

Westflex® LED Neon

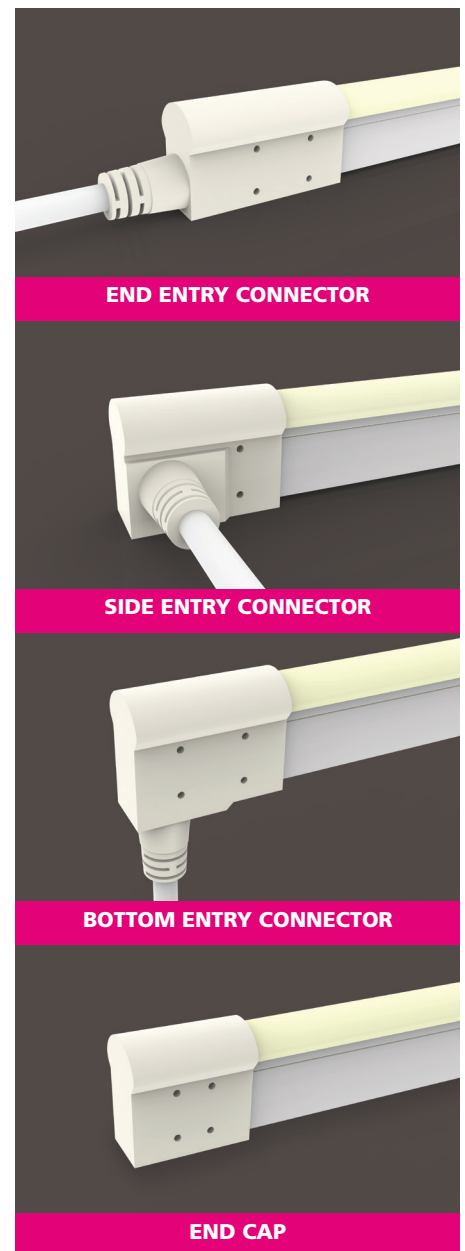
Installation Manual

The Westflex® LED Neon product is a solid-state replacement for neon lighting and building outlines. It is available in the following options: Round-top (horizontal bending), Flat-top (horizontal bending) and Side-bend (vertical bending). It's flexible, is available in White, Solid colors, Tunable White, RGB, RGBW, Pixel Addressable RGB, and Pixel Addressable RGBW. It is IP67 rated for use outdoors.

Fixtures will be supplied with pre-installed dual-molded front connectors with 10' leads along with either dual-molded end caps or dual-molded back connectors as well (depending upon the length of the fixture, and color type). This product can be run up to 32' on a single feed, or you can run up to 64' if power is fed from both ends.

We stock various accessories as well, such as mounting clips and mounting track. We also offer complete DMX addressable and programmable control systems.

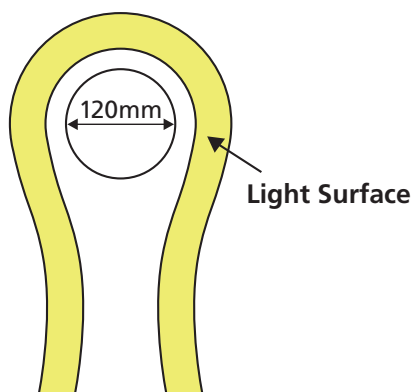
The key to the success and long life of this product is correct installation. This document will serve as a guide to the proper procedures for assembly and installation.



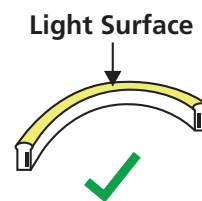
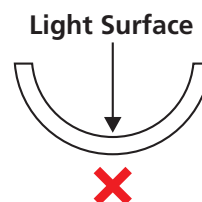
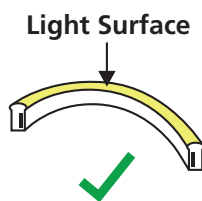
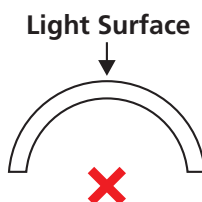
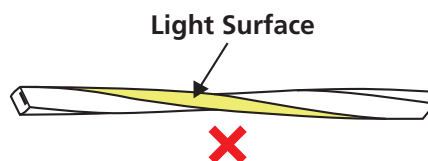
PRECAUTIONS TO TAKE WHILE INSTALLING

The diagrams below will help identify things to avoid while installing this product.

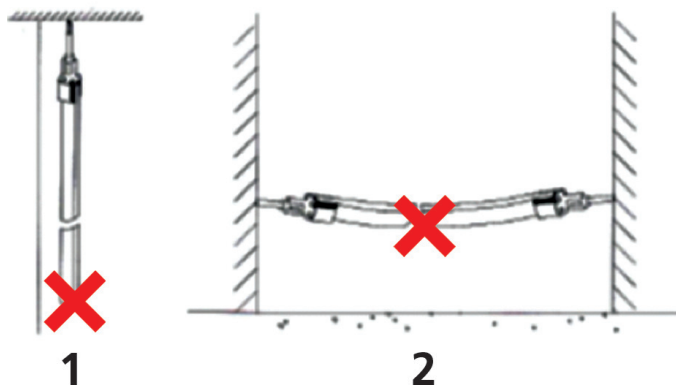
Minimum bending diameter 120mm



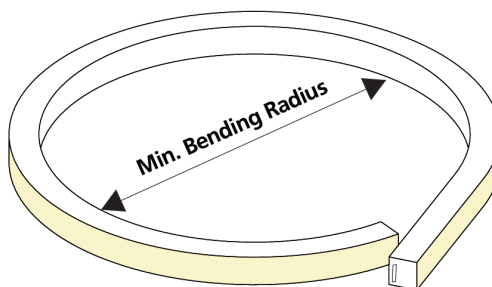
MINIMUM BENDING RADIUS 120MM (4.72")
(HORIZONTAL BEND MODEL SHOWN ABOVE)



DO NOT TWIST THE PRODUCT. SEE ABOVE
PROPER & IMPROPER BENDING METHODS
(HORIZONTAL BEND MODEL SHOWN ABOVE)



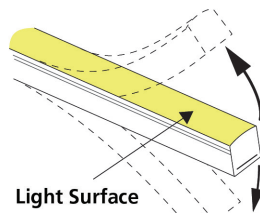
DO NOT HANG THE PRODUCT BY ITS CABLES



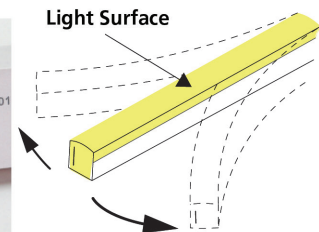
MINIMUM BENDING RADIUS 300MM (11.81")
(VERTICAL BEND MODEL SHOWN ABOVE)

Fixture Bending:

Note and follow the bending mark on the side of the light body, otherwise you may damage the PCB inside, and permanently damage the fixture. **This type of damage is not covered by our warranty.**



Vertical Bending



Horizontal Bending

Step One: Measure Twice!

Make sure you have good measurements for your fixture run lengths as we custom manufacture them to your specification. Westflex® LED Neon is available in a variety of shapes and colors, and maximum fixture lengths vary depending upon the model and color you choose. When you provide run lengths for your project, we make sure those maximum fixture lengths are not exceeded; **THIS PRODUCT IS NOT FIELD CUTTABLE.** Cutting these fixtures will void their warranty, and most likely destroy the fixture, especially if it is installed in a wet location.



Step Two: Mounting

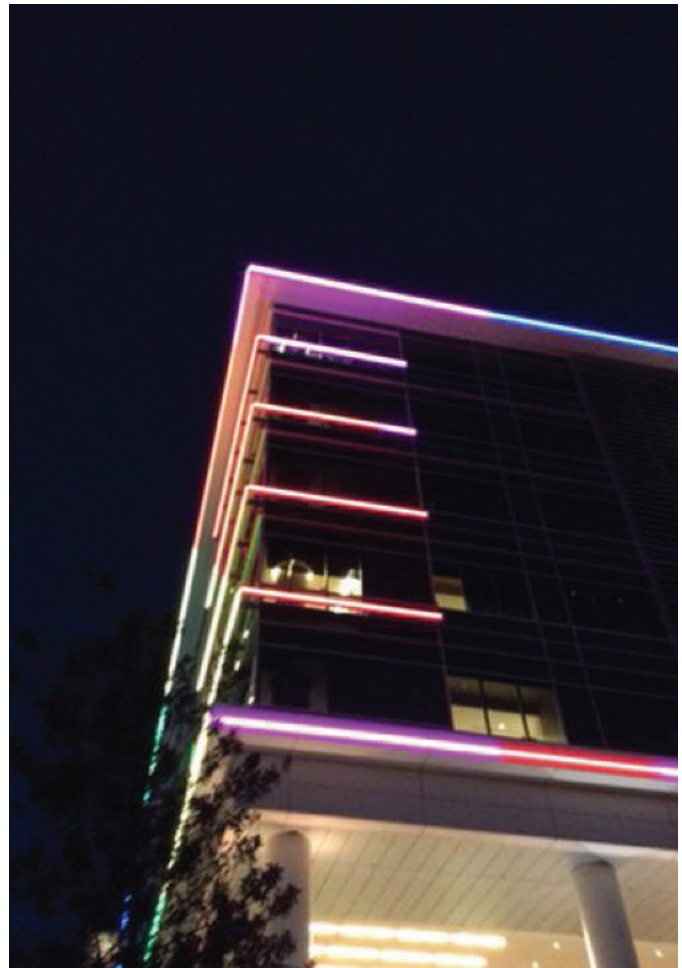
We provide screw-mount mounting clips or 3ft. long rigid mounting tracks with all of our Westflex® LED Neon systems. Clips are used for curved runs (we recommend one clip per foot for best results), mounting tracks are used for straight linear runs and can be field cut if necessary. First the clips or track get fastened to the mounting substrate. Then the fixture simply press-fits into the track; the track is serrated on the inside to SECURE the fixture. The minimum bending radius for each model is as follows:

4.75" for Westflex® Round-top
(horizontal bending)

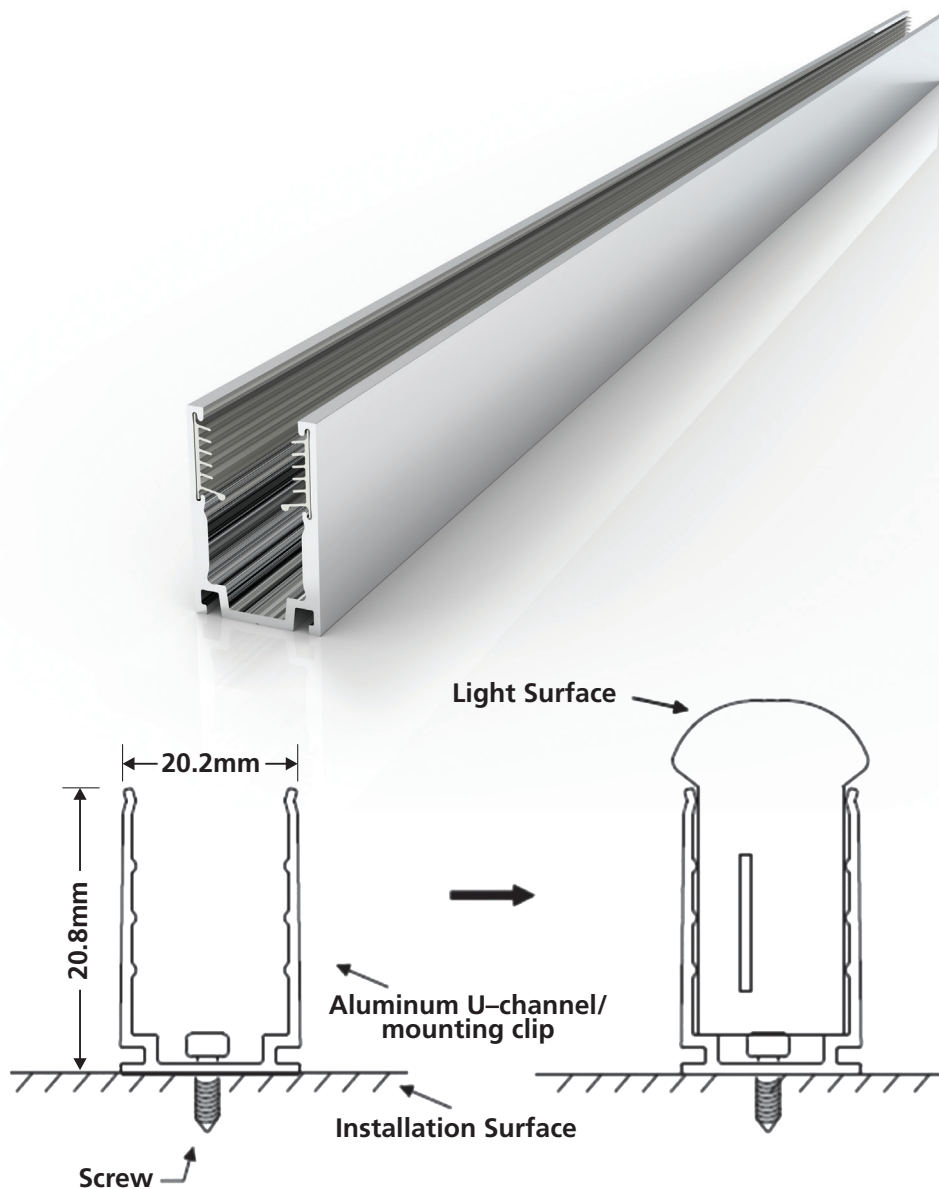
4.75" for Westflex® Flat-top
(horizontal bending)

11.81" for Westflex® Side-bend
(vertical bending)

**4.92" for Westflex® Pixel Addressable
(Round-top/Flat-top)**
(horizontal bending)



MOUNTING CHANNEL AND CLIP (All Horizontal Bend Versions)



Mounting Clip length 20mm (Horizontal & Vertical Bend)

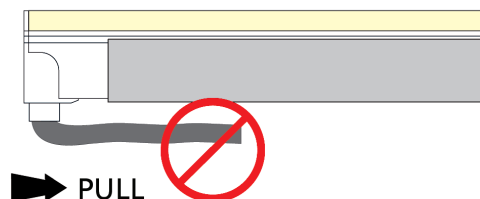
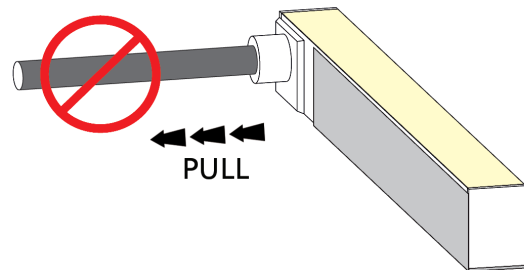
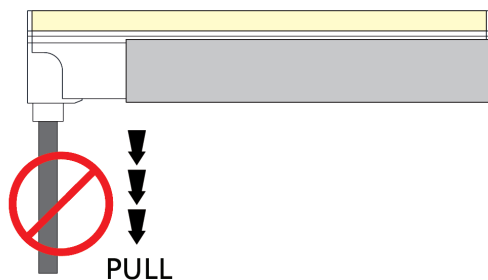
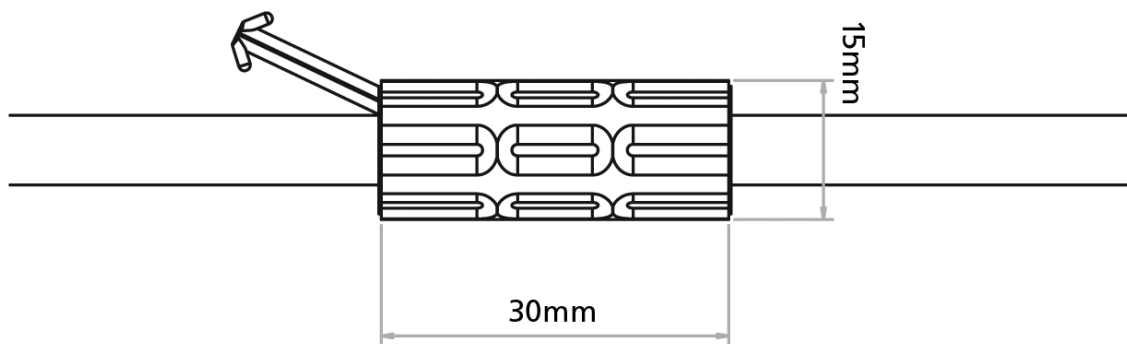
Vertical Bend Mounting Track (not shown) Dimensions:

20.2mm Wide x 20.8mm High

IMPORTANT NOTES BEFORE MOVING ON:

THIS PRODUCT MUST BE INSTALLED BY A LICENSED ELECTRICAL CONTRACTOR!

- Ambient temperature must be above 40°F when installing. Do not attempt installation below this temperature.
- Do not exceed the minimum bending radius/diameter.
- Do not drop the fixture.
- Do not twist the product.
- Do not cut the anti-wicking ferrule. Cutting the anti-wicking ferrule will void the warranty.
- Do not hang the product by its leading cables.

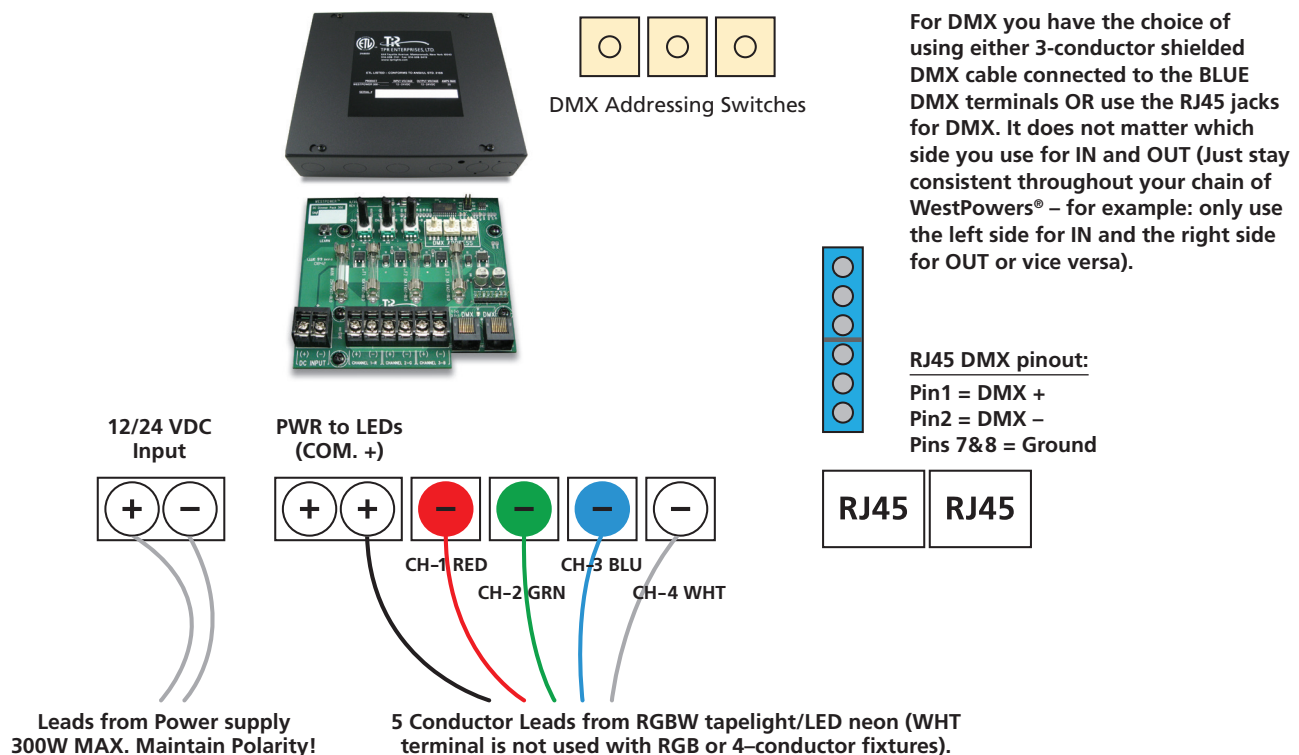


Step Three: Wiring

Wire the Front connector(s) back to the Power Supply (for White and Solid Colors), or to the WestPower DC Dimmer (for RGB and RGBW color change). **Note that Polarity is extremely critical in this step!** The Westflex® LED Neon is a 24VDC product. When wiring up White and Solid Colors, the 24VDC+ and 24VDC- must be wired to their proper terminals on the Power Supply. In 24VDC configurations, the Red wire is + and the Black wire is -. **Reversing polarity will cause the Neon to fail and will void the warranty!**

In RGB and RGBW configurations, the Red, Green, Blue and White wires will be wired on to the WestPower® terminals according to the diagram below. More information can be found in the WestPower®300-4 User Manual which is available on our website www.tprlights.com.

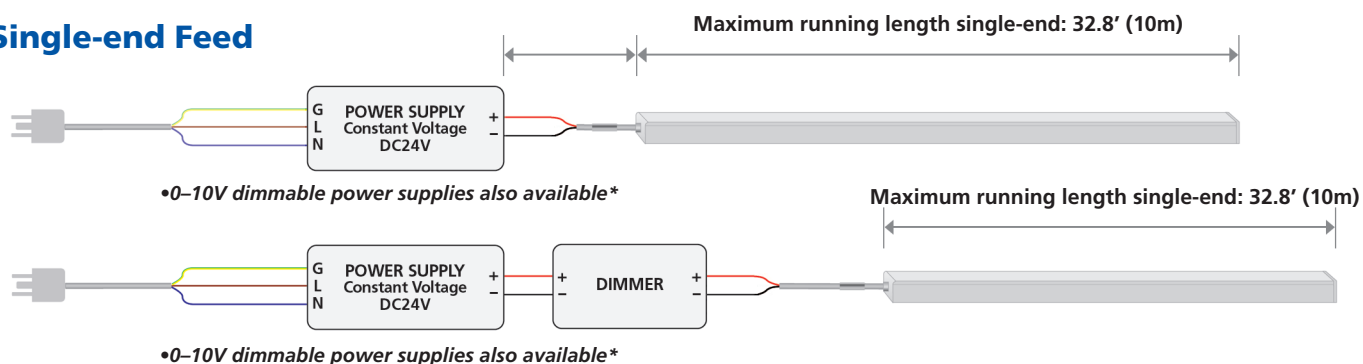
WestPower® 300-4 Wiring Configuration for RGB/RGBW Tapelight or LED Neon



TPR Westflex® LED Single Color/White Wiring Diagram for Round-top, Flat-top and Side-bend (vertical bending) LED Neon types

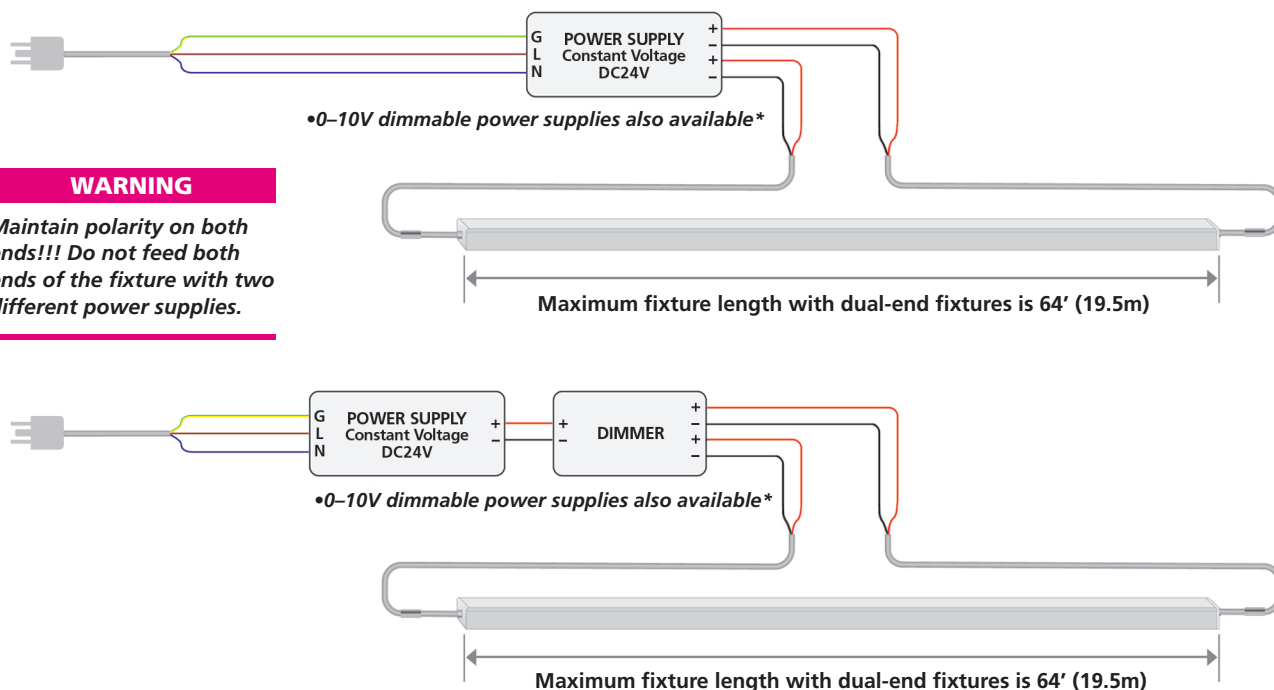
All front connector leading cables on our Westflex® LED single color neon will be manufactured with AWG18-2 cables 10' in length.
If an extension should be necessary, see our 24 volt wiring gauge calculator on our website for maximum loading lengths.

Single-end Feed



Double-end Feed

Why use double feeds? We use front connectors on each end of Westflex® LED single color neon fixtures that exceed the maximum single fed fixture length (32.8')



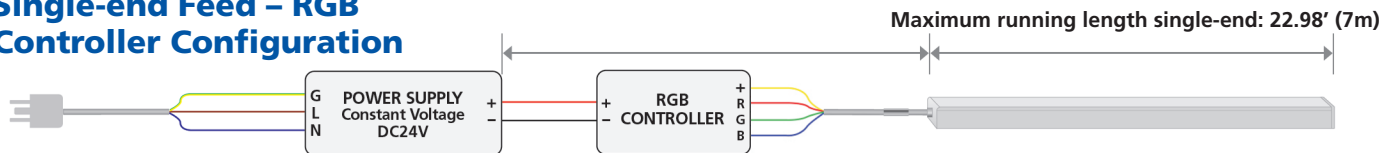
WARNING

Maintain polarity on both ends!!! Do not feed both ends of the fixture with two different power supplies.

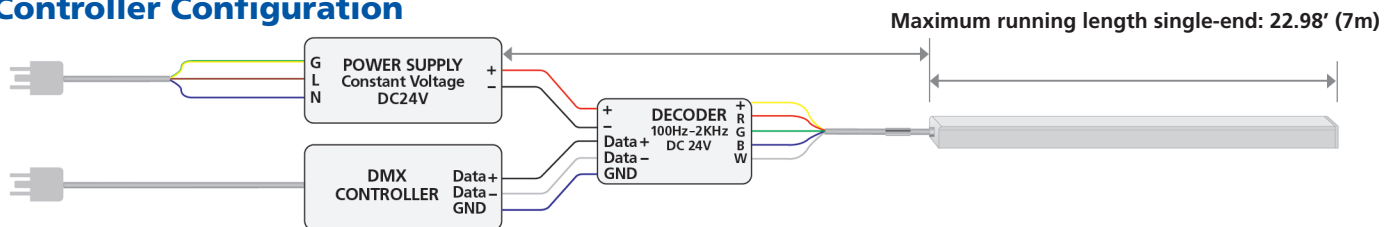
TPR Westflex® RGB Neon Wiring Diagram

All front connector leading cables on our Westflex® LED RGB color neon will be manufactured with AWG18-4 cables 10' in length.
If an extension should be necessary, see our 24 volt wiring gauge calculator on our website for maximum loading lengths.

Single-end Feed – RGB Controller Configuration

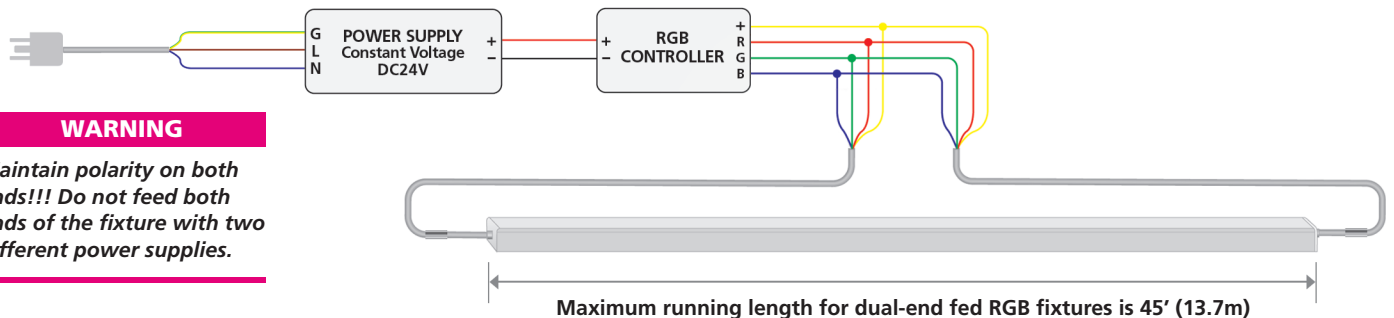


Single-end Feed – DMX Controller Configuration



Double-end Feed – RGB Controller Configuration

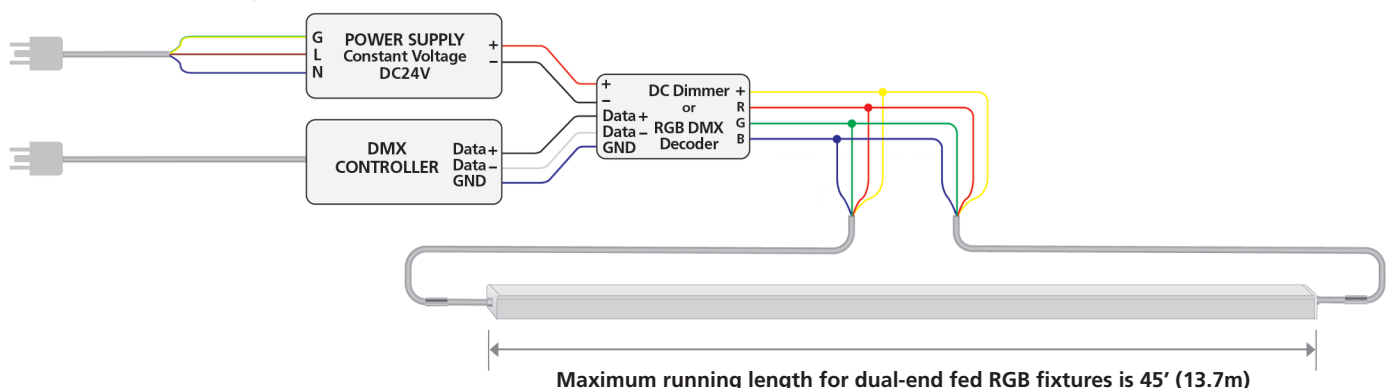
Why use double feeds? We use front connectors on each end of Westflex® LED single color neon fixtures that exceed the maximum single fed fixture length (32.8')



WARNING

Maintain polarity on both ends!!! Do not feed both ends of the fixture with two different power supplies.

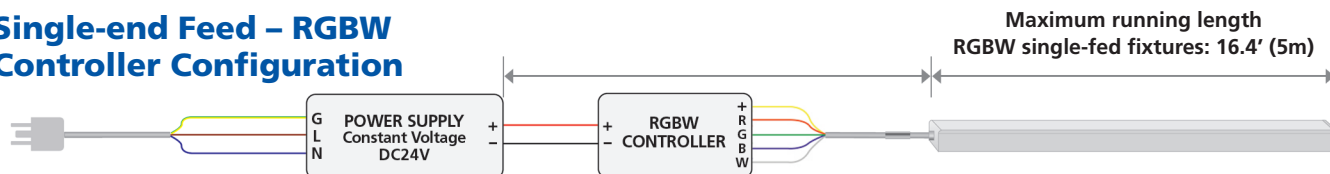
Double-end Feed – DMX Controller Configuration



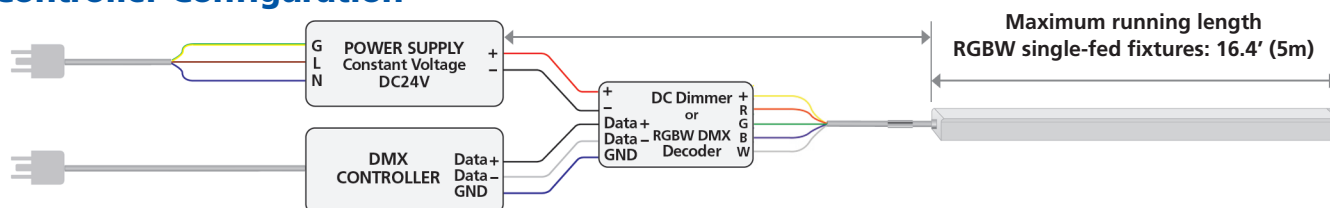
TPR Westflex® LED RGBW Neon Wiring Diagram for Round-top, Flat-top and Side-bend (vertical bending) LED Neon types

All front connector leading cables on our Westflex® LED RGBW color neon will be manufactured with AWG18-4 cables 10' in length. If an extension should be necessary, see our 24 volt wiring gauge calculator on our website for maximum loading lengths.

Single-end Feed – RGBW Controller Configuration

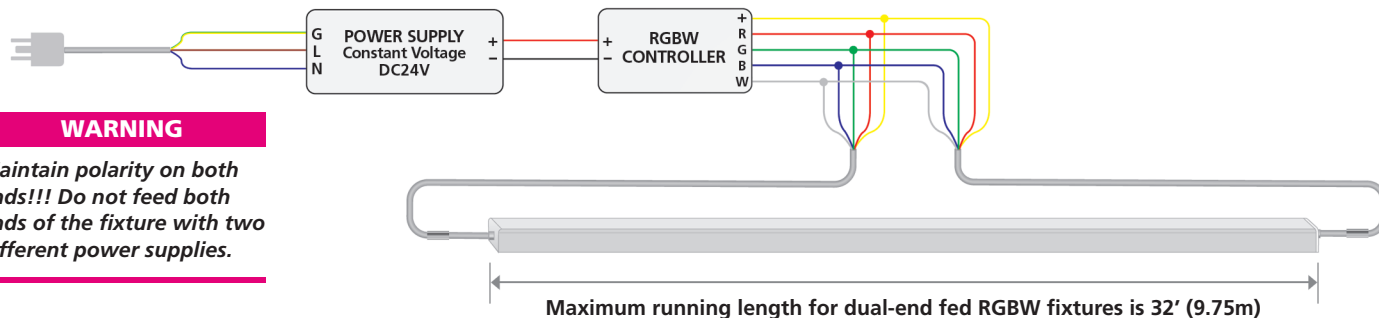


Single-end Feed – DMX Controller Configuration



Double-end Feed – RGBW Controller Configuration

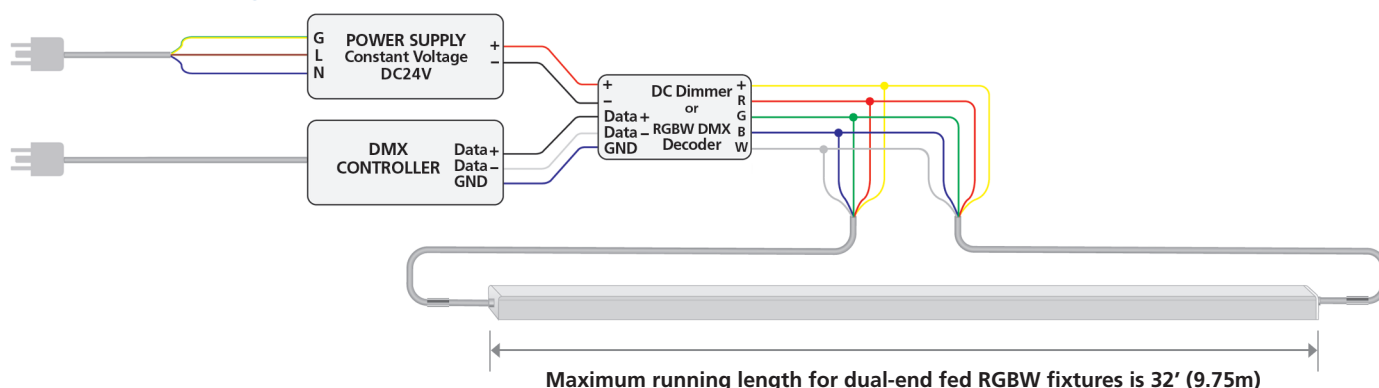
Why use double feeds? We use front connectors on each end of Westflex® LED single color neon fixtures that exceed the maximum single fed fixture length (16.4')



WARNING

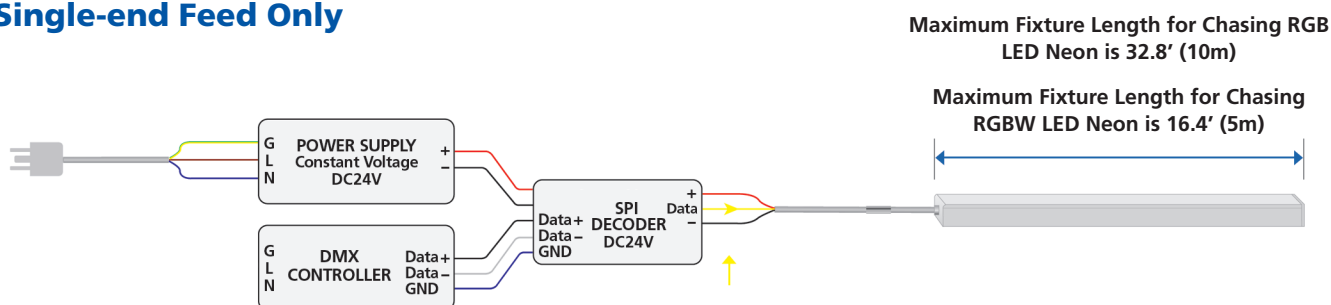
Maintain polarity on both ends!!! Do not feed both ends of the fixture with two different power supplies.

Double-end Feed – DMX Controller Configuration



TPR Westflex® Pixel Addressable LED Neon (RGB and RGBW) Wiring Diagram for Round-top, Flat-top and Side-bend (vertical bending) variations

Single-end Feed Only



IMPORTANT

SPI data only flows in one direction. We do not recommend daisy-chaining fixtures together or dual-feeding fixtures from single sources of power/data for this fixture type.