

# Predator 48 Inch Emergency LED Light Bar

**Operating Manual and Installation Instructions**

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**Warnings and Notices for Users and Installers**

**WARNING: Take CAUTION when installing**

This document must be delivered to and read by the end user and installer as it serves to provide you with the required information for proper and safe use of your LED Equipped product. Before operating this or any LED Equipped products the user and installer must read this manual all the way through. You will find important information in this manual that could prevent property damage and/or serious injury to the user and installer. LED Equipped products are intended to alert pedestrians and other operators of the presence of personnel, the operation of emergency vehicles, an emergency site, and any warning needs. It is your responsibility to make sure you can proceed safely before driving against traffic, entering an intersection, responding to a high rate of speed, or walking on or around traffic lanes.

Your LED Equipped emergency vehicle devices should be tested daily to insure the device and all its functions are operating correctly. If you experience a malfunction contact LED Equipped's Customer Service immediately for troubleshooting options, or a warranty or service claim. You must ensure sure that the projection of the visual and audible is not blocked by vehicle components (i.e.: open trunks, visors, compartment doors), vehicles, other obstructions, or people. LED Equipped's sirens and other audible devices project sound in a forward direction and should be installed in a forward direction that faces away from the occupants of the vehicle.

This is professional grade equipment and is intended for strict use by authorized personal only. It is the user's responsibility to understand and obey all laws regarding emergency warning devices. You must know and be familiar with all applicable city, sate, and federal laws and regulations prior to the use of emergency vehicle warning devices. LED Equipped assumes no liability for any loss resulting from the use of this warning device. Proper installation is vital to the performance of the warning devices and safe operation of the emergency vehicle. Since the operator is under stressful environments the equipment must be properly wired and mounted to ensure effectiveness and safety. Therefore, controllers must be properly installed and placed within convenient reach of the operator so eye contact with the roadway is never lost. The effectiveness of your LED Equipped equipment is highly dependent upon correct mounting and wiring.

Improper wiring and mounting of the warning device will reduce the output and performance of the equipment. Emergency warning devices frequently require high electrical voltages and/or currents. Properly protect and use caution around live electrical connections. Grounding or shorting of electrical connections can cause high current arcing, which can cause severe personal injury and/or serious vehicle damage, including fire. Electromagnetic interference can be caused by many electronic devices used in emergency vehicles. To ensure that this doesn't happen to you, lights bars should be mounted a minimum of 12" - 34" from the radio antenna and do not power your equipment from the same circuit or share the same grounding circuit with radio communication equipment. After installation test all the vehicles equipment together to ensure everything operates free of interference. Driver and/or passenger airbags bags (SRS) will impact the way you mount your equipment. Any equipment installed in the deployment area of the airbags will damage or dislodge the airbags and sensors. This will also reduce the effectiveness of the airbags to protect the passengers and therefore these areas must be avoided. Installers must make sure that this equipment along with any parts, hardware, wiring, power supplies, and switch boxes do not interfere with the airbags, SRS wiring, or sensors. All LED Equipped equipment needs to be mounted and installed according to the vehicle manufactures instructions and securely attached to a part of the vehicle of sufficient strength to withstand the forces applied to the equipment. This device should be permanently mounted within the zones specified by the vehicle manufactures. This especially applies to equipment mounted on the exterior of the vehicle to avoid dislodging. When mounting units on the interior of the vehicle by a method other than permanent mount is discouraged as it may become too detached under aggressive driving conditions such as sudden breaking, collision, or swerving.

## Important Points for Your Safety and Longevity of your Equipment

Installers are required to have a good understanding of automotive electronic, systems and procedures for proper installation.

* One should not stare directly into the LEDs as momentary blindness and/or eye damage may occur.
* One should not take any lights through a car wash. Use only water to clean the outer body/lens of your equipment. –
* One should not use a pressure washer to clean any LED Equipped products. Inspect and test your product daily to insure it operates properly and is mounted correctly.
* One should not cut wires or work on a unit while the unit is still connected to a power source.
* One should not install this product or rout any wires through or in the deployment area of the airbag. Doing so may cause serious personal injury as it will damage or reduce the effectiveness of the airbag by causing the unit to become a projectile.

Reference the owner's manual for your vehicle to find the airbag deployment area. The User/Installer assumes all responsibility to determine proper mounting location, based on providing ultimate safety to all passengers in the vehicle.

* If the product requires you to drill holes the installer must ensure that the drilling process does not damage any vehicle components or other vital parts. Check all sides of the mounting surface before beginning to drill. Make sure to deburr all drilled holes and remove any metal remnants or shards to avoid injury and wires from becoming spliced. Grommets are to be installed in all wire passage holes.
* For LED Equipped products to operate at optimum efficiency a secure and good electrical connection to the Batteries Ground Post must be made. The recommended procedure requires the unit's ground wire be connected directly to the NEGATIVE (-) battery post.

**Included Parts**

The following parts are included with the Predator 48 Inch Emergency LED Light Bar.



Predator 48 Inch Emergency LED Light Bar



Predator 48 Inch Emergency LED Light Bar Controller



Predator 48 Inch Emergency LED Light Bar Mounting Hardware

## Instructions for Wiring and Operation

Installation and Wiring

To ensure proper installation installers are required to have a good understanding of automotive electronic systems and procedures for proper installation.

When you are drilling into the vehicle's surfaces, ensure that the area is free of any electrical wires, vehicle upholstery, fuel lines, etc. that could be damaged. All wiring passing through drilled holes should use grommets and silicone sealant to prevent wire or moisture damage when passing through compartment walls.

WARNING! Larger wires and secure or tight connections will ensure longer service life for your product. It is highly recommended that soldered connections have heat shrink used to protect the connection. Special attention should be given to the location and method of splicing wires to make electrical connections to protect these splices from lost power or connection and corrosion.

Insulation displacement connectors are not to be used. To reduce voltage drop, minimize the number of splices in the wires. The current carrying capacity of wires and fuses will be significantly reduced under high ambient temperature (e.g. under the hood).

All wires should be in accordance with the minimum wire size and other recommendations made by the manufacturer and be protected from hot surfaces and moving parts. Grommets, cable ties, looms, and other installation hardware should be used to anchor and protect all wiring. Fuses should be properly sized and located as close to the power take off points as possible to protect the wiring and device. To protect against short circuits, a fuse is included by LED Equipped for all products. Do NOT use a fuse with a higher amp rating than the initial fuse included.

After removing your product from the packaging, ensure that you conduct a full bench test of your product prior to installation on your vehicle. To do this, connect your product 12v + (positive) and 12v – (negative) to an appropriate 12v + (positive) power source and 12v- (negative ground). Installers will typically want to use the 12v – (negative) battery terminal over a frame-ground installation for proper operation. Many LED Equipped vehicle light bars come preinstalled with a 12v auxiliary power connector (cigarette plug) for ease of installation and to allow for simplicity of bench testing of your product. Once connected to an appropriate 12v power source (and GND), test each functional element of your product to ensure proper operation. If it is identified that any function is not working properly as a result of your bench test, please contact LED Equipped for further diagnosis and resolution. DO NOT in any circumstance attempt to open the product light housing to investigate and resolve the issue on your own. Doing so will result in voiding of the factory warranty. Once a successful bench test has been completed, and you have ensured the proper operation of your product, please follow the instructions below to install your product in your vehicle.

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# Installing the Predator 48 Inch Emergency LED Light Bar

The Predator 48 Inch Emergency LED Light Bar is engineered to be roof mounted, using the included gutter mount brackets and hardware for you specific installation, on the top of your vehicle. To ensure proper placement of your Predator 48 Inch Emergency LED Light Bar, it is recommended that you measure and mark your installation location to prior to installation. As noted above, the Predator 48 Inch Emergency LED Light Bar includes roof mounting hardware that secure the Predator 48 Inch Emergency LED Light Bar to the top of your vehicle during installation. Included with the Predator 48 Inch Emergency LED Light Bar are additional mounting brackets that may be required for your specific installation. Please ensure that the proper mounting hardware is selected for your vehicle installation prior to proceeding.

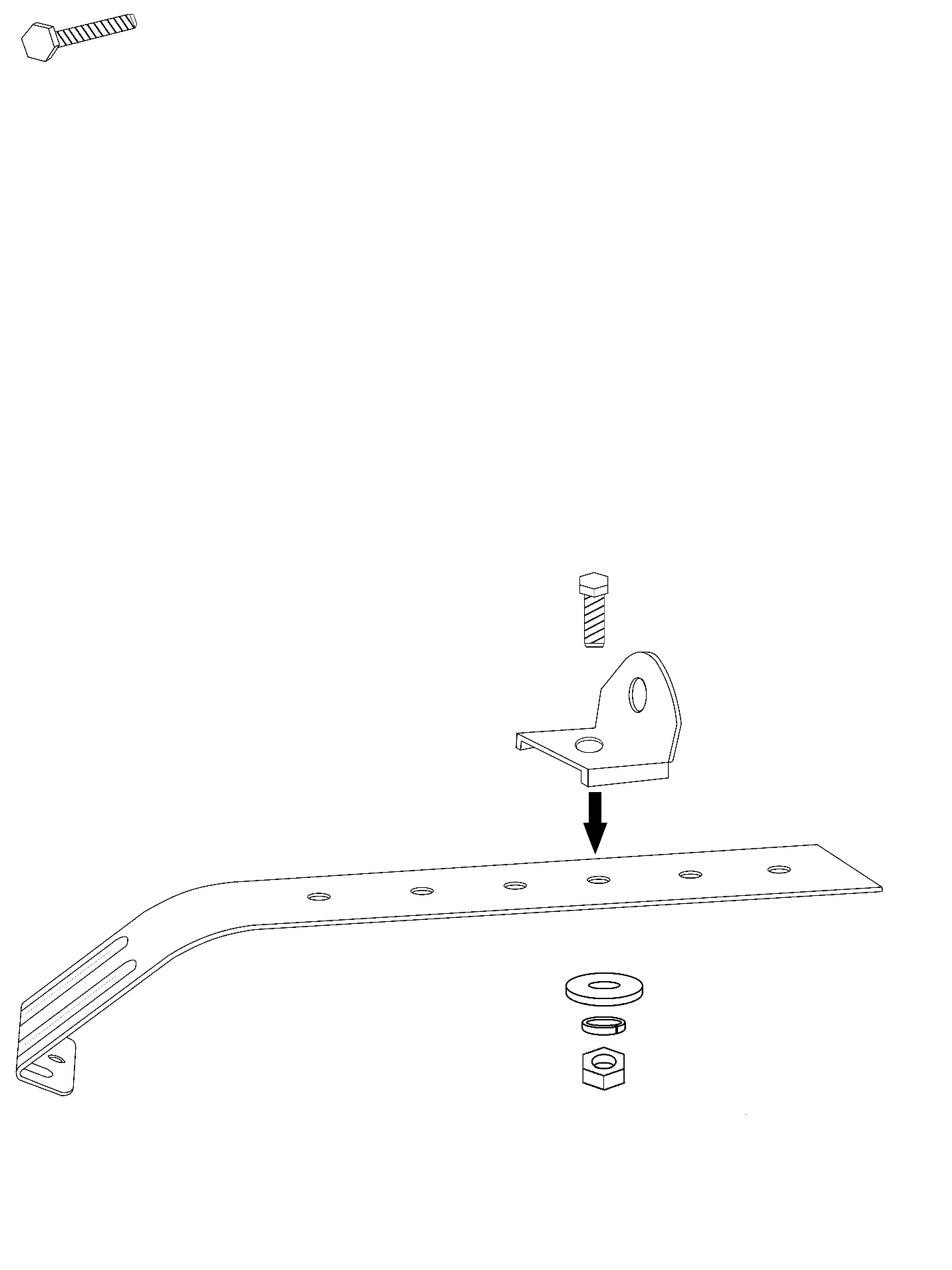
Roof Mounting

Once a desired mounting location has been selected, it is time to begin affixing the Predator 48 Inch Emergency LED Light Bar to your vehicle. Depending on your specific installation needs (gutter/roof rack mount vs. permanent mount), additional mounting hardware (not included) may be required to affix your Predator 48 Inch Emergency LED Light Bar to your vehicle. There are many options for hardware to be utilized in permanently affixing the Predator 48 Inch Emergency LED Light Bar and LED Equipped does not sanction any one preferred method or the hardware that is selected to be used for installation, however it is strongly recommended that any additional mounting hardware that is required for you specific installation be made of stainless steel to best protect against exposure to the elements. The selection of the installation hardware and mounting methodology used for the Predator 48 Inch Emergency LED Light Bar is at the sole and exclusive discretion and responsibility of the vehicle installer or vehicle owner and LED Equipped cannot be held responsible for damage caused to your vehicle as a result of improper mounting of your Predator 48 Inch Emergency LED Light Bar.

Regardless of the desired installation method, the attached mounting feet on the underside of your Predator 48 Inch Emergency LED Light Bar may be adjusted to ensure proper alignment and fit for your specific installation. The attached mounting feet come secured to the Predator 48 Inch Emergency LED Light Bar aluminum housing using four (4), ten (10) millimeter (mm) bolts, and each mounting foot can be adjusted raised or lowered depending to suit your specific installation needs. In addition, it may be necessary to adjust the location of the mounting feet on the Predator 48 Inch Emergency LED Light Bar housing. To raise or lower the mounting feet, or to adjust the location of the mounting feet on your Predator 38 Inch Emergency LED Light Bar, simply loosen the bolts attaching the mounting feet to the light bar, or the bolts used to adjust the height of the mounting feet, and reposition accordingly. Once the desired placement and fit has been achieved, simply tighten the loosened hardware to secure the mounting feet.

To attach mounting brackets (included with your Predator 48 Inch Emergency LED Light Bar), first, utilize the included mounting hardware (bolts, washers and lock nuts) to assemble the mounting bracket as seen in Figure 1. Once you have properly test fit your Predator 48 Inch Emergency LED Light Bar, select the appropriate mounting hold to assemble the mounting bracket for your ideal fit. Optional methods to secure the Predator 48 Inch Emergency LED Light Bar to your vehicle include use of existing vehicle roof rails, or using gutter mounting using the gutters included on the roof of your vehicle. Please note that when attaching the mounting brackets to the Predator 48 Inch Emergency LED Light Bar, additional adjustment will be made as you further tighten the mounting brackets into their final location.

**Figure 1**



Once the mounting bracket has been prepared, loosely affix the mounting bracket to your vehicle, and place your Predator 48 Inch Emergency LED Light Bar into the desired installation location. Remove the fourteen (14) millimeter (mm) bolt that comes pre-installed on the Predator 48 Inch Emergency LED Light Bar and insert it through the mounting bracket and back into the Predator 48 Inch Emergency LED Light Bar mounting feet as seen in Figure 2 below. Once the mounting bracket has been loosely secured to the Predator 48 Inch Emergency LED Light Bar using the 14 mm bolt and locking washer, begin to tighten the 14 mm bolt until the Predator 48 Inch Emergency LED Light Bar is secured to the roof of your vehicle. Ensure that as you are tightening the 14 mm bolt and securing the mounting brackets to the Predator 48 Inch Emergency LED Light Bar, that you alternate tightening the 14 mm bolts on each side of the light bar to best center the Predator 48 Inch Emergency LED Light Bar into its final location on the vehicle. Do not overtighten the 14mm bolts when completing this step to ensure that the mounting brackets do not unseat from where they affix to your vehicle. Ensure that once you have completed your mounting, and appropriately tightened the mounting bracket to your Predator 48 Inch Emergency LED Light Bar, that it cannot move from its final installation location. If you can feel any movement of your Predator 48 Inch Emergency LED Light Bar, recheck and adjust as necessary both the mounting brackets (where connected to the vehicle and the Predator 48 Inch Emergency LED Light Bar) and the hardware to achieve a secure fit.

**Figure 2**



Routing of the Predator 48 Inch Emergency LED Light Bar wiring harness should be considered by the vehicle installer or vehicle owner as part of the installation planning procedures and prior to final securing the light bar to the vehicle. The Predator 48 Inch Emergency LED Light Bar includes ten (10) feet of preinstalled wiring to allow for routing inside your vehicle. The included preinstalled wiring has been designed to allow for exposure on the exterior of the vehicle to eliminate the need to drill unwanted holes in your vehicle exterior.

As described below, there are two options for routing the wiring of your Predator 48 Inch Emergency LED Light Bar. The first method is to run the wiring along the roof of the vehicle to a location where you can easily access the passenger compartment of your vehicle without having to make any holes in your vehicle exterior. The second method is to drill a hole in your vehicle exterior, near to where the wiring harness exits the light housing, through which to route the vehicle wiring harness into the passenger compartment of your vehicle. If it is determined that the wiring for your Predator 48 Inch Emergency LED Light Bar is to be routed through an opening in your vehicle’s exterior, it is recommended that the determination of location and creation of that opening be performed prior to final installation of your Predator 48 Inch Emergency LED Light Bar on your vehicle. Please refer to the wiring instructions below for further details on the routing and wiring of your Predator 48 Inch Emergency LED Light Bar.

External Wire Routing

To begin externally routing the wiring for your Predator 48 Inch Emergency LED Light Bar, identify the desired wiring path to be used to facilitate the easiest and most direct path between the mounting location of your Predator 48 Inch Emergency LED Light Bar and the desired location of your Predator 48 Inch Emergency LED Light Bar controller or external switch box or controller. Identify a path where the wiring harness can be securely fastened to the exterior of your vehicle prior to where it enters the vehicle compartment. Some options include running the wiring along existing roof rails, down the side of the rear window of your vehicle, or down the side of the windshield of your vehicle, where the wiring is out of the way and does not impede or obstruct the safe operation of your vehicle in all operating environments. It is critical that no matter which routing path is chosen, that there are secure fastening points to which you can secure the wiring harness of your Predator 48 Inch Emergency LED Light Bar. Loose or unsecure routing of the wiring harness of your Predator 48 Inch Emergency LED Light Bar can lead to damage to your vehicle and/or damage to the Predator 48 Inch Emergency LED Light Bar. Identify an access point through which you can route the wiring harness into the passenger compartment of your vehicle. Some locations that are typically used are through the firewall or through preexisting pass-through locations in your vehicle exterior. Once a desired wiring path and access point have been identified, route the wiring harness from your Predator Emergency LED Light Bar into your vehicle compartment, securing using appropriate wiring fasteners and secure fastening locations on your vehicle.

Direct Wiring - Through Vehicle Exterior Opening

Should the light bar installer or vehicle owner choose to drill a hole in the vehicle exterior for routing of preinstalled wiring harness, an appropriately sized drill bit will be required and appropriate care should be taken when determining the routing path for the wiring. **Please note: Many vehicles have included safety supports incorporated as part of the vehicle roof design. It is critical that drilling into the safety support structure of your vehicle roof be avoided at all costs. Tampering with or altering vehicle safety and support features can result in injury or death.** Additionally, the vehicle installer or vehicle owner should take appropriate precautions to avoid damaging the headliner of your vehicle interior while predrilling the routing holes for your Predator 48 Inch Emergency LED Light Bar wiring. In many instances, temporary removal of the interior headliner of your vehicle is strongly desired to avoid such damage from occurring, as well as to facilitate the ease of routing of wiring for the Predator 48 Inch Emergency LED Light Bar within your vehicle. Please follow your vehicle’s manufacturer instructions for the removal and reinstallation of any vehicle components such as the interior headliner or moldings within your vehicle. **Please note: It is critical to appropriately seal any holes made in the exterior of your vehicle as part of the installation process. Failure to properly seal any holes made in the exterior of your vehicle may allow harmful gasses to enter the passenger compartment of your vehicle which can result in serious injury or death.** In addition, failure to properly seal any holes made in the exterior of your vehicle may result in unwanted moisture entering the passenger compartment of your vehicle. Appropriate care should be taken by the light bar installer or vehicle owner to ensure all penetrations in the exterior of the vehicle are properly sealed. Routing the Predator 48 Inch Emergency LED Light Bar wiring harness through an opening created in the exterior of your vehicle will need to be done at the light bar installer and vehicle owner’s sole and exclusive liability. LED Equipped takes no responsibility for any damage to your vehicle during the course of an installation or future damage occurring to your vehicle or persons as a result of the installation method utilized.

# Once your Predator 48 Inch Emergency LED Light Bar has been mounted to the exterior of your vehicle, and the preconfigured wiring harness has been appropriately routed into you vehicle’s passenger compartment, you may move onto wiring your Predator 48 Inch Emergency LED Light Bar following the instructions below.

# Wiring the Predator 48 Inch Emergency LED Light Bar

# The Predator 48 Inch Emergency LED Light Bar is fully encapsulated, weather and vibration resistant, and has been designed for ease of installation and wiring. The Predator 48 Inch Emergency LED Light Bar comes pre-equipped with a prewired quick snap wire harness for seamless connection to the provided Predator 48 Inch Emergency LED Light Bar controller. In addition, the Predator Emergency 48 Inch Light Bar comes wired for a direct connection to an appropriate 12v + (positive) and 12v – (negative) power source, including a preinstalled appropriately sized fuse. Optionally, the Predator 48 Inch Emergency LED Light Bar can be hardwired directly to an external switch box or controller for ease of use and adaptability. The Predator 48 Inch Emergency LED Light Bar comes with thirty-three (33) preconfigured flash patterns, as well as four (4) distinct traffic advisory patterns, which can be activated with the touch of a button. Also included, are preconfigured left and right alley lights, as well as two takedown lights on the front of the light bar. The engineering and adaptability of the Predator 48 Inch Emergency LED Light Bar allows for installers to create seamless integration of this unit for your specific application.

# Hardwiring your Predator 48 Inch Emergency LED Light Bar to an external switch box can be accomplished using the wiring functions included in Figure 3 below. Please note that the 12v + (Positive/Red Wires) and 12v – (Negative/Black Wires) wiring connections must be made to an appropriate 12v power source and ground in order for your Predator 48 Inch Emergency LED Light Bar to function properly. Appropriately sized automotive wiring should be used for wiring to an external switch box or controller.

# All wiring connections should be secured using appropriate automotive connectors or through the use of soldered connections. All connections should be protected by using heat shrink wire wrap in order to protect the connection. Special attention should be given to the location and method of splicing wires to make electrical connections to protect these splices from lost power or connection and corrosion.

# Figure 3

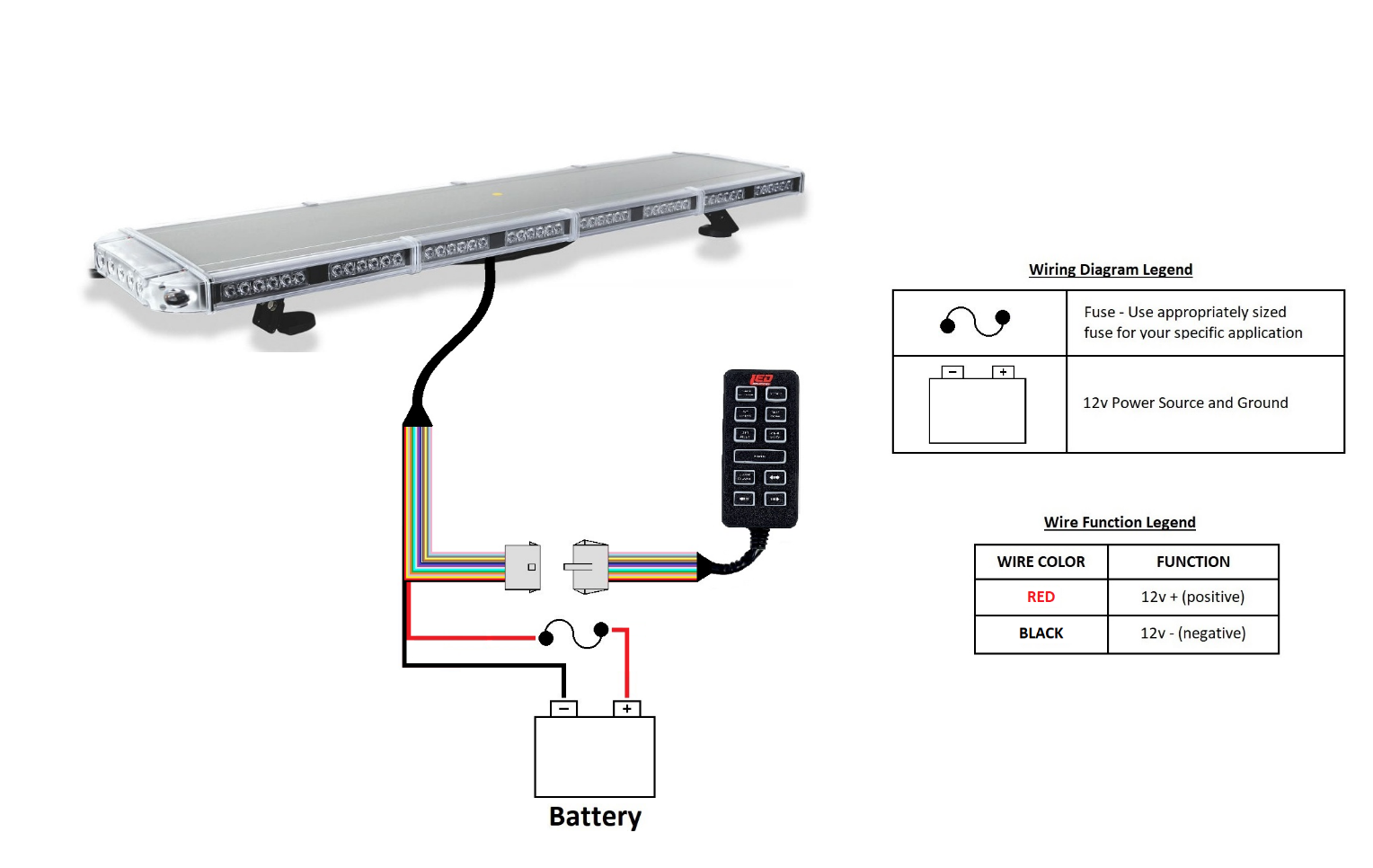
|  |  |  |  |
| --- | --- | --- | --- |
| Predator 48 Inch Emergency LED Light Bars | | | |
| Wire Color | Function | Wire Color | Function |
| Red | 12v + (Positive) | Brown | On/Off |
| Black | 12v – (Negative) | Yellow | Flash Pattern Selection |
| Blue | Left Alley | Yellow with Green Stripe | Right Alley |
| Grey | Take Down Lights | Pink | (Not Currently Used) |
| Green | Rear Lights Only | Orange | Front Lights Only |
| Yellow with Black Stripe | Steady Burn (Cruise Mode) | Light Blue | Center – Out Rear Traffic Advisor |
| Purple | Right to Left Rear Traffic Advisor | White | Left to Right Rear Traffic Advisor |

Wiring the Predator 48 Inch Emergency LED Light Bar to the Included Light Bar Controller

Once the wiring harness has been securely fastened to the exterior of your vehicle and routed into the passenger compartment of your vehicle, continue to route the wiring harness to the desired controller location. If using the included Predator 48 Inch Emergency LED Light Bar controller, simply connect the 12v + (positive/red) and 12v – (negative/black) wires from the Predator 48 Inch Emergency LED Light Bar to an appropriate 12v power source within your vehicle. Once connected to an appropriate 12v power source, simply connect the preinstalled quick snap wiring connector between the Predator 48 Inch Emergency LED Light Bar wire harness and Predator 48 Inch Emergency LED Light Bar controller. If using an external switch box or controller, proceed to the wiring instructions below for further detail.

Please refer to Figure 4 below for a visual representation of how to wire the Predator 48 Inch Emergency LED Light Bar using the provided Predator 48 Inch Emergency LED Light Bar controller and quick snap wiring connector.

**Figure 4**



Wiring the Predator 48 Inch Emergency LED Light Bar to an External Switch Box or Controller

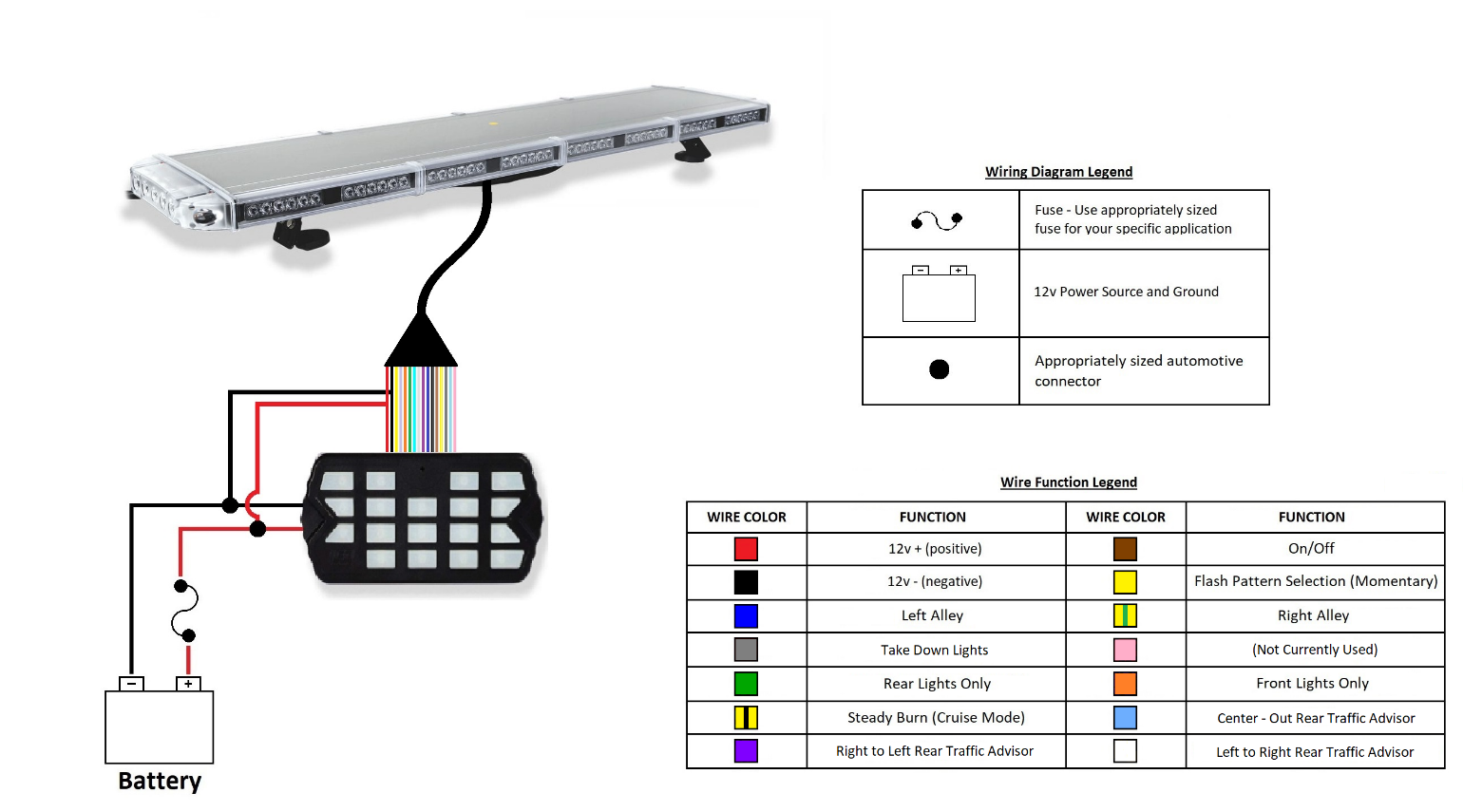
Once the wiring harness has been securely fastened to the exterior of your vehicle and into the passenger compartment, continue to route the wiring harness to the existing external switch box or controller location. In order to utilize an external switch box or controller, the installer is required to remove the quick snap wiring connector to expose the individual wires that are used to power and control the Predator 48 Inch Emergency LED Light Bar.

Once the existing quick snap wiring connector has been removed exposing the individual wires used to power and control the Predator 48 Inch Emergency LED Light Bar, wiring to an external switch box or controller can be done following the wiring functions defined in Figure 3. Utilizing an external switch box or controller requires the availability of up to twelve (12) functional buttons, eleven (11) of which will be need to be able to apply a constant 12v + (positive) power source to utilize all of the available functions engineered into the Predator 48 Inch Emergency LED Light Bar, as well as one button that will be able to apply a momentary 12v + (positive) power source to cycle through the available flash patterns of the Predator 48 Inch Emergency LED Light Bar.

For wiring the Predator 48 Inch Emergency LED Light Bar to an external switch box or controller, the 12v + (positive) and 12v – (negative) wires from the Predator 48 Inch Emergency LED Light Bar must be connected to a continuous 12v power source. Using the wiring functions described in Figure 3 above, wire each of the remaining functional buttons to a 12v + (positive) power source to allow for a customized use of an external switch box or controller to operate your Predator 48 Inch Emergency LED Light Bar. All wiring connections should be secured using appropriate automotive connectors or through the use of soldered connections. All connections should be protected by using heat shrink wire wrap in order to protect the connection. Special attention should be given to the location and method of splicing wires to make electrical connections to protect these splices from lost power or connection and corrosion.

Please refer to Figure 5 below for a visual representation of how to wire the Predator 48 Inch Emergency LED Light Bar for use with an external switch box or controller.

**Figure 5**



All LED Equipped lights are equipped with non-volatile memory which will recall the last selected flash pattern when turned on. Please refer to Figure 6 below for a complete listing of the available flash patterns included with the Predator 48 Inch Emergency LED Light Bar.

Wiring the Predator 48 Inch Emergency LED Light Bar Extension Cable (Optional Part A-1321)

For installations requiring an extension of the existing wiring bundle that is included with your Predator 48 Inch Emergency LED Light Bar, an optional ten (10) foot Light Bar Extension Cable (Part A-1321) is available to assist in the ease of installation. Installation and addition of the extension cable is made simple using the preinstalled quick snap wiring connector that is currently used to connect the Predator 48 Inch Emergency LED Light Bar wire harness and Predator 48 Inch Emergency LED Light Bar controller, and by splicing together the existing 12v + (positive/red) and 12v – (negative/black) wires from the Predator 48 Inch Emergency LED Light Bar to those provided in the Light Bar Extension Cable. Install the Light Bar Extension Cable by simply plugging in the quick snap wiring connector to the Predator 48 Inch Emergency LED Light Bar wire harness and connect the other end to the quick snap wiring connector on the Predator 48 Inch Emergency LED Light Bar controller, and apply the provided 12v + (positive) and 12v – (negative) to a consistent 12v power source, for an additional ten (10) feet of available wiring, for a total of twenty (20) feet of continuous wiring to customize your installation.

**Figure 6**

|  |  |  |  |
| --- | --- | --- | --- |
| **Predator 48 Inch Emergency LED Light Bar Flash Patterns** | | | |
| Pattern  Number | Function | Pattern  Number | Function |
| 1 | Steady Burn | 18 | Pulse Burst Right Half |
| 2 | Left/Right Alternating Double Burst | 19 | Triple Burst – All with Pause |
| 3 | Split Double Burst | 20 | Stacking Left to Right |
| 4 | Single Burst Counter Clockwise Rotation Chase | 21 | Stacking Right to Left |
| 5 | Split Triple Burst | 22 | Quad Burst – All with Pause |
| 6 | Left/Right Alternating Pulse Burst | 23 | Quad Burst Left Half Steady Right Half |
| 7 | Alternating Double Burst | 24 | Quad Burst Right Half Steady Left Half |
| 8 | Left/Right Single Pulse to Quad Burst All | 25 | Single Burst Clockwise Rotation Chase |
| 9 | Alternating Triple Burst | 26 | Double Burst Clockwise Rotation Chase |
| 10 | Stacking Center Out | 27 | Pulse Burst Left Half Steady Right Half |
| 11 | Left/Right Alternating Triple Burst | 28 | Pulse Burst Right Half Steady Left Half |
| 12 | Single Pulse to Quad Burst All | 29 | Stacking Left to Right/Right to Left |
| 13 | Steady Burn Left Half | 30 | Single Burst - All |
| 14 | Steady Burn Right Half | 31 | Double Burst Counter Clockwise Rotation Chase |
| 15 | Left/Right Alternating Quad Burst | 32 | Left/Right Single Burst Alternating |
| 16 | Split Triple Burst | 33 | Alternating Accelerator Burst |
| 17 | Pulse Burst Left Half |  |  |

# Selecting the Predator 48 Inch Emergency LED Light Bar Flash Pattern

Once your Predator 48 Inch Emergency LED Light Bar has been installed and wired in accordance with the wiring instructions identified above, selection of the preferred flash pattern can be performed by utilizing the momentary Flash Patterns button, or the momentary button configured on the external switch box or controller (if that installation method was selected). This will allow you to cycle through the flash patterns noted above to select the desired pattern. Note that all LED Equipped lights are equipped with non-volatile memory which will recall the last selected flash pattern when turned on. Note that depressing the Flash Patterns button constantly for four (4) seconds, will return the light bar to the steady burn pattern (Pattern 1) above for selection of a desired flash pattern.

When operating the front or rear lights of the Predator 48 Inch Emergency LED Light Bar independently, selection of an alternate flash pattern can be made when those individual functions are enabled. To select an alternate flash pattern when using the front or rear lights of the Predator 48 Inch Emergency LED Light Bar independently, enable either the front or rear lights (as desired) and use the momentary Flash Patterns button, or the momentary button configured on the external switch box or controller (if that installation method was selected), to cycle through the available flash patterns to select the desired pattern with either the front or rear lights of the Predator 48 Inch Emergency LED Light Bar are independently enabled.

**Operating the Predator 48 Inch Emergency LED Light Bar**

Once installed, operation of the Predator 48 Inch Emergency LED Light Bar using the provided controller is simple and easy. The chart in Figure 7 below details the functions of each button on your Predator 48 Inch Emergency LED Light Bar Controller and Figure 8 below will give a detailed description of the functionality that is preconfigured using each button on the Predator Emergency LED Light Bar Controller.

**Figure 7**



**5**

**8**

**10**

**11**

**9**

**6**

**4**

**2**

**7**

**1**

**3**

|  |  |  |  |
| --- | --- | --- | --- |
| Predator 48 Inch Emergency LED Light Bar Controller Functions | | | |
| Button | Function | Button | Function |
| 1 | Flash Pattern Selection | 2 | Enable Steady Burn(Cruse Mode) |
| 3 | Blue – Enable Rear Lights OnlyRed – Enable Front Lights Only | 4 | Enable the Front Take-Down Lights (Steady White Burn) |
| 5 | Enable the Left Alley Light (Steady White Burn) | 6 | Enable the Right Alley Light (Steady White Burn) |
| 7 | | Power – On / Off | |
| 8 | Color Change (Only Used with Dual Color Light Bars) | 9 | Enable the Center-Out Rear Traffic Advisor Pattern |
| 10 | Enable the Right to Left Rear Traffic Advisor Pattern | 11 | Enable the Left to Right Rear Traffic Advisor Pattern |

**Figure 8**

|  |  |
| --- | --- |
| **Button Functional Descriptions** | |
| Button | Functional Description |
| **Flash Patterns** (1) | Select the desired flash pattern of the Predator 48 Inch Emergency LED Light Bar. This momentary button, when depressed, advances to the next available flash pattern. |
| **Steady** (2) | Enable the steady burn (cruse mode) on the light bar. This button applies a 12v + (positive) power source to make the Predator 48 Inch Emergency LED Light Bar burn steady (all lights on), in what is also called “Cruise Mode”. This function, when enabled, will activate all light heads within the Predator 48 Inch Emergency LED Light Bar to operate at a steady burn. Pressing the button a second time will return to the previously enabled flash pattern. |
| **R/F Lights** (3) | The Predator 48 Inch Emergency LED Light Bar has the ability to enable use of either the front of the light bar only (six front LED modules enabled), or to enable the use of the rear of the light bar only (six rear LED modules enabled plus both alley lights). Pressing the R/F Lights button the first time will apply a 12v + (positive) power source to make the Predator 48 Inch Emergency LED Light Bar enable the rear lights only, and the button on the controller will glow steady blue to signify that the rear lights only are enabled. Pressing the R/F Lights button a second time will apply a 12v + (positive) power source to make the Predator Emergency LED Light Bar enable the front lights only, and the button on the controller will glow steady red to signify that the front lights only are enabled. Pressing the R/F Lights button a third time will return to the previously enabled flash pattern for all light heads on the Predator 48 Inch Emergency LED Light Bar.  When either the front or rear lights only are enabled, pressing the Flash Patterns button will change the flash pattern currently in use on the front or rear lights respectively. When pressing the momentary Flash Patterns button, the front or rear lights, currently enabled on the R/F Lights button, will advance to the next available flash pattern. When enabling the front or rear lights the next time, the non-volatile memory will revert to the previously selected flash pattern. |
| **Take Down** (4) | Pressing the Take Down button will apply a 12v + (positive) power source to make the Predator 48 Inch Emergency LED Light Bar enable the front Take Down lights to emit a steady white light for greater illumination in front of your vehicle. Regardless of the color of your light bar when operating normally, when the Take Down light button is depressed, the color of the center most two (2) light heads on the Predator 48 Inch Emergency LED Light Bar will change to a steady white light. |
| **Left Alley** (5) | Pressing the Left Alley button will apply a 12v + (positive) power source to make the Predator Emergency LED Light Bar enable the Left Alley light to emit a steady white light for greater illumination on the left side of the light bar. Regardless of the color of the Left Alley light when operating normally, when the Left Alley light button is depressed, the color will change to a steady white light. |
| **Right Alley** (6) | Pressing the Right Alley button will apply a 12v + (positive) power source to make the Predator Emergency LED Light Bar enable the Right Alley light to emit a steady white light for greater illumination on the right side of the light bar. Regardless of the color of the Right Alley light when operating normally, when the Right Alley light button is depressed, the color will change to a steady white light. |
| **Power** (7) | Pressing the Power button once will turn the Predator 48 Inch Emergency LED Light Bar on. Pressing the Power button a second time will turn the Predator 48 Inch Emergency LED Light Bar off. |
| **Color Change** (8) | This button is only utilized on Predator 48 Inch Emergency LED Light Bars that are configured with the Dual Color option. This option allows a user to select a primary color (or split set of colors) as well as an additional secondary color option (white only or amber only) on the light bar. Pressing the Color Change button will apply a 12v + (positive) power source to make the Predator 48 Inch Emergency LED Light Bar switch between the primary color option and the secondary color option on the light bar. |
| **Center-Out Traffic Advisor** (9) | Pressing the Center-Out Traffic Advisor button will apply a 12v + (positive) power source to enable the rear lights of the Predator 48 Inch Emergency LED Light Bar to display a center-out traffic advisory pattern. |
| **Right to Left Traffic Advisor** (10) | Pressing the Right to Left Traffic Advisor button will apply a 12v + (positive) power source to enable the rear lights of the Predator 48 Inch Emergency LED Light Bar to display a Right to Left traffic advisory pattern. |
| **Left to Right Traffic Advisor** (11) | Pressing the Left to Right Traffic Advisor button will apply a 12v + (positive) power source to enable the rear lights of the Predator 48 Inch Emergency LED Light Bar to display a Left to Right traffic advisory pattern. |

**Predator 48 Inch Emergency LED Light Bar Optional Accessories**

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| **Combat Controller**  **Product Number: A-1516** | **Combat Mini Controller**  **Product Number: A-1515** |

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| **Black Falcon Siren and Control Unit**  **Product Number: A-1237 (100w) and**  **A-1368 (200w)** | **Pelican Siren and Control Unit**  **Product Number: A-1108 (100w) and**  **A-1109 (200w)** |



**Predator Light Bar Extension Cable**

**A-1321**



At LEDEQUIPPED, we know that you need affordable lighting for your police, EMS, fire, construction, or towing vehicles and that safety and reliability are important to you. That’s why all of our LED products feature powerful, up to date Generation LED lighting, perfect for your police, fire, construction, or EMS vehicle. LED Equipped focuses on a mission to carry out business ethically and with integrity, provide powerful products of the highest quality, maintain excellent and affordable prices, and to establish an unparalleled costumer service relationship beginning with establishing trust with our customers. As a provider of emergency vehicle lighting, we value the honesty, professionalism, and expertise present within our customer base.

For any questions regarding our products, contact us by calling us at +1 800-846-3940 or email us at sales@ledequipped.com.