

INSTALLATION GUIDE
JEEP UNDER-GLOW
LED LIGHT KIT



Family Owned Motorsports Lighting Since 1989

800.847.1359

www.BoogeyLights.com

Online Installation Video For This Product

<https://www.boogeylights.com/jeep-under-glow-led-light-kit/>

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 variations. **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 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 JEEP. 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.

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 works best if applied when the air temperature is above 40 degrees (and of course is DRY).

Bench test your setup. We know this takes a few extra minutes but we **STRONGLY** suggest you bench test your lights (and LED 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. You can also use a common 9vdc battery to test your lights if you don't have a 12vdc bench testing power source available (the lights won't be as bright). 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.

What You Need to Know

In putting together this installation guide we assume the installer has access to and has a basic understanding of using the tools needed to complete this installation. We also assume the following:

- The installer can gain access to the bottom of the Jeep to mount the LED strips as well as run power leads.
- The installer knows how to remove the Jeep's grill (assuming the grill light kit was purchased) as well as how to access the Jeep's battery.
- The installer understands 12vdc electricity, the importance of not overloading a circuit, making electrical connections using crimp on and/or heat shrink connectors, the importance of having a fuse in the circuit at the battery location and polarity
- How to access the batteries, remove / connect battery connections, how to make electrical connections (e.g. crimping) and the importance of making sure all electrical connections are sealed properly (e.g. no water intrusion).

- How to run power lead cabling such that the power leads and related wiring are secured in a way as to protect them from chafing, pinching or melting because they're too close to the engine or other extreme heat source.

NOTE: Every installation varies a little so you may need to purchase additional items. Make sure to review our list of other items you may need before starting your installation. Here's the link:

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

This particular LED light kit has it's own installation video online. We strongly suggest watching it first before starting the installation. Here's the link: <https://www.boogeylights.com/jeep-under-glow-led-light-kit/>

In addition, our website offers a lot of helpful information – including HOW-TO videos. While they may not be specific to this particular kit, the concepts in terms of preparing the surface, attaching the LED strip, routing LED power leads and connecting the LED controller are the exact same regardless of the vehicle type. We encourage you to take a look at this HOW TO VIDEOS before starting your installation.

<https://www.boogeylights.com/how-to-videos/>

Tools You May Need

Sockets/wrenches in the sizes necessary to make electrical connections to your JEEP's battery, wire cutters/strippers, crimping tool, electrical tape, rubbing alcohol, shop rag or two and a heat gun (or hair dryer). We also suggest a 12vdc multi-meter to confirm/double check voltages. If you have to fabricate the rear bumper mounting surface, you're going to need a band saw or similar to cut the aluminum angle. We also suggest a rivet gun or screw gun in this case to secure the aluminum angle.

Which wiring diagram you get with your kit depends on the controller /switch you purchased. You can also download this wiring diagram from our website. If you purchased the kit without any switching, we assume you are going to be wiring the lights into an existing 12vdc circuit or switch. Be sure to allocate additional amperage draw which depending upon the color, can be as much as 3.3 amps per 300 LEDs. If you're going to be wiring to an existing switch or circuit, we strongly suggest using a 12vdc heavy duty relay. Connecting this many LEDs to an existing light circuit will likely make your LCM think there's a problem and it will throw an error. Using a relay avoids that potential problem.

Mounting & Placement Locations / Planning Your Install

Installation of this led light kit takes 3 to 6 hours depending on which configuration you purchased. Kits that include the grill light kit take the longest because you'll need to remove the grill and build two quick-disconnect wiring harnesses (components supplied in the kit). Also, if you purchased the full perimeter light kit, you may or may not need to fabricate the mounting surface for the rear bumper area (see our installation video on the product page @ 3:55 for an example of what we're referring to). We include the aluminum angle to do this. Regardless, we strongly suggest viewing the installation video we have on the product page before starting this installation. It will give you a good idea of what's involved. Here is the full link: <https://www.boogeylights.com/jeep-under-glow-led-light-kit/>

There are three LED placement configurations based on the kit you purchased. Below is a summary of each configuration:

Basic Under-Glow

- 2 - 30 LED Heavy Duty LED strips on each side of the Jeep (4 total for the four door Jeep). We mounted them on the slider slightly facing inward (see install video for a better view of placement). For the two door Jeep, only ONE - 45 LED HD LED strip is mounted on each side (2 total).

Under-Glow Full-Perimeter

- 2 - 30 LED Heavy Duty LED strips on each side of the Jeep (4 total for the four door Jeep). We mounted them on the slider slightly facing inward (see install video for a better view of placement). For the two door Jeep, only ONE - 45 LED HD LED strip is mounted on each side (2 total).
- 1 - 45 LED Heavy Duty LED strip under the front bumper.
- 1 - 45 LED Heavy Duty LED strip under the rear bumper.

Under-Glow Full-Perimeter + Grill

- 2 - 30 LED Heavy Duty LED strips on each side of the Jeep (4 total for the four door Jeep). We mounted them on the slider slightly facing inward (see install video for a better view of placement). For the two door Jeep, only ONE - 45 LED HD LED strip is mounted on each side (2 total).
- 1 - 45 LED Heavy Duty LED strip under the front bumper.
- 1 - 45 LED Heavy Duty LED strip under the rear bumper.
- 1 - 30 LED low-profile LED strip at the bottom of the radiator, behind the grill, shining upward (see video for placement)
- 1 - 18 LED low-profile LED strip on the inside of the top of the grill shining downward (see video for placement). Includes quick-disconnect connector.
- 1 - 12 LED low-profile LED strip on the inside of the top of the grill shining downward (see video for placement). Includes quick-disconnect connector.

Note that each of the Heavy Duty LED strips have a 36" power lead so each of these power leads will need to be extended. We include power lead extension cable and heat shrink in the kit for this. The quick-disconnect connectors referenced above for the grill light kit are also included in the kit but you have to assemble the wiring harnesses. We suggest wrapping the LED power leads in split loom (included) to protect them from chaffing and abrasion. See photo at the end of this guide showing how to make these connections with heat shrink to seal them.

LED CONTROLLER / SWITCH

For kits that include an LED Controller or wireless ON/OFF Switch we recommend mounting them in the engine bay and connecting them directly to the battery. See install video (@ 4:35) for how we did it. We recommend connecting the 12vdc + for the LED controller directly to the battery using the supplied battery extension cable. The negative side of the LED controller can either be run back to the battery too or simply connected to bare metal somewhere on the Jeep's frame.

MOUNTING 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).

If the area is especially greasy, you'll need to clean it with a degreaser or similar solvent. IF you do, be sure to use rubbing alcohol on the surface next to completely remove any left-over residue from the degreaser.

- 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.

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

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



Do NOT bend the LED strip on a horizontal plane.



line. Really important that the ENTIRE STRIP be stuck to the mounting surface and that you NOT attempt to span across multiple mounting surfaces.

Extending Power Leads & Assembling Quick-Disconnect Connectors

We include heat shrink for extending the power leads on each of the heavy duty LED strips as well as sealing the connections to the LED controller if purchased. The 1/8" heat shrink is used to seal each of the individual connections; there will be 4 per LED strip if RGB and 2 per LED strip is Single Color. Then, the 1/2 " heat shrink is used to seal over top of that group. See the photo below showing how this is done. While this photo is for the quick-disconnect, the concept is the exact same for extending the power leads on the Heavy Duty LEDs. If you purchased the Grill Light Kit, you'll need to assemble the quick-disconnect connectors that will all for future easy removal of the grill.

