24V | TRULUX® SINGLE COLOR (IP54)

AMERICAN LIGHTING
BRIGHT IDEAS • INNOVATIVE SOLUTIONS

INSTALLATION INSTRUCTIONS
STL, HTL, and SPTL Series

c UL us LISTED

> **⚠ WARNING**
>
> These products may represent a possible shock or fire hazard if improperly installed or attached in any way. Products should be installed in accordance with these instructions, current electrical codes, and/or the current National Electric Code (NEC).

> **⚠ WARNING**
>
> Use only with 12 or 24V DC drivers with a wattage capacity that can handle the total load; see page 2 for more details. Factory warranty will be void if used with a non-recommended power supply, transformer or driver.

> **⚠ WARNING**
>
> To reduce the risk of fire, electric shock or injury to persons, make sure that the electrical power to the system is disconnected at the source prior to installation or any servicing.

> **⚠ WARNING**
>
> Never fold Trulux® or bend past the minimum bending radius of 1" whether lighted or unlighted.

SAFETY INFORMATION

- Read all installation instructions before beginning; if not qualified, do not attempt installation. Contact a qualified electrician.
- To reduce the risk of fire, electric shock, or injury to persons, pay close attention to this manual and stay within its guidelines when using this product. Save these instructions for future use.
- Do not cover this product with paper surface coverings, fabrics, streamers, or other similar combustible materials.
- Do not operate Trulux on the reel, nor while it is coiled.
- This IP54 rated tape light is suitable for indoor use in dry and damp locations, but not for direct contact with water or moisture Do not submerge flexible light in liquids, or use the product in the vicinity of standing water or other liquids, or where water can accumulate.
- Do not route the cord or tape light through walls, ceilings, doors, windows, or any similar part of the building structure.
- Secure tape light using only the adhesive provided with the tape and/or factory recommended mounting clips, mounting track, and aluminum channel (sold separately).
- Do not secure this product or its cord with staples, nails, or like means that may damage the outer jacket or cord insulation.
- Do not use if there is any damage to the tape light, diodes or power cord insulation; inspect periodically.
- Do not install on gates or doors, or where subject to continuous flexing.
- Do not install in airtight tanks or enclosures of any kind.
- Size your 24V DC driver appropriately for your run distance. Be sure not to load a driver to 100% as this will reduce its efficiency; a 90% maximum load is recommended. See SELECTING POWER SUPPLY on page 2 and use driver chart as directed.

LAYOUT CONSIDERATIONS

Pay close attention to the following maximum run lengths:

Series	Maximum run	Reel Length	Comments
STL Series	32.8 feet (71.83 watts)	16.4 or 32.8 feet	16.4ft reels can be interconnected using IP54 connector blocks (See Figure 1)
HTL Series	22 feet (101.2 watts)	16.4 feet	A full reel + 5.6 feet from a second reel can be interconnected (See Figure 1)
SPTL Series	13.1 feet (102.2 watts)	13.1 feet	No additional tape light can be added

IP54 snap style jumpers are available in 6", 12", and 24" lengths (TL-2JUMP-.5, TL-2JUMP-1, AND TL-2JUMP-2 respectively, sold separately) or build your own custom length jumpers (See Figure 2) using 4-in-1 connector blocks (TL-BLKS, sold separately as bags of 10 connectors). Three TL-CONKITs (3ft lead wire attached to a 4-in-1 connector block) are included with each reel.

FIGURE 1

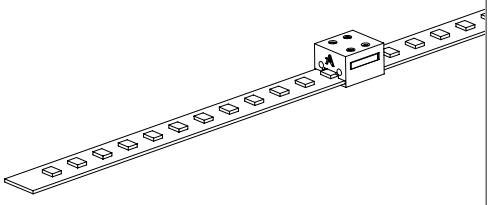
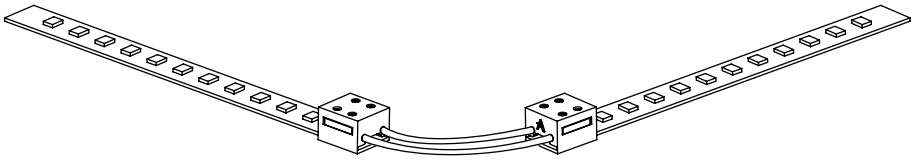


FIGURE 2



PRODUCT INFORMATION

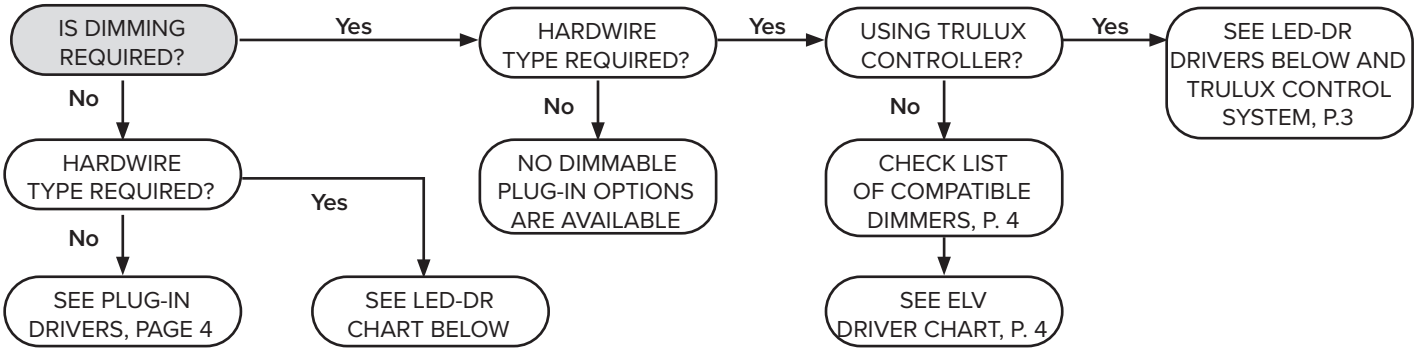
IP54 reels include (3) 4-in-1 connector kits (TL-CONKITs) which have 3 feet of 18AWG lead wire attached to each block.
Mount tape light using the 3M® VHB adhesive. Once the VHB protective backing is removed, the tape should be placed on the prepared mounting surface and not be repositioned, removed, or re-used. For best results, let adhesive cure 24 hours prior to first use.

Trulux® controllers are available to dim and control power to single color Trulux®. They use Radio Frequency (RF) signals that are detected by a receiver. Each controller requires a receiver (REC-5A-4Z, sold separately). See controller instructions for more details.

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SELECTING POWER SUPPLY



LED-DR DRIVERS FOR TRULUX® CONTROLLERS

Calculate the load and make sure to select a driver that can handle the total load. Use the chart below to select the driver.

Distances for LED-DR power supplies in Trulux Control System Applications - 5% MINIMUM load and 90% MAXIMUM load						
Trulux Series	***Watts Per Foot***	***Max Run***	***LED-DR30-24***	***LED-DR60-24***	***LED-DR100-24***	***LED-DR150-24***
STL Series (6.56" cut marks)	2.19W/ft	32.8'	1.1ft - 12.02ft (2.4 - 26.33 watts)	1.64ft - 24.6ft (3.6 - 53.87 watts)	2.73ft - 39.36ft* (5.98 - 86.19 watts)	3.83ft* - 61.23ft* (8.38 - 134.08 watts)
HTL Series (3.94" cut marks)	4.6W/ft	22'	0.33ft - 5.58ft (1.51 - 25.7 watts)	0.66ft - 11.5ft (3.02 - 52.8watts)	1.31ft - 19.4ft** (6.04 - 89.1 watts)	1.64ft** - 29.2ft** (7.55 - 134.3 watts)
SPTL Series (1.97" cut marks)	7.8W/ft	13.1'	0.33ft - 3.44ft (2.56 - 26.8 watts)	0.49ft - 6.89ft (3.84 - 53.78 watts)	0.65ft - 11.49ft (5.12 - 89.63 watts)	0.98ft - 17.2ft† (7.68 - 134.45 watts)

*When the length needed exceeds 32.8', connect up to 32.8' from a full reel to one zone (see CAPACITY below), and the balance to another zone.

**When the length needed exceeds 22', connect up to 22' from a full reel to one zone (see CAPACITY below), and the balance to another zone.

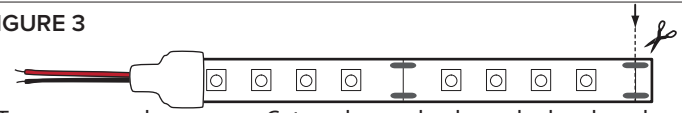
†When the length needed exceeds 13.1', connect up to 13.1' from a full reel to one zone (see CAPACITY below), and the balance to another zone.

CONNECTING AND MOUNTING TRULUX SECTIONS:

This product is designed to be mounted to a smooth, clean, non-moving surface.

1. Review any marks made indicating placement of connectors prior to continuing. For best adhesion to surface, once Trulux backing is removed, it should be placed on mounting surface and not be repositioned or removed and re-used.
2. Peel the protective backing from the tape light and press the first piece of Trulux into place, working from the "L", "T", or "X" connection,where applicable.
3. For extending any piece, connect a snap connector or jumper wire to the preceding piece by sliding the tape light end completely into the connector, ensuring the tape light is underneath the metal conductors, and closing the clip securely over the tape light until the connector halves 'snap' together. (See Figure 2). Compatible clip connectors include TL-2SPL, TL-2L, TL-2T, and TL-2X. Jumpers (TL-2JUMP-.5, TL-2JUMP-1, and TL-2JUMP-2) are also available, sold separately. The clip and jumper connectors are shipped open, ready to use. See page 3 for additional notes on using connectors.
4. Attach the next Trulux section to the clip connector/jumper in a similar manner.
5. For best results, allow 24 hours for the adhesive to "cure" to the mounting surface before using lights.
6. Mounting clips with screws are also available (TL-CLIPS-15, sold separately) to secure tape light in place.
7. See page 3 for power supply and receiver connection.

FIGURE 3



To power supply

Cut marks are clearly marked and can be cut down the center.

FIGURE 4

