

# Single Pole (One location) or 3-Way (Multi-location)

## Fluorescent Dimmer

Cat. No. VZHØ8-1L (Lighted) 8A-120VAC, 60Hz

# **INSTALLATION INSTRUCTIONS**

#### **WARNINGS AND CAUTIONS:**

- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- If you are unsure about any part of these instructions, consult a qualified electrician.

**Electrical Tape** 

- To avoid overheating and possible damage to this device and other equipment, use only with the appropriate Lutron 120V Hi-lume® or Eco-10™ (EcoSeries) electronic ballasts for controlling the specific fluorescent lamps.
- Vizia<sup>TM</sup> dimmers are not compatible with standard 3-way or 4-way switches. They must be used with compatible Vizia<sup>TM</sup> remotes for multi-location dimming.
- Use only one (1) Vizia™ dimmer in a multi-location circuit with up to 9 coordinating remotes without LEDs or up to 4 matching remotes with LEDs. The remote(s) will turn the light on at the brightness level selected at the dimmer.
- Only use lamps listed on ballast label. Compact Fluorescent lamps must have four pins for dimming.

#### **WARNINGS AND CAUTIONS:**

- · Lamps must be burned in at full intensity for 100 hours prior to dimming for proper dimming performance.
- For new installations, wire a test switch before installing dimmer.
- Total minimum load must exceed 40W.
- Dimmer may feel warm to the touch during normal operation.
- Recommended minimum wall box depth is 2-1/2".
- · Maximum wire length from dimmer to all installed remotes cannot exceed 300 ft.
- · Disconnect power at circuit breaker or fuse when servicing, installing or removing fixture.
- · Use this device only with copper or copper clad wire. With aluminum wire use only devices marked CO/ALR or CU/AL.

# Tools needed to install your Dimmer

Slotted/Phillips Screwdriver

Pencil Cutters Ruler

#### Changing the color of your Dimmer:

Your Dimmer will include three color options. The Dimmer ships with the White frame attached. To change color of frame, proceed as follows:

Installing Dimmer by itself or with other devices If installing Dimmer in a single device application, proceed with

the INSTALLING YOUR DIMMER section. If installing Dimmer in

In multi-dimmer installations, the side sections of the mounting

strap may require removal. Use pliers to carefully bend side

a multi-device application, proceed as follows:

**MULTI-DEVICE APPLICATION** 

forth to remove





Line up tabs and press in side to attach

# **INSTALLING YOUR DIMMER**

ballasts on dimmer.

NOTE: Use check boxes  $|\sqrt{\phantom{a}}|$  when Steps are completed.



WARNING: TO AVOID FIRE, SHOCK, OR **DEATH: TURN OFF POWER** at circuit breaker or fuse and test that power is off before wiring!

The maximum current rating is 6A, which can be measured from

label to determine the total load on the dimmer circuit. The total

load is calculated by adding all of the ballast input currents for all

the incoming Hot (Black) on the dimmer. Refer to the ballast

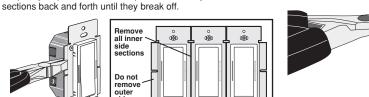




Strip Gage

# Step 2 Preparing and connecting wires:

Pull off pre-cut insulation from dimmer leads. Make sure that the ends of the wires from the wall box are straight (cut if necessary). Remove insulation from each wire in the wall box as shown.



Typically, removal of the side sections in multi-dimmer installations requires a reduction of the dimmer's capacity. However, there is no reduction necessary for this device. Refer to the chart for maximum load per dimmer.

MAXIMUM LOAD PER DIMMER FOR MULTI-DEVICE					
Cat. No.	Single	Two Devices	More than 2 Devices		
VZHØ8	8A	8A	8A		

5/8" (measure bare (1.6 cm) wire here)

For non-standard wiring applications, refer to Wire Nut and Conductor Size Chart

#### WIRE NUT / # OF COND. COMBINATION CHART

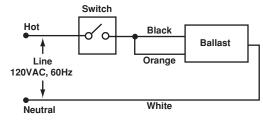
- 1 #12 w/ 1 to 3 #14. #16 or #18 2 - #12 w/ 1 or 2 #16 or #18
- 1 #14 w/ 1 to 4 #16 or #18
- 2 #14 w/ 1 to 3 #16 or #18

# Step 2 cont'd

#### **CAUTION:**

Before installing your dimmer, check new installation wiring for any shorts in the circuit.

- · Turn OFF Power at circuit breaker or fuse.
- · Using a standard switch, connect appropriate wires to Hot circuit and ballast (refer to diagram).
- Turn ON Power. If lights do not turn ON, there is an open in the
- · If required, Turn OFF Power and correct wiring. Verify circuit again. Warranty of dimmer will be voided if dimmer is turned ON in a shorted circuit.



- 1) For Single-Pole Application, go to Step 3a. For 3-Way Coordinating Remote (no LEDs)
- Application, go to Step 3b.
- 3) For 4-Way Coordinating Remote (no LEDs) Application, go to Step 3c.
- 4) For 3-Way Matching Remote (with LEDs) Application, go to Step 3b.
- For 4-Way Matching Remote (with LEDs) Application, go to Step 3c.

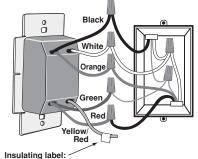
# Step 3 Wiring your Dimmer:

Connect wires per WIRING DIAGRAM as follows: Twist strands of each lead tightly together and, with circuit conductors, push firmly into appropriate wire connector. Screw connectors on clockwise making sure no bare conductors show below the wire connectors. Secure each connector with electrical tape. For all multi-location applications, the dimmer must be installed in a wall box that has a Load connection. The remote must be installed in a wall box with a Line Hot connection and a Neutral

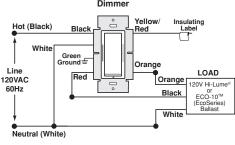
If you are unsure about any part of these instructions, consult a qualified electrician.

NOTE: Maximum wire length from dimmer to all installed remotes cannot exceed 300 ft.

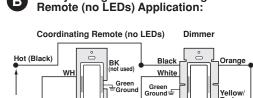
# Single-Pole Wiring Application:



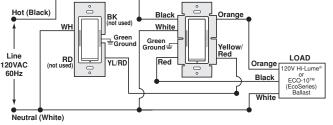
This wire is used in 3-way installations only. For single pole installations do not remove this insulating label.



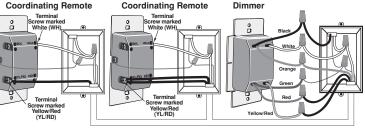


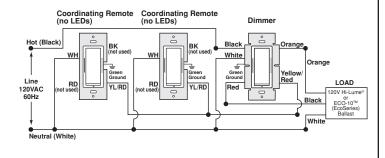


3-Way Wiring with Coordinating



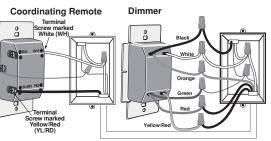
## 4-Way Wiring with Coordinating Remote (no LEDs) Application:

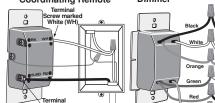






3-Way Wiring with Coordinating Remote (no LEDs) Application:







4-Way Wiring with Matching

Remote (w/LEDs) Application:

Matching Remote (w/LEDs)

Black

Neutral (White)

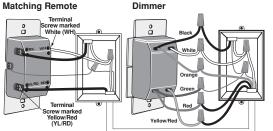
**Matching Remote** 

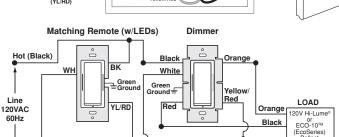
120VAC

Neutral (White)

Matching Remote (w/LEDs)

YL/RD





# Step 4 Testing your Dimmer prior to mounting

- Position all wires to provide room in outlet wall box for device.
- Ensure that the word "TOP" is facing up on device strap.
- Partially screw in mounting screws in wall box mounting holes

NOTE: Dress wires with a bend as shown

in diagram in order to relieve stress when

· Restore power at circuit breaker or

Press pad until locator light is OFF.

Lights should turn ON. If lights do not

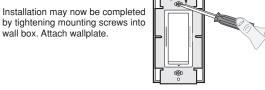
turn ON, press the upper half of DIM/

BRIGHT bar until the lights brighten.

the TROUBLESHOOTING section.

If lights still do not turn ON, refer to

mounting device



TURN OFF POWER AT CIRCUIT BREAKER OR FUSE.

Step 5 Dimmer Mounting:

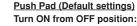
Restore Power: Restore power at circuit breaker or use. Installation is complete.

## **OPERATION**

NOTE: The locator light will illuminate when the load is in the OFF position to facilitate access in the dark.

**NOTE:** If using the dimmer in a 3-way application, the lights will turn ON at brightness set on dimmer's DIM/BRIGHT bar. The lighting can be controlled from either the dimmer or the remote location.

### LED Brightness BRIGHT Display



Tap - Lights turn ON to preset level. Press and Hold - Lights turn ON to full

## Turn OFF from ON position:

Tap - Lights turn OFF.

#### **DIM/BRIGHT Bar** BRIGHTEN:

Press upper half of DIM/BRIGHT Bar - Lights brighten to desired level.

### DIM:

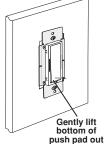
Press lower half of DIM/BRIGHT Bar -Lights dim to desired level. If you continue to hold, the lights will DIM to minimum level and then turn OFF.

NOTE: When lights are OFF you can change the light level that the lights will turn ON to using the DIM/BRIGHT Bar. If there is a power outage, when the power is restored the lights will return to the last setting before the power interruption.



Air-Gap Switch: On the dimmer only, engage the air-gap switch by gently pulling the bottom of the push pad until it lifts mcompletely out of the frame and a click is heard and all LED's are OFF (refer to Figure). This will cut power to the fixture to replace the bulb. After servicing is complete, push the push pad back for normal operation.

Cleaning: Clean with a damp cloth. DO NOT use chemical cleaners.



# **ADVANCED PROGRAMMING FEATURES**

Mode 1 - Set Minimum Brightness: Set the minimum brightness level that the lights can dim to prior to turning full OFF.

Mode 2 - Set Dim-Lock: Set the brightness level that the lights will turn on to regardless of the previous light level at which they were

Mode 3 - Set Fade Rate: Set the amount of time (in seconds) that the lights will have to turn ON or OFF. Fade rates can be set to one of 7 different settings.

Advanced Features Summary					
Mode	Description	Range	Default		
1	Set Min. Brightness	1 - 50%	25%		
2	Set Dim-Lock Level	0 -100%, 0=no lock	0		
3	Select Fade Rate	1, 2, 3, 4, 5, 6 or 7	Preset #1		

#### To Program:

NOTE: Have a flashlight handy if this dimmer controls the only light source in the room.

- 1. On the dimmer only, engage the air-gap switch by gently pulling the bottom of the push pad until it lifts completely out of the frame and a click is heard and all LED's are OFF.
- 2. Press push pad back into frame and hold push pad for 7 seconds until the locator light and the top LED (LED 1) starts blinking
- 3. Upon releasing the push pad, the locator light will continue to blink once per second indicating the dimmer is in Mode 1, Set Minimum Brightness mode. To change the current Minimum Brightness level from 1-50%, use the DIM/BRIGHT Bar. This setting will automatically be saved.
- 4. Tap the push pad to change to Mode 2, Set Dim-Lock Level mode. The locator light will blink twice per second. To change the current Set Dim-Lock level from 1-100%, use the DIM/BRIGHT Bar. If this feature is not desired, press and hold the lower half of the DIM/BRIGHT Bar until no LED is lit. This setting will automatically be saved.
- 5. Tap the push pad to change to Mode 3, Set Fade Rate mode. The locator light will blink 3 times per second. To change the current Fade Rate, use the DIM/BRIGHT Bar to move the LED to the desired preset level. This setting will automatically be saved by tapping the push pad to exit programming mode.

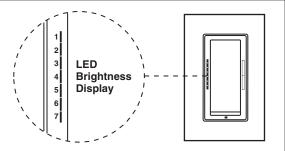
The LED Brightness Display is separated into 7 segments. Each LED represents a preset level with LED 1 (Preset 1) located at the top and LED 7 (Preset 7) located at the bottom. Refer to chart for settings and

NOTE: The dimmer will exit program mode after 3 minutes of inactivity.

Fade Rate Presets					
Preset	LED**	Fade On	Fade Off		
1*	1	Approx. 1.5s from full off	Approx. 3s from full on		
2	2	No Fade	No Fade		
3	3	No Fade	Approx. 3s from full on		
4	4	Approx. 0.5s from full off	Approx. 3s from full on		
5	5	Approx. 0.5s from full off	Approx. 1.5s from full on		
6	6	Approx. 1.5s from full off	Approx. 5s from full on		
7	7	Approx. 1.5s from full off	Approx. 10s from full on		

- default
- \*\* LED #1 is on the top

DI-000-VZH06-02C



### **TROUBLESHOOTING**

## · Lights Flickering

- Lamp has a bad connection.
- Wires not secured firmly with wire connectors of dimmer or terminal screws of remote
- · Light does not turn ON and Locator LED does not turn ON
- Circuit breaker or fuse has tripped.
- Lamp is burned out.
- Neutral not wired to Dimmer (White wire).

#### · Intermittent dimmer operation

- Minimum load is under 40W.
- · Remote does not operate lights
- Ensure that total wire length does not exceed 300 ft.
- Ensure wiring is correct.
- · Lights cycle ON and OFF
- Remove excess load.

For additional information, contact Leviton's Techline at 1-800-824-3005 or visit Leviton's website at www.leviton.com

> Covered by one or more US & Foreign Patents and patents pending

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#### FCC COMPLIANCE STATEMENT

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 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 communications. 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 the 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.

#### **LIMITED 5 YEAR WARRANTY AND EXCLUSIONS**

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for five years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option, if within such five year period the product is returned prepaid, with proof of purchase date, and a description of the problem to Leviton Manufacturing Co., Inc., Att: Quality Assurance Department, 59-25 Little Neck, New York 11362-2591. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other or implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty including merchantability and fitness for a particular purpose, is limited to five years. Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.