

# Sunnata Standalone Controls

Touch dimmer (and coordinating products) with next generation design and technology.

## Features

- Touch technology with intuitive on/off paddle switch that fits in a standard designer wallplate opening.
- Advanced dimming technology designed for compatibility with a broad range of high efficacy bulbs.
- Dimmers and switches contain MyLevel Personalization Advanced Feature Mode to customize the control.
- Low-end and high-end adjustments to accommodate a wide range of bulbs.
- White light bar provides locator light to easily find the switch in the dark. Brightness of locator light is adjustable through MyLevel Personalization. Locator light can also be turned off.
- Can be used in single-pole, multi-location<sup>1</sup>, or 3-way mechanical switch<sup>2</sup> applications.
- Coordinating Claro and Stainless Steel wallplates available separately.
- 100% factory tested.
- NEMA SSL-7A Compliant.
- UL® Listed



*LED+ Dimmer  
STCL-153M*



*Accessory Switch  
ST-AS (works with STCL-153M only)*



*PRO Dimmer  
ST-PRO-N*



*PRO Companion Dimmer  
ST-RD (works with ST-PRO-N only)*



*Switch  
ST-6ANS*



*Companion Switch  
ST-RS (works with ST-6ANS only)*

**NOTE:** Main control will only work with companion or accessory shown to the right. Companions and accessories are not interchangeable.

<sup>1</sup> Sunnata standalone controls can be controlled from multiple locations when paired with the appropriate accessory or companion control pictured to the right of the main control above.

<sup>2</sup> LED+ models only. An additional wiring step is required for 3-way mechanical switch applications. Not for use in 4-way mechanical switch applications.

<b>Job Name:</b> <input type="text"/>	<b>Model Numbers:</b> <input type="text"/>	
<b>Job Number:</b> <input type="text"/>	<input type="text"/>	<input type="text"/>

### Model Numbers

#### LED+ Dimmer

*LED/CFL/Incandescent/Halogen (120 V~)*

STCL-153M-XX<sup>1,2,3</sup> (replaces STCL-153P-XX) 150 W (LED/CFL)\* or 600 W Incandescent/Halogen

ST-AS-XX<sup>1</sup> (works with STCL-153M only) Accessory Switch (120 V~, max 9 per LED+ dimmer)

#### PRO LED+ Dimmer

*LED/CFL/Incandescent/Halogen/MLV/ELV/Dimmable Fluorescent Ballasts/Hi-lume LTE Drivers (120 V~)*

ST-PRO-N-XX<sup>1</sup> 250 W (LED/CFL)\* or 500 W Incandescent/Halogen/ELV or 400 VA MLV phase selectable, neutral dimmer

ST-RD-XX<sup>1</sup> (works with ST-PRO-N only) PRO Companion dimmer (120 V~, max of 4 per PRO dimmer)

#### Switches

*Lighting and Motor Loads (120 V~)*

ST-6ANS-XX<sup>1</sup> 6 A Light, 1/10 HP 3 A motor neutral wire electronic switch

ST-RS-XX<sup>1</sup> (works with ST-6ANS only) Companion switch (120 V~, max of 4 per Sunnata switch)

\* Go to [www.lutron.com/ledfinder](http://www.lutron.com/ledfinder) to see all compatible LED lamps.

### Colors and Finishes

#### Gloss - All models



White  
WH



Ivory  
IV



Light Almond  
LA



Black  
BL

#### Notes:

<sup>1</sup> XX" represents the color code.

<sup>2</sup> For clamshell packaging add "H" after "153M".

<sup>3</sup> For clamshell packaged product for Canada add "-C" after the color code.

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<b>Job Number:</b> <input style="width: 80%; height: 20px;" type="text"/>	<input style="width: 30%; height: 20px;" type="text"/>	<input style="width: 30%; height: 20px;" type="text"/>

# Specifications

## Regulatory Approvals

- UL® Listed to U.S. and Canadian safety requirements (UL 1472/CSA C22.2 184.1)
- NOM
- NEMA SSL-7A-2015 forward-phase compliant
- FCC, IC (not applicable to ST-AS)

## Environment

- For indoor use only
- Operating temperatures 32 °F (0 °C) to 104 °F (40 °C)

## Performance

- Power-failure memory
- Touch dimmer to go to any light level (-PRO-N, -RD, and -153M only)
- Electrostatic discharge tested
- Precise color matching
- Includes a Front Accessible Service Switch (FASS) for safe bulb replacement (not applicable to ST-AS)

## Application Requirements

- ***When using LEDs or CFLs, only bulbs marked or rated as Dimmable can be used.***
- To access our mobile friendly online tool of DIMMABLE LEDs visit [www.lutron.com/LEDfinder](http://www.lutron.com/LEDfinder)

## Warranty

- 1 Year Limited Warranty.  
For additional Warranty information, please visit [www.lutron.com/TechnicalDocumentLibrary/369-119\\_Wallbox\\_Warranty.pdf](http://www.lutron.com/TechnicalDocumentLibrary/369-119_Wallbox_Warranty.pdf)

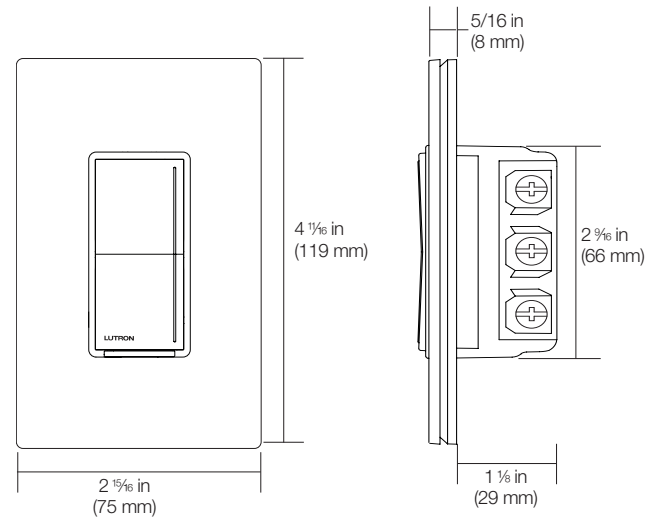
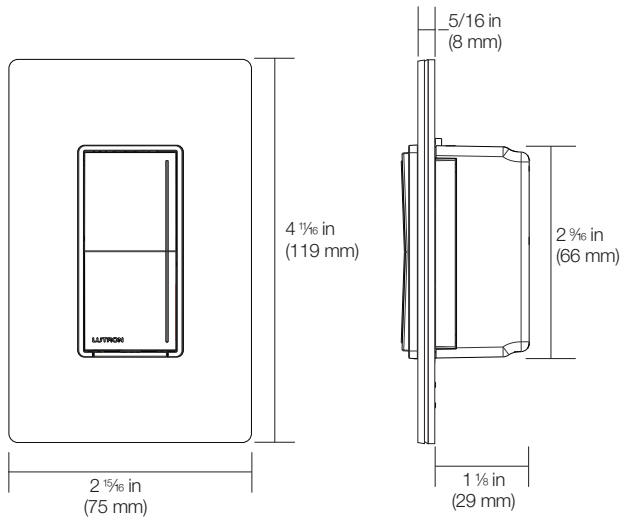
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### LED+ and Accessory Switch Dimensions

### PRO and Companion Dimensions

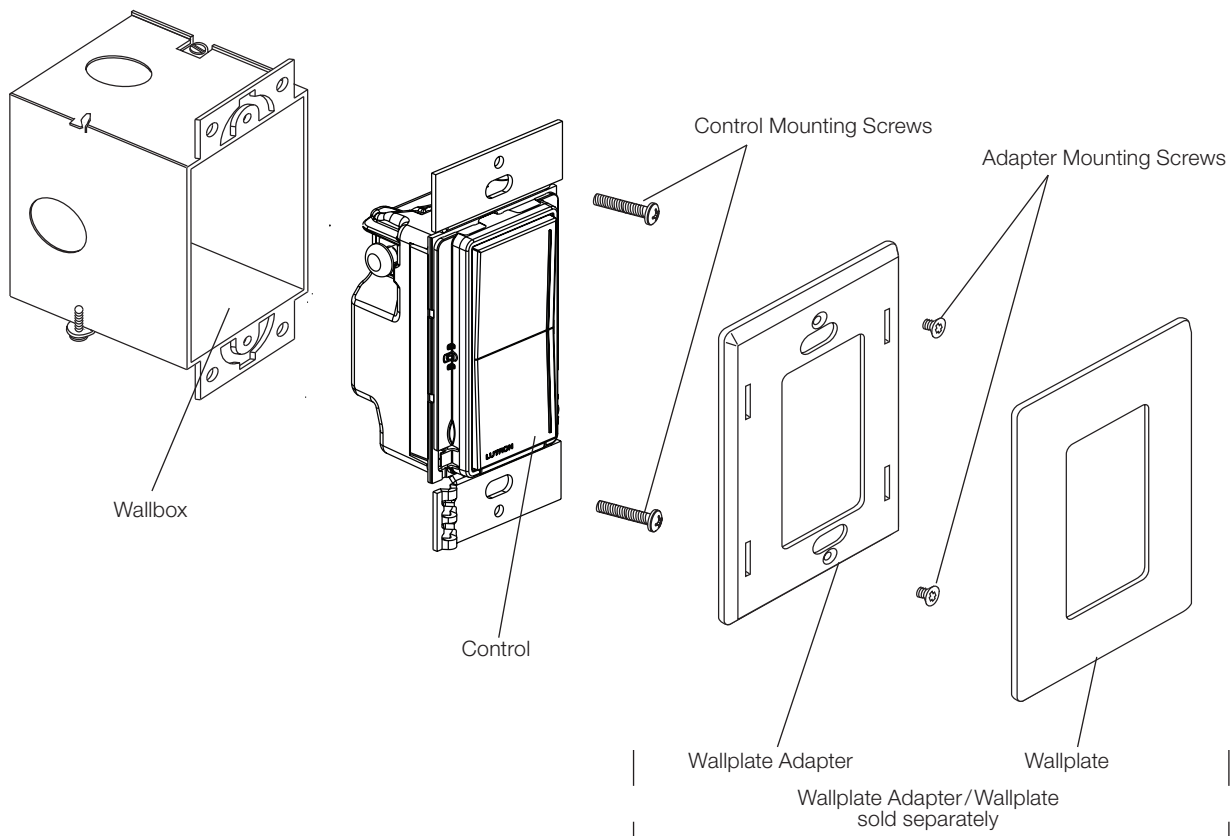
Wired Product

Screw Terminal Product



**Note:** Requires a U.S. wallbox 2 1/4 in (57 mm) deep minimum.

### Mounting and Parts Identification



Job Name:	Model Numbers:	
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Job Number:	<input type="text"/>	<input type="text"/>

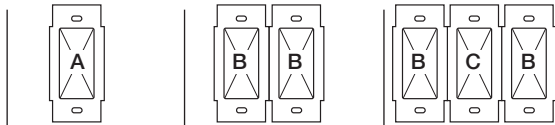
### Model Compatibility

Model Number	Description	Neutral Required	Compatible with Mechanical Switch?	Companion	Number of Locations	Identical Companion (appearance and functionality)	Load Types Controlled (other than LED/CFL/INC/HAL)
STCL-153M	LED+ Dimmer	No	Yes <sup>1</sup>	ST-AS	10	No	N/A
ST-PRO-N	PRO Phase Selectable Dimmer	Yes	No	ST-RD	5	Yes	MLV/ELV/ Dimmable Fluorescent Ballasts/ Hi-lume LTE Drivers
ST-6ANS	Switch	Yes	No	ST-RS	5	Yes	Lighting and Motor loads

<sup>1</sup> LED+ models only. An additional wiring step is required for 3-way mechanical switch applications. Not for use in 4-way mechanical switch applications.

Job Name: <input style="width: 90%; height: 20px;" type="text"/>	Model Numbers: <input style="width: 60%; height: 20px;" type="text"/> <input style="width: 35%; height: 20px;" type="text"/>	
Job Number: <input style="width: 80%; height: 20px;" type="text"/>	<input style="width: 30%; height: 20px;" type="text"/>	<input style="width: 30%; height: 20px;" type="text"/>

### Load Type and Capacity



Load Type	Minimum Load	A Not Ganged	B End of Gang	C Middle of Gang	Neutral Connection	Required Phase Mode <sup>2</sup>
<b>STCL-153M<sup>3</sup></b>						
LED	1 LED	150 W	150 W	150 W	No	—
CFL	1 CFL bulb	150 W	150 W	150 W	No	—
Incandescent/Halogen	25 W	600 W	500 W	400 W	No	—
<b>ST-PRO-N<sup>3,4</sup></b>						
LED	1 LED	250 W	200 W	150 W	Required <sup>1</sup>	Either
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					Forward
ELV Transformer with LEDs						Reverse
MLV Transformer with Halogen	10 W	400 VA (300 W)	No Derating Required			Forward
ELV Transformer with Halogen	10 W	500 W	400 W	300 W		Reverse
Incandescent/Halogen	10 W	500 W	400 W	300 W		Either
Dimmable Fluorescent Ballast	1 ballast	3.3 A (400 VA)	No Derating Required			Forward
Hi-lume 1% 2-wire (LTE) LED Driver	1 driver	3.3 A (400 W) 20 drivers max.	No Derating Required			Forward
PHPM-PA/3F and GRX-TVI <sup>4</sup>	1 interface	3 interfaces	No Derating Required			Forward
<b>ST-6ANS<sup>4,5,6</sup></b>						
LED Lighting	1 LED	6 A	4 A	4 A	Required <sup>1</sup>	—
Other Lighting Loads	10 W/VA	6 A	4 A	4 A		—
Motor	0.08 A	1/10 HP 3 A	1/10 HP 3 A	1/10 HP 3 A		—

<sup>1</sup> Neutral is required for all load types.

<sup>2</sup> Phase Mode default setting is Reverse-Phase. (-PRO-N only)

<sup>3</sup> Do not install dimmers to control receptacles or motor-operated appliances.

<sup>4</sup> Power boosters/Load Interfaces: -ST-PRO-N and -ST-6ANS can be used to control power boosters/load interfaces. For a list of compatible power boosters/load interfaces see **Compatible Power Boosters and Load Interfaces**, page 8.

<sup>5</sup> Do not install switches to control receptacles.

<sup>6</sup> Switch Load Type:

-6ANS: Designed for use with permanently installed 120 V~ incandescent, MLV, ELV, tungsten halogen, fluorescent, LED, CFL, or motor loads.

**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.

Job Name:	Model Numbers:	
<input type="text"/>	<input type="text"/>	<input type="text"/>
Job Number:	<input type="text"/>	<input type="text"/>

## Mixing Lamp Types

Mixing lamp types (using a combination of LED/CFL, Incandescent/Halogen bulbs) and ganging with other dimmers or electronic switches may reduce maximum wattage as shown in the chart below.

Example: If you have two dimmers ganged together and you have two 13 W bulbs installed (total LED Wattage = 26 W) on one dimmer, you may add up to 300 W of incandescent or halogen lighting to that one dimmer. Repeat the exercise for the other dimmer with which it is ganged.

Total LED/CFL Wattage	Total Incandescent/Halogen Wattage			Neutral Connection
	A Not Ganged	B End of Gang	C Middle of Gang	
<b>STCL-153M<sup>1</sup></b>				
0 W	+ 600 W	Or 500 W	Or 400 W	No
1 W-25 W	+ 500 W	Or 400 W	Or 300 W	
26 W-50 W	+ 400 W	Or 300 W	Or 200 W	
51 W-75 W	+ 300 W	Or 200 W	Or 100 W	
76 W-100 W	+ 200 W	Or 100 W	Or 50 W	
101 W-125 W	+ 100 W	Or 50 W	Or 0 W	
126 W-150 W	+ 0 W	Or 0 W	Or 0 W	
<b>ST-PRO-N<sup>1</sup></b>				
0 W	+ 500 W	Or 400 W	Or 300 W	Required
1 W-50 W	+ 400 W	Or 300 W	Or 200 W	
51 W-100 W	+ 300 W	Or 200 W	Or 100 W	
101 W-150 W	+ 200 W	Or 100 W	Or 0 W	
151 W-200 W	+ 100 W	Or 0 W	Or 0 W	
201 W-250 W	+ 0 W	Or 0 W	Or 0 W	

<sup>1</sup> Do not install dimmers to control receptacles or motor-operated appliances.

Job Name: <input style="width: 90%; height: 20px;" type="text"/>	Model Numbers: <input style="width: 95%; height: 20px;" type="text"/>
Job Number: <input style="width: 80%; height: 20px;" type="text"/>	<input style="width: 95%; height: 20px;" type="text"/>

## Compatible Power Boosters and Load Interfaces

Some local controls can be used to control power boosters or load interfaces. Up to three power boosters or load interfaces can be used with one control. See table below for a list of controls and compatible power boosters and load interfaces.

Control	Phase Adaptive Power Modules: PHPM-PA-120-WH; PHPM-PA-DV-WH	3-wire Fluorescent Power Modules: PHPM-3F-120-WH; PHPM-3F-DV-WH	Switched Power Module: PHPM-SW-DV-WH	0–10 V <sub>DC</sub> Interface and Switching Module: GRX-TVI
STCL-153M				
ST-PRO-N	✓	✓		✓
ST-6ANS			✓	

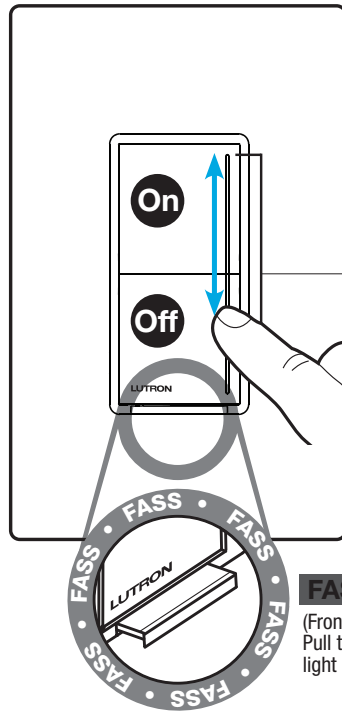
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Job Number: <input style="width: 80%; height: 20px;" type="text"/>	<input style="width: 30%; height: 20px;" type="text"/>	<input style="width: 35%; height: 20px;" type="text"/>



# Operation

## LED+ Dimmer

Dimming from LED+ dimmer only



**On**

- Lights go to full brightness or programmed preset level
- See Sunnata Dimmer MyLevel Personalization Application Note #734 (P/N 048734) at [www.lutron.com/SunnataMyLevel](http://www.lutron.com/SunnataMyLevel) to change this behavior
- Anytime - Double tap to full brightness

**Adjust:**  
(Light Bar)

- Touch the light bar to set the lamps to desired level
- Slide to adjust the light level
- Will not turn lights off

**Off**

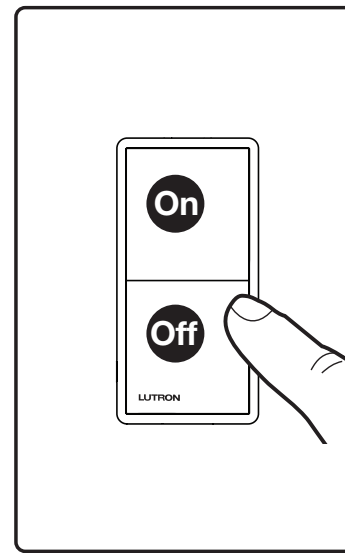
- Lights go off
- Press and Hold for more than 1 second - Delayed long fade to off (30 second delay)

**FASS\***

(Front Accessible Service Switch)  
Pull tab out to change the room's light bulb.

## Accessory Switch

ON/OFF only from accessory switches



**On**

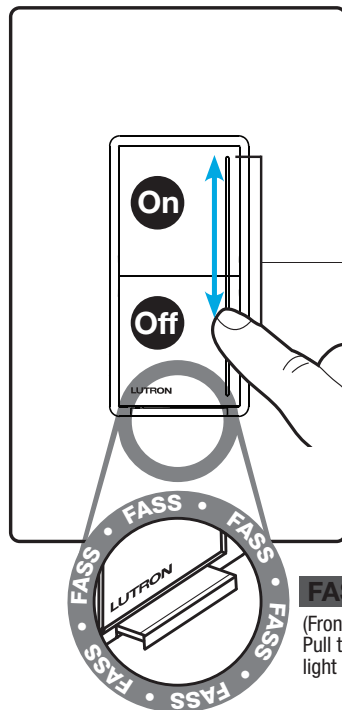
- Lights go to full brightness or programmed preset level of the main dimmer
- Anytime - Double tap to full brightness

**Off**

- Lights go off
- Press and Hold for more than 1 second - Delayed long fade to off (30 second delay)

## PRO Dimmer and Companion Dimmer

Dimming from PRO dimmer and all companion dimmer locations



**On**

- Lights go to full brightness or programmed preset level
- See Sunnata Dimmer MyLevel Personalization Application Note #734 (P/N 048734) at [www.lutron.com/SunnataMyLevel](http://www.lutron.com/SunnataMyLevel) to change this behavior
- Anytime - Double tap to full brightness

**Adjust:**  
(Light Bar)

- Touch the light bar to set the lamps to desired level
- Slide to adjust the light level
- Will not turn lights off

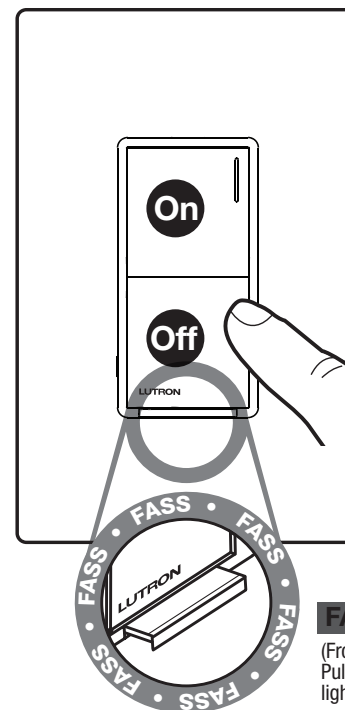
**Off**

- Lights go off
- Press and Hold for more than 1 second - Delayed long fade to off (30 second delay)

**FASS\***

(Front Accessible Service Switch)  
Pull tab out to change the room's light bulb.

## Switch and Companion Switch



**On**

- Lights or load turns on
- See Sunnata Switch MyLevel Personalization Application Note #793 (P/N 048793) at [www.lutron.com/SunnataMyLevel](http://www.lutron.com/SunnataMyLevel) to change the appearance of the light bar

**Off**

- Lights or load turns off
- Press and Hold for more than 1 second - Delayed off (30 second delay)

**FASS\***

(Front Accessible Service Switch)  
Pull tab out to change the room's light bulb.

\* FASS switch is **ONLY** for changing light bulbs in permanently wired fixtures. Changing wiring or installing dimmers/switches/companion controls requires turning off the breaker at the breaker panel.

Job Name:	Model Numbers:	
<input type="text"/>	<input type="text"/>	<input type="text"/>
Job Number:	<input type="text"/>	<input type="text"/>

## MyLevel Personalization Advanced Features

Sunnata dimmers and switches contain advanced features that allow users to customize the control to meet their specific needs. For a detailed description of the features and uses, please refer to the Sunnata Dimmer MyLevel Personalization Application Note #734 (P/N 048734) or Sunnata Switch MyLevel Personalization Application Note #793 (P/N 048793) at [www.lutron.com/SunnataMyLevel](http://www.lutron.com/SunnataMyLevel). Before entering MyLevel, it is important to have a good understanding of the features.

Available Dimmer MyLevel Personalization Advanced Features	
Feature	Description
High-end trim	Select the maximum available light limit. Default - Highest level of trim range.
Low-end trim	Select the minimum available light limit. Default - Middle level of trim range.
Preset light level	Change the behavior of the control when the ON button is pressed from the OFF state to ON. Default - Tapping the ON button always sets the lights to full (locked preset at high-end).
Light bar brightness	Select between high, medium, and low brightness of the control's light bar. Default - Medium brightness.
Light level indicator/locator light*	Select between ON and OFF for the light bar when the lights are on (light level indicator) and when the lights are off (locator light). Default - ON/ON.
Phase select (PRO-N only)	Select the Phase mode in which the dimmer operates. Forward or Reverse (Default).
Restore factory default settings	Select to return dimmer to its original factory settings.

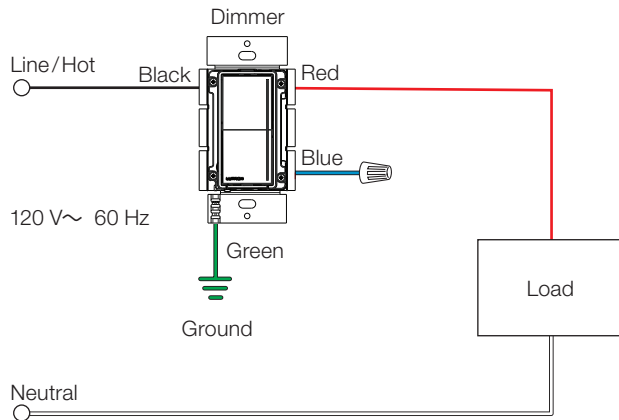
\* The dimmer light bar will always illuminate when interacting with the dimmer to indicate the light level setting.

Available Switch MyLevel Personalization Advanced Features	
Feature	Description
Light bar brightness	Select between high, medium, and low brightness of the control's light bar. Default - Medium brightness.
Light level indicator/locator light	Select between ON and OFF for the light bar when the lights are on (light level indicator) and when the lights are off (locator light). Default - ON/ON.

<b>Job Name:</b> <input style="width: 90%; height: 20px;" type="text"/>	<b>Model Numbers:</b> <input style="width: 60%; height: 20px;" type="text"/> <input style="width: 35%; height: 20px;" type="text"/>	
<b>Job Number:</b> <input style="width: 150px; height: 20px;" type="text"/>	<input style="width: 300px; height: 20px;" type="text"/>	<input style="width: 300px; height: 20px;" type="text"/>

### Wiring Diagrams

#### Single Pole Wiring: STCL-153M

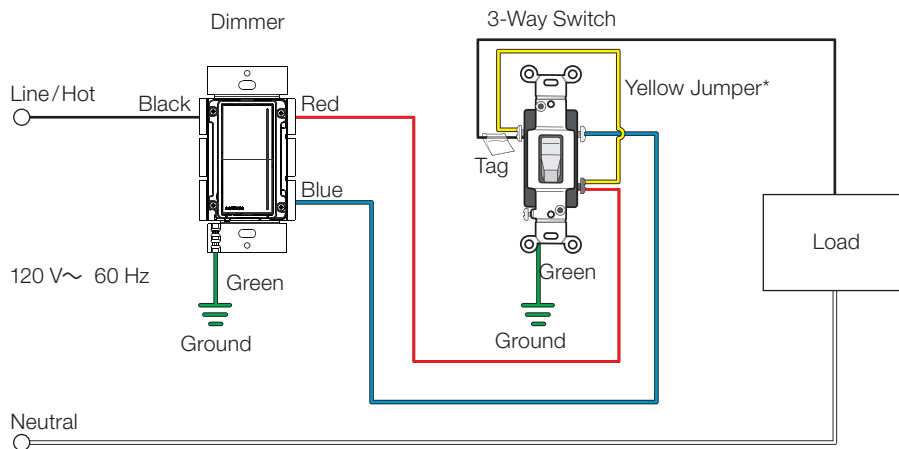


#### Single Pole Application:

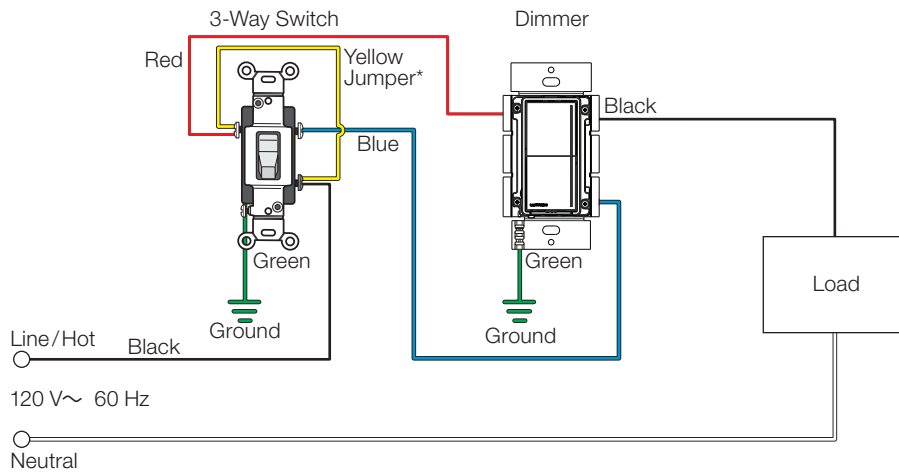
- Black and red wires are interchangeable in this application.
- Cap the blue wire with the supplied wire connector.
- Do not connect the blue wire to any other wiring or to ground.

#### 3-Way Wiring (Using 3-Way Mechanical Switch): STCL-153M

##### Dimmer Line Side



##### Dimmer Load Side



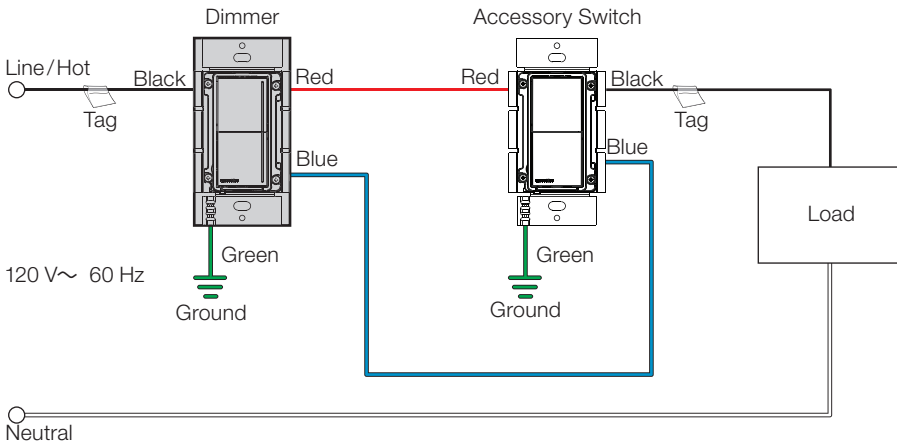
\* Yellow jumper wire is included in the dimmer packaging.

Job Name:	Model Numbers:	
<input type="text"/>	<input type="text"/>	<input type="text"/>
Job Number:	<input type="text"/>	<input type="text"/>

### Wiring Diagrams (continued)

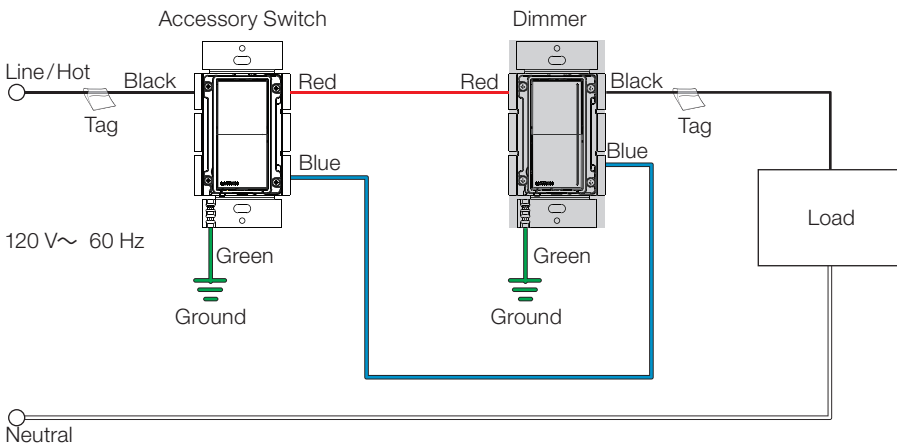
#### Wiring (Using Sunnata Accessory Switch<sup>1</sup>): STCL-153M with ST-AS

##### Dimmer Line Side



**Note:** ST-AS is NOT compatible with STCL-153P, it works only with STCL-153M.

##### Dimmer Load Side

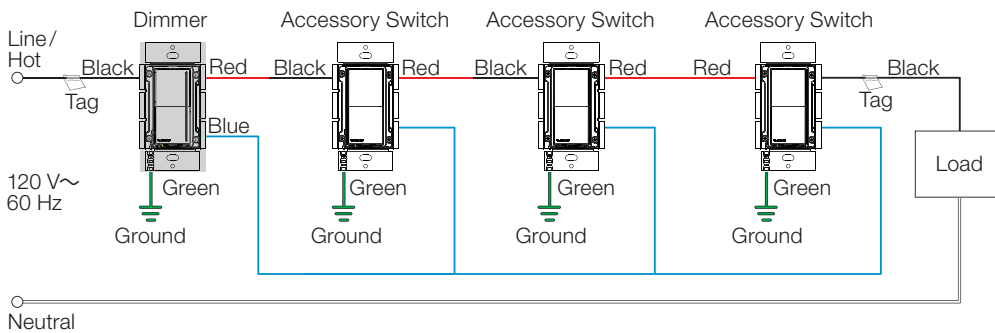


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Wiring Diagrams (continued)

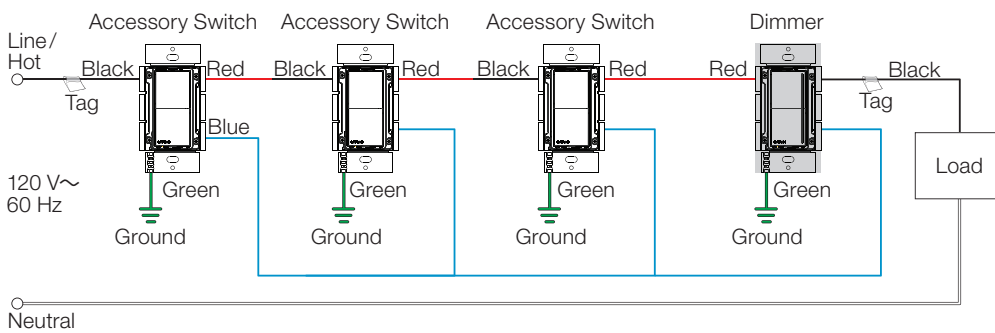
4-Way Wiring (Using Sunnata Accessory Switch(es)<sup>1,2</sup>: STCL-153M with ST-AS

Dimmer Line Side

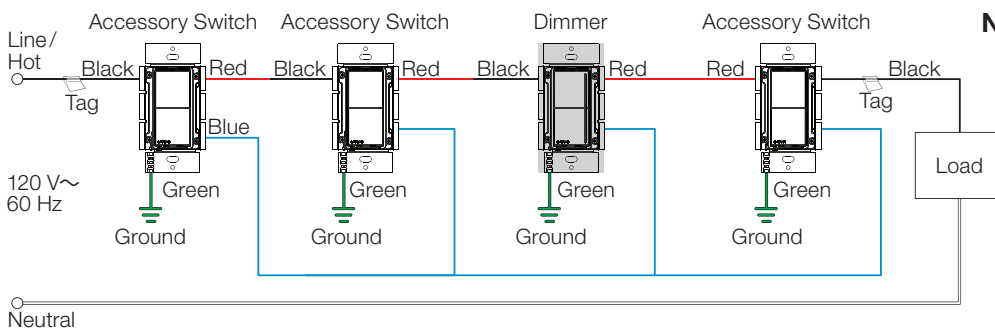


**Note:** ST-AS is NOT compatible with STCL-153P, it works only with STCL-153M.

Dimmer Load Side



Dimmer in the Middle



**Note:** Main dimmer can go in any location.

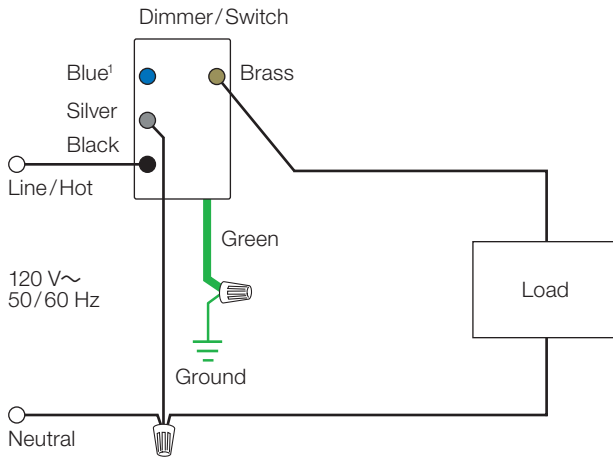
<sup>1</sup> ST-AS, Sunnata accessory switch is NOT compatible with STCL-153P, it works only with STCL-153M.

<sup>2</sup> Up to nine (9) accessory switches may be connected to the dimmer. Total blue wire connection wire length may be up to 150 ft (45 m).

Job Name:	Model Numbers:	
<input type="text"/>	<input type="text"/>	<input type="text"/>
Job Number:	<input type="text"/>	<input type="text"/>

Wiring Diagrams (continued)

Single-Location Installation<sup>1</sup> with required Neutral: -PRO-N, -6ANS

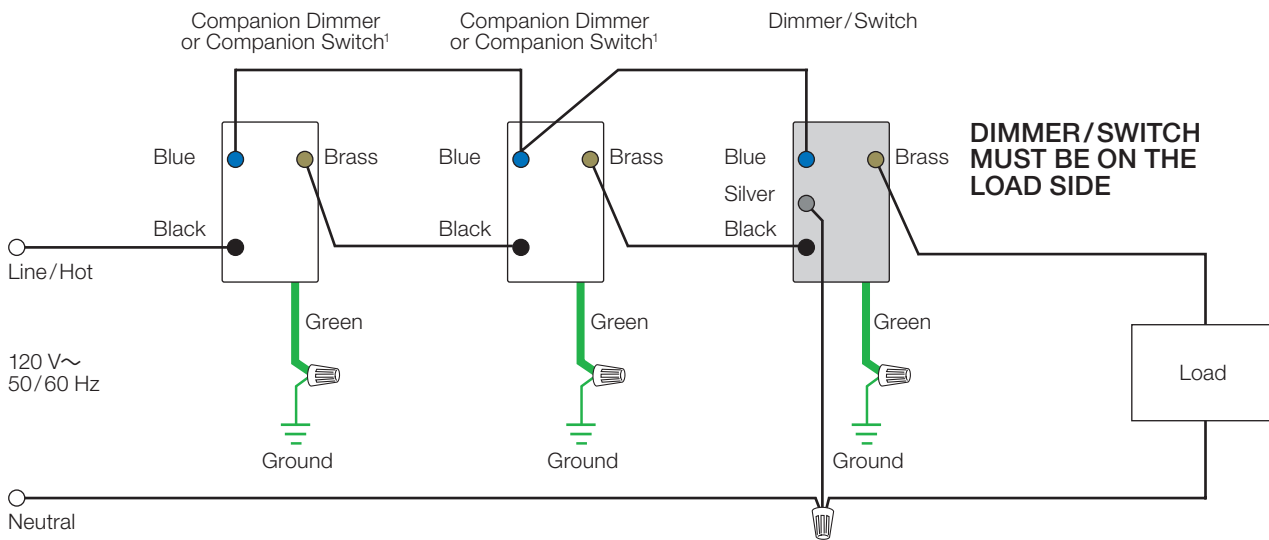


**Note:** Ground connection is a 18 AWG (1.0 mm<sup>2</sup>) green wire.

<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.

Multi-Location Installation with required Neutral: -PRO-N with -RD OR -8ANS or -6ANS with -RS

**Note:** Dimmer and switch must be on the load side



**Note:** Ground connection is a 18 AWG (1.0 mm<sup>2</sup>) green wire.

<sup>1</sup> Up to four companion dimmers/companion switches may be connected to the dimmer/switch. Total blue terminal wire length may be up to 150 ft (45 m).

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<b>Job Name:</b> <input type="text"/>	<b>Model Numbers:</b> <input type="text"/>	
<b>Job Number:</b> <input type="text"/>	<input type="text"/>	<input type="text"/>