



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

Cat. No. VRM10-1L, 1000VA (Lighted)  
120VAC, 60Hz

## INSTALLATION INSTRUCTIONS



DI-000-VRM10-02A-X0

### 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.
- To avoid overheating and possible damage to this device and other equipment, do not install to control a receptacle, fluorescent lighting, a motor- or a transformer operated appliance.
- 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.
- 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 RF + dimmers are not compatible with standard 3-way or 4-way switches. They must be used with compatible Vizia + or Vizia RF + controllers for multi-location dimming.

### WARNINGS AND CAUTIONS:

- Use only one (1) Vizia RF + Magnetic Low Voltage 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 load on ("at the level selected" for dimmers only) at the control.
- 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.

### INTRODUCTION

Leviton's Vizia RF + components are designed to communicate with each other via Radio Frequency (RF) to provide remote control of your lighting. Using RF technology allows Leviton to provide the greatest signal integrity possible. Each module in Leviton's Vizia RF + component line is a Z-Wave enabled device. In a Z-Wave network, each device is designed to act as a router. These routers will re-transmit the RF signal from one device to another until the intended device is reached. This ensures that the signal is received by its intended device by routing the signal around obstacles and radio dead spots. The Scene Capable Magnetic Low Voltage Dimmer is compatible with any Z-Wave enabled network, regardless of the manufacturer and can also be used with other devices displaying the Z-Wave logo.

### CAUTION:

Remember to exercise good common sense when using the Timer features of your remote, especially when scheduling unattended devices. There can be some unexpected consequences if not used with care. For example, an empty coffee pot can be remotely turned on. If that should happen, your coffee pot could be damaged from overheating. If an electric heater is turned on by remote control while clothing is draped over it, a fire could result. **DO NOT USE** the remote for the control of high power heating appliances such as portable heaters. This device will not control lighting that is used with electronic low-voltage and high frequency power supply transformers, nor high pressure discharge lamps (HID lighting). This includes mercury-vapor, sodium vapor and metal halide lamps.

### FEATURES

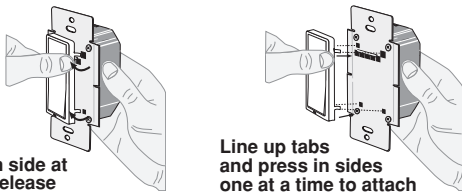
- Soft fade ON/OFF
- Scene capable
- ON/OFF LED and Brightness level LED
- Two way communication
- RF reliability
- Ease of installation – No new wiring
- Compatible with other Z-Wave enabled devices

### Tools needed to install your Dimmer:

Slot/Phillips Screwdriver    Electrical Tape    Pliers  
Pencil    Cutters    Ruler

### Changing the color of your Dimmer:

Your device may include color options. To change color of the face proceed as follows:

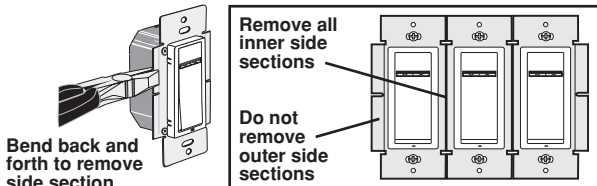


### Installing Dimmer by itself or with other devices:

If installing Dimmer in a single device application, proceed with the **INSTALLING YOUR DIMMER** section. If installing Dimmer in a multi-device application, proceed as follows:

### MULTI-DEVICE APPLICATION

In multi-dimmer installations, the reduction of the dimmer's capacity is required. Refer to the chart for maximum load per dimmer.



Load	Single	Two Devices	More than 2 Devices
Incand	1000W	800W	650W
Mag LV	1000VA	800VA	650VA

### MAXIMUM BULB WATTAGE

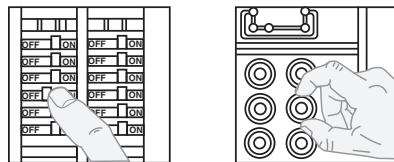
Low-voltage dimmers are rated in Volt-Amps (VA). The maximum bulb wattage is determined by the efficiency of the transformer in the low-voltage lighting system. Transformer efficiencies will vary from different manufacturers; consider 80% efficient as average. Use the chart to determine maximum bulb wattage for typical transformer efficiency ratings.

Rating	Single	Two Gang	More than 2 Gang
1000VA	800W	640W	520W

### INSTALLING YOUR DIMMER

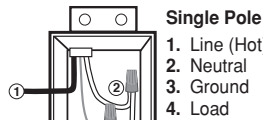
NOTE: Use check boxes  when Steps are completed.

**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!



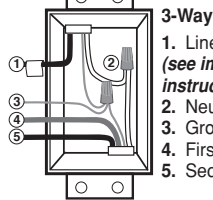
### Step 2 Identifying your wiring application (most common):

NOTE: If the wiring in your wall box does not resemble any of these configurations, consult a qualified electrician.



- Single Pole**
- Line (Hot)
  - Neutral
  - Ground
  - Load

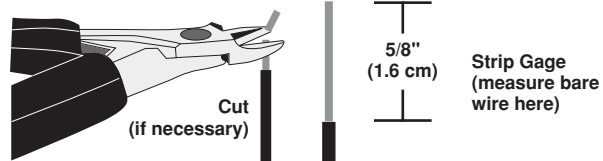
**IMPORTANT:** For 3-Way applications, note that one of the screw terminals from the old switch being removed will usually be a different color (Black) or labeled Common. Tag that wire with electrical tape and identify as the common (Line or Load) in both the dimmer and remote wall box.



- 3-Way**
- Line or Load (see important instruction)
  - Neutral
  - Ground
  - First Traveler – note color
  - Second Traveler – note color

### Step 3 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:



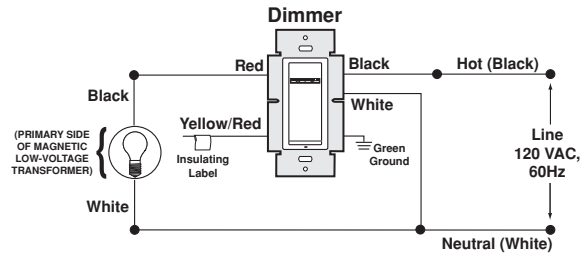
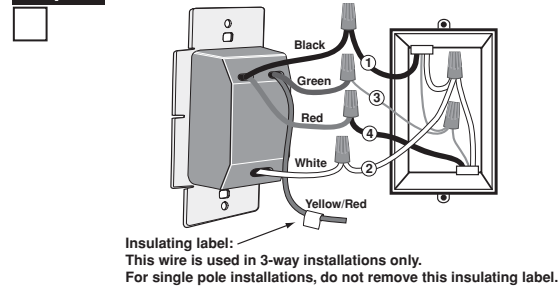
- Pull off pre-cut insulation from dimmer leads.
- Make sure that the ends of the wires from the wall box are **straight (cut if necessary)**.
- Remove insulation from each wire in the wall box as shown.
- For Single-Pole Application, go to Step 4a.
- For 3-Way Coordinating Remote (no LEDs) Application, go to Step 4b.

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

### WIRE CONNECTOR / # 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 4a Single Pole Wiring Application:

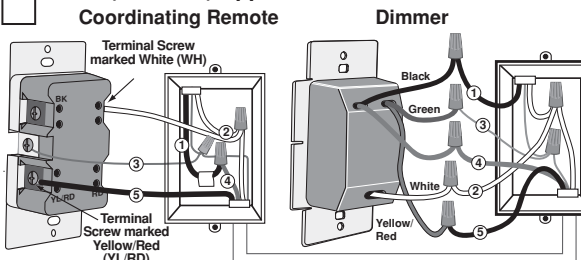


### WIRING DIMMER:

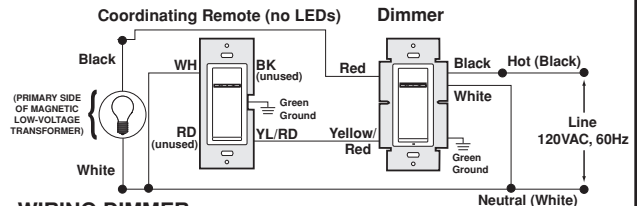
Connect wires per WIRING DIAGRAM as follows: **WARNING:** CONNECT A MAGNETIC LOW-VOLTAGE DIMMER ONLY TO THE PRIMARY (HIGH-VOLTAGE) SIDE OF A MAGNETIC LOW-VOLTAGE TRANSFORMER.

- Green or bare copper wire in wall box to Green dimmer lead.
- Line Hot wall box wire to Black dimmer lead.
- Load wall box wire to Red dimmer lead.
- Line Neutral wall box wire to White 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 4b 3-Way Wiring with Coordinating Remote (no LEDs) Application:



### Step 4b cont'd



### 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. NOTE: Maximum wire length from dimmer to all installed remotes cannot exceed 300 ft (90 m).

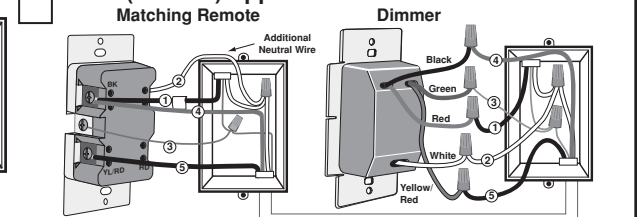
- Green or bare copper wire in wall box to Green dimmer lead.
- Line Hot (common) wall box wire identified (tagged) when removing old switch to Black dimmer lead.
- First Traveler wall box wire to Red dimmer lead (note wire color).
- Remove Red insulating label from Yellow/Red dimmer lead.
- Second Traveler wall box wire to Yellow/Red dimmer lead (note wire color). This traveler from the dimmer must go to the terminal screw on the remote marked "YL/RD".
- Line Neutral wall box wire to White dimmer lead.

### WIRING COORDINATING REMOTE:

Connect wires per WIRING DIAGRAM as follows: NOTE: "BK" and "RD" terminals on coordinating remote are unused. Tighten both screws.

- NOTE: Maximum wire length from dimmer to last remote is 300 ft (90 m).
- Green or bare copper wire in wall box to Green terminal screw.
- Load wall box wire identified (tagged) when removing old switch to First Traveler (note color as above).
- Second Traveler wall box wire (note color as above) to terminal screw marked "YL/RD". This traveler from the remote must go to the Yellow/Red dimmer lead.
- Remove White insulating label from terminal screw marked "WH".
- Line Neutral wall box wire to terminal screw marked "WH".
- Proceed to Step 5.

### Step 4c 3-Way Wiring with Matching Remote (w/LEDs) Application:





## LEVITON INSTRUCTION SHEET/MANUAL SPECIFICATIONS

- Artwork No/Rev Level: DI-000-VRM10-02A-X0
- Color(s): 1 over 1
  1. Black
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
- Font Families: Helvetica
- Material
  - Type: 40 Lb. offset
- Coating:  \_\_\_\_\_
- Paper size:
  - Overall size: 16.5" X 9.0"
  - Final fold size: 2.75" X 3.0"

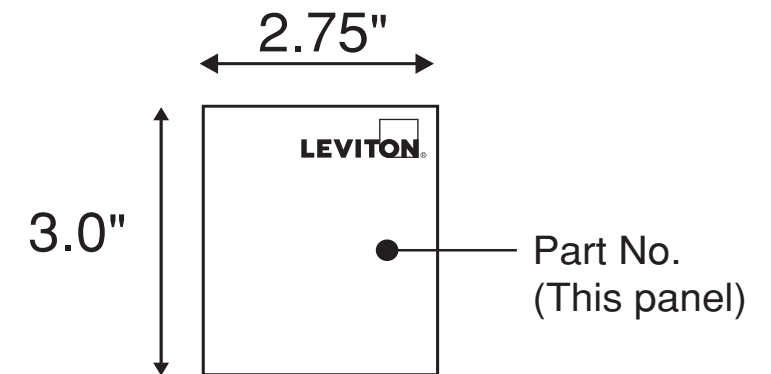
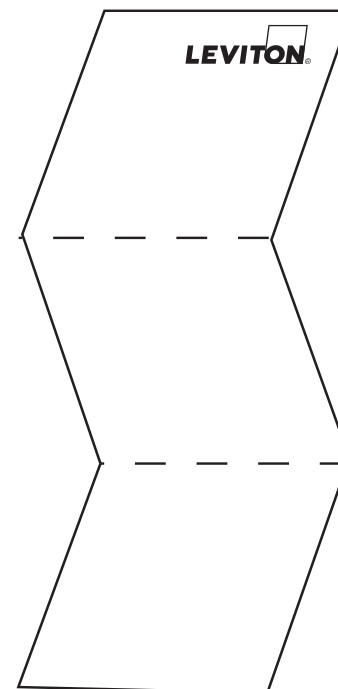
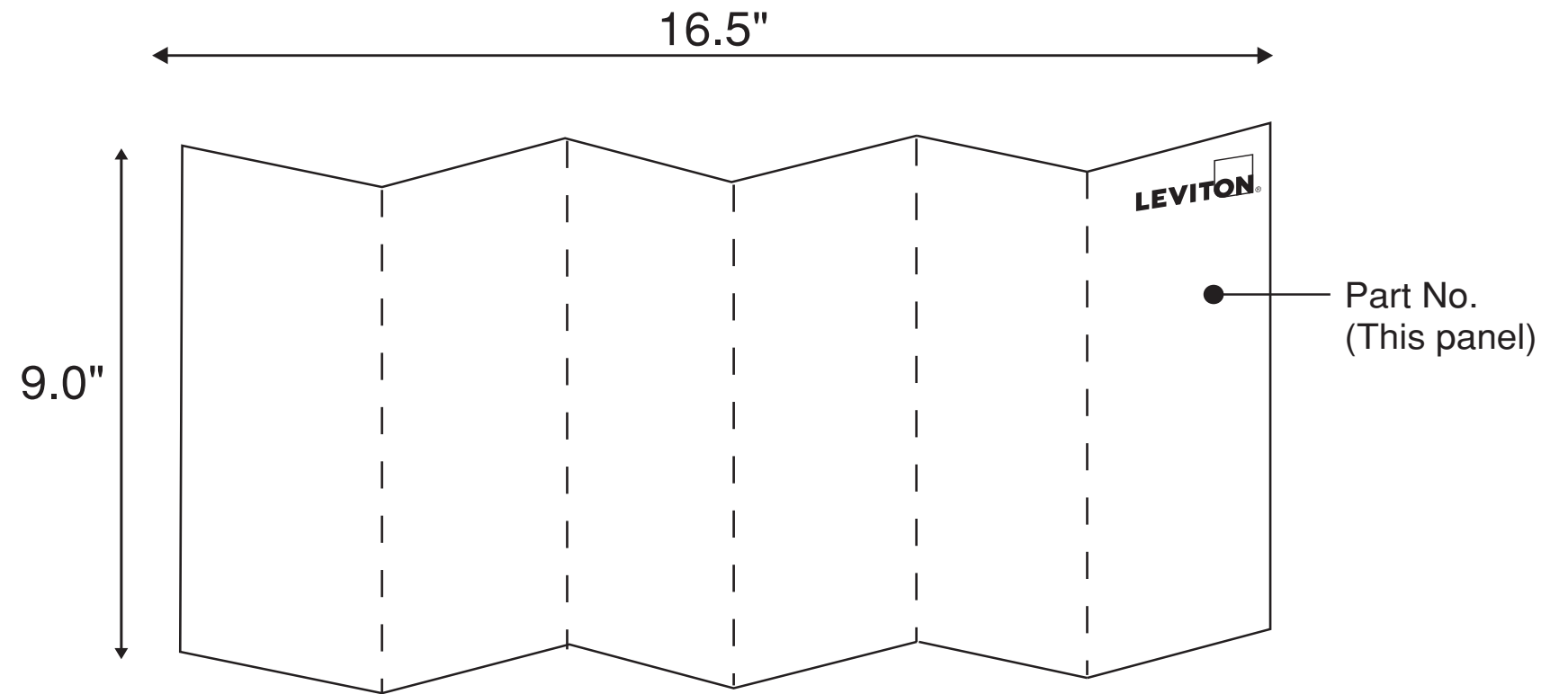
## DOCUMENTATION

- ECO No.: N/A
- Artist: HSZ Date: 02/12/08

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## FOLD SCHEME



FINAL

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