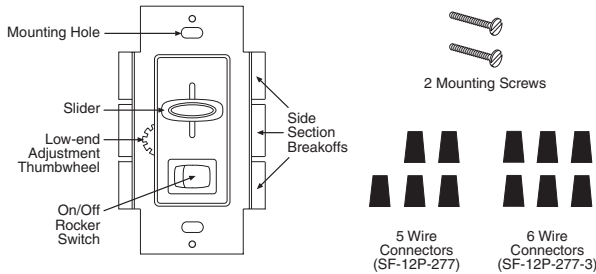


Package Contents and Part Identification



Important Notes Please Read Before Installation

Wallbox and Location: A single-gang wallbox (3" high x 2" wide x 2 1/2" deep) will service all individual Skylark dimmers. These dimmers are designed to operate in ambient temperatures from 0°C (32°F) to 40°C (104°F). Allow a minimum space of 4 1/2" above and below the dimmer for proper heat dissipation.

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.

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:** Greater dimming range is achieved by operating lamps at full intensity for 100 hours.

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 ballast manufactured by more than one company. Using single lamp ballasts will produce the most consistent low end dimming level.

Multi-phase Applications: In multi-phase applications use a separate neutral for each phase containing a dimmer. Contact the **Lutron Technical Assistance Hotline** toll-free 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

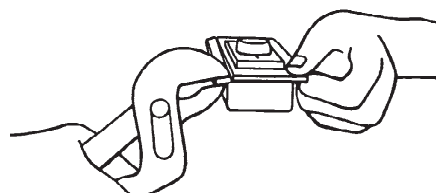
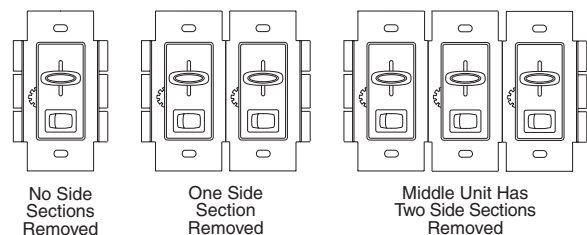
Magnetic Ballasts	Side Sections Removed		
	None	One	Two
<i>Universal</i> 679-L-TC-P	12 lamps	10 lamps	8 lamps
678-A-TC-P*	12 lamps	10 lamps	8 lamps

* 2 lamp ballast

Electronic Ballasts: Maximum current per control

Electronic Ballasts	Side Sections Removed		
	None	One	Two
<i>Lutron</i> Hi-lume	6 amps	6 amps	6 amps
Eco-10	6 amps	6 amps	6 amps

3. Remove desired inner side sections. Using pliers, bend side sections down as far as possible 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.



Installation

1. TURN OFF POWER at fusebox or circuit breaker. Wiring with power on can result in personal injury or product damage. Damage caused by wiring with power on will void the warranty.

2. Wire connectors supplied can be used to join one 10-, 12-, 14-, 16-, or 18-gauge wire with one or two 12-, or 14-gauge wires. Wire connectors are suitable for use with copper wire **ONLY**.

Strip wallbox wires to the following lengths:

1/2" for 10, 12, and 14 gauge wire

5/8" for 16 and 18 gauge wire



3. Using wire connectors supplied, make connections following the appropriate wiring diagrams for your combination of controls and ballasts.

4. Carefully push and form wires into wallbox while keeping wire connectors toward the top and bottom corners to allow room for the 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:

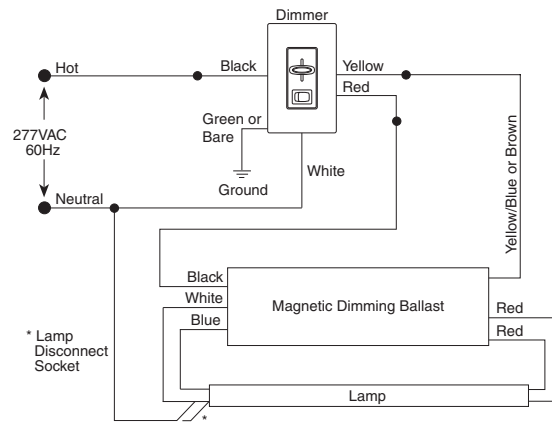
- Run lamps at full intensity (slider at top position) for 15 minutes to warm ballasts.
- After 15 minutes push slider to low intensity position.
- Locate thumbwheel adjustment (shown in Package Contents and Part Identification on page 1).
- Rotate the thumbwheel to raise or lower minimum light intensity.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

For Lutron electronic ballasts ONLY:

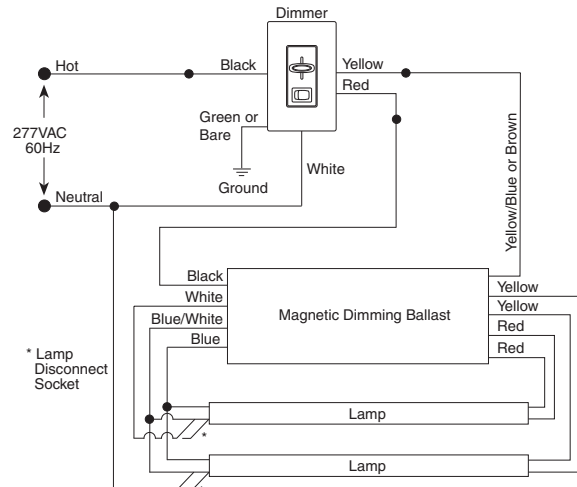
This unit is factory-calibrated and does not normally require low-end light adjustment when used with Lutron FDB or ECO-10 electronic ballasts. If lamps flicker or drop out at minimum dimming level there may be an installation error or the low-end light level may need to be reset. Continued use of the system in this mode will cause premature lamp failure. If this condition exists, call the **Lutron Technical Assistance Hotline** at: 1-800-523-9466.

SF-12P-277 with Magnetic Dimming Ballast

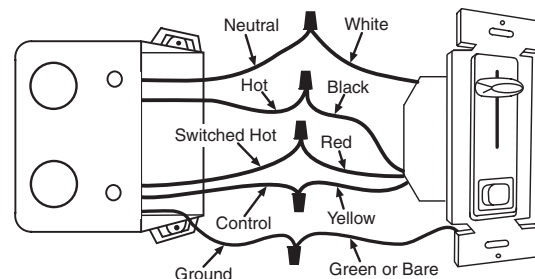
SF-12P-277 with one lamp ballast



SF-12P-277 with two lamp ballast

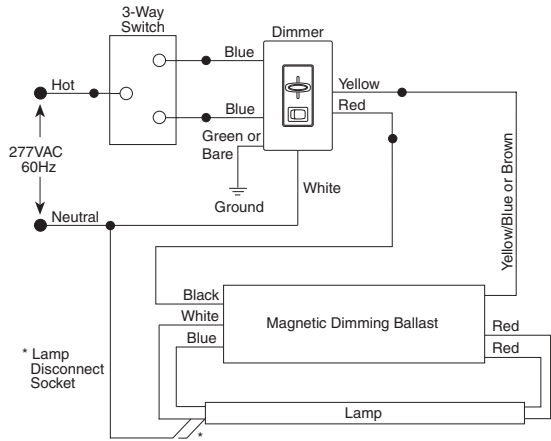


SF-12P-277 wallbox wiring

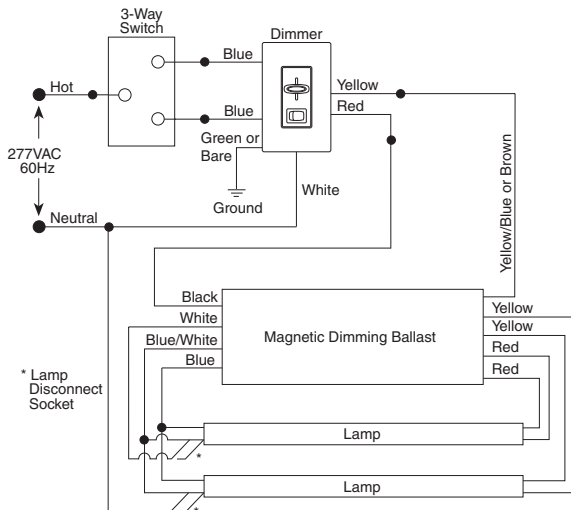


SF-12P-277-3 with Magnetic Dimming Ballast

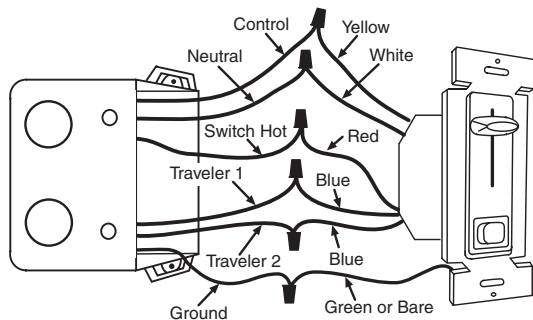
SF-12P-277-3 with one lamp ballast



SF-12P-277-3 with two lamp ballast



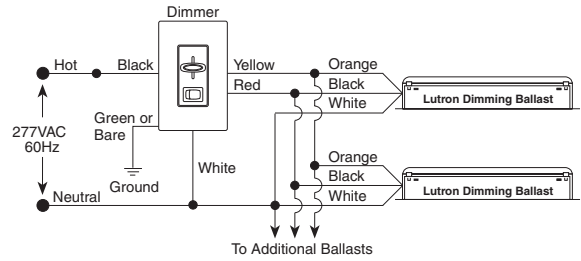
SF-12P-277-3 wallbox wiring



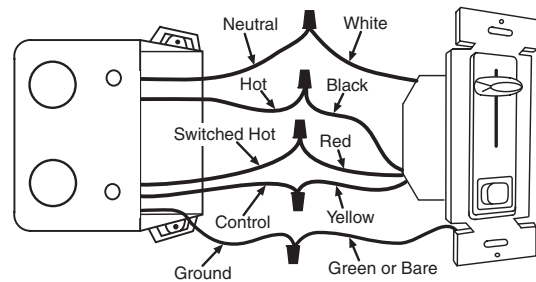
NOTE: If the SF-12P-277-3 does not turn off, or the unit does not turn on at all, the red and blue wires have been connected incorrectly. The result of the miswire depends on the position of the other 3-Way switch. Check the wiring carefully.

SF-12P-277 with Lutron Dimming Ballast

SF-12P-277 with Lutron electronic ballast

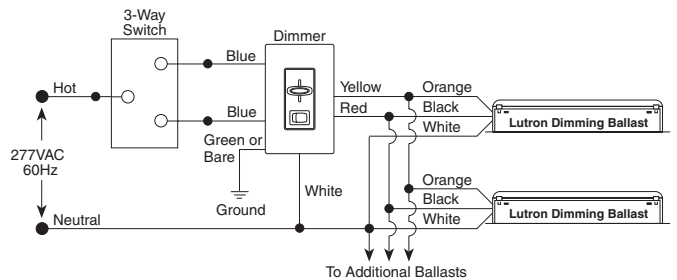


SF-12P-277 wallbox wiring

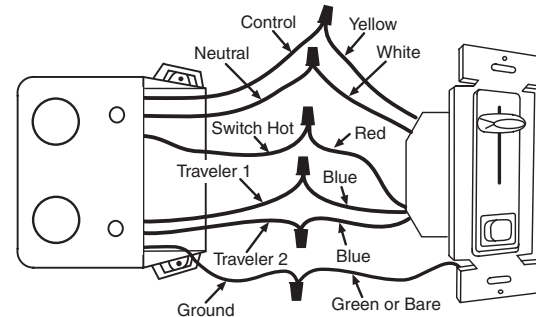


SF-12P-277-3 with Lutron Dimming Ballast

SF-12P-277-3 with Lutron electronic ballast

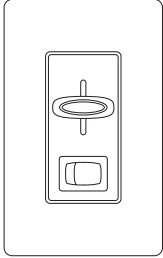


SF-12P-277-3 wallbox wiring

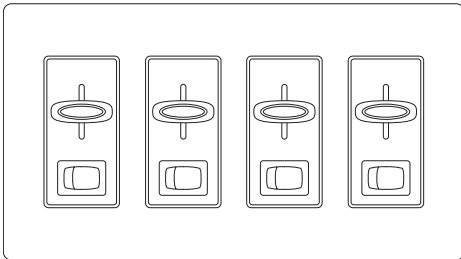


8. Attach Lutron Claro wallplate or other designer-style wallplate purchased separately. A beautiful, clean appearance with no visible screws is provided by Lutron's Claro wallplate systems.

Single Unit With Claro Wallplate



Multi-Ganged Unit With Claro Wallplate (4 gang max.)



Worldwide Technical and Sales Assistance

If you have questions concerning the installation or operation of this product, call the **Lutron Technical Assistance Hotline:**

(800) 523-9466 (U.S.A., Canada, and the Caribbean)
Other countries call (610) 282-3800
Fax (610) 282-3090

Warranty

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 Road, Coopersburg, PA 18036-1299, postage prepaid.

This warranty is in lieu of all other warranties, express or implied, 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 resulting from improper wiring or installation.

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