

INSTALLATION GUIDE

CORVETTE C8

Under-Glow LED Light Kit



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

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 manual 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. This is particularly the case with where to mount the LED strips and the routing of power leads. 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).

BENCH TEST YOUR SETUP FIRST. We know this takes a few extra minutes, but we STRONGLY suggest you bench test your lights AND your controller 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.** BTW ... Did we mention we suggest bench **testing your LEDs and** controller before installing? You would be surprised at how many people don't take our advice on this step; many regret it later.

The Corvette sits low to the ground making it difficult to access the bottom of the car to properly mount the LED strips. Having the ability to lift the car is helpful. Some might say it's essential. Also, the wheel well lights are easier to install if you remove the wheels from the car.

THE LED LIGHT KITS

This product has three possible LED light kits. You can install any one or all of them on your car. It's up to you. We include some diagrams of these layout locations further along in this guide. We also include a wiring plan diagram as well. The layout for each light kit configuration is as follows:

UNDER-GLOW

- 2 - 73" low profile LED strips. One mounted on each side of the car inside the supplied aluminum channels with plastic diffusers.
- 3 - 22" **heavy duty LED strips** mounted under the front bumper.
- 4 – 12" **heavy duty LED strips** mounted in each wheel well using the included 1.5" wide plastic flat bar.
- 1 - 36" low profile LED strip mounted under the rear bumper.
- 1 – 40" low profile LED strip mounted in the rear grill
- 2 – 16" low profile LED strips mounted in the air vents on each side of the car.

The **HEAVY DUTY LED STRIPS** in this kit have a 36" power lead. In most cases you will need to extend those power leads anywhere from 3' to 5' each. We include extra power lead for this purpose.

Side LED Mounting

These LED strips are mounted inside of the supplied mini-t12 aluminum channel with plastic diffuser. The aluminum channel is first mounted to the bottom of the car using 3M tape w/3M adhesion primer. Then, the LED strip is mounted to the aluminum channel. Lastly, the plastic diffuser snaps into that channel. **It's important to seal both ends with silicon or similar to hold those plastic diffusers in place.** If you don't do this, those plastic diffusers will come off. We use the aluminum channel because the LED strip is close to the edge of the car that if you didn't use the channel, you would be able to see the side view of the LED strip which isn't a good look.

Wheel Well Mounting

The LED strips used in the wheel wells are our heavy duty strips. Each heavy duty led strip has a 36" power lead. Before mounting you'll need to add some extension cable to each strip. 3' to 10' for each strip should be enough based on the location of the strip (see wiring plan section below). The wheel well material however won't allow the led strip to be attached to it directly. It's a felt material. The LED strip will not stick to this fabric. We include 1 – 48" 1.5" wide plastic flat bar with this kit. It needs to be cut into 4 pieces. Each plastic flat bar needs to be secured to that wheel well liner/fabric using rivets or zip ties. We prefer rivets (with a wide washer on the back side) but zip ties will work too. Eight rivets with washers are supplied with this kit for that purpose. To access the back of the wheel well fabric you'll need to pull the wheel well lining away from the fender so you can get your hand behind it. Carefully drill 2 holes in the plastic flat bar and liner. Insert the rivets and secure the plastic flat bar to the liner. At this point you can secure the LED strip to the plastic flat bar using the 3M tape + 3M adhesion primer. It's easier of course to do this if you remove the wheel from the car. In terms of placement, we prefer to place the led strip and plastic flat bar as close to the outside of the fender well as we can so the light shines inward.

Front Bumper Area

The front bumper area uses three heavy duty led strips each are about 22" long. We like to place these as close to the front of the car as possible WITHOUT being able to see the LED strips themselves. You may want to first temporarily dry mount these LED strips using painters or electrical tape to see how the glow looks. Important to use the heavy duty LED strips for this location because the car's low stance means the strips in the front are most likely to get hit by debris.

Engine Air Intake Scoops

We like to mount the LED strips on the inside of the outside wall of the scoop facing inward towards the car vs on the top shining downward (see diagram below). This way the glow reflects off the side of the car better (in our view). You can do it either way. Here too dry mounting is a good way to see how the lights look in the mounting location you've chosen before permanently mounting the LED strip.

Rear Bumper

This strip mounts to the bottom of the rear bumper. It's the easiest of all of them to install.

Rear Grill

This strip can be a little tricky to install because you likely can't get your hand all the way up in the area of the grill; at least in the middle of it. You can usually get your hand up on both ends of the grill area but not in the middle. So we'll use a 12" wood dowel or similar stick to push the middle of the LED strip to the mounting surface. Just don't push too hard that you crush the LEDs. The key is making sure that strip is shining straight down.

ENGINE LIGHT KIT

This kit has 3 LED strips.

- 2 – 16" low profile LED strips
- 1 – 12" low profile LED strips

The two longer LED strips mount to the 2 cross member supports in the engine bay. The remaining LED strip mounts under the front support. See diagram. The power leads for all three strips drop down on the driver's side of the car and attach to the 18awg feeder cable. See wiring plan.

INTERIOR FOOT WELL LIGHT KIT

This kit has 2 LED strips:

- 1 – 18" LED strip for the driver's side.
- 1 – 16" LED strip for the passenger's side.

We include some 2" x .5" black plastic flat bar with the kit to use for mounting these two LED strips in the foot wells. The plastic flat bar is secured to the top of each foot well using rivets and then the LED strip is mounted to that plastic flat bar. The plastic flat bar with the .5" lip should be mounted facing

forward with the LED strip up against that .5" lip. We do this to block the light coming from the side of the LED strip so it can't be seen looking into the foot well; only the glow from the LED strip shining downward can be seen. We connect both power leads together and then run one power lead through the firewall to the controller mounted in the battery compartment.

THE WIRING PLAN

The LED controller is mounted in the battery compartment which is in the front of the vehicle. You'll have to open the 'frunk' and remove the plastics that cover the battery compartment to gain access to this area.

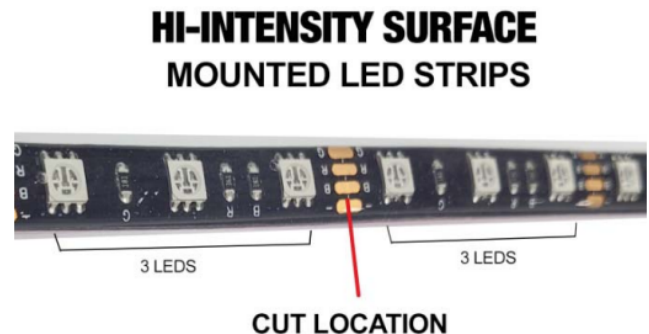
We prefer to run two feeder cables from the controller downward from the battery compartment to outside of the car. One of those cables is routed to the rear of the car where all the LED strips in that area connect to the feeder cable. The other connects to the LED strips in the front of the car. If you are installing the interior foot well lights too, we pull the power lead through the fire wall and connect it to the controller directly. We have a diagram of this wiring plan below. We include a separate wiring diagram for the switches/controller purchased with your kit.

All power lead wires should be wrapped in split loom.

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 below 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.



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 without reading the section "A Word About 3M Tape & 3M Promoter" further on in this document).
- Next, use the 3M Adhesion Promoter supplied with your kit to "paint" on the promoter where you are going to mount the LED strip. See the note below (on page 6) about the proper way to use promoter. ***This is an important step. Do not bypass.*** Allow the promoter to dry for 30-60 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.**
- 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.

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



Do NOT bend the LED strip on a horizontal plane.



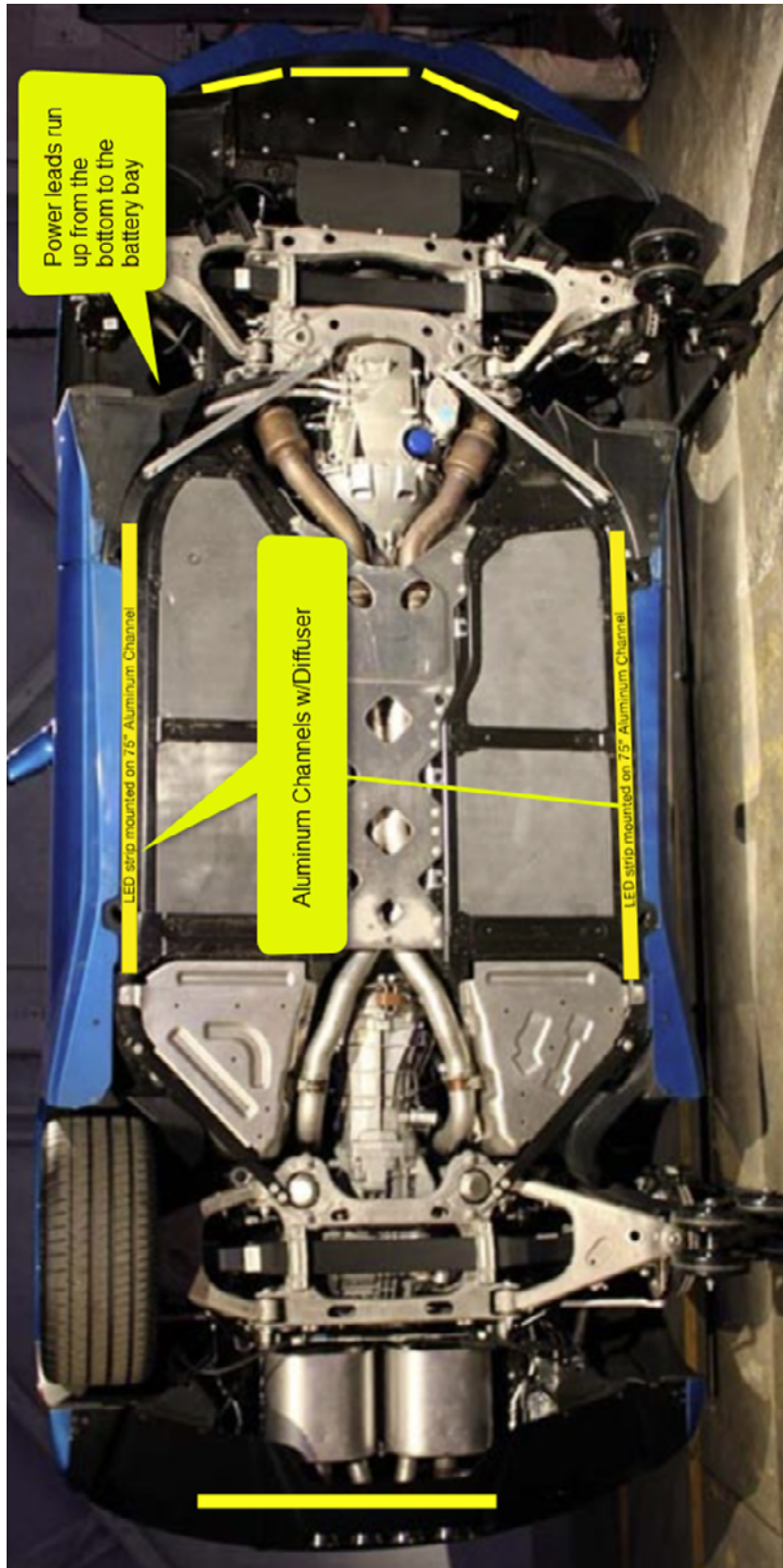
3M Tape & 3M Adhesion Promoter (aka Primer)

All Boogey Lights® LED strips have 3M Tape backing affixed to them. This 3M Tape is designed to make a more-or-less permanent bond between the LED strip and the surface to which it is attached. When properly prepared, 3M Tape can be affixed to polyethylene, polypropylene, ABS, PET/PBT blends, concrete, wood, glass, metal and painted metal surfaces. To make this bond you must however prepare the surface to which the LED strip will be affixed. You do this by first cleaning the surface with isopropyl alcohol (50/50 mixture with water) and then painting on 3M Adhesion Promoter. **YOU CANNOT SKIP THIS STEP.** Always apply 3M Adhesion Promoter to any surface Boogey Lights® LED strips will be mounted. The promoter acts as a primer that ensures maximum adhesion. Porous surfaces may require 2 applications of 3M Promoter for uniform coverage and good adhesion. If you are going to add a second coat, allow the first application of promoter to dry before applying the second coat. Our lighting kits include a small bottle of 3M Adhesion Promoter. Simply use a clean, dry cloth to apply it to the mounting surface.

Using Acetone on Heavy Oiled or Greasy Surfaces: For situations where you are affixing Boogey Lights® to a surface where heavy oils or grease are present, a "degreaser" solvent such as acetone may need to be used first. If you use acetone (or any other degreasing solvent) you must still apply the 3M Promoter. Acetone is not a replacement for promoter. In addition, if you use acetone to clean a heavy oiled or greased surface, you will still need to follow up with an alcohol cleaning to help ensure any residue or film from the acetone is removed. This is because acetone (and most other degreasing solvents) will thin the promoter as well as break down the adhesive in the tape greatly reducing the tape's stickiness. Any surface first cleaned with acetone must also be cleaned with alcohol and then thoroughly dried before painting on promoter.

Important Reminder! The 3M adhesive tape on the back of Boogey Lights® LED stripes are one-use only. If you apply them to a surface that has not been properly prepared, the holding power of the 3M adhesive tape will be greatly diminished perhaps making the light strip unusable. If you take the time to properly prepare the surface in accordance with our instructions here, you won't have any problems mounting your LEDs.

INSTALLATION DIAGRAMS ON FOLLOWING PAGES

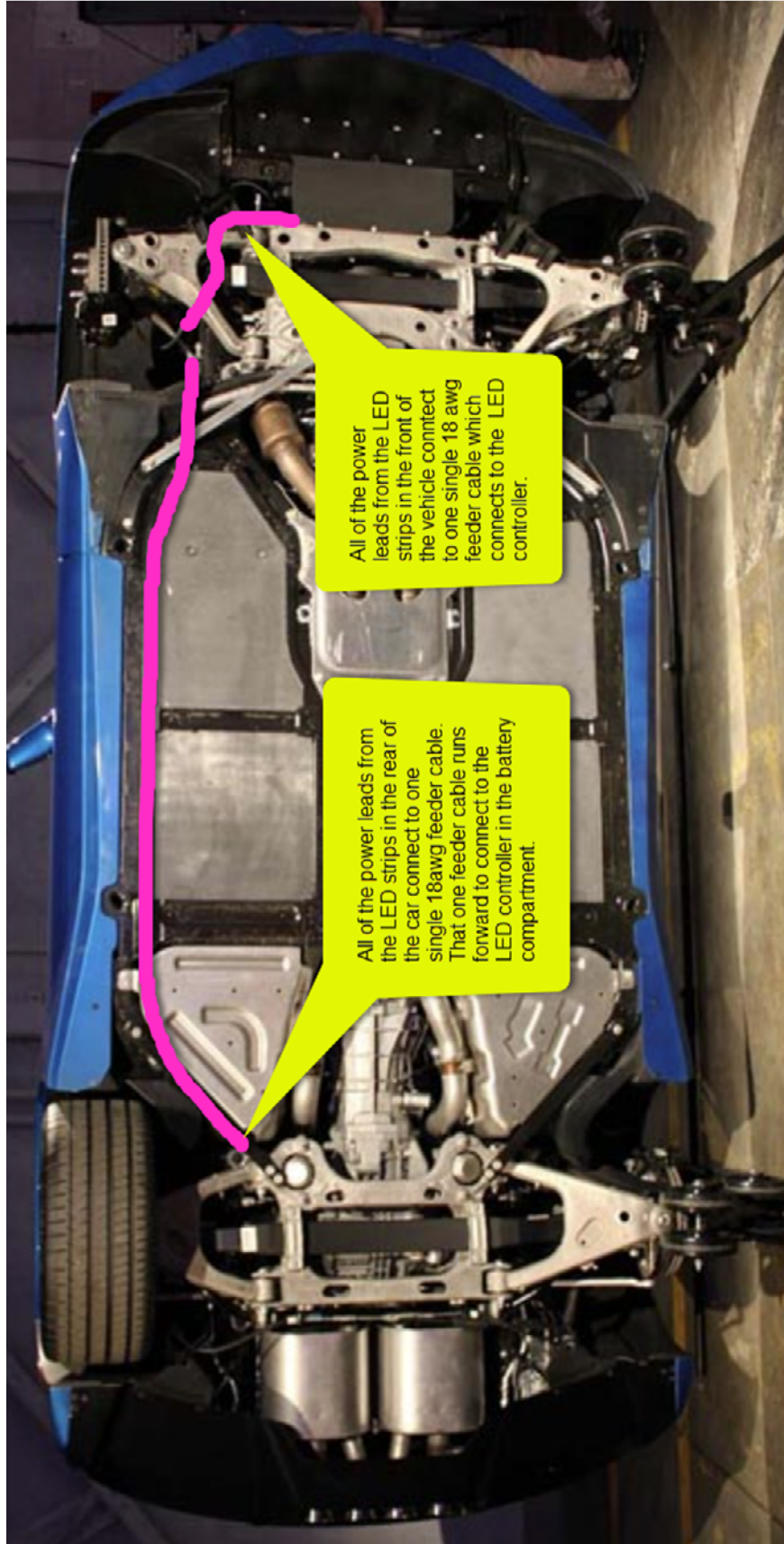


Power leads run up from the bottom to the battery bay

LED strip mounted on 1/8" Aluminum Channel

Aluminum Channels w/Diffuser

LED strip mounted on 7/8" Aluminum Channel







NEED HELP? HAVE MORE QUESTIONS?

Links to all product specs and installation information including remote control functions, wiring diagrams, APP control instructions and operating instructions can be found on our website in the **INSTALLATION INSTRUCTIONS** section (<https://www.boogeylights.com/installation-resources/>). We also offer a number of How To Videos which can be found here: <https://www.boogeylights.com/how-to-videos/>. For Trouble Shooting, refer to this page here: <https://www.boogeylights.com/trouble-shooting-guide/>.

If you need additional assistance or have questions, we offer a number of options. If it's during regular business hours you can call us TOLL FREE at 800.847.1359, M-F 9-5 Eastern. We also offer TEXT support (859.955.8155). If it's after hours, you can check our website. We include as much information as we can online for 24x7 access. You can also send us an email by visiting the CONTACT US link at the top of every page of our website.

WARRANTY INFORMATION

The Boogey Lights® original-owner warranty is only available to customers who purchase genuine Boogey Lights® products from the Boogey Lights website or an authorized Boogey Lights® dealer and present the original sales receipt from that dealer. **THIS WARRANTY IS NULL AND VOID IN THE ABSENCE OF AN ORIGINAL SALES RECEIPT FROM AN AUTHORIZED BOOGEY LIGHTS® DEALER.** This warranty is a product-only warranty and does not cover reimbursement for labor or any other charges you may incur having a defective product replaced. Complete warranty details can be found here: <https://www.boogeylights.com/warranty/>

You can register your purchase for warranty by visiting our website at <http://www.BoogeyLights.com/warranty-registration/>. This is especially important if you purchased this product from someone other than the Boogey Lights website directly.