



**Solid State, High Voltage Power Supply For Cold-Cathode (Gas Discharge) Lighting Applications**

**FEATURES:**

- UL Recognized, CSA Certified
- Secondary Ground Fault Interruption (SGFI)
- Over Voltage Interruption
- Anti-Bubbling / Anti-Mercury Migration Circuitry
- Open / Short Circuit output will not damage device
- Dual Class 2 Auxiliary Voltage Outputs
- 10 Foot Line Cord Standard
- Light Weight / Cost Competitive

**SPECIFICATIONS:**

INPUT

Voltage: 120 VAC Nominal  
(108-132 VAC operating range)  
Frequency: 50/60 Hz.  
Current: 3.0 Amps rms maximum  
Power: 240 Watts  
(Recommended operating max.  
at nominal line voltage)

WEIGHT

1.5 Lbs. (0,68 kg.)

OUTPUT

Rated Output: 5.7kV rms  
Short Circuit Current: 25mA rms  
Equivalent Sign Volts: 10kV maximum  
2kV minimum  
Class 2 Outputs: 2 x 22V rms, 2.4A rms each  
Frequency: 20 kHz

TEMPERATURE

Ambient operating: 104°F (40°C) Maximum (in open air)

**FAULT MODE:**

- The unit will automatically turn off whenever a SGFI, or Over Voltage fault occurs.
  - If the output has an imbalance of 12mA or more, or exceeds 15kV for longer than 250ms, the unit will shut down for one second and then attempt to restart two times. If the unit still detects a fault, it will remain shut down until power is cycled by the pull cord.
- To restore normal operation, switch the unit OFF for 5 seconds, then switch ON again.
- Alternately, operation can be restored by unplugging the power cord, waiting 30 seconds, then reconnecting the power cord.
- If normal operation cannot be restored, refer sign to a qualified repair facility.

**TABLE 1**

LUMINOUS TUBE LENGTH (FEET)							
Tube Size Diameter [mm]	15	13	12	11	10	9	8
Fill Pressure mm of Hg at 100°C	9	10	11	12	13	15	16
Tube Length - Neon	48	37	31	26	21	16	12
Tube Length - Mercury/Argon	58	46	40	35	30	25	20
TUBE LENGTH ADJUSTMENTS: Deduct 1.0 foot for each electrode pair beyond the first pair. Deduct 5.0 feet for use with sheet metal or metalized sign frame. Deduct 5.0 feet for each 20°F above ambient temperature of 75°F.							

**INSTALLATION:**

Mounting (see Figure 1):

For Indoor Use Only

Use (2), #10-24 machine screws, 5/16" longer than the thickness of the mounting surface.

If mounting to a metal surface other than a bar frame, a minimum 0.75 in. thick non-metallic spacer must be used.

Mount power supply with the bottom surface in a vertical plane, such that the vents are facing up and down.

For proper grounding of the sign frame, use a #10 internal tooth star washer between the sign frame and the mounting boss identified with the Earth Ground symbol.

**- CAUTION -**

***This device should not be mounted in spaces or near bodies that may exceed an ambient temperature of 104°F (40°C).***

Wiring:

The molded plug on the power cord must be connected to a dedicated 120V, 20A branch circuit receptacle with earth grounding means.

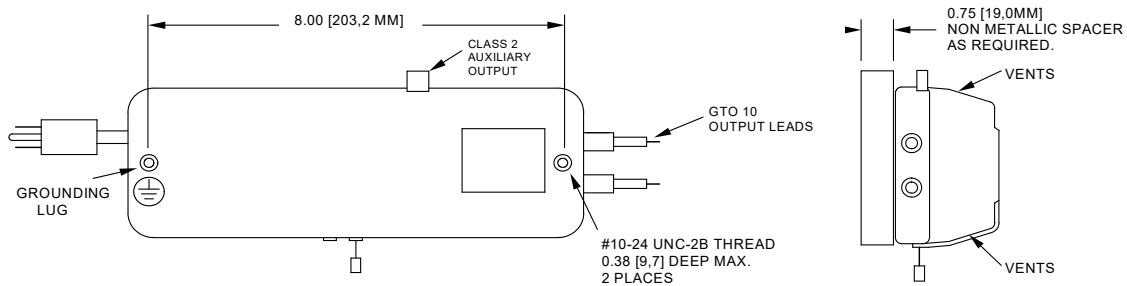
The tube load for the main power supply unit shall not exceed the footage limits specified in Table 1.

The power supply output leads (GTO 10) are to be connected to tube load as shown in Figure 2.

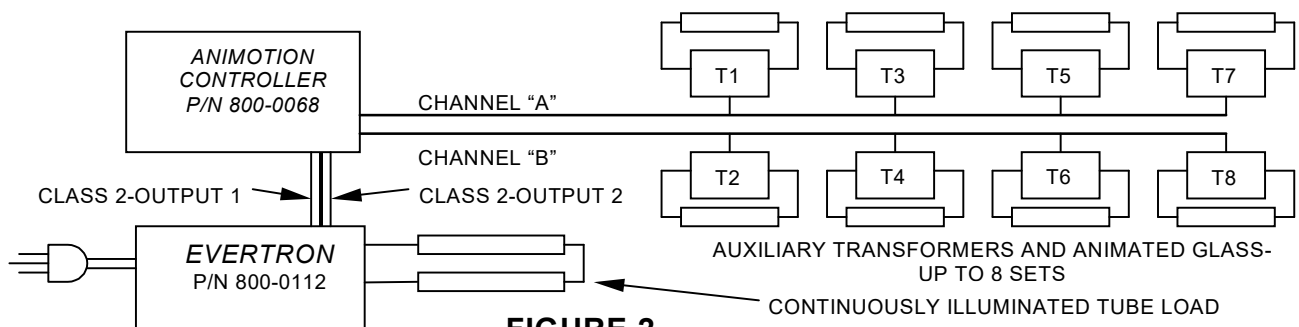
***When connected directly, do not exceed two Auxiliary transformers per Class 2 output channel. For proper connection and loading of Auxiliary transformers when using an Animation Controller, please refer to the Everbrite Animation System Installation Guide.***

**- CAUTION -**

***When two or more power supplies are required on a single neon sign, the output leads from one MUST NOT be wired in series or in parallel with the output leads from the other(s).***



**FIGURE 1**



**FIGURE 2**

**WARRANTY:**

Everbrite Electronics, Inc. warrants to the original purchaser that the product described herein is free from defects in material and workmanship for a period of four years from date of manufacture and will replace or repair, at the discretion of the manufacturer, products found to be defective. The liability of the company is limited to the replacement of the defective product.

**No other warranty, whether expressed or implied, including any warranty of merchantability of fitness for a particular purpose, shall exist in connection with the sale or use of such products.**