

## THE PROWLER LIGHTBAR

### INSTALLATION INSTRUCTION



PL-46B

### Contents

Mounting Instructions .....	2
Installing mounting legs .....	2
Vehicle mounting .....	3
Wiring Instructions .....	4
Connecting the harness .....	4
Options and Specifications .....	5
Troubleshooting.....	7
Hardware parts list .....	7
Warranty and return information .....	8
Contact Information .....	8

**IMPORTANT:** Read ALL instructions and warnings before installing and using this system.

## Description

The *PROWLER* Lightbar combines the best features of LED Modules, strobe and halogen technologies. It's unique low (2.75") profile and clear lenses make the *PROWLER* virtually undetectable when not in use. With a strong extruded aluminum frame, UV treated polycarbonate lens and modular design, PROWLER can be easily customized to most applications.

With four (4) available standard lengths *PROWLER* is the ultimate light-bar for flexibility and serviceability.

## Models Referenced

Model number	Description
PL-35B	35" lightbar
PL-46B	46" lightbar
PL-56B	55" lightbar
PL-66B	66" lightbar

## Mounting Instructions

### Installing mounting legs

To assemble the mounting leg brackets proceed as follows:

1. Place the light-bar upside-down on a smooth surface.
2. Determine the appropriate gap for the legs by referring to the examples shown in the leg gap table.



Figure 1 mounting Legs

STANDARD LEG GAP			
MODEL	MODEL YEAR	PLACEMENT	GAP
FCV	2000 thru 2008	Roof, centered over the door pillar	43"
F250 (crew cab)	2000 thru 2008	Roof, centered over the door pillar	45"

3. For each leg, slide two 5/16 carriage bolts (from leg bracket kit) into each of the channels on the light-bar.
4. Place the leg bracket on the light-bar aligned over the carriage bolts  
Secure finger tight using washer/lock-washer/nut (from leg bracket kit)
6. Using a tape measure, adjust the leg brackets so that the leg bracket gap (when measured from the center of the leg foot mounting holes) is as determined in step two.
7. Tighten
8. For each leg foot: the rubber foot has been preinstalled. In order to adjust the height, use the additional rubber foot, included in the kit.

If your vehicle is not listed or you are mounting in a position not specified, use the following procedure to determine leg gap

- Determine the mounting location and position for the light-bar on the vehicle roof.
- Take a measurement from approximately 1 1/2" from the edge of the roof (at the mounting position) across to the other side ending similarly 1 1/2" from the edge of the roof. This measurement is the ideal leg gap.

**Note: Make sure the leg feet sit on the curved portion of the roof to provide maximum**

support.

## Vehicle Mounting

**Note:** Determine the orientation of the lightbar by placing the lightbar on the vehicle with the wire harness on the correct side of the vehicle according to the wiring specifications sheet.

When determining a mounting position for the *Prowler* consider the following:

- Will the leg feet rest in a position able to bear the weight of the PROWLER when secured, without dimpling the roof?
- Can the light-bar be mounted in a level position?
- Is there a position approximately four (4") to six (6") inches behind the light-bar that is not obstructed by a cross-member allowing the power cable to be routed through the vehicle?
- Is the wire harness on the correct side according to the wiring specifications sheet?

### Complete mounting by securing the light-bar into position as follows:

Insert the 5/16" x 2 1/2" cap Hex Bolt through the holes in leg bracket and gutter hook (plate) and secure by hand. Position gutter bracket and drill pilot holes using a 1/8" drill bit. Secure the gutter bracket using screws provided. Start with the centre hole, then the outer most holes, then remaining holes. Seal with color coordinated silicone sealant. Tighten main bolt until light-bar is firmly in place. Test by giving the light-bar a sharp bump with the heel of the palm, it should not move.

**Warning:** Do not over-tighten the main bolt as this may cause the light-bar or legs to bow loosening seals and causing structural damage.

Figure 2 Gutter Hook (Plate)

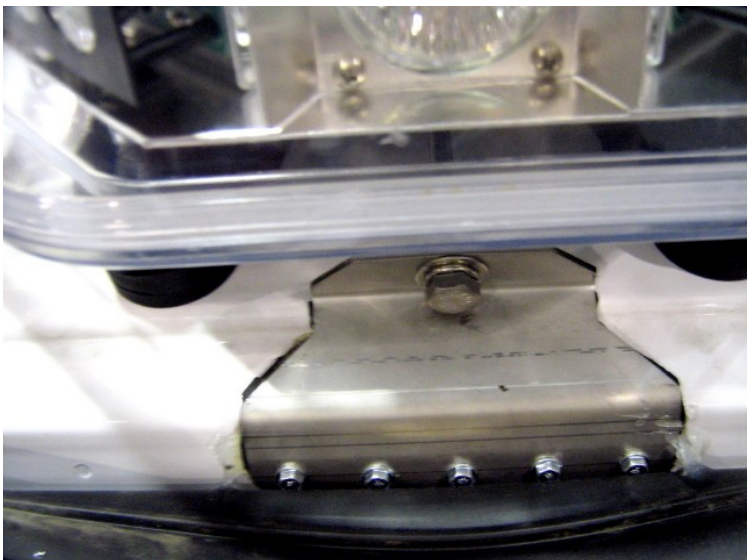


Figure 3 Finished Gutter Mounting

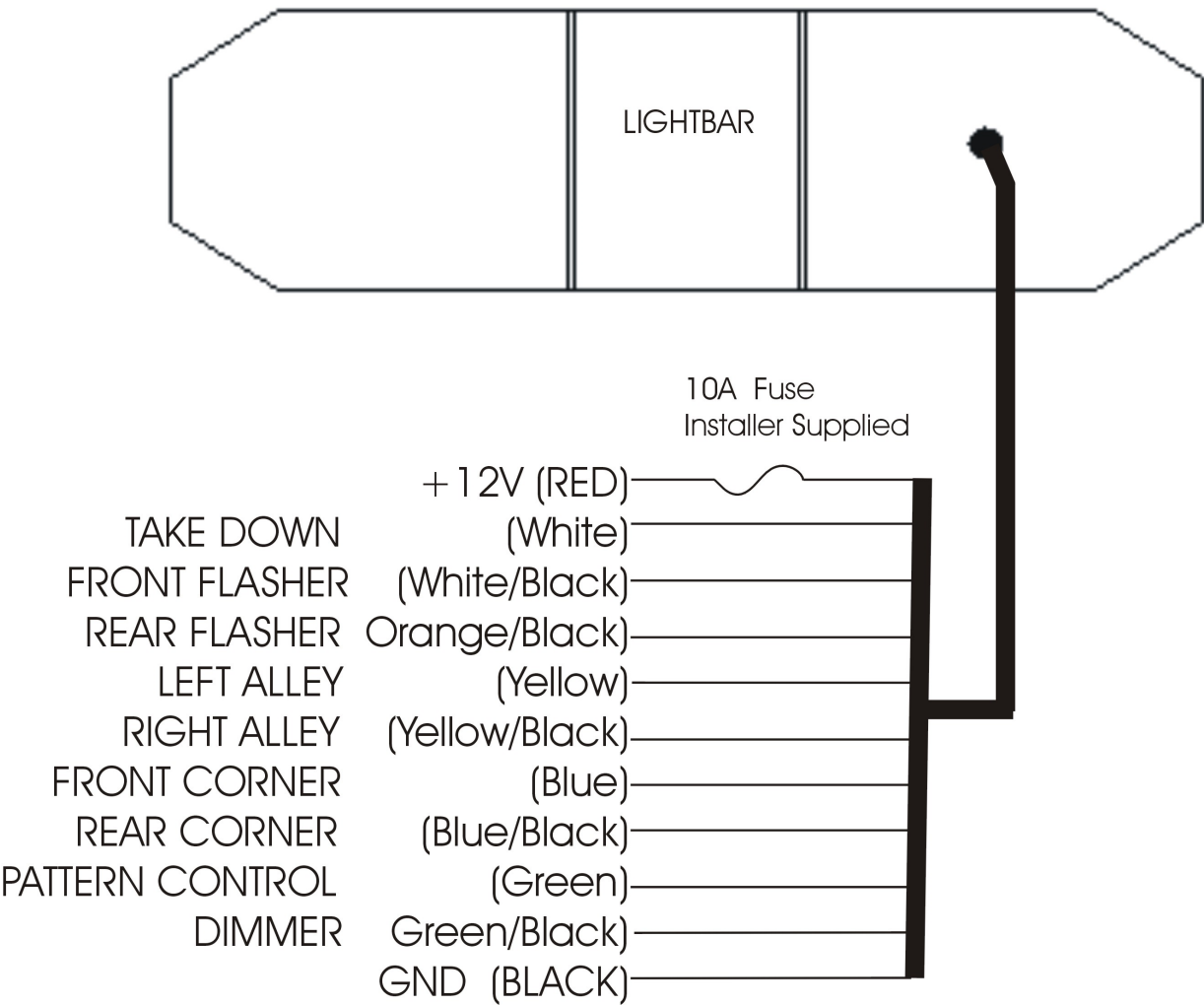


# Wiring Instructions

## Connecting the Harness

The Prowler light bar is equipped with a thirteen wire cable. The BLACK wire is ground and the RED wire is the +12V supply. The function of the remaining 11 wires may vary with each light bar. Refer to the enclosed wiring specifications sheet specific to your light bar for the function of these wires. A typical wiring diagram is shown below.

# WIRING DIAGRAM PROWLER LIGHTBAR



NOTE: WIRE COLORS AND FUNCTIONS ARE PROVIDED  
ON WIRING SPECIFICATIONS SHEET

**To wire the *PROWLER* light-bar proceed as follows:**

1. Connect the black wire from the power harness to a solid frame (earth) ground (this is the light-bar main ground)
2. Connect the red wire (power) to a positive source. Use a fuse as specified in the wiring specifications sheet.
3. Using the enclosed wiring specifications sheet, connect the wires from the harness to the appropriate control head or switch.
4. Connect power and ground to the control head or switch as per manufactures instructions
5. Test the unit to confirm functionality.

**Flashing Light Modules:**

The black wire should be connected to ground and the red wire should be connected to +12V. The red wire is the power source to the internal flasher controller. Once the power is connected to the red wire, each set of lights can be activated by supplying +12V to the corresponding trigger wire. For instance, the front flasher modules will flash if the FRONT FLASHER wire is connected to +12V and the rear flasher modules will flash when the REAR FLASHER wire is connected to +12V.

In the case of the example shown above, the flasher modules that can be activated individually are FRONT FLASHER, REAR FLASHER, FRONT CORNER, and REAR CORNER.

**Strobe lights (IF EQUIPPED):**

The strobe lights require an internal power supply. A +12V source connection to the strobe power supply will cause the strobe light module to flash.

**Halogen Light Modules:**

The halogen lights are not controlled by the internal flasher. Therefore, the red (+12V) wire does not have to be connected to turn on the halogen lights. These lights include; TAKE DOWN, LEFT ALLEY, and RIGHT ALLEY.

**Pattern Control (IF EQUIPPED)**

The flashing pattern of the lightbar flashing light modules may be changed by momentarily connecting the PATTERN CONTROL wire to +12VDC.

**Dimmer (IF EQUIPPED)**

This function is used to reduce the brightness of the LED lights in the lightbar. Activated by +12V connection to the DIMMER wire. Optional Photocell module for providing automatic dimmer for the Lightbar.

**Traffic Director (IF EQUIPPED)**

The Traffic Director requires a second wire harness. The second wire harness will be a thinner gray cable exiting the light bar. The Traffic Director unit is a “ground trigger” device and must be wired to a compatible control device (i.e. AS5400 or AS5500Ext.). Unit can be supplied w/Internal arrowstick controller. Units with Internal arrowstick controller will require only one data cable to be routed to the arrowstick control head.

**To wire the optional Traffic Director proceed as follows:**

Route the power harness through the vehicle interior to the controller.

Determine the functions of the wires according to wiring specifications sheet.

Wire the control unit as per manufactures instructions

Test the Traffic Director functionality.

**Options and Specifications****Internal Options**

**Cobra light modules** – These LED lights are available in red, blue, amber, and clear.

**Take down** – Provides light to the front of the vehicle. Available in 50W and 35W halogens.

**Take down flash** – Internal flasher for the take down lights. Lights will flash alternately.

**Alley lights** – Provides light to the sides of the vehicle. Available in 50W and 35W halogens.

**Alley light flash** – Internal flasher for the alley lights. Lights will flash alternately, but they can

not be turned on independently unless an F3 Intimidator or Protec control system is used.

**Arrowstick** – Rear lights in the lightbar are used as a traffic director. This option requires a traffic director controller such as AS5500. The Arrowstick is usually made up of Cobra LED modules.

**Internal Arrow stick controller** – Internal controller for arrowstick. With this internal device, the arrowstick can be controlled by AS5500, intimidator, or 4 input control (+12V activated).

**Stop/Turn/Tail lights** – The right most and left most rear light modules are configured to provide stop, turn and tail signals to following traffic.

## Controllers

**All controllers can be Dash mount** (Controller touchpad mounted on the dash) or **Console mount** (Controller touchpad mounted on the console)

**Intimidator** – The siren and light control system provides siren control and many outputs for flexible control of lightbars and other electronics equipment.

**P1300 (Protec)** – The siren and light control system provides flexible and an easily programmable format. The remote console pad provides an easy interface to the control unit to allow user controlled functions to be set.

**SP600** – Controls the lightbar with a simple rocker switch panel. (Console mounted only)

**AS5400**—Lightbar controller

**AS5500**—Compact control system for traffic warning systems

## Other Options

**Dimmer Switch** – Provides the user with the ability to dim the lights in the lightbar. Activated by connecting the Dimmer wire to +12V.

**Pattern Control Switch** – Provides the user with the ability to change the flash pattern of the lightbar. Activated by momentarily connecting the Pattern Control wire to ground.

VEHICLE	PART NUMBER / DESCRIPTION
UNIVERSAL	
F150 - 2004	936-0208A
FCV (Older Vehicles)	936-0150A
FCV (Newer Vehicles)	936-0150B
IMPALA - 2000+	936-0245A
IMPALA - 2006	936-0263A
CHARGER 2006	936-0260A
CHARGER 2008	936-0337A
UNIVERSAL TRUCK	936-0276A
TAHOE / SUBURBAN / SILVERADO	936-0303A

THE BRACKETS LISTED IN THIS TABLE ARE THE MOST COMMON

## Troubleshooting

PROBLEM	POSSIBLE CAUSE	PROBABLE SOLUTION
LED module does not function when turned ON	Loose connection to trigger control or switch.  Faulty ground connection.  Faulty power connection.  Controller or switch is damaged.	Inspect connection and tighten.  Verify ground connection.  Verify +12VDC connections.  Return controller or switch for repair or replacement.
LED lamp bank does not light	Faulty circuit board	Replace LED module
Some LEDs do not light	Individual LED lamp failed	Replace LED module
Flash pattern changes	Exposed flash control wire.	Inspect and verify that control (green) wire is not touching a ground source
Light output appears dim	Low voltage  Faulty ground connection  Product is in "DIM" mode	Check connections or battery  Verify ground connections  Select appropriate mode.
Module does not flash	Faulty circuit board	Replace LED module

### Parts List in addition to the Prowler light Bar

PART NUMBER	QTY	DESCRIPTION
300-0075	2	PROWLER LEG KIT, GFN Leg + basic HW
401-0094	10	SCREW, #8-18 x 5/8" Pan/Phil , ST.Type A /SS
See Table	2	Lightbar Mtg Bkt (gutter clamp)
411-0001	2	BOLT,5/16-18X3-1/2",HEX,SS
411-0036	8	BOLT, 5/16"-18 x 3/4" Carriage S.S.
412-0006	2	NUT,COUPLING 5/16-18, HEX S.S.
412-0007	8	NUT,5/16-18, HEX, S.S
413-0006	10	WASHER,5/16-18, LOCK, S.S
413-0005	10	WASHER,5/16 FLAT, S.S

## WARRANTY

D&R Electronics warrants its new products to be free from defects in material and workmanship, under normal use and service, for a period of one year on parts replacement.

This warranty applies only to original purchasers acquiring the product directly from D&R Electronics, or its authorized dealers. Warranty will not be recognized without proof of purchase or bill of sale. This warranty is not transferable.

The warranty begins on the date of delivery to the first user/purchaser.

This warranty shall not apply to product which must be repaired due to normal wear and tear, negligence, improper installation, abuse, misuse, or which have been altered or modified at a facility other than D&R Electronics, or its authorized depot center.

Units proved to be defective within the warranty period, based on an examination by D&R Electronics, will be replaced or repaired at D&R Electronics' option.

This warranty is in lieu of all other express warranties. D&R Electronics makes no other warranties, expressed or implied, than the express warranties contained herein.

## PRODUCT RETURN POLICY

In order to provide you with faster service, product returns for repair or replacement, must have a **Return Goods Authorization Number (RGA number)**. Please contact our company to obtain a RGA number before you return the product to D&R Electronics. Write the RGA number clearly on the package. Be sure you use sufficient packing materials to avoid damage to the product being returned while in transit.

D&R Electronics assumes no responsibility or liability for expenses incurred for the removal and/or the installation of products requiring service and/or repair. Repairing or replacing product is at the discretion of D&R Electronics.

Problems / Questions?  
Contact D&R for Technical assistance:

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