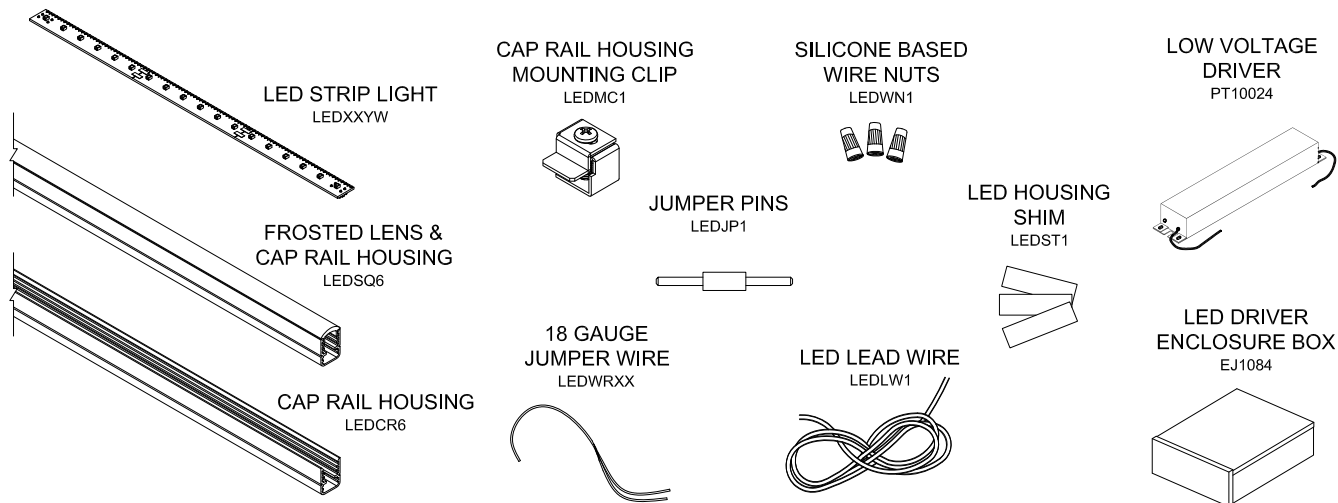
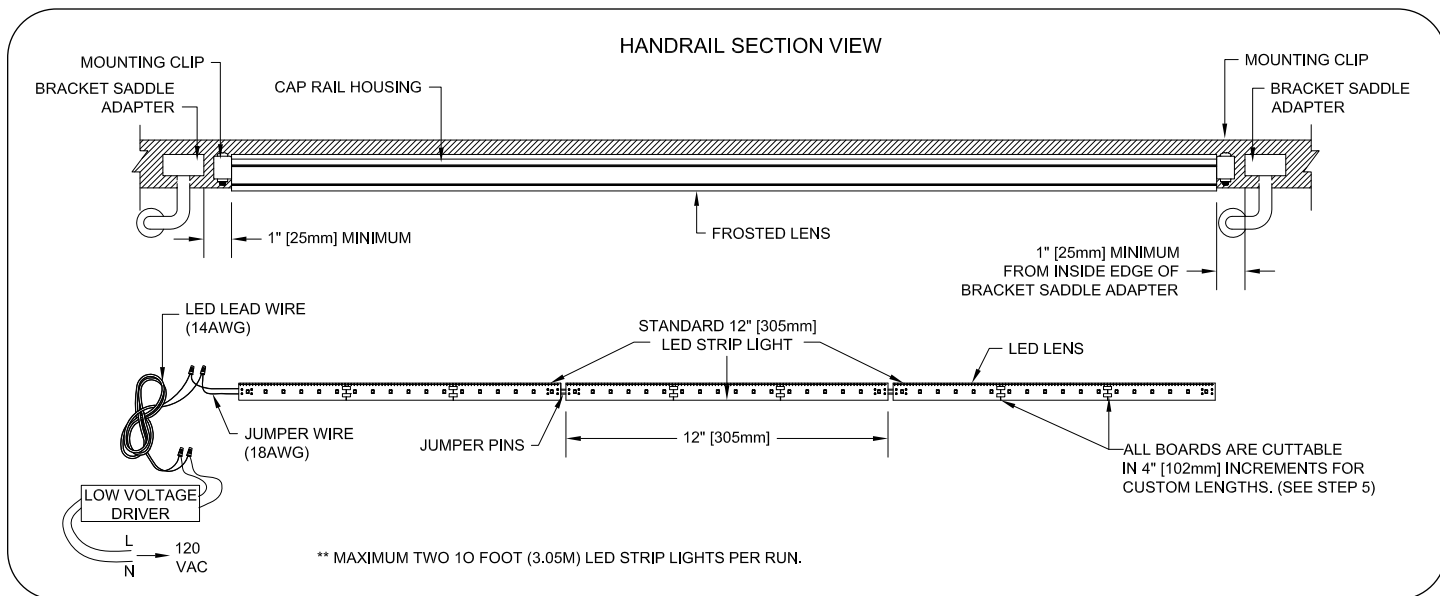


CRL LED WALL MOUNT AND POST MOUNT LIGHTED HAND RAIL SYSTEM

CRL LED LIGHTING COMPONENTS



CRL LED STRIP LIGHT SYSTEM OVERVIEW

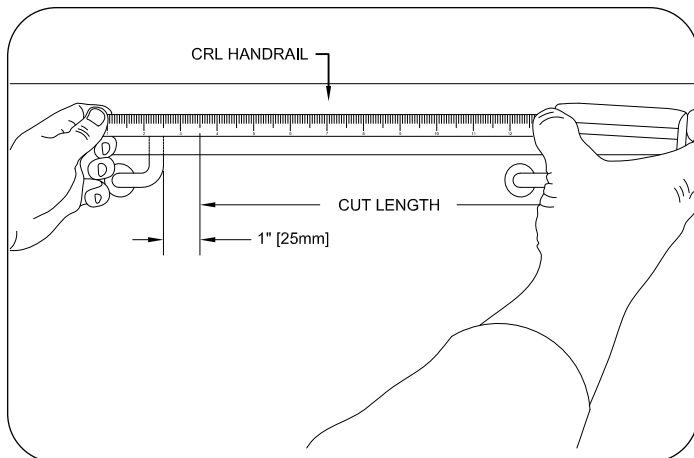


WARNING / CAUTION

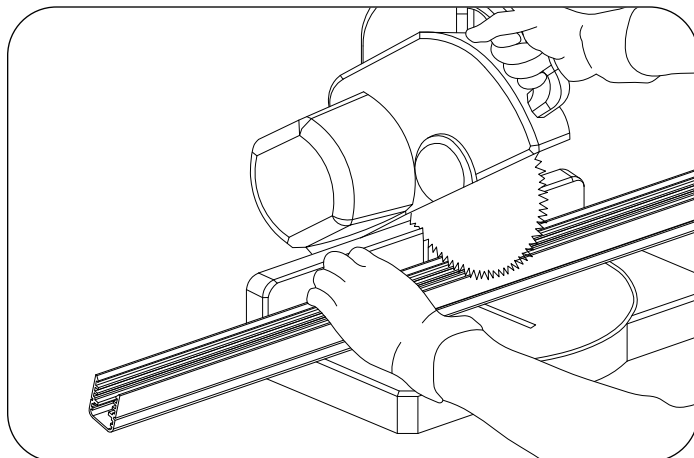
- Read these instructions carefully prior to installation.
- All wiring of the low voltage driver shall be done in accordance with the National Electric Code (NEC) and local codes.
- **Risk of electrical shock.** Disconnect power before servicing or installing product.
- **Risk of injury.** Gloves, safety glasses and/or other safety devices should be worn during the installation of this product.
- Failure to comply with installation instructions may void the product warranty.
- **Do not touch** LED lens. Only handle strip lights by holding LED strip light edge.
- **Do not exceed maximum lengths** for LED strip lights, LED drivers, lead or jumper wires as it may void warranty.
- This product is a plastic product. The frosted lens and housing may be cleaned with mild soaps (such as dishwashing liquids) mixed with water. **Do not use** products that contain solvents (other than water), acids, alkalis, and/or strong oxidizing agents. **Do not use** high pressure or water jets on this product as it may void warranty.

**CRL LED WALL MOUNT AND POST MOUNT
LIGHTED HAND RAIL SYSTEM**

MEASURING AND CUTTING TO LENGTH

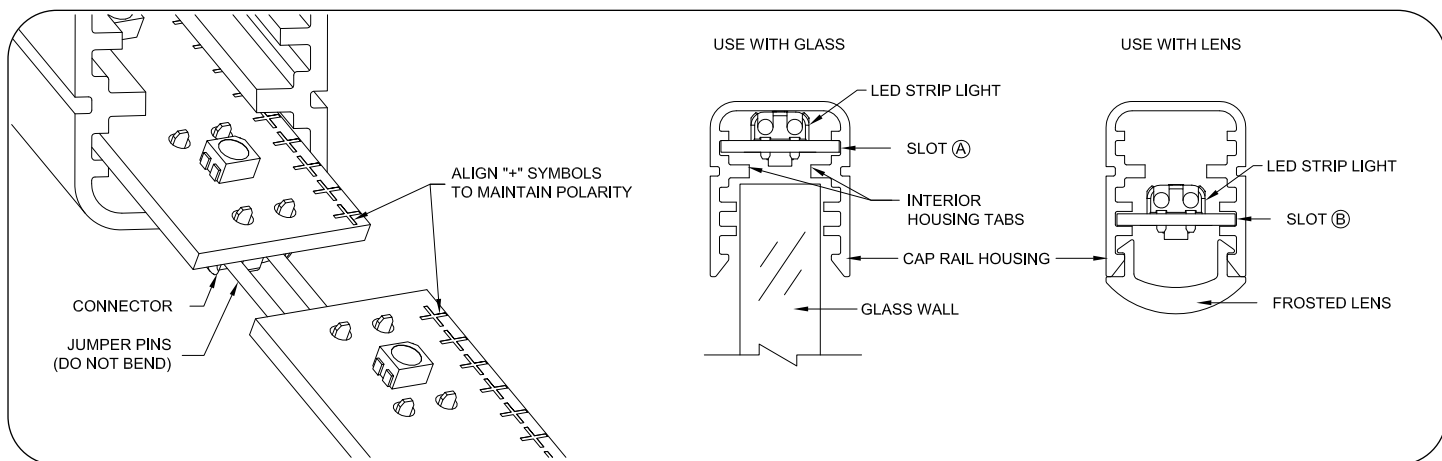


1 Measure the distance between handrail supports. Subtract 2" (51mm) total from the measurement to allow for clip space.

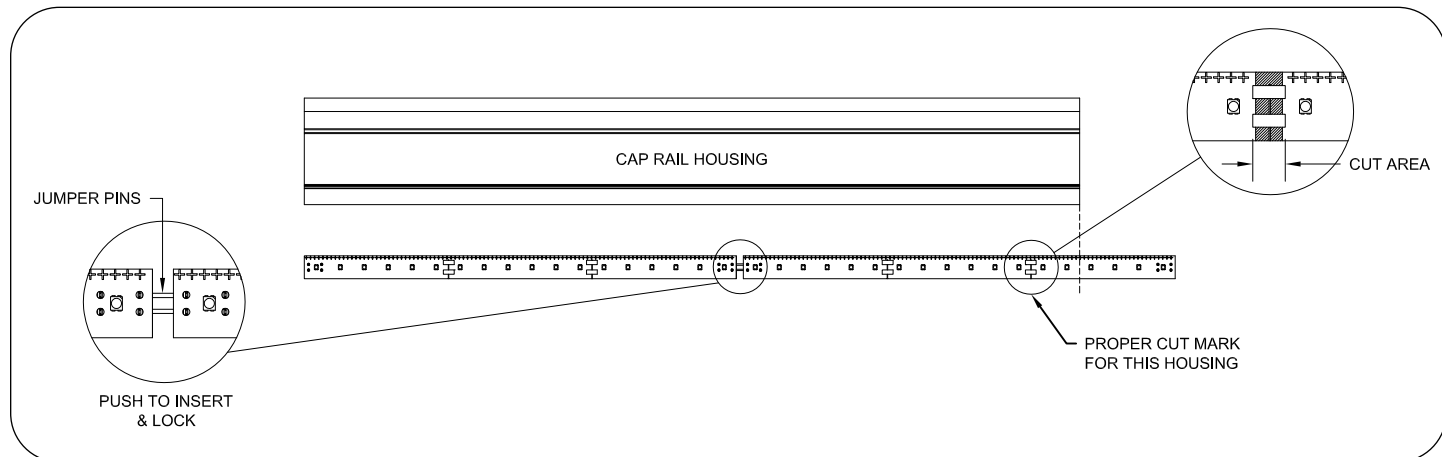


2 Take reduced measurements and cut cap rail housing to length with chop saw. If using frosted lens, cut lens to same length as cap rail housing. Do not cut both at same time.

INSERTING JUMPER PINS & CONNECTING STRIP LIGHTS



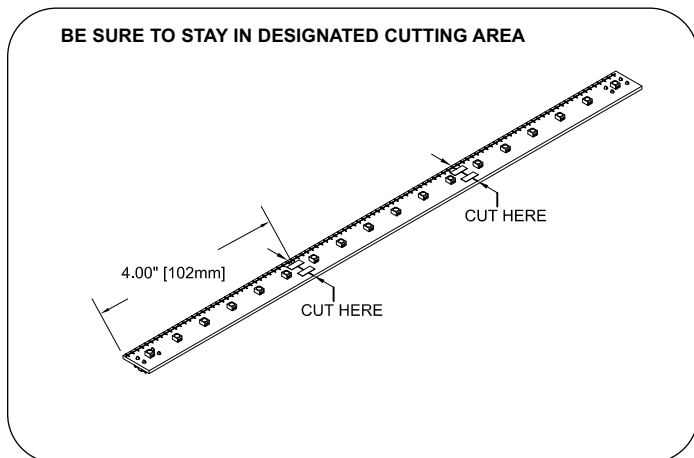
3 Slide LED strip lights into cap rail housing slot. If using with glass, place LED strip light into slot (A). Slot options (A) or (B) are available if using with frosted lens. Once inserted, take two jumper pins and insert into female connectors on end of LED strip light. To connect LED strip lights, align the "+++" of the first board to the "+++" on the second LED strip light board.



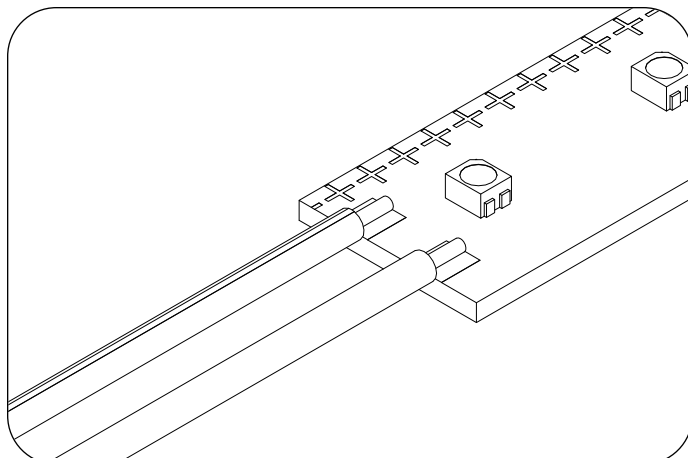
4 Slide LED strip light into the extended jumper pins until strip lights link securely together. Custom cut option is described in **Step 5**.

CRL LED WALL MOUNT AND POST MOUNT LIGHTED HAND RAIL SYSTEM

CUTTING & JUMPING LED STRIP LIGHTS

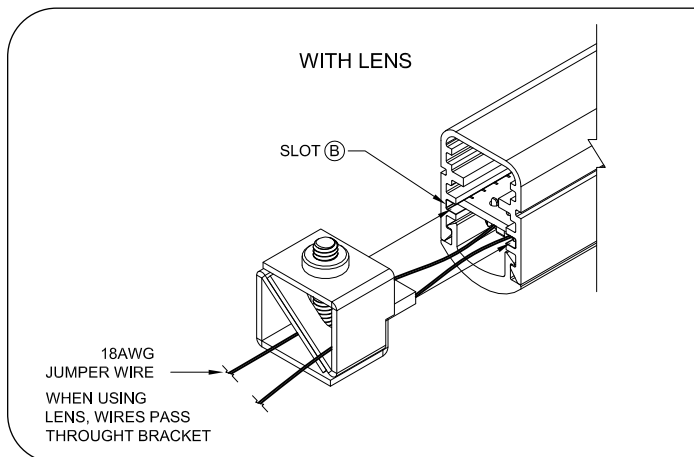


5 The LED strip light is designed to be cut in 4" (102mm) lengths as indicated by the double lines on the LED strip lights. Use a hack saw or other fine toothed saw to cut the LED strip light. If cut LED strip light is used at the end of run, no soldering is required. Note: the remainder LED strip light is usable elsewhere if needed.

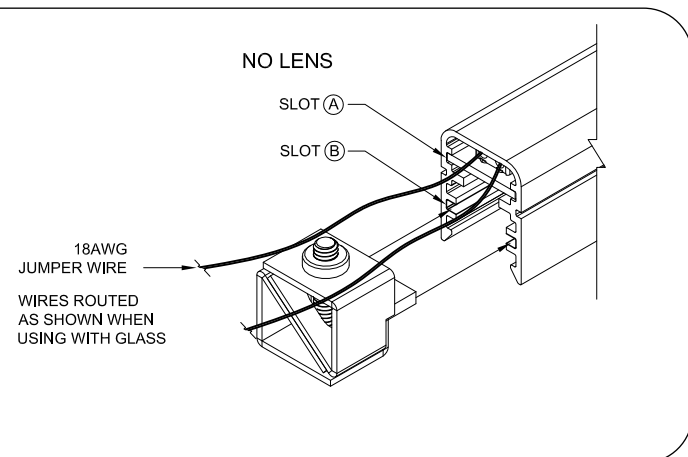


6 If the cut piece is in middle of run, prepare LED strip light by using a soldering iron tip with solder to burn off transparent waterproof coating at LED strip light cut lines. Then solder 18 AWG jumper wires to cut LED strip light to connect to adjacent LED strip light. Note: The black & white striped wire is positive (+) and black wire is negative (-).

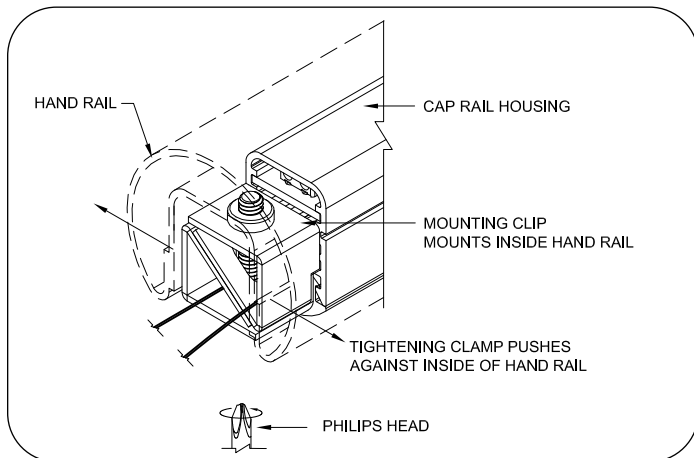
INSERTING CAP RAIL HOUSING MOUNTING CLIPS INTO CAP RAIL HOUSING



7 If using frosted lens, feed 18 AWG jumper wire through LED mounting clip as shown (above left), and slide clip in cap rail into Slot (B).



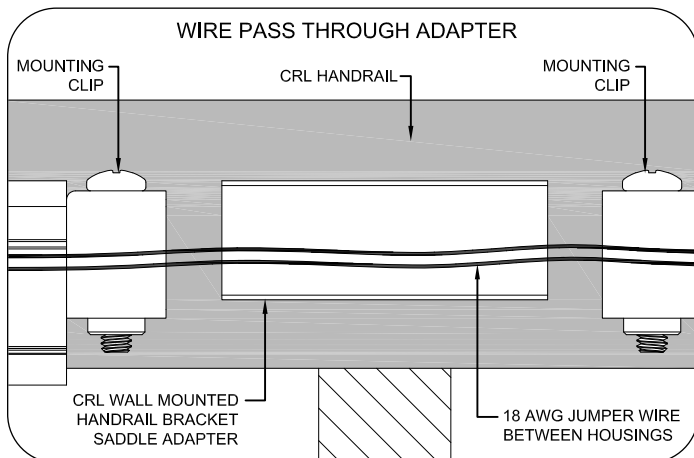
8 If frosted lens is not used, feed 18 AWG jumper wire as shown (above right), and slide clip in cap rail housing into Slot (B).



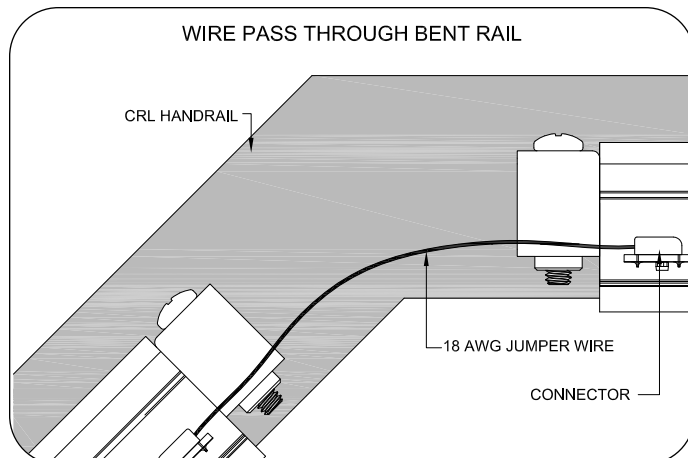
9 After jumper wires and mounting clips are inserted into hand rail, screw into hand rail housing. Clip will expand until tight with housing. Make sure clips are securely fastened.

CRL LED WALL MOUNT AND POST MOUNT LIGHTED HAND RAIL SYSTEM

WIRE MANAGEMENT FOR RAIL

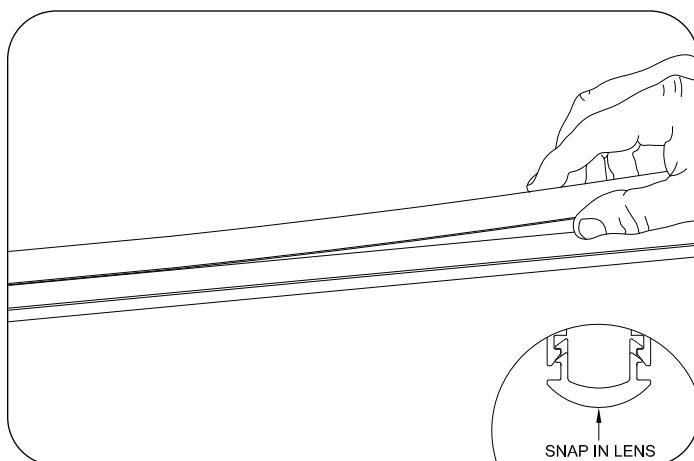


10 The CRL Saddle Adapter is designed to allow LED wiring to pass through inside of handrail and should be used where needed.

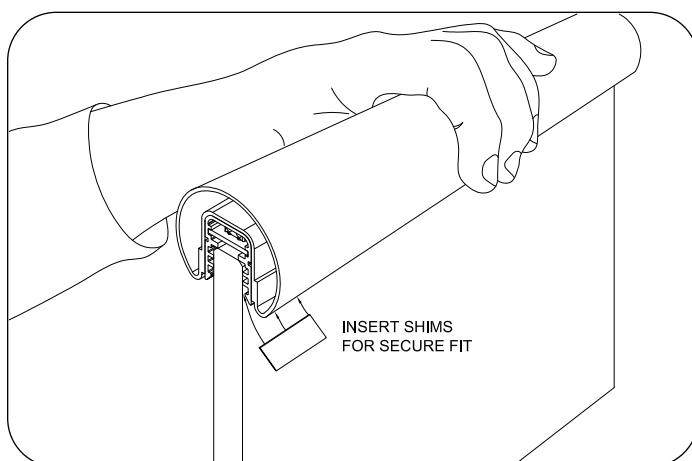


11 Use 18 AWG jumper wire to accommodate angled rails. The connectors are designed for use with stranded and solid core 18 AWG. Inserting stranded 18 AWG wire into connectors is easier if wire is lightly tinned.

INSERTING FROSTED LENS OR GLASS



12 Gently snap on frosted lens at end of cap rail housing. Continue to press frosted lens down length of housing channel, snapping it securely in place.



13 If using handrail with glass, insert handrail with completed cap rail housing and LED strip lights onto glass once all the above steps are completed. Glass enters base of cap rail housing and stops at interior housing tabs. Note: If loose after glass insertion, cut LED housing shims to size and insert between glass and housing.

INSTALLING LOW VOLTAGE DRIVER

For specific instructions on the low voltage driver setup and example driver and run configurations, please refer to the "INSTALLATION GUIDE FOR LOW VOLTAGE DRIVER" that is included with every driver.

For questions regarding this product or to order additional components, please contact C. R. Laurence at www.crlaurence.com or at 1-800-421-6144.

PRODUCT MAX CONFIGURATION

- **20 feet (6.10m)** Max. LED product length per LED driver
Two 10 foot (3.05m) runs
- **40 feet (12.19m)** Max. total length 14 AWG lead wire in any given run
- **20 feet (6.10m)** Max. total length 18 AWG jumper wire in any given run