

# GELP24-100U-GLX

## 24V 100W Power Supply

All of our power supplies are designed specifically for the sign industry by our team of electronics experts. Our LED power supplies are built to stand the test of time, backed by the most extensive reliability testing in the industry and a five-year warranty.



### Features:

- Standard 5-year warranty
- Compatible with all 24VDC Tetra products
- UL: Class 2
- IEC: SELV

Specifications	
Model	GELP24-100U-GLX
Nominal Voltage	120-277V ± 10%
Line Current	1.1-0.36A
Frequency	50/60Hz
Protection Class: (EU Class I/II/III)	Class I
Number of Output Channels	1
Output Voltage	24VDC ± 1VDC
Output Power	96W, I <sub>out</sub> ≤ 4A
Power Factor	>0.9 @ full load across nominal input voltage
THD	< 20% @ full load across nominal input voltage
Efficiency at Full Load	120VAC: 87% 230VAC: 89.6% 277VAC: 89.6%
Max. no. of PSU per MCB:	Available upon request
Operating Temperature Range, T <sub>a</sub>	-40°C to 60°C
Operating Humidity	10% to 95% non-condensing
Storage Temperature Range	-40°C to 85°C
Max. Case Temperature at T <sub>c</sub> Point:	85°C
Warranty @ 100% Duty Cycle, T <sub>c</sub> =45°C	5 years
Dimmable:	No
Short Circuit Protection	Yes

Specifications	
Overload Protection	Yes
Over Temperature Protection	Yes
Environmental Rating	Dry and Damp Rated
Geometry (L×W×H)	9.5 in. x 1.7 in. x 1.1 in. (241 mm x 43.2 mm x 28 mm)
Weight	610 g
Suitable for Fixtures with Protection Class	UL Class 2, SELV
Safety	UL 1310 CAN/CSA-C22.2 No.223 EN 61347-2-13, EN 61347-1
Radio Interference	FCC Part 15 Class A ES5015, EN 61547, EN 61000-3-2, EN 61000-3-3
Surge Capability	ANSI/IEEE C62.41 (1.2/50µs @ 6kV/20 L-N, 6kV/20 L+N-PE)
RoHS	Yes
Approvals (Certificates)	UL, CE, UKCA
Additional Notes	Not intended to operate in "No Load" mode



Electrical products must not be thrown out with domestic waste. They must be taken to a communal collecting point for environmentally friendly disposal in accordance with local regulations. Contact your local authorities or stockist for advice on recycling. The packaging material is recyclable. Dispose of the packaging in an environmentally friendly manner and make it available for the recyclable material collection-service.

# Tetra® LED Systems Power Supply

EN Instruction Guide

24  
Volt

GEPS24-100U-GLX (120-277 VAC input / 24 VDC output / 100W)

## Power Supply Features

- Supports all 24 VDC Tetra Products
- UL: Class 2
- IEC: SELV



## BEFORE YOU BEGIN

Read these instructions completely and carefully.

- |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>10.</b> Българията версия на инструкциите за инсталация и информация за безопасност могат да бъдат намерени на следния адрес: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                 | <p><b>16.</b> La version française des instructions d'installations et information de sécurité est disponible à l'adresse suivante: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>     | <p><b>22.</b> Polska wersje instrukcji instalacji oraz informacje dotyczące bezpieczeństwa można znaleźć w następującej lokalizacji: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                          |
| <p><b>11.</b> Návod k montáži a bezpečnostní informace v češtině najdete zde: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                                                                       | <p><b>17.</b> Hrvatska verzija priručnika za ugradnju i sigurnosnih informacija nalazi se na sljedećoj lokaciji: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                        | <p><b>23.</b> A versão em Português das instruções de instalação e das informações de segurança pode ser encontrada na seguinte localização: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                  |
| <p><b>12.</b> Den danske version af installationsvejledningen og sikkerhedsoplysninger kan findes på følgende placering: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                            | <p><b>18.</b> A telepítési útmutató és a biztonsági információk magyar nyelvű változata az alábbi címen található: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                      | <p><b>24.</b> Versiunea în limba română a instrucțiunilor de instalare și a informațiilor de siguranță pot fi găsite la: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                                      |
| <p><b>13.</b> Die deutsche Version der Installationsanleitung und Sicherheitsinformationen finden Sie in folgendem Verzeichnis: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                     | <p><b>19.</b> La versione italiana del manuale di installazione e sicurezza può essere reperita nella seguente sezione: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                 | <p><b>25.</b> Ni hittar den svenska versionen av installationsanvisningarna och säkerhetsinformationen på följande plats: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                                     |
| <p><b>14.</b> Η παρτίδα να βρείτε την ελληνική έκδοση των οδηγιών εγκατάστασης και των πληροφοριών ασφαλείας στην κλίση τοποθεσία: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                  | <p><b>20.</b> Lietuvišką diegimo instrukcijos ir saugos informacijos versiją galima rasti šioje vietoje: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                                | <p><b>26.</b> Previdnostna opazila in varnostne informacije so na zadnji strani vodnika za namestitve. Pred začetkom namestitve izdelka jih skrbno preberite: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p> |
| <p><b>15.</b> La versión española de las instrucciones de instalación y la información sobre seguridad puede encontrarse en la siguiente ubicación: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p> | <p><b>21.</b> Uzstādīšanas instrukciju un drošības informāciju latviešu valodā var atrast šeit: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                                         | <p><b>27.</b> Slovenskú verziu montážnej príručky a bezpečnostných instrukcií nájdete na nasledujúcej lokalite: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                                               |
| <p><b>17.</b> Eesti keelse paigaldusjuhendi ja ohutusjuhendi leiate aadressilt: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                                                                     | <p><b>28.</b> De Nederlandse versie van de installatie-instructies en veiligheidsinformatie kan op de volgende locatie worden gevonden: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p> |                                                                                                                                                                                                                                                         |
| <p><b>18.</b> Aaennusohjeiden ja turvallisuustietojen suomenkielinen versio löytyy seuraavasta paikasta: <a href="https://products.currentbyge.com/ru">https://products.currentbyge.com/ru</a></p>                                            |                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                         |

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

For the latest European install guides for your product go to: <https://products.currentbyge.com/ru>

## Save These Instructions

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

## Prepare Electrical Wiring **FOR UL ONLY**



### Electrical Requirements

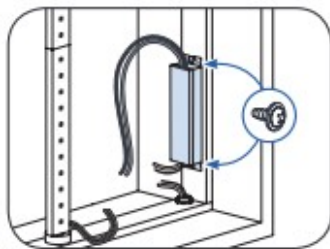
- Limited to use in dry and damp locations.
- The suitability of rain enclosure shall be determined if intended for wet location.
- The grounding and bonding of the LED Driver shall be done in accordance with National Electric Code (NEC) Article 600.
- Follow all National Electric Codes (NEC) and local codes.

**current**  
powered by GE



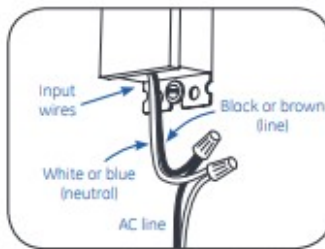
<b>⚠ WARNING/AVERTISSEMENT</b>	
<p><b>RISK OF ELECTRIC SHOCK</b></p> <ul style="list-style-type: none"> <li>Disconnect power at fuse box or circuit breaker before servicing or installing product.</li> <li>Properly ground Tetra® power supply.</li> <li>AC input connections shall be suitably enclosed. The power supply shall be enclosed or made inaccessible to users during normal use.</li> </ul> <p><b>RISK OF FIRE</b></p> <ul style="list-style-type: none"> <li>Minimum power supply spacing to other power supply or other heat producing component shall be at least 4" (101.6 mm) from side to side and 1" (25.4mm) from end to end.</li> <li>Use only approved wire for input/output connection. Minimum size 18 AWG (0.82 mm<sup>2</sup>).</li> <li>Follow all local codes.</li> <li>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.</li> </ul>	<p><b>RISQUES DE DÉCHARGES ÉLECTRIQUES</b></p> <ul style="list-style-type: none"> <li>Coupez l'alimentation électrique à la boîte de fusibles ou au disjoncteur avant l'entretien ou l'installation du produit.</li> <li>Assurez-vous de correctement mettre à terre le bloc d'alimentation Tetra®.</li> <li>Les connexions d'entrée CA doivent être convenablement enfermées. Le bloc d'alimentation doit être enfermée ou rendue inaccessible aux utilisateurs pendant l'utilisation normale.</li> </ul> <p><b>RISQUES D'INCENDIE</b></p> <ul style="list-style-type: none"> <li>L'espacement minimal du bloc d'alimentation par rapport à un autre bloc d'alimentation ou aux autres composants produisant de la chaleur doit être au moins 4" (101,6 mm) de chaque côté et 1" (25,4 mm) de bout en bout.</li> <li>N'utilisez que des fils approuvés pour les entrées/sorties de connexion. Taille minimum 18 AWG (0.82 mm<sup>2</sup>).</li> <li>Respectez tous les codes locaux.</li> <li>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.</li> </ul>
<b>⚠ CAUTION/ATTENTION</b>	
<p><b>RISK OF INJURY</b></p> <ul style="list-style-type: none"> <li>While performing installations described, gloves, safety glasses or goggles should be worn.</li> </ul>	<p><b>RISQUES DE BLESSURE</b></p> <ul style="list-style-type: none"> <li>Lors de l'exécution des installations décrites, des gants, des lunettes de sécurité ou des lunettes de protection doivent être portées.</li> </ul>

## Power Supply Installation



- 1** Mount the power supply. Mounting the power supply base directly to a thermally conductive installation surface can improve thermal performance.

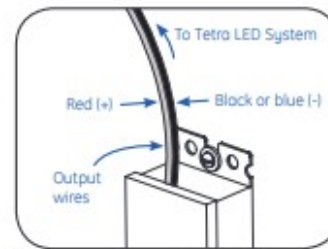
**NOTE:** All electrical connections should be suitably protected from mechanical damage and the environment. Seal all connections exposed to water with electrical grade self-hardening silicone.



- 2** Connect the AC line to the black or brown (line) and white or blue (neutral) input wires of the power supply using suitable wire connectors.

**⚠ WARNING**

**RISK OF ELECTRIC SHOCK**  
AC input connections shall be suitably enclosed.



- 3** Connect the supply wire that is attached to the Tetra LED System to the red (+) and black or blue (-) output wires of the power supply as outlined in the "Electrical Connections" section of your LED system's Installation Instructions.

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

**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.

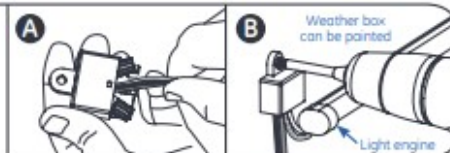
**FOR UL ONLY** **NOTE:** When installing power supply, connect to the appropriate sized building breaker or disconnect device for line, neutral and ground connections, in accordance with National Electric Code (NEC) Article 600 and all local regulations.

### 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.



## Power Supply Specifications

Performance Data	Min	Typical	Max
Input Voltage (VAC)	108	120-277	305
Input Frequency (Hz)	-	50/60	-
Input Current (A)	0.35	-	1.1
THD	-	-	20
PF	0.9	-	-
Output Voltage (VDC)	24.0	24.5	25.2
Output Current (ADC)	-	-	4.0
Output Power (W)	-	-	96
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	IP54 rated: must be protected from direct exposure to the weather		
Dimensions	9.5 in. x 1.7 in. x 1.1 in. (241 mm x 43.2 mm x 28 mm)		

\*Maximum case temperature is 85°C

## Troubleshooting

Symptom	Solution
All LEDs are OFF	<ul style="list-style-type: none"> <li>The GEPS24-100UGLX features a new built in output overload shutdown feature that automatically resets when the AC supply is removed and reapplied. So if all letters are off, first verify whether or not the output can be reset by first switching off then switching back on the AC supply. If the letters do not re-light, then proceed to the following solutions.</li> <li>Check AC input connection and/or check circuit breaker.</li> <li>Check wire connection(s) at the Tetra® LED System and power supply for improper termination(s) or short circuits. Properly terminate or replace the wire connection(s).</li> <li>Check that connections are the red striped wire (+) of the LED strip to the red wire (+) of the power supply and the white wire (-) of the LED strip to the black or blue wire (-) of the power supply.</li> <li>Ensure the overall length of the Tetra® LED System does not exceed the maximum load. If so, remove the excess load and cycle the AC supply to reset the drivers built in overload protection.</li> </ul>
Some LEDs appear dim	<ul style="list-style-type: none"> <li>Ensure the length of supply wire is equal to or below the recommended remote mounting distance.</li> </ul>
Some of the LEDs are not illuminated	<ul style="list-style-type: none"> <li>Check wire connection(s) at the Tetra® LED System and power supply for improper termination(s) or short circuits. Properly terminate or replace the wire connection(s).</li> <li>Check that connections are the red striped wire (+) of the LED strip to the red wire (+) of the power supply and the white wire (-) of the LED strip to the black or blue wire (-) of the power supply.</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.

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:



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