

## Stanza™ Dimmers SZ-6D, SZ-6ND Stanza™ Switch SZ-6ANS

### FCC Information

Changes or modifications not expressly approved by Lutron Electronics Co. could void the user's authority to operate this equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### Installation Instructions

Please Read Before Installing

120 V~ 50/60 Hz



Dimmer and Dimmer with Neutral      Switch

### Load Specifications

Control	Load Type	Min. Load	Max. Load
SZ-6D <sup>1</sup>	Incandescent	50 W	600 W
	MLV <sup>2</sup>	50 W/VA	450 W / 600 VA
SZ-6ND <sup>1</sup>	Incandescent	10 W	600 W
	MLV <sup>2</sup>	10 W/VA	450 W / 600 VA
SZ-6ANS <sup>3</sup>	Lighting	10 W/VA	6 A
	Motor	0.083 A	3 A

### Notes

**1 Dimmer Load Type:** SZ-6D and SZ-6ND are designed for use with permanently installed incandescent, magnetic low-voltage (MLV), or tungsten halogen only. Do not install dimmers to control standard receptacles or motor-operated appliances.

**2 Low-Voltage Applications:** Use SZ-6D and SZ-6ND with magnetic (core and coil) low-voltage transformers only. Not for use with electronic (solid-state) low-voltage transformers.

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.

**3 Switch Load Type:** SZ-6ANS is designed for use with all permanently installed lighting loads and with motor loads up to 1/4 HP (3 A).

### Important Notes

Install in accordance with all local and national electrical codes.

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

**Spacing:** If mounting one control above another, leave at least 4.5 in (114 mm) vertical space between them.

**Faceplates:** Use Lutron *Stanza* faceplates for best color match and aesthetic appearance. Do not paint controls or faceplates.

**Cleaning:** To clean, wipe with a clean damp cloth. **DO NOT** use any chemical cleaning solutions.

**Wallboxes:** Lutron recommends using 3.5 in (89 mm) deep wallboxes for easier installation. Several controls may be installed in one multigang wallbox — see Derating Chart.

**RF Device Placement:** RF dimmers and switches must be located within 20 feet (6 m) of an RF signal repeater or a device configured as a repeater.

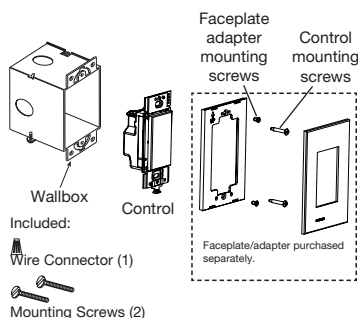
*Stanza* RF dimmers or switches cannot be controlled by the system until they are addressed and programmed. They will work as stand-alone controls only.

### FCC Information

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential and commercial installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### Mounting Diagram



### Multigang Installations

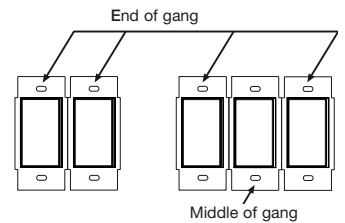
In multigang installations, several controls are grouped horizontally in one multigang wallbox.

When combining controls in a wallbox, derating is required.

### Derating Chart

Control	Load Type	End of Gang	Middle of Gang
SZ-6D, SZ-6ND	Incandescent	500 W	400 W
	MLV	400 W / 500 VA	300 W / 400 VA
SZ-6ANS	Lighting	5 A	3.5 A
	Motor	3 A	3 A

### Control Location for Ganging



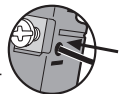
### Installation

**WARNING!** Wiring with power ON may result in personal injury or death. Locate and remove fuse or lock circuit breaker in the OFF position before proceeding.

**Short Circuit Check:** Check the installation for short circuits before installing control(s). With power OFF, install standard mechanical switch(es) or wire connector(s) between hot and load. Restore power. If lights do not work or a breaker trips, correct wiring and check again. Install control(s) only when short is no longer present. Warranty is void if control is turned ON with a shorted circuit.

1. Turn power OFF at fusebox or circuit breaker.
2. Prepare wires. When making wire connections, trim or strip wallbox wires to the length indicated by the strip gauge on the back of the control. **Note:** Wire connectors provided are suitable for copper wire only. **Wire Connector:**
  - Use to join one 14 AWG (1.5 mm<sup>2</sup>) or 12 AWG (2.5 mm<sup>2</sup>) ground wire with one 18 AWG (0.75 mm<sup>2</sup>) control ground wire.
  - Twist wire connector tight.

**Push-In Terminals:** Insert wires fully. Push-in terminals are for use with 14 AWG (1.5 mm<sup>2</sup>) *solid copper wire only*. **DO NOT** use stranded or twisted wire.



**OR**  
**Screw Terminals:** Tighten securely to 5 in•lbs (0.55 N•m). Screw terminals are for use with *solid copper wire only*. **DO NOT** use stranded or twisted wire.



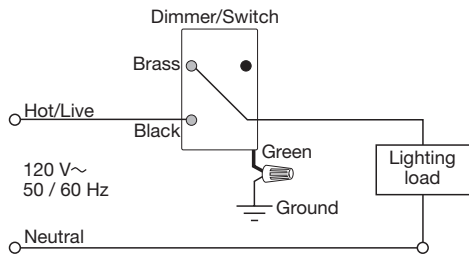
3. Wire controls as follows:
  - Single location installation:** See Wiring Diagrams 1 and 2.
  - Power Booster and Interfaces:** When using power boosters or interfaces, see wiring diagrams provided with the interface.
4. Push all wires back into the wallbox and **loosely** fasten the control to the wallbox using the control mounting screws provided. Do not pinch the wires.
5. Attach Lutron *Stanza* faceplate adapter and faceplate.
  - a. Install faceplate adapter onto front of control(s).
  - b. Tighten control mounting screws until faceplate adapter is flush to wall (do not over-tighten).
  - c. Snap faceplate onto faceplate adapter, and verify that control is aligned properly and switch protrudes in front of the faceplate.
  - d. If control(s) is (are) misaligned or switch is flush with the faceplate, loosen control mounting screws appropriately.
6. Restore power. Check for correct local operation (see Dimmer Operation and Switch Operation).



**Correct:** Dimmer/switch protrudes from faceplate. **Incorrect:** Dimmer/switch is flush with faceplate. Loosen control mounting screws.

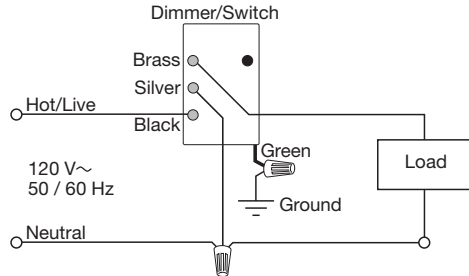
## Wiring Diagram 1

Single Location Installation  
SZ-6D

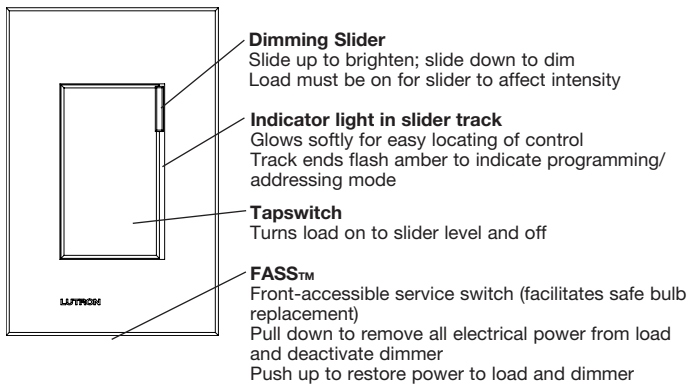


## Wiring Diagram 2

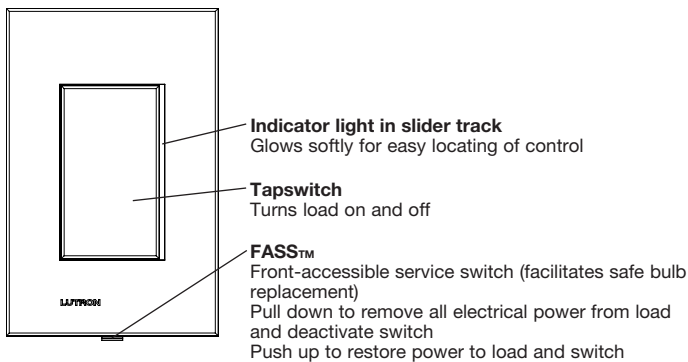
Single Location Installation with Neutral  
SZ-6ND, SZ-6ANS



## Dimmer Operation (SZ-6D, SZ-6ND)



## Switch Operation (SZ-6ANS)



## Lamp Replacement



**Caution!** For any procedure other than routine lamp replacement, power must be disconnected at the main electrical panel. Working with power ON may result in personal injury or death.

For routine lamp replacement, remove power from the fixture(s) by pulling down the FASS switch on the Dimmer/Switch.

## Troubleshooting Guide

Symptom	Cause and Action
Load is off and there is no indicator on the dimmer/switch	Power not present <ul style="list-style-type: none"> <li>• Circuit breaker OFF or tripped. Perform short circuit check.</li> <li>• FASS is in the OFF position. Move FASS to the ON position by fully pushing it up.</li> </ul>
	Wiring error <ul style="list-style-type: none"> <li>• Check wiring to be sure it matches installation instructions and wiring diagrams.</li> </ul>
	Lamps burned out or not installed <ul style="list-style-type: none"> <li>• Replace or install lamps.</li> </ul>
	Diode lamps <ul style="list-style-type: none"> <li>• Replace with non-diode lamps.</li> </ul>
	Damaged dimmer/switch <ul style="list-style-type: none"> <li>• Device may have been damaged by previous overload or miswire. Replace device.</li> </ul>
Dimmer/switch indicator is on but load cannot be turned on and/or cannot be turned off	Wiring error <ul style="list-style-type: none"> <li>• Check wiring to be sure it agrees with installation instructions and wiring diagrams.</li> </ul>
	Damaged dimmer/switch <ul style="list-style-type: none"> <li>• Device may have been damaged by previous overload or miswire. Replace device.</li> </ul>
Light turns ON and OFF continuously	Load is less than minimum load requirement <ul style="list-style-type: none"> <li>• Make sure the connected load meets the minimum load requirement for that control. See Load Specifications table.</li> </ul>
	Improper load type <ul style="list-style-type: none"> <li>• Check that the load being dimmed is dimmable. See Load Specifications table.</li> </ul>
Lights don't switch ON/OFF from keypad	Improper programming <ul style="list-style-type: none"> <li>• Check programming in the <i>Stanza</i> software.</li> </ul>
	Out of RF range <ul style="list-style-type: none"> <li>• Ensure device is within 20 feet (6 m) of another device configured as a repeater.</li> </ul>
	Wiring <ul style="list-style-type: none"> <li>• Wiring error. Check wiring to be sure it agrees with installation instructions and wiring diagrams.</li> </ul>
Faceplate is warm	Solid-state control dissipation <ul style="list-style-type: none"> <li>• Solid-state dimmers and switches internally dissipate about 2% of the total connected load. It is normal for dimmers and switches to feel warm to the touch during operation.</li> </ul>
Control is buzzing or humming	It is normal for dimmers and switches to emit a slight buzzing or humming sound.

### Returning the Dimmer/Switch to Factory Settings

1. Triple-tap the tapswitch quickly (within 1 second).
2. Press and hold the tapswitch for 5 seconds (until the load flashes).
3. Triple-tap the tapswitch quickly again.

### Notes

- Returning to factory settings will clear all programming from the dimmer/switch, and will prevent it from being controlled over RF from a keypad or control interface.
- After being returned to factory defaults, the device will need to be re-addressed as part of a system.

**Technical support:** USA, Canada, Caribbean: 1.800.523.9466  
Mexico: +1.888.235.2910  
Central/South America: +1.610.282.6701

**Warranty:** 1-year limited warranty standard. 2-year parts and labor warranty, with 8-year pro-rated parts replacement on systems that include factory startup.

These products may be covered under one or more of the following U.S. patents: 5,248,919; 5,637,930; 5,838,226; 5,848,054; 5,905,442; 6,687,487; 6,803,728; and corresponding foreign patents. U.S. and foreign patents pending. Lutron and the sunburst logo are registered trademarks and FASS and Stanza are trademarks of Lutron Electronics Co., Inc.  
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