INSTALLATION INSTRUCTIONS
SPTL-RGBTW 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 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 kinds.
- 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 LED-DR DRIVERS on page 2 and use driver chart as directed.

LAYOUT CONSIDERATIONS

1. Pay close attention to the maximum run length:

Series (W/ft)	Maximum run	Reel Length
SPTL-RGBTW (7W/ft)	13.1 feet (91.7 watts)	13.1 feet

2. If an intersection is involved, plan ahead by starting the layout there. IP54 jumpers are available in 6", 12", and 24" lengths (TL-6JUMP-.5, TL-6JUMP-1, and TL-6JUMP-2 respectively, sold separately). Other accessories that are compatible with Trulux Tunable CCT (IP54) tape light include (each sold separately): TL-6SPL (splice connector).
3. Mark the location(s) of any jumpers or splice connectors, then determine the best length for all sections, keeping in mind the cut marks and max runs of each type of Trulux.
4. Determine the type and best location for the power supply in relation to the Trulux installation to determine routing of the power cord(s). See page 2 for details LED-DR DRIVERS FOR TRULUX CONTROLLERS.

CUTTING TRULUX

SPTL-RGBTW can be cut every 3.94" as marked on the tape light.
1. Determine nearest cut mark that is best suited for the specific installation.
2. Using a good pair of scissors, making sure the cut is square, make appropriate cuts.
3. The 3M® VHB protective strip on the back side of the Trulux can be left in place at the end to ease connection of snap connectors if they are to be used.

PRODUCT INFORMATION

IP54 reels include (3) TL-6PWR power connector kits with each reel.
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® RGB+TW controller (DMX-RGBTW-1Z) and a 5 channel receiver (REC-DMX-RJ45A-5CH) are required for color control of RGB+TW Trulux®. See individual controller instructions for more details.

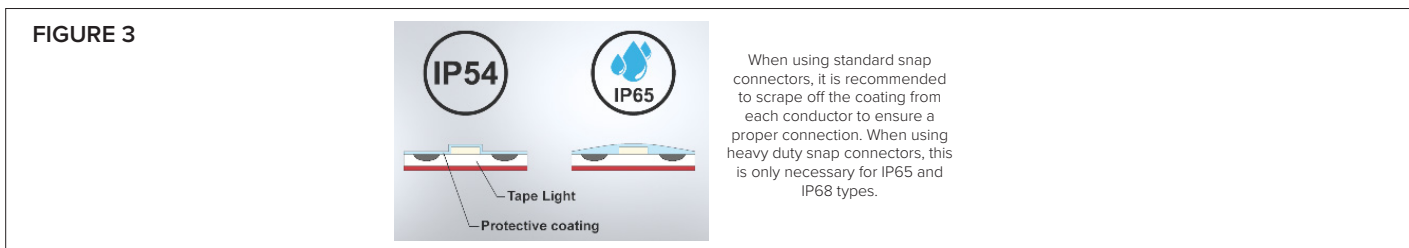## INSTALLATION INSTRUCTIONS
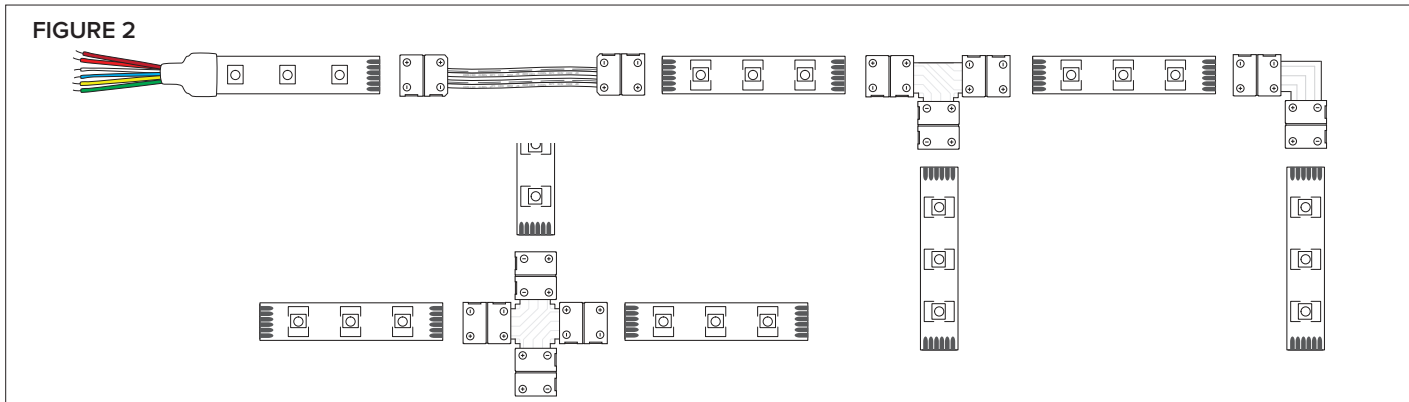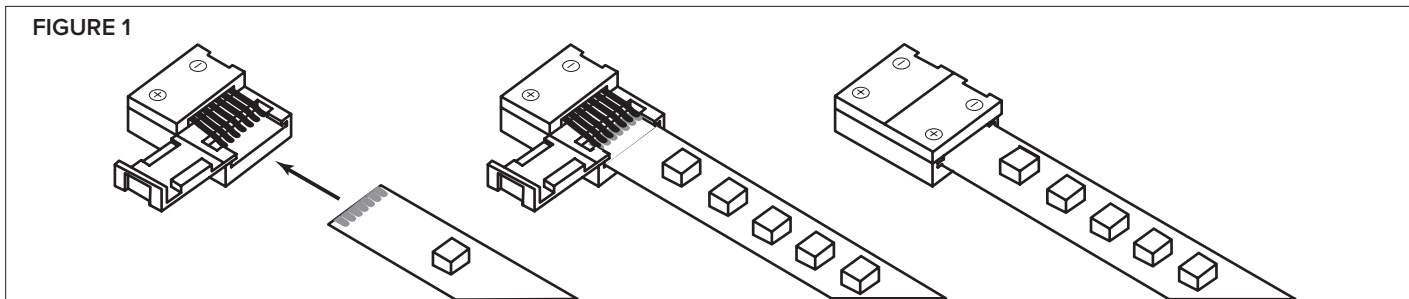### SPTL-RGBTW Series

CONNECTING AND MOUNTING TRULUX SECTIONS

This product has one end already prepared with soldered wire and white shrink tube for connection to the receiver.

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 the mounting surface and not be repositioned or removed.
2. Peel the protective backing from the adhesive tape and press the first piece of Trulux into place.
3. For extending any piece, connect a splice 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 (See Figures 1 and 2). The clip connectors have two pointed pins inside to help secure the tape light once closed. See figure 3 for additional notes on using snap 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. Aluminum extrusions are also available for a variety of mounting options.

FIGURE 1

FIGURE 2

FIGURE 3

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.

IP54   IP65

Tape Light
Protective coating

LED-DR DRIVERS FOR TRULUX® CONTROLLERS

Use the chart below to select the driver based on total length and type of tape light used.

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*
SPTL-RGBTW (3.94" cut marks)	7.0W/ft	13.1'	0.21ft - 3.85ft (1.5 - 27 watts)	0.42ft - 7.7ft (3 - 53.9 watts)	0.71ft - 12.85ft (5 - 90.0 watts)	1.07ft - 13.1ft (7.5 - 91.7 watts)

INSTALLATION INSTRUCTIONS
SPTL-RGBTW Series

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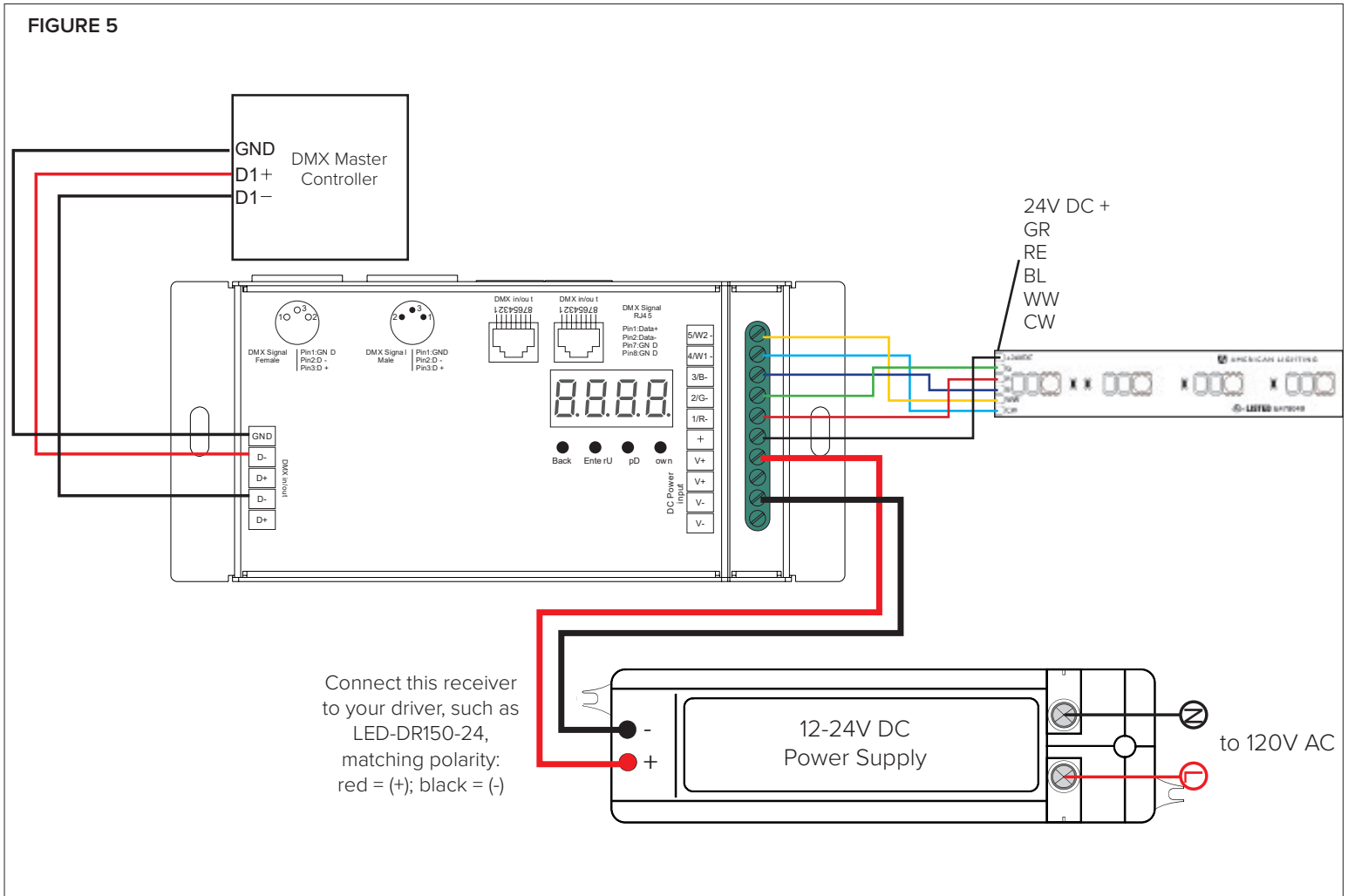
CONNECTING TRULUX TO THE RECEIVER
1. Determine which receiver and controller you need for the application. See CONTROLLER OVERVIEW below.
2. Attach power adapter wires to terminals of RECEIVER, following polarity markings.
3. The non-powered end of the Trulux does not require an end cap.

CONTROLLER OVERVIEW
NOTE: The following controllers are compatible with the Trulux RGB+Tunable White tape light.

CONTROLLER	POWER TO CONTROL	RECEIVER ITEM #	CAPACITY	POWER TO RECEIVER
DMX-RGBTW-1Z (White, touch)	12-24V DC	REC-DMX-RJ45A-5CH	1 zone, 8A max	24V DC input

FIGURE 5

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

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.