

# PL22-2BCN24 Lightbar

# **Installation Manual**



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## **Basic information**

- Available with 12 and 24 LED Beacon
- Available LED modules colour: Red, Blue, Clear, Amber.
- Available lenses colour: Amber, Clear, red, Blue.
- □ 100% solid state component.

# **Technical specification**

- Current draw: 12 LED Beacon 2.4 A / 24 LED Beacon 5 A
- □ Voltage: 11-18V (24V available with special request) □ Operating Temperature: -40°C to +65°C (-40F to +149F).
- UV treated polycarbonate lens.
- Screw down lens to base.
- Meets all applicable SAE Class1 and California Title XIII when properly configured.

#### **Component List**

Item number	Description	Qty
936-0322A/	Bracket - Lightbar Mounting Bracket (1.75")	1
936-0321A	Bracket - Lightbar Mounting Bracket (4")	

# **Hardware List with magnetic feet**

Item number	Description	Qty
401-0004	Bolt - 1/4-20 X 1/2", S.S.,18.8	4
412-0003	Nut, 1/4-20 Hex /Jam S.S	4
413-0003	Washer 1/4 Lock S.S.	4
403-0005	Washer- 1/4" Sae Flat (244 Pcs/Lb)	4
08.0308	Magnet - 3.25" Donut Magnet	4
413-0006	Washer 5/16-18 Lock S.S	4
413-0005	Washer 5/16 Flat S.S	4
412-0007	Nut 5/16-18 Hex S.S 4	
401-0124	Bolt 5/16"-18 X 3/4" Hex S.S. bag of 100	4

# **Hardware List with rubber feet**

Item number	Description	Qty
404-0009	Washer Flat Nylon Black 0.5 Id 1.5 Od 1/8"	4
400-0200	Bumper Rubber, Black (Light bar Footing)	4
413-0018	Washer 1/4 Flat 18.8 S.S.	4
413-0005	Washer 5/16 Flat S.S	8
412-0002	Nut 1/4-20 Hex S.S	4
411-0012	Bolt 1/4-20X3/4" Carriage S.S	4
413-0006	Washer 5/16-18 Lock S.S	4
412-0007	Nut 5/16-18 Hex S.S	4
401-0124	Bolt 5/16"-18 X 3/4" Hex S.S. bag of 100	4

#### **General Warning**

- 1. The use of emergency warning devices does not ensure the safety of the operator. The operator is responsible to ensure safe operation of the vehicle regardless of whether the warning device is in operation or not
- The effectiveness of this or any warning device is highly dependent on proper installation and maintenance. Read the manufactures instructions before installing and follow all recommendations.
- 3. When in use the operator must ensure that the warning signal is visible and not obstructed by vehicle components (i.e. open trunk lid), people or other obstructions
- 4. This device is intended for use by authorized personnel only the user is responsibility to ensure that all local, state/provincial and federal laws are being complied with. D&R assumes no liability for any loss resulting from the use of this device.
- 5. The device must be installed so as not to reduce the output performance of vehicle systems
- 6. Placement of control switches must be so as to provide convenient reach for the operator without losing eye contact with the road.
- Emergency warning devices require high electrical voltages and/or currents. Properly connect and ground all circuits. Shorting or improper grounding of this device may cause personal injuring, vehicle damage or both
- 8. All operators should be properly trained in the operation of this device to ensure both their and public safety

### Installation and Mounting

# Warning

- 1. Any device used inside a vehicle, may cause severe personal injury if not properly mounted and secured. Objects used in the vehicle may become airborne during a collision or other sudden changes in vehicle speed or direction, such as braking, acceleration or turns.
- Be sure to mount unit through the steel of the vehicle. Avoid mounting through plastic or other nonstructural materials.
- POINT OF INSTALLATION MUST NOT INTERFERE WITH DEPLOYMENT OF VEHICLE AIR BAGS.
- 4. D&R Electronics recommends this or any of our products be installed by qualified professionals.

#### Mechanical Installation with rubber feet

PL-22-2BCN24 can be mounted in 3 different ways:

- 1. mount directly on the roof of car/truck with rubber legs or magnetic feet.
- 2. Mount with mounting (1.75"/ 4") bracket (936-0322/936-0321) with option of rubber or magnetic feet.

Note: Mounting option will be supplied only if customer requests. Do not forget to mention mounting option checkmark in template form.

#### Fix mounting with rubber feet's.

- 1. Determine an appropriate mounting location and mark position for mounting.
- 2. Make 4 holes of 0.28" clearance on the roof of car.
- 3. Secure the *PL22-2BCN24* with supplied hardware.

#### **Mount on Lightbar Mounting Bracket**

- 1. Determine an appropriate mounting location and mark position for drilling according to mounting brackets holes.
- 2. Make 4 holes of 0.28" clearance on the roof of car.
- 3. Secure the PL22-2BCN24 on the bracket with supplied hardware.

Note: Holes is not required if you use magnetic leg assembly.

Decide a desired and appropriate location and make a drill hole of 0.450" and mount 1/4" gourmet water tight. Recommend to seal it with silicon.

## **Electronics Installation wiring diagram**

Function	colour
BCN +12V	RED
GROUND	BLACK
CHANGE PATTERN	GREEN
DIMMER	WHITE

Red: Connect red wire to +12V battery.

Black: Connect black wire to ground terminal of battery.

Green: Connect to +12V momentary if need to change pattern.

White: Connect to +12V for dimmer function activation.

**Note:** Dimmer and pattern change function is only available on special request. Do not forget to mention about those function checkmark in template form.

#### **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, and one year on labor. 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 products 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 does not cover travel expenses or labor charges for removal or installation. Lamps, flash tubes, batteries or other items considered consumables are not covered under warranty. 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.

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