

# LED Neon Light - 3D NEON RGB

This LED 3D Neon Light is durable and flexible with 120mm minimum bending diameter. It has three-dimensional emitting output providing uniform and even light without any hotspots. It is good for damp location. Using 24VDC power input, the power connection and installation of this 3D neon light is as same as regular LED strip light.

## Features

- Top bend, 3 dimensional light emitting and looks beautiful from every angle.
- RGB color changing controller.
- Soft bend flexibility, strong impact resistant and high weather resistance.
- Uniform, dot-free, smooth and comfortable luminary up to 16<sup>13</sup>/<sub>32</sub>ft run length.
- 50,000h long lifespan with 5 years limited warranty.
- UL listed.



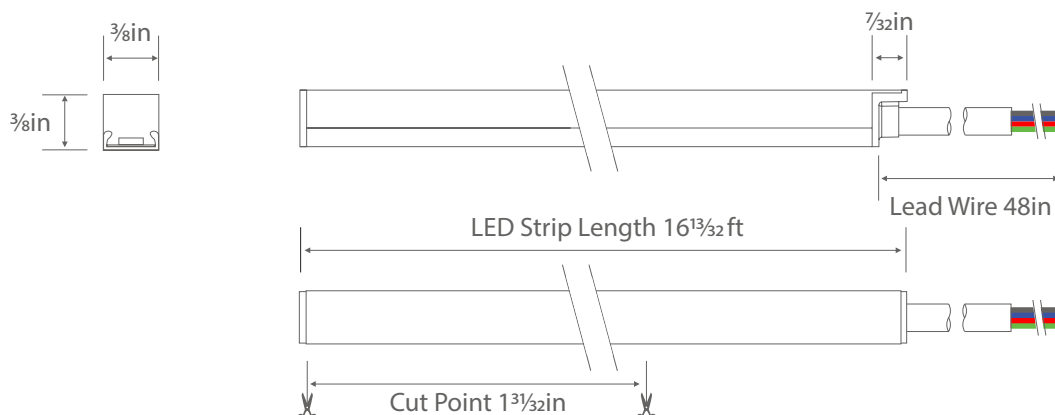
## Specification

|                             |                               |
|-----------------------------|-------------------------------|
| <b>Input Voltage</b>        | 24VDC                         |
| <b>Controller</b>           | RGB color changing controller |
| <b>Lead Wire</b>            | 20 AWG, 4ft (4 wires)         |
| <b>Color</b>                | RGB                           |
| <b>Power Consumption/ft</b> | 4.4W                          |

|                              |                                     |
|------------------------------|-------------------------------------|
| <b>Dimensions</b>            | 3/8 x 3/8 in                        |
| <b>Maximum Run Length</b>    | 16 <sup>13</sup> / <sub>32</sub> ft |
| <b>LED Chip</b>              | 3535                                |
| <b>Operating Temperature</b> | -20°F~60°F                          |
| <b>Lumen Maintenance</b>     | 50,000 hrs                          |

## Models

| Model No.                    | Color | Brightness/ft | Power/ft | CRI | IP Rating           | Length                              |
|------------------------------|-------|---------------|----------|-----|---------------------|-------------------------------------|
| GL-3DN-3535-120-RGB-24V-IP65 | RGB   | 183.4lm       | 4.4W     | N/A | IP65 (Wet location) | 16 <sup>13</sup> / <sub>32</sub> ft |



## Voltage Drop Guidance Chart

This table provides general guidelines for determining Wire Gauge based on total load and distance from LED transformer to beginning of luminaire.

### 24V Voltage Drop & Wire Length Distance Chart (3% Drop or 23.28V)

| Wire Gauge (AWG) | 10W<br>0.42A | 20W<br>0.83A | 30W<br>1.3A | 40W<br>1.7A | 50W<br>2.1A | 60W<br>2.5A | 70W<br>2.9A | 80W<br>3.3A | 90W<br>3.75A | 100W<br>4.2A |
|------------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| 20               | 85ft         | 43ft         | 27ft        | 21ft        | 17ft        | 14ft        | 12ft        | 11ft        | 9ft          | 8ft          |
| 18               | 134ft        | 68ft         | 45ft        | 33ft        | 27ft        | 22ft        | 19ft        | 17ft        | 15ft         | 14ft         |
| 16               | 215ft        | 109ft        | 72ft        | 54ft        | 43ft        | 36ft        | 31ft        | 27ft        | 24ft         | 22ft         |

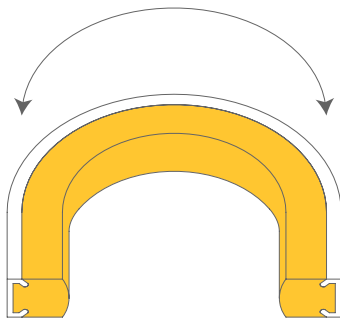
**Step 1:** Calculate Total Load: Check the power consumption of the LED light (e.g. 3W/ft). Calculate the total load of the LED light based on the light length (e.g. 10ft). The total load is 3W/ft x 10ft = 30W.

**Step 2:** Find Distance from Transformer to the Light Beginning: Check the distance between the transformer to the beginning of the light onsite. Let's assume it is 40ft. Round up to the nearest one on the table (Column 30W), which is 45ft.

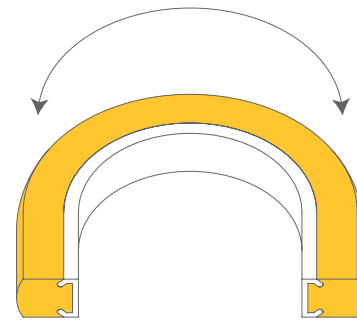
**Step 3:** Choose Suitable Wire Gauge: According to the table (Column 30W & Row 45ft), it's recommended to use 18AWG or up wire between the transformer and LED light to eliminate voltage drop.

Note: This table is calculated based on the theoretical voltage drop formula. The wire quality, the LED light technology and environment conditions affect the result also. This table is only for reference.

## Bending Options

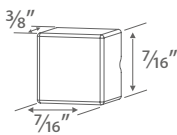


Top Bend

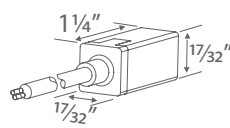


## Accessories (Sold Separately)

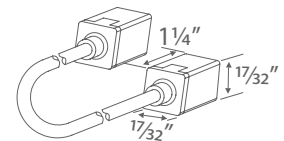
### Connecting Accessories



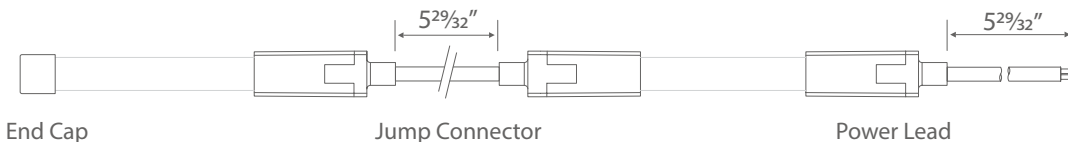
End Cap  
GL-3DN-EC-W



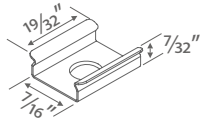
Power Lead  
GL-3DN-PC-RGB



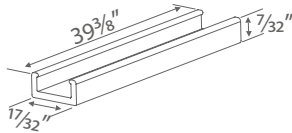
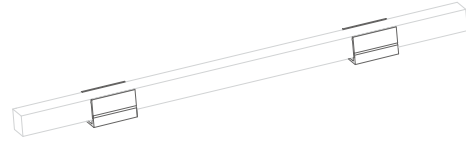
Jumper Connector  
GL-3DN-JP-RGB



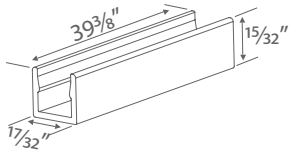
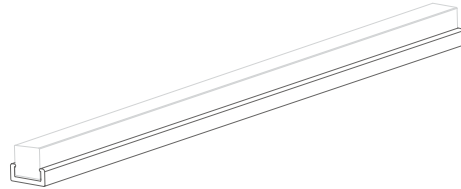
## Mounting Accessories



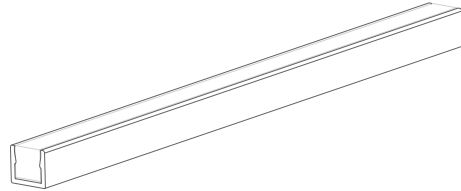
Mounting Clip  
**GL-3DN-MCL**



Mounting Channel  
**GL-3DN-SMCH**

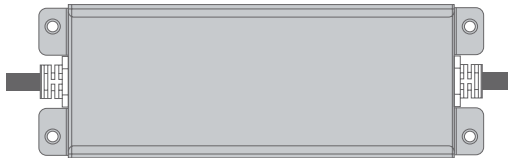


Deep Mounting Channel  
**GL-3DN-DMCH**

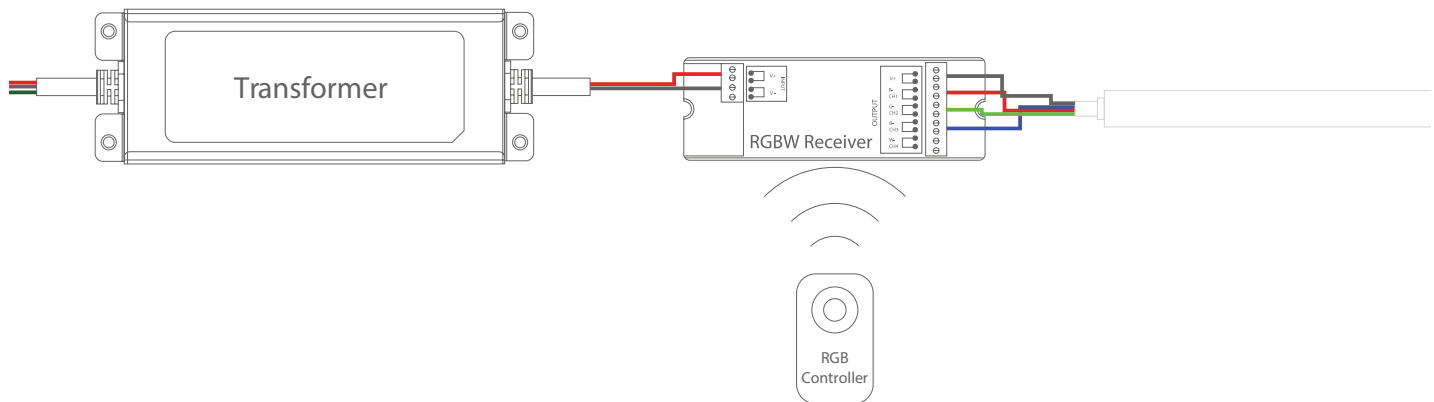


## Recommended Transformer (Sold Separately)

### LED Non-Dimmable Transformer



| Model No.    | Output Voltage | Wattage | Dimensions (L x W x H) | Certificates    |
|--------------|----------------|---------|------------------------|-----------------|
| APV-8W-24V   | 24V            | 8W      | 2.30x1.20x0.90in       | CE, RU, Class 2 |
| APV-35W-24V  | 24V            | 35W     | 3.30x2.20x1.20in       | CE, RU, Class 2 |
| XLG-150W-24V | 24V            | 150W    | 5.51x2.48x1.26in       | CE, RU          |
| XLG-200W-24V | 24V            | 200W    | 7.09x2.48x1.40in       | CE, RU          |

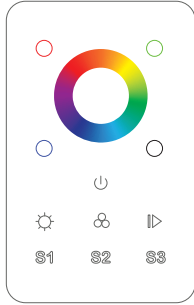


Non-Dimmable Transformer Wiring Diagram (with RGBW Receiver)

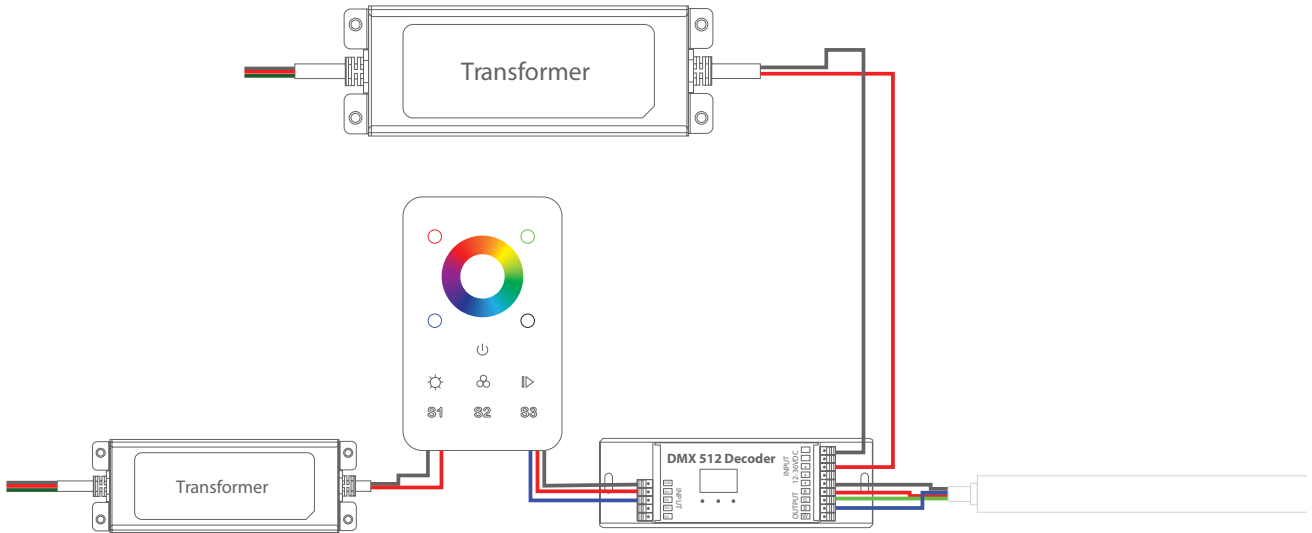
\*This diagram is for references only. Please see the LED RGB Controller Specification for a more accurate diagram.

## Recommended Controller (Sold Separately)

### DMX RGBW Wall Mount Controller



| Model No.         | Dimensions (L x W x H) | Certificates      |
|-------------------|------------------------|-------------------|
| DMX-RGB-WM-T-1Z-W | 4.7x2.9x1.1in          | TUV, CE, FC, ROHS |
| DMX-RGB-WM-T-3Z-W | 4.7x2.9x1.1in          | TUV, CE, FC, ROHS |



Non-Dimmable Transformer Wiring Diagram (with DMX RGBW Wall Mount Controller)

\*This diagram is for references only. Please see the DMX RGB Wall Mount Controller Specification for a more accurate diagram.