



## INSTALLATION INSTRUCTIONS RGB 24V LED TAPE

T300RGB-24V  
T300RGB-24V-RD



\*\*DANGER: Prior to installation, disconnect power at the source.\*\*

Make sure you have all components listed below:

- LED tape
- 24VDC Power Supply
- Connectors (if creating DIY connections)
- Extrusion/Lens (optional)

# INSTALLATION INSTRUCTIONS

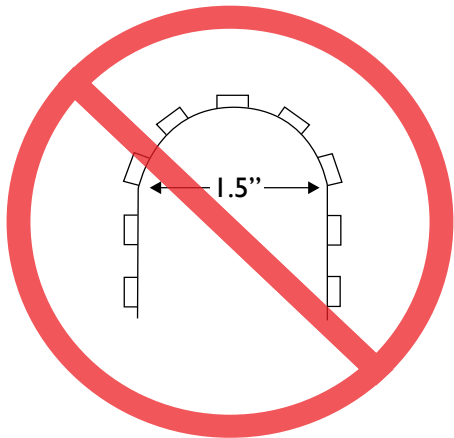
## RGB 24V LED TAPE

Please read all steps before beginning the installation.

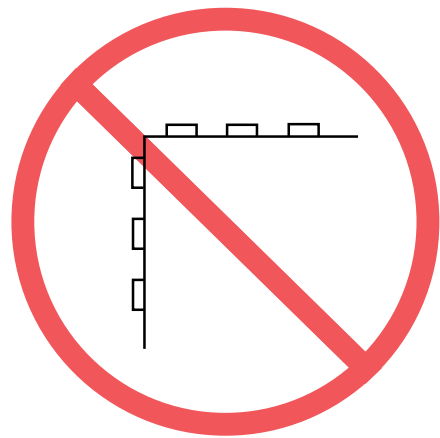
- **WARNING:** Do not connect directly to high voltage power (120v-277v). Use only with 24V DC hardwire or plug-in power supply. Factory warranty will be void if used otherwise.
- These products may represent a potential shock or fire hazard if improperly installed or attached in any way. Products should be installed in accordance with these instructions, local electrical codes and the National Electric Code (NEC).
- Do not energize LED tape light when rolled up in its spool.
- Uncoated products are intended for indoor use in dry locations. Coated products are intended for outdoor use or in damp/wet locations. Refer to product spec sheet for location ratings.
- Do not use if there is any damage to the unit or to the wiring/insulation. Inspect periodically.
- Do not route cords or LED tape through walls, doors, windows or any similar part of a building structure.
- Do not secure LED tape or its power cord with staples, nails, or any other sharp objects that may cause damage. Mounting adhesive is available (sold separately).
- Do not install LED tape closer than 6" to combustible material.
- Ensure proper gauge wires are installed between Power Supplies, Controls & LED tape to avoid voltage drop.
- Ensure applicable wires are in compliance with local codes (In-wall rated, wet-location, high temperature, etc.).
- Recommended load for power supplies is 80%.

# INSTALLATION INSTRUCTIONS

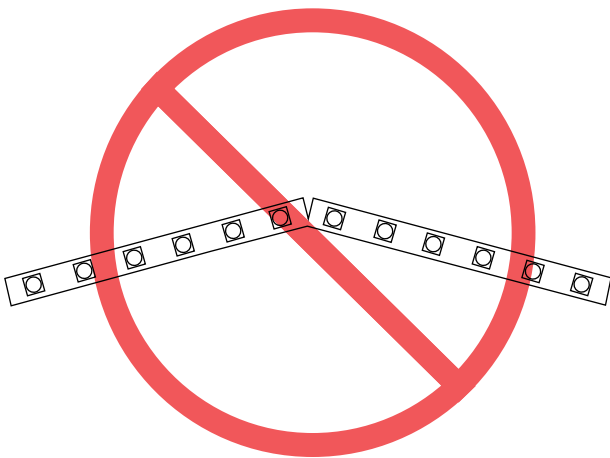
RGB 24V LED TAPE



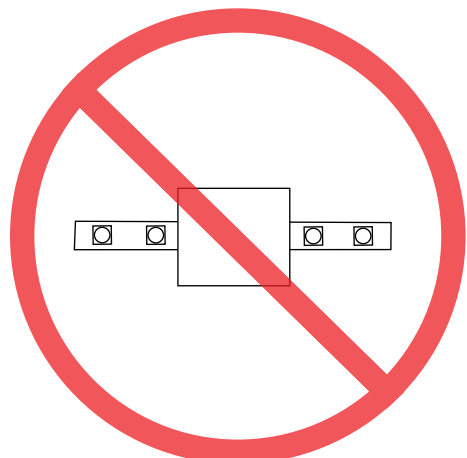
MINIMUM BEND RADIUS  
1.5 INCH



DO NOT FOLD OR CREASE  
LED TAPE



DO NOT BEND LED TAPE  
SIDE TO SIDE



DO NOT COVER LED TAPE OR  
APPLY EXCESS PRESSURE TO  
LED TAPE

# INSTALLATION INSTRUCTIONS

## RGB 24V LED TAPE

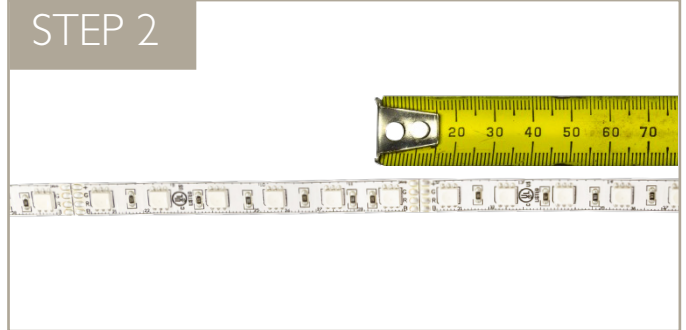
### Prep LED Tape for Installation

#### STEP 1



Remove the LED tape spool from its package and un-roll the LEDs.

#### STEP 2



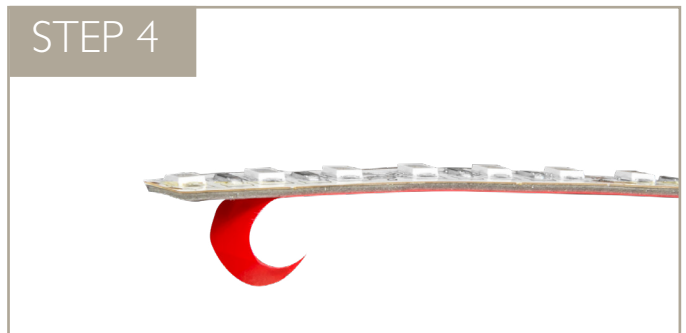
Measure the location where the LED tape will be placed and identify the cut point of the LED tape. The cut point will be marked with a black line, and/or a small scissors image.

#### STEP 3



Cut the Linear LED to the desired length. Make sure you cut along the marked line and that the cut is straight.

#### STEP 4



Peel back about a ¼ inch of the red backing and the adhesive tape. Make sure to expose the copper pads on the back of the Linear LED.

**NOTE:** This product can be interconnected and energized by soldering leads to the copper pads.

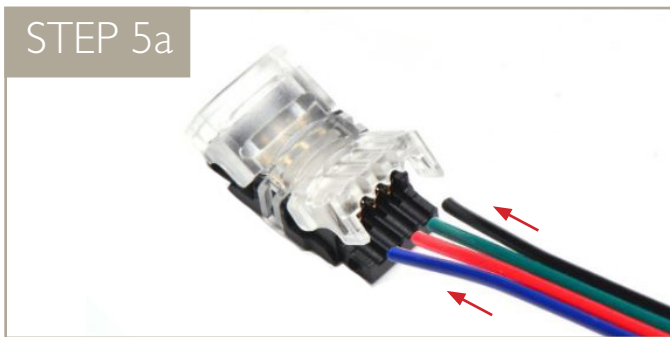
# INSTALLATION INSTRUCTIONS

## RGB 24V LED TAPE

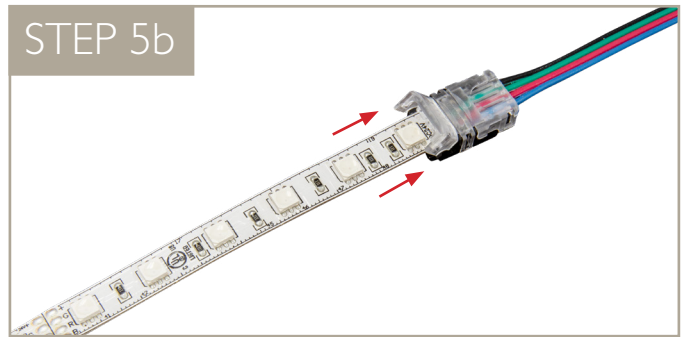
### Gripper Connector Installation

**IMPORTANT:** Skip these steps if your LED tape was soldered to specification by the factory. Only follow these steps if creating your own connections.

**NOTE:** To ensure proper operation, make sure the LED wires are the proper gauge before proceeding. Please refer to the “LLIA voltage drop chart” on Page 9.



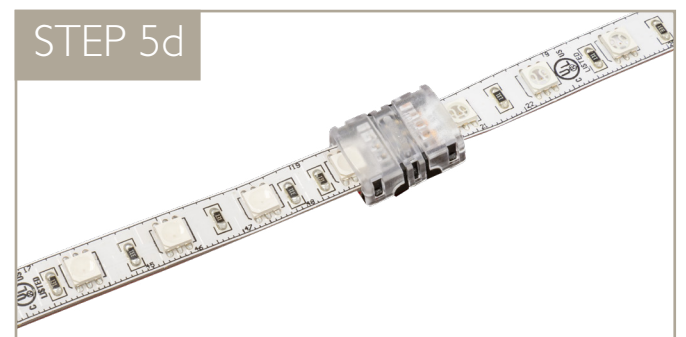
Carefully pry open the tops of the gripper connector, exposing the connection pins inside the connector on both ends. Insert wires into the larger end – do NOT strip wire.



Make note of which wire is positive (+) and which wires correspond to Red negative (R-), Green negative (G-), and Blue negative (B-). Align the LED tape's R-, G-, B-, and positive connections accordingly, then gently push the LED tape into the connector. Be sure to guide the tape over the pins inside the connector.



Tightly squeeze both ends of the gripper connector until the top covers click shut.



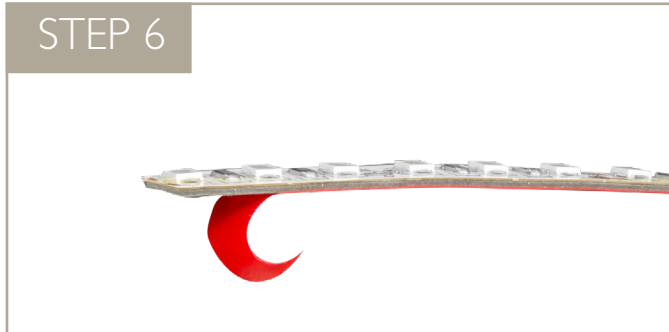
Use the LED-to-LED gripper connector if you are interconnecting LED tape sections. Be sure to align section's positive (+), Red negative (R-), Green negative (G-), and Blue negative (B-) connections.

# INSTALLATION INSTRUCTIONS

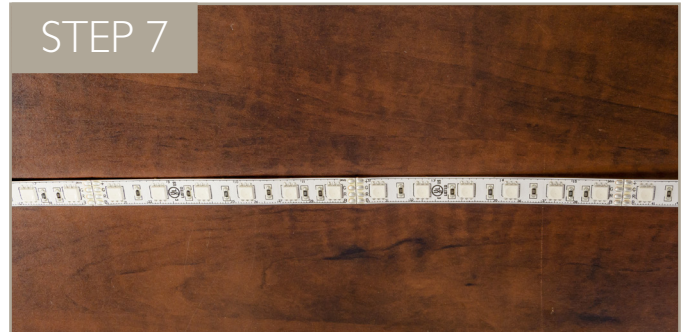
## RGB 24V LED TAPE

### Installation without Channel/Lens

**IMPORTANT:** Prior to mounting the LED tape, please ensure the surface is clean and free of any loose debris.



Remove the red adhesive backing from the LED tape.



Carefully press the LED tape to the mounting surface. Secure lead wire from connector.

# INSTALLATION INSTRUCTIONS

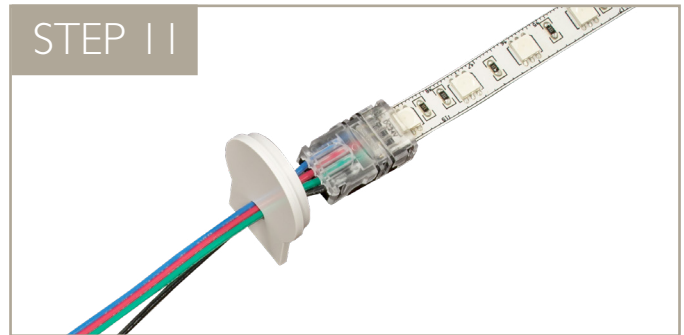
## RGB 24V LED TAPE

### Installation with Channel/Lens

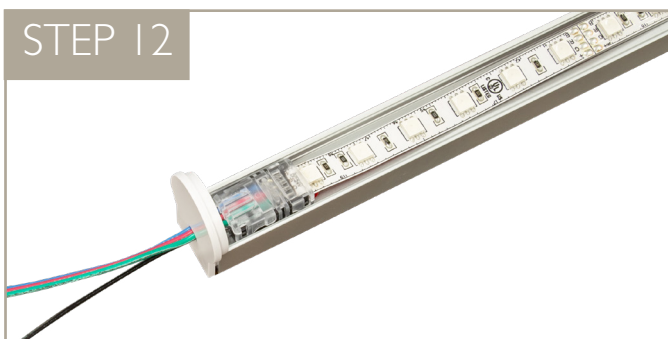
**IMPORTANT:** Verify that the LED tape and connector width are sized properly to fit into the channel with no interference to the lens.



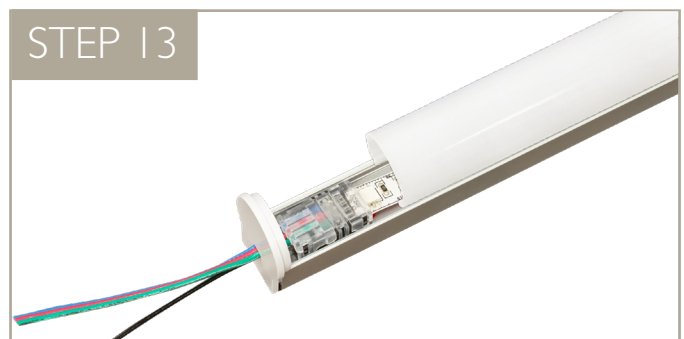
Measure the channel to verify that it is the appropriate length. Cut the channel if needed.



Pull the wires through the endcap(s) and remove red adhesive backing from the LED tape.



Carefully place inside the aluminum channel and place endcaps onto ends of channel. Ensure a tight fit between the channel and endcaps.



Measure the opening for the lens between the endcaps. Cut lens to desired length and insert into channel.



Attach channel to mounting surface. If using mounting clips, secure clip with screws and gently push the extrusion into the clip.

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## RGB 24V LED TAPE

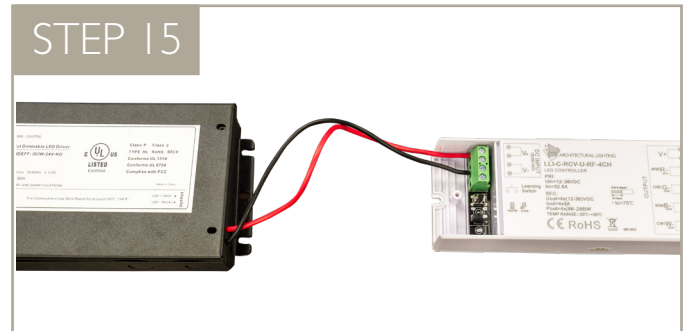
### Power Supply & Receiver Setup

**NOTE:** Verify that the power supply you are installing has the proper input and output voltage.

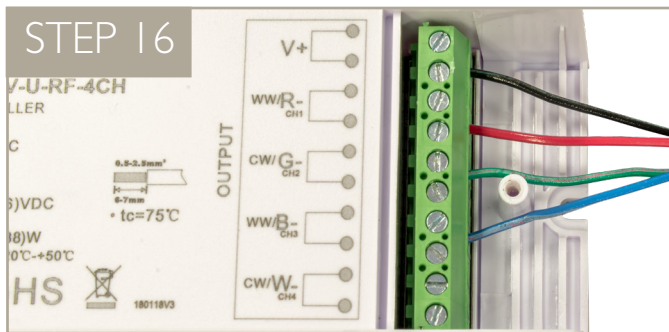
**IMPORTANT:** Polarity is crucial for the operation of the RGB LED tape. Please ensure that your wiring corresponds with the polarity of each copper pad.



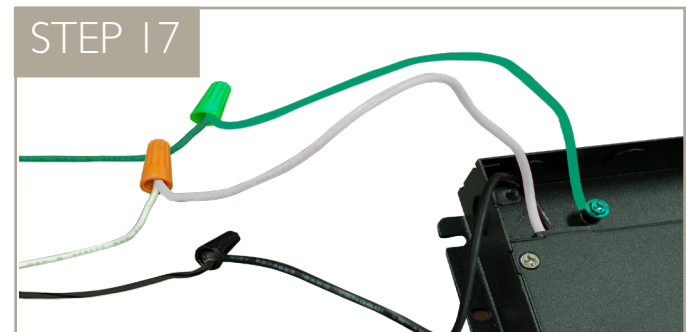
Open both wiring compartments on each end of the 4-channel receiver.



Connect the positive (+) wire from the power supply to the positive (+) input terminal of the receiver. Connect negative (-) wire from the power supply to the negative (-) input terminal of the receiver.



Connect the wires from the RGB LED tape to the output terminals of the receiver. Connect the positive (+) wire to the positive (+) input terminal, and connect the color wires to the corresponding color negative (-) input terminals.



Connect the power supply to AC power/line voltage. Please refer to the wiring diagram of the power supply being used. Each power supply has its own specific wiring.

**NOTE:** Refer to the controller/receiver installation guides for more detail on connection and control of your RGB LED tape.



# INSTALLATION INSTRUCTIONS

## RGB 24V LED TAPE

### Low Voltage Wire Gauge Chart

24V DC Voltage Drop and Wire Length (ft.) Distance Chart

Power (W)		10W	20W	30W	40W	50W	60W	70W	80W	90W	100W	110W	120W
Wire Gauge	#18	189'	94'	63'	47'	38'	31'	27'	24'	21'	19'	17'	16'
	#16	300'	149'	100'	76'	60'	50'	43'	37'	33'	30'	27'	25'
	#14	478'	238'	159'	120'	95'	79'	68'	60'	53'	48'	43'	40'
	#12	753'	274'	250'	189'	150'	125'	108'	94'	83'	75'	68'	63'
	#10	1205'	599'	400'	303'	240'	200'	172'	150'	133'	120'	109'	100'