RULE THE NITE™

BOOGEY LIGHTS

Family Owned Motorsports Lighting Since 1989!

INSTALLATION GUIDE

SPORT BIKE LED 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 12vdc battery to do this (e.g. car battery, motorcycle battery, lawn tractor battery or 12vdc power supply). If you're not sure how to bench test, download this pdf: 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 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.

MOUNTING SURFACE. 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

SECURE THE POWER LEADS. Make sure the power lead wire that connects to one end of the LED strip is firmly secured to the boat. Do not allow that power lead to move or flex at the point where it attaches to the LED strip. If you do, it will fail prematurely and is not covered under warranty.

We include wiring diagrams with each kit. Be sure to use the diagram that matches the kit configuration you purchased. You can also find these same wiring diagrams on our website for immediate download at https://www.boogeylights.com/installation-resources/. We also offer some **HOW-TO VIDEOS** (https://www.boogeylights.com/how-to-videos/) . While these videos may not be specific to your ride, the installation process, concepts and wiring are the same regardless of the format.

Here are a few tips to make the install easier:

- Make sure your ride is cool and parked on a flat, secure surface.
- Next, locate the battery and unhook the battery negative (-) cable. This must be done to avoid a fire hazard.
- Remove seat and side fairings as needed to gain access to this area.
- Never use fuses other than the 5 amp/12 volt blade fuse supplied with the installation kit and/or controller. If you are blowing this fuse it means you have a short somewhere in the wiring. Using a larger fuse could result in a fire or fry your lights. Not cool and not covered by warranty.

We strongly recommend bench testing your lights BEFORE you mount them to your ride. 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 of other wires, connectors and cables already on your ride. Bench testing takes 10 or 15 minutes. It's simple to do and can potentially save you hours of time and frustration down the road.

WIRING DIAGRAM

A wiring diagram is included with your kit. A copy of it is available too for immediate download on our website in our installation information section.

LED CONTROLLER PLACEMENT

On a sport bike installation, the LED controller is typically mounted under the seat or in the rear compartment just behind the seat. Regardless of the location, it's important the LED controller be mounted in a dry location. They are water resistant; not water-proof. Also, even though the LED controller can be turned on/off wirelessly, we suggest installing the push-button switch on the 12vdc power circuit coming into the controller so you can stop the controller from draining the battery when the bike sits for long periods of time. It also makes for an easy, quick way to turn off your lights without having to use the RF remote control (or Bluetooth mobile device).

BRAKE LIGHT INTEGRATION

If you purchased the optional Brake Light integration, it's important to make sure the push-button switch is installed in-line on the 12vdc POSITIVE wire (not ground) coming to the LED controller from the battery. Installing it on the ground will on some bikes interfere with the operation of the lights.

LIGHT STRIP PLACEMENT

This kit has been designed to light up the areas inside the left fairing, right fairing, bottom fairing, front fairing (top of front wheel area) and under the rear fender. The idea is to install the light strips onto the backside of the fairing so the light pours out and around any vents/openings you have on your bike. Not all bikes and brands will work the same so you'll need to take a look at your bike to see what fits. The kit includes a variety of LED strip lengths to fit pretty much any bike. If necessary, you can also cut the LED strip. Just be sure to cut it where indicated on the strip (between the scissor marks every 3 LED clusters). If cutting the strip, you'll also need to seal the open end with some liquid electrical tape (or similar substance). You don't want moisture getting into the strip from that cut end. You will need to remove the fairing to do this install.

On our Honda Repsol we used the following layout to light around the side vents on each side of the bike, under the bike, under the front fairing and under the rear fender area. We have included some photos of this installation in this manual. Installation time: 3-5 hours.

Left Fairing

- 1 – 24 LED strip w/18" power lead
- 1 – 12 LED strip w/18" power lead
- 1 – 18 LED strip w/18" power lead
- 1 – 48" wire harnesses with quick-disconnect runs back to the LED controller. The three LED strips connect to the other end of this harness. When removing the fairing, simply use the quick-disconnect to remove the fairing from the bike with the LEDs attached.

Right Fairing

- 1 – 24 LED strip w/18" power lead
- 1 – 12 LED strip w/18" power lead
- 1 – 18 LED strip w/18" power lead
- 1 – 48" wire harnesses with quick-disconnect runs back to the LED controller. The three LED strips connect to the other end of this harness. When removing the fairing, simply use the quick-disconnect to remove the fairing from the bike with the LEDs attached.

Bottom Fairing

- 2 – 6 LED strips w/24" power lead
- 2 – 3 LED strip w/24" power lead
- 1 – 48" wire harnesses with quick-disconnect runs back to the LED controller. The three LED strips connect to the other end of this harness. When removing the fairing, simply use the quick-disconnect to remove the fairing from the bike with the LEDs attached.

Front Fairing (Area on top of Front Fender)

- 1 – 6 LED strip w/72" power lead (connects back to the controller in the rear compartment)

Rear Fender Area

- 2 – 6 LED strips w/24" power lead

Push-Button Switch: We installed the push-button switch on the left side of the bike just beneath the seat. The push-button provides for a quick power-off option that cuts all power going to the LED controller. This way the controller won't drain your battery if your bike is sitting for a long time.

MOUNTING STEPS

1) Determine the length you need for each of your LED strips by holding them up to the surface where you plan on installing them. We have provided some suggested placement ideas but your bike might be slightly different. You'll want to make sure you have a good idea where the lights will be placed before proceeding. If you need to cut a strip, you can do so provided you cut in the proper place and seal the end. Details on this are below.

2) Clean the mounting surface with the supplied alcohol wipes first. Once the alcohol dries, use the supplied 3M adhesion promoter (aka 'primer') to prepare the surface where you'll be attaching the strips. The 3M adhesion promoter is used to enhance the adhesion strength of the 3M tape on the back of the light strips and makes a permanent bond. YOU CANNOT SKIP THIS STEP. Always apply 3M Promoter to any surface Boogey Lights® LED strips will be mounted. Let the promoter dry before proceeding.

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.

3) We suggest you position the flexible strip before removing the tape backing. When ready, remove a small amount of tape backing from one end of the strip while holding it in position. Continue to peel it off and press as you go to ensure the tape doesn't stick prematurely to the wrong place.

The promoter used will cause immediate and permanent adhesion on contact with the 3M tape so be sure to TAKE YOUR TIME. You must get it right the first time for a guaranteed trouble-free installation.
For best results, attach your lights within one hour or less after the promoter has been applied.

NOTE: While 3M states the promoter and tape combination will not harm painted surfaces, we do not recommend using the promoter on new paint jobs that are not fully cured or aren't at least six months old.

If you need to remove a light strip once placed, you can do so using a hair dryer/heat gun and carefully pulling the light strip off. We recommend using a hard plastic card or similar object (e.g. old credit card) to help pry the light strip off the surface to which it was mounted. If you have to remove the light strip for any reason, the 3M tape on the back of the light strip will not be reusable.

SECURING THE POWER LEADS

When mounting the LED strips to the fairing, make sure to secure the power leads coming from the LED strip firmly to the fairing using the supplied zip tie mounts (see photos). Failure to do this will likely result in the LED strip failing over time. Note: Before mounting the Zip Tie mounts, be sure to promote the surface with 3M promoter too.

USING 3M PROMOTER

3M Promoter can be removed with isopropyl alcohol. Vigorous scrubbing may be required. 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.

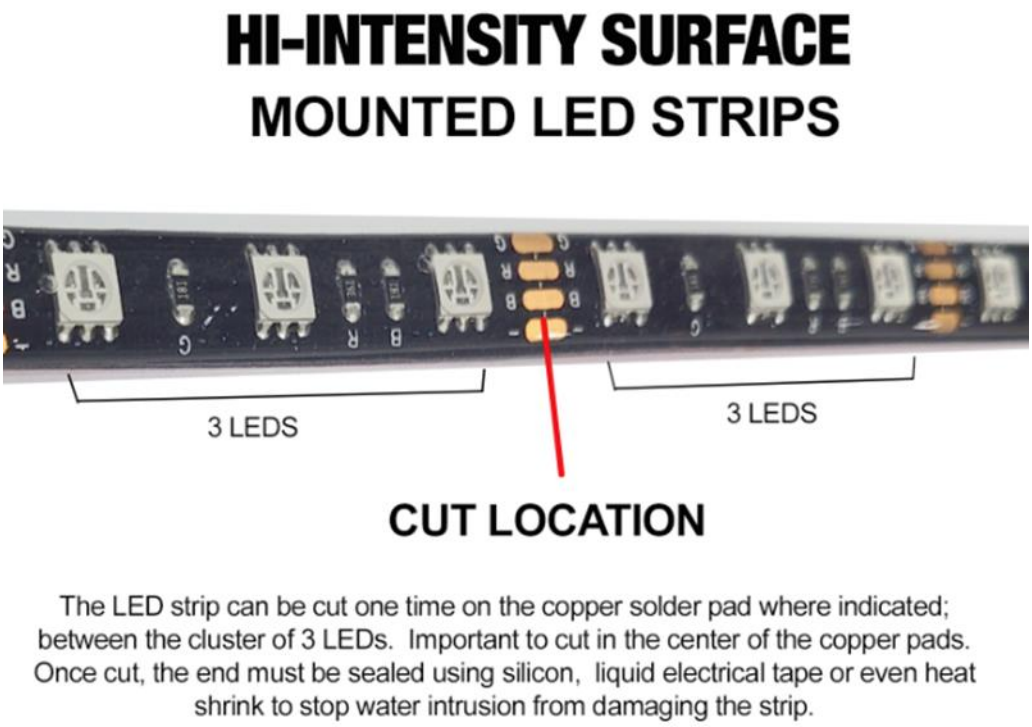
3M Promoter is a powerful adhesion primer. You don't need a lot to make it work. A simple single swipe on the surface you're mounting the light strip to is all you need. The 3M primer instantly bonds the 3M tape on the back of the LED light strip to the mounting surface. Once the 3M tape on the back of the LED strips touches a surface that has been treated with the 3M promoter, they will instantly bond together. You will not be able to break that bond without damaging the strip so make sure you have the placement where you want it the first time.

ROUTING THE POWER LEADS

When routing the power leads back to the LED Controller, it's important to make sure the power leads aren't making contact with any moving parts such as handle bar tree, chain, drift shaft, wheels, etc. Also, make sure the power leads don't make direct contact with a surface (e.g. engine) that's hot enough to melt the power lead plastic casing protecting the wires.

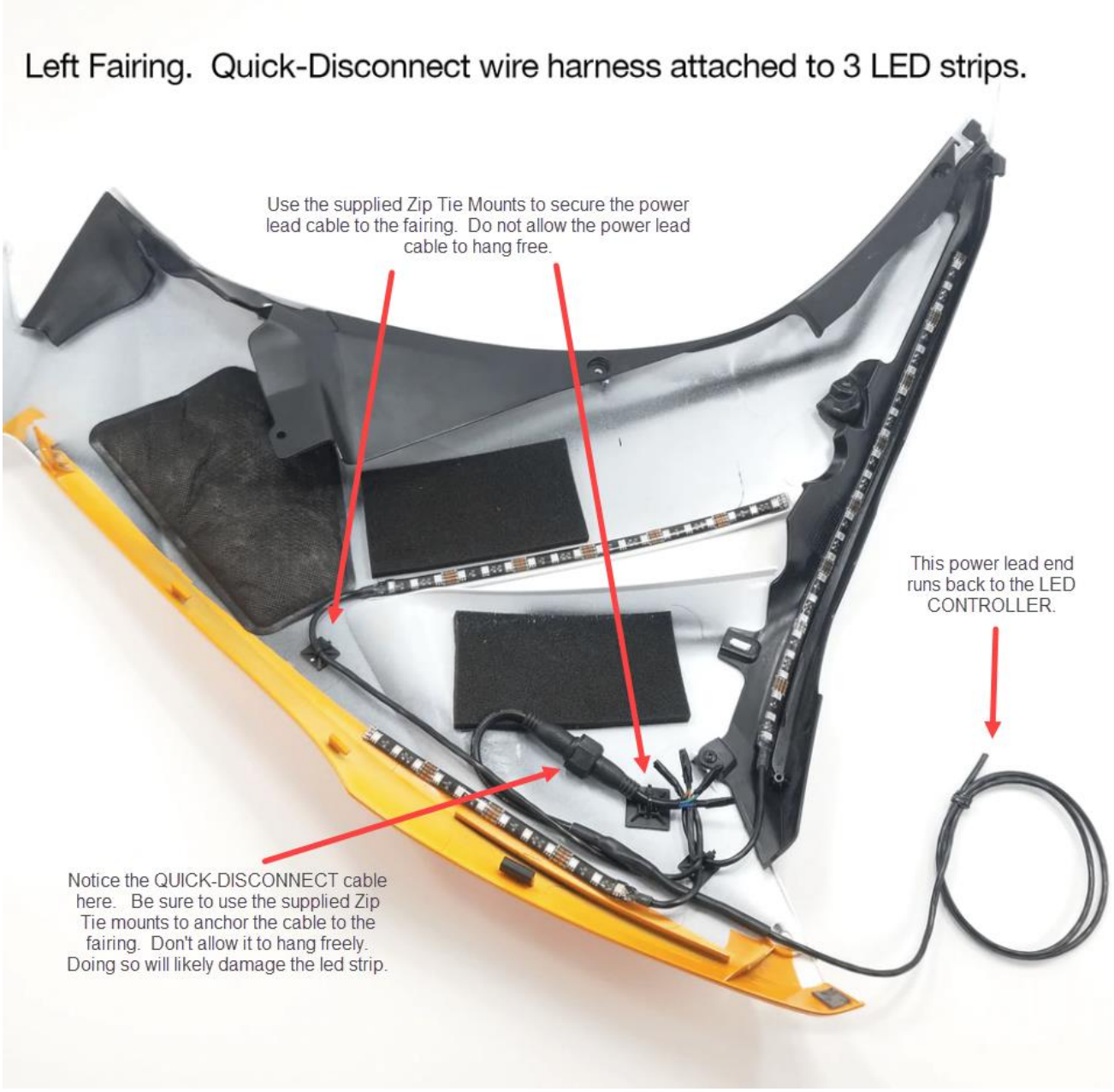
CUTTING OUR HI-INTENSITY LED STRIPS

The LED strip can be cut ONE TIME between the copper fingers where indicated. Important to cut between the copper pads on the white line. Once cut, the end must be sealed using silicon, liquid electrical tape or heat shrink tubing.



It is important to cut in the correct location. Cutting incorrectly could damage your lights and is not covered by the warranty. See image for correct location.

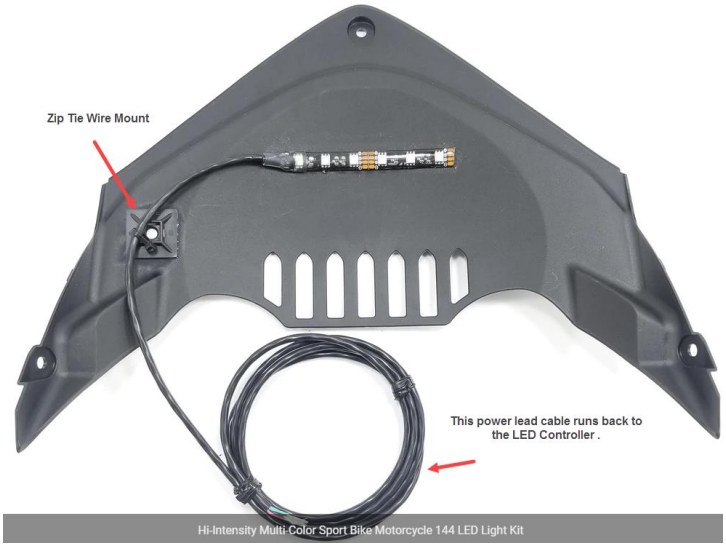
Note: Once you cut the wire it is important to slide a small piece of heat shrink tubing over the cut end and shrink it with a hair dryer or heat gun to seal the end. This will prevent moisture from getting into the cut end and shorting out the strip. If you are using the entire piece you may want to cut off the one end of the wire leads. In this case you should not cut too close to the strip. Allow about 1" from the end of the strip to make the cut. It is important to heat shrink this cut as well.



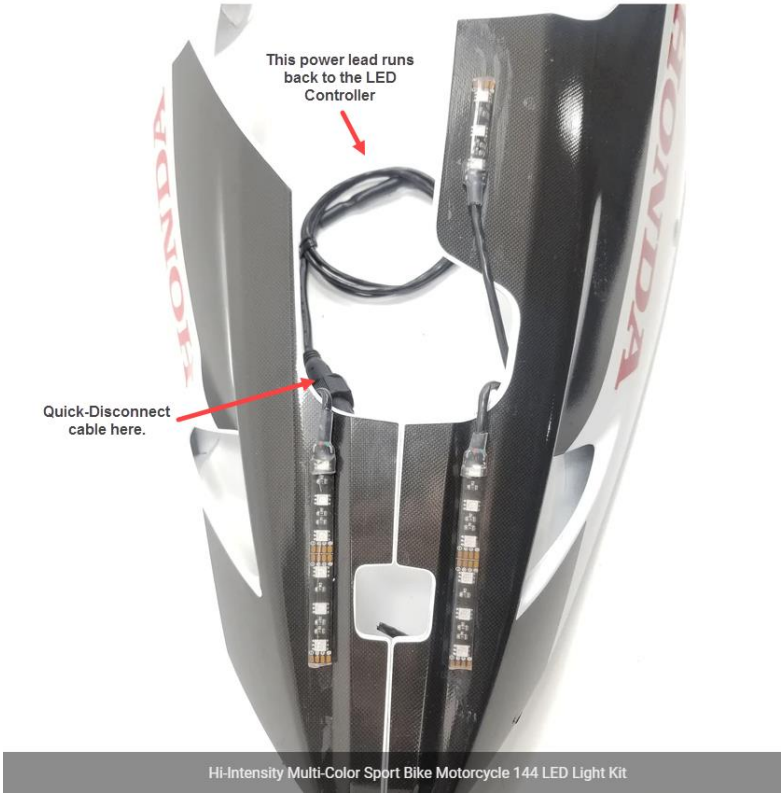
Note: Be sure to apply some 3M Promoter to the surface before affixing the Zip Tie mounts. It's important the Zip Tie mounts stay put too just like the LED strips.

Right Fairing. Quick-Disconnect wire harness attached to 3 LED strips.

Bottom of Front Fairing



Bottom Fairing. Quick-Disconnect attached to 3 LED strips



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Additional Resources

- Product Page: https://www.boogeylights.com/motorcycle-led-kits/
- How to Videos: https://www.boogeylights.com/how-to-videos/
- Troubleshooting: https://www.boogeylights.com/trouble-shooting-guide/
- Installation Resources: https://www.boogeylights.com/installation-resources/
- How to Bench Test: https://docs.boogeylights.net/?wpdmdl=1305
- Amperage Data: https://docs.boogeylights.net/?wpdmdl=1137
- Cutting Your LEDs: https://docs.boogeylights.net/?wpdmdl=964
- 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

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/.