### Single Pole (One location) or 3-Way (Multi-location) Magnetic Low-Voltage Dimmer

**Cat. No. VZM10-1L, 1000VA (Lighted)**

**120VAC, 60Hz**

### INSTALLATION INSTRUCTIONS

**WARNING AND CAUTIONS:**

- 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.
- 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 future.
- Use this device only with copper or copper clad wire. With aluminum wire use only devices marked CO/AL or CU/AL.

**Tools needed to install your Dimmer:**

- Slotted/Phillips Screwdriver
- Electrical Tape
- Pliers
- Pencil
- Cutters
- Ruler

**Changing the color of your Dimmer:**

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

1. Hold Dimmer faceplate and press down the White frame attached.
2. To change color of frame, proceed as follows:
   - Single Pole (One location) or 3-Way (Multi-location): Follow the chart for maximum load per dimmer.
   - In multi-dimmer installations, the side sections of the mounting sections back and forth until they break off.

**MULTI-DEVICE APPLICATION**

In multi-dimmer installations, the side sections of the mounting sections may require removal. Pages to the chart for maximum load per dimmer. To change color of frame, proceed as follows:

1. Push in side at tab to release.
2. Line up tabs and press in side to attach.
3. Identify your wiring application (most common):
   - NOTE: If the wiring in the wall box does not resemble any of these configurations, consult a qualified electrician.

**Installing Dimmer by itself or with other devices**

- If installing Dimmer in a single device application, proceed with *Step 1*.
- For 3-Way Matching Remote (with LEDs) Application, go to *Step 4a*.
- For 3-Way Coordinating Remote (no LEDs) Application, go to *Step 4b*.
- For non-standard wiring applications, refer to Wire Nut and Conductor Size Chart.

**WIRING DIMMER:**

Connect wires per WIRING DIAGRAM as follows:

- WARNING: FOR MAGNETIC LOW-VOLTAGE APPLICATIONS, CONNECT DIMMER ONLY TO THE PRIMARY (HIGH-VOLTAGE) SIDE OF A MAGNETIC LOW-VOLTAGE TRANSFORMER.
- NOTE: When using the coordinating remote without LEDs, the dimmer can be installed on either the Line or Load side of the 3-way circuit.
- Maximum wire length from dimmer to all installed remotes cannot exceed 300 ft.
- Green or bare copper wire in wall box to Green dimmer lead.
- Line Hot (common) wall box wire identified (tagged) when removing old switch to Black dimmer lead.
- First Traveler wall box wire to Red dimmer lead (note wire color). This traveler from the dimmer must go to the terminal screw on the remote marked “RD”.
- Neutral (White) wire in wall box to Red dimmer lead.
- Line hot wall box wire to Black dimmer lead.
- Load wall box wire to Red dimmer lead.
- Yellow/Red dimmer lead should have Red insulation label affixed. NOTE: If insulating label is not affixed to Yellow/Red dimmer lead, use electrical tape to cover.

**STEP 1**

**WARNING:** To avoid fire, shock, or death; turn off power at circuit breaker or fuse and test that power is off before wiring.

**STEP 2**

**IMPORTANT:** For 3-Way applications, note that one of the screw terminals from the side switch being removed will usually be a different color (Black) or labeled Common. Tag that wire with electrical tape and identify as live common (Line or Load) in both the dimmer wall box and remote wall box.

**STEP 3**

**FOR STANDARD WIRING APPLICATIONS:**

- Connect wires per WIRING DIAGRAM as follows:

  **WARNING:**

  Disconnect power at circuit breaker or fuse when servicing, installing or removing future.

  - Use this device only with copper or copper clad wire. With aluminum wire use only devices marked CO/AL or CU/AL.

### MAXIMUM BULB WATTAGE

<table>
<thead>
<tr>
<th>Rating</th>
<th>Single</th>
<th>Two Gang</th>
<th>Two Way</th>
<th>Multi Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000VA</td>
<td>750W</td>
<td>600W</td>
<td>450W</td>
<td>250W</td>
</tr>
</tbody>
</table>

**MAXIMUM BULB WATTAGE AT 75% EFFICIENCY**

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

**STEP 4**

**STEP 4A**

**SINGLE-POLE WIRING APPLICATION:**

- Connect wires per WIRING DIAGRAM as follows:

**STEP 4B**

**3-WAY WIRING WITH COORDINATING DIMMING OR SWITCHING REMOTE (NO LED) APPLICATION:**

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

**STEP 4C**

**3-WAY WIRING WITH COORDINATING DIMMING OR SWITCHING REMOTE (LED) APPLICATION:**

<table>
<thead>
<tr>
<th>WIRE NUT / # OF CONDUCTOR COMBINATION CHART</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. #2 w/ 1 #18 or 1 #16 or #14</td>
</tr>
<tr>
<td>2. #2 w/ 1 #16 or #18 or #14</td>
</tr>
<tr>
<td>3. #4 w/ 1 #16 or #18 or #14</td>
</tr>
<tr>
<td>4. First Traveler – note color</td>
</tr>
<tr>
<td>5. Second Traveler – note color</td>
</tr>
<tr>
<td><strong>NOTE:</strong> For matching remote w/LEDs Installation, the First Traveler becomes Line Hot.</td>
</tr>
</tbody>
</table>

**WIRING DIAGRAM:**

Connect wires per WIRING DIAGRAM as follows:

- **WARNING:** FOR MAGNETIC LOW-VOLTAGE APPLICATIONS, CONNECT DIMMER ONLY TO THE PRIMARY (HIGH-VOLTAGE) SIDE OF A MAGNETIC LOW-VOLTAGE TRANSFORMER.
- When magnetic low-voltage circuits are operated at a dim level, with all lamps inoperative, excess current may flow through the transformer. To avoid possible transformer failure due to overcurrent, use a transformer that incorporates thermal protection or a fuse at the primary windings.
- Vizia™ dimmers are not compatible with standard 3-way or 4-way switches. They must be used with compatible Vizia™ remotes for multi-location dimming.
- Use with magnetic low-voltage transformers, incandescent, or 120V halogen fixtures only. Use a Leviton electronic low-voltage dimmer to control electronic (solid state) low-voltage transformers.
- If you are unsure about any part of these instructions, consult a qualified electrician.
**WIRING COORDINATING REMOTE:**
Connect wires per WIRING DIAGRAM as follows:
- **NOTE:** Maximum wire length from dimmer to last remote is 20 ft. 
- Green or bare copper wire in wall box to Green terminal screw.
- Load wire box is identified (tagged) when removing old switch to terminal screw marked ‘BK.’
- First Traveler wall box wire (note color as above) to terminal screw marked ‘YL/RD.’ This traveler from the remote must go to the Red dimmer lead.
- Second Traveler wall box wire (note color as above) to ‘YL’ or ‘LR’ Red dimmer lead.
- Remote terminal screw marked ‘WH’ should have White insulator label. If insulating label is not affixed to terminal screw marked ‘WH,’ use electrical tape to cover.

**WIRING DIMMER (wall box with Load connection):**
Connect wires per WIRING DIAGRAM as follows:
- **WARNING:** For magnetic low-voltage applications, connect dimmer only to this primary high-voltage, side-of-a magnetic low-voltage transformer.
- Green or bare copper wire in wall box to Green lead.
- Load wire box is identified (tagged) when removing old switch to terminal screw marked ‘BK.’
- First Traveler wall box wire (note color as above) to terminal screw marked ‘YL/RD.’ This traveler from the remote must go to the Red dimmer lead.
- Second Traveler wall box wire (note color as above) to ‘YL’ or ‘LR’ Red dimmer lead.

**NOTE:** 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. Any claims for defects or damages must be presented within five years from the purchase date, and a description of the problem to Leviton Manufacturing Co., Inc., At: Quality Assurance Department, D-02 Little Neck Parkway, Little Neck, New York 11363-0261. This warranty excludes and there is disclaimed liability for labor for removal of this product or its installation. This warranty is void if the product is installed improperly or in an improper environment, overloaded, misused, or abused. Power failure, incorrect wiring, or operating conditions beyond the control of Leviton are not covered by this warranty. Leviton is not liable for direct, indirect, punitive, special, or consequential damages, including those that result from interruption of power, or for Nevada, or other states, governmental or local requirements.!

**ADVANCED PROGRAMMING FEATURES**

**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/off from the Traveler outlet.

- **Push Pad (Default settings)**
  - Turn ON from OFF position.
  - Turn OFF from ON position.

- **DIMMER MODES:**
  - **DIMMING:**
    - BRIGHT: Light brightness changes in steps of 25%.
    - DIM: Press and hold the upper half of the dimmer until you hear a click.
    - Minimum load is under 40W.

- **Air-Gap Switch:**
  - 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 the LED’s are off.

- **Remote does not operate lights**
  - Ensure that total wire length does not exceed 30ft.

- **FOR MAGNETIC LOW-VOLTAGE APPLICATIONS,**
  - Connect wires as follows:
    - **NOTE:** Minimum wire length from dimmer to all installed remote switches cannot exceed 200ft.
  - Dimmer will exit program mode after 3 minutes of inactivity.

- **TROUBLESHOOTING**
  - **Lights Flickering**
    - Lamp has a bad connection.
  - **Dimmer wires not securely fastened and/or wires not secured firmly under terminal screws of remote.
  - **Lights do not turn ON and Locator LED does not turn ON**
    - Circuit breaker or fuse has tripped.
  - **Remote turn OFF**
    - Lamp is burned out.

- **INTERMITTENT DIMMER OPERATION**
  - **NOTE:** Minimum load is under 40W.

- **Dimmer will exit program mode after 3 minutes of inactivity.

**For additional information, contact Leviton's Technical Support at 1-800-260-3500 or visit Leviton's website at www.leviton.com**

**D100-52016-00C**

**ADVANCED Features Summary**

- **Mode 1 – Set Minimum Brightness:**
  - Set the minimum brightness that the lights can dim to prior to turning full OFF.
- **Mode 2 – Set Dim-Lock:**
  - Set the minimum brightness that the lights will turn on to regardless of the previous light level at which they were turned OFF.
- **Mode 3 – Fade Rate Set:**
  - Set the amount of time (in seconds) that the lights have to turn ON from OFF. Fade rate can be set to one of five different settings.

**ADVANCED Features Summary**

- **Mode 1 – Set Minimum Brightness:**
  - Select Brightness: 5% to 100%
- **Mode 2 – Set Dim-Lock:**
  - 100% - 100% 25% - 25%
- **Mode 3 – Fade Rate Set:**
  - Tapered Point 1 (T1)

**To Program:**

- **NOTE:** Have a flashlight handy if the 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 the LED’s are off.
  - 2. Press push pad back into frame and hold push pad for 7 seconds until the locator light is on and the top LED (1) starts blinking.
  - 3. Upon releasing the push pad, the locator light will continue to blink twice per second indicating the dimmer is in Mode 1, Minimum Brightness mode. To change the current Minimum Brightness level from 150%, 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. The locator light will blink twice per second. To change the current Dim-Lock level from 10% to 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 on. This setting will automatically be saved.
  - 5. Tap the push pad to set to Mode 3, Set Fade Rate mode.
  - **NOTE:** The locator light will blink 3-4 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 programmed mode.

- **WIRING DIMMER (wall box with Load connection):**
  - Connect wires per WIRING DIAGRAM as follows:
    - **NOTE:** Maximum wire length from dimmer to all installed remote switches cannot exceed 200ft.
  - Dimmer will exit program mode after 3 minutes of inactivity.

- **5-WAY Dimming:**
  - TURN OFF POWER AT CIRCUIT BREAKER OR FUSE.
  - Installation may now be completed by tightening mounting screws into wall box.
  - **NOTE:** Mounting screws must be tightened into wall box.

- **Restoring Power to Circuit Breaker or Fuse**
  - Press pad until locator light OFF. Lights should turn ON. Rights to the right half of the dimmer until the lights brightness.
  - If lights still do not turn OFF, refer to the TROUBLESHOOTING section.

- **Air-Gap Switch:**
  - 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 the LED’s are off.

- **Display of Minimum Brightness**
  - Locate 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 6) located at the bottom.

- **Locator LED:**
  - * LED #1 is located at the top

- **Display of Maximum Brightness**
  - Tap the push pad to change to Mode 1, Set Minimum Brightness.
  - Set the minimum brightness that the lights can dim to prior to turning full OFF.
  - **Mode 2 – Set Dim-Lock:**
  - Set the brightness that the lights will turn on to regardless of the previous light level at which they were turned OFF.
  - **Mode 3 – Fade Rate Set:**
  - Set the amount of time (in seconds) that the lights have to turn ON from OFF. Fade rate can be set to one of five different settings.