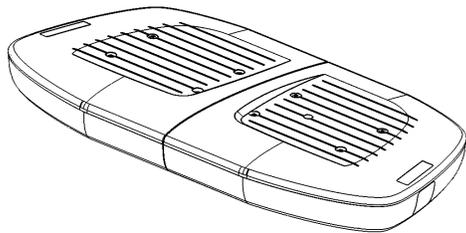


**nFORCE™ LED Lightbar - 24"**



**IMPORTANT NOTICE TO INSTALLER:** 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™ LED Lightbar built to your specifications
- 1 - Breakout Box
- 1 - 24 Pin Harness

**Other Parts that may be included depending on your configuration:**

- 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



1.800.338.7337 / [www.soundoffsignal.com](http://www.soundoffsignal.com)

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SUPERIOR CUSTOMER RELATIONSHIPS. SMARTLY DESIGNED LIGHTING & ELECTRONIC SOLUTIONS.

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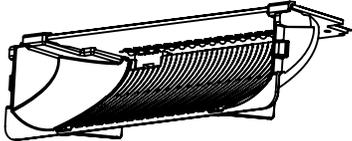
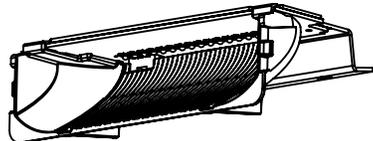
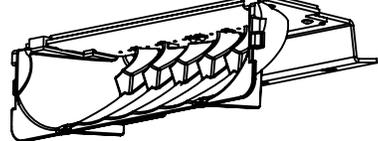
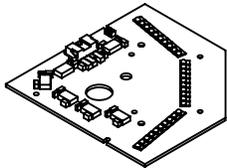
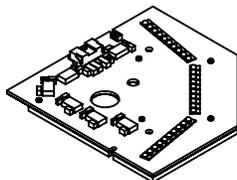
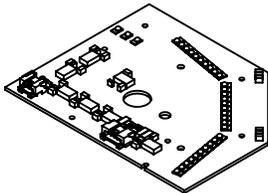
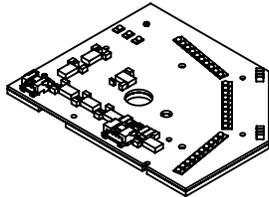
PAGE	CONTENT
1	COMPONENTS/ CONTENTS
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3	TECHNICAL/ POWER SPECIFICATIONS
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7	CONTROL HARNESS
8	LIGHT MODULE WIRE HARNESS LOCATIONS & DRIVER MODULE REPLACEMENT
9	NFORCE TROUBLESHOOTING
10	CONNECTION OF BREAKOUT BOX TO SOUNDOFF SIGNAL SIRENS
11	REPLACEMENT PARTS
12	WARRANTY AND RETURN GOODS PROCEDURE

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- 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.

	<p><b>6 LED Single, Dual &amp; Tri Color Inboard Module</b></p> <p>INPUT VOLTAGE RANGE: 10-16Vdc  CURRENT DRAW: 0.5 Amps @ 12.8 Vdc (Flashing)  1.0 Amps @ 12.8 Vdc (Steady On)  WATTAGE: 6.4W (Flashing)</p>
	<p><b>9 LED Single Color Inboard Module</b></p> <p>INPUT VOLTAGE RANGE: 10-16Vdc  CURRENT DRAW: 0.75 Amps @ 12.8 Vdc (Flashing)  1.5 Amps @ 12.8 Vdc (Steady On)  WATTAGE: 9.6W (Flashing)</p>
	<p><b>6 LED Single Color Takedown Module</b></p> <p>INPUT VOLTAGE RANGE: 10-16Vdc  CURRENT DRAW: 1 Amps @ 12.8 Vdc (Steady On)  WATTAGE: 12.8 (Steady On)</p>
	<p><b>12 LED Single, Dual &amp; Tri Color Corner Module</b></p> <p>INPUT VOLTAGE RANGE: 10-16Vdc  CURRENT DRAW: 1 Amps @ 12.8 Vdc (Flashing)  2 Amps @ 12.8 Vdc (Steady On)  WATTAGE: 12.8W (Flashing)</p>
	<p><b>12 LED Single, Dual &amp; Tri Color Corner Module w/Alley</b></p> <p>INPUT VOLTAGE RANGE: 10-16Vdc  CURRENT DRAW: 1 Amps @ 12.8 Vdc (Flashing)  2.5 Amps @ 12.8 Vdc (Steady On)  WATTAGE: 12.8 (Flashing)</p>
	<p><b>18 LED Single Corner Module</b></p> <p>INPUT VOLTAGE RANGE: 10-16Vdc  CURRENT DRAW: 1.5 Amps @ 12.8 Vdc (Flashing)  3 Amps @ 12.8 Vdc (Steady On)  WATTAGE: 19.2W (Flashing)</p>
	<p><b>18 LED Single Corner w/Alley</b></p> <p>INPUT VOLTAGE RANGE: 10-16Vdc  WARNING CURRENT DRAW: 1.5 Amps @ 12.8 Vdc (Flashing)  3.5 Amps @ 12.8 Vdc (Steady On)  WARNING WATTAGE: 19.2W (Flashing)  ALLEY CURRENT DRAW: .25 Amps @ 12.8 Vdc (Flashing)  .5 Amps @ 12.8 Vdc (Steady On)  ALLEY WATTAGE: 6.4W (Steady On)</p>

FLASHING = AVERAGE  
STEADY ON (100%) = PEAK

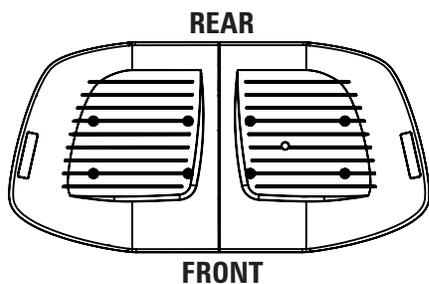
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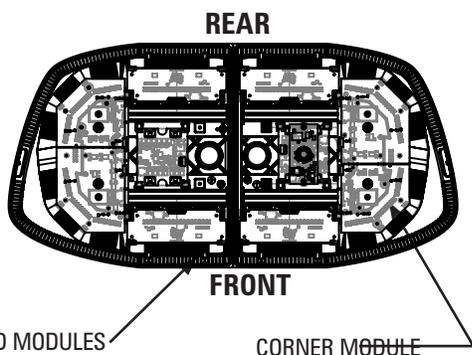
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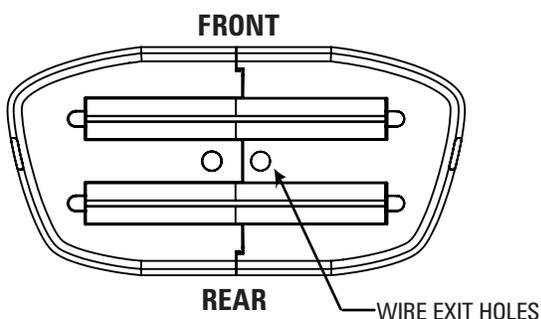
**TOP VIEW WITH COVERS ON**



**TOP VIEW WITH COVERS OFF**



**BOTTOM VIEW**



**TECHNICAL SPECIFICATIONS**

Material:	Aluminum Base, polycarbonate outer lenses, ASA/PC top cover.	
Roof Attachments:	1/4" bolt Stainless A2	
Operating Temperature:	-40° to +65° C	
LENGTH	# OF INBOARDS	DIMENSIONS
24"	2	12"D x 2.5"H inboard

**POWER SPECIFICATIONS**

Input Voltage Range:	10 -16 Vdc			
Light Bar Component	Current Draw (Average = Flashing)		Power Consumption (Watts)	
Standby Current	Ignition ON 0.010 Amps	Ignition OFF 0.002 Amps	Ignition ON 0.13 Watts	Ignition OFF 0.03 Watts
Reverse Polarity	Protected			
Load Dump	Protected			
Wiring	Power Cable 15ft 14 AWG Wires, (+) Red, (-) Black Data Cable 25ft RJ-45 Type			

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## ELECTRICAL INSTALLATION

### Featured Highlights & Terminology:

**Mode Select:** The nForce Lightbar is equipped with 2 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 Lightbar'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 Mode:** Allows the user to program any light group(s) to "Glow" when this feature is activated. For dual / tri color bars, the color for each light group is selectable.

**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 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.**

#### 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.

#### Initial Power up Test:

1. Plug RJ-45 power / data plug into 'Lightbar' connector on the breakout box.
2. **Apply power to pink/white ignition wire on breakout box. See table 1 on page 9.**
3. Observe the GREEN Data Link indicator LED on the Breakout Box; the Green LED will be ON showing power is connected.
4. 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.

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## ELECTRICAL INSTALLATION (CONTINUED)

### Warning Flash Pattern Configuration:

- a. Apply voltage to Ignition Input Wire and then set Switch #2 on Breakout box to down position (Switch #1 must be in Up position)
- b. Apply voltage to the activation wire of the function which requires pattern to be changed (i.e. Front Corner, Takedown, Left Alley, etc.)
- c. Apply voltage to the Mode activation wire to configure mode 2 flash patterns, leave Mode activation wire floating to configure mode 1 flash patterns
- d. Momentarily apply voltage to the pattern select wire to change the warning flash pattern
- e. Set Switch #2 on Breakout box to up position to save settings and return light-bar to normal operating mode

**NOTE:** Takedown and Alley light patterns are limited to pattern #1 – 11

\*fpm=Flashes per Minute

\*\*fps=Flashes per Second

### FLASH PATTERNS

#	Name	SAE		Sequence	fpm	fps
		Compliant	Color			
1	Random Single #1	Yes	#1	Variable	-	-
2	Random Single #2	No	#1	Variable	-	-
3	Quint	Yes	#1	Alternating	70	1.2
4	Quad 2	Yes	#1	Variable	-	-
5	Q-Switch	Yes	#1	Variable	-	-
6	Double	Yes	#1	Alternating	115	1.9
7	Power Pulse	Yes	#1	Alternating	180	3.0
8	RoadRunner	Yes	#1	Alternating	115	1.9
9	SlowRunner	Yes	#1	Alternating	70	1.2
10	Warp	No	#1	Alternating	350	5.8
11	Inter-cycle	No	#1	Alternating	-	-
12	Warp 1, 2, 3	No	#1	Variable	-	-
13	E-Single	Yes	#1	Alternating	125	2.1
14	E-Double	Yes	#1	Alternating	125	2.1
15	E-Triple	Yes	#1	Alternating	125	2.1
16	Random Duo #1	Yes	#1/2	Variable	-	-
17	Random Duo #2	No	#1/2	Variable	-	-
18	Quint Duo	Yes	#1/2	Alternating	70	1.2
19	Quad 2 Duo	Yes	#1/2	Variable	-	-
20	Q-Switch Duo	No	#1/2	Variable	-	-
21	Double Duo	Yes	#1/2	Alternating	115	1.9
22	Power Pulse	Yes	#1/2	Alternating	180	3.0
23	RoadRunner Duo	Yes	#1/2	Alternating	115	1.9
24	SlowRunner Duo	Yes	#1/2	Alternating	70	1.2
25	Warp Duo	No	#1/2	Alternating	350	5.8
26	Inter-cycle Duo	No	#1/2	Alternating	-	-
27	Warp 1, 2, 3, Duo	No	#1/2	Variable	-	-
28	Dual Color Flash 1	No	#1/2	Variable	-	-
29	Dual Color Flash 2	No	#1/2	Variable	-	-
30	Impact	No	#1/2	Variable	-	-
31	Explosion	No	#1/2	Variable	-	-
32	Tri Color Flash 1	No	#1/2/3	Alternating	-	-

### **IMPORTANT**

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

### **⚠ 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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## ELECTRICAL INSTALLATION (CONTINUED)

### **Takedown and Work-light Configuration:**

- a. Apply voltage to Ignition Input Wire and then set Switch #2 on Breakout box to down (Switch #1 must be in Up position)
- b. Determine which module inputs are needed for Takedowns or Work-lights
- c. Apply voltage to the Takedown activation wire
- d. Apply voltage to the light group wire(s) required (i.e. Front Inboard 1, Rear Inboard 2, etc.)
- e. Momentarily apply voltage to the pattern select wire to change the color between Off, Color 1, Color 2, and Color 3.

**NOTE: If configuring a single color or dual color module, make sure the chosen color is configured for Off and not a color which does not exist on the module. The light-bar will flash color #1 of all modules configured for takedown. If a module flashes every 2 seconds and is not intended to be on when takedown is activated, repeat steps 'd' and 'e' until module no longer flashes.**

- f. Set Switch #2 on Breakout box to up position to save settings and return light-bar to normal operating mode

### **Scene light Configuration:**

- a. Apply voltage to Ignition Input Wire and then set Switch #2 on Breakout box to down (Switch #1 must be in Up position)
- b. Determine which module inputs are needed for Scene Lighting
- c. Apply voltage to the Scene light activation wire
- d. Apply voltage to the light group wire(s) required (i.e. Front Inboard 1, Rear Inboard 2, etc.)
- e. Momentarily apply voltage to the pattern select wire to change the color between Off, Color 1, Color 2, and Color 3.

**NOTE: If configuring a single color or dual color module, make sure the chosen color is configured for Off and not a color which does not exist on the module. The light-bar will flash color #1 of all modules configured for scene light. If a module flashes every 2 seconds and is not intended to be on when scene light function is activated, repeat steps 'd' and 'e' until module no longer flashes.**

- f. Set Switch #2 on Breakout box to up position to save settings and return light-bar to normal operating mode

### **Stop / Tail / Turn (STT) Light Configuration:**

- a. Apply voltage to Ignition Input Wire and then set Switch #2 on Breakout box to down position (Switch #1 must be in Up position)
- b. Determine which module inputs are needed for Stop / Tail / Turn Lights
- c. Apply voltage to the Left Turn or Right Turn activation wires
- d. Apply voltage to the light group wire(s) required (i.e. Rear Inboard 1, Rear Inboard 2, etc.)
- e. Momentarily apply voltage to the pattern select wire to change the color between Off, Color 1, Color 2, and Color 3.

**NOTE: If configuring a single color or dual color module, make sure the chosen color is configured for Off and not a color which does not exist on the module. The light-bar will flash color #1 of all modules configured for STT function. If a module flashes every 2 seconds and is not intended to be on when an STT function is activated, repeat steps 'd' and 'e' until module no longer flashes.**

- f. Set Switch #2 on Breakout box to up position to save settings and return light-bar to normal operating mode

### **Cruise Mode Configuration:**

- a. Apply voltage to Ignition Input Wire and then set Switch #2 on Breakout box to down position (Switch #1 must be in Up position)
- b. Determine which module inputs are needed for cruise mode
- c. Apply voltage to the Cruise Mode activation wire
- d. Apply voltage to the light group wire(s) required (i.e. Front Corner, Front Inboard 1, etc.)
- e. Momentarily apply voltage to the pattern select wire to change the color between Off, Color 1, Color 2, and Color 3.

**NOTE: If configuring a single color or dual color module, make sure the chosen color is configured for Off and not a color which does not exist on the module. The lightbar will flash color #1 of all modules configured for cruise mode. If a module flashes every 2 seconds and is not intended to be on when Cruise mode is activated, repeat steps 'd' and 'e' until module no longer flashes.**

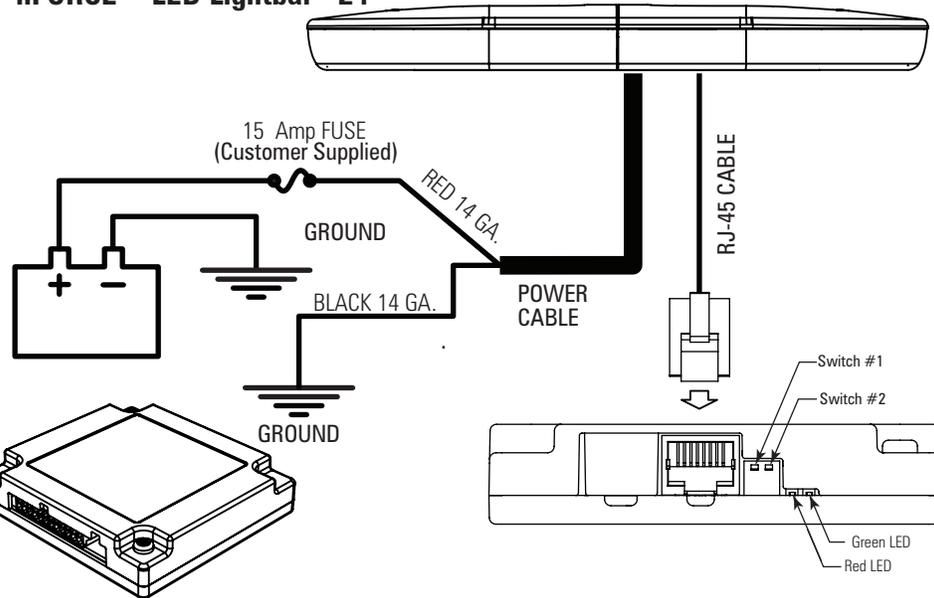
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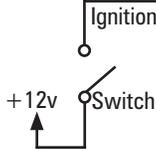
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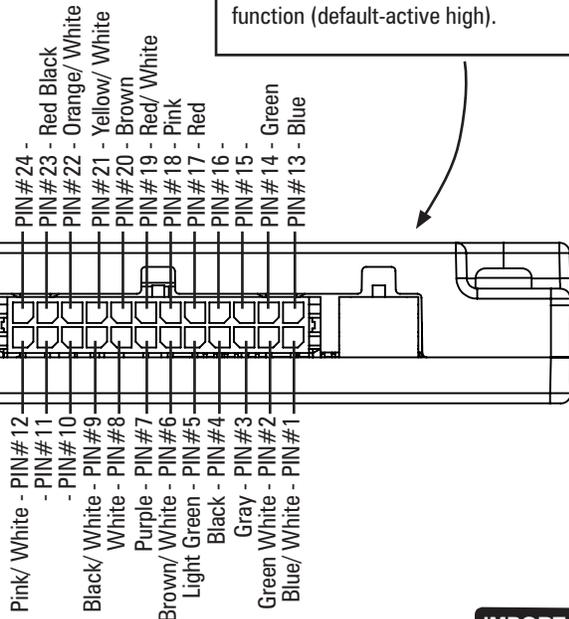


Connector Pinning Chart

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



**Functional Inputs**  
Functional Inputs connect to your control head or switching unit. Applying +12Vdc to any functional Input will activate it's function (default-active high).



### BREAKOUT BOX HOOKUP:

- Refer to Table 1 for Breakout Box input wire default functions
- Make sure the 24-pin connector and the RJ-45 connector are snapped in securely.
- Follow the label for the wire color to connect to a 12Vdc source, which turns on that given light or lights.
- Make sure your wire connections are secured and isolated from any other wire.

Table 1.

Wire Pin #	Wire Color	Wire Function
1	Blue/White	Rear Corners
2	Green/White	Rear Inboard 1
3	Gray	Mode Select
4	Black	Cruise Mode
5	Light Green	Scene Lighting
6	Brown/White	Takedown Flash
7	Purple	Low Power
8	White	Pattern Select / Tail
9	Black/White	Left Turn
10	-	-
11	-	-
12	Pink/White	Ignition Input
13	Blue	Front Corners
14	Green	Front Inboard 1
15	-	-
16	-	-
17	Red	Alley Passenger
18	Pink	Alley Driver
19	Red/White	Alley Flash
20	Brown	Takedown
21	-	-
22	-	-
23	Red/Black	Right Turn
24	Light Green/White	-

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## LIGHT MODULE WIRE HARNESS LOCATIONS

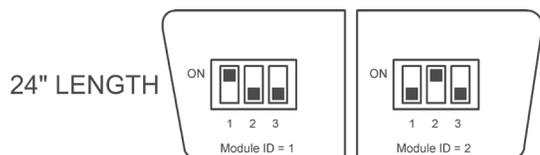


### REPLACEMENT OF INBOARD AND CORNER MODULES:

1. Disconnect main power.
2. Remove top cover by removing screws.
3. Locate module and remove mounting screws. Pull or slide module from lightbar.
4. Remove connector from rear of module by carefully pulling connector body from back of module.
5. Push module connector into replacement module ensuring locking latch is seated properly or connector is fully seated.
6. Replace module and hardware that fasten module to base extrusion.
7. Restore power to bar and test new module to ensure functionality.
8. Replace top cover of bar with screws removed in step 2.

### Driver Module Replacement:

- a. Verify power has been removed from lightbar before attempting service
- b. Remove top cover
- c. Unplug 3 pin power/data connector and LED module connectors from driver module assembly, noting location.
- d. Remove driver module
- e. Snap new driver module assembly into housing
- f. Plug 3 pin power/data connector and LED module connectors into driver module assembly
- g. Set DIP switch according to lightbar length and driver module location as shown below:
- h. Apply power to lightbar and verify proper operation.
- i. Set Switch #2 on Breakout Box to Down position then to Up position to store configuration into new driver module
- j. Verify DIP switch settings if lightbar does not function properly, and repeat step 'i' if DIP switch setting is changed



### IMPORTANT INFORMATION:

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## nForce TROUBLESHOOTING

### **NORMAL OPERATION**

Under Normal operation with lightbar turned ON, the breakout box will have the Green LED flash approx every 5 seconds and the Red LED light will be on steady whenever an input is active and both switches will be in the UP (off) position. Each driver module inside the lightbar has a fused circuit from the power distribution module. The LED on the driver module will flash whenever there is an active function selected on the breakout box.

### **NO OPERATION**

No Green LED flashing on Breakout box;

Check input power and ground to lightbar, check data cable for damage and/or opens.

**Check Ignition Input wire and verify a minimum of 10.0 Volts is present on the wire**

Defective power distribution assembly – replace.

### **NO or INCORRECT INBOARDS or CORNERS LIGHTS (WARNING)**

Breakout box LED's operating correctly;

Check DIP switches on driver modules in lightbar. Verify they are all set correctly

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. 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

### **NO LIGHT OPERATION IN ONLY 1 TUB**

Breakout box LED's operating correctly;

Remove top cover of tub in which lights are not functioning. Verify DIP switch is set correctly.

Check LED on Driver Module PCB is flashing when power is applied to any input wire on breakout box. If there is no LED illumination check for voltage across Red and Black power input wires to driver module. If voltage is present, replace driver module. If voltage is not present, locate the power distribution PCB (possibly in different tub) and verify fuse is not blown open. If fuse is blown, check for shorts in cabling replace any damaged cables and replace fuse. If fuse blows again, replace defective driver module assembly.

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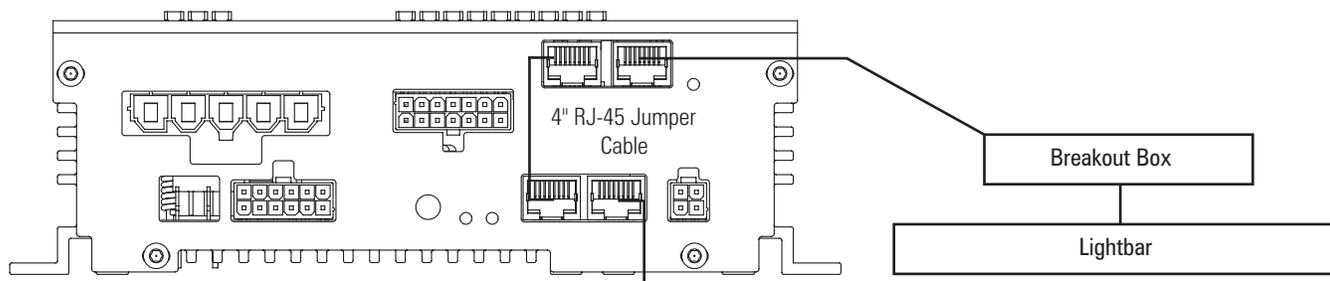
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**Connection of Lightbar Breakout Box to SoundOff Signal Siren:**

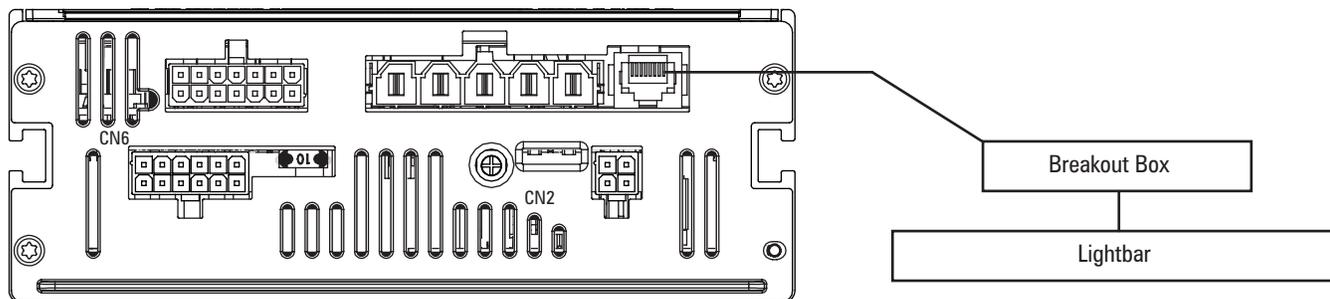
Note: Requires PC configuration app to map siren control switches to lightbar functions

Plug 1 end of RJ-45 cable to available jack on siren amplifier  
 Plug other end of RJ-45 cable to 'siren'

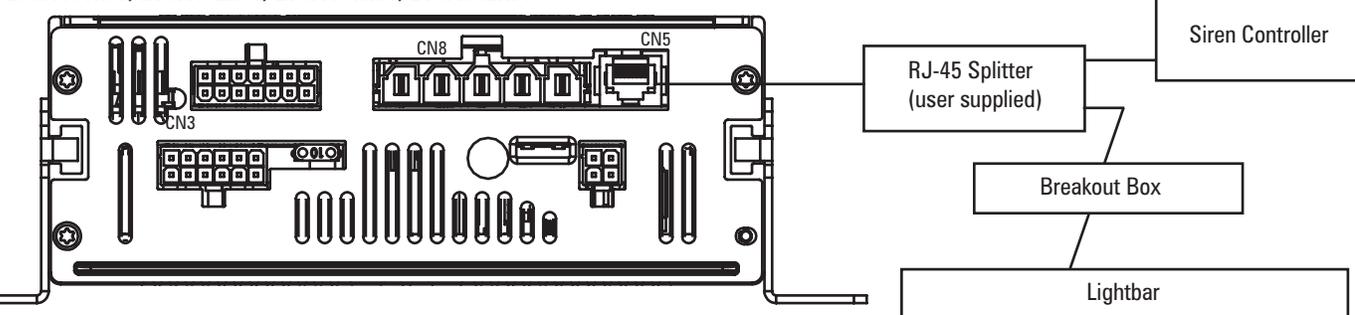
**ETSA380R or ETSA385HR**



**ETSA481CSR or ETSA482CSR**



**ETSA481RSP, ETSA482RSP, ETSA461HPP, ETSA462HPP**

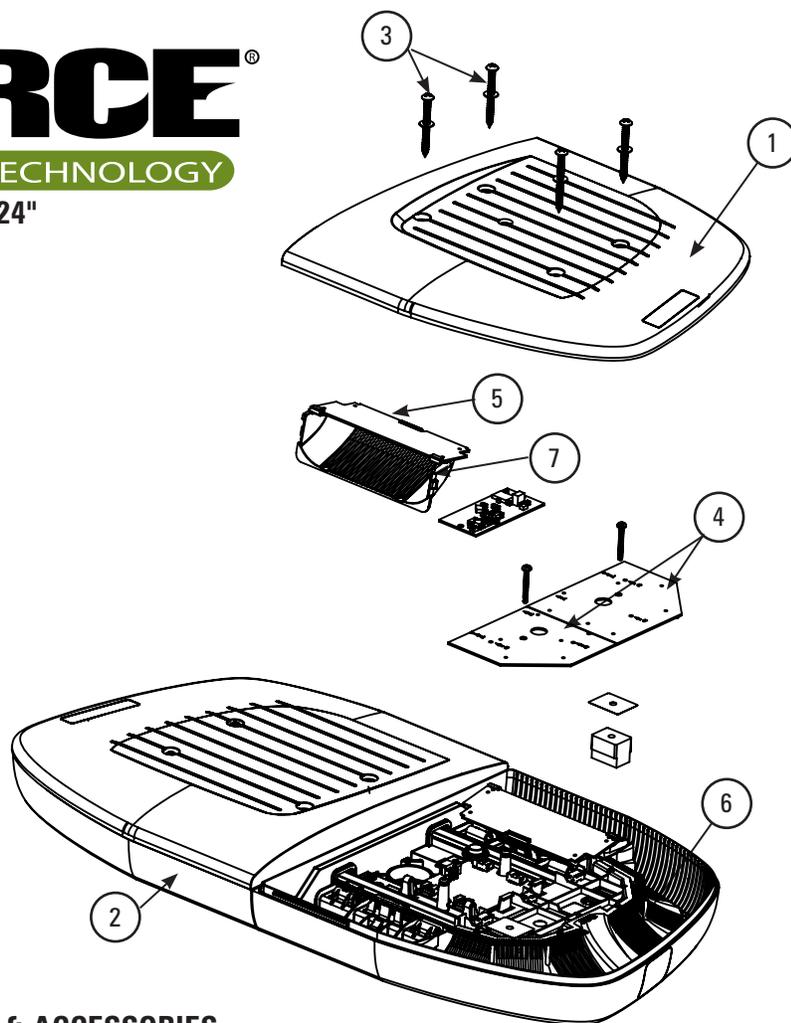


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### REPLACEMENT PARTS & ACCESSORIES

ITEM #	PART#	DESCRIPTION
	PNFLBK02	HEADACHE RACK MOUNT
	PNFLBK03	MAGNETIC MOUNT FOOT KIT (24" ONLY)
	PNFLBJ00	BREAKOUT BOX
	PNFLBHNDT1	BREAKOUT BOX DATA CABLE
	PNFLBHNPW1	POWER HARNESS
	PNFLBHNSD(xx)	DISTRIBUTION HARNESSSES
	PNFLBHNSD(x)	MODULE HARNESSSES
	PNFLBHNSAL1	ALLEY HARNESS
	PNFLBWMKT1	WIRE MANAGEMENT KIT
	PNFLBHPKT1	HOLE PLUG KIT
3	PNFLBTCSKT1	TOP COVER SCREW KIT
	PNFLBDRV(x)	DRIVER BOARDS
5	PNFLBLT118(xxx)	18 LED TRI INBOARD MODULES

ITEM #	PART#	DESCRIPTION
1	PNFLBTT(xx)LGY	TOP COVERS - GRAY GELOY
2	PNFLBTB(xx)LC	BOTTOM LENSES - CLEAR LEXAN
4	PNFLBCSS112(x)	12 LED CORNER MODULES - SMALL
4	PNFLBCSS118(x)	18 LED CORNER MODULES - SMALL
4	PNFLBCSD124(x)	24 LED DUAL CORNER MODULES - SMALL
4	PNFLBCST130(xxx)	30 LED TRI CORNER MODULES - SMALL
4	PNFLBCLS112(x-x)	12 LED CORNER MODULES - LARGE NO ALLEY
4	PNFLBCLS118(x)-Z	18 LED CORNER MODULES - LARGE NO ALLEY
4	PNFLBCLD124(x)-Z	24 LED DUAL CORNER MODULES - LARGE NO ALLEY
4	PNFLBCLT130(xxx)-Z	30 LED TRI CORNER MODULES - LARGE NO ALLEY
	PNFLBCLS112(x)-W	12 LED CORNER MODULES - LARGE WITH ALLEY
	PNFLBCLS118(x)-W	18 LED CORNER MODULES - LARGE WITH ALLEY
	PNFLBCLD124(x)-W	24 LED DUAL CORNER MODULES - LARGE WITH ALLEY
	PNFLBCLT130(xxx)-W	30 LED TRI CORNER MODULES - LARGE WITH ALLEY
5	PNFLBLS106(x)	6 LED INBOARD MODULES
5	PNFLBLS109(x)	9 LED INBOARD MODULES

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nFORCE™ LED Lightbar - 24"

## 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 (10) 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.

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