GE
Lighting

Installation Guide

24 Volt

Tetra® LED Systems Power Supply

GEPS24-25U-NA

Power Supply Features

- Supports Tetra PowerStrip DS, Tetra miniStrip DS, Tetra EdgeStrip, Tetra Contour and Tetra Contour LS LED lighting systems
- Class 2 wiring per NEC Article 725 (SELV)
- Damp location rated
- 120-277 VAC input
- IP66 rated: separate enclosure required



STOP

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:
- Use only Tetra® supply wire to make connection from Tetra® power supply to Tetra® LED strip.
- Use only approved wire for input/output connection. Minimum size 18 AWG (0.82mm²)
- Follow all local codes.

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 l'alimentation électrique Tetra®.

RISQUES D'INCENDIE
- N'utilisez que le fil d'approvisionnement Tetra® pour faire la connexion entre l'alimentation Tetra® et la bande DEL Tetra®.
- N'utilisez que des fils approuvés pour les entrées/sorties de connexion. Taille minimum 18 AWG (0.82mm²).
- Respectez tous les codes locaux.

- A suitable Fire and Electrical Enclosure shall be provided in the end product.
- In the end product, power supply spacing to other heat producing components shall be minimum 2 inches spacing to sidewalls, and minimum 2 inches spacing to top of enclosure.

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.

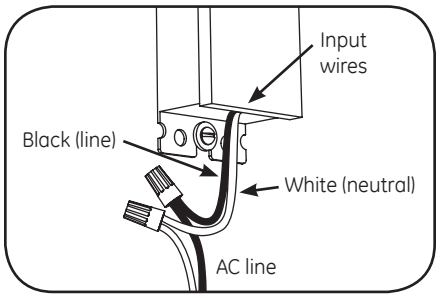
NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment 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.

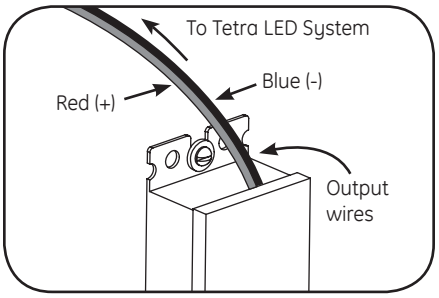
current
powered by GE

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Power Supply Installation



1 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^2) twist-on wire connectors.



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

NOTE: Power Supply Loads: Exceeding maximum load will cause the power supply to shut down. Once the excess load is removed, cycle the input power to restart the power supply. Specific load information for the supported LED systems can be found in the **"Power Supply Specifications"** section on the next page.

NOTE: For CSA approval, a disconnect/toggle switch of appropriate rating needs to be placed within 29.5 ft. (9 m) of primary side of the power supply. The minimum rating of the switch must be either 120 or 220 Volts AC. The switch must also support twice the amount of input current.

NOTE: When installing power supply, connect to the appropriate sized building breaker or disconnect device for line and neutral connections, in accordance with local, state or country regulations.

Retrofit Instructions

1. **(Existing Signs Only)** Prior to installation, survey the site for information regarding power and accessibility inside and outside the building. Ensure that the branch circuit supplying the existing transformer or ballast will be within the voltage ratings of the new LED power supply, and have a current rating not exceeding 20A, or that permitted by applicable local, state, or country electrical codes (whichever is less).
2. **(Existing Signs Only)** Remove the existing lighting equipment to be replaced, such as neon tubing or fluorescent tubes; and associated transformers and ballasts. Care should be taken not to break the existing neon or fluorescent tubes.
   NOTE: Follow all federal and local regulations when disposing of neon tubing, fluorescent tubes, transformers and ballasts.
3. **(Existing Signs Only)** If removal of the existing lighting equipment eliminates the disconnect switch, as required by applicable local, state, or country electrical codes; a new disconnect switch must be installed.
4. **(Existing Signs Only)** Make sure the removal of lighting equipment does not compromise the integrity of the sign body (i.e. water intrusion). Fill in all holes 0.5 in. (13 mm) or smaller with the appropriate amount of rated caulk or sealant. For holes greater than 0.5 in. (13 mm), use an aluminum or zinc coated steel patch with rivets and sealant.
5. Using the layout guidelines within the LED module installation instructions, determine required number of LED modules required to illuminate the sign.
6. Using the applicable LED module maximum Loading chart, determine the number of Tetra Class 2 Power Supplies required to power the number of LED modules required to illuminate the sign, so as not to overload any single power supply output.
7. Follow the LED module instructions to properly mount the LED modules.
8. Connect the DC output of the power supply to the LED modules using the Power Supply Installation instructions above.
9. Connect the power unit to the supply in accordance with the applicable local, state, and country electrical codes, and the Power Supply Installation instructions above.
10. If required, the disconnect switch shall be installed by qualified personnel, in accordance with applicable local, state, and country electrical codes.

Power Supply Specifications

Performance Data	Min	Typical	Max
Input Voltage (VAC)	100	120-277	305
Input Frequency (Hz)	-	50/60	-
Input Current (A)	0.1 (277VAC)	-	0.3 (100VAC)
Output Voltage (VDC)	23	24	25
Output Current (ADC)	-	-	1.0
Output Power (W)	-	-	25
Environmental Operating Temperature Range	-25°C	+25°C	+50°C*
Environmental Humidity (non-condensing)	10%	-	95%
Environmental Storage Temperature Range	-40°C	-	+70°C
Environmental Rating	IP66 rated: separate enclosure required		
Dimensions	5.2 in. x 1.6 in. x 1.2 in. (133 mm x 30.5 mm x 40 mm)		

* Maximum case temperature is 75°C

Supports Tetra Products	SKUs	Rated Watts	Maximum Load	Remote Mounting Distance 18 AWG/ 0.82 mm²	16 AWG/ 1.31 mm²	14 AWG/ 2.08 mm²	12 AWG/ 3.31 mm²
Tetra PowerStrip DS	GESS2471-2, GESS2450-2, GESS2441-2, GESS2432-2	2.52W/module	9 modules/ 9 ft. (2.74 m)	120 ft. (36.6 m)	-	-	-
	GESS24H71-1, GESS24H50-1, GESS24H41-1, GESS24H32-1	2.9W/module	6 modules/ 6 ft. (1.83 m)	120 ft. (36.6 m)	-	-	-
Tetra PowerStrip DS	GEDS71-2, GEDS50-2, GEDS41-2, GEDS32-2	5.04W/module	4 modules/ 4 ft. (1.22 m)	120 ft. (36.6 m)	-	-	-
	GEDSH71-2, GEDSH50-2, GEDSH41-2, GEDSH32-2	5.80W/module	3 modules/ 3 ft. (0.91 m)	120 ft. (36.6 m)	-	-	-
Tetra PowerStrip HO	GESS24H71-1, GESS24H50-1, GESS24H41-1, GESS24H32-1	2.9W/module	6 modules/ 6.5 ft. (1.98 m)	120 ft. (36.6 m)	-	-	-
Tetra miniStrip DS	GEWHBDP6, GEWWBDP6-50K, GEWWBDP6-41K, GEWWBDP6	2.20W/module	9 modules/ 9 ft. (2.74 m)	120 ft. (36.6 m)	-	-	-
	GEBDH71-1, GEBDH50-1, GEBDH41-1, GEBDH32-1	2.98W/module	7 modules/ 7 ft. (2.13 m)	120 ft. (36.6 m)	-	-	-
Tetra EdgeStrip	GEBI71-2, GEBI50-2, GEBI41-2, GEBI32-2	2.52W/module	9 modules/ 9 ft. (2.74 m)	120 ft. (36.6 m)	-	-	-
	GEBIH71-2, GEBIH50-2, GEBIH41-2, GEBIH32-2	5.40W/module	4 modules/ 4 ft. (1.22 m)	120 ft. (36.6 m)	-	-	-
F12 LFL	GEF12DHOLED-1 GEF12SGNHOLED-1 GEF12CWHOLED-1	5.8W/module	3 modules/ 4.4 ft. (1.33 m)	120 ft. (36.6 m)	-	-	-
Tetra Contour LS	GEXNLRD-1	1.30W/ft. (strip)	16 ft. (4.88 m)	20 ft./6.1 m	-	-	-
	GEXNLBL-1, GEXNLGL-1	1.73W/ft. (strip)	12 ft. (3.66 m)	20 ft./6.1 m	-	-	-
	GEXNL65-1, GEXNL32-1	3.17W/ft. (strip)	6 ft. (1.83 m)	20 ft./6.1 m	-	-	-
Tetra Contour	GEXNBL-1, GEXNGL-1, GEXNRD-1	1.52W/ft. (Strip)	14 ft. (4.27 m)	20 ft./6.1 m	-	-	-
	GEXNYG-1, GEXNRC-1	2.27W/ft. (Strip)	8 ft. (2.44 m)	20 ft./6.1 m	-	-	-
	GEXN65-1, GEXN32-1	3.17W/ft. (Strip)	6 ft. (1.83 m)	20 ft./6.1 m	-	-	-

NOTE: Minimum wire size for remote mounting is 18AWG (0.82 mm²). For information regarding longer remote mounting distances, contact technical support.

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:

current powered by GE

www.currentbyge.com, www.gelighting.com

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