

INSTALLATION INSTRUCTIONS

STL, HTL, and SPTL Series



⚠ 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

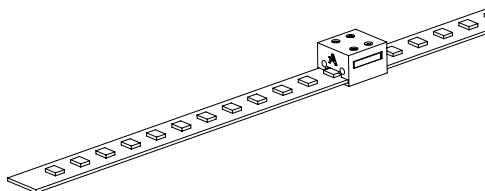
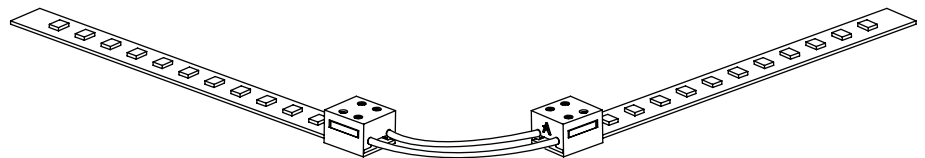


FIGURE 2



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.

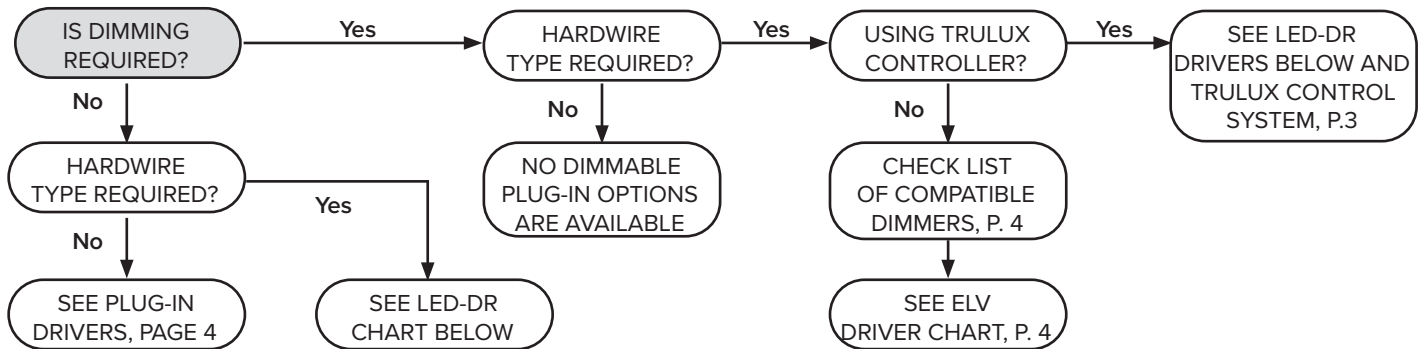
Trulux® controllers are available to dim and control power to single color Trulux®. They use Radio Frequency (RF) signals that are detected by a receiver. Each controller requires a receiver (REC-5A-4Z, sold separately). See controller instructions for more details.

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STL, HTL, and SPTL Series



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.

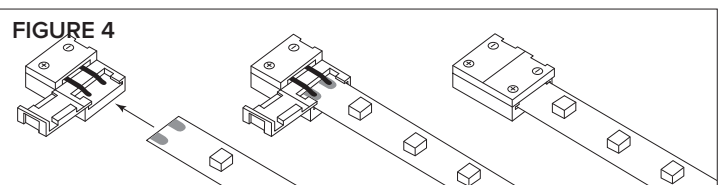
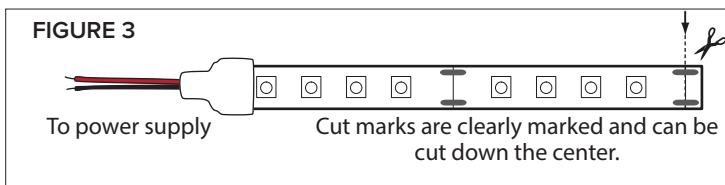
**When the length needed exceeds 22', connect up to 22' from a full reel to one zone (see CAPACITY below), and the balance to another zone.

†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.



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STL, HTL, and SPTL Series



CONTROLLER OVERVIEW

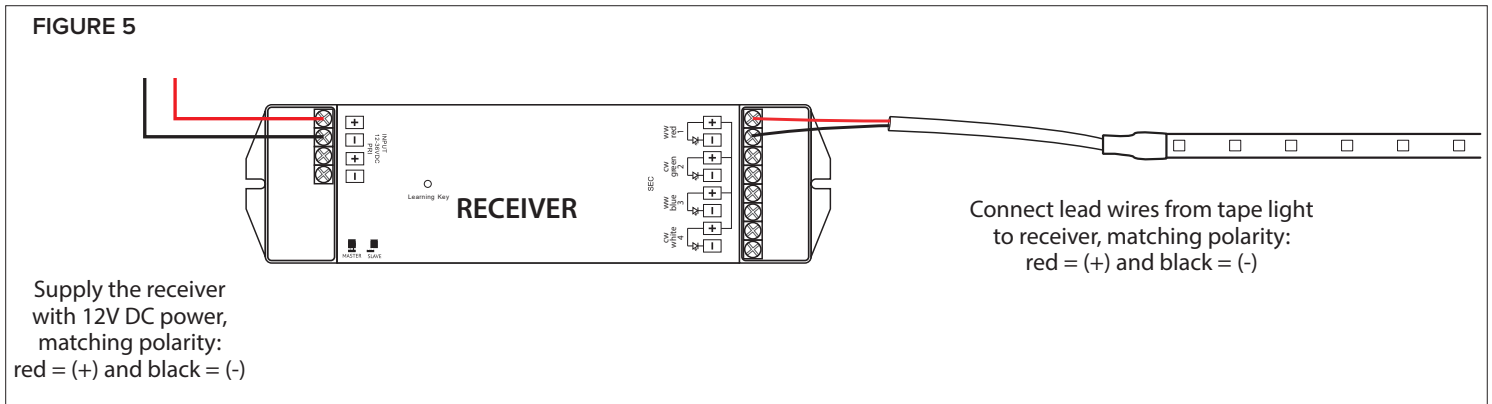
NOTE: The following controllers are compatible with the single color IP65 tape light. Alternatively, use the Trulux application with one or more WIFI receivers (REC-5A-4Z-WIFI); one receiver is needed for each zone.

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

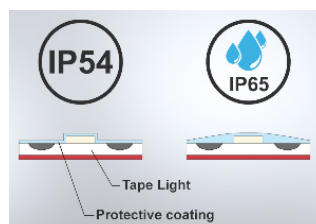
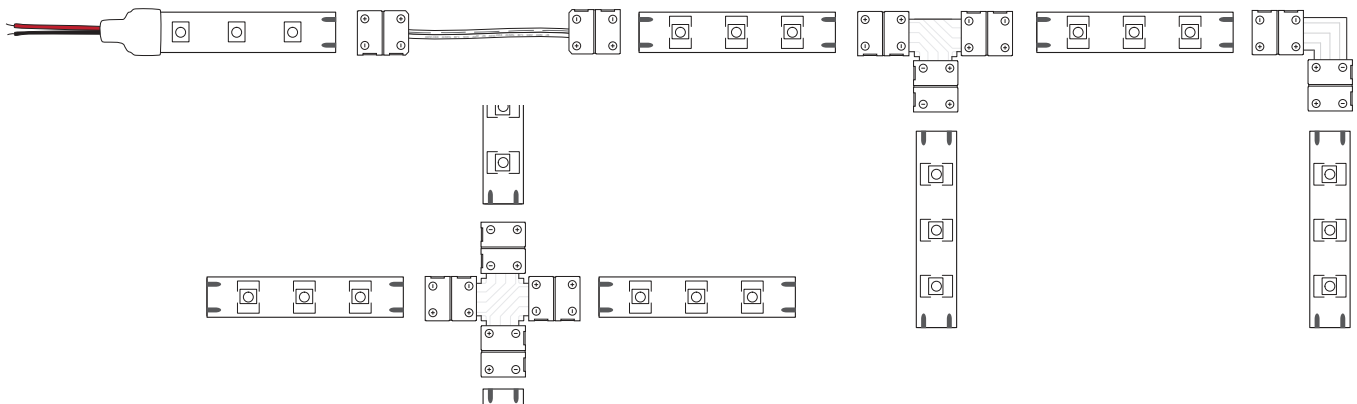
1. Determine which controller is best suited for your application. See list below.
2. Select a receiver for each zone. For RF controllers, use one REC-5A-4Z for each zone. For the Trulux app, use one REC-5A-4Z-WIFI for each zone. For WIFI setups with 2-8 zones, you will need a WIFI hub (WIFI-RF-8, sold 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 zones, 5A max | 24V DC input |
| SRF-4Z-3P (White, touch) | 24V DC input (not 120V!) | REC-5A-4Z | 4 zones, 5A max | 24V DC input |

See Figure 3 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 3 represents a single zone system that has multiple runs of Trulux.



TAPE LIGHT LAYOUT EXAMPLES USING L, T AND X CONNECTORS



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.

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STL, HTL, and SPTL Series



ALTERNATE CONTROL SYSTEMS

CONTROLLING TRULUX 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 driver per maximum run distances and allowable loads specified on the chart below.

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.

| MAXIMUM RUN DISTANCES CONNECTED TO ONE HARDWIRE POWER SUPPLY - TRULUX SINGLE COLOR (IP54) | | | | | | |
|---|----------|---------|---|---|---|--|
| Distances for ELV power supplies in dimming applications with other brands of wall dimmers: ~60% minimum load and ~90% maximum load | | | | | | |
| Trulux Series | Watt/Ft | Max Run | ELV-30-24 | ELV-45-24 | ELV-60J-24 | ELV-80J-24 |
| STL Series (6.56" cut marks) | 2.19W/ft | 32.8' | 8.75ft - 12.02ft (19.16 - 26.33 watts) | 12.58ft - 18.04ft (27.54 - 39.5 watts) | 16.95ft - 24.6ft (37.12 - 53.87 watts) | 22.4ft - 32.8ft (49.08 - 71.83 watts) |
| HTL Series (3.94" cut marks) | 4.6W/ft | 22' | 3.9ft - 5.58ft (18.1 - 25.7 watts) | 5.6ft - 8.5ft (25.7 - 39.2 watts) | 7.9ft - 11.5ft (36.2 - 52.8 watts) | 10.5ft - 15.4ft (48.3 - 70.9 watts) |
| SPTL Series (1.97" cut marks) | 7.8W/ft | 13.1' | 2.5ft - 3.44ft (19.2 - 26.8 watts) | 3.61ft - 5.1ft (28.17 - 39.7 watts) | 4.8ft - 6.89ft (37.1 - 53.78 watts) | 6.2ft - 9.2ft (48.6 - 71.6 watts) |

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

1. See plug-in driver selection chart below.

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.

| Distances for plug-in power supplies: 5% minimum load and 90% maximum load (NOT DIMMABLE) | | | | | |
|---|----------------|---------|---|---|---|
| Trulux Series | Watts Per Foot | Max Run | PS-40-24VPI | PS-60-24VPI | PS-90-24VPI |
| STL Series (6.56" cut marks) | 2.19W/ft | 32.8' | 1.09ft - 16.4ft (2.34 - 35.9 watts) | 1.64ft - 24.6ft (3.6 - 53.87 watts) | 2.19ft - 36.63ft* (4.78- 80.2 watts) |
| HTL Series (3.94" cut marks) | 4.6W/ft | 22' | 0.65ft - 7.55ft (3.02 - 34.73 watts) | 0.66ft - 11.5ft (3.02 - 52.8 watts) | 0.98ft - 17.4ft (4.5 - 80.04 watts) |
| SPTL Series (1.97" cut marks) | 7.8W/ft | 13.1' | 0.32ft - 4.59ft (2.56 - 35.85 watts) | 0.49ft - 6.89ft (3.84 - 53.78 watts) | 0.65ft - 10.3ft (5.1 - 80.67 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.

ADDITIONAL SAFETY MEASURES

- Route and secure cords so that they will not be pinched or damaged in any way.
- 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.