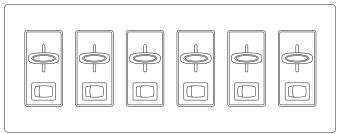
8. Attach Lutron® Claro® wallplate or other designer-style wallplate purchased separately. A beautiful, clean appearance with no visible screws is provided by *Claro* wallplate systems by *Lutron*.

Single Unit With Claro Wallplate



Multi-Ganged Unit With Claro Wallplate (6 gang max.)



Cleaning Instructions

Clean control with a soft damp cloth only. Do not use any chemical cleaners.

Limited Warranty

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

Worldwide Technical and Sales

Please provide exact model number when calling.

1.800.523.9466 (U.S.A., Canada, and the Caribbean)

Fax +1.610.282.6311 Internet: www.lutron.com

If you have questions concerning the installation or operation

of these products, call the *Lutron Technical Support Center*.

Assistance

+1.888.235.2910 (Mexico)

+1.610.282.3800 (Other Countries)

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.

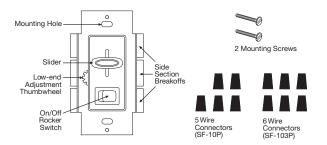
This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitation on how long an implied warranty may last, so the above limitations may not apply to you. Lutron, Claro, Skylark, Hi-Lume, Eco-10, and EcoSystem are registered trademarks and Compact SE is a trademark of Lutron Electronics Co., Inc. NEC is a registered trademark of the National Fire Protection Association, Quincy, Massachusetts.

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Lutron Electronics Co., Inc. 7200 Suter Road Coopersburg, PA 18036-1299 U.S.A. Printed in U.S.A. 1/2011 P/N 032-047 Rev. D SKYLARK_®

Installation Instructions Please Leave for Occupant

Package Contents and Part Identification



Important Notes Please Read Before Installation

CAUTION: To reduce the risk of overheating and possible damage to other equipment, do not use to control receptacles, motor-operated appliances, or transformer-supplied appliances.

Wallbox and Location: A single-gang wallbox 3 in high x 2 in wide x $2\frac{1}{2}$ in deep (76.2 mm high x 50.8 mm wide x 63.5 mm deep) will service all individual Skylark® dimmers. These dimmers are designed to operate in ambient temperatures from $32\,^{\circ}$ F ($0\,^{\circ}$ C) to $104\,^{\circ}$ F ($40\,^{\circ}$ C). Allow a minimum space of $4\frac{1}{2}$ in (114.3 mm) above and below the dimmer for proper heat dissipation. This Dimmer requires a neutral wire in the wallbox. If your wallbox does not have a neutral wire, one must be run. The dimmer will not operate without one.

When no "grounding means" exist within the wallbox, then the NEC® 2008, 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, twist a wire connector onto the green ground wire or remove the green ground wire on the Dimmer and use an appropriate wallplate such as Claro® or Satin Colors® series wallplates by Lutron®.

Short Circuit Check: Check new installation for short circuits prior to installation of dimmer by connecting incoming hot wire to ballast input wires with POWER OFF. Magnetic ballast: Connect the black and brown or black and yellow/blue wires together. Electronic ballast: Connect the black and orange wires together. Turn power on. If lights do not work or breaker trips, a short is present. Correct the wiring and check circuit again. Install dimmer only when short is no longer present. This check should be done by a qualified electrician.

Sockets: For magnetic ballasts, use lamp disconnect sockets only. This meets U.L. and NEC® regulations and maintains personal safety standards. For electronic ballasts, knife edge sockets are recommended. Use only with rapid start lamp sockets.

Lamps: Energy Saver Lamps may NOT be used with this dimmer. With magnetic ballasts only, do not mix different wattage lamps in the same circuit. NOTE: For best dimming performance, fluorescent lamps may need to be operated at full light output for a specified amount of time prior to dimming. Contact the lamp manufacturer for their specific reccomendations concerning lamp seasoning.

Magnetic ballasts: Use ONLY dimming ballasts shown on chart in step 2 of Pre-Installation. Do not mix 1 and 2 lamp ballasts in any one dimmer circuit. Do not mix ballasts manufactured by more than one company. Using single lamp ballasts will produce the

Fluorescent Dimmers

most consistent low end dimming level.

SF-10P, SF-103P

120 V∼ 60 Hz 8 A

Multi-phase Applications (120/208-3 Phase): In multi-phase applications use a separate neutral for each phase containing a dimmer. Contact the *Lutron Technical Support Center* at: **1.800.523.9466** for Application Note #17, "Common Neutral Interaction."

Pre-Installation

- **1.** Determine the number of controls to be ganged in the same wallbox. Allow the space equivalent of a full wallbox for EVERY control to be installed.
- **2.** If more than one control is being ganged in the same wallbox, side sections must be removed for proper fit. When controlling magnetic ballasts, breaking side sections off the control will reduce the maximum number of lamps per control. Use the following charts to determine the maximum capacity of each control.

Magnetic Ballasts: Maximum number of lamps per control

Magnetic	Side Sections Removed			
Ballasts	None	One	Two	
Universal 550LTCP [†] 502ATCP [†] *	10 lamps 10 lamps	8 lamps 8 lamps	6 lamps 6 lamps	
Advance DIM 140H DIM 240H*	8 lamps 8 lamps	6 lamps 6 lamps	4 lamps 4 lamps	
Valmont 8G5001W 8G5007W*	10 lamps 10 lamps	8 lamps 8 lamps	6 lamps 6 lamps	

[†] can be used with 30 W lamps * 2 lamp ballast

Electronic Ballasts: Maximum current per control

Electronic	Side Sections Removed			
Ballasts	None	One	Two	
Lutron FBD- Series ECO- Series	8 A 8 A	8 A 8 A	8 A 8 A	

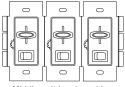
3. Remove desired inner side sections. Using pliers, bend side sections down as far as you can and then back to their original position. See diagrams below. Side sections will break off. Do not remove outer side sections of controls on the ends of the installation.







One side section removed



Middle unit has two side section removed





Installation



1. WARNING: Shock Hazard. May result in serious injury or death. Turn off power at circuit breaker before installing the unit.

Damage caused by wiring with power on will void the warranty. Install in accordance with all national and local electrical codes.

2. Wire connectors supplied can be used to join one 10 to 18 AWG (6 to 0.75 mm²) wire with one or two 12 or 14 AWG (2.5 or 1.5 mm²) wires. Wire connectors are suitable for use with copper wire ONLY.

Strip wallbox wires to the following lengths:

1/2 in (13 mm) for 10, 12, and 14 AWG (6, 2.5 and 1.5 mm²) wire 5/8 in (16 mm) for 16 and 18 AWG (1.0 or 0.75 mm²) wire



- **3.** Using wire connectors supplied, make connections following the appropriate wiring diagrams for your combination of controls and ballasts.
- **4.** Carefully push wires into wallbox, allowing room for dimmer backcover. Do not pinch wires.
- **5.** Mount dimmer to wallbox using screws provided. Unit MUST be mounted vertically.
- **6.** Turn power ON.

7. For magnetic ballasts ONLY:

Adjust minimum light intensity as follows:

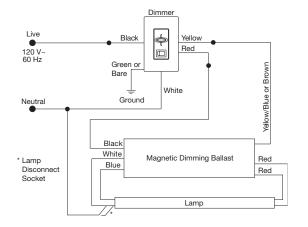
- a) Run lamps at full intensity (slider at top position) for 15 minutes to warm ballasts.
- **b)** After 15 minutes push slider to low intensity position.
- c) Locate thumbwheel adjustment (shown in Package Contents and Part Identification on page 1).
- d) Rotate the thumbwheel to raise or lower minimum light intensity. Proper minimum light intensity is set when lamps do not flicker or drop out.

For Lutron electronic ballasts ONLY:

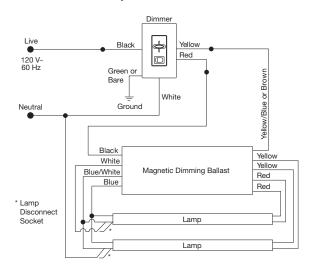
This unit is factory-calibrated and does not normally require low-end light adjustment when used with *Lutron* Hi-Lume_®, Hi-Lume_® 3D, Compact SE_™, Eco-10_®, EcoSystem_® (H3D-, FDB-, ECO-, HL3-, EC5-, L3D) electronic ballasts. If lamps flicker or drop out at minimum dimming level there may be an installation error or the low-end light level may need to be reset. Continued use of the system in this mode will cause premature lamp failure. If this condition exists, call the Lutron Technical Support Center at: 1.800.523.9466.

SF-10P with Magnetic Dimming Ballast

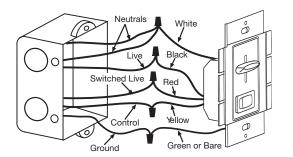
SF-10P with one lamp ballast



SF-10P with two lamp ballast

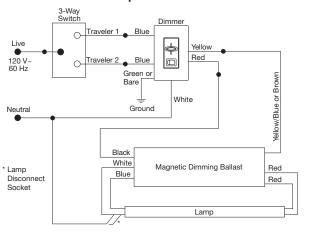


SF-10P wallbox wiring

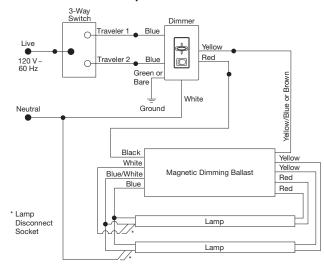


SF-103P with Magnetic Dimming Ballast

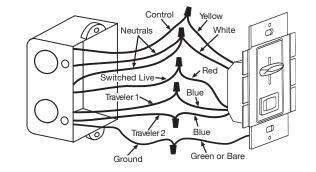
SF-103P with one lamp ballast



SF-103P with two lamp ballast



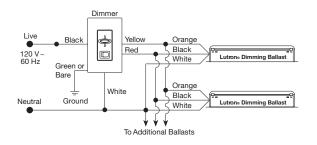
SF-103P wallbox wiring



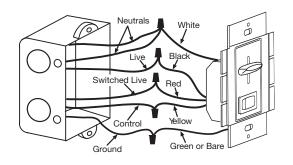
NOTE: If the SF-103P does not turn off or the unit does not turn on at all, the red and blue wires have been connected incorrectly. The result of the miswire depends on the position of the other 3-Way switch. Check the wiring carefully.

SF-10P with Lutron® Ballast

SF-10P with Lutron electronic ballast

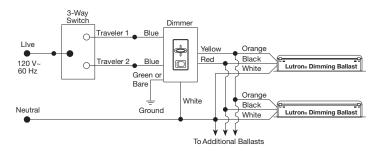


SF-10P wallbox wiring

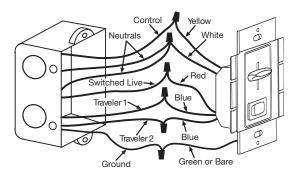


SF-103P with Lutron® Ballast

SF-103P with Lutron electronic ballast



SF-103P wallbox wiring



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