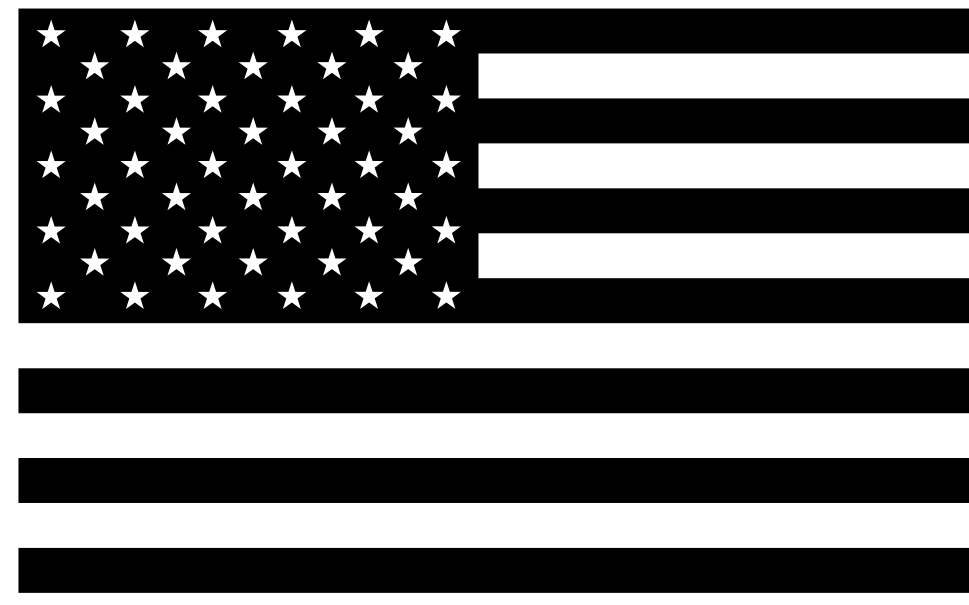


# FREEDOM

★ LIGHTING SUPPLY ★



EST 2022

## ROCK LIGHT INSTALLATION GUIDE

PLUG & PLAY • DIY FRIENDLY • REAL INSTALL SUPPORT

For Freedom Lighting Supply Plug & Play Rock Light Systems

Pure White • RGB+White • White & Amber

**IMPORTANT:** Read this guide completely before beginning installation. Test the complete system before permanently mounting or routing components.

### Installation Support

Monday-Saturday • 8:00 AM-8:00 PM Eastern Time

239-300-8339 • [info@freedomlightingsupply.com](mailto:info@freedomlightingsupply.com)

[freedomlightingsupply.com](http://freedomlightingsupply.com)

### THE FREEDOM GUARANTEE

Quality products. Exceptional service. Support you can count on.

# BEFORE YOU BEGIN

Thank you for choosing Freedom Lighting Supply. Our rock light systems are designed around a **Plug & Play installation**, allowing you to achieve a clean, professional lighting setup without unnecessarily cutting or splicing the supplied lighting harness.

Please read these instructions completely before beginning your installation. Installation requirements may vary depending on the vehicle, number of lights, mounting locations, controller, and accessories being used.

Freedom Lighting Supply rock light systems operate on 12V power unless otherwise specifically stated for your product.

## Before installation:

- Verify that all components ordered are present.
- Inspect the lights, wiring, connectors, and control box for shipping damage.
- Temporarily connect and test the complete lighting system before permanently mounting or routing components.
- Disconnect vehicle power when making final electrical connections.
- Plan all light locations and wiring routes before drilling any mounting holes.

**DO NOT cut, splice, extend, modify, or alter the supplied Freedom Lighting Supply Plug & Play wiring harness. Alteration of the supplied wiring may void applicable warranty coverage.**

Use only compatible Freedom Lighting Supply extensions, connectors, and accessories when additional wiring length or connections are required.

# TOOLS & INSTALLATION SUPPLIES

Depending on your mounting method and vehicle, you may need:

- Drill
- Appropriate drill bits
- Phillips-head screwdriver
- Zip ties
- Self-tapping screws
- Appropriate tools for accessing the vehicle's battery terminals

The supplied **stainless-steel rock light mounting hardware** is used when through-bolting rock lights through compatible wheel-well liners.

**Self-tapping screws may be required** for mounting rock lights to suitable metal surfaces when through-bolting is not practical.

Self-tapping screws may not be necessary when using compatible Freedom Lighting Supply mounting accessories such as magnetic rock light mounts, 45° or 90° fully magnetic brackets, or bolt-on rock light brackets.

# STEP 1 — TEST THE SYSTEM

Before permanently installing any components, assemble and test the lighting system.

Connect the rock lights to the appropriate Plug & Play harnesses or connectors and connect the system to the compatible Freedom Lighting Supply control box.

Temporarily connect the control box directly to the vehicle's **12V battery**: positive (+) to the positive (+) battery terminal and negative (-) to the negative (-) battery terminal.

Turn the system on using the supplied RF remote and/or compatible Bluetooth app.

**Verify:**

- Every rock light illuminates.
- All Plug & Play connections function correctly.
- The RF remote operates the system.
- Bluetooth/app control functions correctly when equipped.
- Color functions operate correctly on RGB+White systems.
- White and amber functions operate correctly on applicable White & Amber systems.

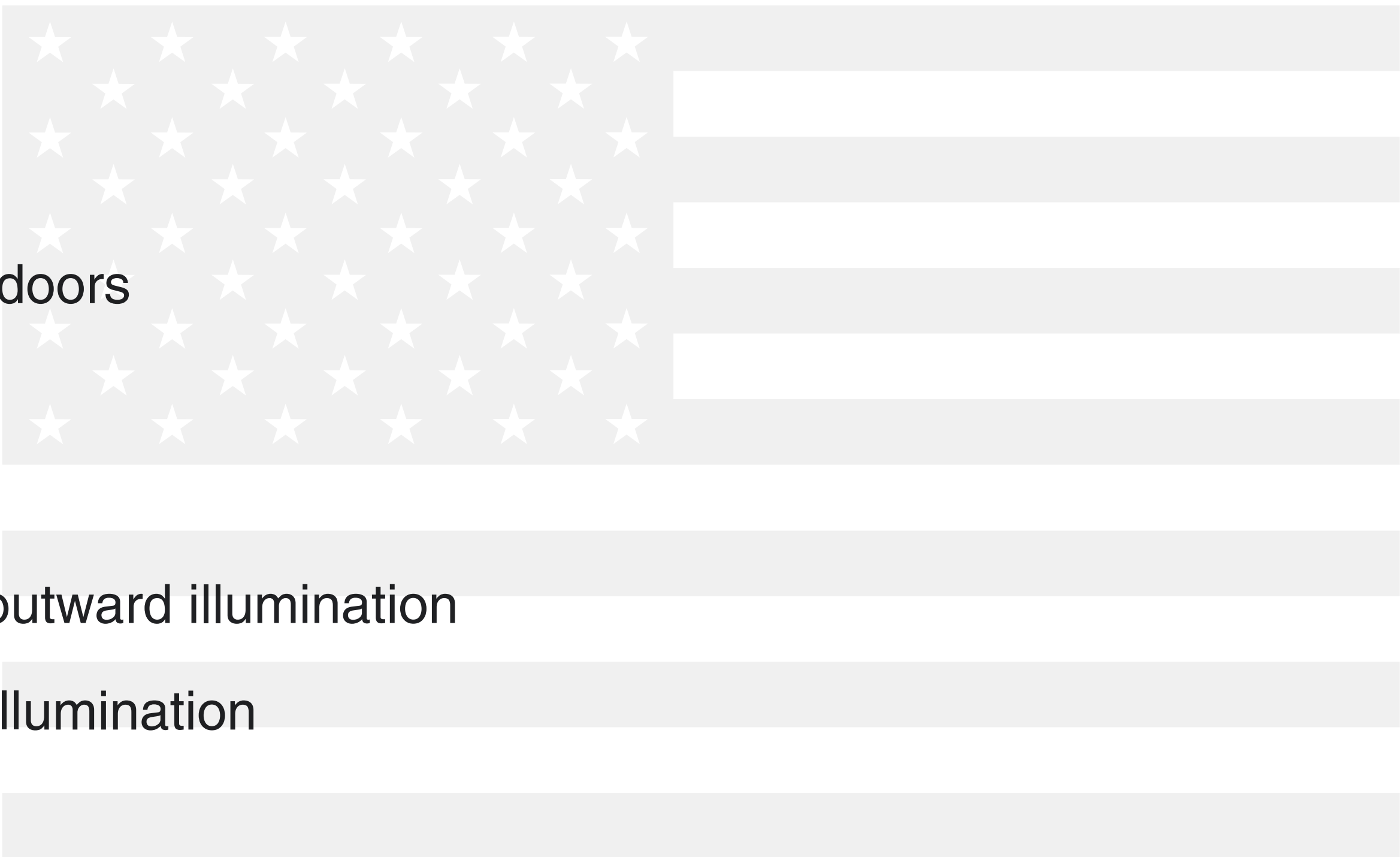
Do not permanently install the system until all components have been tested and confirmed operational.

## STEP 2 — PLAN YOUR ROCK LIGHT PLACEMENT

Proper placement is one of the most important parts of achieving even light coverage. Before mounting the lights, determine where each rock light will be positioned underneath the vehicle.

**Common mounting locations include:**

- Front wheel wells
- Rear wheel wells
- Frame rails
- Under the driver and passenger doors
- Front underside of the vehicle
- Rear underside of the vehicle
- Front bumper or grille areas for outward illumination
- Rear bumper areas for outward illumination



### FOR BEST RESULTS

Position lights so the LED face has a clear path toward the area you want illuminated. Space lights as evenly as possible to reduce dark areas and shadows.

Larger systems should generally distribute additional lights throughout the sides, front, rear, and center sections of the vehicle rather than concentrating too many lights in one location.

Before drilling, temporarily position the lights and verify the projected lighting direction whenever possible.

## STEP 3 — SELECT SAFE MOUNTING LOCATIONS

Before permanently mounting any rock light, inspect the area behind and around the mounting location.

**Do not mount lights or route wiring where they may contact:**

- Exhaust components
- Engine or drivetrain components producing excessive heat
- Driveshafts

- Axles
- Steering components
- Suspension components
- Tires
- Brake components
- Sharp metal edges
- Moving components
- Areas where suspension travel could pinch, stretch, or damage wiring

Make sure the selected location provides sufficient clearance during **full steering movement and normal suspension travel**.

**Never drill into a surface without verifying what is located on the opposite side.**

## STEP 4 — MOUNT THE ROCK LIGHTS

Freedom Lighting Supply rock lights can be mounted in several different ways depending on the vehicle, desired light placement, and mounting accessories being used.

### WHEEL-WELL ROCK LIGHT INSTALLATION

For rock lights being installed directly to a compatible **wheel-well liner**, use the **provided stainless-steel mounting hardware to through-bolt the rock light through the wheel liner**.

#### 1. POSITION THE ROCK LIGHT

Hold the rock light against the wheel-well liner in the desired mounting location. Make sure the LED face is positioned toward the area you want illuminated and verify that the light will not interfere with the tire, suspension, steering, brake components, or other moving parts.

#### 2. MARK THE MOUNTING HOLES

Using the rock light as your guide, mark the locations where the stainless-steel mounting hardware will pass through the wheel-well liner. Before drilling, verify there are no wires, hoses, brake lines, fuel lines, or other vehicle components behind the drilling location.

#### 3. DRILL THE WHEEL-WELL LINER

Using an appropriately sized drill bit, carefully drill the required mounting holes through the wheel-well liner at the marked locations. Use only the size necessary for the supplied mounting hardware.

#### 4. THROUGH-BOLT THE ROCK LIGHT

Position the rock light over the drilled holes and install the supplied stainless-steel mounting hardware through the rock light and wheel-well liner. Secure the hardware from the opposite side of the liner.

Tighten until secure. **Do not overtighten** to the point that the wheel-well liner, rock light housing, or mounting surface becomes distorted or damaged.

#### 5. SECURE THE WIRING

Route the rock light wiring cleanly along the wheel-well liner and toward the main wiring route. If installing **multiple rock lights in the same wheel well**, group the wires together and secure them using **zip ties** for a clean, organized installation.

Leave enough slack at each light connection to prevent unnecessary tension while keeping wiring clear of tires, steering, suspension, brakes, sharp edges, heat, and any area where it could rub, pinch, stretch, or become damaged.

After securing the wiring, trim excess zip-tie material for a clean finished installation.

## SELF-TAPPING SCREW INSTALLATION

Self-tapping screws are typically used on larger rock light kits where lights are being installed in additional locations beyond the wheel wells.

This may include mounting rock lights:

- Under the front of the vehicle
- Under the rear of the vehicle
- Along the driver and passenger sides
- On frame sections
- On crossmembers
- Through the center underside of the vehicle
- In other suitable underbody mounting locations

When using self-tapping screws, a **flat, solid steel mounting surface is preferred** whenever possible.

Position the rock light against the selected steel surface with the LED face directed toward the desired illuminated area. Inspect what is behind the mounting surface before installing any screw.

**Do not install self-tapping screws where they could contact or damage wiring, fuel lines, brake lines, hoses, tanks, drivetrain components, or other vehicle systems.**

Secure the rock light firmly without overtightening or damaging the housing. For larger kits, distribute additional lights throughout the **front, rear, sides, and center** of the vehicle as appropriate for the desired coverage.

## OPTIONAL FREEDOM LIGHTING SUPPLY MOUNTING SOLUTIONS

Depending on your installation, drilling or self-tapping screws may be reduced or eliminated by using compatible Freedom Lighting Supply mounting accessories:

- Magnetic Rock Light Mounts
- 45° Fully Magnetic Rock Light Brackets
- 90° Fully Magnetic Rock Light Brackets
- Bolt-On Rock Light Brackets

## MAGNETIC INSTALLATION

Magnetic mounts require a suitable **ferrous steel mounting surface**. Magnetic mounting will generally not function correctly on aluminum, fiberglass, plastic, and certain stainless-steel surfaces.

Clean the mounting surface and make sure the magnet sits completely flat against the steel with maximum possible contact. Verify each mount is secure before operating the vehicle.

Magnetic holding strength can vary depending on mounting material, steel thickness, surface coating, cleanliness, and amount of direct contact.

**IMPORTANT MOUNTING REMINDER: Never drill or install mounting hardware until you have verified what is located behind the mounting surface. After installation, confirm every light is secure and all wiring is clear of tires, steering, suspension, drivetrain, exhaust, and other moving or high-temperature components.**

## STEP 5 — ROUTE THE ROCK LIGHT WIRING

Once the lights are positioned, begin routing the Plug & Play wiring toward the control box. Whenever possible, follow existing factory wiring routes along the frame or chassis.

**Keep wiring:**

- Away from exhaust and excessive heat
- Away from driveshafts and axles
- Away from steering components
- Away from suspension components
- Away from tires
- Away from sharp edges
- Away from pinch points
- Protected from excessive movement

Secure wiring at regular intervals using zip ties or other appropriate automotive wire-management methods. Do not leave wiring hanging underneath the vehicle.

Leave enough slack near each rock light to prevent connector tension during normal vehicle movement, but do not leave excessive loose wiring.

When multiple rock-light wires follow the same route, **bundle and zip tie the wires together whenever practical.**

**NEED ADDITIONAL LENGTH?**

Use compatible Freedom Lighting Supply **Plug & Play Wire Extensions** when additional wiring length is required.

**Do not cut or splice the supplied harness to create additional length.**

## STEP 6 — CONNECT THE ROCK LIGHTS

Connect each rock light to the appropriate Freedom Lighting Supply Plug & Play connector or harness. Depending on the system configuration, your installation may use add-on connectors such as 1-to-2, 1-to-4, 1-to-6, or 1-to-8.

**IMPORTANT — CONNECTOR ALIGNMENT**

Freedom Lighting Supply Plug & Play connectors are designed with **alignment arrows and a guide pin** to ensure the connectors are joined in the correct orientation.

**Before plugging any connection together, locate the alignment arrows and guide pin. Line up the arrows, align the guide pin with its corresponding position, and confirm the connector is oriented correctly before pushing it together.**

- The arrows should be properly lined up with each other.
- The guide pin should be correctly aligned with its corresponding position.
- Do not force a connector together if the arrows and guide pin are not properly aligned.
- Make sure the connection is completely seated and secure.

It is possible for a connector to be connected in the **incorrect or upside-down orientation**. If the wiring orientation is reversed, the affected rock light may **not illuminate**, even though there is nothing wrong with the light itself.

This is one of the first items to check anytime an individual rock light does not turn on.

**IMPORTANT — CONTROLLER CAPACITY**

Adding additional connectors or lights **does not increase the electrical capacity of the control box**. The total electrical load must remain within the rated capacity of the controller. Contact Freedom Lighting Supply if you are unsure whether your controller supports the number of lights being installed.

## STEP 7 — MOUNT THE CONTROL BOX NEAR THE BATTERY

Choose a secure mounting location for the control box **as close to the vehicle's 12V battery as practical**. The positive (+) and negative (-) power leads coming from the controller are approximately **6 inches long** and feature **pre-installed terminal rings** designed for direct connection to the battery terminals. Because these power leads are intentionally short, the control box needs to be mounted **very close to the battery** so both terminal rings can comfortably reach their corresponding battery terminals without stretching or placing tension on the wiring.

- When selecting the controller location, make sure:**
- Both battery leads comfortably reach the battery terminals
  - There is no tension on the positive or negative wiring
  - The control box is securely mounted
  - The control box is away from excessive heat
  - The control box is away from belts, fans, and moving components
  - Wiring can be routed cleanly away from sharp edges
  - The control box remains reasonably accessible for future service

Do not attempt to stretch the battery leads to reach the battery.

## STEP 8 — CONNECT THE CONTROL BOX DIRECTLY TO THE BATTERY

Once the control box is securely mounted near the battery, connect its pre-installed positive and negative terminal rings **directly to the vehicle's 12V battery terminals**.

### POSITIVE CONNECTION

Connect the **positive (+) controller lead and pre-installed terminal ring directly to the positive (+) battery terminal**. Make sure the connection is clean, secure, and properly tightened.

### NEGATIVE CONNECTION

Connect the **negative (-) controller lead and pre-installed terminal ring directly to the negative (-) battery terminal**.

For the most reliable system operation, do not use a chassis ground in place of the direct negative battery connection.

|                              |                               |
|------------------------------|-------------------------------|
| Positive (+) Controller Lead | Positive (+) Battery Terminal |
| Negative (-) Controller Lead | Negative (-) Battery Terminal |

Both terminal rings should reach comfortably without stretching, pulling, or placing tension on the controller wiring. A secure direct-to-battery connection helps provide consistent power and ground.

Do not reverse polarity. Do not cut, splice, extend, or otherwise modify the controller's battery leads to mount the control box farther away from the battery.

## STEP 9 — OPTIONAL CONTROL & TRIGGER WIRES

Certain Freedom Lighting Supply control boxes may include additional control or trigger wires for integrating your rock lights with specific vehicle functions.

THESE WIRES ARE COMPLETELY OPTIONAL. You do not need to connect any optional control or trigger wire for the kit to operate normally. The system will still function through the supplied RF remote and/or Bluetooth app.

### PURE WHITE OVERRIDE — WHITE WIRE

The **white wire** is the Pure White override trigger on compatible controllers. Connect it only to the appropriate vehicle 12V signal if this optional function is desired.

### BRAKE TRIGGER — BLUE WIRE

The **blue wire** is the brake trigger input on compatible controllers. It can be connected to the appropriate 12V brake-light signal if the supported brake function is desired.

### TURN SIGNAL TRIGGERS — GREEN & YELLOW WIRES

Compatible controllers may include **green and yellow turn-signal trigger wires**. These can be connected to the corresponding 12V turn-signal circuits to activate supported turn-signal functions.

### OPTIONAL WIRE QUICK REFERENCE

- White Wire — Pure White Override
- Blue Wire — Brake Trigger
- Green & Yellow Wires — Turn Signal Triggers

If you are using only the RF remote and/or Bluetooth app, leave these wires **disconnected and safely secured**.

Never connect an optional trigger wire directly to the battery simply because it uses a 12V signal. Connect only to the correct corresponding vehicle circuit when that feature is desired.

## STEP 10 — RF REMOTE & BLUETOOTH APP SETUP

### RF REMOTE PAIRING

If the supplied RF remote is not already paired to the controller, use the following pairing procedure:

- Pull the system fuse to cut power to the controller.
- Press and hold the remote's **OFF / Power button**.
- While continuing to hold the OFF / Power button, reinstall the fuse to restore controller power.
- Continue holding the button for approximately **2 additional seconds**.
- The light on the remote fob should blink when pairing is successful.

After pairing, test the remote's power and available lighting functions.

If the app works but the RF remote does not: replace the remote battery and repeat the pairing procedure.

BLUETOOTH APP SETUP — LEDShow

Scan the supplied **iOS / Android QR code** included with your system to download the **LEDShow** app.

- Make sure the lighting controller has power.
- Open the LEDShow app on your smartphone.
- The controller should connect automatically through the app.
- Use the app's on/off control to verify the connection.
- The device menu should display **HYLEDTEST** on compatible controllers.

**IMPORTANT: Do not pair the controller through your phone's normal Bluetooth settings. Connect to the controller through the LEDShow app.**

If you previously paired the controller through the phone's normal Bluetooth settings, delete/reinstall LEDShow and reconnect through the app.

On compatible controllers, the LEDShow main interface provides **2 independently controllable zones**.

IF NO DEVICE APPEARS IN LEDShow

- Allow LEDShow access to **Bluetooth** and **Location** permissions when prompted.
- Confirm the controller is powered on.
- Restart the app and, if necessary, restart the phone.

IF THE REMOTE WORKS BUT THE APP WILL NOT CONNECT

- Delete the LEDShow app from your phone.
- Pull the lighting-system fuse and leave controller power disconnected for approximately **5 minutes**.
- While controller power is still off, reinstall LEDShow.
- Restore controller power by reinstalling the fuse.
- Open LEDShow and reconnect through the app.

STEP 11 — TEST BEFORE FINALIZING THE INSTALLATION

Once all lights, connectors, wiring, controller, and battery connections have been installed, test the entire system again.

- Every rock light operates correctly.
- All connector arrows and guide pins are correctly aligned.
- All connectors are completely seated.
- RF remote functions correctly.
- LEDShow/Bluetooth app control functions correctly when equipped.
- All selected colors and functions operate correctly.
- Wiring does not contact heat sources or moving components.
- Wiring is not stretched or under excessive tension.
- All lights and brackets are securely mounted.
- The control box is securely mounted near the battery.
- Positive and negative battery connections are secure.

LEDShow - iPhone / iOS



Scan to download from the App Store  
Official LEDShow App

Turn the steering wheel fully in both directions and inspect wiring around the front wheel wells. Where practical and safe, verify normal suspension movement will not pull, pinch, or damage wiring.

## STEP 12 — SECURE & FINISH THE INSTALLATION

After confirming proper operation, complete the installation by securing all wiring. Bundle and secure excess wiring neatly. Do not tightly coil large amounts of wiring against excessive heat sources or moving components.

Trim excess zip-tie material. Reinstall any wheel-well liners, panels, covers, or other vehicle components removed during installation. Perform one final visual inspection underneath the vehicle before driving.

## FINAL INSTALLATION CHECKLIST

- All rock lights are securely mounted.
- All brackets and mounting hardware are secure.
- Magnetic mounts, when used, have full contact with suitable steel.
- Connector arrows and guide pins are properly aligned.
- All Plug & Play connections are fully seated.
- Control box is securely mounted near the battery.
- Positive controller terminal ring is directly connected to the positive (+) battery terminal.
- Negative controller terminal ring is directly connected to the negative (-) battery terminal.
- No tension is being placed on the controller's battery leads.
- Optional trigger wires are either properly connected or safely secured and left disconnected.
- Wiring is secured and clear of exhaust, heat, tires, and moving components.
- Wiring has adequate clearance for steering and suspension movement.
- All lights illuminate correctly.
- RF remote operates correctly.
- LEDShow app operates correctly when equipped.
- All system functions have been tested.

## TROUBLESHOOTING

### SYSTEM DOES NOT TURN ON

- Check positive (+) battery connection.
- Check negative (-) battery connection.
- Check main control-box power wiring and control-box connections.
- Check Plug & Play connectors and their orientation.
- Check applicable fuse or circuit protection.
- Check RF remote operation.
- Check LEDShow/Bluetooth connection when equipped.

Confirm both controller power leads are connected directly to the correct battery terminals.

ONE ROCK LIGHT DOES NOT WORK

Checkconnector orientation first.

- Alignment arrows are lined up correctly.
- Connector guide pin is in the correct position.
- Connector is not upside down or in the incorrect orientation.
- Connection is completely seated and secure.

An incorrectly oriented or upside-down connector can cause the rock light not to illuminate, even when there is nothing wrong with the light itself.

If orientation is correct, disconnect and reconnect the light, inspect the wiring for visible damage, and when possible connect the affected light to a known-working connection to isolate the issue.

MULTIPLE LIGHTS DO NOT WORK

Inspect theconnectororharnesssupplyingthatgroup of lights. Make sure all upstream Plug & Play connections are fully seated and that alignment arrows and guide pins are correctly oriented. If using an add-on connector, verify its connection to the main system.

LIGHTS FLICKER OR OPERATE INTERMITTENTLY

- Positive battery connection
- Negative battery connection
- Control box connections
- Plug & Play connections
- Connector alignment
- Wiring for rubbing, pinching, or damage

Make sure both battery-terminal connections are clean, tight, and secure.

RF REMOTE DOES NOT RESPOND

Replace/check the remote battery.If needed, repeat the RF pairing procedure: remove the system fuse, hold the remote OFF / Power button, reinstall the fuse while holding the button, and continue holding for approximately 2 seconds. The remote-fob light should blink when pairing succeeds.

BLUETOOTH APP WILL NOT CONNECT

- Verify thelighting systemhas power.
- Verify Bluetooth is enabled on your smartphone.
- Use LEDShow rather than pairing through the phone's normal Bluetooth settings.
- Allow LEDShow Bluetooth and Location permissions.
- Confirm you are within Bluetooth range.
- If the remote works but the app still will not connect, delete LEDShow, pull the fuse for approximately 5 minutes, reinstall LEDShow while power is off, restore power, and reconnect.

IMPORTANT WARRANTY INFORMATION

Freedom Lighting Supply lighting products are backed by our **Limited Lifetime Warranty** for the original purchaser, subject to applicable warranty terms and conditions.

Control boxes are covered by a **3-Year Warranty**.

Warranty coverage does not include damage caused by improper installation, misuse, physical damage, rubbing, contact with moving components, excessive heat exposure, or unauthorized modification of the product or wiring.

**Cutting, splicing, extending, or otherwise altering the supplied Plug & Play wiring harness may void warranty coverage.**

When additional wiring length is required, use compatible Freedom Lighting Supply Plug & Play extensions. Always refer to the current Freedom Lighting Supply warranty policy for complete terms, conditions, limitations, and exclusions.

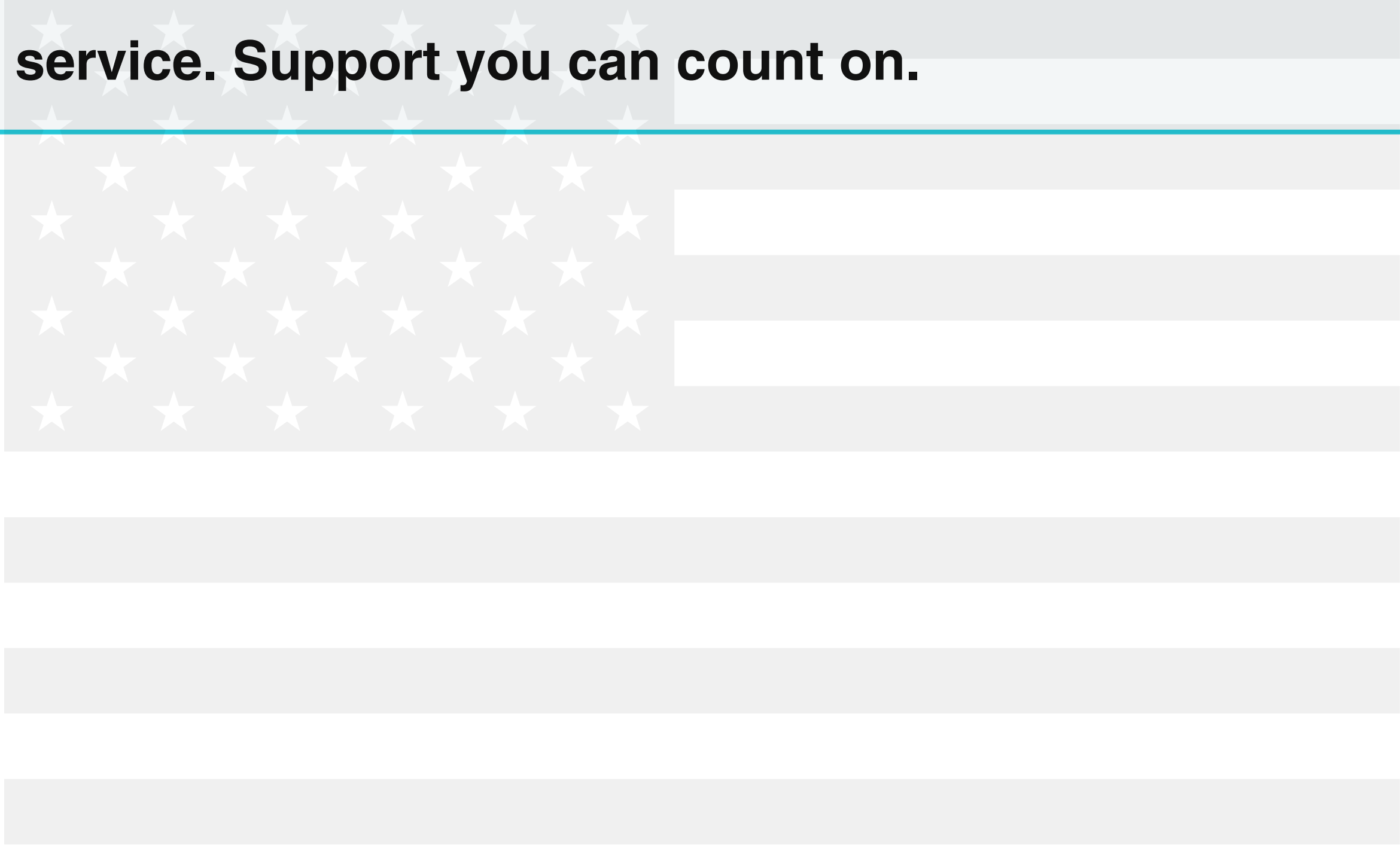
## NEED INSTALLATION HELP?

One of the biggest advantages of choosing Freedom Lighting Supply is having access to **real installation support when you need it**.

If you have a question during your installation, are unsure about a connection, or need help determining the correct mounting or wiring configuration, contact us before modifying the system.

| INSTALLATION SUPPORT                            | CONTACT                                                                     |
|-------------------------------------------------|-----------------------------------------------------------------------------|
| Monday-Saturday<br>8:00 AM-8:00 PM Eastern Time | 239-300-8339<br>info@freedomlightingsupply.com<br>freedomlightingsupply.com |

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