

Troubleshooting

Symptom	Possible Cause
Light does not turn on, but LEDs on control are on.	<ul style="list-style-type: none"> Lamps burned out or not installed properly.
Light does not turn on, and LEDs on dimmer are off.	<ul style="list-style-type: none"> Breaker is off or tripped. Front Accessible Service Switch (FASS) on the dimmer or accessory dimmer is switched to the left (see Step 4).
Dimmer does not dim properly or drops out at low end.	<ul style="list-style-type: none"> Lamps not operated at full intensity for 100 hours prior to dimming. The dimmer is not wired correctly. See Step 3 for correct wiring.
Lamps flicker when dimmed.	<ul style="list-style-type: none"> Lamps not operated at full intensity for 100 hours prior to dimming.
Light turns on and Dimmer works, but Accessory Dimmer does not work.	<ul style="list-style-type: none"> Blue wire on Accessory Dimmer not connected to the same color wire as the blue wire on Dimmer (see Step 3).
Dimmer works properly then shuts OFF.	<ul style="list-style-type: none"> Dimmer is overloaded. Check for correct number of ballasts and/or total ballast current load on dimmer.

Symptom	Possible Cause
Dimmer does not respond to <i>Spacer System</i> Infrared Hand-held Remote Control (transmitter).	<ul style="list-style-type: none"> Transmitter batteries are installed incorrectly. Transmitter batteries are dead or low. Transmitter is not aimed at the <i>Spacer System</i> Dimmer. Transmitter is not a <i>Spacer System</i> transmitter.
Dimmer does not respond to a non-Lutron infrared remote control (transmitter).	<ul style="list-style-type: none"> Transmitter is not a programmable type transmitter (i.e. learnable or stored code). Transmitter was not set up properly.

Limited Warranty

(Valid only in U.S.A., Canada, Puerto Rico, and the Caribbean.)

Lutron will, at its option, repair or replace any unit that is defective in materials or manufacture within one year after purchase. For warranty service, return unit to place of purchase or mail to Lutron at 7200 Suter Rd., Coopersburg, PA 18036-1299, postage pre-paid.

THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES, AND THE IMPLIED WARRANTY OF MERCHANTABILITY IS LIMITED TO ONE YEAR FROM PURCHASE. THIS WARRANTY DOES NOT COVER THE COST OF INSTALLATION, REMOVAL OR REINSTALLATION, OR DAMAGE RESULTING FROM MISUSE, ABUSE, OR DAMAGE FROM IMPROPER WIRING OR INSTALLATION. THIS WARRANTY DOES NOT COVER INCIDENTAL OR CONSEQUENTIAL DAMAGES. LUTRON'S LIABILITY ON ANY CLAIM FOR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, SALE, INSTALLATION, DELIVERY, OR USE OF THE UNIT SHALL NEVER EXCEED THE PURCHASE PRICE OF THE UNIT.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitation on how long an implied warranty may last, so the above limitations may not apply to you.

This product is covered under one or more of the following U.S. patents: 4,835,343; 5,017,837; 5,248,919; 5,399,940; 5,637,930; 5,798,581; 5,909,087; 6,169,377; 6,300,727; 6,380,696; DES 353,798; and corresponding foreign patents. U.S. and foreign patents pending. Lutron, Claro and Spacer are registered trademarks and Spacer System, FASS, and The Hand are trademarks of Lutron Electronics Co., Inc. NEC is a registered trademark of the National Fire Protection Association, Quincy, Massachusetts.

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Technical Assistance

If you have questions concerning the installation or operation of this product, call the **Lutron Technical Support Center**. Please provide exact model number when calling. +1-800-523-9466 (U.S.A., Canada, and the Caribbean)

Other countries call +1-610-282-3800

Fax +1-610-282-3090

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LUTRON®

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Made and printed in the U.S.A. 7/05 P/N 030-663 Rev. D

English

P/N 030-663 d

spacer SYSTEM™
Personal Space Light Control

Installation Instructions for Multi-Location Control

Please Leave for Occupant

Read all instructions completely before installation. Use *Spacer System™* infrared hand-held remote controls (SPS-4IT, SPS-FSIT) for programming and recalling lighting scenes, remote dimming, and switching from the palm of your hand.

Important Notes

- Caution:** To avoid overheating and possible damage to other equipment, do not use to control receptacles, motor-operated or transformer-supplied appliances.
- This dimmer requires special wiring and a Lutron dimming ballast. See wiring requirements in Step 2 (next page) before starting installation.
- Install in accordance with all national and local electrical codes.
- When no "grounding means" exist within the wallbox then the NEC® 2002, Article 404-9 allows a dimmer without a grounding connection to be installed as a replacement, as long as a plastic, noncombustible wallplate is used. For this type of installation, cap or remove the green ground wire on the dimmer and use an appropriate wallplate such as Lutron *Claro*® series wallplates.
- Do not paint front or back of dimmer.
- Use only to control Lutron FDB- or ECO- Series electronic fluorescent dimming ballasts.
- To ensure proper dimming performance and full lamp life, fluorescent lamps should be operated at full intensity for 100 hours prior to dimming.
- Operate between 0 °C (32 °F) and 40 °C (104 °F).
- Dimmer may feel warm to the touch during normal operation.
- For new installations, wire a test switch before installing the control.
- Recommended wallbox depth is 2 1/2" minimum.
- Maximum wire length between the Dimmer and the last Accessory Dimmer is 250 feet (76 m).
- Clean with a soft damp cloth only.** Do not use any chemical cleaners.



"The Hand™" Infrared Wireless Remote Control **will not** operate the *Spacer System* Dimmers. Use *Spacer System* infrared hand-held remote controls only (sold separately).

For Lutron FDB- or ECO- Series Fluorescent Dimming Ballasts

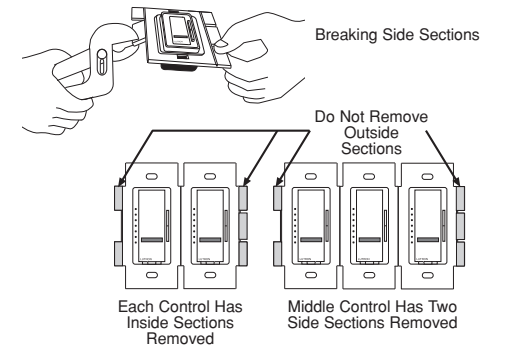
SPSF-6AM	120 V Fluorescent Dimmer with IR Receiver
SPS-AD	120 V Accessory Dimmer
SPSF-6AM-277	277 V Fluorescent Dimmer with IR Receiver
SPS-AD-277	277 V Accessory Dimmer
Rated at 120 V ~ or 277 V ~ (depending on model) 60 Hz	
0.08 Amp. minimum, 6 Amp. maximum total current	
Maximum of 20 ballasts	

Installation Note

Important: Dimmers used together to create scenes with a *Spacer System* wall mounted scene selector (SPS-5WC) must be installed in a single multigang wallbox with no dividers or barriers between dimmers. Accessory Dimmers can not be mounted between SPS-5WC and Dimmers. Individually mounted wallboxes are not acceptable. For scene programming and functions, refer to the instructions supplied with a *Spacer System* infrared hand-held remote control or wall mounted scene selector.

Multigang Installations

Lutron *Claro* wallplates are available in 1 to 6 gang versions. Purchase *Claro* multigang wallplates separately. When combining dimmers with other controls in the same wallbox, remove all inner side sections prior to wiring. Using pliers, bend side sections up and down until they break off.



Reduction of the *Spacer System* Dimmer load capacity **is required** when removing side sections. To determine total ballast load, add the line current found on the ballast label for all the ballasts in the circuit. This will indicate the total load for the dimmer. See table below.

	No sides removed	1 side removed	2 sides removed
SPSF-6AM	6 Amps	5 Amps	3.5 Amps
SPSF-6AM-277	6 Amps	5 Amps	3.5 Amps
Maximum number of ballasts is 20, regardless of the total ballast load or number of side sections removed			

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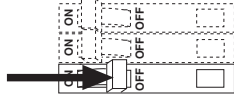
Multi-Location Installation

For installations combining dimmers with other controls in a wallbox, refer to Multigang Installations on page 1 before beginning.

IMPORTANT NOTE: This dimmer requires special wiring and a Lutron dimming ballast for installation. See wiring requirements in Step 2 before starting installation.

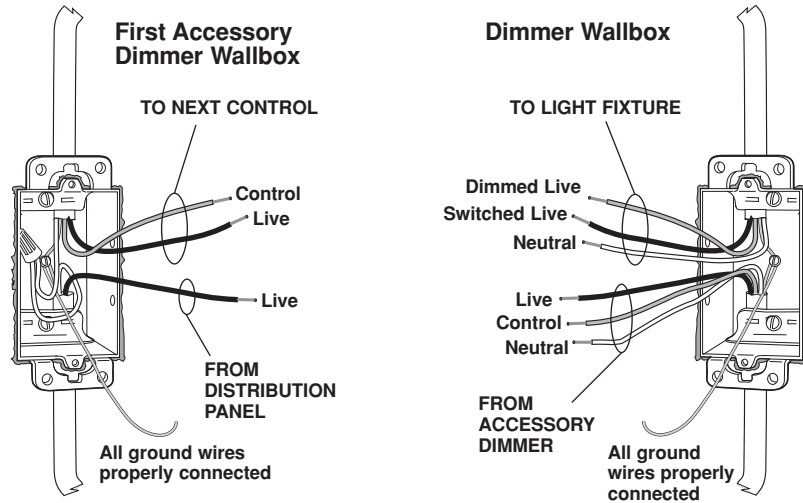
✓ Check off Steps as completed.

Step 1 Turn power off at circuit breaker panel or remove fuse from fusebox.



Step 2 The following wires are required in the wallbox for installation.

If the following wires are not available in your wallbox, you must run the needed wires or contact a licensed electrician for installation. All wiring must be in accordance with national and local electrical codes.



Important Wiring Information

When making wire connections, follow the recommended strip lengths and combinations for the supplied wire connectors. **Note:** Wire connectors provided are suitable for **copper wire only**. For aluminum wire, consult an electrician.

Small:
Strip insulation 3/8" (10 mm) for 14 AWG wire
Strip insulation 1/2" (13 mm) for 16 or 18 AWG wire
Use to join one 14 AWG supply wire with one 16 or 18 AWG control wire.

Large:
Strip insulation 1/2" (13 mm) for 10, 12 or 14 AWG wire
Strip insulation 5/8" (16 mm) for 16 or 18 AWG wire
Use to join one or two 12 or 14 AWG supply wires with one 10, 12, 14, 16, or 18 AWG control wire.

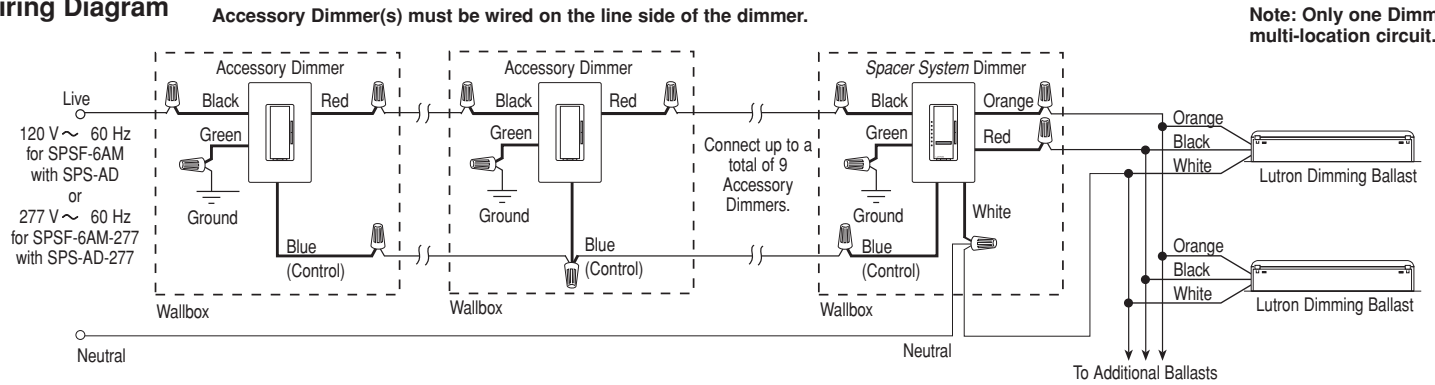


Twist wire connector tight. Be sure no bare wire is exposed.



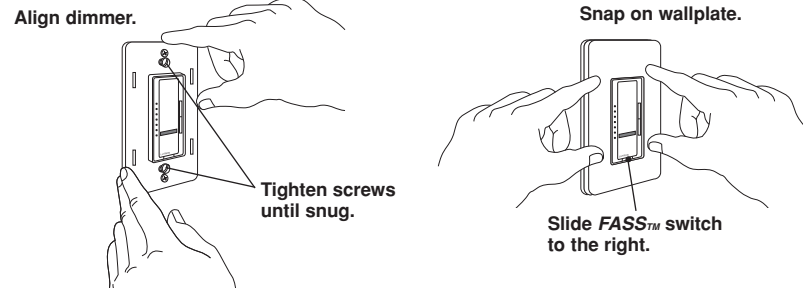
Step 3 Wire the *Spacer System* Dimmer and Accessory Dimmers as shown in Wiring Diagram.

Wiring Diagram

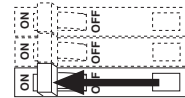


Note: Only one Dimmer can be used per multi-location circuit.

Step 4 Mount and align dimmer. Install *Claro* wallplate (sold separately).



Step 5 Turn power ON.



To ensure proper dimming performance and full lamp life, fluorescent lamps should be operated at full intensity for 100 hours prior to dimming.

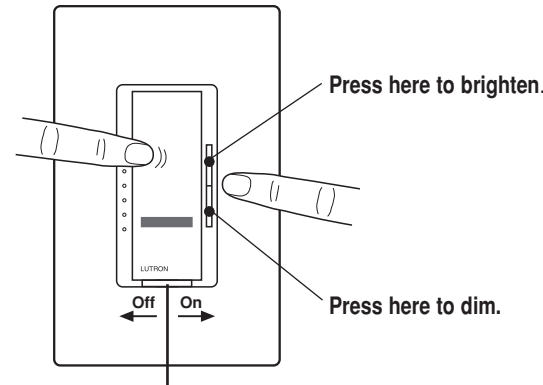
Operation

Basic Operation

Tap once to turn On.

Tap again to turn Off.

Tap twice to turn On to full bright.



IMPORTANT NOTICE:

FASS - Front Accessible Service Switch - to replace bulb, power may be conveniently removed by sliding FASS switch to the left. For any procedure other than routine lamp replacement, power must be disconnected at the main electrical panel.

Power Failure Memory - Light(s) return to level prior to power failure.

Advanced Features

Fade to OFF - Press and hold to activate delayed fade to OFF. As tap switch is held, LEDs will begin to flash. Each flashing LED represents 10 seconds of delay before dimmer fades to OFF (up to 60 seconds).

Locked-in Preset - Tap 4 times quickly to set the current light level as the "Locked-in" preset (the LEDs will blink twice indicating the preset was locked). When the dimmer is turned ON via this button it will always go to this "Locked-in" light level rather than the previous light level. To unlock the preset, tap the switch 4 times quickly (the LEDs will blink three times indicating the preset was unlocked).

