

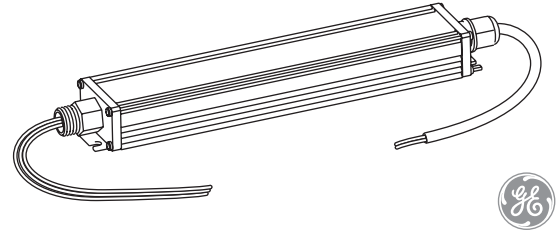
# LED Systems Power Supply

12  
Volt

GEPS12W-60 (100-240 VAC input/12VDC output/60W)

## Power Supply Features

- Supports all 12 VDC Tetra Products
- UL: Class 2
- 100-240 VAC Input



## BEFORE YOU BEGIN

Read these instructions completely and carefully.

### ⚠ WARNING / AVERTISSEMENT

#### RISK OF ELECTRIC SHOCK

- Disconnect power at fuse box or circuit breaker before servicing or installing product.
- Properly ground Tetra® power supply.

#### RISK OF FIRE

- Minimum 10 cm (4") to side and 2.5 cm (1") spacing in compartment surrounding component required.
- Use only approved wire for input/output connection. Minimum size 18 AWG (0.82 mm<sup>2</sup>).
- Follow all local codes.
- Application considerations potentially requiring additional spacing include high ambient temperature seen by the power supply, poor contact with a heat dissipating material, inadequate ventilation, or direct exposure to sun.

#### RISQUES DE DÉCHARGES ÉLECTRIQUES

- Coupez l'alimentation électrique à la boîte de fusibles ou au disjoncteur avant l'entretien ou l'installation du produit.
- Assurez-vous de correctement mettre à terre le bloc d'alimentation Tetra®.

#### RISQUES D'INCENDIE

- Un espacement minimum de 10 cm (4 po) entre 2 alimentations de puissance est requis ainsi qu'un espacement minimal de 2,5 cm (1 po) avec toute enceinte.
- N'utilisez que des fils approuvés pour les entrées/sorties de connexion. Taille minimum 18 AWG (0.82 mm<sup>2</sup>).
- Respectez tous les codes locaux.
- Certaines applications pourraient requérir un espacement additionnel, p. ex. une température ambiante élevée autour du bloc d'alimentation, un mauvais contact avec une matière dissipatrice de chaleur, une ventilation inadéquate ou une exposition directe au soleil.

### ⚠ CAUTION / ATTENTION

#### RISK INJURY

- While performing installations described, gloves, safety glasses or goggles should be worn.

#### RISQUES DE BLESSURE

- Lors de l'exécution des installations décrites, des gants, des lunettes de sécurité ou des lunettes de protection doivent être portées.

## Prepare Electrical Wiring FOR UL ONLY



#### Electrical Requirements

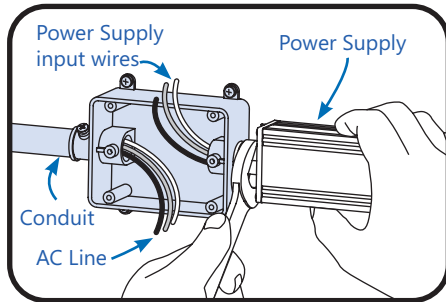
- Acceptable for use in dry, damp and wet locations.
- The grounding and bonding of the LED Driver shall be done in accordance with National Electric Code (NEC) Article 600.
- Follow all National Electric Codes (NEC) and local codes.

## Save These Instructions

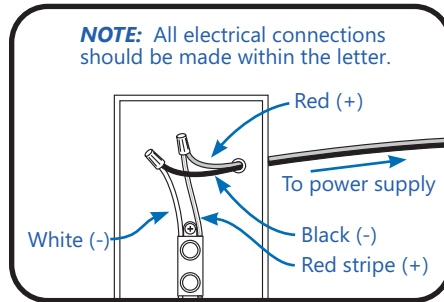
Use only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.

For the latest North American install guides for your product go to: <https://products.LED.com/led-signage-lighting>

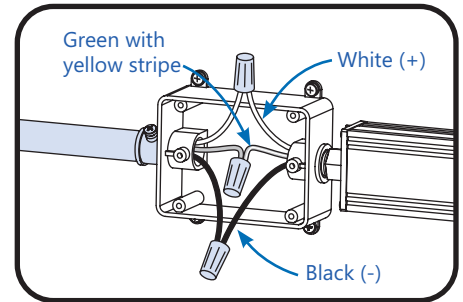
## Power Supply Installation



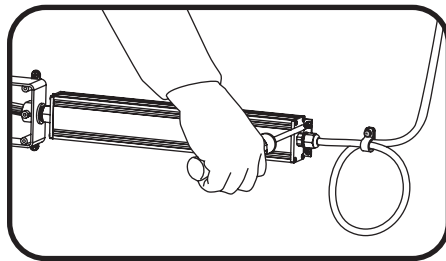
1 Run AC line through conduit and attach conduit to outdoor-rated/UL approved enclosure. Attach power supply to enclosure.



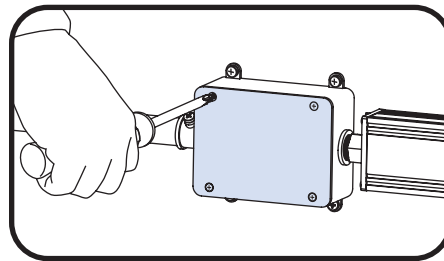
2 Connect the red stripe wire (+) of the LED strip to the red wire (+) of the power supply. Connect the white wire (-) of the LED strip to the black wire (-) of the power supply.



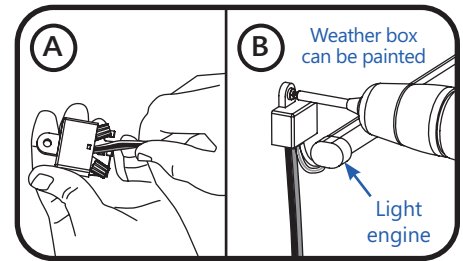
3 Connect the AC line to the black (line) and white (neutral) input wires of the power supply using 18-14 AWG (0.82-2.08 mm<sup>2</sup>) twist-on wire connectors. Properly ground (green wire with yellow stripe) power supply in accordance with National Electric Code (NEC) Article 600.



4 Mount Power Supply in a horizontal orientation with a minimum of one screw per mounting plate (two screws per power supply) with the base in contact with the mounting surface in accordance with the power supply spacing requirements described above.



5 Tighten liquid-tight fittings and properly replace cover on junction box to ensure a water-tight seal. If not protected from the weather, the output connections may be sealed with electrical grade silicone.



**OPTIONAL**  
A Weather Box (GEXNWB2) may be used to house and seal Class 2 connections.  
A) Insert wire connectors into weather box. Fill with electrical grade silicone and close box.  
B) Secure the weather box using a #6 or #8 (M2 or M3) screw.

**FOR UL ONLY** **NOTE:** For installation in Canada, a disconnect switch of appropriate rating needs to be placed within 29.5 feet (9 meters) of primary side of the power supply. The switch voltage rating shall not be less than the branch circuit voltage. The switch must also support twice the amount of input current.

**FOR UL ONLY** **NOTE:** When installing power supply, connect to the appropriate sized building breaker or disconnect device for line, neutral and ground connections, in accordance with National Electric Code (NEC) Article 600 and all local regulations.

**NOTE:** Exceeding maximum load per bank will cause the power supply to shut down. Once the excess load is removed, cycle the input power to restart the power supply.

**NOTE:** To avoid overloading this power supply with LED modules, please refer to the specific module loading guides.

## Power Supply Specifications

Performance Data	Min	Typical	Max
Input Voltage (VAC)	90	100-240	264
Input Frequency (Hz)	–	50/60	–
Input Current (A)	–	–	0.85
THD	–	–	20
PF	0.9	–	–
Output Voltage (VDC)	11.4	12.0	12.6
Output Current (ADC)	0.8	–	5.0
Output Power (W)	–	–	60
Environmental Operating Temperature Range	-40°C	+25°C	+60°C*
Environmental Humidity (non-condensing)	0%	–	95%
Environmental Storage Temperature Range	-40°C	–	+85°C
Environmental Rating	IP66 Rated		
Dimensions	12 in. x 2 in. x 1.25 in. (307 mm x 52 mm x 32 mm)		

\*Maximum case temperature is 80°C

## Troubleshooting

Symptom	Solution
All letters are OFF	<ul style="list-style-type: none"> <li>Recycle AC power, turn it off, then turn on again.</li> <li>If still off, check the power supply DC output voltage using a voltmeter. It should be nominally 12V.                             <ul style="list-style-type: none"> <li>» If there is DC output, inspect and correct all DC wire damage/polarity issues; If no issue is found, replace the OFF-module string.</li> <li>» If there is no DC output, have a licensed electrician check the input AC voltage and if there is correct AC voltage, replace the power supply.</li> <li>» If there is no AC voltage, correct the upstream AC issue.</li> </ul> </li> </ul>
Some LEDs appear dim	<ul style="list-style-type: none"> <li>Ensure the overall length of the Tetra® LED System does not exceed the maximum load.</li> <li>Ensure the length of supply wire is equal to or below the recommended remote mounting distance.</li> </ul>
Some of the letters are not illuminated	<ul style="list-style-type: none"> <li>Inspect and correct the wires of the non-illuminated letters for damage/polarity issues; If no issues are found, see the troubleshooting solution for "All letters are OFF."</li> </ul>
Shadows	<ul style="list-style-type: none"> <li>Re-route supply wire and secure to the back of the can with electrical grade RTV silicone. Adjust wire connector orientation so that it does not cover any LEDs.</li> <li>Adjust LED layout to ensure uniformity of illumination of the face of the letter.</li> </ul>

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This Class [A] RFLD complies with the Canadian standard ICES-005. Ce DEFR de la classe [A] est conforme à la NMB-005 du Canada.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This product is intended to be used as a lamp control gear that is installed after the mains control switch.

Conforms to the following standards:

