



# CAST LED Perimeter Lighting System Kit

## 500 Ft. Fence / 20 Ft. Fixture Spacing

**E1CPLK50020**

### PLANNING INSTRUCTIONS

#### Introduction

Congratulations on your purchase of the CAST LED Perimeter Lighting System Kit for up to a 500 ft. fence with fixtures spaced every 20 ft. This sheet is meant to assist you in planning the wiring configuration for your system.

Full installation instructions can be found in the "Planning, Installation, & Maintenance Guide" found in the packet attached to the transformer box.

#### Wiring Plan

The following illustrations show two possible wiring methods. The second method (T-Method) is the preferred method because it reduces voltage loss to the greatest extent and results in greater energy savings, but either method will work.

Note that you received two spools of wire (#10/2 and #12/2). The heavier gauge wire (#10/2) is to be used for the run from the transformer to the first connected fixture, then to be run along at least 10 fixtures in both wiring methods. If the run from the transformer is less than 250 ft. then you can use that extra #10/2 wire to run between more fixtures (for greater energy savings).

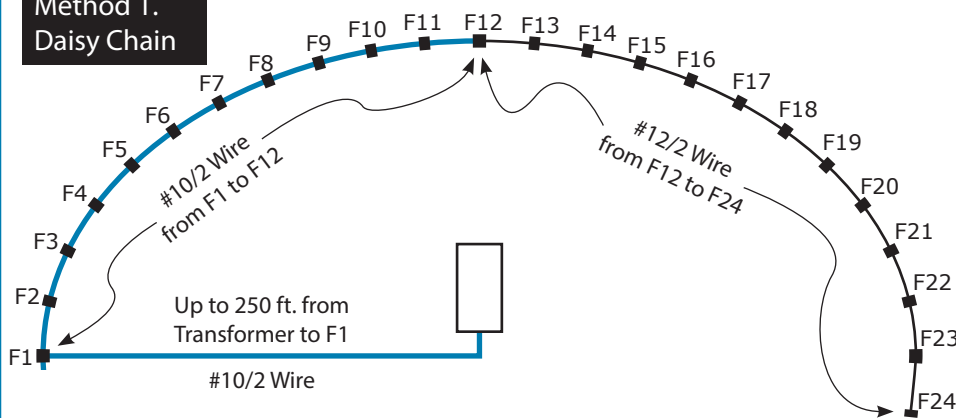
Note that in the Daisy Chain Method, fixtures are numbered F1 to F24 starting from the end of the fence. In the T-Method, the fixtures are numbered starting from the center; fixtures to the right of center are preceded with an "A"; fixtures to the left of center are preceded with a "B".

#### Kit Contents

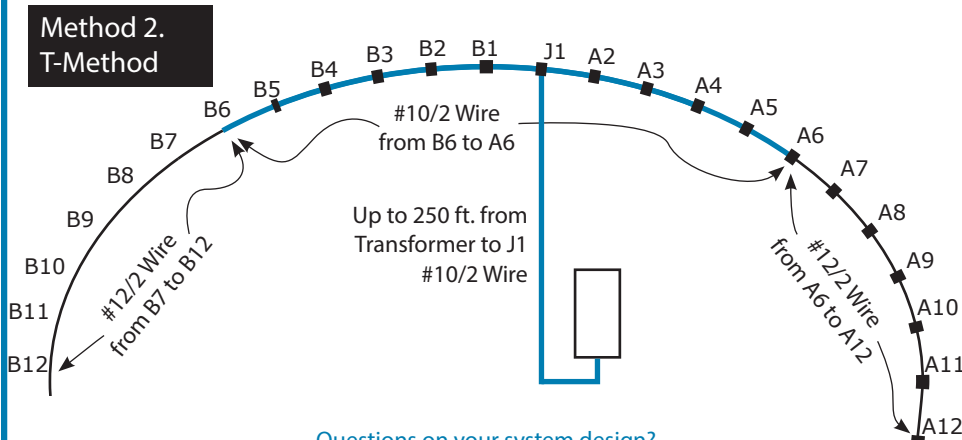
Please check that you received all of these components.

- ~ (24) CAST LED Perimeter Lights (CPL1)
- ~ (1) 300VA CAST Perimeter Lighting Transformer (220/240V) (E1CPT300)
- ~ (1) CAST Photocell (E1CTPC)
- ~ (1) 250 Ft. Roll CAST #12/2 No-Ox Wire (CLW122250)
- ~ (1) 500 Ft. Roll CAST #10/2 No-Ox Wire (CLW102500)
- ~ (50) Ideal #NC8 Parallel Wire Crimps (XCEW30648)
- ~ (1) CAST LED Perimeter Lighting System - Planning, Installation, and Maintenance Guide (in packet attached to transformer box)

#### Method 1. Daisy Chain



#### Method 2. T-Method



Questions on your system design?  
Call CAST Lighting at 973-423-2303

Important: Follow all local electrical codes and requirements.

#### Connectors (Important!)

The standard crimp connectors included with the fixtures (in the fixture box) are sized for #14/2 wire. These connectors are too small for the #12/2 and #10/2 wire included in this kit. Do not use these connectors.

Connectors that will work with the supplied wire (Ideal #NC8) are included in the kit.

#### Further Instructions

A complete Planning, Installation, & Maintenance guide is in a packet attached to the transformer box.

You can skip past the 'Planning Section' since the sheet you are currently reading covers planning for this kit.

#### System Calculator

The CAST LED Perimeter Lighting System Calculator (Excel format) can be downloaded from <http://www.cast-lighting.com/support-installers/system-calculator-installers/>.

This calculator predicts voltage loss, energy consumption and other useful data.