

Product Description

Thank you for purchasing Solid Apollo's RGB Neon3 24V 60W!

Solid Apollo's RGB Neon3 is a state of the art Neon LED light simulating the effect and look of neon in a continuous well-balanced light. This next generation bendable RGB Neon3 projects a brutally bright light offering optimum performance, energy efficiency, and effortless maintenance over traditional glass neon.

This user guide is intended to instruct and guide any user on how to properly cut the RGB Neon3 to length, re-power with a new power cable, and completely waterproof the connection.



RGB Neon3 24V 60W

Product Features

- 16.4ft Spool
- Flexible & Cuttable
- Side Bending
- Cut Points Every 2in
- Fully Dimmable
- Features a 6.6ft Waterproof Cable w/ Female Barrel Connector
- Low Voltage Product at 24V - 60W Per Spool
- Fully Waterproof, Rated at IP67
- Indoor / Outdoor Application
- Product Comes Ready to Plug & Play
- Perfect for Accent Lighting, Linear Lighting and In-Wall Lighting

Manual Will Review

- Proper Cutting and Installation
- Waterproofing and Configuration Process
- Technical Information
- Do's and Don'ts

Proper Cutting and Installation

This section will guide you on how to cut the RGB Neon3, install a power/extension cable, and add an end cap for a complete, fully waterproof connection. Please note, for outdoor or high humidity applications, we recommend using waterproofing glue for all connections and a drying time of at least 24 hours before installing or using the RGB Neon3.

Tools & Accessories Required

- Sharp Metal Scissors or Shears (for cutting Neon at cut points)
- 5g Waterproofing Glue
- Soldering Iron
- 15ft Waterproof RGB LED Strip Extension Cable
- Cable End Cap for Neon3 24V 60W
- Box Knife or Blade

Step 1: Locate the Cut Points

Look on both sides of the RGB Neon3 and find the side that has a thin transparent line in the middle of the strip. The transparent line will be your guide to locating the fixture's cut points.

Within the transparent lines you will see a distinctive small **black line**. That black line is your cut point (see Figure 1).

Pro Tip: The RGB Neon3 has cut points every **2 inches**. If you are having a hard time seeing the Cut Points, measure 2 inches from the beginning of the Neon light, mark it with a marker and cut it from there.



Figure 1.

Step 2: Cutting the Cut Point

Imagine a line passing from one side of the RGB Neon3 to the other with the center being the cut point symbol. Take either **scissors** or **shears** and line them up over the cut point as straight as you can and cut through the RGB Neon3 (see Figure 2).

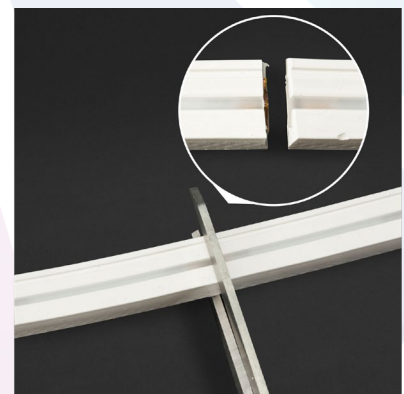


Figure 2.

Step 3: Exposing the Contacts

Once you have made your cut, notice that the contacts are tucked inside the RGB Neon3 fixture. Grab your **box knife** or **blade** and prepare to trim.

To gain access to the contacts, you will need to cut **1/4** of an inch off the RGB Neon3's sleeve or just enough until you can clearly see the positive and RGB icons next to the contacts (see Figure 3).

Please Note: Be very careful when trimming off the sleeve. Do not cut all the way through to the strip. The RGB Neon3's sleeve is super soft and will only require the tip of the blade.

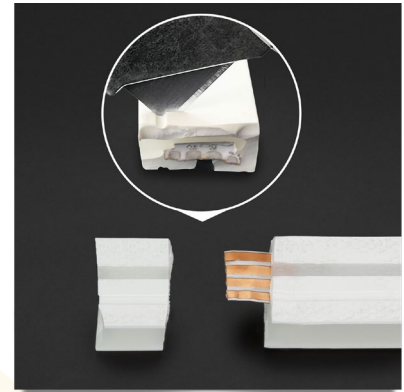


Figure 3.

Step 4: Insert Cable End Cap to Cable Wire

Step 4 is one of the most important steps in the guide as it is the easiest to forget. Slide the **Cable End Cap** on to the cable wire before proceeding to the next step (see Figure 4). Failure to do this step will cause you to re-do the soldering process.

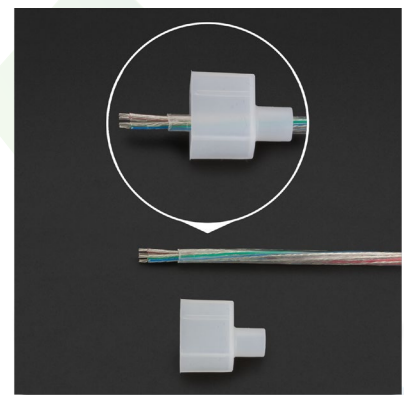


Figure 4.

Step 5: Splicing Waterproof Cable Wires

When splicing your **Waterproof Cable** wires, be sure to cut the positive and negative wires as short as **1/8** of an inch or short enough for the main waterproof cable to be inside the Cable End Cap (see Figure 5). Leaving the positive and negative wires too long will not properly seal the connection and will cause the RGB Neon3 to fail over time due to debris and exposure to other damaging elements. See Figure 6 for proper connection.

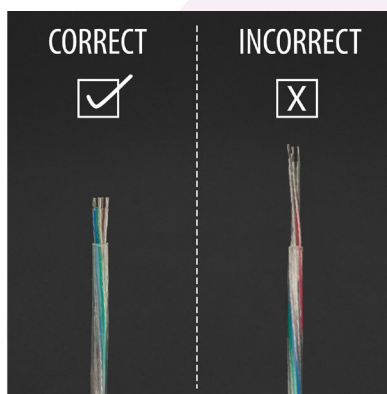


Figure 5.

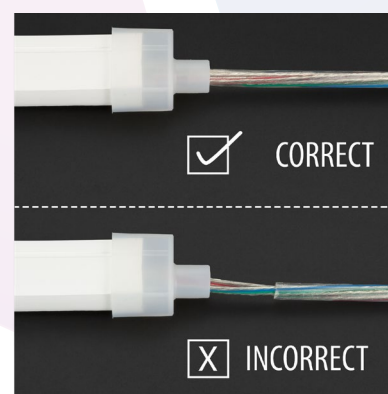


Figure 6.

Step 6: Soldering Positive and Negative Wires

If you are using standard power cables (positive, red, green, and blue wires) keep in mind which contact corresponds to the correct wire when soldering your connections. On the strip, you can identify each contact by looking for the icons printed next to the contacts (see Figure 7).

The example shown in Figure 8 utilizes Solid Apollo's 15ft RGB Waterproof Cable which has red, green, blue, and white stripes running along the RGB and positive wires respectively as an identifier. When using a similar cable with a barrel connector, double check that you're connecting the correct wire to the correct contact to avoid having to re-solder your connections.

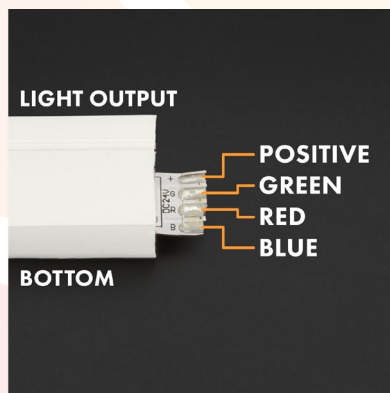


Figure 7.

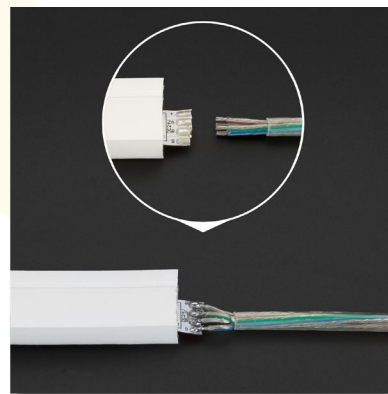


Figure 8.

Step 7: Waterproof Seal - Cable End Cap

Before completing a waterproof seal, check first to see if your connections work. Once you've confirmed the strip properly lights, put a pinch of the 5g Waterproofing glue inside the **Cable End Cap** (Figure 9). Slide the end cap over the connection and the beginning of the strip until it's snug and you're good to go.

Please note: Let the unit dry for at least **24 hours** before installing or using the RGB Neon3.



Figure 9.

Step 8: Waterproof Seal - End Cap

Like Step 7, check first to see if your connections work. Once you've confirmed the strip properly lights, put a pinch of the 5g Waterproofing glue inside the **End Cap** (Figure 10). Slide the end cap over the end of the strip until it's snug and you're good to go.

Please note: Let the unit dry for at least **24 hours** before installing or using the RGB Neon3.

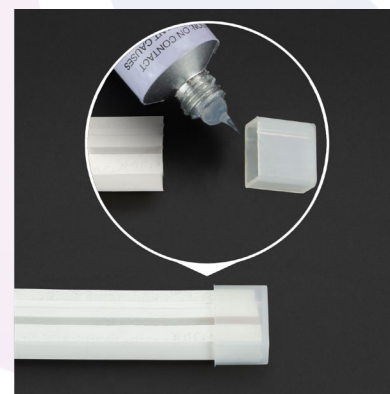


Figure 10.

Technical Information

Dimmable : Yes	LED Type : SMD 5050
Minimum Cut : 2in (50mm)	Beam Angle : 155°
Total LEDs : 600	Warranty : 3 Years
LEDs per Foot : 37	Weight : 2.1lb
Operating Voltage : 24V	Size : L: 16.4ft x W: 0.32in x H: 0.62in
Watts per Foot : 3.7W	IP Rating : IP67
Watts per Spool : 60W	Working Temperature : -10F to 140F
Max Power : 60W	

Do's and Don'ts

Before Soldering Cable Wires to RGB Neon3

1. **Do** - Check the length of the cable wires before soldering to avoid having to cut and re-solder the cables. Remember, if the cables are not a proper length the connection will not be waterproof sealed.
2. **Don't** - Do not forget to slide the Cable End Cap onto the cable wire first before soldering your connections (refer to Step 4).

Proper Handling and Cutting

1. **Do** - Always double-check the cut point you are preparing to cut. Highlight it with a marker if you have to, it's better to be safe than sorry.
2. **Don't** - Keep in mind that the RGB Neon3 is side bending (left to right) in the opposite direction of the light output and not top bending (up and down). Bending the RGB Neon3 vertically could split the contacts causing the unit to fail. If you do have to adjust the RGB Neon3 vertically, off the brackets for example, pull the unit off the brackets gently.