

## COOLEDGE LINE INSTALLATION INSTRUCTIONS

Please read these instructions PRIOR to installation.

Installation must be completed by a qualified electrician in accordance with all national and local electrical and construction codes.



Ensure the following steps are completed prior to connecting power to the system.

### 1.0 IMPORTANT NOTES

- Cooledge LINE products are rated for dry locations ONLY.
- Cooledge LINE light sheets must be powered by a Cooledge approved constant voltage LED Driver that has been certified for use in your region. If used with a non-approved power source, the warranty will be voided.

#### 2.0 CARE & HANDLING GUIDELINES

- Handle light sheets by the borders running the length of the sheet on both sides.
- Avoid handling, scraping, rubbing, or wiping the active area of the sheet between the borders. LEDs and drive components are bonded to the plastic base material, but it is possible to remove or damage the electrical connection if not handled with care.
- Avoid penetrating the active area of the sheet for any reason. Mounting holes for fasteners may be located
  in the border areas along the length of the sheets.
- As with all electronics, LINE is susceptible to damage from Electrostatic Discharge (ESD). Where possible avoid situations that are conducive to creating static.
- Avoid creasing or repeated flexing of the light sheets as this may cause separation in the traces of the (safe low voltage DC) electrical circuits located on the sheet surface.
- Do not install light sheet in a curve with a bend radius of < 2" (50mm).</li>





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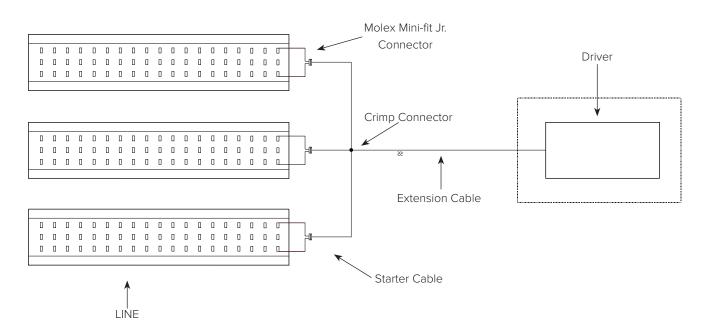
**5 Year Limited Warranty:** Parts and workmanship

EN 60598 Compliant (as a system)

#### 3.0 COOLEDGE LINE SYSTEM CONTENTS

- One or more LINE sheets with a Molex connector attached to the red/black conductors at the input end of each sheet.
- One 2-conductor Starter Cable per LINE sheet with a matching Molex connector on one end and bare leads on the other for connection to the LED driver or an Extension Cable.
- One LED driver certified for use in your region (includes enclosure in N. America)
- 2 conductor Extension Cable (Optional)

#### Multiple LINE Sheets wired to LED Driver



# 4.0 LINE INSTALLATION OVERVIEW

- 1. Plan your layout or refer to the project drawings and locate the LINE sheets that correspond to the layout.
- 2. Starting at the input end (the end with the wires and connector) place the LINE in the correct install location. Pull the LINE taught to lie flat on the mounting surface.
- **3.** At the opposite end, determine the amount of material that needs to be cut off (if any).
- 4. Cut the LINE to length at the appropriate cut point (cut increment).
- **5.** Using mechanical fasteners or double-sided foam tape, attach the LINE to the mounting surface ensuring that it lies flat.
- 6. At the input end, connect the Starter Cable to the LINE using the white plug connector. This cable will connect to the LED driver or, where many LINE sheets are connected to a single driver, to an Extension Cable.
- 7. Once the driver is connected to the main power, the installation is complete.

# 5.0 LINE INSTALLATION: DETAILS

LINE products are designed to mount directly to most common building materials. The choice of using fasteners or adhesive tape should be appropriate for the mounting surface.

## A. CUTTING

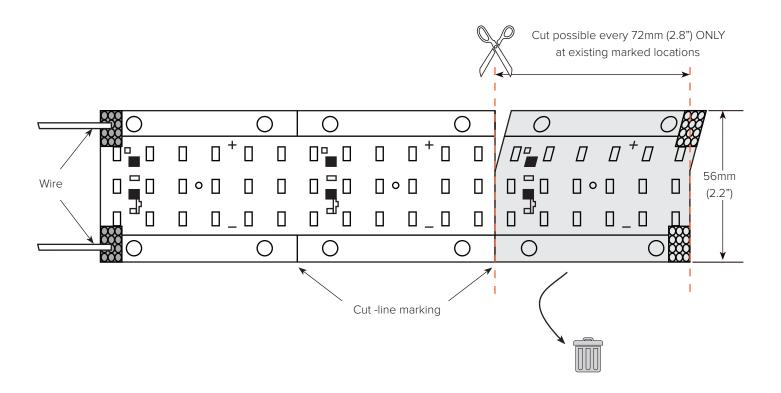
- **1.** LINE products are shipped in lengths and may require cutting to a shorter length on-site.
- 2. LINE sheets may be cut with scissors, shears, and a knife at specific length increments that are unique to each type.
- 3. Material that is cut from the end of the LINE sheet not connected to the input wires cannot be used and should be discarded.

## **B. MOUNTING**

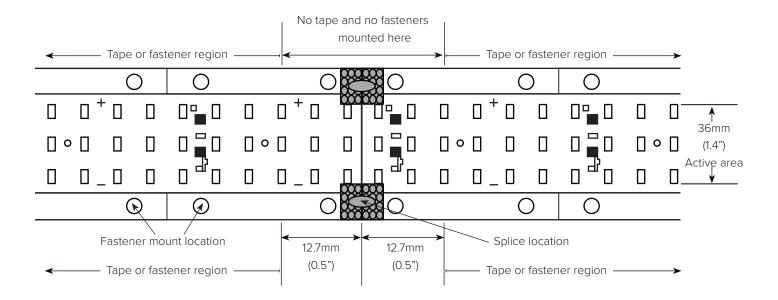
LINE may be mounted using double-sided tape, mechanical fasteners, or a combination of both.

MECHANICAL FASTENERS		TAPE	
1.	Fasteners should be appropriate for the mounting surface.	1.	Cooledge recommends using a foam type (e.g. 3M VHB or similar) to allow some expansion/contraction.
2.	The transparent border of the LINE sheet (identified as the "tape" region) can be punched at periodic intervals and the sheet attached with mechanical fasteners (e.g. screws, rivets). Ensure that all fasteners are located outside of the active area of the LINE sheet and at least 0.2" (5mm) away from any component.	2.	Adhesive tape must not be applied within 0.5" (12.7mm) distance from a sheet splicing location, which occurs at the intersection of 2 adjacent sheets.
3.	A nylon washer should be used in conjunction with the fastener to allow for expansion/ contraction of the plastic material with relation to the mounting surface and prevent electrical contact with the active area of the light sheet.	3.	It is recommended to only apply tape along the borders of each sheet.

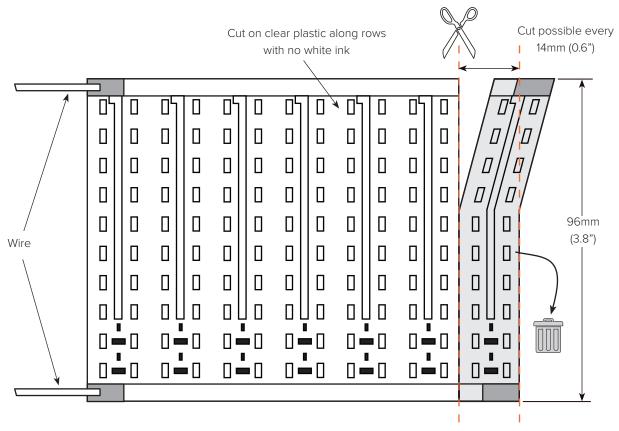
Cutting: LINE-175 & LINE-450 sheets may be cut every 72mm (2.8") with scissors, shears, or a knife.



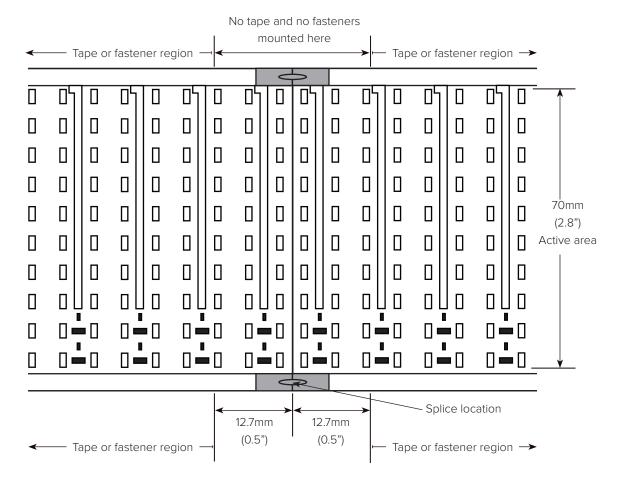
Mounting: Ensure fasteners are located outside the active area and at least 5mm (0.2") away from any component.



Cutting: LINE-850 sheets may be cut every 14mm (0.6") with scissors, shears, or a knife.



Mounting: Ensure fasteners are located outside the active area and at least 5mm (0.2") away from any component.



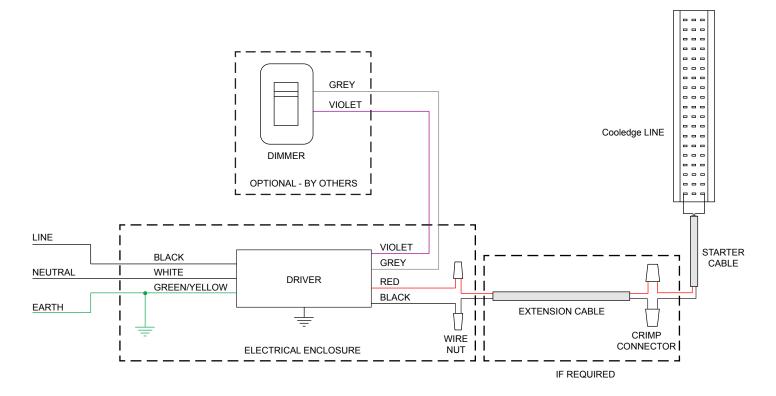


WARNING - Risk of Fire. Do not install insulation within 3" (75mm) of the surface of the LED driver (or UL Listed enclosure).

Access above ceiling or behind wall required.



DO NOT connect AC power to the LED driver until all wiring has been completed and checked.



Referto the wiring diagram above:

- **1.** Mount the LED driver (or enclosure) to the mounting surface using appropriate fasteners.
- 2. Connect the Start Cable or Extension Cable to the low voltage DC connections on the LED driver.
- 3. Connect the 0/1-10V dimmer (if required) to the LED drivers.
- **4.** Connect the Extension Cable (if required) to the Starter Cable(s) using a crimp connector.
- **5.** Connect the Starter Cable to the LINE sheet using the wire plug connector.
- 6. Check that all connections have been made correctly\*
- 7. Connect the AC mains (line) voltage according to the requirements of all applicable electrical codes.

\*WARNING - Connecting the low voltage DC connections incorrectly will cause damages to the LINE sheet(s).

### 9.0 TROUBLESHOOTING

#### If the LINE does not illuminate when power is applied

- Check to ensure all electrical connections have been made.
- Check to ensure that the low voltage wires have been correctly matched.

If one (1) section of LEDs on a sheet does not illuminate

 The circuit for those LEDs has likely been damaged and the LINE sheet should be replaced.

If a single LED on a LINE sheet does not illuminate

The connection between the LED and the circuit on the Cooledge LINE has likely been short circuited. The overall light output of the system will not be affected and if the LINE sheet is mounted so that the LEDs are not visible, there should not be a need to replace the sheet. If the LEDs are intended to be visible, a replacement LINE sheet may be required.

### 10.0 PRODUCT SUPPORT

Contact Cooledge Technical Support at:

- E: apps.engineering@cooledgelighting.com
- O: +1.604.273.2665
- T: 1.844.455.4448 (toll free North America)

## 11.0 WARRANTY

Cooledge warrants that the products manufactured, distributed or sold by it will:

- 1. Be free of any claim of ownership by third parties
- 2. Beconforming to the Specifications and free from defects in materials and workmanship under normal use, handling, warehousing and service.

The warranty period specified in the Cooledge Warranty Terms and Conditions for the products will be for a period of five (5) years from the shipment date of any products sold by Cooledge.





**RoHS** 



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