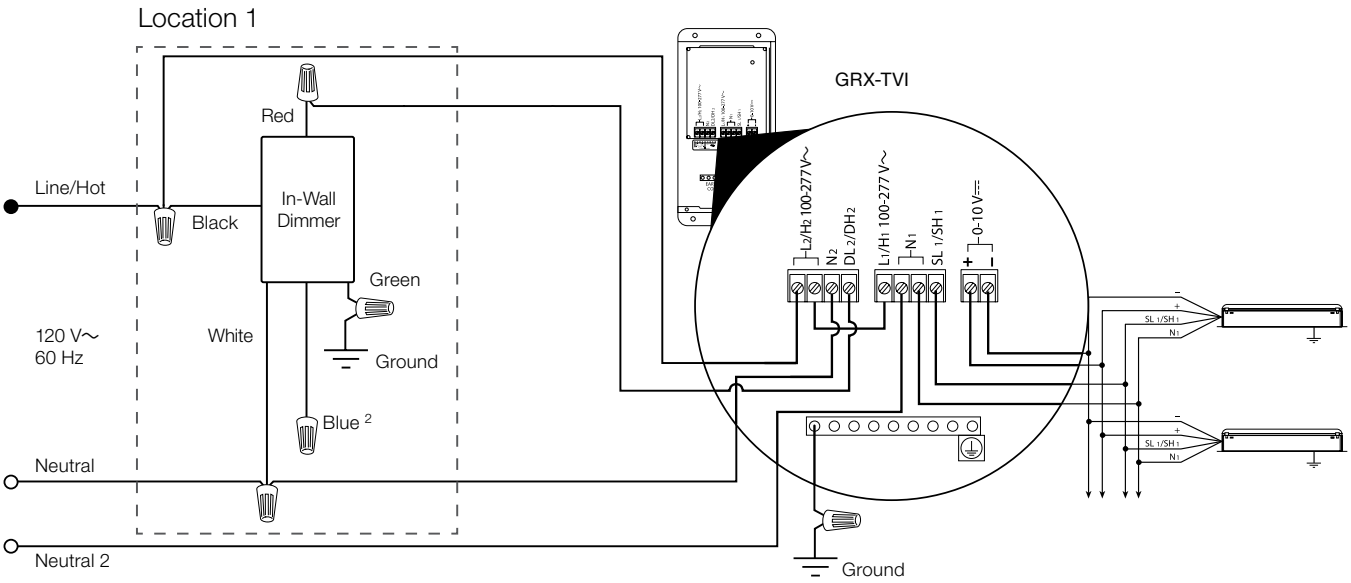


| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

# Wiring Diagrams - Dimmers (cont.)

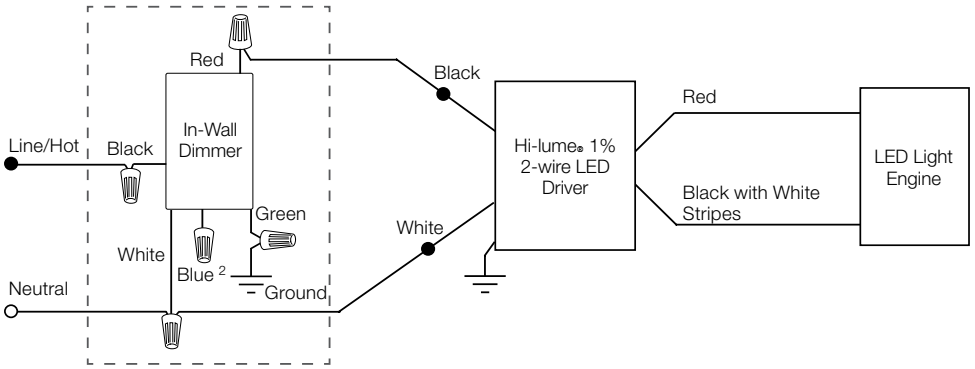
## Installation with GRX-TVI - Neutral required[1]

### PD-10NXD and PD-5NE




## Installation with Hi-lume® 1% 2-wire LED Drivers - Neutral required

### PD-10NXD and PD-5NE




**Note:** For more information on Hi-lume® 1% 2-wire LED Drivers, see www.lutron.com

[1] See Lutron® P/N 369247 for additional wiring diagrams.
[2] Blue wire is only present on the PD-10NXD model.



| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |

# Colors and Finishes

## Gloss Finishes

White
WH

Black
BL

Ivory
IV

Light Almond
LA

Due to printing limitations, colors and finishes shown cannot be guaranteed to perfectly match actual product colors.



| Job Name: | Model Numbers: | |
|---|---|---|
| | | |
| Job Number: | | |