

## **Commercial Grade Lighting Controls Collection**



## **KEY PRODUCT FEATURES**

- Efficient construction with consistent form factor, excellent ergonomic traits and precision feel
- Digital circuitry provides aesthetically pleasing soft-on and fade-off
- Innovative contoured geometry offers an exclusive aesthetic design
- Superior versatility provides six product options in each box:
  - 3 changeable face plates Single-pole or 3-way
- High gloss finish complements décor
- Green LED serves as locator
- Commercial Grade with Five-Year Limited Warranty
- Meet all applicable UL, CSA and FCC requirements
- Complements Vizia RF<sup>TM</sup> lighting controls and switches
- Compatible with Decora® screwless wallplates
- Multiple remotes available for multi-location control

## STANDARD FEATURES

- Universal design
- Crisp actuation, minimal travel

#### SPECIFICATION SUBMITTAL

JOB NAME:	CATALOG NUMBERS:	
JOB NUMBER:		

Leviton Manufacturing Co., Inc.

59-25 Little Neck Parkway, Little Neck NY 11362-2591

Customer Service: 1-800-323-8920 • FAX: 1-800-832-9538 Tech Line: 1-800-824-3005

Leviton Manufacturing of Canada, Ltd.

165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 Customer Service: 1-800-469-7890 • FAX: 1-800-563-1853

Leviton S. de R.L. de C.V.



## DIMMERS (1) (2)

## For Single-Pole, 3-Way or More Applications

Description	Rating (For Multigang Installation see Derating Chart)	Cat. No.
Incandescent with LED Locator and Brightness Display	600W-120VAC	VZI06-1L
Magnetic Low-Voltage with LED Locator and Brightness Display	600VA-120VAC	VZM06-1L
Incandescent/Magnetic Low-Voltage with LED Locator and Brightness Display	1000W-120VAC Incandescent 1000VA-120VAC Magnetic Low-Voltage	VZM10-1L
Electronic Low-Voltage with LED Locator and Brightness Display	400W-120VAC	VZE04-1L
Electronic Low-Voltage with LED Locator and Brightness Display	600W-120VAC	VZE06-1L
Mark 10™ <i>Powerline</i> or Tu-Wire™ Fluorescent Dimmer with LED Locator and Brightness Display	1000VA- 120VAC	VZX10-1L
Mark 10™ Powerline Fluorescent Dimmer with LED Locator and Brightness Display	1200VA-277VAC	VZX12-7L
Hi-lume® or Eco-10™ (Eco-Series) Fluorescent Dimmer with LED Locator and Brightness Display	8A-120VAC	VZH08-1L
Hi-lume® or Eco-10™ (Eco-Series) Fluorescent Dimmer with LED Locator and Brightness Display	6A-277VAC	VZH06-7L
Quiet Fan Speed Control with LED Locator and Speed Display	1.5A-120VAC	VZF01-1L

## SWITCH (1) (2) For Single-pole, 3-Way or More Applications

Description	Rating	Cat. No.
Electronic Switch with LED Locator	15A-120VAC	VZS15-1L

## REMOTES ( G. For Multi-location Control

	Description	Rating	Cat. No.
	Matching Dimmer Remote to 120VAC Dimmers/Fan Speed Control for 3-Way or up to 5 location applications, with LED Locator and Brightness/Fan Speed Display	120VAC No load rating	VZ00R-1L
	Matching Dimmer Remote to 277VAC Dimmers for 3-Way or up to 5 location applications, with LED Locator and Brightness Display	277VAC No load rating	VZ00R-7L
	Coordinating Dimmer Remote to 120VAC Dimmers/Fan Speed Control for 3-way or up to 10 location applications (No LEDs)	120VAC No load rating	VZ00R-10
	Matching Switch Remote for 3-way or up to 5 location applications, with LED Locator	120VAC No load rating	VZOSR-1L
Coordinating Switch Remote for 3-way or up to 10 location applications (No LED)		120VAC No load rating	VZ0SR-10

## Leviton Manufacturing Co., Inc.

59-25 Little Neck Parkway, Little Neck NY 11362-2591

Customer Service: 1-800-323-8920 • FAX: 1-800-832-9538 Tech Line: 1-800-824-3005

Leviton Manufacturing of Canada, Ltd.

165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 Customer Service: 1-800-469-7890 • FAX: 1-800-563-1853

Leviton S. de R.L. de C.V. Lago Tana 43 Mexico DF, Mexico CP 11290 Tel. (+52) 55-5082-1040 www.leviton.com.mx



## **DERATING/MAXIMUM CAPACITY**

VZI06, VZM06, and VZF01 controls do not have side sections. In multi-gang installations, fin removal is not required but devices must be derated in accordance with the following charts.

VZI06 Incandescent (Minimum Ioad: 40W)			
Gang	Maximum Wattage		
1	600W		
2	500W		
3 or more	400W		
VZM06 Magne	etic Low-Voltage (Minim	num load: 40VA)	
Gang	Maximum VA	Maximum Bulb Wattage with 75% efficient transformer	
1	600VA	450W	
2	500VA	375W	
3 or more	400VA	300W	
VZF01 Quiet I	Fan Speed Control		
1.5A	No derating required		

in accordance with the following charts.

VZM10 Incande	VZM10 Incandescent/Magnetic Low-Voltage (Minimum load: 40W/VA)						
Gang	Incandescent Maximum Wattage	Magnetic Low-Voltage Maximum VA	Magnetic Low-Voltage Maximum Bulb Wattage wit 80% efficient transformer				
1	1000W	1000VA	800W				
2	800W	800VA	640W				
3 or more	650W	650VA	520W				
VZE04 Electronic Low-Voltage							
Gang	Maximum Wattage						
1	400W						
2	350W						
3 or more	250W						
VZE06 Electro	VZE06 Electronic Low-Voltage						
Gang	Maximum Wattage						
1	600W						
2	500W						
3 or more	400W						
VZX10 Mark 10 <sup>™</sup> <i>Powerline</i> or Tu-Wire <sup>™</sup> Fluorescent							
Gang	Maximum VA						
1	1000VA						
2	800VA						
3 or more	650VA						
VZX12 Mark 10	<sup>™</sup> <i>Powerline</i> Fluorescer	nt					
1200VA 4.3A	No derating required						
VZH08 Hi-lume	® or Eco-10™ (Eco-Serie	es) Fluorescent Dimn	ner				
8A	No derating required	,					
VZH06 Hi-lume	® or Eco-10™ (Eco-Serie	es) Fluorescent Dimn	ner				
6A	No derating required	,					

Leviton Manufacturing Co., Inc. 59-25 Little Neck Parkway, Little Neck NY 11362-2591 Customer Service: 1-800-323-8920 • FAX: 1-800-832-9538 Tech Line: 1-800-824-3005

Leviton Manufacturing of Canada, Ltd.

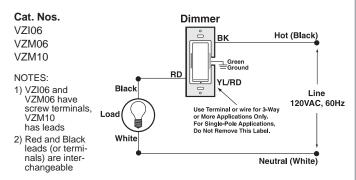
165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 Customer Service: 1-800-469-7890 • FAX: 1-800-563-1853



## WIRING DIAGRAMS

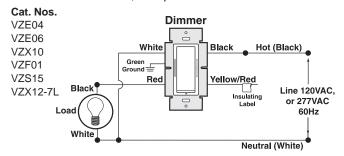
#### Diagram 1

Single-pole wiring for incandescent or magnetic low-voltage dimmer.



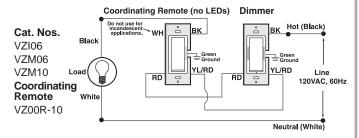
## Diagram 2

Single-pole wiring for electronic low-voltage dimmer, Mark  $10^{\text{TM}}$  *Powerline* dimmer, fan speed control or switch.



## Diagram 3

3-Way wiring for incandescent or magnetic low-voltage dimmer with Coordinating Remote.



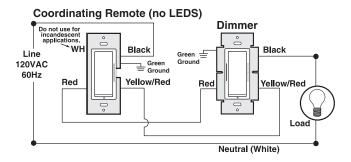
#### NOTES:

- 1) VZI06 and VZM06 have screw terminals, VZM10 has leads
- 2) Coordinating Remote VZ00R-10 has screw terminals
- 3) Black connections are interchangeable (see Diagram 4)
- 4) Silver terminal on Coordinating Remote is unused

## Diagram 4

Alternate 3-Way wiring for incandescent or magnetic lowvoltage dimmer with Coordinating Remote.

Cat. Nos. Coordinating Remote VZI06, VZM06, VZM10 VZ00R-10



#### NOTES

- 1) VZI06 and VZM06 have screw terminals, VZM10 has leads
- 2) Coordinating Remote VZ00R-10 has screw terminals
- 3) Black connections are interchangeable (see Diagram 3)
- 4) Silver terminal on Coordinating Remote is unused

## Diagram 5

3-Way wiring for electronic low-voltage dimmer, Mark  $10^{™}$  Powerline dimmer, fan speed control or switch with Coordinating Remote.

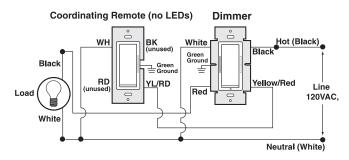
 Cat. Nos.
 Cat. Nos.

 VZS15
 VZE04, VZE06

 Coordinating Remote
 VZX10, VZF01

 VZ0SR-10
 Coordinating Remote

 VZ00R-10
 VZ00R-10



#### NOTES:

- 1) Coordinating Remotes VZ0SR-10 and VZ00R-10 have screw terminals
- 2) Black and Red terminals on Coordinating Remotes are unused

## Leviton Manufacturing Co., Inc.

59-25 Little Neck Parkway, Little Neck NY 11362-2591

Customer Service: 1-800-323-8920 • FAX: 1-800-832-9538 Tech Line: 1-800-824-3005

## Leviton Manufacturing of Canada, Ltd.

165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 Customer Service: 1-800-469-7890 • FAX: 1-800-563-1853

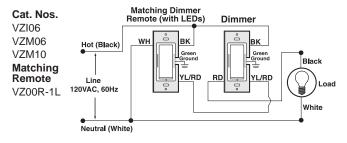
#### Leviton S. de R.L. de C.V.



#### WIRING DIAGRAMS

#### Diagram 6

3-Way wiring for incandescent or magnetic low-voltage dimmer with Matching Remote.

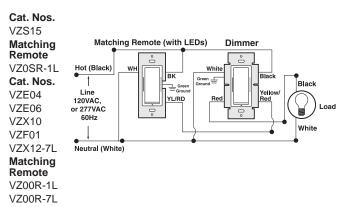


#### NOTES:

- 1) VZI06 and VZM06 have screw terminals, VZM10 has leads
- 2) Matching Remote VZ00R-1L has screw terminals

## Diagram 7

3-Way wiring for electronic low-voltage dimmer, Mark 10™ *Powerline* dimmer, fan speed control or switch with Matching Remote.

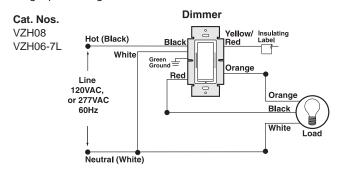


## NOTES:

- 1) Matching Remotes VZ0SR-1L, & VZ00R-1L have screw terminals
- 2) VZ00R-7L has leads

### Diagram 8

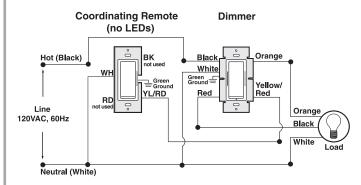
Single-pole wiring for Hi-lume® fluorescent dimmer



## Diagram 9

3-Way wiring for Hi-lume® fluorescent dimmer with Coordinating Remote.

Cat. Nos. Coordinating Remote VZH08 VZ00R-10



#### NOTES:

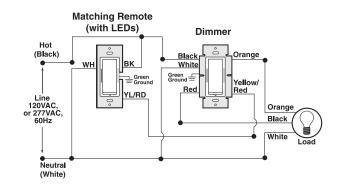
- 1) Coordinating Remote VZ00R-10 has screw terminals
- 2) Black and Red terminals on Coordinating Remote are unused

#### Diagram 10

3-Way wiring for Hi-lume® fluorescent dimmer with Matching Remote.

 Cat. Nos.
 Matching Remote

 VZH06-7L VZH08-1L
 VZ00R-1L VZ00R-7L



#### NOTES:

- 1) Matching Remote VZ00R-1L has screw terminals
- 2) Matching Remote VZ00R-7L has leads

## Leviton Manufacturing Co., Inc.

59-25 Little Neck Parkway, Little Neck NY 11362-2591

Customer Service: 1-800-323-8920 • FAX: 1-800-832-9538 Tech Line: 1-800-824-3005

## Leviton Manufacturing of Canada, Ltd.

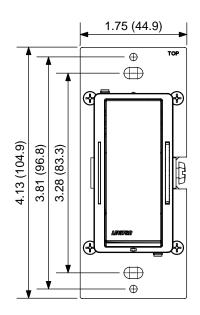
165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 Customer Service: 1-800-469-7890 • FAX: 1-800-563-1853

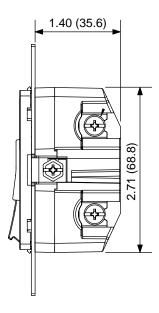
#### Leviton S. de R.L. de C.V



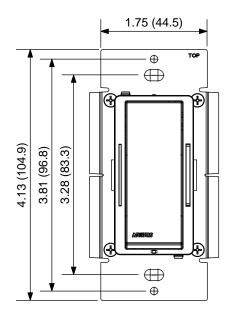
## **DIMENSIONS**

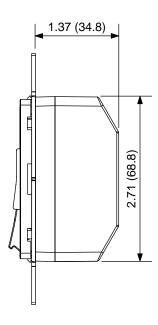
# All Dimmers, Quiet Fan Speed Control, Electronic Switch, Matching and Coordinating Dimmer and Switch Remotes





Dimmer with LEDs Shown - VZI06, VZM06, VZ00R-1L, VZ00R-10, VZ0SR-1L, VZ0SR-10, VZS15





Dimmer w/LED's shown - VZM10, VZE04, VZE06, VZH08, VZX10, VZX12-7L, VZH06-7L, VZF01\*, VZ00R-7L \*Note: VZF01 does not have side fins.

## Leviton Manufacturing Co., Inc.

59-25 Little Neck Parkway, Little Neck NY 11362-2591

Customer Service: 1-800-323-8920 • FAX: 1-800-832-9538 Tech Line: 1-800-824-3005

## Leviton Manufacturing of Canada, Ltd.

165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 Customer Service: 1-800-469-7890 • FAX: 1-800-563-1853

#### Leviton S. de R.L. de C.V



## PART 1 — GENERAL

#### 1.01 SUMMARY

- A. Section Includes: Vizia-style switches, dimmers, fan speed control (and corresponding remote units), for the areas indicated on the drawings, specifications, and load schedule
- B. Related Sections: Section 16570 (Dimming Controls), Section 16580 (Ballasts)

#### 1.02 REFERENCES

#### A. Vizia Lighting Controls:

- 1. UL Standard 1472
- 2. CSA Standard C22.2 No. 184-M1988
- 3. IEC Level 4 Surge and Fast Transients
- 4. California Title 24 2005
- 5. UL Standard 1472
- 6. FCC Part 15, Class B for Residential Compliance
- 7. MIL. STD 105 or ANSI Z1.4
- 8. UL Listed (File #E-31373)
- 9. CSA Certified (File #LR-3413)
- 10. NOM-057

## 1.03 SYSTEM DESCRIPTION

- A. Permanently installed, wallbox mounted switches, dimmers and corresponding remote units
- B. Permanently installed, wallbox mounted fan-speed control and corresponding remote units

#### 1.04 SUBMITTALS

A. Submit manufacturer's standard catalog data giving all product, application, wiring, and installation information on all basic components and wallplates. Provide test data and/or samples for finish, color and texture as required to demonstrate conformance with PART 2 of this specification.

#### 1.05 QUALITY ASSURANCE

- A. Manufacturer shall have a minimum of 20 years continuous experience in the manufacture of wallbox-mounted dimming products.
- B. Dimmers, switches and fan-speed control shall be UL Listed and CSA approved specifically for each required load (tungsten, electronic low-voltage ballast, magnetic low-voltage ballast, Mark 10™ Powerline fluorescent, and Hi-lume® fluorescent). Manufacturer shall provide file card or certificate upon request. Universal load-type dimmers shall not be acceptable.
- C. Source Limitations: To assure compatibility, all dimming controls shall be obtained from a single source with complete responsibility over all lighting controls, including accessory products. The use of subcontracted component assemblers is not acceptable.
- D. Manufacturer shall be ISO 9001 certified and provide a copy of the certificate upon request.

#### 1.06 WARRANTY

- A. Manufacturer's Warranty: All equipment shall be warranteed free of defects in materials and workmanship.
  - 1. Warranty Period: Five years from date of purchase
  - Owner Rights: Manufacturer's warranty is in addition to, not a limitation of, other rights the Owner may have under contract documents.

## PART 2 — PRODUCTS

## 2.01 ACCEPTABLE MANUFACTURERS

- A. Leviton Manufacturing Co., Inc.
- B. Unless otherwise noted, all basic components (dimmer, fan-speed control, switch and corresponding remote units) shall be provided

by one manufacturer.

#### 2.02 EQUIPMENT

## A. Leviton Vizia Lighting Controls

#### 1. Performance

- a. Controls shall provide full-range, continuously variable control of light intensity.
- b. Dimmers requires 40W minimum load.
- c. Controls shall fit in the Decora wallplate opening only. Controls shall be thin profile with no exposed heat sink/yoke and shall fit in a single-gang 18 cubic-inch wallbox. All controls shall have a high-gloss finish.
- d. Controls shall provide a green LED Locator light that shall illuminate when the lights are OFF to help users locate control in the dark
- e. Controls shall provide a Dim/Bright bar that allows light level (or fan speed) to be set by the user. A seven-step LED indicator shall be adjacent to the Push Pad to show relative lighting level. Push Pad with return-to-neutral design shall provide preset ON/OFF control independent of Dim/Bright bar.
- f. Push Pad and Dim/Bright bar shall be ergonomically designed for precise tactile quality with distinct actuation confirmation.
- g. Controls shall provide a default setting where Push Pad preset ON switching returns lights to last selected level when lights were ON.
- h. Controls shall provide a Dim Lock feature that allows users to program a customized preset ON level. With Dim Lock active, lights shall switch ON to selected preset level regardless of last established light level (Default setting is with Dim Lock OFF; it shall be activated by user if desired).
- Controls shall provide a selectable fade rate for ON and OFF switching. Default setting shall be 1.5 seconds for ON and 3.0 seconds for OFF.
- Controls shall provide a 10 second delay-OFF from ON when Push Pad is pressed and held.
- k. Controls shall provide switching from OFF to maximum brightness when Push Pad is pressed and held.
- I. Controls shall provide the ability to change the selected brightness level by pressing the Dim/Bright bar while the lights are OFF. LED display shall show selected level and lights shall not be turned ON.
- m. Controls shall provide intuitive "house guest" feature allowing lights to be dimmed to OFF by pressing and holding the Dim/Bright bar. Preset level shall not be changed.
- Controls shall provide an adjustable minimum brightness setting to accommodate lighting loads with a minimum turnon voltage.
- Programmable settings for Dim Lock preset level, minimum brightness level and fade rate shall not require tools or wallplate removal.
- p. Controls shall provide single-pole, 3-way, or multi-location control with choice of remote dimmers.
- q. Matching Dimmer Remote VZ00R-1L/-7L shall provide green LED Locator and LED Brightness display and shall provide 3-way or up to 5 location control. Matching Remote shall require neutral connection.
- Coordinating Dimmer Remote VZ00R-10 shall provide 3-way or up to 10 location control. Coordinating Dimmer Remote shall require neutral connection in specific applications.
- s. Coordinating Switch Remote VZOSR-10 shall provide 3-way or up to 10 location control. Coordinating Switch Remote shall require neutral connection in specific applications.
- t. Controls shall provide air gap switch to totally disconnect power from load during OFF condition. Air gap switch shall be concealed during normal operation and shall be accessi-

Leviton Manufacturing Co., Inc.

59-25 Little Neck Parkway, Little Neck NY 11362-2591

Customer Service: 1-800-323-8920 • FAX: 1-800-832-9538 Tech Line: 1-800-824-3005

Leviton Manufacturing of Canada, Ltd.

165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 Customer Service: 1-800-469-7890 • FAX: 1-800-563-1853

Leviton S. de R.L. de C.V.



- ble without removing wallplate.
- Within rated capacity, dimmers shall be available for direct control of incandescent, electronic low-voltage, magnetic low-voltage, Mark 10<sup>™</sup> Powerline fluorescent, and Hi-lume® or Eco-10<sup>™</sup> (Eco-Series) fluorescent. Matching fan-speed control and switches shall also be available.
- v. Controls may require the removal of fins in multi-gang installations. Controls shall be derated in multi-gang installations in accordance with manufacturer's specifications.
- w. Controls shall provide transient surge protection to IEC Level 4.
- Controls shall provide ESD protection to IEC 1000 4-2 Level 4 to protect against damage and memory loss due to static discharges.
- y. Dimmers shall provide RFI filtering for radio, audio, and video equipment.
- z. Controls shall incorporate power-failure memory. Should power be interrupted and subsequently returned, the lights or fans will come back on to the same levels set prior to the power interruption.
- aa. Controls shall operate in an ambient temperature range of 0°C (32°F) to 55°C (131°F).

#### 2. Incandescent Dimmers

- a. Dimmers shall have a maximum output of no less than 95% of line voltage.
- VZI06 shall provide 4 terminal screws for Line, Load, Remote and Ground.
- c. VZM10 rated for 1000W incandescent shall provide 4 wire leads for Line, Load, Remote and Ground.

#### 3. Electronic Low-Voltage (ELV) Dimmers

- Dimmers shall contain circuitry specifically designed to control the input of electronic (solid state) low-voltage transformers. Dimmers using standard phase control shall not be acceptable.
- VZE04 (400W) and VZE06 (600W) dimmers shall have a resettable overload protection that automatically shuts off when dimmer capacity is exceeded.
- c. Dimmers shall provide 5 wire leads for Line, Load, Neutral, Remote and Ground.

## 4. Magnetic Low-Voltage (MLV) Dimmer

- vZM10 shall provide direct control of up to 1000VA of 120V magnetic low-voltage load.
- Dimmer shall contain circuitry specifically designed to control and provide a symmetrical AC waveform to the input of magnetic low voltage transformers per UL 1472 section 5.11.
- Dimmer shall not cause a magnetic low voltage transformer to operate above the transformers rated operating current or temperature.
- d. Dimmers shall have a maximum output of no less than 95% of line voltage.
- e. Dimmer shall provide 4 wire leads for Line, Load, Remote and Ground.

#### 5. Fluorescent Dimmers

- a. Fluorescent dimmers shall provide direct control of fluorescent dimming ballasts up to the manufacturer's specified rating.
- b. VZX10 shall be rated 1000VA to control Mark 10™ Powerline or Tu-Wire™ ballasts and provides 5 wire leads for Line, Load, Neutral, Remote and Ground.
- c. VZX12 shall be rated 1200 VA for use on 277V applications to control Mark 10™ Powerline ballasts and provide 5 wire

- leads for Line, Lead, Neutral, Remote and Ground.
- d. VZH08 shall be rated 8A to control Hi-lume® or Eco-10™ (Eco-Series) ballasts and provides 6 wire leads for Line, Load, Neutral, Signal, Remote and Ground.
- e. VZH06 shall be rated 6A for use on 277V applications to control Hi-lume® or Eco-10™ (Eco-Series) ballasts and provides 6 wire leads for Line, Load, Neutral, Remote and Ground.
- f. 277V Fluorescent controls shall only be used with VZ00R-7L matching remote.

#### 6. Fan-Speed Control

- vZF01 Quiet Fan-Speed Control shall be rated 1.5A and provide Low-Medium-High speed settings plus OFF.
- b. VZF01 shall provide microprocessor-controlled "kick-start" to allow fan to go directly from OFF to any speed setting.
- VZF01 shall provide 5 wire leads for Line, Load, Neutral, Remote and Ground.

#### 7. Switches

- All switches shall be completely compatible with Vizia lighting controls and provide ON/OFF Push Pad ergonomically designed for precise tactile quality with distinct actuation confirmation.
- All switches shall provide a green LED locator light that shall illuminate when the lights are OFF to help users locate control in the dark.
- vZS15 electronic switch shall be rated 15A 120V AC and provide 5 screw terminals for Line, Load, Neutral, Remote and Ground.
- d. VZS15 electronic switch shall provide single-pole, 3-way, or multi-location control with choice of remote dimmers.
- Matching Remote Switch VZOSR-1L shall provide green LED locator and shall provide 3-way or up to 5 location control. Matching Remote shall require neutral connection.
- f. Coordinating Remote Switch VZOSR-10 shall provide 3-way or up to 10 location control. Coordinating Remote shall require neutral connection.

#### 2.03 SOURCE QUALITY CONTROL

A. All dimming controls shall be 100% functionally tested at the time of manufacture. Statistical sampling plan shall not be acceptable.

## PART 3 — EXECUTION

## 3.01 INSTALLATION

- A. Contractor shall furnish all devices (dimmers, switches), labor and other services necessary for the proper installation of the devices as indicated on the drawings and specified herein.
- B. Contractor shall be responsible for derating lighting control capacity in multi-gang installations.
- C. Devices shall be installed utilizing manufacturer's recommended application, wiring and installation instructions.
- D. Contractor shall provide frameless wallplate covers per specification 2.02 for all devices ganged in a common box. Contractor shall provide barriers within the box where required by code.

## 3.02 FIELD QUALITY CONTROL

- A. Leviton technical hotline available 8:30AM–7:30PM E.S.T. Monday–Friday: 1-800-824-3005
- B. Supplemental information shall be provided by Leviton's website at www.leviton.com/vizia

Vizia is a trademark of Leviton Manufacturing Co., Inc. Note: Features and specifications subject to change Patents Pending

Tu-Wire<sup>™</sup> and Eco-10<sup>™</sup> (Eco-Series) are trademarks and Hi-lume<sup>®</sup> is a registered trademark of Lutron Electronics, Inc.

Mark 10® *Powerline* is a registerd trademark of Advance Transformer

Leviton Manufacturing Co., Inc.

59-25 Little Neck Parkway, Little Neck NY 11362-2591

Customer Service: 1-800-323-8920 • FAX: 1-800-832-9538 Tech Line: 1-800-824-3005

Leviton Manufacturing of Canada, Ltd.

165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 Customer Service: 1-800-469-7890 • FAX: 1-800-563-1853

Leviton S. de R.L. de C.V.

