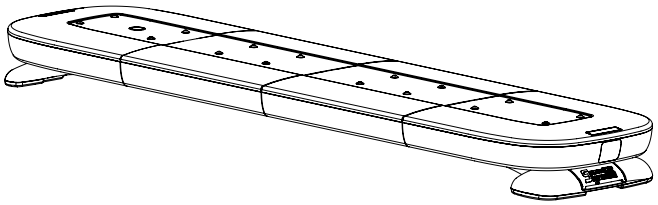
nFORCE® NEXUS TECHNOLOGY

nFORCE nxt LED Lightbar



IMPORTANT NOTICE TO INSTALLÊR: Make sure to read and understand all instructions and warnings before proceeding with the installation of this product. Ensure that the manual and any warning cards are delivered to the end user of this equipment. Proper installation of the lightbar requires the installer to have a thorough knowledge of automotive electronics, systems, and procedures. Lightbars provide an essential function of an effective visual warning system. The use of the lightbar does not insure that all drivers can or will abide by or react to an emergency warning signal, especially at high rates of speeds or long distances. The operator of the vehicle must never take the right of way for granted and it is the operator's responsibility to proceed safely. The effectiveness of the lightbar is highly dependant on the correct mounting and wiring. The installer must read and follow the manufacturer's installation instructions and warnings in the manual. The vehicle operator should verify daily that the lightbar is securely fastened to the vehicle and properly functioning before operating vehicle. The lightbar is intended for use by authorized personnel only. It is the user's responsibility to ensure they understand and operate the emergency warning devices in compliance with the applicable city, state and federal laws and regulations. SoundOff Signal assumes no liability for any loss resulting from the use of this warning device.

Components/Contents

Standard Equipment:

1 - nFORCE nxt LED Lightbar built to your specifications
1 - Breakout Box
1 - 24 Pin Harness
1 - 4 Pin Harness

Other Parts that may be included depending on your configuration:

1 - Vehicle Specific Hook Kit w/ Hardware*
2 - Fixed Height Mounting Brackets w/ Hardware or
1 - Flat Mount Hardware Kit or
2 - Headache Brackets w/ Hardware

*Kits will vary with each lightbar depending on vehicle specified on order form.

Unpack Lightbar

1. Remove the lightbar from box and packaging.
2. Save packaging for later shipping.
3. Check components/contents.
4. Please reference these instructions for proper wiring and installation.

Tools Required for Installation

- 7/16" Socket with ratchet
- Phillips Head Screwdriver
- Drill bit #30

SoundOff Signal®

1.800.338.7337 / www.soundoffsignal.com

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Important Information:

- To view the full Software Revision History click the in the lower left hand corner of the SoundOff Central Lightbar application.
- Warning devices are strictly regulated and governed by Federal, State and Municipal ordinances. These devices shall be used ONLY on approved vehicles. It is the sole responsibility of the user of these devices to ensure compliance.
- DO NOT install this product or route any wires in the Air Bag Deployment Zone. Refer to your vehicle Owner's Manual for the location of any air bag deployment zones.
- DO NOT connect this device to a strobe power supply. This product is self-contained and does not require an external power supply.

⚠ WARNING

This product contains high intensity LED devices. To prevent eye damage, DO NOT stare into the light beam at close range.

NOTICE:

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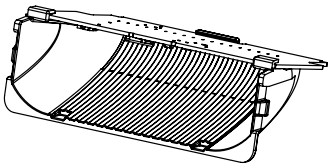
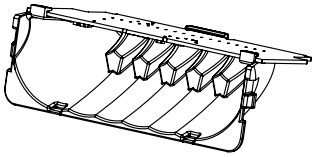
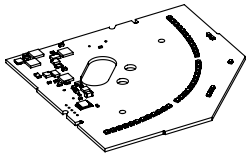
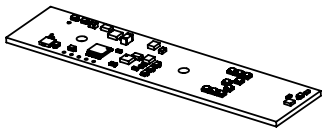
nFORCE® NEXUS TECHNOLOGY

nFORCE nxt LED Lightbar

TECHNICAL SPECIFICATIONS

	**6 LED Single / 12 LED Dual / 18 LED Tri Color** INPUT VOLTAGE RANGE: 10-32Vdc CURRENT DRAW: 0.5 Amps @ 12.8 Vdc (Flashing) 1.0 Amps @ 12.8 Vdc (Steady On) WATTAGE: 6.4W (Flashing)
	**6 LED Single Color Takedown Module** INPUT VOLTAGE RANGE: 10-32Vdc CURRENT DRAW: 1 Amps @ 12.8 Vdc (Steady On) WATTAGE: 12.8 (Steady On)
	**12 LED Single / 24 LED Dual / 36 LED Tri Color** INPUT VOLTAGE RANGE: 10-32Vdc CURRENT DRAW: 1 Amps @ 12.8 Vdc (Flashing) 2 Amps @ 12.8 Vdc (Steady On) WATTAGE: 12.8W (Flashing)
	**3 LED Single / 6 LED Dual / 9 LED Tri Color Alley Module** INPUT VOLTAGE RANGE: 10-32Vdc CURRENT DRAW: (Flashing) 0.3 Amps @ 12.8 Vdc (Steady On) 0.6 Amps @ 12.8 Vdc WATTAGE: 3.2 (Flashing)

FLASHING = AVERAGE
STEADY ON (100%) = PEAK

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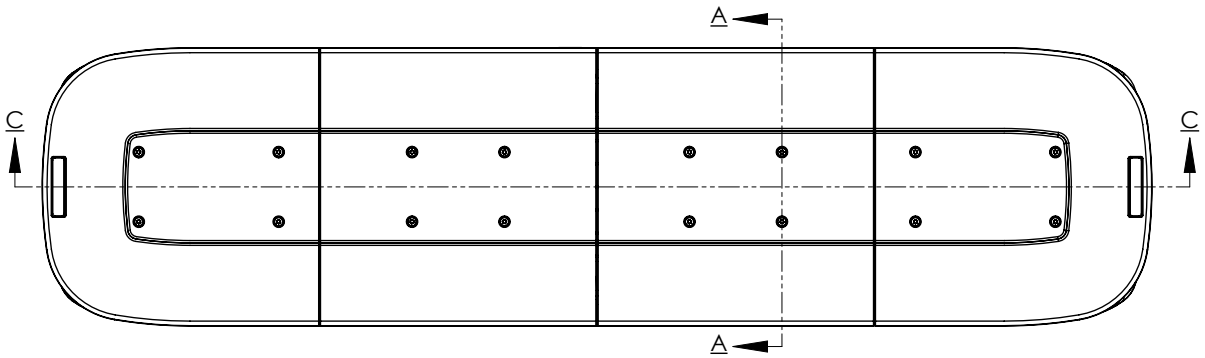
TECHNICAL SPECIFICATIONS (CONT.)

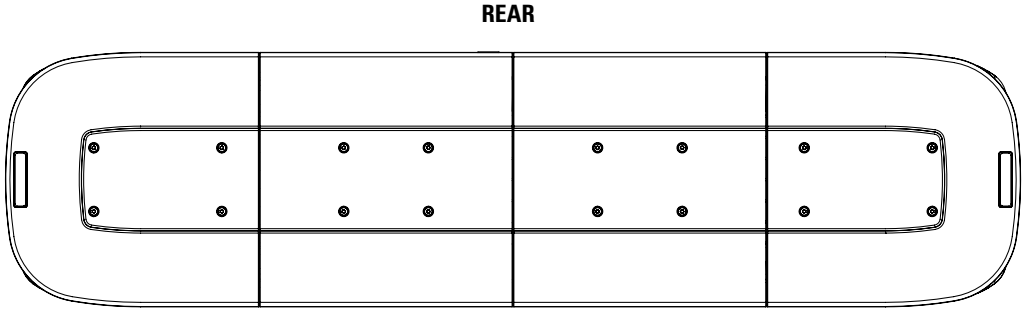


TECHNICAL SPECIFICATIONS			
INPUT VOLTAGE RANGE	10-32Vdc		
INPUT VOLTAGE RANGE	-40˚C to +65˚C (-40˚F to +149˚F)		
ELECTRICAL PROTECTION	Reverse Polarity Transient Voltage Over-Voltage High-Temperature Thermal Fold-back		
WIRING	Power Cable: 15ft. 10AWG Wires (+) Red and (-) Black, 22AWG (Data) Green 25ft. 10AWG Wires (+) Red and (-) Black, 22AWG (Data) Green		
MATERIAL	Aluminum Base, polycarbonate outer lenses, ASA/PC top cover.		
STANDBY CURRENT (Per Module)	IGNITION ON: 0.150 Amps IGNITION OFF: <0.001 Amps		
OVERALL DIMENSIONS	2.55"H X 12.0"D		
ROOF ATTACHMENTS	1/4" bolt Stainless A2		
LENGTH	# OF INBOARDS	MAX CURRENT @ 12.8V	MAX CURRENT @ 25.6V
24"	4	10.7 Amps	4.7 Amps
36"	8	14.3 Amps	6.3 Amps
42"	10	16.1 Amps	7.1 Amps
48"	12	17.9 Amps	7.9 Amps
54"	14	19.7 Amps	8.7 Amps
60"	16	21.5 Amps	9.5 Amps
72"	20	25.1 Amps	11.2 Amps

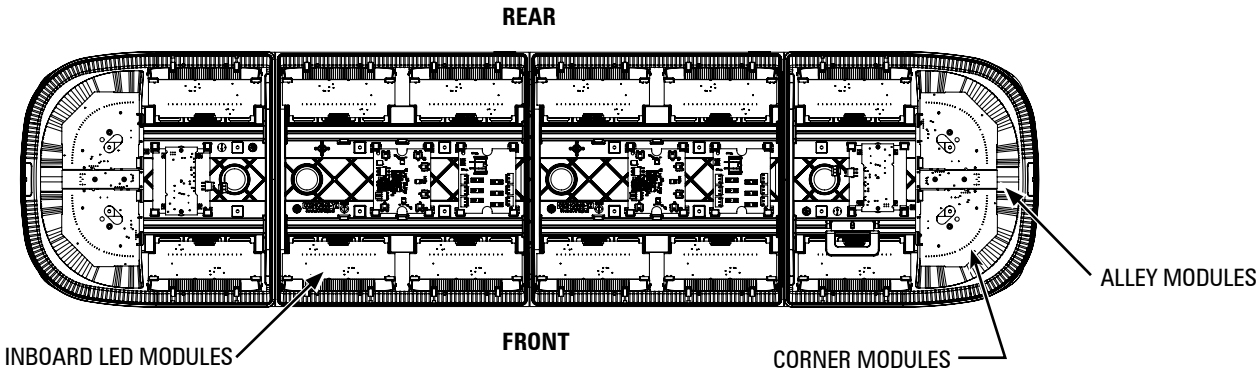
FLASHING = AVERAGE
STEADY ON (100%) = PEAK

nFORCE nxt LED Lightbar

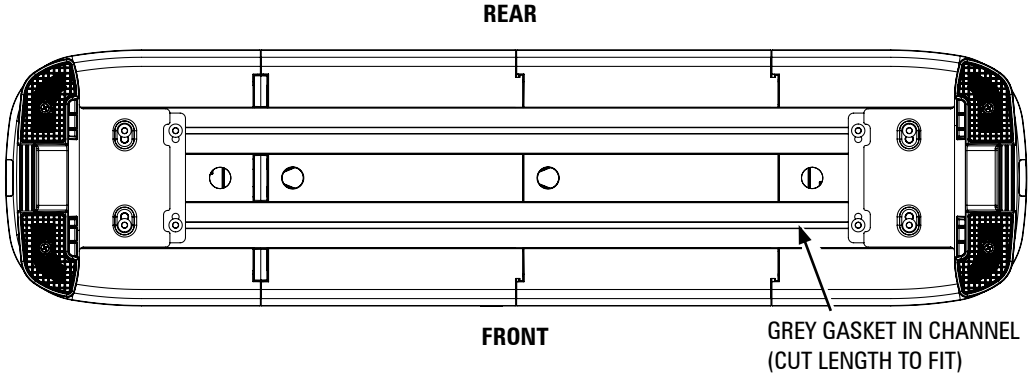
TOP VIEW WITH COVERS ON



TOP VIEW WITH COVERS OFF



BOTTOM VIEW



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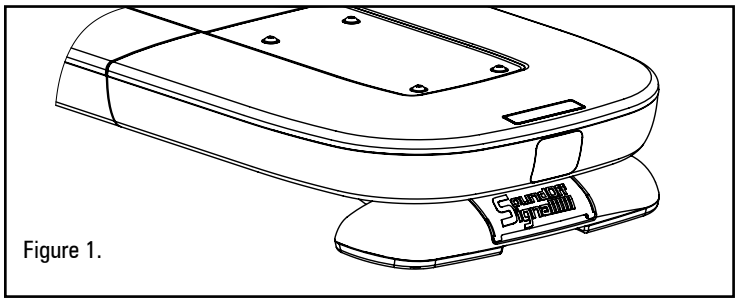

Figure 1.

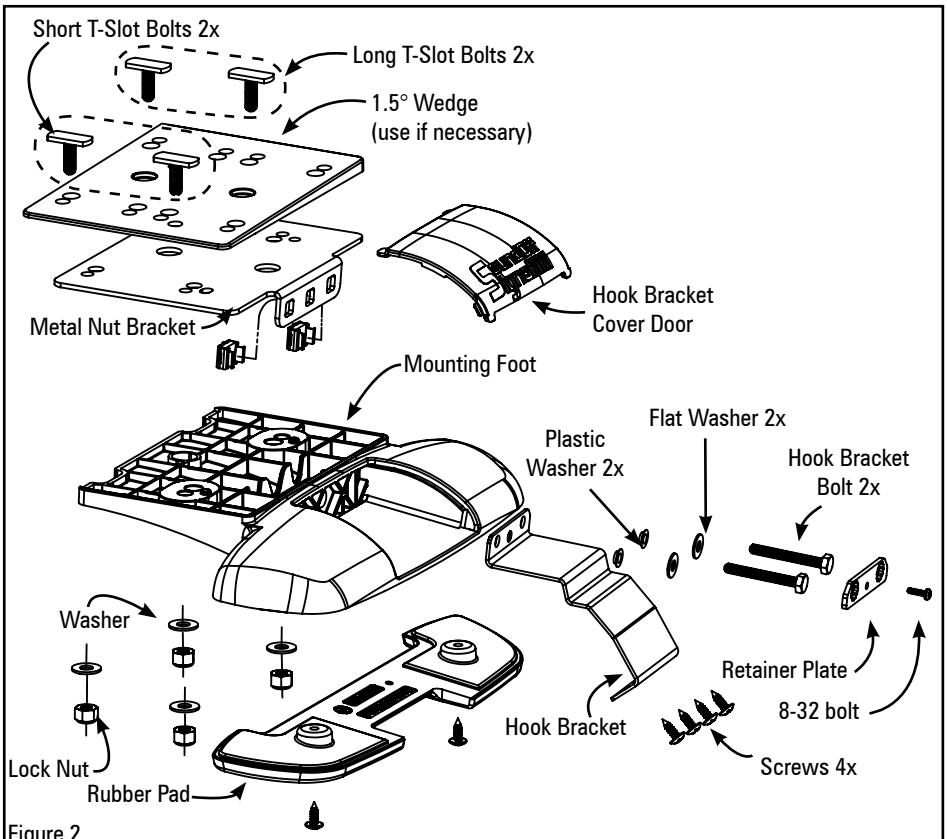

Figure 2.

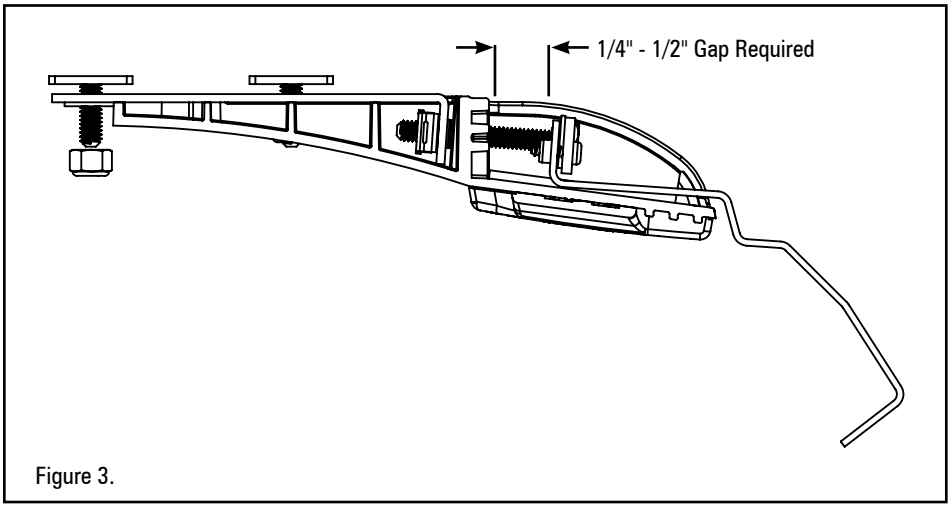

Figure 3.

FIXED HEIGHT BRACKETS AND HOOK MOUNTING (PURSUIT)

1. Attach the supplied screws to the mounting foot to secure the rubber pad as shown in Figure 3 (on next page.)

2. Insert the 2 plastic washers inside holes of the provided hook brackets.

3. Keeping the lightbar level to the road, attach mounting feet to the roof of the vehicle using the 4 supplied T-Slot bolts.

4. Place lightbar centered on the roof, and hold brackets up to the lightbar. A 1/4" to 1/2" gap should be between the hook bracket and front wall of the mounting foot prior to putting any tension on the hook bracket bolt (See Figure 4). Adjust the mounting foot position to accomodate for this gap.

5. Tighten 4 lock nuts to secure mounting foot to lightbar with max torque between 40-60in/lbs. DO NOT OVERTIGHTEN!

6. Using the holes in the hook bracket as a template, drill 4 holes in the roof using the appropriate size drill. Secure hook bracket to roof with 4 screws on each side.

7. Tighten the hook bracket bolts, torque details below:

Due to different vehicle construction and mounting locations, the torque levels for connecting hooks to the lightbar foot may be different based on the vehicle.

A. Minimum requirement for torque should be 10 IN/LB, with a maximum level of 45 IN/LB.*

B. When installing the bolts connecting the hook to the lightbar foot, monitor both the lightbar and roof of the vehicle.

C. Tighten to ensure there is no movement of the lightbar or foot by ensuring there is no movement either side to side, or front to rear after the torque has been done.

The lightbar must be securely mounted to the vehicle for safe operation.

*Deflection of the lightbar and/or the roof of the vehicle may occur when torqueing the bolts connecting the hook to the lightbar foot. Any deflection should be kept at a minimum to avoid damage to the lightbar or vehicle.

NOTE: As always, it is recommended to check the integrity of mounted lightbars on a daily basis to ensure secure attachment to the vehicle for continued safe operation.

8. Insert the retainer plates over the 2 bolts on each of the hook kit brackets. Screw in the retainer plate to the hook kit bracket using the 8-32 bolts.

9. Install the cover door over the hook bracket bolt to finish the assembly. Place tab of one side into place and then push the second tab into place with a flathead screw driver.

⚠ WARNING

Route wires only in locations that are not subjected to potential wear. Make sure to avoid routing wires in the deployment area of your air bag. Refer to your vehicle's owner's manual for airbag deployment zone.

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nFORCE nxt LED Lightbar

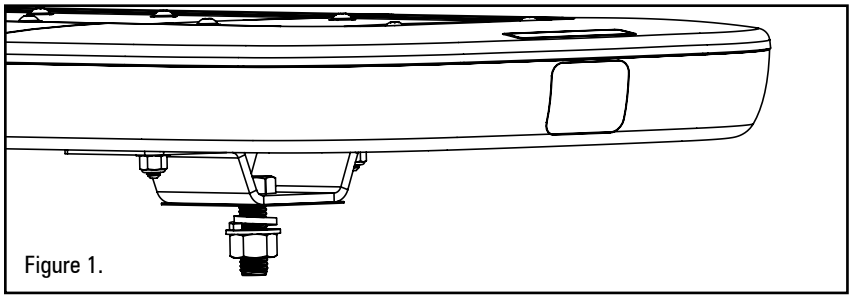

Figure 1.

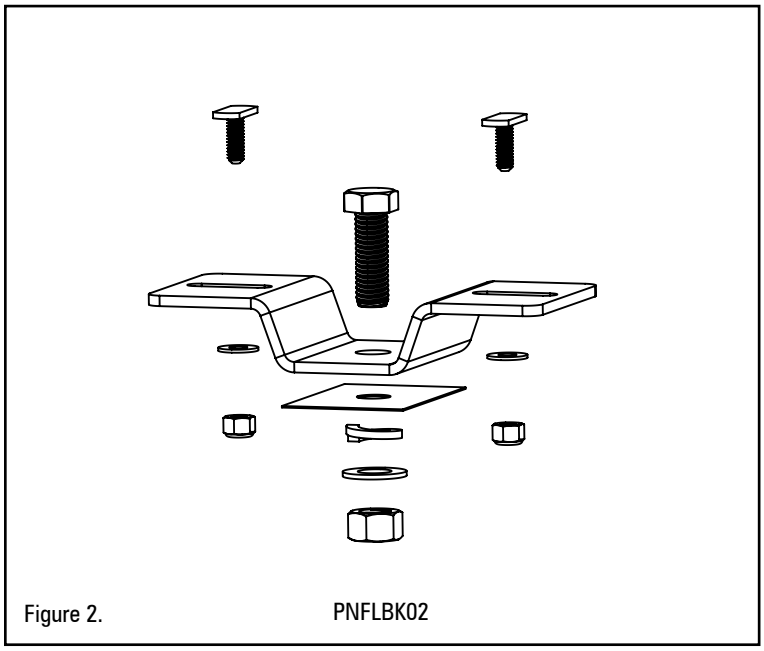

Figure 2. PNFLBK02

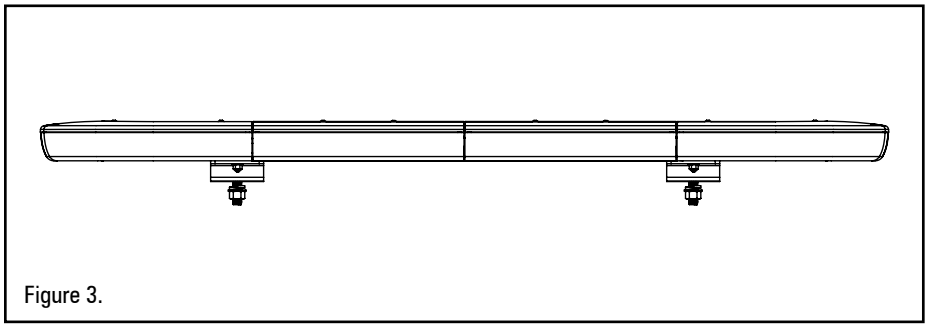

Figure 3.

HEADACHE RACK MOUNTING (PNFLBK02)

1. Place the T-Slot bolts in the extrusion slots on the underside of the lightbar.
2. Insert the ½" hex head bolt into the center hole of the bracket.
3. Place the bracket on the T-Slot bolts and loosely secure with flat washers and nylon locking nuts.
4. Measure and drill appropriate sized holes on the desired mounting surface, spaced evenly for securing the lightbar.
5. Place the plastic spacer over each mounting hole.
6. Place lightbar and bracket assembly into the holes and install the flat washer, lock washer and hex nut on the ½"hex bolt, tighten to compress lock washer. (Torque may vary depending on the mounting surface.)
7. Complete the installation by tightening the ¼-20 lock nuts to 40-60 in-lbs, DO NOT OVER TIGHTEN.
8. Follow the appropriate lightbar Owner's Manual for additional instructions and installation.

⚠ WARNING

Route wires only in locations that are not subjected to potential wear. Make sure to avoid routing wires in the deployment area of your air bag. Refer to your vehicle's owner's manual for airbag deployment zone.

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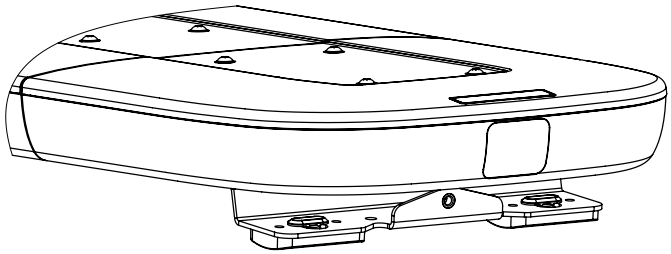
nFORCE nxt LED Lightbar



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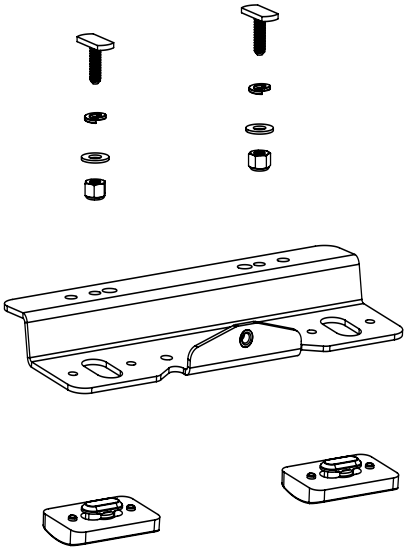

PNFLBK10

Figure 2.

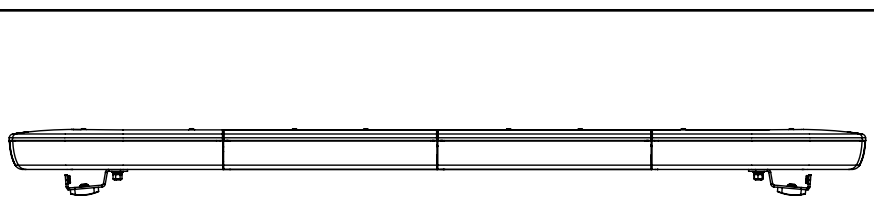

Figure 3.

PERMANENT MOUNTING (PNFLBK10)

1. Place the T-Slot bolts in the extrusion slots on the underside of the lightbar.
2. Place the bracket on the T-Slot bolts, evenly space the brackets on the lightbar and tighten the ¼-20 lock nuts to 40-60 in-lbs, DO NOT OVER TIGHTEN.
3. Install the two rubber bumpers on the bracket, rotate to lock into position.
4. Mark the two inner holes on each bracket to drill into the mounting surface.
5. Fasten the hardware between the lightbar and mounting surface.
6. Follow the appropriate lightbar Owner's Manual for additional instructions and installation.

⚠ WARNING

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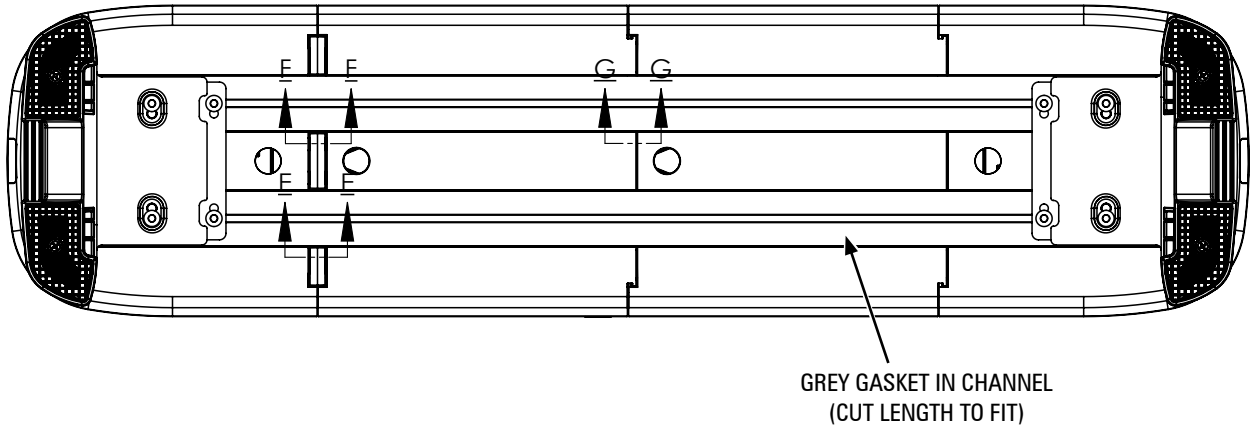
GASKET MOUNTING INSTRUCTIONS

REAR



FRONT

GASKET MOUNTING INSTRUCTIONS

Install the Grey gasket in the front slot of the lightbar as shown above

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ELECTRICAL INSTALLATION

nFORCE nxt LED Lightbar

Featured Highlights & Terminology:

Mode Select: The nFORCE nxt Lightbar is equipped with multiple selectable pattern configuration modes via the Mode Select Input. Default is Mode 1 where the input is floating, Mode 2 is in use when the input activated. This feature allows 2 complete sets of patterns to be programmed into the Light-bar's non-volatile memory. Once programming configuration is complete, the Mode can be changed "on-the-fly" by an activation switch which applies voltage to the Mode 2 input wire.

Cruise & Cruise 2 Mode: Allows the user to program any light group(s) to "Glow" when this feature is activated. For dual color bars, the color for each light group is selectable.

Directional Arrow Built-in: The directional controller is built-in w/ 6 arrow patterns for each of the 3 modes (left arrow, right arrow, and center out arrow) and the color is selectable for dual color bars

Scene Light Mode: Allows the user to program any Light Head Group(s) to turn on steady when this feature is activated to provide additional scene lighting. **The activation of this input also activates the Takedown function**

Stop / Tail / Turn Mode: Allows the user to program any Light Head Group(s) to turn operate in 2 levels of intensity for tail and stop/turn functions.

Low Power Mode: Operates lighting at reduced intensity.

⚠ WARNING

ALL CUSTOMER SUPPLIED POWER WIRES CONNECTING TO THE POSITIVE (+) OR NEGATIVE (-) BATTERY TERMINAL OR LOCAL CHASIS GROUND (-) MUST BE SIZED TO SUPPLY AT LEAST 125% OF THE MAXIMUM CURRENT AND PROPERLY FUSED AT THE POWER SOURCE WITH APPROPIATELY RATED FUSE.

Power Cable:
1. Route lightbar power cables as close to vehicles power source (battery) as possible.
2. Install a maximum of 30Amp Fuse (customer supplied) to the end of the RED wire of the Lightbar Power Cable.
a. Remove the fuse before connecting any wires to the battery.
b. DO NOT USE CIRCUIT BREAKER OR FUSIBLE LINK.
3. Connect the other end of the Fuse to the POSITIVE (+) terminal of the battery.
a. Do NOT use any more than 2ft of wire between the battery terminal and the fuse and ensure the wire is protected and secured from being cut into; this is non-fused wire.
4. Connect the BLACK wire to the factory chassis ground right next to the battery.

Control (Data) Cable:
1. Route Lightbar Control Cable to the location where all controlling equipment will be, i.e. switch box, center console area.
2. Locate the Breakout Box in the same area to connect jumpers from the switching equipment to the breakout box.
3. Refer to breakout box hookup table on page 9.

NOTE: Breakout Box must be mounted inside vehicle where it will not get wet.

Initial Power up Test:
1. Connect the red and the black wire from lightbar to red and black wire of the 4-pin Breakout Box Harness as shown on page 16
2. Connect Green wire from lightbar to green LIN 1 of the 4-pin Breakout Box Harness as shown on page 16.
3. Apply power to pink/white ignition wire on breakout box. See table 1 on page 16.
4. Observe the GREEN Data Link indicator LED on the Breakout Box; the Green LED will be ON showing power is connected.
5. The Red indicator LED on the breakout box will be steady ON whenever any of the input wires are active or data is received from a siren.

Low Power (Standby) Mode (reduced standby current)
If there is no input to the breakout box the lightbar will go into a "standby" mode. The standby mode is a low power mode that is used to extend the life of your battery. The lightbar will awaken from the standby mode if any input is activated on the breakout box.

⚠ WARNING

Route wires only in locations that are not subjected to potential wear. Make sure to avoid routing wires in the deployment area of your air bag. Refer to your vehicle's owner's manual for airbag deployment zone.

IMPORTANT

WHEN PASSING CABLES THROUGH FIREWALL OR OTHER SHEETMETAL, INSERT GROMMET TO PROTECT THE CABLE!

nFORCE® NEXUS TECHNOLOGY

nFORCE nxt LED Lightbar

ELECTRICAL INSTALLATION (CONT.)

ARROW PATTERNS

#	Name	SAE Compliant Timing	ECE Compliant Timing	California Title 13 Compliant Timing	Color	Sequence	fpm	fps
1	Single Fast	No	No	No	-	-	-	-
2	Single Slow	No	No	No	-	-	-	-
3	Chaser Fast	No	No	No	-	-	-	-
4	Chaser Slow	No	No	No	-	-	-	-
5	Fill Fast	No	No	No	-	-	-	-
6	Fill Slow	No	No	No	-	-	-	-
7	Grow/Shrink	No	No	No	-	-	-	-
8	Warning w/Arrow	No	No	No	-	-	-	-
9	Warning w/Arrow Fill	No	No	No	-	-	-	-
10	Arrow Random 1	No	No	No	-	-	-	-
11	Arrow Random 2	No	No	No	-	-	-	-

FLASH PATTERNS

#	Name	SAE Compliant Timing	ECE Compliant Timing	California Title 13 Compliant Timing	Color	Sequence	fpm	fps
SC1	Random 1	Yes	No	No	#1	Variable	-	-
SN2	Random 2	No	No	No	#1	Variable	-	-
SC3	Quint	Yes	No	No	#1	Alternating	70	1.2
SC4	Quad 2	Yes	No	No	#1	Variable	-	-
SC5	Q-Switch	Yes	No	No	#1	Variable	-	-
SC6	Double	Yes	No	No	#1	Alternating	115	1.9
SC7	Power Pulse	Yes	No	No	#1	Alternating	180	3
SC8	Road Runner	Yes	No	Yes	#1	Alternating	115	1.9
SC9	Slow Runner	Yes	No	Yes	#1	Alternating	70	1.2
SN10	Warp	No	No	No	#1	Alternating	350	5.8
SN11	Inter-Cycle	No	No	No	#1	Alternating	-	-
SN12	Warp 1-2-3	No	No	No	#1	Alternating	-	-
SC13	E-Single	Yes	Yes	No	#1	Alternating	125	2.1
SC14	E-Double	Yes	Yes	No	#1	Alternating	125	2.1
SC15	E-Triple	Yes	Yes	No	#1	Alternating	125	2.1
SC16	E-Single Sim	Yes	Yes	No	#1	Simultaneous	125	2.1
SC17	E-Double Sim	Yes	Yes	No	#1	Simultaneous	125	2.1
SN18	Super Slow Runner	No	No	No	#1	Alternating	55	0.9
SC19	Quint Simultaneous	Yes	No	No	#1	Simultaneous	70	1.2
SC20	Road Runner Simultaneous	Yes	No	No	#1	Simultaneous	114	1.9
SC21	Quint Pass/Steady Driver	Yes	No	No	#1	-	70	1.2
SC22	Road Runner Pass/Steady Driver	Yes	No	No	#1	-	114	1.9
SC23	Quint 2	Yes	No	No	#1	-	70	1.2
SN24	Warp 2	No	No	No	#1	-	350	5.8
SN25	Inter-Cycle 2	No	No	No	#1	-	-	-
SN26	Flicker Brake	No	No	No	#1	-	-	-
SN27	Flicker Cruise	No	No	No	#1	-	-	-
SN28	Steady	No	No	No	#1	-	-	-
SN29	Manifesto	No	No	No	#1	-	-	-
SN30	Power Evert	No	No	No	#1	-	-	-
SN31	Dazzle	No	No	No	#1	-	-	-
SN32	Quiver	No	No	No	#1	-	-	-

*fpm=Flashes per Minute

**fps=Flashes per Second

NOTE: Takedown and Alley light patterns are limited to patterns #1 – 22

FLASH PATTERNS (CONT.)

#	Name	SAE Compliant Timing	ECE Compliant Timing	California Title 13 Compliant Timing	Color	Sequence	fpm	fps
SN33	Power Sway	No	No	No	#1	-	-	-
SN34	Evert	No	No	No	#1	-	-	-
SN35	Alternating Rapid Flash	No	No	No	#1	-	-	-
SN36	Swift Impact	No	No	No	#1	-	-	-
SN37	Tango	No	No	No	#1	-	-	-
SN38	Tremble	No	No	No	#1	-	-	-
SN39	Shake	No	No	No	#1	-	-	-
SN40	Evolver	No	No	No	#1	Simultaneous	-	-
SN41	Corner Sweep	No	No	No	#1	-	-	-
SN42	Corner Sweep Slow	No	No	No	#1	-	-	-
SN43	Full/Sweep	No	No	No	#1	-	-	-
SN44	Full/Sweep Slow	No	No	No	#1	-	-	-
SN45	Center Sweep	No	No	No	#1	-	-	-
SN46	Center Sweep Slow	No	No	No	#1	-	-	-
SN47	Orbit	No	No	No	#1	-	-	-
SN48	Orbit Slow	No	No	No	#1	-	-	-
SN49	Double Orbit	No	No	No	#1	-	-	-
SN50	Slow Double Orbit	No	No	No	#1	-	-	-
SN51	Retrograde Orbit	No	No	No	#1	-	-	-
SN52	Slow Retrograde Orbit	No	No	No	#1	-	-	-
SN53	Progressive Alternate	No	No	No	#1	-	-	-
SN54	Recurrent	No	No	No	#1	Simultaneous	-	-
DC1	Random Dual #1	Yes	No	No	#1/2	Variable	-	-
DN2	Random Dual #2	No	No	No	#1/2	Variable	-	-
DC3	Quint Dual	Yes	No	No	#1/2	Alternating	70	1.2
DC4	Quad 2 Dual	Yes	No	No	#1/2	Variable	-	-
DC5	Q-Switch Dual	Yes	No	No	#1/2	Variable	-	-
DC6	Double Dual	Yes	No	No	#1/2	Alternating	115	1.9
DC7	Power Pulse Dual	Yes	No	No	#1/2	Alternating	180	3
DC8	Road Runner Dual	Yes	No	Yes	#1/2	Alternating	115	1.9
DC9	Slow Runner Dual	Yes	No	Yes	#1/2	Alternating	70	1.2
DN10	Warp Dual	No	No	No	#1/2	Alternating	350	5.8
DN11	Inter-Cycle Dual	No	No	No	#1/2	Alternating	-	-
DN12	Warp 1-2-3 Dual	No	No	No	#1/2	Alternating	-	-
DN13	Pattern #1 Dual	No	No	No	#1/2	Variable	-	-
DN14	Pattern #2 Dual	No	No	No	#1/2	Variable	-	-
DN15	Impact Dual	No	No	No	#1/2	Variable	-	-
DN16	Explosion Dual	No	No	No	#1/2	Variable	-	-
DC17	Quint Simultaneous Dual	Yes	No	No	#1/2	Simultaneous	70	1.2

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FLASH PATTERNS (CONT.)

#	Name	SAE Compliant Timing	ECE Compliant Timing	California Title 13 Compliant Timing	Color	Sequence	fpm	fps
DC18	Road Runner Sim. Dual	Yes	No	No	#1/2	Simultaneous	114	1.9
DC19	Quint 2 Dual	Yes	No	No	#1/2	-	70	1.2
DN20	Warp 2 Dual	No	No	No	#1/2	-	350	5.8
DN21	Inter-Cycle 2 Dual	No	No	No	#1/2	-	-	-
DN22	Super Slow Runner Dual	No	No	No	#1/2	-	-	-
DN23	Flicker Cruise Dual	No	No	No	#1/2	-	-	-
DN24	Manifesto Dual	No	No	No	#1/2	-	-	-
DN25	Power Evert Dual	No	No	No	#1/2	-	-	-
DN26	Dazzle Dual	No	No	No	#1/2	-	-	-
DN27	Quiver Dual	No	No	No	#1/2	-	-	-
DN28	Power Sway Dual	No	No	No	#1/2	-	-	-
DN29	Evert Dual	No	No	No	#1/2	-	-	-
DN30	Alternating Rapid Flash Dual	No	No	No	#1/2	-	-	-
DN31	Swift Impact Dual	No	No	No	#1/2	-	-	-
DN32	Tango Dual	No	No	No	#1/2	-	-	-
DN33	Tremble Dual	No	No	No	#1/2	-	-	-
DN34	Shake Dual	No	No	No	#1/2	-	-	-
DN35	Evolver Dual	No	No	No	#1/2	Simultaneous	-	-
DN36	Corner Sweep Dual	No	No	No	#1/2	-	-	-
DN37	Corner Sweep Slow Dual	No	No	No	#1/2	-	-	-
DN38	Full/Sweep Dual	No	No	No	#1/2	-	-	-
DN39	Full/Sweep Slow Dual	No	No	No	#1/2	-	-	-
DN40	Center Sweep Dual	No	No	No	#1/2	-	-	-
DN41	Center Sweep Slow Dual	No	No	No	#1/2	-	-	-
DN42	Orbit Dual	No	No	No	#1/2	-	-	-
DN43	Orbit Slow Dual	No	No	No	#1/2	-	-	-
DN44	Double Orbit Dual	No	No	No	#1/2	-	-	-
DN45	Slow Double Orbit Dual	No	No	No	#1/2	-	-	-
DN46	Retrograde Orbit Dual	No	No	No	#1/2	-	-	-
DN47	Slow Retrograde Orbit Dual	No	No	No	#1/2	-	-	-
DN48	Progressive Alternate Dual	No	No	No	#1/2	-	-	-
DN49	Recurrent Dual		No	No	#1/2	Simultaneous	-	-
TN1	Pattern 1 Tri	No	No	No	#1/2/3	Alternating	-	-
TN2	Random Tri	No	No	No	#1/2/3	Alternating	-	-
TC3	Quint Tri	Yes	No	No	#1/2/3	Alternating	70	1.2
TC4	Quad 2 Tri	Yes	No	No	#1/2/3	Alternating	-	-
TN5	Pattern 2 Tri	No	No	No	#1/2/3	-	-	-
TC6	Double Tri	Yes	No	No	#1/2/3	Alternating	115	1.9
TC7	Power Pulse Tri	Yes	No	No	#1/2/3	Alternating	180	3

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FLASH PATTERNS (CONT.)

#	Name	SAE Compliant Timing	ECE Compliant Timing	California Title 13 Compliant Timing	Color	Sequence	fpm	fps
TC8	Road Runner Tri	Yes	No	Yes	#1/2/3	Alternating	115	1.9
TC9	Slow Runner Tri	Yes	No	Yes	#1/2/3	Alternating	70	1.2
TN10	Warp Tri	No	No	No	#1/2/3	Alternating	350	5.8
TN11	Inter-Cycle Tri	No	No	No	#1/2/3	Alternating	-	-
TN12	Warp 1-2-3 Tri	No	No	No	#1/2/3	Alternating	-	-
TN13	Super Slow Runner Tri	No	No	No	#1/2/3	Alternating	55	0.9
TC14	Quint Simultaneous Tri	Yes	No	No	#1/2/3	Simultaneous	70	1.2
TC15	Road Runner Sim. Tri	Yes	No	No	#1/2/3	Simultaneous	114	1.9
TC16	Quint 2 Tri	Yes	No	No	#1/2/3	Alternating	70	1.2
TN17	Warp 2 Tri	No	No	No	#1/2/3	Alternating	350	5.8
TN18	Inter-Cycle 2 Tri	No	No	No	#1/2/3	Alternating	-	-
TN19	Pattern 3 Tri	No	No	No	#1/2/3	-	-	-
TN20	Flicker Cruise Tri	No	No	No	#1/2/3	-	-	-
TN21	Manifesto Tri	No	No	No	#1/2/3	-	-	-
TN22	Power Evert Tri	No	No	No	#1/2/3	-	-	-
TN23	Dazzle Tri	No	No	No	#1/2/3	-	-	-
TN24	Quiver Tri	No	No	No	#1/2/3	-	-	-
TN25	Power Sway Tri	No	No	No	#1/2/3	-	-	-
TN26	Evert Tri	No	No	No	#1/2/3	-	-	-
TN27	Alternating Rapid Flash Tri	No	No	No	#1/2/3	-	-	-
TN28	Swift Impact Tri	No	No	No	#1/2/3	-	-	-
TN29	Tango Tri	No	No	No	#1/2/3	-	-	-
TN30	Tremble Tri	No	No	No	#1/2/3	-	-	-
TN31	Shake Tri	No	No	No	#1/2/3	-	-	-
TN32	Evolver Tri	No	No	No	#1/2/3	Simultaneous	-	-
TN33	Corner Sweep Tri	No	No	No	#1/2/3	-	-	-
TN34	Corner Sweep Slow Tri	No	No	No	#1/2/3	-	-	-
TN35	Full/Sweep Tri	No	No	No	#1/2/3	-	-	-
TN36	Full/Sweep Slow Tri	No	No	No	#1/2/3	-	-	-
TN37	Center Sweep Tri	No	No	No	#1/2/3	-	-	-
TN38	Center Sweep Slow Tri	No	No	No	#1/2/3	-	-	-
TN39	Orbit Tri	No	No	No	#1/2/3	-	-	-
TN40	Orbit Slow Tri	No	No	No	#1/2/3	-	-	-
TN41	Double Orbit Tri	No	No	No	#1/2/3	-	-	-
TN42	Double Orbit Slow Tri	No	No	No	#1/2/3	-	-	-
TN43	Retrograde Orbit Tri	No	No	No	#1/2/3	-	-	-
TN44	Retrograde Orbit Slow Tri	No	No	No	#1/2/3	-	-	-
TN45	Progressive Alternate Tri	No	No	No	#1/2/3	-	-	-
TN46	Recurrent Tri	No	No	No	#1/2/3	Simultaneous	-	-

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PHOTO SENSOR

The photo sensor continuously monitors ambient light conditions and will control functions configured for operation with the photo sensor input. By default, the photo sensor will set all light modules into low power mode when dark ambient light levels below 50 lux are detected for more than 5 seconds. When ambient light levels exceed 300 lux for 5 seconds, the low power mode will clear/turn off and the lightbar will revert back to full intensity.

The photo sensor is subject to ambient light conditions of the specific environment for the vehicle and needs to be thoroughly tested by the installer to ensure proper light levels and delay are selected to provide the most effective operation in different lighting conditions.

The photo sensor detects ambient light levels, so parking the vehicle under a bright street light during night-time use may (CLEAR) turn off the photo sensor input. Likewise, driving though a dark tunnel during daytime use may (SET) the photo sensor input. Ensure the operator of the vehicle is aware of such possible conditions and provide additional controls to the breakout box to allow the operator the ability to manually over-ride the functions when required.

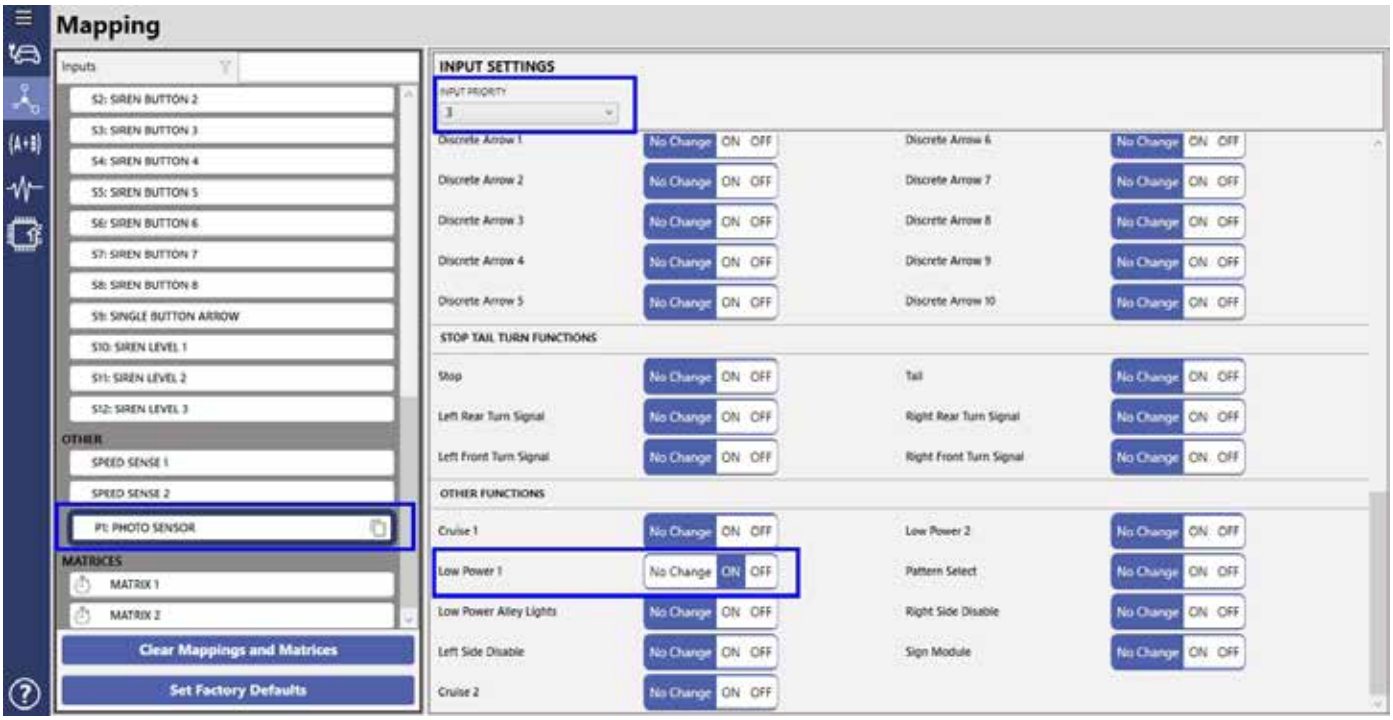
The photo sensor is located in the middle of the AutoDim / Mod ID module.

Changing the ambient light SET/CLEAR levels may be modified by updating the setting in the 'Photo Sensor' tab in the PC Application.

The photo sensor controls may be updated by using the PC App. Refer to the PC App instructions for more detail.

PHOTO SENSOR OVER-RIDE CONFIGURATION INSTRUCTIONS

1. Click on 'Mapping' tab and click on 'P1: Photo Sensor' and note priority and which functions are activated when the photo sensor is active.



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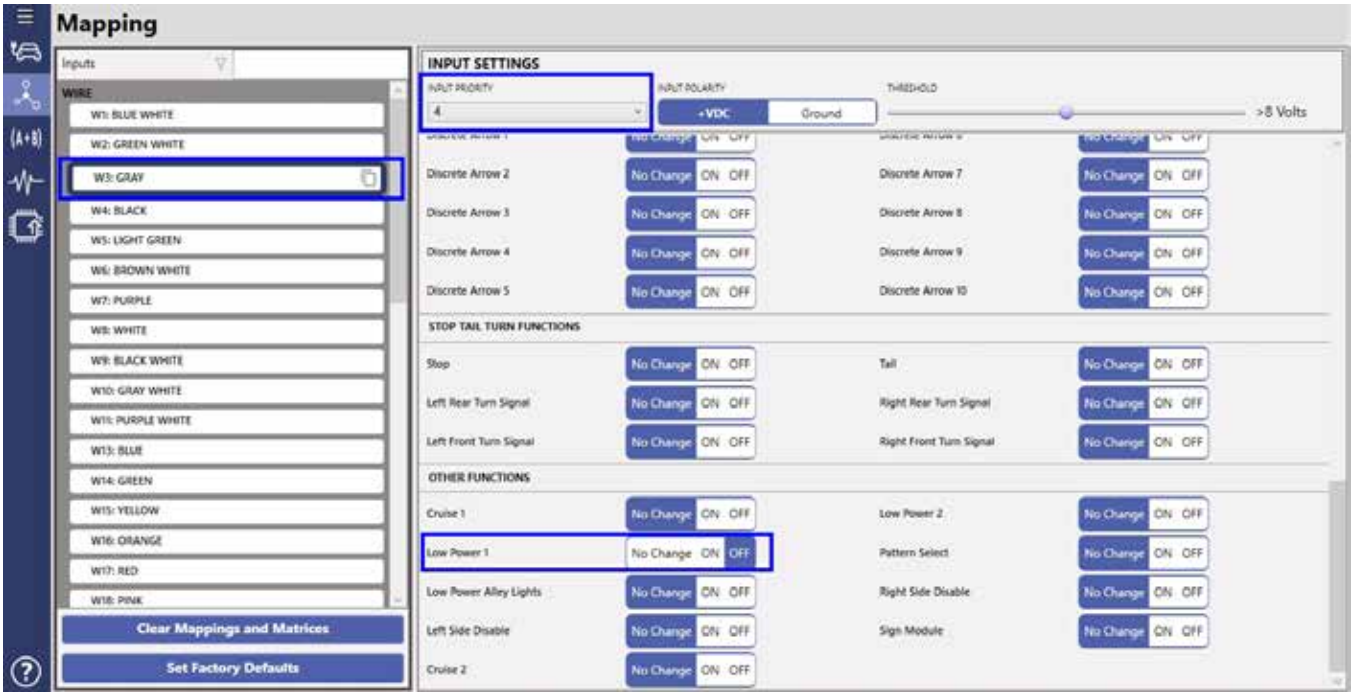
ENHANCING SAFETY THROUGH INNOVATION

PHOTO SENSOR OVER-RIDE CONFIGURATION INSTRUCTIONS (CONT.)

2. Click on the input wire/siren control to be used to over-ride the functions activated by the photo sensor and change the priority of the selected input wire/siren control to be a higher priority than the photo sensor control priority. Set the functions activated by the photo sensor to 'Turn Function OFF' when the input wire/siren control is active.



3. From the example in #2, when +V is applied to the gray wire, Low Power 1 will be turned off even if the photo sensor is active since the gray wire control is a higher priority than the photo sensor control.

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Wire Function Defaults

Table 1

Wire Pin #	Wire Color	Wire Function	Mods affected	Color (→: If the color is not populated, it would be the next color listed)	Flash	CERT chosen	
						SAE/None	ECE
						Pattern	
1	BLU/WHT	Cruise 1	Inboard 1, Corners & Alleys (Front and Rear)	Color 1, not White	-	-	-
2	GRN/WHT	Warning	Entire Bar (Rear)	Color 1	Mode 2	Slow Runner	ECE Single
3	GRY	STT - Rear Turn - Left	Inboard 2 (pair)	Amber→Red→nothing	-	-	-
4	BLK	STT - Rear Turn - Right	Inboard 2 (pair)	Amber→Red→nothing	-	-	-
5	LTGRN	STT - Tail	Inboard 2 (pair)	Red→nothing	-	-	-
6	BRO/WHT	Disable	Left Side Endcap	-	-	-	-
7	PUR	Disable	Right Side Endcap	-	-	-	-
8	WHT	Unassigned	-	-	-	-	-
9	BLK/WHT	Low Power 1	all	-	-	-	-
10	GRY/WHT	Left Arrow	Inboards (Rear)	Amber→Color 1	-	-	-
11	PUR/WHT	Right Arrow	Inboards (Rear)	Amber→Color 1	-	-	-
12	PNK/WHT	IGNITION	-	-	-	-	-
13	BLU	Warning	Entire Bar (Front and Rear)	Color 1	Mode 1	Flicker Cruise	ECE Single
14	GRN	Warning	Entire Bar (Front)	Color 1	Mode 2	Slow Runner	ECE Single
15	YEL	Warning	Entire Bar (Front and Rear)	Color 1	Mode 3	Quint	ECE Single
16	ORG	Warning	Entire Bar (Front and Rear)	Color 1	Mode 4	Intercycle	ECE Single
17	RED	Warning	Entire Bar (Front and Rear)	Color 1	Mode 5	Warp	ECE Single
18	PNK	Warning with Cruise 1 behind	Entire Bar (Front and Rear)	Color 1	Mode 6	Super Slow Runner	ECE Single
19	RED/WHT	Flashing	Takedown	White→nothing	-	-	-
20	BRO	Scene	Left Alley and Left Alley Scene	White→nothing	-	-	-
21	YEL/WHT	Scene	Right Alley and Right Alley Scene	White→nothing	-	-	-
22	ORG/WHT	Takedown	Selected at Bar Creation	White	-	-	-
23	RED/BLK	Scene 1	Selected at Bar Creation	White	-	-	-
24	LTGRN/WHT	VSS Input for Speed 1 and 2	-	-	-	-	-

BREAKOUT BOX INSTRUCTIONS: (LIN COMMUNICATION)

a) Securely snap in the 4-pin and 24-pin connectors
b) Install a 3Amp Fuse (customer supplied) to the end of the Red wire of the 4-pin connector harness.
c)Hook up power, ground, and LIN to the corresponding wire on the 4-pin connector harness.
d)Refer to Table 1 for the input wire's default function
e) Follow the label for the wire color to connect to a +10-32Vdc source, which turns on that given light or lights
f) Make sure your wire connections are secured and isolated from any other wire

CAN BREAKOUT BOX INSTRUCTIONS: (CAN COMMUNICATION)

a) Securely snap in the 4-pin, 5-pin and 24-pin connectors
b) Refer to Table 1 for the input wire default functions and to Table 2 for the CAN wire functions
c) Install a 3Amp Fuse (customer supplied) to the end of the Red wire of the 4-pin connector harness.
d)Hook up power, ground, and LIN to the corresponding wire on the 4-pin connector harness.
e) Follow the label for the wire color to connect to a 10-32 Vdc source, which turns on that given light or lights
f) Make sure your wire connections are secured and isolated from any other wire
g) If extending the 5-pin connector harness, a shielding wire running the length of the entire harness may be necessary

CONNECTOR PRESENT WITH CAN BOB

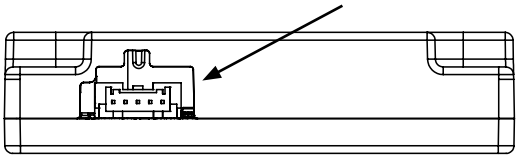
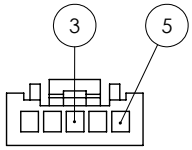


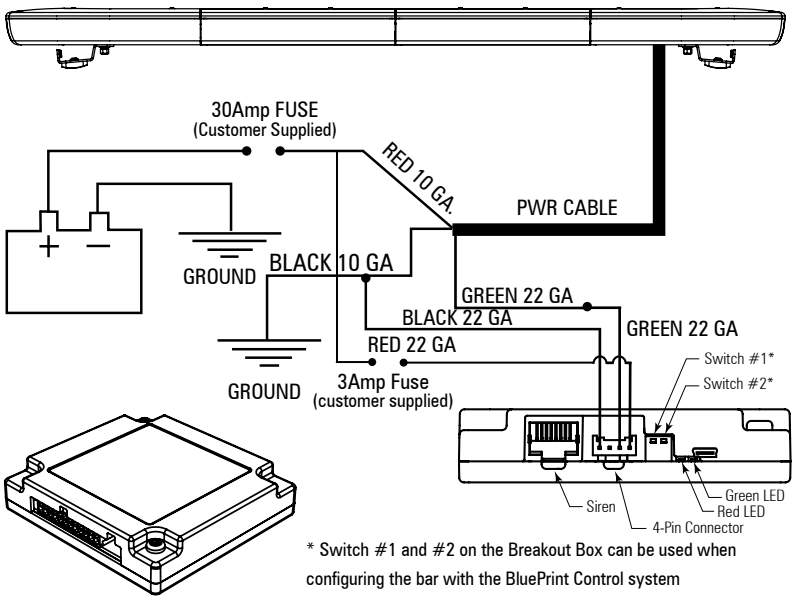
Table 2

Wire Pin	Color	Function
3	Green	CAN Low
5	Yellow	CAN High



CAN CONNECTOR

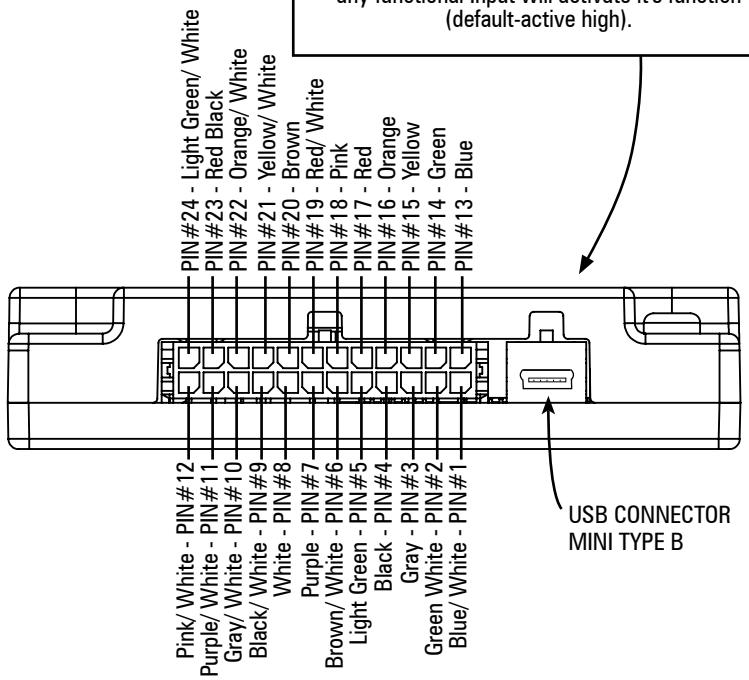
nFORCE nxt LED Lightbar



* Switch #1 and #2 on the Breakout Box can be used when configuring the bar with the BluePrint Control system

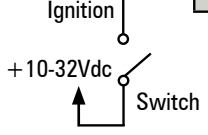
Functional Inputs

Functional Inputs connect to your control head or switching unit. Applying +10-32Vdc to any functional Input will activate it's function (default-active high).



Connector Pinning Chart

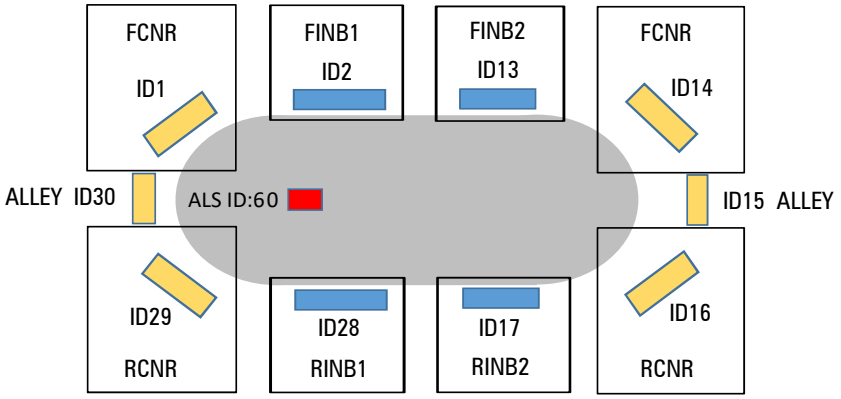
24	23	22	21	20	19	18	17	16	15	14	13
12	11	10	9	8	7	6	5	4	3	2	1



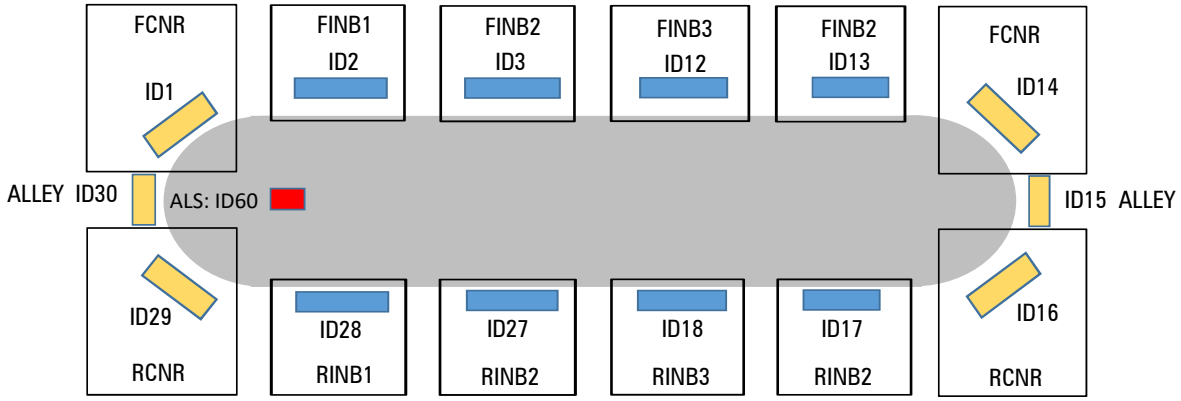
LIGHT MODULE LOCATIONS

nFORCE nxt LED Lightbar

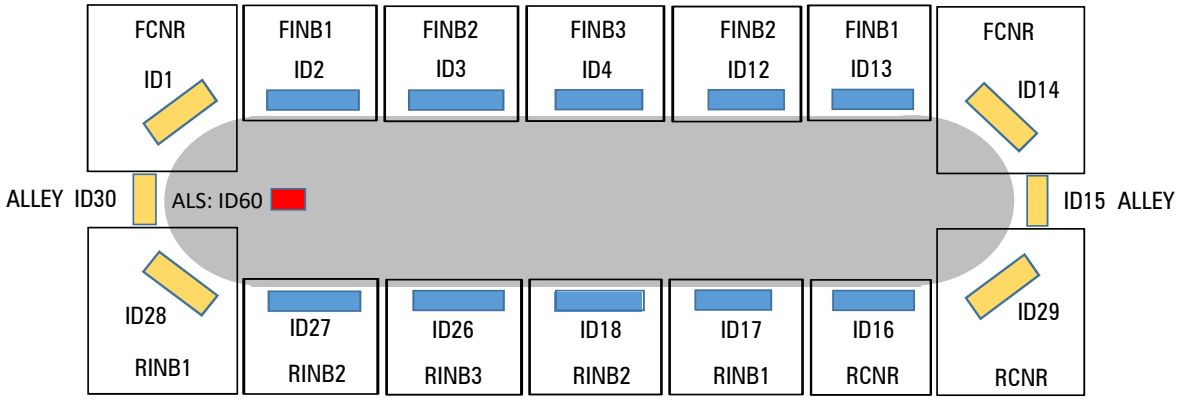
24" LIGHTBAR



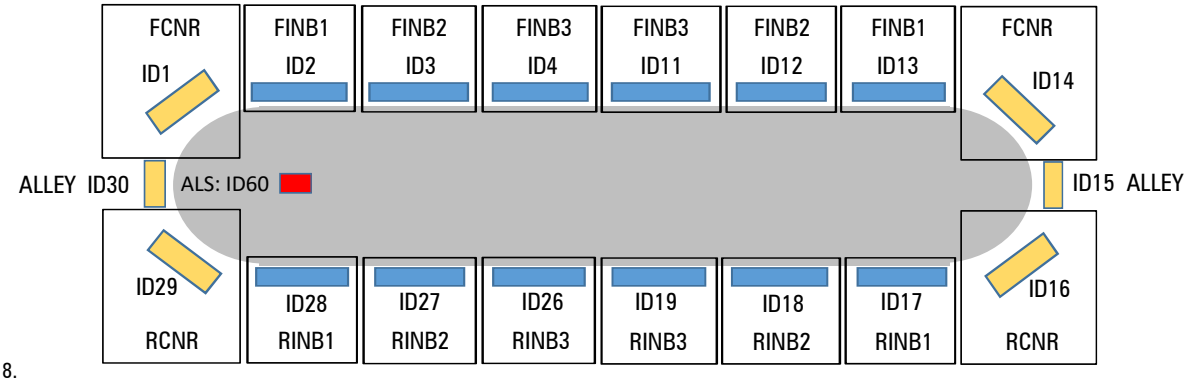
36" LIGHTBAR



42" LIGHTBAR



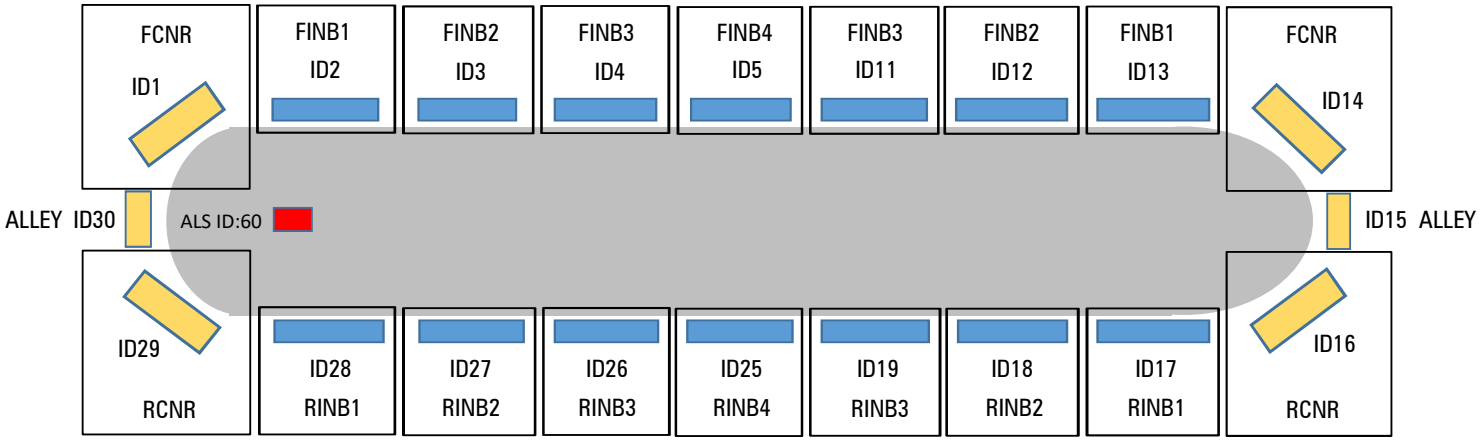
48" LIGHTBAR



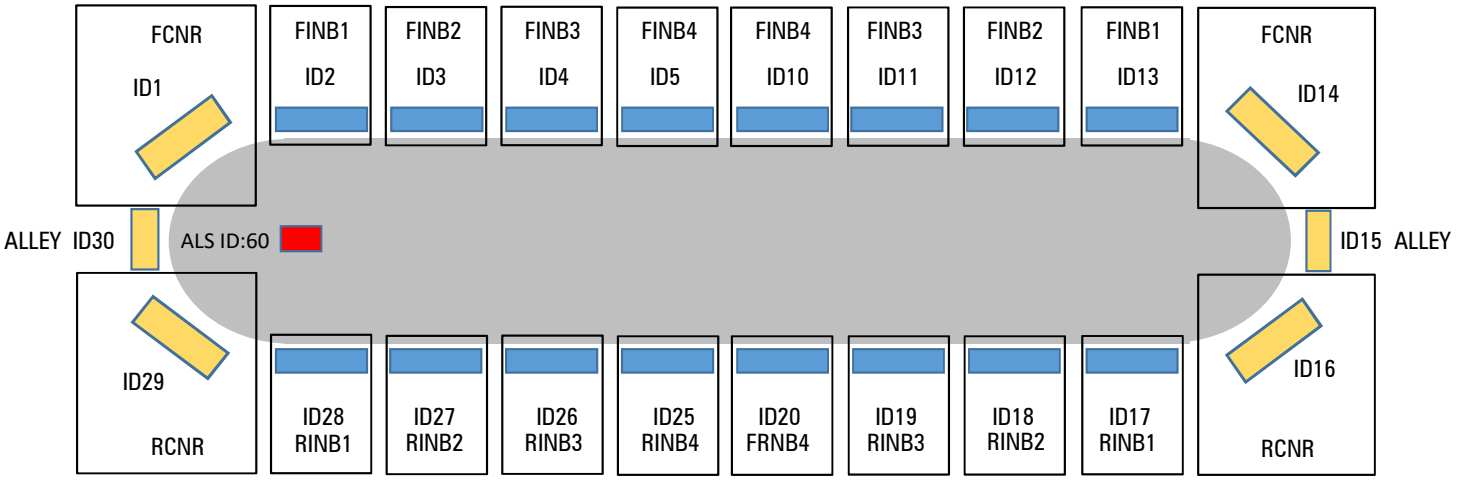
LIGHT MODULE LOCATIONS (CONT.)

nFORCE nxt LED Lightbar

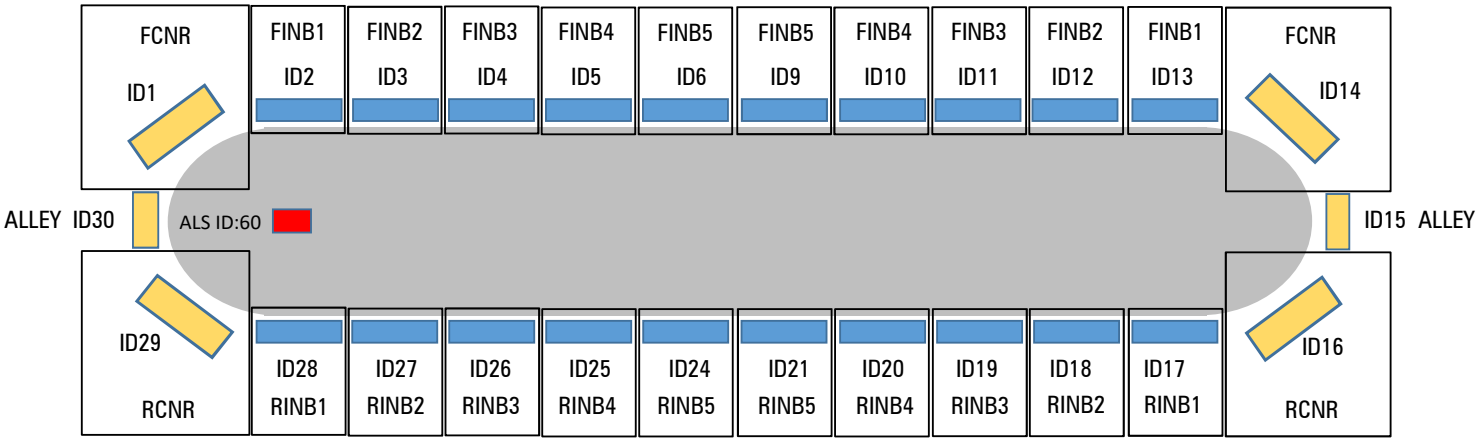
54" LIGHTBAR



60" LIGHTBAR



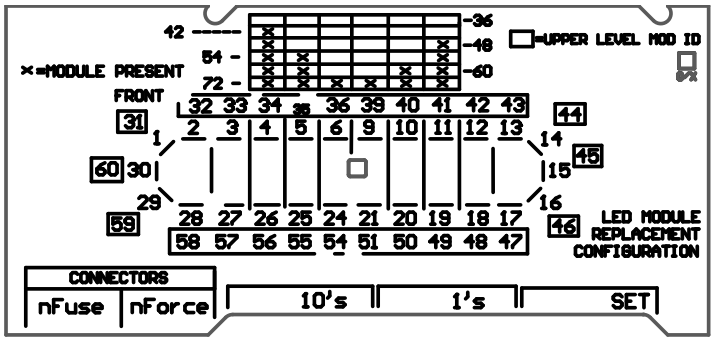
72" LIGHTBAR



BOARD ASSEMBLY REPLACEMENT

Inboard, Corner, and Alley Module Replacement:

1. Remove relevant top cover(s) by removing screws.
2. Disconnect the harness of the module in question from the driver board.
3. Remove the entire light module.
4. Replacement modules should be connected to the nFORCE Connector port on the AutoDim / Mod ID module.
5. Once the module is connected, the LED's under the 10's and 1's labels on the AutoDim / Mod ID module will flash Green to indicate to the module's ID number.



EXAMPLE: An ID of 20 will flash only the 10's LED twice. Similarly an ID of 2 will flash only the 1's LED twice. An ID of 15 would flash the 10's LED once then the 1's LED 5 times.

6. To configure a new ID, quick press the 10's button to add 10 to the current ID and/or press the 1's button to add 1 to the current ID. Pressing and holding the 10's or 1's button until the corresponding red LED goes off will subtract 10 or 1 respectively. Pressing and holding both the 10's and 1's buttons at the same time and releasing once the red LED's turn off will change the ID to 1.
7. Once the 10's or 1's buttons have been pressed the LED's on the AutoDim / Mod ID module will change from green to red and flash the potential new ID. If the ID flashes correctly press the SET button and it will configure the module to that ID. The LED's on the AutoDim / Mod ID module will now flash the module's new ID in green. If the new module ID flashes in green correctly then the module is ready to be connected to the bar.

EXAMPLE: If your module started out with ID 15 and the desired ID was 30 you would press the 10's button once and the 1's button 5 times(15 + 15 = 30.) Verify the 10's LED flashes red 3 times(indicating ID 30) then press the SET button. After the SET button is pressed the 10's LED should flash green 3 times.

NOTE: The highest available ID is 60. Going past 60 will start back at 1 and going backwards from 1 will go to 60.

Power Distribution / Driver Module Replacement:

1. Verify power has been removed from lightbar before attempting service.
2. Remove relevant top cover by removing screws.
3. Disconnect all wire harness connectors attached to the board.
4. Remove power distribution / driver module sensor board.
5. Snap new distribution/photo sensor board assembly into housing.
6. Reconnect all wire harnesses in the identical locations.
7. Apply power to lightbar and verify proper operation.

Fuse	Connectors
F1	J1
F2	J2
F3	J3
F4	J4
F5	J5
F6	J6

AutoDim / Mod ID Module Replacement:

1. Verify power has been removed from lightbar, before attempting service.
2. Remove driver side end cover by removing screws.
3. Disconnect wire harness attached to the board.
4. Remove the two screws.
5. Remove the module.
6. Install new module using the two screws.
7. Reconnect the wire harness to the identical connector.
8. Apply power to lightbar and verify proper operation.

NOTICE:
Installers and users must comply with all applicable federal, state and local laws regarding use and installation of warning devices.

Improper use or installation may void warranty coverage.
*To review our Limited Warranty Statement & Return Policy for this or any SoundOff Signal product, visit our website at **www.soundoffsignal.com/tech-services/returns/**.*
*If you have questions regarding this product, contact **Technical Services**, Monday - Friday, 8 a.m. to 5 p.m. ET at **1.800.338.7337** (press #4).*
*Questions or comments that do not require immediate attention may be emailed to **techservices@soundoffsignal.com.***

ENHANCING SAFETY THROUGH INNOVATION

nFORCE nxt TROUBLESHOOTING

NORMAL OPERATION
Under Normal operation with ignition input powered, the breakout box will have the Green LED ON and the Red LED light will be ON whenever an input is active and both switches are in the UP (off) position.

NO OPERATION

No Green LED flashing on Breakout box;	Check input power and ground to lightbar and breakout box
	Check Ignition Input wire and verify a minimum of 10.0 Volts is present on the wire
	Check the fuses in the lightbar power distribution unit.

NO or INCORRECT WARNING LIGHTS

Breakout box LED's operating correctly;	Check IDs on LED modules in lightbar. Verify they are all set correctly.
No steady Red LED on breakout box;	Check 4-pin connector at breakout box (insure it is snapped in correctly), check appropriate input to breakout box for output lights which should be on. Verify voltage is present at the wire input to the breakout box for the function being tested

NO TAKEDOWNS LIGHTS

Breakout box LED's operating correctly;	Verify configuration and make sure light modules are configured for takedown function
No steady Red LED on breakout box;	Check 24-pin connector at breakout box (insure it is snapped in correctly), check appropriate input to breakout box for output lights which should be on

INCORRECT OR NO ARROW OPERATION

Breakout box LED's operating correctly;	Verify configuration and make sure light modules are configured for arrow function.
No Steady Red LED on breakout box;	Check 4-pin and 24-pin connector at breakout box (ensure it is snapped in correctly), check appropriate input to breakout box for output lights which should be on.

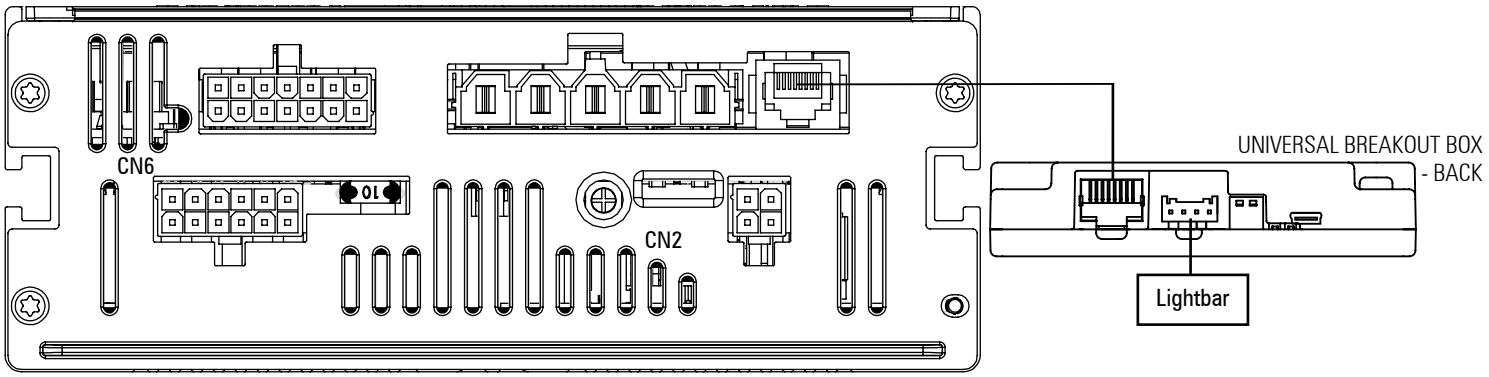
NO LIGHT OPERATION IN ONE LIGHTBAR QUADRANT

Breakout box LED's operating correctly;	Remove top cover and follow 4 non-working modules to fuse location. If fuse is blown, check for shorts in cabling and LED module. Replace any damaged cables or modules and replace fuse. If fuse blows again, replace defective power distribution assembly.
No Steady Red LED on breakout box;	Check 4-pin and 24-pin connector at breakout box (ensure it is snapped in correctly), check ap propriate input to breakout box for output lights which should be on.

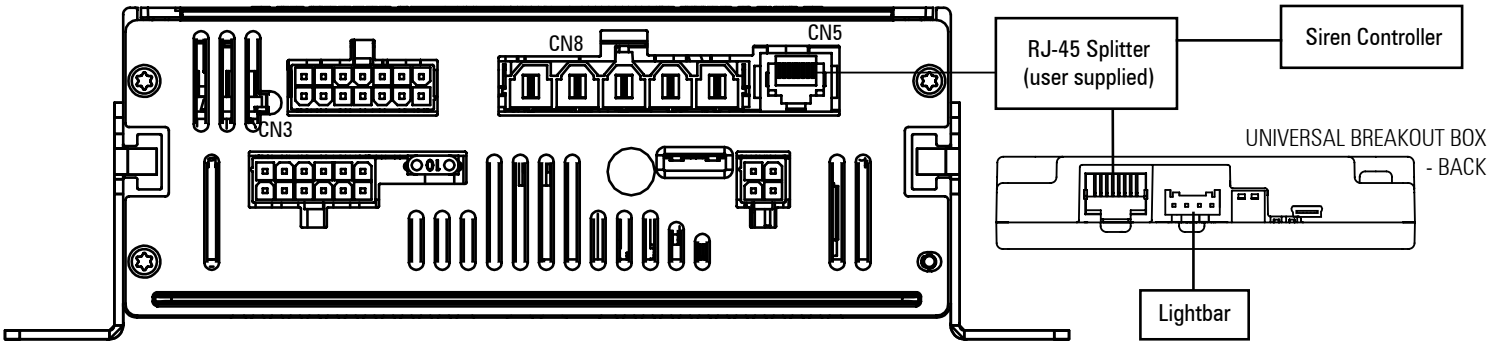
CONNECTION OF LIGHTBAR BREAKOUT BOX TO SOUNDOFF SIGNAL SIREN:

Note: Requires PC configuration app to map siren control switches to lightbar functions.
Plug 1 end of RJ-45 cable to available jack on siren amplifier.

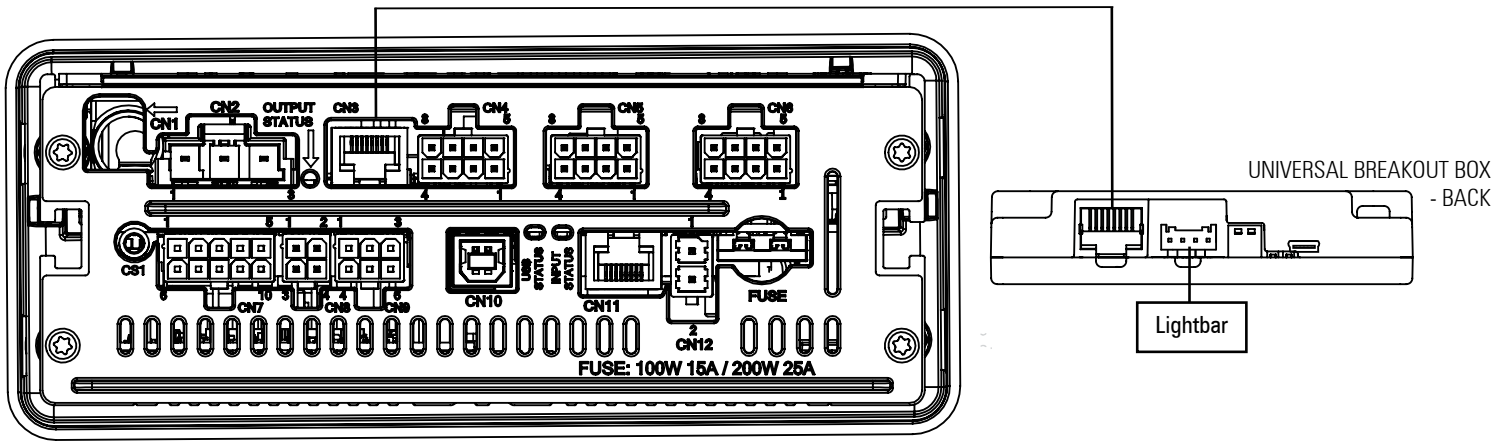
ETSA481CSR or ETSA482CSR



ETSA481RSP, ETSA482RSP, ETSA461HPP, ETSA462HPP

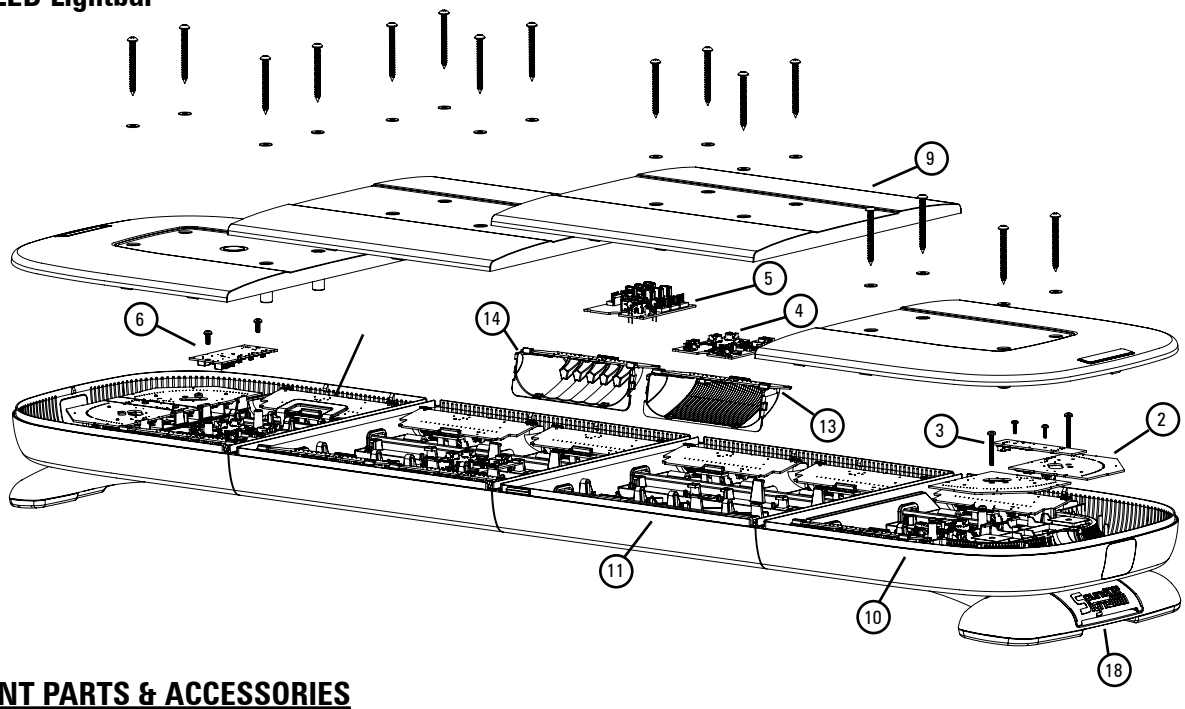


ETSA581CSR, ETSA581CSP, ETSA581RSP, or ETSA582RSP



nFORCE®
NEXUS TECHNOLOGY

nFORCE nxt LED Lightbar



REPLACEMENT PARTS & ACCESSORIES

ITEM #	PART#	DESCRIPTION
	PUVBBJ00	BREAKOUT BOX - STANDARD LIN COMMUNICATION
	PUVBBJC1	BREAKOUT BOX - CAN COMMUNICATION
	PUVBBHNCN1	CAN BREAKOUT BOX 5-PIN HARNESS
	PUVBBHNPW1	BREAKOUT BOX 4-PIN HARNESS
	PEPL9BBHN(x)	BREAKOUT BOX 24-PIN HARNESS
	PNNLBHNMD(x)	LIGHT ENGINE MODULE HARNESS
	PNULBHNPW(x)	POWER HARNESS (36"-72" BARS)
	PNNLBHNPW1	POWER HARNESS (24" BAR)
	PNFLBHNDS(xx)	DISTRIBUTION HARNESS
	PNNLBHNPW2	QUICK CONNECT LIGHTBAR HARNESS
	PNNLBHNPW3	QUICK CONNECT ROOF HARNESS
1	PNNLBLHS206(x)	6 LED SINGLE COLOR INBOARD MODULE (ECE AND TAKEDOWN)
1	PNNLBLSS206(x)	6 LED SINGLE COLOR INBOARD MODULE (SAE)
1	PNNLBLHD212(x)	12 LED DUAL COLOR INBOARD MODULE (ECE)
1	PNNLBLSD212(x)	12 LED DUAL COLOR INBOARD MODULE (SAE)
1	PNNLBLST218(xxx)	18 LED TRI COLOR INBOARD MODULE (SAE)
2	PNNLBCSS212(x)	12 LED SINGLE COLOR CORNER MODULE
2	PNNLBCSD224(x)	24 LED DUAL COLOR CORNER MODULE
2	PNNLBCST236(xxx)	36 LED TRI COLOR CORNER MODULE
3	PNNLBASS203(x)	3 LED SINGLE COLOR ALLEY MODULE
3	PNNLBASD206(x)	6 LED DUAL COLOR ALLEY MODULE
3	PNNLBAST209(xxx)	9 LED TRI COLOR ALLEY MODULE
4	PNNLBDST1	DISTRIBUTION BOARD (36"-72" BARS)
5	PNNLBDRV1	DRIVER BOARD
	PNNLBDRV2	DRIVER/DISTRIBUTION BOARD (24" BAR)
6	PNNLBDAD(x)	AUTODIM / MOD ID MODULE

ITEM #	PART#	DESCRIPTION
7	PNNLBTTE0L(x)	TOP COVER, END, W/O LENS
8	PNNLBTTEAL(x)	TOP COVER, END, W/ LENS
9	PNNLBTTLGL(x)	TOP COVER, 12"
	PNNLBTTSML(x)	TOP COVER, 6"
10	PNNLBTBECL(x)	LENS, END
11	PNNLBTBLGL(x)	LENS, 12"
	PNNLBTBSML(x)	LENS, 6"
12	PNNLBRFEC1	END CAP REFLECTOR
13	PNFLBRFL845	INBOARD REFLECTOR, STANDARD
14	PNFLBRFTD1	INBOARD REFLECTOR, TAKEDOWN
15	PNNLBTCSKT1	TOP COVER SCREW KIT (10PCS)
16	PNNLBTBECSP1	SPACER END BRACKET
17	PNFLBF(xx)	HOOK BRACKET KITS
18	PNFLBK06	STANDARD FIXED HEIGHT MOUNT w/ THIN PAD (EA)
	PNFLBK08	STANDARD FIXED HEIGHT MOUNT w/ THICK PAD (EA)

*PARTS LIST CONTINUED ON NEXT PAGE

REPLACEMENT PARTS & ACCESSORIES*** (CONT.)

PART#	DESCRIPTION
PNFLBHPKT1	HOLE PLUG KIT
PNFLBWGKT1	WEDGE KIT
PNFLBK01	FIXED HEIGHT PERMANENT MOUNT (EA)
PNFLBK02	HEADACHE RACK MOUNT (EA)
PNFLBK09	XtraFit UNIVERSAL MOUNT (EA)
PNFLBK10	EXTRA LOW FIXED HEIGHT MOUNT (EA)
PNFLBK11	CLASSIC FIXED HEIGHT MOUNT (EA)
PNFLBK12	STANDARD FIXED HEIGHT MOUNT w/THICK, THIN, AND CURVED PAD (EA)
PNFLBK13	5" HEADACHE RACK MOUNT (EA)
PNFLBK14	FIXED HEIGHT PURSUIT MOUNT CURVED FOOT PAD
PNFLBKXT	FIXED HEIGHT EXTENSTION PLATE (EA)
PNFLBFTCV1	FIXED HEIGHT FOOT COVER
PNFLBFTCV2	XTRAFIT UNIVERSAL MOUNT FOOT COVER
PNFLBGTTKT	OPTICOM MODULE 795H
PNFLBGTTSTB	STROBE PREP KIT MODULE
PNFLBPDKT(x)	FIXED HEIGHT PURSUIT MOUNT FOOT PAD
PNFLBSPLT1	RJ45 PIGTAIL SPLITTER W/ HARNESS
PNFLBSPKT1	SOLAR PANEL HARDWARE KIT
PNFLBLS000X	INBOARD MODULE, BLANK BRACKET (QTY 1)
PNFLBLN0000	INBOARD MODULE, BLANK BRACKET (QTY 6)
PNFLBHT1	CORNER MODULE HEAT SINK LUG KIT

nFORCE® NEXUS TECHNOLOGY

nFORCE nxt LED Lightbar

WARRANTY & RETURN GOODS PROCEDURE

CLEANING & CARE OF YOUR LIGHTBAR:

Keeping the lenses clean and scratch free will optimize the performance of the lightbar. The exterior of the lightbar including lenses should be cleaned with mild soapy water and a soft cotton cloth to remove dirt, grime and insects. Never use window cleaners or harsh chemicals on the lenses; this may cause failure of the lenses or reduce clarity resulting in the reduction of light output.

MOUNTING INTEGRITY:

A review of bolt/hardware/mounting bracket integrity should be performed at the beginning and end of each shift.

WARNING MESSAGES - PLEASE READ:

WARNING - DRILLING ANY HOLES INTO THE LIGHTBAR IS NOT RECOMMENDED! THE RISK OF DAMAGING INTERNAL COMPONENTS AND THE RESULTING FAILURE OF THE LIGHTBAR WILL VOID ANY WARRANTY OF THIS PRODUCT.

WARNING - CARE MUST BE TAKEN WHEN DRILLING THROUGH THE ROOF OF THE VEHICLE NOT TO DRILL INTO ANY EXISTING WIRING AND NOT TO DRILL THROUGH THE HEADLINER OR SUPPORT MEMBERS OF THE VEHICLE. CHECK BOTH SIDES OF THE MOUNTING SERVICE PRIOR TO DRILLING. DE-BURR ANY HOLES AND REMOVE ANY METAL SHARDS OR REMNANTS. INSTALL GROMMETS INTO ALL WIRE PASSAGE HOLES.

WARNING - ROUTE WIRES ONLY IN LOCATIONS THAT ARE NOT SUBJECTED TO POTENTIAL WEAR. MAKE SURE TO AVOID ROUTING WIRES IN THE DEPLOYMENT AREA OF YOUR AIR BAG. REFER TO YOUR VEHICLE OWNER'S MANUAL FOR AIR BAG DEPLOYMENT ZONES.

WARNING - ALL CUSTOMER SUPPLIED POWER WIRES CONNECTING TO THE POSITIVE (+) OR NEGATIVE (-) BATTERY TERMINAL OR LOCAL CHASSIS GROUND (-) MUST BE SIZED TO SUPPLY AT LEAST 125% OF THE MAXIMUM CURRENT AND PROPERLY FUSED AT THE POWER SOURCE WITH APPROPRIATELY RATED FUSE.

IMPORTANT: When passing cables through fire wall or other sheet metal, insert grommet to protect the cable!

WARRANTY RETURN PROCESS:

Please contact your SoundOff Signal Sales Representative, Customer Services staff or our Technical Department (800.338.7337) for a RMA #, Return Merchandise Authorization Number.

The following information is required for issuance of the RMA #:

- Reason for returning the product*
- Address where replacement product is to be shipped*
- Telephone number where you may be reached*
- SoundOff Signal invoice number on which product was purchased**
- SoundOff Signal part number and serial number**
- E-mail address where RMA # should be e-mailed**
- Fax number where RMA # should be faxed**

* RMA # will not be given without this information.
** If available, please provide this information.

SoundOff Signal will NOT accept returns without an RMA #. Each RMA # is good for only one (1) return and will expire (30) days after the date it was issued. Products must be shipped back to SoundOff Signal and the RMA # clearly marked on the outside of the package near the shipping label. Please use the following address on your shipping label:

SoundOff Signal
ATTN: RMA # / Technical Services
3900 Central Parkway
Hudsonville, MI 49426

WARRANTY EXCLUSIONS:

Shipping & Handling, labor and service fees are non-refundable. SoundOff Signal is not liable for any damage due to installation or personal injury as a result of using SoundOff Signal product.

WARRANTY FORFEITURE:

Warranty will not be granted if the Warranty Return Policy & Procedure rules are not strictly followed. Physical damage resulting from customer abuse will void warranty. Warranty will also be voided if any SoundOff Signal and/or manufacturer serial tags, product stickers, seals, or the like, are removed, altered or tampered with. Returned product that is damaged by shipping via the RMA # procedure is not the responsibility of SoundOff Signal.

Document effective date on cover and below supersedes previously dated policies and statements.

There are no other warranties, expressed or implied, including, but not limited to, any implied merchantability or fitness for a particular use. SoundOff Signal reserves the right to modify this warranty statement at any time; or to discontinue, modify, or upgrade any products of its manufacture with design improvements without prior notice.

NOTICE:

Installers and users must comply with all applicable federal, state and local laws regarding use and installation of warning devices.

Improper use or installation may void warranty coverage.
To review our Limited Warranty Statement & Return Policy for this or any SoundOff Signal product, visit our website at ***www.soundoffsignal.com/tech-services/returns/****.*
If you have questions regarding this product, contact ***Technical Services****, Monday - Friday, 8 a.m. to 5 p.m. ET at* ***1.800.338.7337*** *(press #4).*
Questions or comments that do not require immediate attention may be emailed to ***techservices@soundoffsignal.com.***

ENHANCING SAFETY THROUGH INNOVATION