

Tetra[®] Slim EdgeStrip

LED Lighting System


**24
Volt**

GEBIH32-S2, GEBIH41-S2, GEBIH50-S2, GEBIH57-S2, GEBIH65-S2,
GEBIH71-S2, GEBI32-S2, GEBI41-S2, GEBI50-S2, GEBI57-S2,
GEBI65-S2, GEBI71-S2



BEFORE YOU BEGIN

Read these instructions completely and carefully.

<p>BG Българската версия на инструкциите за инсталация и информация за безопасност могат да бъдат намерени на следния адрес: https://products.gecurrent.com/eu</p>	<p>FR La version française des instructions d'installations et information de sécurité est disponible à l'adresse suivante: https://products.gecurrent.com/eu</p>	<p>PL Polską wersję instrukcji instalacji oraz informacje dotyczące bezpieczeństwa można znaleźć w następującej lokalizacji: https://products.gecurrent.com/eu</p>
<p>CS Návod k montáži a bezpečnostní informace v češtině najdete zde: https://products.gecurrent.com/eu</p>	<p>HR Hrvatska verzija priručnika za ugradnju i sigurnosnih informacija nalazi se na sljedećoj lokaciji: https://products.gecurrent.com/eu</p>	<p>PT A versão em Português das instruções de instalação e das informações de segurança pode ser encontrada na seguinte localização: https://products.gecurrent.com/eu</p>
<p>DA Den danske version af installationsvejledningen og sikkerhedsoplysninger kan findes på følgende placering: https://products.gecurrent.com/eu</p>	<p>HU A telepítési útmutató és a biztonságos információk magyar nyelvű változata az alábbi címen található: https://products.gecurrent.com/eu</p>	<p>RO Versiunea în limba română a instrucțiunilor de instalare și a informațiilor de siguranță pot fi găsite la: https://products.gecurrent.com/eu</p>
<p>DE Die deutsche Version der Installationsanleitung und Sicherheitsinformationen finden Sie in folgendem Verzeichnis: https://products.gecurrent.com/eu</p>	<p>IT La versione italiana del manuale di installazione e sicurezza può essere reperita nella seguente sezione: https://products.gecurrent.com/eu</p>	<p>SV Ni hittar den svenska versionen av installationsanvisningarna och säkerhetsinformationen på följande plats: https://products.gecurrent.com/eu</p>
<p>EL Μπορείτε να βρείτε την ελληνική εκδοχή των οδηγιών εγκατάστασης και των πληροφοριών ασφάλειας στην εξής τοποθεσία: https://products.gecurrent.com/eu</p>	<p>LT Lietuvišką diegimo instrukcijos ir saugos informacijos versiją galima rasti šioje vietoje: https://products.gecurrent.com/eu</p>	<p>SL Previdnostna opozorila in varnostne informacije so na zadnji strani vodnika za namestitev. Pred začetkom namestitve izdelka jih skrbno preberite: https://products.gecurrent.com/eu</p>
<p>ES La versión española de las instrucciones de instalación y la información sobre seguridad puede encontrarse en la siguiente ubicación: https://products.gecurrent.com/eu</p>	<p>LV Uzstādīšanas instrukciju un drošības informāciju latviešu valodā var atrast šeit: https://products.gecurrent.com/eu</p>	<p>SK Slovenskú verziu montážnej príručky a bezpečnostných informácií nájdete na nasledujúcej lokalite: https://products.gecurrent.com/eu</p>
<p>ET Eestikeelse paigaldusjuhendi ja ohutusnõuded leiate aadressilt: https://products.gecurrent.com/eu</p>	<p>NL De Nederlandse versie van de installatie-instructies en veiligheidsinformatie kan op de volgende locatie worden gevonden: https://products.gecurrent.com/eu</p>	
<p>FI Asennusohjeiden ja turvallisuustietojen suomenkielinen versio löytyy seuraavasta paikasta: https://products.gecurrent.com/eu</p>		

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

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

Prepare Electrical Wiring **FOR UL ONLY**



Electrical Requirements

- Acceptable for use in dry and damp 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.
- These products are only suitable for connection to a circuit from a Class 2 power source.
- These products have not been evaluated for use when connected to a power source that does not comply with Class 2 voltage and energy limited supplies.

Save These Instructions

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



RETROFIT SIGN CONVERSION LED KIT FOR USE ONLY IN ACCORDANCE WITH KIT INSTRUCTIONS.

KIT IS COMPLETE ONLY WHEN ALL PARTS REQUIRED BY THE INSTRUCTIONS ARE PRESENT.

TROUSSE DE CONVERSION À DEL POUR LA MODERNISATION DES ENSEIGNES

À UTILISER CONFORMÉMENT AU GUIDE D'INSTALLATION.

⚠ WARNING / AVERTISSEMENT

RISK OF ELECTRIC SHOCK

- Turn power off before inspection, installation or removal.
- Properly ground GE power supply enclosure.

RISK OF FIRE

- Use only suitably approved wire for input/output connections. Minimum size 18 AWG (0.82mm²)
- Follow all local codes.
- Not to be submerged or used in a marine environment.

RISQUES DE DÉCHARGES ÉLECTRIQUES

- Coupez l'alimentation avant l'inspection, l'installation ou le déplacement.
- Assurez-vous de correctement mettre à terre l'alimentation électrique GE.

RISQUES 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 locaux.
- Ne pas submerger ou installer dans un environnement marin.

⚠ UL WARNING / AVERTISSEMENT UL

RISK OF FIRE OR ELECTRIC SHOCK

- LED Retrofit Kit installation requires knowledge of sign electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.
- Install this kit only in host signs that have been identified in the installation instructions and where the input rating of the retrofit kit does not exceed the input rating of the sign.
- Installation of this LED retrofit kit may involve drilling or punching of holes into the structure of the sign. Check for enclosed wiring and components to avoid damage to wiring and electrical parts.
- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.

RISQUE D'INCENDIE OU DE CHOC ÉLECTRIQUE

- L'installation de l'équipement de remplacement DEL exige la connaissance des systèmes électriques pour enseignes. Si non qualifié, ne tentez pas d'installation. Veuillez contacter un électricien qualifié.
- Risque d'incendie ou de choc électrique. Installez cet ensemble seulement dans des enseignes hôtes qui ont été identifiés dans les instructions d'installation et dont la capacité d'entrée de l'ensemble ne dépasse pas la capacité d'entrée de l'enseigne.
- L'installation de cet équipement de remplacement DEL peut impliquer le perçage ou le poinçonnage de trous dans la structure du panneau. Vérifiez le câblage et les composants inclus pour éviter d'endommager le câblage et les composants électriques.
- Ne pas faire ou modifier les trous ouverts dans une enceinte de câblage ou de composants électriques pendant l'installation de cet équipement de remplacement DEL.

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.

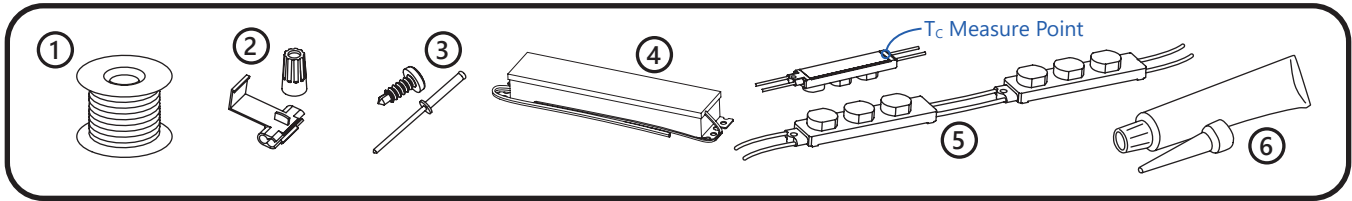
This product is intended solely for the use of non-residential signage lighting and is not intended for use in any other applications.

Conforms to the following standards:

IP66 rated: separate enclosure required for outdoor use, UL damp location rated

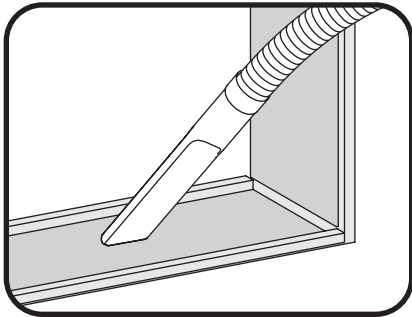


Components and Tools Required

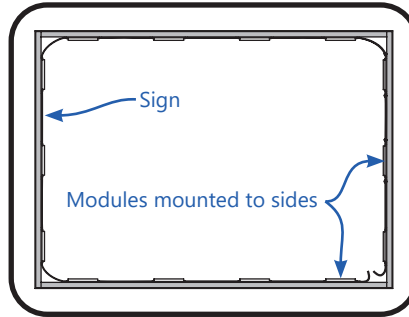


- ① UL approved 18 AWG (0.82 mm²) supply wire
- ② UL approved 22-14 AWG (0.33-2.08 mm²) wire connectors or 22-18 AWG (0.33-0.82 mm²) in-line/IDC connectors
- ③ #6 or #8 (M3 or M4) screws, 1/8 inch (3.2 mm) rivets or electrical grade silicone
- ④ Tetra® 24Volt Power Supply
- ⑤ Tetra® Slim EdgeStrip LED modules
- ⑥ Electrical grade RTV silicone.
Example electrical grade RTV 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

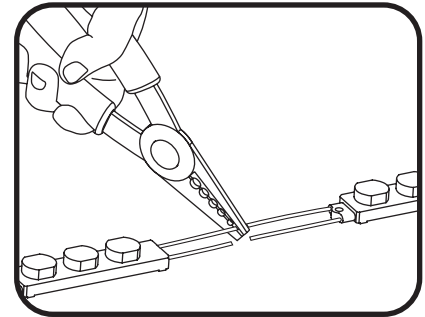
Layout LED Modules



- ① Before you begin, clean surfaces and remove all debris from the inside of the sign. Clean the surfaces with a 50:50 mixture of isopropyl alcohol (IPA) and water and let dry.

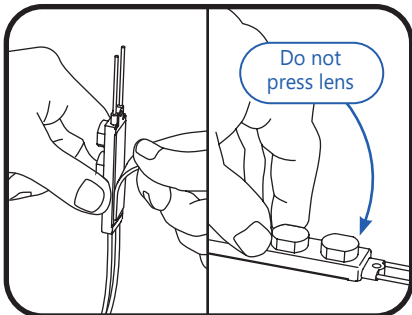


- ② Determine location of where LED modules will be mounted based on sign dimensions.

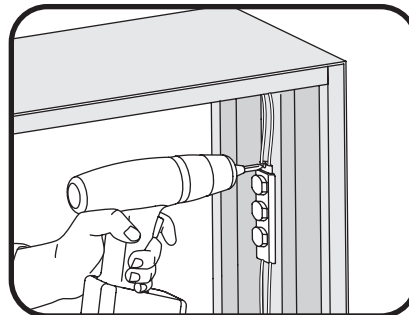


- ③ Determine how many modules are required for your application and cut where necessary.

NOTE: Cuts can be made between any of the LED modules.



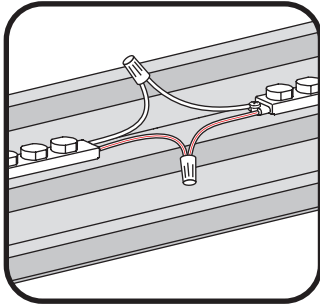
- ④ Remove tape backing and stick LED modules into place. When using tape apply approximately 15 psi pressure on the module (avoid the lens dome surface) for 5 seconds, full bonding strength after 24 hours. Continue until you have reached the end of the strip.



- ⑤ Use rivets, screws, or silicone to secure each module within the sign. Use #6 (M3) or #8 (M4) screws, 1/8-inch (3.2 mm) rivets, or silicone.

Electrical Connections

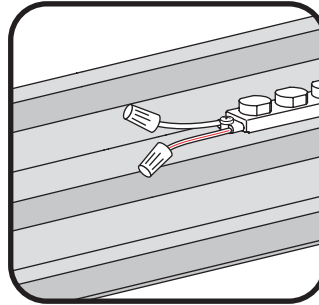
NOTE: Refer to the power supply installation instructions for loading and remote mounting information.



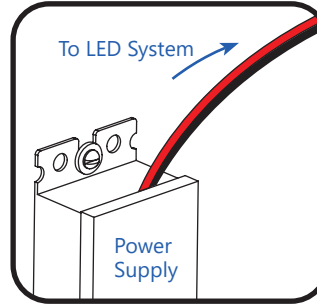
- 1 Connect modules using twist-on wire connectors or in-line (IDC) connectors. Join white wires together and red striped wires together.

NOTE: Additional supply wire may be necessary to bridge electrical connections.

NOTE: Seal all connections that could be exposed to water with electrical grade RTV silicone.

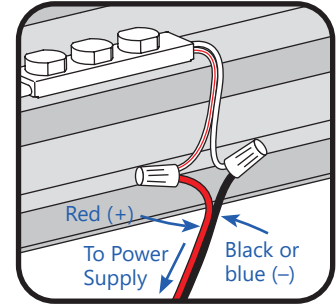


- 2 Cap all exposed wires with appropriate wire connectors or apply electric grade (non-corrosive) silicone for additional weather protection.



- 3 Run a wire from the Power Supply and connect to the first LED module on the strip. Must be used with **Tetra® 24 Volt Power Supplies**.

NOTE: Refer to Maximum Loading & Remote Mounting Specifications on page 4.



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

NOTE: All electrical connections should be made within the box sign.

NOTE: All electrical connections should be suitably protected from mechanical damage and the environment. Seal all connections that could be exposed to water with electrical grade RTV silicone.

Retrofit Instructions FOR UL ONLY

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)** Repair and seal any unused openings in the electrical enclosure. Openings greater than 12.7-mm (1/2-in) diameter require a metal patch secured by screws or rivets and caulked with non-hardening caulk. Smaller openings may be sealed with non-hardening caulk.
5. Using the layout guidelines within the LED module installation instructions, determine required number of LED modules required to illuminate the sign.
6. A Tetra® 24VDC 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.
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.
10. If required, the disconnect switch shall be installed by qualified personnel, in accordance with applicable local, state, and country electrical codes.

Troubleshooting

Symptom	Solution
Row of modules does not light	<ul style="list-style-type: none"> Check wire connections to power supply to ensure red stripe-to-red and white-to-black or blue connections. Check row-to-row polarity connections.
Sign does not light	<ul style="list-style-type: none"> Check input and output voltage and check power supply input/output connections. Check polarity connections.
Individual modules do not light	<ul style="list-style-type: none"> Remove module and replace with another working module.
Modules are dim	<ul style="list-style-type: none"> Ensure the overall length of the Tetra® LED system does not exceed the maximum load. Ensure the length and gauge of the supply wire is equal to or below the recommended remote mounting distance.

Maximum Loading per Tetra® 24 VDC Class 2 Power Supply

SKU	Rating	25W Power Supply	80W Dimming Power Supply	100W Power Supply	180W Power Supply	300W Power Supply
GEBIH32-S2	24VDC 2.16W per module	10 modules/ 6.6 ft.	32 modules/ 21 ft.	38 modules/ 25 ft.	36 modules/ 20.4 ft. per output channel 72 modules/ 40.8 ft. per power supply	38 modules/ 25 ft. per per output channel 114 modules/ 75 ft. per power supply
GEBIH41-S2						
GEBIH50-S2						
GEBIH57-S2						
GEBIH65-S2						
GEBIH71-S2						
GEBI32-S2	24VDC 1.44W per module	15 modules/ 9.87 ft.	48 modules/ 31.6 ft.	57 modules/ 37.5 ft.	53 modules/ 34.9 ft. per output channel 106 modules/ 69.8 ft. per power supply	57 modules/ 37.56 ft. per per output channel 171 modules/ 112.7 ft. per power supply
GEBI41-S2						
GEBI50-S2						
GEBI57-S2						
GEBI65-S2						
GEBI71-S2						

Maximum Remote Mounting Distance

	18 AWG/0.82 mm ² 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	–	–	–
80W Power Supply	20 ft./6.1 m	25 ft./7.6 m	35 ft./10.6 m	40 ft./12.1 m
100W Power Supply	20 ft./6.1 m	25 ft./7.6 m	35 ft./10.6 m	40 ft./12.1 m
180W Power Supply	20 ft./6.1 m	25 ft./7.6 m	35 ft./10.6 m	40 ft./12.1 m
300W Power Supply	20 ft./6.1 m	25 ft./7.6 m	35 ft./10.6 m	40 ft./12.1 m