INSTALLATION GUIDE

MOTORHOME & TRAILER
BASEMENT LED LIGHT KIT

RULE THE NITE™

BOOGEY LIGHTS®

Family Owned Motorsports Lighting Since 1989

800.847.1359

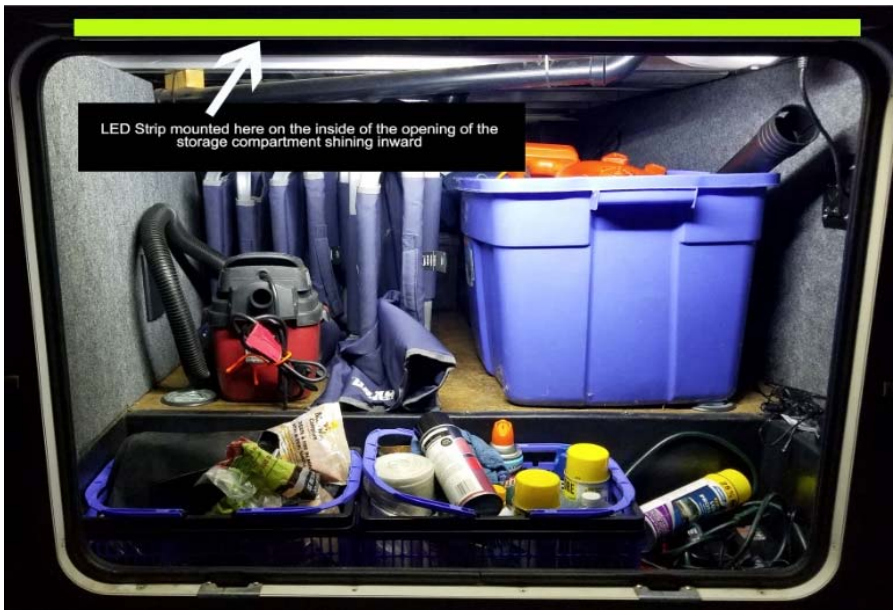
www.BoogeyLights.com

Thank you for purchasing genuine Boogey Lights® LED Lighting products! We know you're anxious to get started but we strongly recommend taking time to read through these instructions. You'll likely save yourself some grief and aggravation if you do. For additional installation support refer to www.BoogeyLights.com or give us a call at 800.847.1359 for assistance.

BEFORE YOU START

It's simply not possible to provide detailed instructions for all installation scenarios. Far too many variables and RV variations. **The information in this document is intended to be used as a guide.** It is not a detailed step-by-step how-to installation manual. We do not spell out every single step along the way. We cover the essential steps related to installing this kit. Beyond that however we must assume the installer has the skills, knowledge and tools necessary to do the work using the information we provide. You may need to vary your installation based on your RV. This is particularly the case with electrical wire routing and switching. If you're unsure about how to do the installation – particularly the electrical components – we urge you to seek assistance from someone who has those skills.

Bench test your setup. We know this takes a few extra minutes but we STRONGLY suggest you bench test your lights (and switch/controller if purchased) on a table before doing anything further. While we test every light strip and controller before shipping, bench testing your lights will eliminate the possibility of any problems with the lights or controller before mounting. Also, the process of bench testing gives you an opportunity to understand the wiring system without interference from other wires, connectors and cables. You can use any 12vdc battery to do this (e.g. car battery, motorcycle battery, lawn tractor battery or 12vdc power supply). Bench testing takes an extra 10 or 15 minutes. It's simple to do and can potentially save you hours of time and frustration down the road. **Please take our advice.** Bench test your LEDs AND controller before mounting.

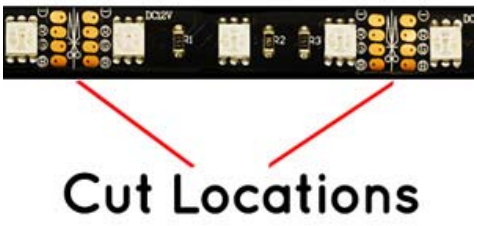


Mounting Locations

RV basement lighting is most commonly mounted on the inside edge of the storage compartment shining inward. In some cases the strip is mounted on the top of the storage compartment shining downward. The mounting location depends on where you have a smooth flat surface available and of course, which location will provide the best light. Make sure the area where you will be attaching the LED strip is clean and smooth (and free from sharp edges). The LED strip MUST be mounted flat against a single continuous mounting surface, in a straight line; it cannot bend around a radius or corners. Plus, the entire strip needs to be stuck to the mounting surface and not span across mounting surfaces. If you do, the strip will almost certainly fail in the spot that isn't affixed firmly to the mounting surface or, the point at which is spans across the two mounting surfaces. If you don't have a smooth, flat, contiguous mounting surface we recommend riveting or screwing 1.5" wide aluminum or plastic flat stock to the surface and then mount the LED strip to that flat stock.

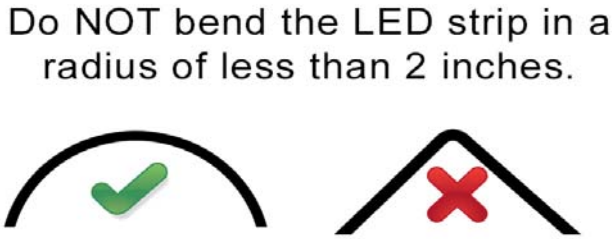
CUTTING YOUR LED STRIP

While you shouldn't have to do so, if you need to cut your LED strip you can do so as long as you cut in the proper location – which is every three LEDs as shown in the below photo. Cutting incorrectly could damage your lights and is not covered by the warranty. If you cut the strip, be sure to use the included heat shrink tubing to seal the cut end. You can also use silicone found at your local hardware or RV store. If you do need to cut your LED strip, we strongly suggest doing so BEFORE you mount the strip.



MOUNTING YOUR LED STRIP

Follow these steps:



- The area where you are mounting the LEDs has to be clean: free of all dirt, oil or anything that might affect the LED from sticking. You only get one opportunity to mount the LEDs so it's critical the area be prepared properly.

- Use rubbing alcohol to clean the area where you are going to mount the LED strip. Be sure to let the alcohol dry completely before proceeding to the next step. (Note: Do not use acetone or similar cleaner).

- Next, use the 3M Adhesion Primer supplied with your kit to "paint" on the promoter where you are going to mount the LED strip. ***This is an important step. Do not bypass.*** Allow the promoter to dry for 60-90 seconds.

- Peel off the red backing tape that protects the 3M adhesive tape on your LED strip. Be careful not to let the tape touch anything. The 3M backing tape on these LED strips are one-use only. They cannot be reused.

Carefully push the LED strip to the area you have prepared. You will want to apply only enough pressure to the strip to make sure it is firmly mounted. *You only get one opportunity to do this.* Once the LED strip touches a properly prepared surface that has been promoted, that LED strip will be very difficult to remove. Moreover, if you do remove the LED strip, the strip cannot be used again without adding another layer of 3M adhesive tape to the back. DO NOT press too hard as too much pressure can damage the LEDs and connecting wires in the strip. Also, do not pull, stretch or twist the LED strip. Too much tension on the strip will also damage the LEDs such that some of the LEDs in the strip will not illuminate. The strip must be mounted flat against a single continuous mounting surface, in a straight line. Really important that the ENTIRE STRIP be stuck to the mounting surface and that you NOT attempt to span across multiple mounting surfaces.

NOTE: Every installation varies a little so you may need to purchase additional items for your install.

AMPERAGE & 12VDC POWER

An essential skill with installation of any Boogey Lights LED products is knowing how to correctly wire the product to a 12vdc circuit. This includes understanding the importance of having a properly sized fuse at the power source, polarity, how to properly seal an electrical connection, using properly sized wire gauge for the load, measuring voltage and measuring the additional amperage draw you're adding. Be mindful of the amount of amperage you're drawing through your lighting circuit and to not exceed the circuit component limitations. The amount of power (amps) you're pulling through the circuit will vary based on a combination of three factors: 1) The number of LEDs in the circuit, 2) the amount of copper wire in the circuit and 3) the input voltage to the circuit. The amperage ratings for our switches, controllers and LEDs assume 12.5 vdc input or less.

Know Your Amperage Draw

A 12" long LED strip of Boogey Lights® single color WHITE LEDs will pull about .22 amps. That's .22 amps per foot. If you are adding one single 6 foot strand of LEDs, you'll be adding about 1.4 amps (assumes 12.5vdc input) to your existing system. It's important to calculate your amperage draw in advance to make sure the circuit you're connecting to can handle the additional amperage for the number of LEDs you're adding. These are approximations only. We urge customers to measure the actual amperage draw of their system once installed to double check.

If you are uncertain or unfamiliar with any of the electrical concepts discussed here, we urge you to ask someone who has the knowledge to assist you OR hire a professional to do the job for you. Electricity is unforgiving.

WIRING & SWITCHING

For many basement lighting installations an existing on/off light switch in the basement area can be used. The switch is typically a simple on/off rocker or toggle switch as shown here in this diagram (with fuse not shown). This of course assumes the existing OEM on/off switch and related cable and circuit is capable of supporting the additional amperage draw you're adding to the circuit.

If you purchased an optional switch with your light kit, we have included the wiring diagram for that switch.