rev grx-tvi-1a 5.07.03

# **GRX-TVI** Ten Volt Interface

GRAFIK Eye.



#### **DESCRIPTION**

- Lets a Control Unit switch and dim fluorescent lights that have Lutron Eco-10™ (TVE Series) Electronic Dimming Ballasts.
- Switches and dims any 0-10V electronic fluorescent dimming ballast powered by 100-277V (ballast must source/provide 10V supply). Switches up to 10A of electronic capacitive fluorescent ballasts.
- Also switches motors 1/4HP @ 100-127V, 1/2HP @ 200-277V.
- Lets you connect up to five Ten Volt Interfaces to one Control Unit zone. This allows one zone to control up to five 16A circuits of Eco-10<sub>TM</sub> (TVE Series) Electronic Dimming Ballasts or five motors.
- Provides 100-277V power to loads.
- Requires 100-127V or 200-240V power for internal operations.

#### **SPECIFICATIONS**

#### Power

- Load (output) power: 100-277V. Phase independent of lighting control.
- Control circuit: 40W/VA @ 100-127V or 200-240V, 50/60Hz, same phase as lighting control. Provides power for internal operations.

#### 0-10V Dimming Control

Output rating: 10µA-300mA. Sinks current only (ballast must source/provide 10V supply).

# **Switching Load Types and Capacities**

Can switch 100-277V.

Source/Load Type	100-127V 200-277V	230V (CE)
Fluorescent  • Lutron Eco-10™ (TVE Series)  • Electronic Capacitive Non-Dim	16A <sup>1</sup>	_ 10A
Incandescent	16A	10A
Low-Voltage	16A	10A
Metal Halide	16A	10A
Neon/Cold Cathode	16A	10A
Motors 1/4HP @ 100-120V 1/2HP @ 200-277V		

<sup>&</sup>lt;sup>1</sup> 10A maximum for 230V (CE) applications

#### **Zone Capacity**

Up to five Ten Volt Interfaces per Control Unit zone.

### **Key Design Features**

- Complies with standard UL 508.
- Provides a Class 2 isolated 0-10V output signal that conforms to EN60929 and IEC929.
- Accepts a constant-gate drive fluorescent signal (100-127V or 200-240V; 50/60Hz).

#### **Terminals**

Up to two #12 AWG (2.5mm<sup>2</sup>) conductors.

#### **Physical Design**

- Wall-mounted. Indoor use only. Type 1 enclosure.
- Weight: 4.25 pounds (2kg).

### **Environment**

32-104°F (0-40°C). Relative humidity less than 90% non-condensing.

### **LUTRON** SPECIFICATION SUBMITTAL

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JOB NAME: MODEL NUMBERS: JOB NUMBER:

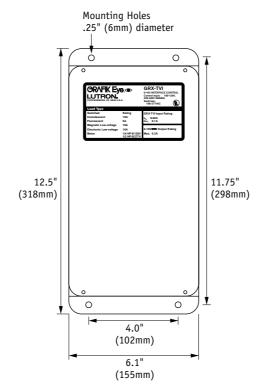
GRAFIK Eye.

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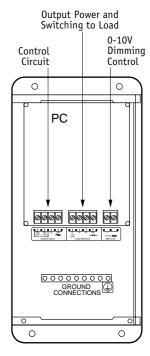
#### **DIMENSIONS AND MOUNTING**

- Mount only where ambient temperature is 32-104°F (0-40°C), relative humidity less than 90% (non-condensing). Allow 4.5" (114mm) between Interfaces when mounting several in a vertical layout.
- Mount so line (mains) voltage wiring is at least 6 feet (1.8m) from sound or electronic equipment and wiring.
- Mount Interface within 7° of true vertical.

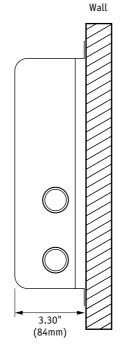
#### FRONT VIEW



#### **COVER OPEN**



#### SIDE VIEW



# **LUTRON** SPECIFICATION SUBMITTAL

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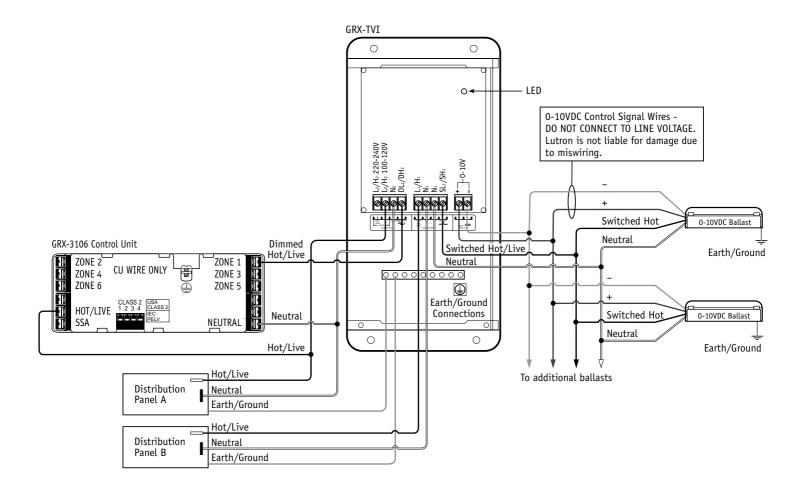
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#### WIRING

- Each terminal can accept up to two #12 AWG (2.5mm<sup>2</sup>) conductors.
- L1/H1 is the Live/Hot feed to power the load.
- L2/H2 (on the control circuit terminals) supplies operating power for the Ten Volt Interface.
- Choose the correct L2/H2 terminal for your operating power.
  - Leave one terminal empty don't use both.
  - Do not connect 277V to either L2/H2 terminal.
  - Make sure L2/H2 is on the same phase as DL2/DH2
     (Dimmed Live/Dimmed Hot) from the lighting control.

# WIRING FROM TWO DISTRIBUTION PANELS OR CIRCUIT BREAKERS

- Panels can have different phases and/or voltages.
- Run separate neutrals for load circuit. No common neutrals.



# **LUTRON** SPECIFICATION SUBMITTAL

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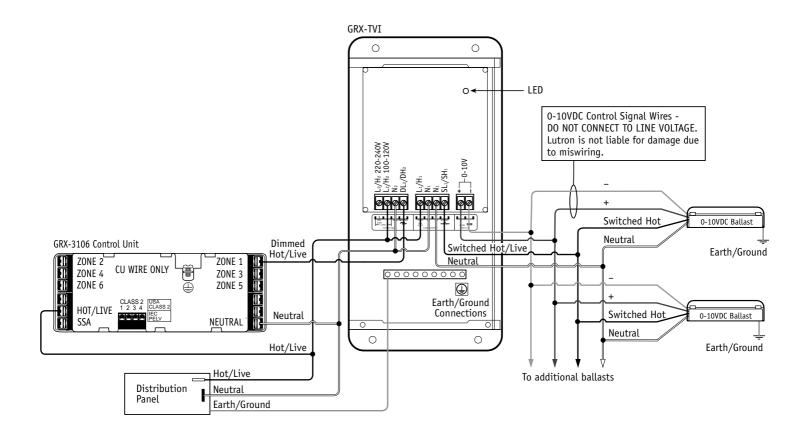
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# WIRING FROM ONE CIRCUIT BREAKER OR OUTPUT (100-240V ONLY)

- Each terminal can accept up to two #12 AWG (2.5mm<sup>2</sup>) conductors.
- L1/H1 is the Live/Hot feed to power the load.
- L2/H2 (on the control circuit terminals) supplies operating power for the Ten Volt Interface.
- Choose the correct L2/H2 terminal for your operating power.
  - Leave one terminal empty don't use both.
  - Do not connect 277V to either L2/H2 terminal.
  - Make sure L2/H2 is on the same phase as DL2/DH2 (Dimmed Live/Dimmed Hot) from the lighting control.

# WIRING FROM ONE DISTRIBUTION PANEL OR CIRCUIT BREAKER

• Run separate neutrals for load circuit. No common neutrals.



# **LUTRON** SPECIFICATION SUBMITTAL

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