



Gemini Incorporated Fabricated Metal Letter Wiring Instructions Halo Lit with GE Tetra LEDs

F6-ULAB-A1

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Customer Installation/Tips/Troubleshooting Guide

Enclosed are your fabricated halo lit letters, populated with GE Tetra LEDs. Each individual letter has been carefully filled with the proper number of LED modules designed to provide a consistent Lumen output.



Components Used

All components used are UL Recognized and approved for LED lighting.

GE Tetra® LED Systems - UL#E219167.

UL approved electrical tap connectors - 3M Scotchlok 560B

UL approved twist on wire connectors - GB 10-001.

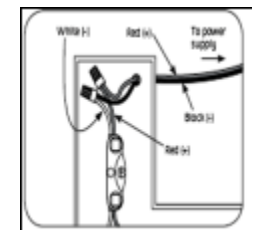
GE Class 2 Power Supply: UL information listed on power supply.



Electrical Connections

It is recommended that all electrical connections be performed by a licensed electrical contractor. Each Fab Metal letter has been filled with GE Tetra LEDs and contain a **Red (+)** and **Black (-)** pigtail wire for connecting letters to a main line and/or GE Power Supplies (see wiring example).

If UL required letters are ordered, additional green ground wires will be supplied.



Power Supply (PS) Connections

GE power supplies are designed to illuminate GE LED systems only.

When using this power supply, safeguards are built in to prevent overpowering the LEDs.

Do NOT mount (PS) directly into letters. Secure (PS) into proper NEMA enclosures.

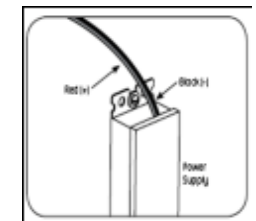
Shown below are the available power supplies along with limitations.

GEPS12-20 (20watt max) Power Supply: Max 30 GE miniMAX modules or 12 feet.

GEPS12-60 (60watt max) Power Supply: Max 90 GE miniMAX modules or 36 feet.

GEPS12-60U is designed for input voltage up to 277 volts.

GEPS12W-60 is a sealed 60watt unit for Exterior use without enclosures.



The maximum remote mounting distance for the Power Supply, with 12AWG wire is 120 ft.

Connect **Red (+)** Lead wires to **Red** main line, in parallel, then to **Red (+)** wire of the power supply.

Connect **Black (-)** Lead wires to **Black** main line, in parallel, then to **Black (-)** wire of the power supply.

If UL required letters are ordered, additional green ground wires will be supplied.

Connect power supply to appropriate sized breaker or power cord, in accordance with National Electric Code (NEC) Article 600 and all Local Electrical Codes.

All orders will be supplied with a line drawing that details letter groupings to Power Supplies (PS).

Power Supply Wiring Example

"G E M I" are powered by one 60watt power supply.

" N I I N C" are powered by one separate 60watt power supply.



Caution: Plugging your LEDs direct into 110V will destroy them. Use ONLY Class 2 Power Supplies.

Other notes

LED Modules

Individual LED modules have been secured to the LEXAN backs with double faced tape.

Every other module has also been further secured with a plastic support block.

Should you need to reposition or move any LED modules, break off the support block with pliers, reposition modules, re-tape back down and secure with silicone on sides and wires.

Lexan Backs

All UL required components are supplied with weep (drain) holes in the Lexan backs, per UL requirements. Weep holes are used to allow moisture or water to escape.

Letter Stand-Off

Halo lit letters are designed to stand-off the mounting surface by using studs and spacers. Adjusting the spacer length or stand-off from the wall will effect the halo lighting effect. Typical stand-offs for optimal halo lighting is around 1-1/2" from the mounting surface.

LED Troubleshooting GuideBlinking LEDs:

*Blinking LEDs: Too many LEDs connected to a given power supply.
Reduce the number of letters or modules attached to your power supply.

LEDs in one or more letters will not light:

*LEDs will not light: Too many LED modules are connected to a given power supply.
Reduce the number of letters or modules attached to your power supply.

*Check letter connections. Make sure pigtailed are properly wired to power supply line.

Make sure all Red (+) wires are connected together and to the Red (+) wire of the power supply.

Make sure all Black (-) wires are connected together and to the Black (-) wire of the power supply.

*Check AC input connection and/or check circuit breaker.

One LED module is Dark (not lit):

*You may have a bad module. Check lighting of letter with face covered to determine impact of one dark LED. If the face is too dark or visible shadows exist, additional LEDs may have to be added to the letter.

I see light shadows in the letter face:

*Ensure that all modules are secured to the backs of the formed channel cans.

If a module has come loose, press it back down and secure with additional DF tape and/or silicone.

Some LEDs appear dim:

*Ensure that the overall length of the LED system does not exceed the maximum load.

*Ensure that the length of supply wire is equal to or below the recommended remote distance.

*GE Tetra LED systems are rated for damp location use by UL but should still be protected from exposure to moisture.

Caution: Plugging your LEDs direct into 110V will destroy them. Use ONLY Class 2 Power Supplies.

Electrical Contractor Required**WARNINGS!**

It is recommended that all electrical connections be performed by a licensed electrical contractor.

Always follow proper OSHA LOTO (Lockout/Tagout) practices and procedures.

RISK OF ELECTRIC SHOCK:

- Turn power **OFF** before inspection, installation or removal.
- Properly ground Tetra Power Supply enclosure.
- Shut off power at fuse box or circuit breaker before install.

Prepare Electrical Wiring (*Electrical Requirements*)

- Do not use in wet locations.
- The grounding and bonding of the LED Driver shall be done in accordance with NEC Article 600.

Always understand and follow all National Electric Codes (NEC) and local electrical codes.

IP66 rated: separate enclosure is required for outdoor use, if not using a GEPS12W-60 power supply.

GE power supplies are UL damp location rated. Operating temp -40C+60C.

RISK OF FIRE:

- Use only UL approved supply wires, minimum 18AWG.
- Follow all NEC and Local Electrical Codes.
- Use only UL approved wire for input connection. Minimum size 1.02mm

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