## **INSTALLATION GUIDE**

### Car LED Foot Well Interior Light Kit

IMPORTANT! No two installation scenarios are the same. Accent lighting is highly subjective. Not everyone shares the same lighting or installation quality goals. Some folks are OK with twisting wires together, others want to solder and heat shrink them. Some folks are OK with running wires where they may be seen or unprotected to save money/time, others want a tidy, clean install so they wrap plastic split-loom around all exposed cables. Some folks are OK with mounting their LED strips to whatever surface they can find, others want to take the time necessary to build out appropriate mounting surfaces to provide the best lighting effect on their vehicle and maximize the longevity of their lighting system. The point is it's not possible to provide all the materials necessary for all installation scenarios on all types of vehicles to meet everyone's quality goals. Our light kits provide the essential components needed for a high-quality, functioning lighting system. Installation of our light kit to your specific vehicle will however likely require additional items to make it look, fit and work the way you want. This is particularly the case with electrical wiring, switching functionality and mounting surfaces for the LED strips. We have created a list of additional items you may need. Here's the link:

https://www.boogeylights.com/other-items-you-might-need/

While we offer them for sale you can also find these items locally. We urge you to review this information before starting your install.

#### BENCH TEST YOUR LIGHTING COMPONENTS FIRST

We know this takes a few extra minutes, but we STRONGLY suggest you bench test your lights AND your controller / switches 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. It also lets you know everything is working properly. 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.

Did we mention the importance of bench testing every LED strip and controller first?

THIS IS A GUIDE. NOT A HOW-TO. It's simply not possible to provide detailed instructions for all installation scenarios. Far too many variables. 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 we assume the installer has the skills, knowledge and tools necessary to do the work using the information we provide as a guide. You may need to vary your installation and/or make adjustments based on your vehicle. This is particularly the case with led strip mounting locations, electrical wire routing, electrical connections, electrical load sizing 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.

YOU MUST HAVE AN UNDERSTANDING OF 12V 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. If you are uncertain or unfamiliar with any of these concepts, we urge you to ask someone who has the knowledge to assist you. Electricity is unforgiving.

**WORK AREA.** Make sure you have ample area in which to work and that the area is protected from rain or cold temperatures. The 3M adhesive tape and 3M adhesion promoter works best if applied when the air temperature is above 40 degrees (and of course is DRY).

MOUNTING SURFACE CONSIDERATIONS. How and where you mount your LED strips will for the most part determine the longevity of your lighting system. If you mount the LED strips to smooth, clean, continuous, straight, flat surfaces as we recommend, you can expect your lighting system to last for many years. If however you try to save installation time by bending the strips around corners/curves, mounting them on uneven/split surfaces, mounting them to rusty/dirty/greasy surfaces or mounting them in locations where they're likely to be damaged, chances are high the LED strips won't last very long (and failures under these circumstances are not covered under warranty).

**TYPICAL INSTALLATION SCENARIO.** In most cases this car interior foot well LED light kit is installed along with another light kit – often our Under-Glow light kit. In those situations it's common to connect the foot well interior LEDs to zone 2 of our dual zone controller (assumes multi-color installation). It doesn't have to be this way but it's a common configuration. Whether or not you're connecting these interior foot well LEDs to another light kit installation, the mounting of the LED strips is the same. The only difference will be how you connect the LED strips to power and a switching mechanism.

For power you'll need access to 12vdc. For most cars, the battery is located under the hood in the engine compartment (although some will have them in the rear). If you're not connecting these interior foot well lights to another light kit (e.g. under-glow light kit with a dual zone controller), you can usually pull 12vdc power from the fuse block typically located in the drivers foot well. We include a buddy fuse for this purpose. Just make sure the point at which you're connecting is capable of handling the additional amperage you're adding. If you aren't sure what we are referring to here, you probably should consider asking someone who has more 12vdc power circuit design experience to assist you with this part of the installation.

#### **LED STRIP LOCATION & PLACEMENT**

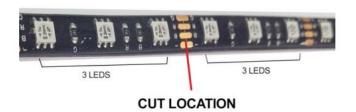
- Typical placement of our LED strips are underneath the dash (in the foot wells), under the seats or inside the trunk. It's totally up to you. Depending on the kit purchased you may be able to light up multiple areas. And of course you can purchase additional LED strips if you want to expand the kit. The standard foot well light kit includes 2 18 LED strips, each about 12" long with a single 10' power lead attached to one end of the led strip. Optional led strips can be added for the rear seats and/or other locations in the vehicle.
- The LED strips can be attached with the 3M tape or loosely zip tied to existing wiring under the dash. When using the 3M tape, make sure you are preparing the surface in accordance with the instructions we provide. Note: If you are using zip ties make sure you are not pulling them too tight such that you crimp or damage the PCB board. For under seat installation be mindful of moving components. Keep power lead wires away from seat track or motorized equipment. Power lead wires can be routed along the dash, center console or under interior molding.

**LOW PROFILE LED STRIPS.** This car under-glow light kit uses our LOW PROFILE LED series. Our Low Profile LED strips can be cut every 3 LEDs if needed to fit. Details on how to do this are below.

#### **CUTTING YOUR LEDS**

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 photo. Cutting incorrectly could damage your lights and is not covered by the warranty. If you cut the strip, be sure to seal the cut end. You can also use silicone found at your local hardware store. If you do need to cut your LED strip, we strongly suggest doing so BEFORE you mount the strip to your car. **NOTE:** Heavy Duty LED strips CANNOT be cut. LOW PROFILE only.

# HI-INTENSITY SURFACE MOUNTED LED STRIPS



The LED strip can be cut one time on the copper solder pad where indicated; between the cluster of 3 LEDs. Important to cut in the center of the copper pads. Once cut, the end must be sealed using silicon, liquid electrical tape or even heat shrink to stop water intrusion from damaging the strip.

#### **MOUNTING THE LED STRIPS**

Once you have your LED strips cut (if necessary) and you know where you are going to attach them, 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 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 Promoter 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 30-60 seconds.

Do NOT bend the LED strip in a radius of less than 2 inches.





Do NOT bend the LED strip on a horizontal plane.



- 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.
- Secure all power leads. Do not leave the power lead cable hanging. Doing so will place too much stress on the LED strip itself causing it to fall off or fail where the power lead connects to the LED strip. Be sure to wrap all power leads in split loom to avoid chaffing.