



INSTALLATION INSTRUCTIONS

STL-UWW/WW/WH-100, STL-WW-100-12V, HTL-UWW/WW-100



**⚠ 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**

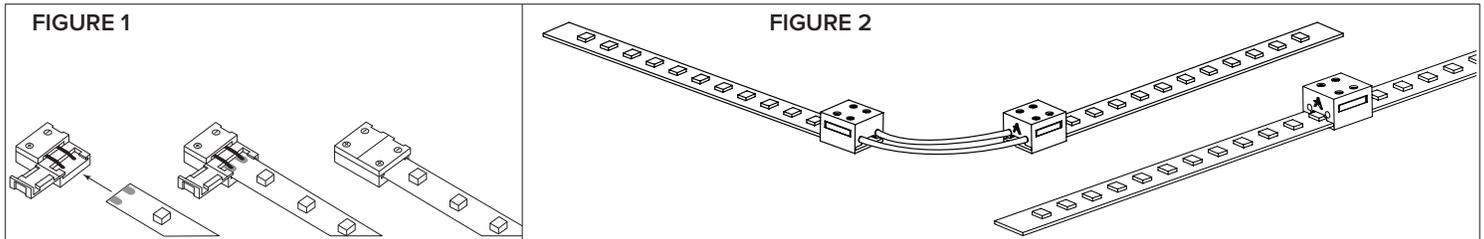
Never fold Trulux®; or bend past the minimum bending radius of 1" whether lighted or unlighted.

**SAFETY INFORMATION**

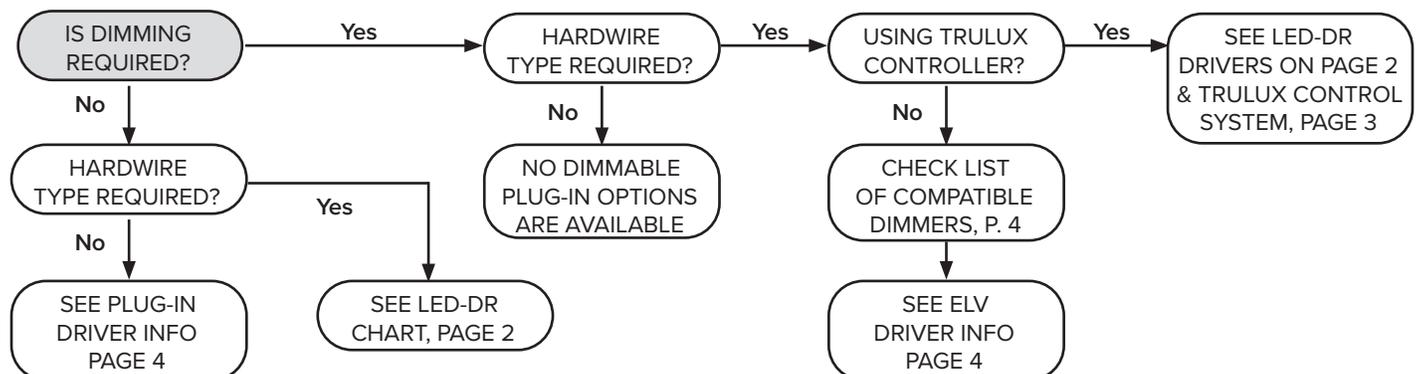
- Read all installation instructions before beginning. If not qualified, do not attempt installation. Contact a qualified electrician.
- To reduce the risk of fire, electric shock, or injury to persons, pay close attention to this manual and stay within its guidelines when using this product. Save these 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 LEDs 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 kinds.
- Size your 12V or 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.
- Pay close attention to the maximum run lengths. See SELECTING POWER SUPPLY chart on page 2.

**POWER CONNECTION OPTIONS**

The 100ft kits include either (5) IP54 snap style conkits (TL-PWR with 6" leads - Figure 1) or (5) conkits using the new 4-in-1 connector block (TL-CONKIT with 3ft of 18AWG lead wire). 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 you can build your own custom length jumpers or conkits (See Figure 2) using 4-in-1 connector blocks (TL-BLKS, sold separately as bags of 10 connectors) and wire (not included, 18-20AWG wire is recommended). You can also use the 4-in-1 connector block as a splice connector (See Figure 2).



**SELECTING POWER SUPPLY**





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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 12V DC power supplies in Trulux Control System Applications - 5% MINIMUM load and 90% MAXIMUM load						
12V Trulux Reels	Watts Per Foot	Max Run	LED-DR30-12	LED-DR60-12	LED-DR100-12	LED-DR150-12
STL-WW-100-12V (3.94" cut marks)	2.19W/ft	27'	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)

\*For run distances that exceed the max run of 27 feet, consider locating the drive in a central location and splitting the run in half.

Distances for LED-DR 24V DC 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, 24V (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, 24V (3.94" cut marks)	4.6W/ft	22.0'	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)

\*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.

\*\*For run distances that exceed the max run distance, consider locating the driver in a central location and splitting the run in half.

CONNECTING AND MOUNTING TRULUX SECTIONS:

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

1. Peel the protective backing from the tape light and press the first piece of Trulux into place, starting with intersections ("L", "T", or "X" connections), where applicable. 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 or use TL-BLKS (4-in-1 connectors, bag of 10) to make splice connectors and/or custom jumpers using your own 18AWG wire.
2. For extending any piece, connect a snap connector or block connector on 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 or tightening the terminal screw securely over the tape light until the tape is secure in the connector. See figures 3 and 4 for additional notes on using connectors.
3. Attach the next Trulux section to the clip connector/jumper in a similar manner.
4. Mounting clips with screws are also available (TL-CLIPS-15, sold separately) to secure tape light in place. The attached VHB adhesive is suitable for most installations, however. For best results, allow 24 hours for the adhesive to "cure" to the mounting surface before using lights.
5. See page 3 for power supply and receiver connection.

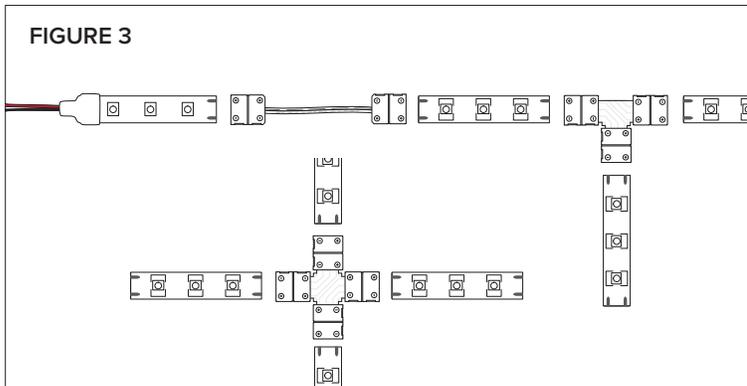


FIGURE 4



When using standard snap connectors, it is recommended to scrape off the coating from each conductor to ensure a proper connection. When using heavy duty snap connectors, this is only necessary for IP65 and IP68 types.



INSTALLATION INSTRUCTIONS

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CONTROLLER OVERVIEW

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.

NOTE: The following controllers are compatible with the single color IP65 tape light. Alternatively, use the Trulux application with one or more WIFI receivers (REC-5A-4Z-WIFI); one receiver is needed for each zone.

Visit [www.americanlighting.com/truluxapp.html](http://www.americanlighting.com/truluxapp.html) for a direct access link or visit the App Store or Google play marketplace to download the Trulux application.

1. Determine which controller is best suited for your application. See list below.
2. Select a receiver for each zone. For RF controllers, use one REC-5A-4Z for each zone. For the Trulux app, use one REC-5A-4Z-WIFI for each zone. For WIFI setups with 2-8 zones, you will need a WIFI hub (WIFI-RF-8, sold separately). You can use a REC-5A-4Z-WIFI in conjunction with wall mount and/or handheld controllers, in addition to using the App.

CONTROLLER	POWER TO CONTROL	RECEIVER ITEM #	CAPACITY	POWER TO RECEIVER
SRF-BATT (White, dial)	3V Battery (CR203, included)	REC-5A-4Z	1 zone, 5A max	12-24V DC input
SRF-4Z-3P (White, touch)	24V DC input (not 120V!)	REC-5A-4Z	4 zones, 5A max	12-24V DC input

See Figure 4 for an example of a multiple zone system. However, note that you can have receivers “learn” which zone they control, so if you teach them all to respond to one zone, then Figure 4 represents a single zone system that has multiple runs of Trulux.

See Figure 5 for an example of multiple receivers connected to multiple runs of tape light. You can connect receivers to their own drivers or daisy chain them together as shown in Figure 5, as long as the total connected load does not exceed 90% of the capacity of the driver.

FIGURE 4

Supply the receiver at right with 12-24V DC power, matching polarity: red = (+); black = (-)

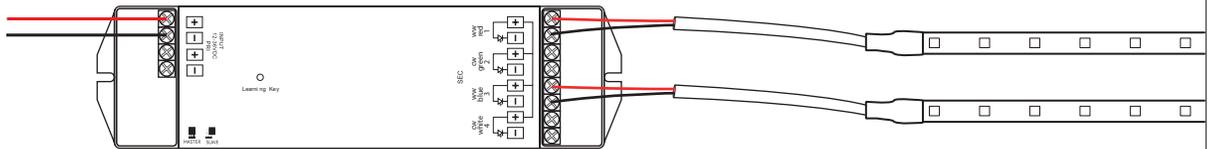
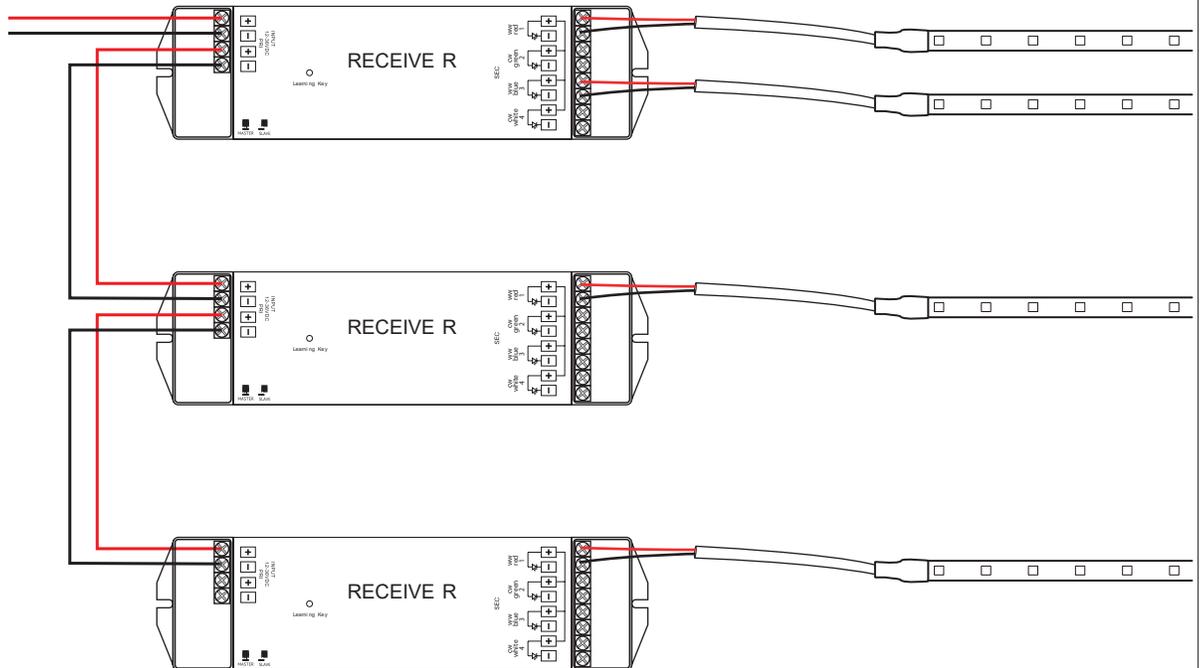


FIGURE 5

Connect this receiver to your driver, such as LED-DR150-24, matching polarity: red = (+); black = (-)





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## ALTERNATE CONTROL SYSTEMS

## CONTROLLING TAPE VIA NON-TRULUX BRAND WALL DIMMER

1. Confirm which wall dimmer is to be used and check its level of compatibility below.

Brand	Dimmer Type	Dimmer Model #	Dimming Range
Lutron Diva	Electronic	DVCL-153P	10-100%
Lutron Diva	Electronic low voltage	DVELV-300P-LA	15-100%
Legrand	Multi	ADTP700MMTU	6-100%
Leviton Sureslide	Incandescent	6613	20-100%

2. Select ELV driver by multiplying total number of feet by watts per foot based on type of tape. To use non-Trulux dimmers, the ELV driver must be used and the load has to be 60% minimum and 90% maximum of the driver's capacity.
3. Follow markings on the LED-DR driver to locate input and secondary sides. Follow marks for connecting 120V AC supply power and 24V DC output to red/black lead wires on power connector, matching polarity: Red = positive and Black = negative.

## USING PLUG-IN POWER SUPPLY FOR TRULUX (NON-DIMMING)

1. Select plug-in driver by multiplying total number of feet by watts per foot based on type of tape. The total load should be at least 5% of the driver's capacity, but not more than 90%.
2. Attach the DC power lead adapter (not included with 100ft reels) to the existing lead matching polarity. Attach DC jack from this power cord to DC jack of plug-in power supply (sold separately). Plug power supply into 120V AC power source.

## ADDITIONAL SAFETY MEASURES

1. Route and secure cords so that they will not be pinched or damaged in any way.
2. LEDs are bright. Do not look directly at lighted tape light.

**Important Note:** The National Electrical Code (NEC) does not permit cords to be concealed where damage to insulation may go unnoticed. To prevent fire danger, do not run cord behind walls, ceilings, soffits, or cabinets where it may be inaccessible for examination. Cords should be visually examined periodically and immediately replaced when and damage is noted.