

EcoFlex 4-in-1 LED Neon - Vertical Bend

Part Numbers: LN-ECO-VB-RGB3000K-10m, LN-ECO-VB-RGB6500K-10m,
LN-ECO-VB-RGBA-10m



EcoFlex 4-in-1, RGB + [3000K/6500K/Amber] LED Neon is a highly flexible and cost-effective LED Neon product that expands your neon color mixing possibilities by combining 3000K/6500K/Amber and RGB. This neon allows you to achieve the creative potential of traditional glass neon while getting all the benefits of LED. This is the “vertical bend” version, which means it bends like standard strip light, but provides the diffused look of neon. It can be used to wrap around three-dimensional objects like columns, with the light shining outward.

EcoFlex LED Neon is UL Listed and saves time and money on installation. It runs on 24 volts DC and its silicone casing provides protection and excellent diffusion for a hotspot-free appearance. EcoFlex LED Neon is incredibly flexible, with a 80mm minimum vertical bending radius. It is low maintenance and easy to control. This product comes with 39 inch [1 meter] leads on each end so it can be cut and capped, if needed. It is ideal for use in scenic, architectural, retail, and other decorative lighting installations.

Specifications

Voltage:	24VDC
Power consumption:	9.6 watts per meter (2.97 watts per foot)
Dimensions:	16mm x 16mm (0.63” x 0.63”)
LED quantity:	96 LEDs per meter
Minimum cutting length:	62.5mm (2.46”)
LEDs per cut segment:	6
Minimum bending diameter:	80mm (3.15”)
Waterproof rating:	IP65
Certifications:	UL, RoHS
Warranty:	5 year limited

Warning

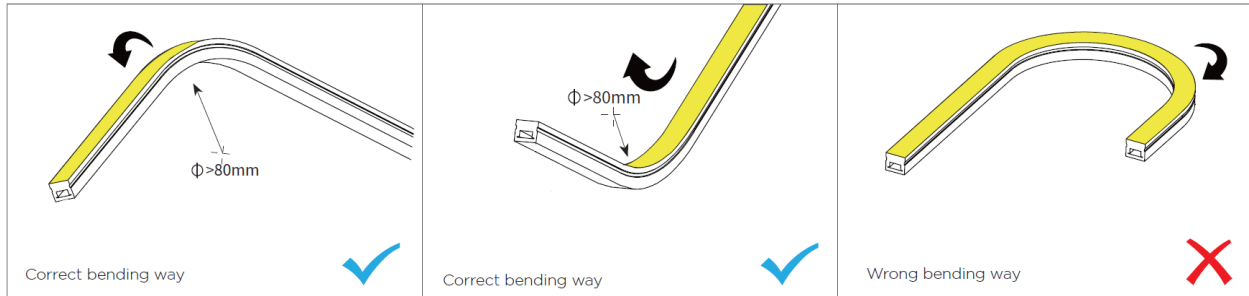
- Before making any cuts or performing installation/maintenance, be sure all electricity is disconnected.
- Operate LED Neon lighting according to instructions only.
- Confirm the polarity of connectors before inserting.
- Connect and cut this product correctly. **Must use cutting shears designed to cut LED Neon (listed in companion parts tab).**
- Incorrect operation will damage the circuitry.

Caution

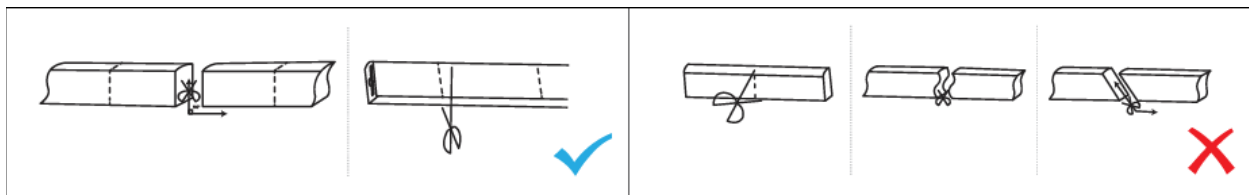
- Use only factory-recommended connectors and accessories.
- Recommended operating temperature is below 45°C (110°F) ambient temperature.
- Do not bend and handle light when ambient temperature is below 0°C (32°F), as the lights can become brittle and susceptible to damage below 0°C.

Assembly and Installation

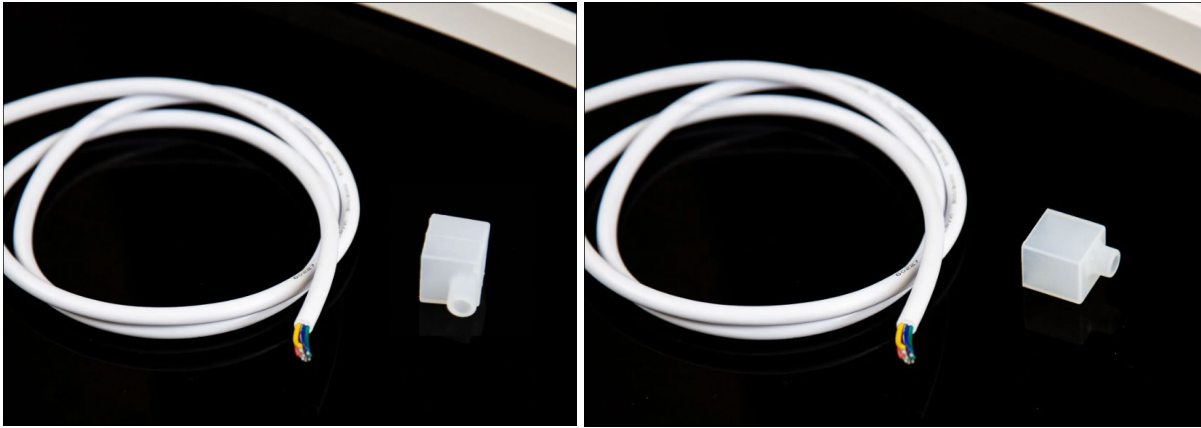
1. Be sure to mount the Eco Flex LED Neon correctly. Vertical Bend Eco Flex LED Neon can only be vertically bent. Horizontally bending will cause damage.



2. Eco Flex LED Neon can be cut every six LEDs at specific cut points. Scissor marks on the side of the rope indicate where cuts can be made. Be sure your cut is a straight line, perpendicular to the rope light, as shown below.



EcoFlex LED Neon – Vertical Bend - Solder Connection Kit (LN-ECO-VB-R4, LN-ECO-VB-S4)



Installation Steps:

1. Use wire cutters or a razor blade to cut back the silicone sheath and expose the solder pads.



2. Solder the wire to the solder pads. The red wire is attached closer to the front of the LED Neon.
3. Pour Silicone Glue over the solder pads and then thread the cable through the end cap.
4. Fill the cap with glue to ensure a tight seal around both the LED Neon segment and the cable.
5. Affix the cap tightly to the LED Neon and around the cable.



6. Let the LED Neon segment dry for 12 hours before installation.

EcoFlex LED Neon - Vertical Bend - End Cap (LN-ECO-VB-EC)



Installation Steps:

1. Pour silicone glue (LN-ECO-GLUE) into end cap and affix it to the end of neon.



2. Let glue dry with the cap hanging downwards for 12 hours.



Safety Precautions

Please take the following precautions:

1. This equipment, like all electrical equipment, should be installed by a qualified person.
2. Do not expose these LEDs, dimmers or power supplies to intense electro-magnetic fields, including lightning.
3. The controllers and power supplies are not waterproof. Keep them dry.
4. Always observe proper polarity.

When installing LED lighting, it is a good idea to follow this “dry-run” procedure:

1. Be sure you have everything you need before you start.
2. Lay out your lights and power supply on the floor or table.
3. There is some resistance in the LED lighting. If you see any color fading or dimming at the end of a long run, you may have too many LEDs for your power supply and you might need a bigger supply or shorter runs. Use a bus structure as described in [rgb_manual.pdf](#). Call if you need assistance with larger projects.
4. Connect everything and test it to be sure it works and you have it connected properly. It is unlikely, but possible, that some part of your system is defective or was damaged during shipment. If that is the case, it will be very helpful to you to know that before you do all the work involved in installing custom LED lighting systems. You will also know if you damage anything during installation, which is really helpful in trouble-shooting because manufacturing defects and installation damage typically have very different solutions.

Once you have tested the system successfully, you are ready to install it. We recommend you install LEDs, electronic controls and dimmers in such a way that you have access to them in case they fail. All electrical components can fail.