

Important Notes

1. Install in accordance with all national and local electrical codes.
2. These controls are designed to operate in ambient temperatures from 0 °C to 40 °C (32 °F to 104 °F).
3. Wire connectors provided are suitable for copper wire only. Use connectors to join one 10, 12, 14, 16, or 18 gauge wire with one or two 12 or 14 gauge wires. Strip insulation from all wires as indicated:

- 1/2" (13 mm) for 10, 12, and 14 gauge wire
- 5/8" (16 mm) for 16 and 18 gauge wire



Note: For supply connections use wires rated for at least 75° C.

4. Check for short circuits in new installations before wiring controls. With power OFF, use appropriate switch and connect to line and lamp. Turn power ON. If breaker trips, a short is present. Correct wiring and check circuit again. Install control only when short is no longer present.
5. Controls mount in standard wallboxes. For easy installation, Lutron recommends using 3 1/2" (89 mm) deep wallboxes. Several controls can be installed in one wallbox (refer to "Multigang Installation" on page 3). This requires removal of side sections and derating of controls.
6. Auxiliary Switching: VF-10 uses a VETS-R for auxiliary switching from up to nine (9) additional locations. **Controls will not work with standard 3-way and 4-way switches.**
7. VF-10 requires a neutral connection. The auxiliary tapswitch, VETS-R, does not require a neutral connection.
8. Multiphase Applications: Use a separate neutral for each phase containing a control circuit. For more information, call the **Lutron Technical Support Center** (1-800-523-9466) and request "Application Note #17, Common Neutral Interaction."
9. This control is for use only with Lutron 3-wire controlled electronic dimming ballasts.
CAUTION: To reduce the risk of overheating and possible damage to other equipment, do not use to control receptacles or motor-operated equipment.
10. To determine the maximum load, add the line currents listed on each ballast connected to this control. The total line current can not exceed the maximum load capacity rating. **Warning:** Do not exceed a maximum of 20 ballasts per control providing it does not exceed the maximum load rating (see Control Size and Rating Chart under "Multigang Installations" on page 3).
11. To ensure proper dimming performance and full lamp life, fluorescent lamps must be operated at full intensity for 100 hours prior to dimming.
12. To clean control, wipe with a clean damp cloth. DO NOT use any chemical cleaning solutions.

Installation

If more than one control is to be installed in the same wallbox, review "Multigang Installation" section (page 3) before beginning.

1. Turn power OFF at fusebox or circuit breaker. **WARNING: Wiring with power on may result in personal injury. Damage to this product caused by wiring with power on voids warranty.**
2. Remove wallplate and wallplate adapter from control to prevent damage and to access mounting holes. Pull from top of wallplate to remove. Unscrew wallplate adapter. Set aside.
3. Wire control per appropriate wiring diagram (see page 2) using wire connectors provided. Dots on diagrams represent wire connectors and color names refer to the wire color on the control.

Model Number

Wiring Diagram

VF-10
Single Location
3-Way
Multi-Location

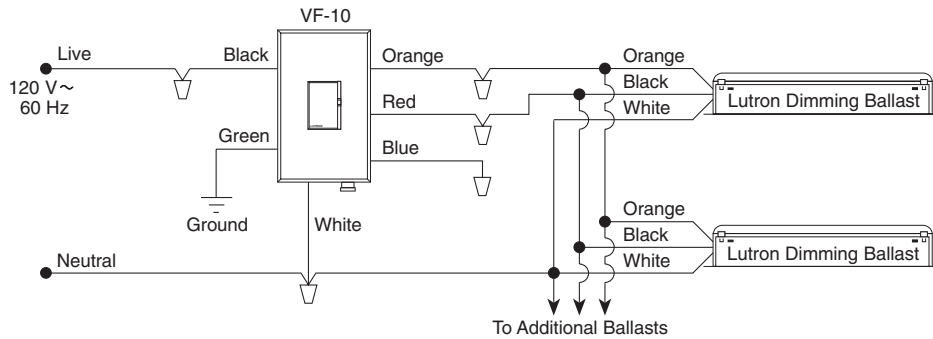
1
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VETS-R
3-Way
Multi-Location

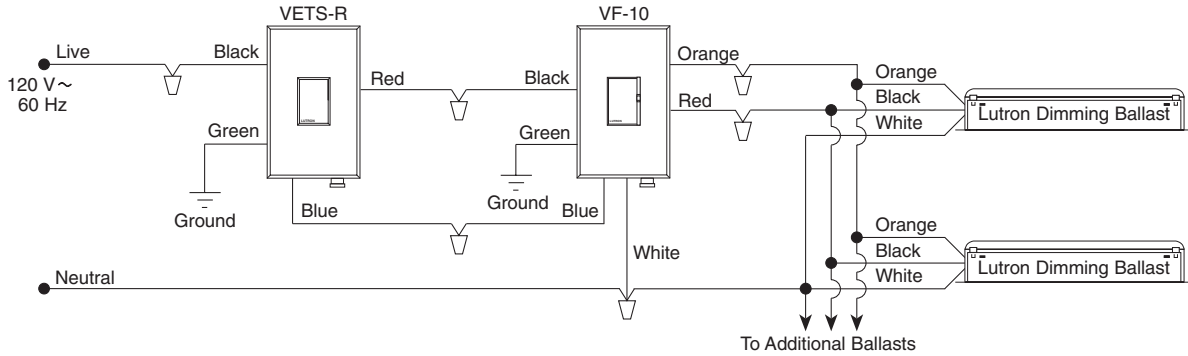
2
3

Wiring Diagrams

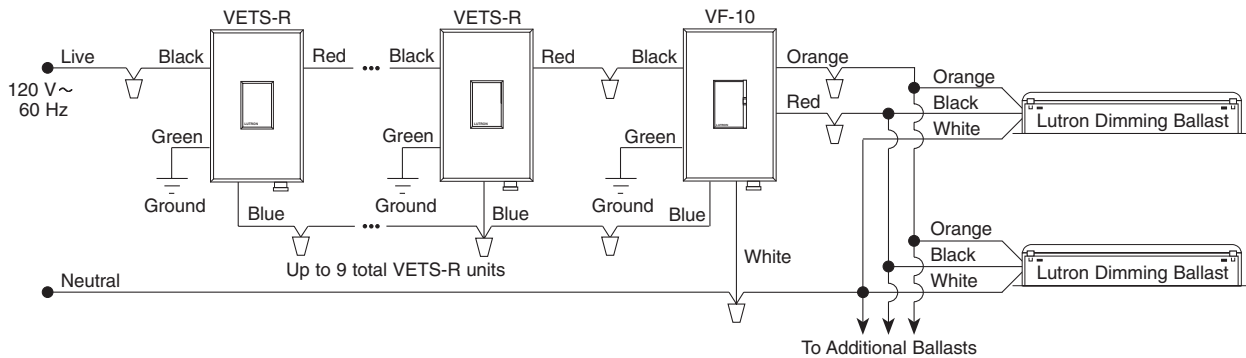
Wiring Diagram 1: Single Location Installation



Wiring Diagram 2: 3-Way Installation (VF-10 must be on load side as shown below)



Wiring Diagram 3: Multi-Location Installation (VF-10 must be on load side as shown below)



Multigang Installation

Multiple controls can be installed in a common gangable wallbox or a series of interconnected wallboxes for a clean, consolidated appearance. To maintain a smooth, clean installation, standard one-piece multigang wallplates are available in various colors and sizes from Lutron. Refer to instruction sheet supplied with multigang wallplates for installation.

For new installations, controls can be ganged without removing side sections. However, to reduce the size of the multigang installation or to fit existing wallboxes, inner side sections must be removed. Because side sections are designed to dissipate heat, removing them requires derating the capacity of the control.

Note: When ganging any combination of small and large controls, place all small controls on one end of the gang and all large controls on the other. Use the charts below to determine the size and rating of each control.

Control Size and Rating Chart

| Model | Control Size | No Sides Removed | 1 Side Removed | 2 Sides Removed |
|--------|--------------|-----------------------|----------------|-----------------|
| VF-10 | S | 8 Amps | 6 Amps | 4.5 Amps |
| VETS-R | S | No Derating Necessary | | |

Note: The total line current can not exceed the maximum load capacity rating listed in the chart above. To determine the maximum load, add the line currents listed on each ballast connected to the control.

Warning: Do not exceed a maximum of 20 ballasts per control providing it does not exceed the maximum load rating as shown above.

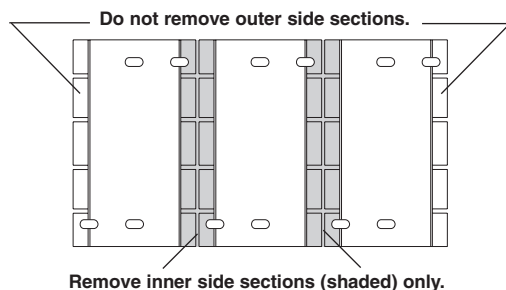
Side Sections Removed

(Capacity Reduction Required)

Wallbox Requirement Chart

| | | Number of Small Controls | | | | | | |
|--------------------------|---|--------------------------|---|----|----|----|----|----|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Number of Large Controls | 0 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| | 1 | 1 | 3 | 4 | 5 | 6 | 7 | 8 |
| | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 3 | 5 | 7 | 8 | 9 | 10 | 11 | 12 |
| | 4 | 7 | 9 | 10 | 11 | 12 | 13 | 14 |

Remove inner side sections from controls. Using pliers, bend side sections back and forth until they break off.



No Side Sections Removed

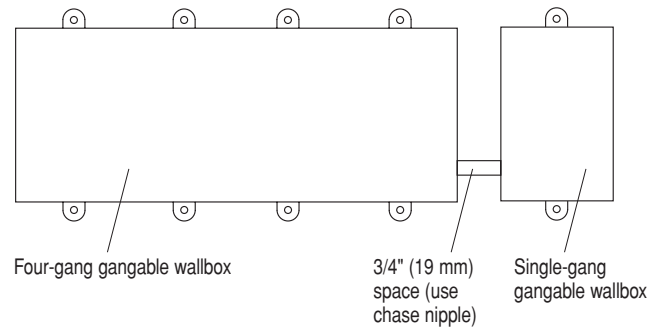
(Capacity Reduction Not Required)

Wallbox Requirement Chart

| | | Number of Small Controls | | | | | | |
|--------------------------|---|--------------------------|----|------|----|------|----|------|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Number of Large Controls | 0 | 0 | 1 | 1+1* | 4 | 4+1* | 7 | 7+1* |
| | 1 | 1 | 3 | 5 | 6 | 8 | 9 | 11 |
| | 2 | 4 | 6 | 7 | 9 | 10 | 12 | 13 |
| | 3 | 6 | 8 | 10 | 11 | 13 | 14 | 16 |
| | 4 | 9 | 11 | 12 | 14 | 15 | 17 | 18 |

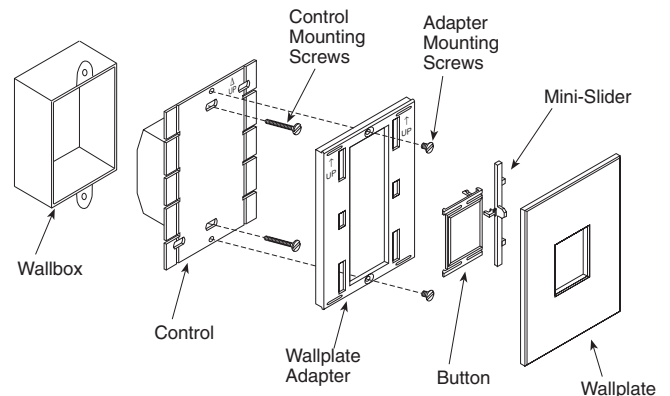
Note: When ganging an even number of small controls with side sections intact, use gangable 3" x 2" (76 mm x 51 mm) wallboxes. Space an additional wallbox 3/4" (19 mm) apart from the other wallboxes. A 3/4" (19 mm) chase nipple is recommended as a spacer between wallboxes.

Example: Wallbox arrangement required for ganging 4 small controls with no side sections removed:



Mounting Instructions

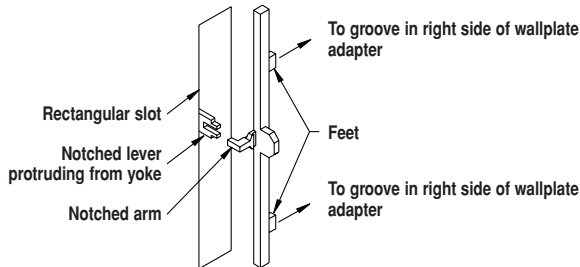
1. Push wires into wallbox, allowing room for control backbox to be inserted. Do not pinch wires between wallbox and control.
2. Mount control to wallbox using screws provided. (See diagram below). Controls must be mounted vertically. See stamp (up arrows) on control for correct positioning.
3. Screw on wallplate adapter. Refer to adapter for correct positioning.



4. Replace mini-slider and button

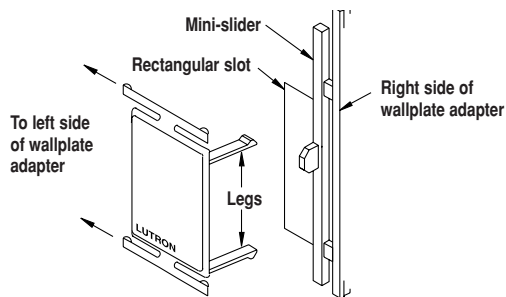
Mini-Slider

Hold the mini-slider with the two feet facing to the right and notched arm to the left. Fit the feet into the groove on the right side of the wallplate adapter and mate the arm into the notched lever protruding from the control. Slide it up and down to make sure the fit is correct. (Refer to diagram below.)



Tapswitch Button

To mount the tapswitch button, hold it so the name "LUTRON" appears in the lower left corner. Fit the feet into the groove on the left side of the wallplate adapter. Push the two legs on right side of button gently into the slot of the control. Button should fit loosely but not fall out. (Refer to following diagram.)



5. Snap wallplate onto the wallplate adapter.

6. Turn power ON.

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.

(800) 523-9466 (U.S.A., Canada, and the Caribbean)

Other countries call (610) 282-3800

Fax (610) 282-3090

Internet: www.lutron.com

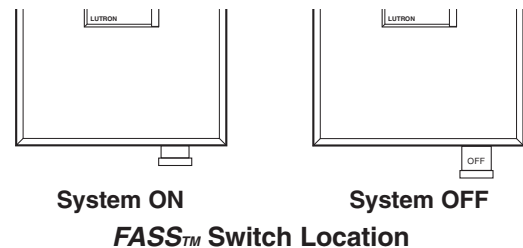
Operation

Press the tapswitch button in the center of the control to turn lights on and off. To adjust the lighting level for the controls, move the mini-slider up or down. Quickly pressing the tapswitch twice on the controls or VETS-R controls will adjust the lights to full; pressing and holding the tapswitch 1/2 second activates a 10-second fade-to-off.

To add all fade functions to the control, turn the control off. Pull the Front-Accessible Service Switch (*FASS™*) down while depressing the tapswitch. Push the *FASS* up and hold the tapswitch for about 10 seconds until the light turns on. The fade is now enabled. To remove the fade action, repeat the same procedure.

For routine lamp replacement, power may be removed from fixtures by pulling down the clear *FASS* until the word "OFF" is visible (see below). After replacing lamps, the switch must be pushed up to the ON position ("OFF" is not visible) to operate lights.

WARNING: For any procedure other than routine lamp replacement, turn power off at main electrical panel. Failure to do this may result in personal injury.



This unit is factory-calibrated and does not require low-end light adjustment. If lamps flicker or drop out at minimum dimming level there may be an installation error. Continued use of the system in this mode will cause premature lamp failure. If this is occurring, call the **Lutron Technical Support Center** at 1-800-523-9466.

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

Limited 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 Rd., Coopersburg, PA 18036-1299, postage pre-paid.

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