

Electrical Service

Installing electrical service at your sign location can be very costly. Consider the location of the signs to the proximity of the source for your electrical service. The greater the distance from your building to the sign - the greater the cost of trenching and installing conduit. Trenching under parking lots, sidewalks or other paved areas can add significant cost to your installation.

If the distance between your building and sign location is greater than 2000 feet you may want to ask your local utility company if they can install a new meter at your sign location. Sometimes that can be less costly than running conduit and wire for great distances.

LED signs are controlled by an internal computer. For the sign(s) to operate properly, it is essential you provide proper electrical power to the sign. The following steps should be taken to protect your warranty.

- Each sign should be on a dedicated electrical circuit. If your sign build includes an ID cabinet and two LED signs that would require 3 total circuits. Sharing power on a single circuit could cause the voltage to fluctuate thereby interrupting the display and programming.
- The signs are wired for 120 volts. Your electrician should provide the proper size wire to ensure proper voltage at the sign (120 volt + - 3%) when in operation. For assistance calculating the wire size, you can refer to: <http://www.csgnetwork.com/wiresizecalc.html>
- Electric wire and Ethernet cable may be run in the same trench. But Ethernet cable must be placed in separate conduit from the electrical wiring and separated as far as possible in the trench (preferred minimum of 12 inches apart).
- All electrical connections must be water tight.

Electrical Preparation

- Electrical installation should only be completed by a licensed electrician or licensed sign specialist.
- All electrical connections must comply with NEC 600, national and local codes.

The electrician must plan for the following:

- Panels and circuit breakers for sign disconnects.
- Use Hi Magnetic or Motor Load circuit breakers.
- Proper earth grounding using ground rod or rods.
- Use AWG 6 wire, run from the ground rod to each sign.
- Conduit runs with connectors to the sign that are water tight.
- Electrical permits for the sign(s).
- NEC 600 code requires that the power disconnect must be within sight of the sign. If it is not, it must be lockable.