Installation Guide



Tetra[®] Flexible Tape

LED Lighting System

GETP35-1, GETP40-1, GETP50-1, GETP60-1, GETPRD-1 GETPH35-1, GETPH40-1, GETPH50-1, GETPH60-1, GETPBL-1, GETPGL-1



STOP

DE	Einbauanleitung				
EL	ΟδηγόςΕγκατάστασης				
ES	Guía de instalación				

ES	Guía de instalaci
ET	Paigaldusjuhend

FI

Guía	de	instalación				
Paigaldusjuhend						
		1- 1 -				

HR Priručnik za instalaciju HU Felszerelési útmutató Guida all'installazione

FR Guide d'installation

LT Sumontavimo vadovas

Uzstādīšanas instrukcija Installatiehandleiding NO Monteringsanvisning PL Instrukcja instalacji PT Guia de Instalação

RO Ghid de instalare RU Инструкции по установке sv Installationsanvisning SL Navodila za namestitev SK Návod na inštaláciu

TR Montaj Kilavuzu ик Посібник з установлення ZH 安装指南

BEFORE YOU BEGIN

Read these instructions completely and carefully.

WARNING/AVERTISSEMENT

RISK OF ELECTRIC SHOCK

• Turn power off before inspection, installation or removal. · Properly ground Tetra® power supply enclosure.

- · Coupez l'alimentation avant l'inspection, l'installation ou le déplacement . •Assurez-vous de correctement mettre à terre l'alimentation électrique Tetra®.
- **RISK OF FIRE** · Use only UL certified wire for input/output connections.
- Minimum size 18 AWG (0.82mm²).
- Follow all NEC and local codes.

RISOUES D'INCENDIE • N'utilisez que des fils approuvés par UL pour les entrées/sorties de connexion. Taille minimum 18 AWG (0.82mm²).

Respectez tous les codes NEC et codes locaux

Save These Instructions

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

Prepare Electrical Wiring



Electrical Requirements

· Acceptable for use in dry and damp locations.

• The grounding and bonding of the Power Supply shall be done in accordance with National Electric Code (NEC) Article 600.

• Follow all National Electric Codes (NEC) and local codes.

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.



imagination at work

RISQUES DE DÉCHARGES ÉLECTRIQUES



Components

- 1 UL certified 18 AWG (0.82 mm²) supply wire
- UL certified 22-14 AWG (0.33-2.08 mm²) twist-on wire connectors or 18-14 AWG (0.82-2.82 mm²) inline/IDC connectors
- **3** Flexible Tape End Cap
- 4 Tetra[®] 12 Volt Power Supply
- **5** Tetra[®] Flexible Tape
- 6 Tetra[®] Flexible Tape Lead Connector (GETPLCN54-1)
- Tetra[®] Flexible Tape Jump Connector (GETPJCN54-1)
- 8 Scissors

Installation



 Mounting surface must be free of dust, dirt or grease. Clean mounting surface with alcohol before installation and allow to dry.



Measure and cut Tetra® flexible tape to the desired length using scissors. Cut only on the scissor markings and stay within the limit lines.



3 Peel away a portion of the tape backing at cut end. Press fit an end cap fully to the open end and apply electrical grade silicone (see note below).

If soldering is needed, refer to the steps 4a-6a



4a At the cut end, carefully peel back the silicone cover over the soldering pads. Make sure not to remove the silicone over the LED.



 Using UL certified 18AWG wire, solder a red wire to the (+) pad and a black wire to the (-) pad.



6a Seal the soldering points with electrical silicone. Replace the silicone cover and secure it by shrinking a piece of ¹/₄" heat shrink over the end.

NOTE: Example electrical grade silicones include:

- Momentive RTV 6700 Series Silicone Rubber Adhesive Sealant
- Momentive White Blanc RTV 162 Silicone Rubber Adhesive Sealant-Electrical Grade
- Dow Corning-3140-Non-Corrosive Flowable (clear)
- Dow Corning 3145-Non-Corrosive Nonflowable (clear or gray)
- Dow Corning RTV 748 Non-Corrosive Sealant-White

If connector is needed, refer to the steps 4b-6b



7 If necessary, join two strips together using a jump connector or a soldered wire connection. Follow steps 4b-6b for each end of the jump connection, or 4a-6a for each end of the soldered wire connection.



in place. Ensure the tape is firmly attached.

NOTE: Securing with electrical grade silicone is also acceptable.

Electrical Connections





at least 2" (50.8mm) apart end to end and 4" (101.6mm) apart along the sides.



Connect the red wire (+) of the LED system to the red wire (+) of the power supply. Connect the black wire (-) of the LED system to the black or blue wire (-) of the power supply.



Wire AC line to power supplies in accordance with the applicable local, state, and country electrical codes. Connect black to black or brown, white to white or blue, and green to green using 18 AWG (0.82mm²) wire connectors.

NOTE: All power supplies except GEPS12-180U must be installed in an enclosure or be provided with a GEPSJB60 power supply extended enclosure.

Interconnect multiple runs of Tetra Flexible Tape together using twist-on wire connectors or in-line (IDC) connectors. Join black wires (-) together and red wires (+) together.

NOTE: Make sure not to exceed power supply power limits (see step 1 above).

NOTE: The UL Retrofit Classification is only applicable when retrofitting a listed sign.

Retrofit Instructions

- (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. (Existing Signs Only) A clean and dry mounting surface ensures optimum adhesion if the self-adhesive method of mounting is chosen. Follow the manufacturer 's directions when using a non-oil based solvent, such as rubbing alcohol to clean the surface area where you intend to mount the module. before installing, ensure the surface is dry.
- 6. Using the layout guidelines above, determine required number of LED modules required to illuminate the sign.
- 7. A Tetra® 12VDC Class 2 Power Supply, as listed below, must be used with this retrofit kit. Using the Maximum Loading chart below, 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 the Tetra® Class 2 Power Supply chosen.
- 8. Follow the instructions above to properly mount the LED modules.
- 9. Connect the DC output of the power supply to the LED modules using the Electrical Connections instructions above.
- 10. Connect the power unit to the supply in accordance with the applicable local, state, and country electrical codes, and the instructions found in the power supply installation guide.
- 11. If required, the disconnect switch shall be installed by qualified personnel, in accordance with applicable local, state, and country electrical codes.

Troubleshooting

Symptom	Solution
All letters are OFF	 Check AC input connection and/or check circuit breaker. 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). 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.
Some LEDs appear dim OR not illuminated	 Ensure the overall length of the Tetra[®] LED System does not exceed the maximum load. Ensure the length of supply wire is equal to or below the recommended remote mounting distance. Verify that each connector between the affected LEDs and power supply is fully engaged by applying pressure on the cover verifying that the tabs have clicked into place and their is good electrical contact. 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). Check that connections are the red wire (+) of the LED strip to the red wire (+) of the power supply and the black wire (-) of the LED strip to the black or blue wire (-) of the power supply.
Shadows	 Re-route supply wire and secure to the back of the can with silicone. Adjust wire connector orientation so that it does not cover any LEDs. Adjust LED layout to ensure uniformity of illumination on the face of the letter.

Power Supply Loading Specifications Maximum Loading per Tetra 12 VDC Power Supply

SKU	Rating	25W Power Supply Note: Load shall not exceed 2A	60W Power Supply Note: Load shall not exceed 5A	180W Power Supply Note: Load shall not exceed 5A per each (of 3) output channels	
GETP35-1 GETP40-1	45W/m (1.37W/ft.)	4m/13 ft	10m/32 ft	10m/32 ft. per output channel	
GETP50-1 GETP60-1				30m/96 ft. per power supply	
GETPH35-1 GETPH40-1	10.8W/m(3.3W/ft.)	2m/6 5 ft	4m/13 ft	4m/13 ft. per output channel	
GETPH50-1 GETPH60-1	10.000/111(0.000/10.)	211/010 121	, 10	12m/39 ft. per power supply	
GETPRD-1	3.5W/m (1.06W/ft.)	5m/16.4 ft.	12m/39 ft.	12m/39 ft. per output channel	
	, , ,,			36m/117 ft. per power supply	
GETPGI -1	2.4W/m(0.73W/ft.)	7m/23 ft	15m/49 ft	15m/49 ft. per output channel	
	,	,		45m/147 ft. per power supply	
GETPBI -1	4.5W/m(1.37W/ft.)	4m/13 ft	10m/32 ft	10m/32 ft. per output channel	
02 02.1		, 20 10.	1011,02 11.	30m/96 ft. per power supply	

NOTE: For linear runs longer than 5m/16 ft. the middle connection to the tape is recommended to minimize voltage drop.

Maximum Remote Mounting Distance

	18 AWG/0.82 mm² Supply Wire	16 AWG/1.31 mm ² Supply Wire	14 AWG/2.08 mm ² Supply Wire	12 AWG/3.31 mm ² Supply Wire
25W Power Supply	120 ft./36.6 m	-	-	-
60W Power Supply	20 ft./6.1 m	30 ft./9.1 m	50 ft./15.2 m	86 ft./26.2 m
180W Power Supply	20 ft./6.1 m	30 ft./9.1 m	50 ft./15.2 m	86 ft./26.2 m

Notices



This product is intended solely for the use of non-residential signage lighting and is not intended for use in any other applications. IP54 rated: separate enclosure required for outdoor use, UL damp location rated. Conforms to the following standards:



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