



INSTALLATION GUIDE

PETERBILT 379/389 GRILL 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. Test all of them. 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 good 12vdc battery to do this (e.g. car battery, motorcycle battery, lawn tractor battery or 12vdc power supply capable of supporting a 5 amp load). If you're not sure how to do this, we have prepared a document explaining the process here: <https://docs.boogeylights.net/?wpdmdl=1305> . 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 before installing?

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 based on your truck. This is particularly the case with 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).

KNOW YOUR AMPERAGE DRAW. Pay attention to the number of LEDs you are lighting and the total amps you will be drawing. We manufacture a number of LED Controllers of varying capacities. If you over-load the LED controller, it will either not work at all or the lights will dim in a short period of time. Amperage data for all our LED products are on each product page. You can also download it directly here: <https://docs.boogeylights.net/?wpdmdl=1137>

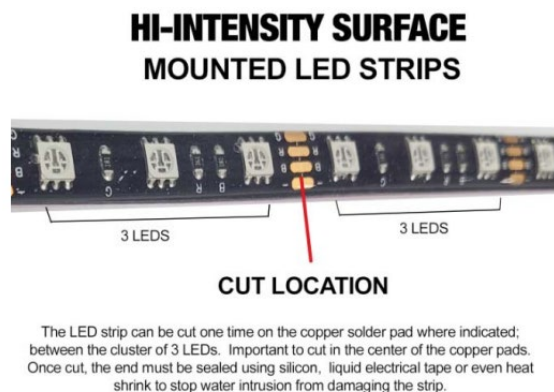
Mounting Locations

There is only one mounting location and it's inside the grill – see photo of exact placement. The power lead coming from the grill needs to be carefully run up one side of the truck (passenger's or driver's – your choice based on where you're making your electrical connection) where it will connect to the switching mechanism or, another light kit (e.g. Under Glow). To do this you will have to open the hood and maybe even remove the grill itself. We say 'maybe' because you don't have to remove the grill IF you have a means by which to support the hood when it's open such that you can put your body weight on it. It's also wise to put a piece of plywood across the inside of the grill before putting your body weight on it (see photo). This helps distribute the weight. This will allow you to climb inside (more or less) the front of the hood to install the LED light strip from the inside. Not everyone is going to be able to do this. In that case you're going to have to remove the grill so you can gain access to the inside of the grill from the front of the truck. Also, you'll likely need to remove the driver's side step to gain access to the truck's battery for power. When possible, we suggest pulling power directly from the positive side of the battery bank directly vs somewhere else on the truck. That way you know you're not overloading an existing circuit in the truck.

If you're installing an LED controller (or wireless on/off switch) with this kit, you'll need to remove the driver's side steps to access the batteries. You can mount it anywhere you have a dry area. We prefer to mount our led controllers in either the driver's or passenger's side storage box but it's not required. You can just as easily mount the controller in the engine compartment or also inside the battery box. The key is making sure you're mounting it where it is protected from water or extreme heat. There should be air flow too around the controller. If mounting inside either of the storage boxes, you will need to drill a hole in the floor of that box to connect power to the battery box, led wires and antenna. We provide some butyl tape to seal this hole.

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.**



MOUNTING YOUR LED STRIPS

Follow these steps for mounting your LED strips:

- 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 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 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.

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



Do NOT bend the LED strip on a horizontal plane.



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.

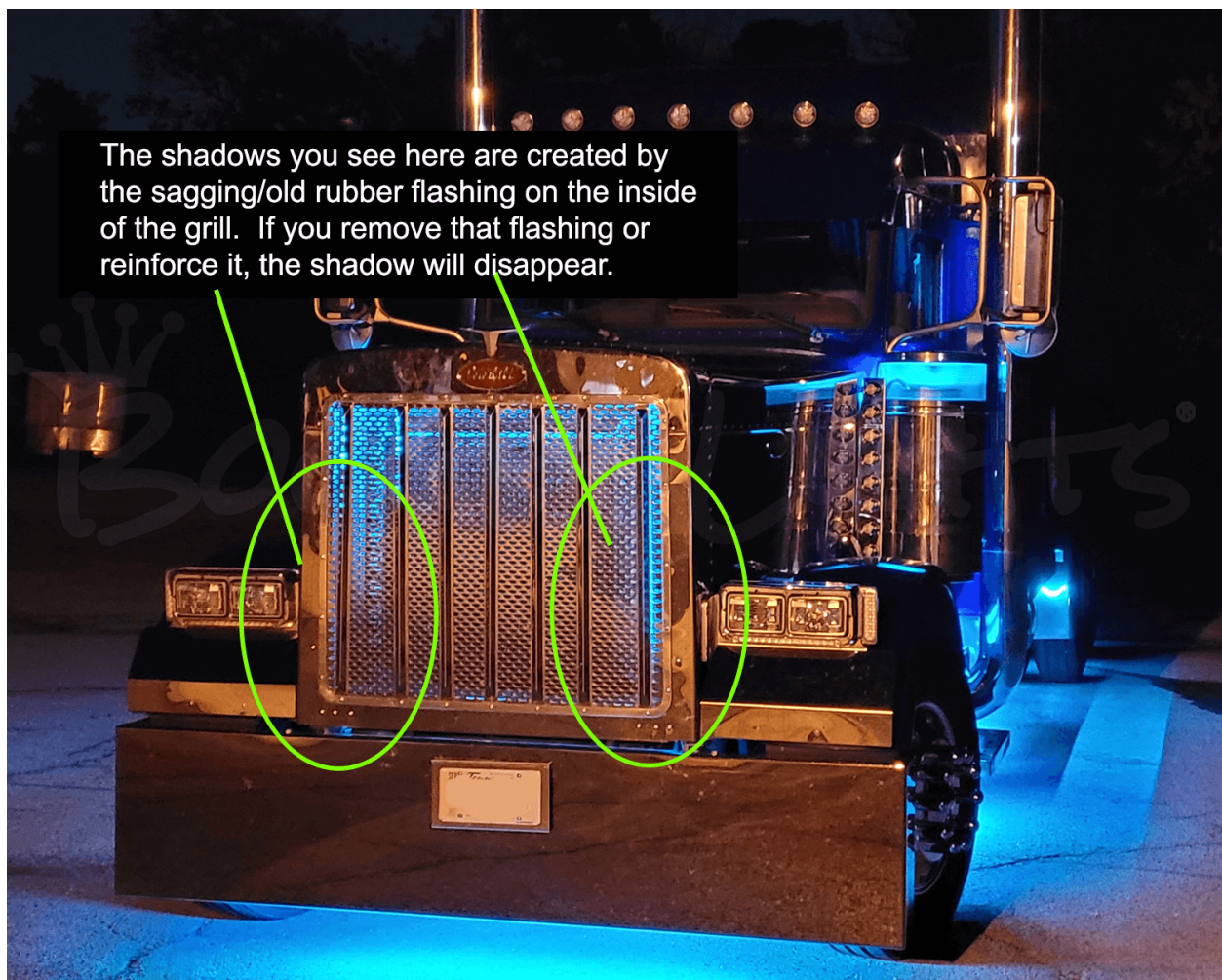
INSTALLATION

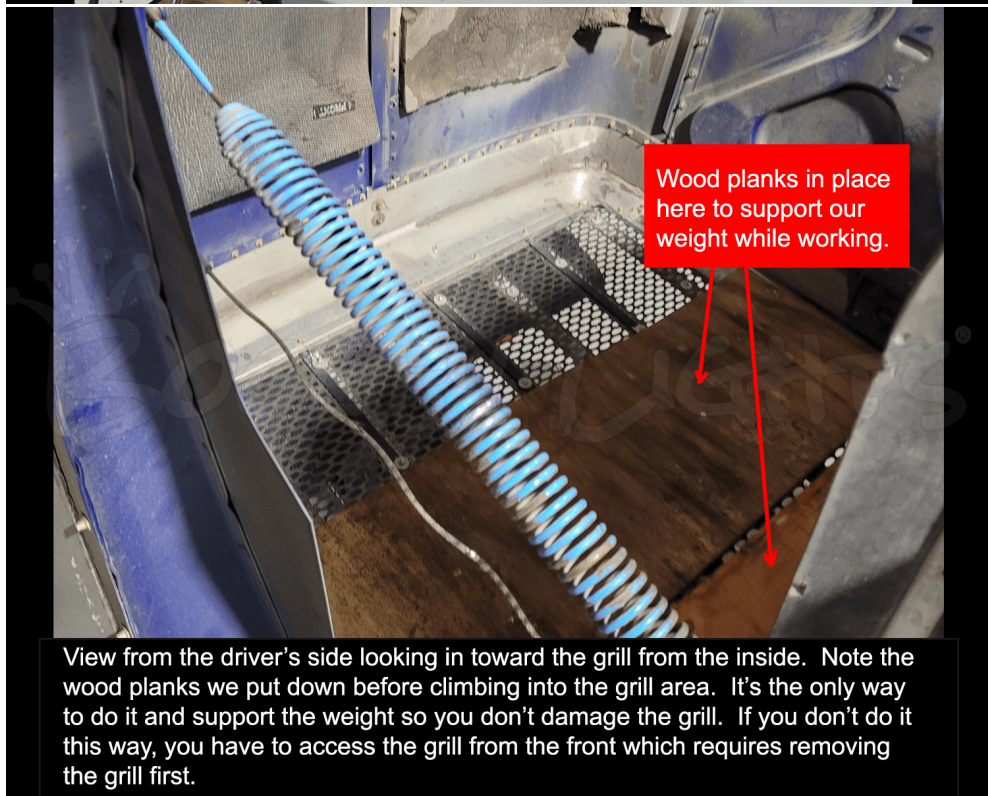
1. You need access to the inside of the grill. You don't have to remove the grill IF you have a means by which to support the hood when it's open such that you can put your body weight on it. It's also wise to put a piece of plywood across the inside of the grill before putting your body weight on it (see photo). This helps distribute the weight. This will allow you to climb inside (more or less) the front of the hood to install the LED light strip from the inside. Not everyone is going to be able to do this -- particularly for those who might be a little on the heavy side. In that case you're going to have to remove the grill so you can gain access to the inside of the grill from the front of the truck.
2. Clean the surface where the LED strip will be mounted with alcohol and then prep with 3M Adhesion Primer. It's important to make sure this area is clean and free of dirt, oil or grease before proceeding.
3. Place some butyl tape on any hood seams where the LED strip will be mounted on top. We have included a photo of the two seams for our installation. It's important the LED strip not be mounted on top of these two seams without butyl tape on it first. Also, do not mount the LED strip on top of screw or bolt heads. This part of the process is super important. Do not skip it.
4. Decide which side of the truck the power lead will route. In our installation we routed it out on the passenger's side because our other light kit power leads (Breather + Under-Glow kits) were on the passenger's side of the truck. We mounted the LED controller in the passenger's side storage box and thus why our connections are on the passenger's side. It could also go on the driver's side. Totally up to you.
5. Starting with the power lead end, peel off the red backing tape on the LED strip. Be careful not to let the tape touch anything. Carefully push the LED strip to the area you have prepared making your way around the three sides of the grill opening (see photo). Continue all the way around the grill opening until you get to the other side. 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.

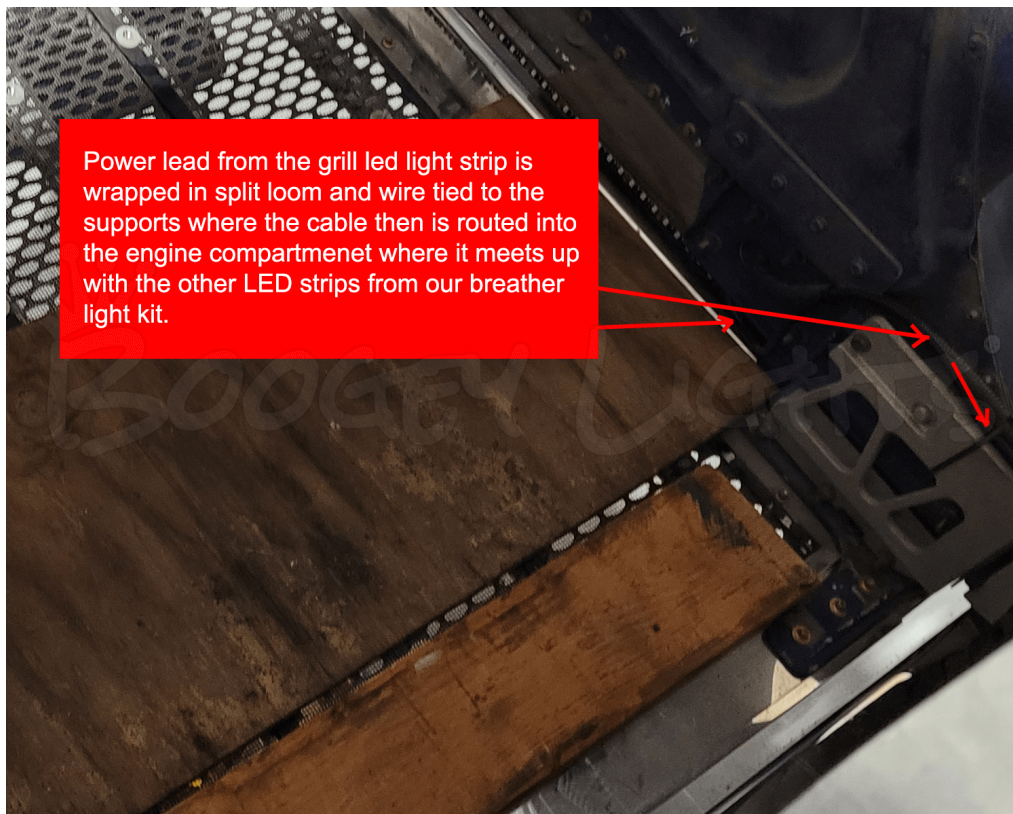
NOTE: If you're unsure about this part of the installation, we suggest dry fitting (don't remove the red backing tape) the LED strip first using some electrical, masking or scotch tape. It will give you an opportunity to see how the strip will fit before actually mounting it permanently.

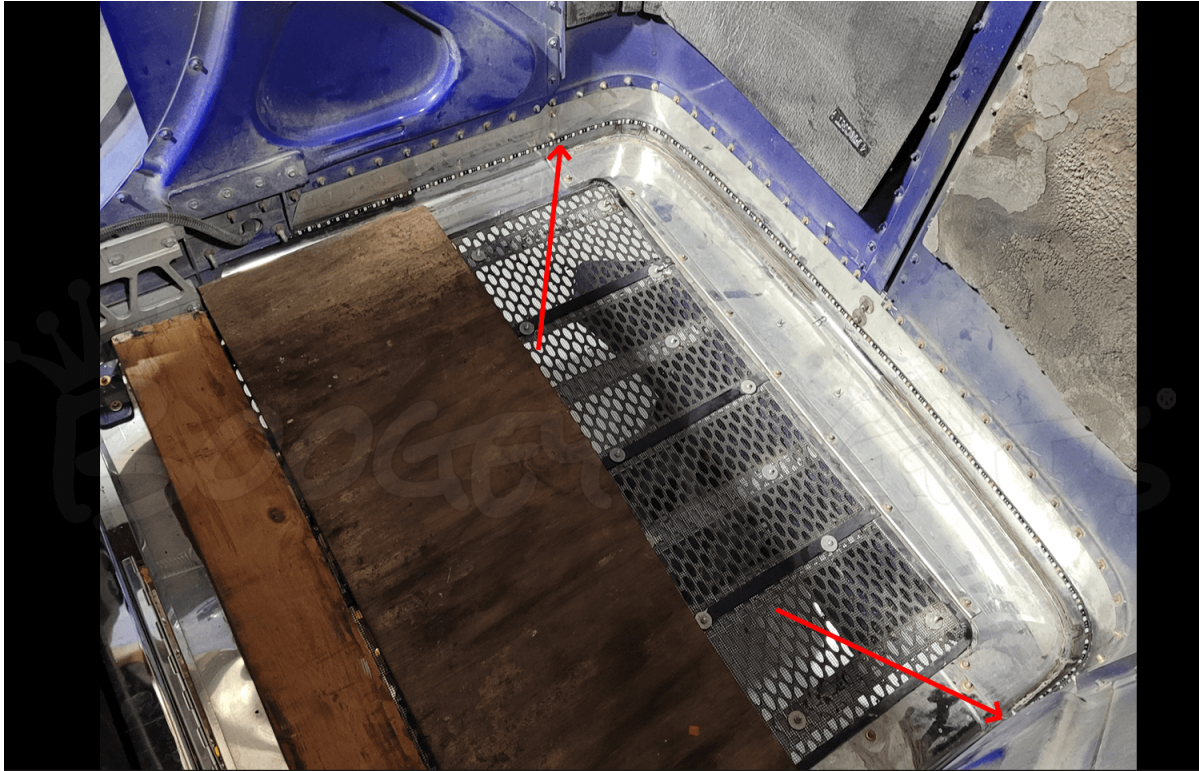
6. Once you have the LED strip power lead cable in the engine compartment, you can continue with wiring the LEDs to power and/or a switch. Be sure to wrap split loom around any exposed power lead cable.

One final note on LED strip placement. You'll notice a shadow on both the left and right side of the grill (see marked up photo below). The reason is some trucks have rubber flashing attached to the top, left and right sides of the radiator. That flashing is designed to funnel air coming in from the front of the grill into the radiator. In newer trucks, the rubber flashing is ridged; it generally won't be an issue. In older trucks however the rubber is quite worn and flimsy so it sags which is what causes the shadow. In our installation the top rubber flashing was so bad it was torn; hanging down and blocking air so we removed it. If you want maximum illumination and that rubber flashing is worn to the point at which it's creating the shadow you have a couple of options. First is to simply remove it - or - at least a portion of it. Whether or not doing so will impact air direction/flow to the radiator we don't know but we doubt it's that significant. Second, reinforce the rubber flashing with something rigid (or tie it back) so the rubber doesn't bend or sag. In our case we left the rubber flashing as it was and let the customer decide later what he wanted to do - and thus why you see the shadow on the left and right sides of the grill photos.









View from the passenger's side with the LED strip in place. In this installation the power lead came out on the passenger's side but it could also come out on the driver's side. Totally up to you. And while it's difficult to see in this photo, we put down some butyl tape first where the LED strip went on top of the metal seams as indicated by the red line pointers. Super important to put butyl down first.

Additional Resources

- Product Page: <https://www.boogeylights.com/peterbilt-379-389-grill-led-light-kit/>
- How to Videos: <https://www.boogeylights.com/how-to-videos/>
- Building a mounting surface: <https://www.boogeylights.com/video-creating-a-smooth-mounting-surface/>
- Using Aluminum Channels - <https://docs.boogeylights.net/?wpdmdl=1351>
- General installation: <https://www.boogeylights.com/video-how-to-install-a-boogey-lights-multi-color-under-glow-led-light-kit/>
- Troubleshooting: <https://www.boogeylights.com/trouble-shooting-guide/>
- Installation Resources: <https://www.boogeylights.com/installation-resources/>
- GEN2 LED Controller Wiring Diagrams + Operating Info: <https://docs.boogeylights.net/?wpdmdl=1163>
- GEN2 RF Wireless Remote Operating Info: <https://docs.boogeylights.net/?wpdmdl=1164>
- GEN2 Bluetooth APP Operating Info: <https://docs.boogeylights.net/?wpdmdl=1169>
- GEN2 Bluetooth APP Quick-Start: <https://docs.boogeylights.net/?wpdmdl=1167>
- Amperage Data: <https://docs.boogeylights.net/?wpdmdl=1137>

Support

- Phone: 800.847.1359 (M-F, 9-6 Eastern)
- Text: 859.955.8155
- Open a Support Ticket: <https://www.boogeylights.com/email-us/>
- Online: 24/7 resources at <https://www.boogeylights.com/installation-resources/>
- How to Make a Warranty Claim: <https://www.boogeylights.com/make-a-warranty-claim/>

Warranty

The Boogey Lights® warranty requires an original sales receipt from Boogey Lights or an authorized dealer. It covers product replacement only, not labor or other costs. Register your purchase at: <https://www.boogeylights.com/warranty-registration/>. Full details: <https://www.boogeylights.com/warranty/>.