

# Cable Communication Options

## Ethernet/Cat5 Cable Communications

Direct cable connection to your sign is a good option if your signs are mounted to your building or located very close to your building. CAT5 is limited to 300 feet and CAT6 cable is limited to 600 feet of distance from your network connection. Ethernet cable requires a separate conduit and cannot be run through existing conduit sharing electrical wiring.

### Pros:

- Ethernet cable connected directly to your sign is very reliable.
- Ethernet cable is relatively inexpensive.
- Direct ethernet cable connection doesn't require any additional equipment. The Ethernet cable plugs directly into the Ethernet port on the sign.
- Ethernet installation is simple and can usually be managed by IT or maintenance personnel.

### Cons:

- Ethernet cable requires its own conduit, which may require digging and trenching to install the cable.
- Can be damaged by lightning strikes nearby.
- Ethernet cable has a 600 foot distance limitation.

## Fiber Optic Cable Communications

Fiber optic cable communications offer speed and reliability. Typical transmission speed and distance limits are 100 Mbit/s for distances up to 1 mile. Fiber optic cable can share conduit with electrical service. But fiber optic cable can be costly -- both for the cable and the services of a qualified technician to install and terminate the cable.

### Pros:

- Very fast transmission speed. Capable of streaming live video.
- Virtually unlimited distance from your sign to your network hub.
- Not prone to lightening damage.

### Cons:

- Can be very costly depending on the distance between your sign and network hub.
- Will require a qualified technician to run and terminate the fiber.
- Requires the additional expense of two fiber convertor boxes. One box is connected to your sending PC or network. The other box is connected at the sign.
- Fiber optic cable is fragile and easily damaged or broken.