Control4 · VIBRANT

Performance RGBTW and RGBW Linear Light Installation Guide

Supported models

- C4-LP-RGBTW-13 Performance RGBTW Linear Light 13 ft
- C4-LP-RGBTW-98 Performance RGBTW Linear Light 98 ft
- C4-LP-RGBW-16 Performance RGBTW Linear Light 16 ft
- C4-LP-RGBW-98 Performance RGBTW Linear Light 98 ft

Introduction

Control4 Vibrant RGBTW tape light provides RGB + tunable white lighting. The Control4 Vibrant RGBW tape light provides RGB + 3000K white lighting. These durable tape lights are UV, flame, and saltwater resistant and easy to install. These tape lights require a 24V power supply and an Ethernet or Zigbee DMX decoder.

Box contents

Performance RGBTW Linear Light 13 ft

- Six-Wire Heavy-Duty Connector with 6" Lead (C4-LCH5-6WL) (3)
- Six-Wire Heavy-Duty 6" Jumper (3)
- Emery Board (1)

Performance RGBTW Linear Light 98 ft

- Six-Wire Heavy-Duty Connector with Lead (C4-LCH5-6WL) (6)
- Six-Wire Heavy-Duty Jumper (6)
- Emery Board (1)

Performance RGBW Linear Light 16 ft

- Five-Wire Heavy-Duty Connector with 6" Lead (C4-LCH5-5WL) (3)
- Five-Wire Heavy-Duty 6" Jumper (3)
- Emery Board (1)

Performance RGBW Linear Light 98 ft

- Five-Wire Heavy-Duty Connector with Lead (C4-LCH5-5WL) (6)
- Five-Wire Heavy-Duty Jumper (6)
- Emery Board (1)

Specifications and supported load types

The specifications are described below.

Model	RGB + TW
Model numbers	C4-LP-RGBTW-13 / C4-LP-RGBTW-98
Color temperature	RGB + 1800K–6000K white
Voltage	24V DC
Wattage	7W/ft (23W/m)
Lumens	Up to 410 Lm/ft (1345 Lm/m)
IP rating	IP54 – coated
Operating temperature	41 to 158°F (5 to 70°C)
Maximum run	13.1 ft (4 m)
Tape size	0.46" (12 mm)
Cutting increment	3.94" (100 mm)
Reel length	C4-LP-RGBTW-13 — 13.1 ft (4 m) C4-LP-RGBTW-98 — 98.4 ft (30 m)
Dimming	5-100% requires Ethernet or Zigbee DMX controller
Control method	24V DC power supply, dimmer switch

Model	RGB + W
Model numbers	C4-LP-RGBW-16 / C4-LP-RGBW-98
Color temperature	RGB + 3000K white
Voltage	24V DC
Wattage	4.4W/ft (14.4W/m)
Lumens	Up to 240 Lm/ft (787.4 Lm/m)
IP rating	IP54 – coated
Operating temperature	41 to 158°F (5 to 70°C)
Maximum run	22 ft (6.7 m)
Tape size	0.46" (12 mm)
Cutting increment	6.56" (166 mm)
Reel length	C4-LP-RGBTW-13 — 16 ft (5 m) C4-LP-RGBTW-98 — 98.4 ft (30 m)
Dimming	5-100% requires Ethernet or Zigbee DMX controller
Control method	24V DC power supply, dimmer switch

Warnings and considerations

IMPORTANT! Read all installation instructions before beginning; if not qualified, do not attempt installation. Contact a qualified electrician

IMPORTANT! 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.

IMPORTANT! Do not cover this product with paper surface coverings, fabrics, streamers, or other similar combustible materials.

IMPORTANT! Do not operate tape light on the reel, nor while it is coiled.

IMPORTANT! Do not route the cord or tape light through walls, ceilings, doors, windows, or any similar part of the building structure.

IMPORTANT! Secure tape light using only the adhesive provided with the tape and/or factory recommended mounting clips, mounting track, and aluminum channel (sold separately).

IMPORTANT! Do not secure this product or its cord with staples, nails, or like means that may damage the outer jacket or cord insulation.

IMPORTANT! Do not use if there is any damage to the tape light, diodes or power cord insulation; inspect periodically.

IMPORTANT! Do not install on gates or doors, or where subject to continuous flexing.

IMPORTANT! Do not install in airtight tanks or enclosures of any kinds.

IMPORTANT! 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; an 80% maximum load is recommended.

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.

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 tape light or bend past the minimum bending radius of 9.4" (24 cm) whether lighted or unlighted.

WARNING! This device must be protected by a circuit breaker (20A max).

IMPORTANT! Using this product in a manner other than outlined in this document voids your warranty. Further, Snap One is not liable for any damage incurred with the misuse of this product.

IMPORTANT! **Snap One does not guarantee the performance of any bulb or lamp/fixture in your environment. Customer assumes all risks, including any damage to control4 products, associated with (i) the type, load rating and quality of the bulb and lamp/fixture, or (ii) any use or installation not in accordance with the documentation furnished by control4, either with the control4 product or at www.control4.com.**

Installing the tape light

Ensure that the location and intended use meet the following criteria:

- Your tape light does not exceed the maximum run length.
- Your power supply is rated for the total wattage of the run.
- The voltage drop from the tape light length and the length of connecting wires does not go below 21.6V.

**To install the tape light, perform the following steps:**

1. Before you install the tape light, connect all connectors with lead wires and jumpers.
2. Align the end of the tape so that it is centered in the extrusion and parallel with its sides.
3. Using firm pressure, work your way along the tape, pressing it into the extrusion.
4. If installing the tape light to a curved surface, you may cut the extrusion into smaller segments. However, they must be spaced closely enough that the tape light does not hang or sag.

Cutting the tape light

1. Cut the tape light only at a designated cut increment. Cut increments are clearly marked on the tape light. Ensure an even cut along the center of the copper conductors to ensure enough surface area is exposed for snap connector pins to pierce through.
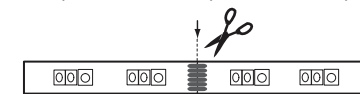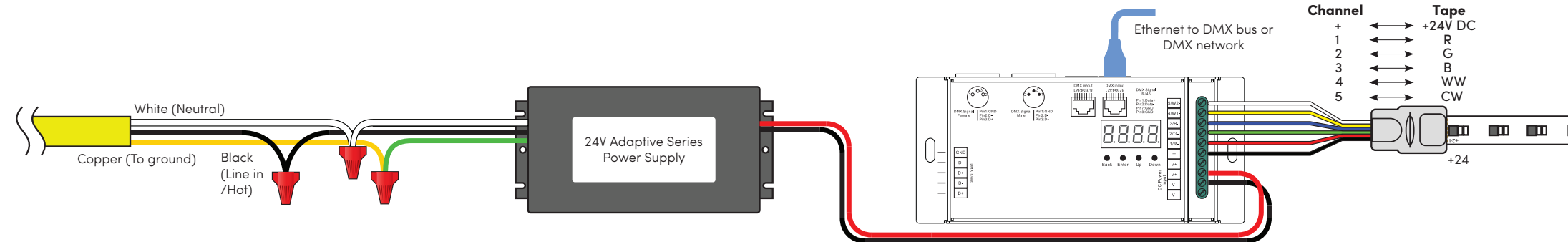

2. The tape light is protected by clear coating. Use the supplied emery board on the exposed copper conductors to remove the coating for a better connection.
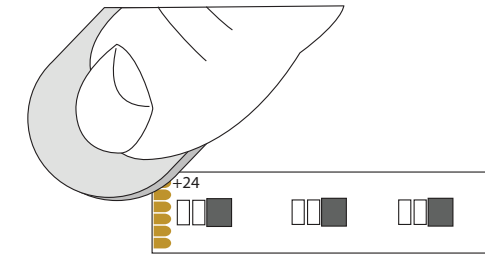
NOTE: You do not need to solder or terminate the cut end of the tape light.

IMPORTANT! Do not exceed the maximum tape light run length in any single run.

WARNING! Ensure the cut angle is 90°. Cutting diagonally or horizontally through the tape light body may damage the tape light.

Connecting the tape light using heavy-duty connectors with leads or jumpers

1. Ensure polarity of the conductors on the connected piece of tape light and the polarity of the wires align.
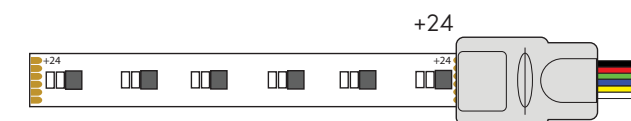
2. Peel a small portion of the protective backing from the tape light on the end to be connected, then insert the cut tape light end into the Five/Six-Wire Heavy-Duty Connector.
3. Close the connector onto the tape light. Using pliers, apply pressure on each side of the connector, not just in the middle. Ensure the teeth cut through the tape light and the connector closes completely.

Connecting the DMX decoder to RGBTW tape light

1 Ensure the power source is disconnected from the DMX decoder.
2 Connect the tape light to the DMX decoder as shown below.
3 Connect the power supply to the DMX decorder.
4 Connect the DMX decoder to the DMX gateway (or to the Zigbee network if using the Zigbee model).
5 Install the power supply as shown in the power supply documentation.
6 Refer to the DMX decoder documentation for additional configuration here: ctrl4.co/vibrant-dmxdecoder-ig

Channel		Tape
+	←→	+24V DC
1	←→	R
2	←→	G
3	←→	B
4	←→	WW
5	←→	CW

Ethernet to DMX bus or DMX network

White (Neutral)

Copper (To ground)   Black (Line in /Hot)

24V Adaptive Series Power Supply

+24

✏️ **Pro Tip:** If you exceed the run length, you may run power from the same power supply to each end of the tape light.

Warranty and legal information

Find details of the product's Limited Warranty at *snapone.com/legal* or request a paper copy from Customer Service at *866.424.4489*.
Find other legal resources, such as regulatory notices and patent information, at *snapone.com/legal*.