

## WARNING!

**FAMILIARIZE YOURSELF WITH INSTRUCTIONS BEFORE PROCEEDING. USE ONLY GM LIGHTING LineDRIVE 24VDC NON-DIMMING DRIVERS TO ACTIVATE 5-YEAR WARRANTY. FOLLOW ALL LOCAL CODES.**

## Dry Location

Dry location is a designation that usually means 'in-door'. LTR Series dry location tape is presented in a copper bus that is not encapsulated with a silicone sheath. To insure proper operation, install only in locations that are not exposed to moisture, steam, inclement weather or leaks of any type.

**Wet location not available.**

## Turn Power Off at Circuit Breaker Before Installing

Prior to installation, verify that all components (LED tape, connectors, mounting clips, channels, power supplies and controllers) are compatible. **Verify that power is off before proceeding.**

## Determine Location and Prepare Mounting Surface

Locate area where 24VDC LineDRIVE **non-dimmable** power supply is to be mounted. Make sure area is clean and free of dust and any debris that may hamper installation or get in the way of wiring. Please make sure that the wire gauge that you select has voltage drop, amperage rating and type (in-wall, dry or wet location, etc.) factored in.

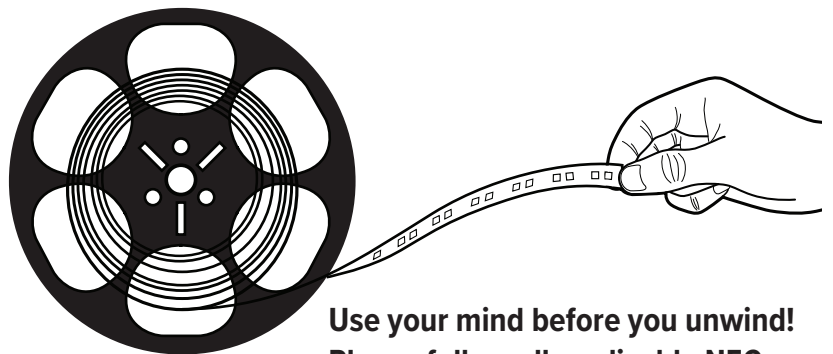
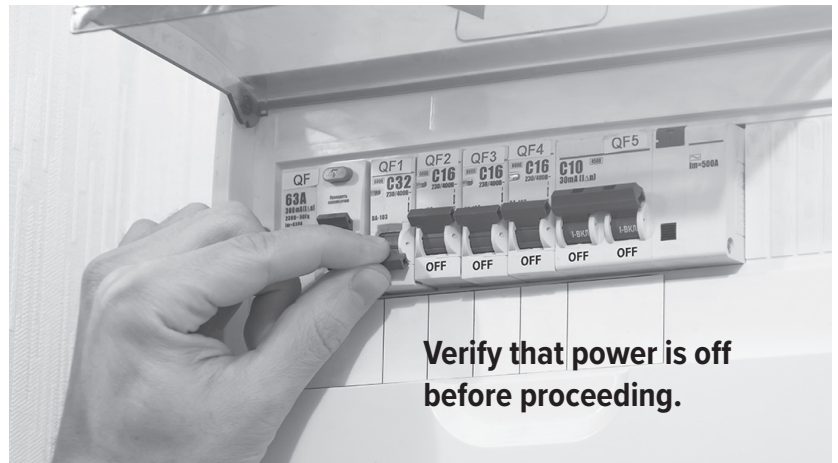
## Layout and Pre-Configure Components Before You Begin Installation

Locate area where LineDRIVE **non-dimmable** power supply and controller are to be mounted. Make sure that this space is free of obstructions and can be easily reached or mounting or maintenance.

## LEDTask™ Flexible LED Tape LTR-S Series Dry Location CCT Tunable LED Tape



**NOTE: Custom cuts require the use of LTR-S-TUN connectors. See compatible channels.**



**Use your mind before you unwind!**  
Please follow all applicable NEC and local wiring codes.

Follow maximum length tolerances when using tape.  
**Max. Length = maximum run length from one power feed.**

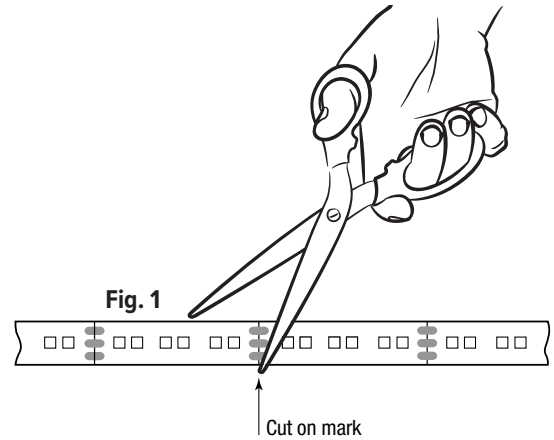
\*Title 24 when used with select drivers.  
See [www.gmlighting.net](http://www.gmlighting.net)

## Cutting Tape

LED tape is unique in the fact that it is the only lighting 'fixture' that you can cut to length with only a pair of scissors. We made it easy for you to do that! Find the cut mark closest to your desired length and cut cleanly, across the marks. **Fig. 1**

Peel back adhesive 1/2" to expose back of tape. You are now ready for attaching a connector **Fig. 2**. If you're at the end of your run, you're done.

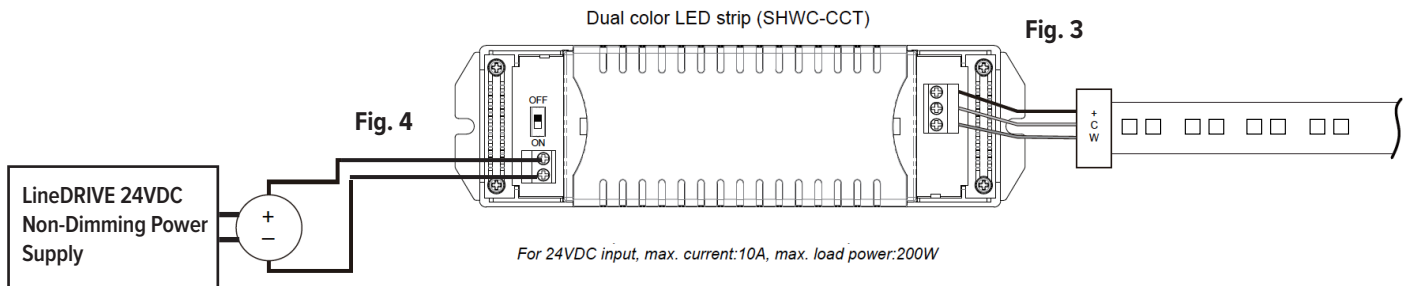
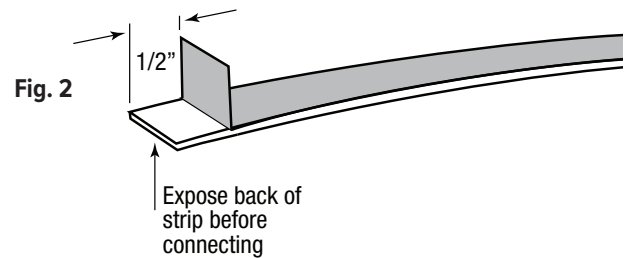
## LEDTask™ Flexible LED Tape LTR-S Series Dry Location CCT Tunable LED Tape



## Attaching Tape to Controller and Power Supply

Connect three wires from tape to three terminals on SHWC-CCT controller. **Fig. 3**.

Connect leads from LineDRIVE 24VDC non-dimming driver to terminals on SHWC-CCT controller. **Fig. 4**. Note that controller can be manually switched on and off via the two-position power switch located near the 24VDC power terminals.



## Pairing Before Mounting

Whenever possible, it's important to be close to your WiFi source when pairing a LUXcontrol device. **Fig. 5**. This is true for any device that depends on a WiFi signal. Consult the pairing directions that comes with the controller, or watch our LUXcontrol pairing video.

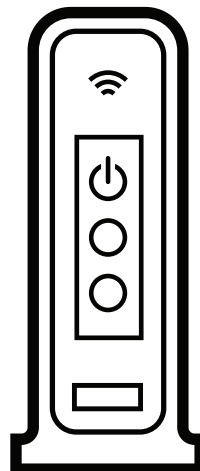
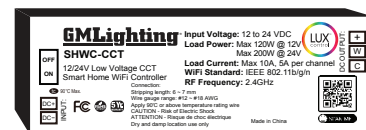


Fig. 5



Bring controller in close proximity to WiFi source (modem or router) during pairing.

## Preparing the Mounting Surface

Now that you've paired the controller, time to permanently mount your tape run. **Dust will hamper adhesion. Clean all surfaces thoroughly.**

**Fig. 6.** Wear protection, do not breathe in fumes. Peel back adhesive 1/2" to expose back of tape. If you are connecting other lengths of tape, now is the time to use a connector. Cut only at cut lines and either splice together using our LTRS-TUN-SP splice connector, or use any one of our tape to tape connectors, available from 3" to 60". **Push end of tape into connector, making sure that contacts seat securely against contacts in the connector.** Fig. 7.

## Using Mounting Channels

We offer a complete line of architectural quality aluminum extruded mounting channels and lenses in both 4' and 8' lengths. In measuring out a channel for your installation, take note that not all channels accept connectors within them. Best to make your connections outside of the channel.

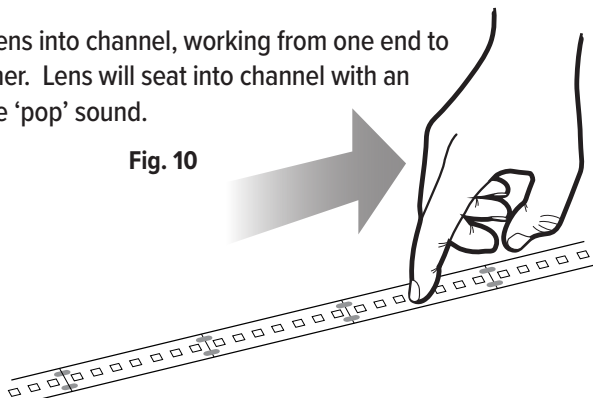
Cut channel using a metal blade in a circular saw or with a hacksaw. Make sure you observe all proper safety precautions and wear protective goggles. If using a hacksaw, insure that channel is tightly clamped to work bench. Fig. 8.

Mount channels using counter sunk screws (by others). Sink screw every 12" along length of channel. Fig. 9.

Lay tape in using adhesive backing to adhere tape to channel. Press firmly along length of tape. Do not apply a roller to tape as this may damage diodes.

Snap lens into channel, working from one end to the other. Lens will seat into channel with an audible 'pop' sound.

Fig. 10



## LEDTask™ Flexible LED Tape LTR-S Series Dry Location CCT Tunable LED Tape

Fig. 6

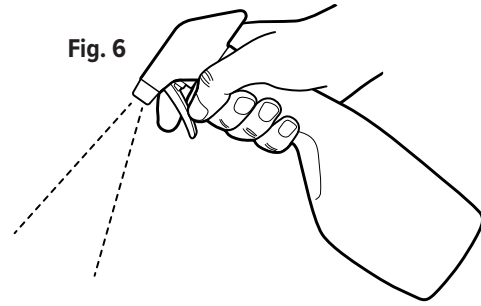


Fig. 7

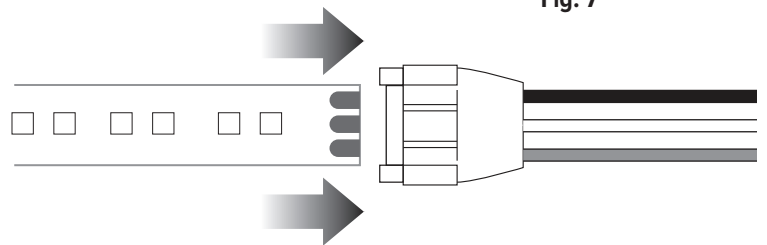


Fig. 8

OR

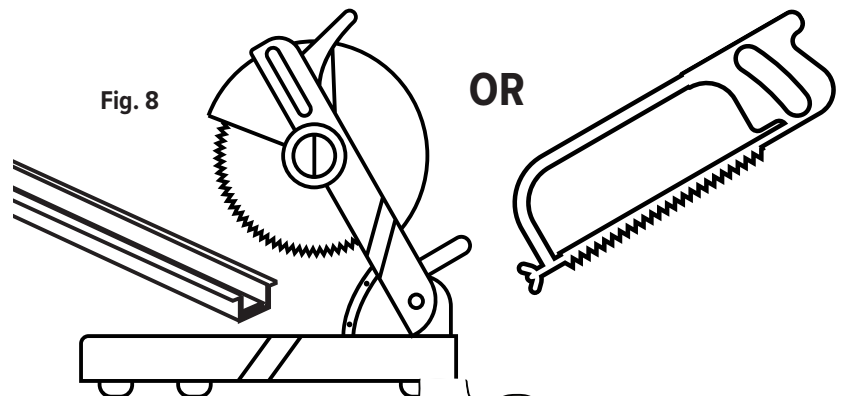
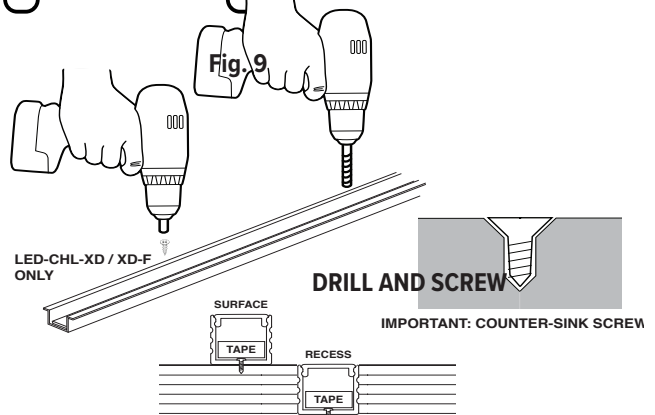


Fig. 9



# Creating Multiple Runs From One LineDRIVE Driver

# LEDTask™ Flexible LED Tape LTR-S Series

## Dry Location CCT Tunable LED Tape

Consult the diagrams below on how to wire multiple runs from the same driver and **Fig. 11**.

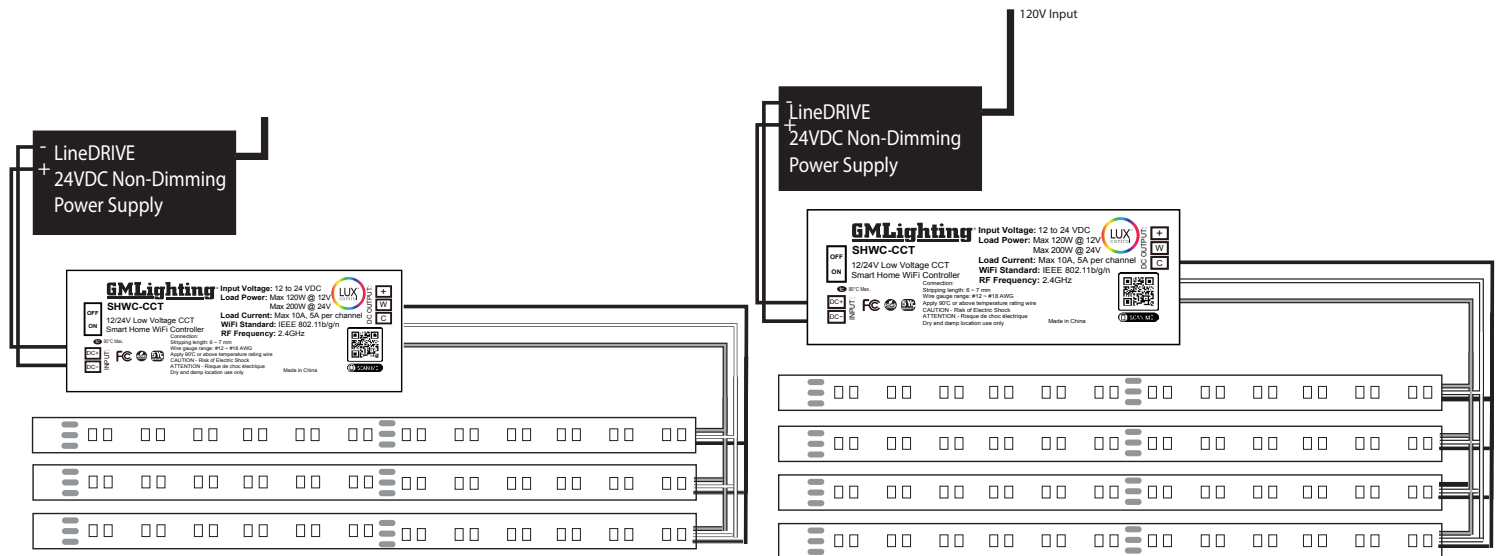
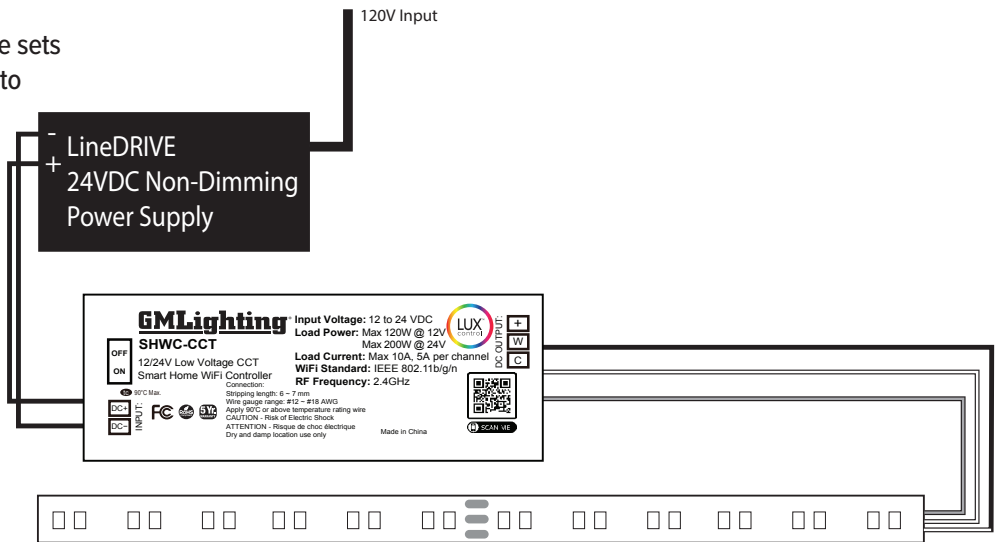
Do not exceed maximum wattage of controller. Power supply should only use 80% of maximum power. Use a repeater to extend power over longer runs that exceed maximum wattage.

## Your Tunable White Installation

Congratulations! Your LTR-S Series 24VDC Tunable White CCT Tape installation will bring a new dimension in lighting, especially with LUXcontrol.

More than dimming the lights, Tunable White sets the mood. From intimate and warm 2400K to bright and sunny 5000K.

Fig. 11 refers to these three layouts



# LEDTask™ Flexible LED Tape

## LTR-S Series

### Dry Location CCT Tunable LED Tape

## Frequently Asked Questions (FAQ) and Voltage Drop Charts

Problem	Typical Cause and Action
<b>LED Tape does not turn on - no lights</b>	<ul style="list-style-type: none"> <li>• Circuit breaker at electrical box is OFF or has tripped</li> <li>• Incorrect wiring, or polarity (+ / -) are reversed. Check every connection and insure that tape is firmly seated in connectors.</li> <li>• You're using the wrong power supply, or power supply is not functioning properly. Make sure that you are using the correct 12V or 24V power supply.</li> </ul>
<b>LED Tape overheats</b>	<ul style="list-style-type: none"> <li>• Heat is not being properly mitigated by channel mounting. Certain tape wattages require a mounting channel.</li> <li>• Incorrect voltage pairing of LED power supply and tape. If you are powering a 12V tape with a 24V power supply, this can cause overheating and lead to failure of product.</li> <li>• Installation where ambient temperature is too high. Proper thermal management is crucial to the successful operation of your LED tape application. We recommend the following tolerances: -4° - 122°F (-20° - 50°C)</li> </ul>
<b>Fixture randomly flickers and may shut off unexpectedly.</b>	<ul style="list-style-type: none"> <li>• Connectors are not securely connected. Insure that tape is firmly seated and in contact with metal contacts within connector.</li> <li>• Use of soldered connections may cause flickering and will void warranty. If you have soldered leads - re-trim tape at cut marks and use proper connectors.</li> </ul>
<b>Brightness shifting</b>	<ul style="list-style-type: none"> <li>• Power supply is over-loaded and is overheating. An over-loaded power supply will trip the internal auto-reset repeatedly, turning the system on and off.</li> </ul>
<b>If all else fails</b>	<ul style="list-style-type: none"> <li>• We're here for you! Call our technical service reps at (866) 671-0811 or write to: tech@gmlighting.net</li> </ul>

## Guide to Voltage Drop

- Determine load size. If load is 35W - round up to next load at chart at left, i.e. 40W.
- Determine distance from power supply to load. It is assumed that the distance is no longer than 20 feet.
- We recommend using larger gauge wire. This is the 'safest choice' and usually eliminates excess voltage drop.

## 24V Wire Voltage Drop

Wire Gauge	10W - .83A	20W - 1.7A	30W - 2.5A	40W - 3.3A	50W - 2.1A	60W - 4.2A	70W - 2.9A	80W - 3.3A	90W - 3.75A	100W - 4.2A
<b>20 AWG</b>	85 ft.	43 ft.	27 ft.	21 ft.	17 ft.	14 ft.	12 ft.	11 ft.	9 ft.	8 ft.
<b>18 AWG</b>	134 ft.	68 ft.	45 ft.	33 ft.	27 ft.	22 ft.	19 ft.	17 ft.	15 ft.	14 ft.
<b>16 AWG</b>	215 ft.	109 ft.	72 ft.	54 ft.	43 ft.	36 ft.	31 ft.	27 ft.	24 ft.	22 ft.
<b>14 AWG</b>	345 ft.	174 ft.	115 ft.	86 ft.	69 ft.	57 ft.	49 ft.	43 ft.	39 ft.	36 ft.
<b>12 AWG</b>	539 ft.	272 ft.	181 ft.	135 ft.	108 ft.	90 ft.	77 ft.	68 ft.	61 ft.	56 ft.
<b>10 AWG</b>	784 ft.	397 ft.	263 ft.	197 ft.	158 ft.	131 ft.	112 ft.	98 ft.	97 ft.	82 ft.

# **GMLighting®**



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