

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 - EMHLB MAGNUM H™ LED Lightbar built to your specifications

Other Parts that may be included depending on your configuration:

1 - Vehicle Specific Mounting Brackets

Unpack Lightbar

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

Tools Required for Installation

- 1/2" Socket with ratchet or 1/2" box end
- · Phillips Head Screwdriver
- Drill bit #30



1.800.338.7337 / www.soundoffsignal.com

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Important Information:

- · 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.



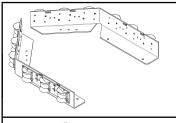
NOTICE:

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/salessupport. If you have questions regarding this product, contact Technical Services, Monday - Friday, 8 a.m. to 5 p.m. or after hours 5 p.m. to 8 p.m. EST at 1.800.338.7337 (press #4 to skip the automated message). Questions or comments that do not require immediate attention may be emailed to techservices@soundoffsignal.com.

SUPERIOR CUSTOMER RELATIONSHIPS. SMARTLY DESIGNED LIGHTING & ELECTRONIC SOLUTIONS.



FLASHING = AVERAGE STEADY ON (100%) = PEAK

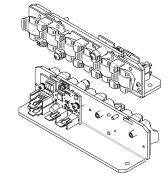


12 LED Corner Module

INPUT VOLTAGE RANGE: 12/24Vdc

CURRENT DRAW: 1.44 Amps @ 12.8 Vdc (Flashing) 3.6 Amps @ 12.8 Vdc (Steady On)

WATTAGE: 18.4W (Flashing)



Fusion Boost 6 LED Inboard Module active

INPUT VOLTAGE RANGE: 12/24Vdc

CURRENT DRAW: 0.4 Amps @ 12.8 Vdc (Flashing)

0.9 Amps @ 12.8 Vdc (Steady On)

WATTAGE: 5.1W (Flashing)

Fusion Boost 3 LED Inboard Module active

INPUT VOLTAGE RANGE: 12/24Vdc

CURRENT DRAW: 0.2 Amps @ 12.8 Vdc (Flashing) 0.5 Amps @ 12.8 Vdc (Steady On)

WATTAGE: 2.6W (Flashing)

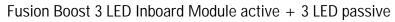
Fusion Boost 3 LED Takedown Module active

INPUT VOLTAGE RANGE: 12 or 24Vdc

CURRENT DRAW: 0.6 Amps @ 12.8 Vdc (Steady On)

WATTAGE: 7.7W (Steady On)

LIGHT OUTPUT: 600 lm



INPUT VOLTAGE RANGE: 12/24Vdc

CURRENT DRAW: 0.2 Amps @ 12.8 Vdc (Flashing) 0.5 Amps @ 12.8 Vdc (Steady On)

WATTAGE: 2.6W (Flashing)

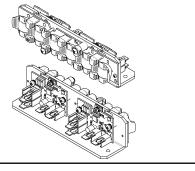


INPUT VOLTAGE RANGE: 12/24Vdc

CURRENT DRAW: 0.4 Amps @ 12.8 Vdc (Flashing)

1.0 Amps @ 12.8 Vdc (Steady On)

WATTAGE: 5.1W (Flashing)



Fusion Boost 6 LED Takedown Module

INPUT VOLTAGE RANGE: 12Vdc or 24Vdc

CURRENT DRAW: 0.9 Amps @ 12.8 Vdc (Steady On)

0.5 Amps @ 24 Vdc (Steady On)

WATTAGE: 11.5W LIGHT OUTPUT: 1200 lm



Inboard/Alley 3 LED Module

INPUT VOLTAGE RANGE: 12 or 24Vdc

CURRENT DRAW: 0.6 Amps @ 12.8 Vdc (Steady On)

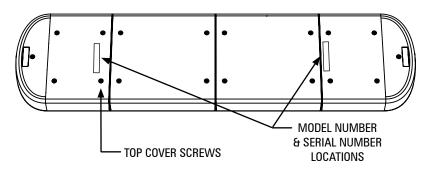
0.3 Amps @ 24 Vdc (Steady On)

WATTAGE: 7.7W (Steady On)

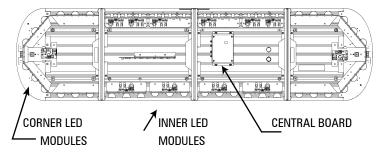
LIGHT OUTPUT: 600 lm

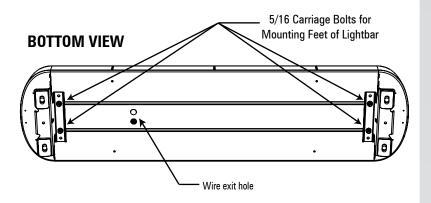


TOP VIEW WITH COVERS ON



TOP VIEW WITH COVERS OFF





TECHNICAL SPECIFICATIONS

Aluminum Base, Nylon base end caps,
Material: polycarbonate outer lenses, acrylic inner
lenses.

Roof

Attachments: 1/4" bolt Stainless A2

Operating $$-40^{\rm o}$\ to\ +65^{\rm o}$\ C}$ Temperature:

	LENGTH	# OF INBOARDS
	23" / 584 mm	0
	29.25" / 743 mm	2
٤	35.5" / 902 mm	4
HEIGHT 59 mm, DEPTH 314 mm	41.75" / 1060 mm	6
, ОЕРТН	48" / 1219 mm	8
59 mm	54.25" / 1378 mm	10
НЕІСНТ	60.5" / 1537 mm	12
	66.75" / 1695 mm	14
	73" / 1854 mm	16

POWER SPECIFICATIONS

Input Voltage Range:	12Vdc or 24Vdc or 12/24Vdc (configuration dependent)	
Light Bar Component	Current Draw (A)	Power Consumption (Watts)
Standby Current	0.01	0.12
Reverse Polarity	Fuse Protected	
	Power Cable 5.5m 2.5mm2 Wires: (+) Red, (-) Blue	
	Direct Connect Cable 5.5m	



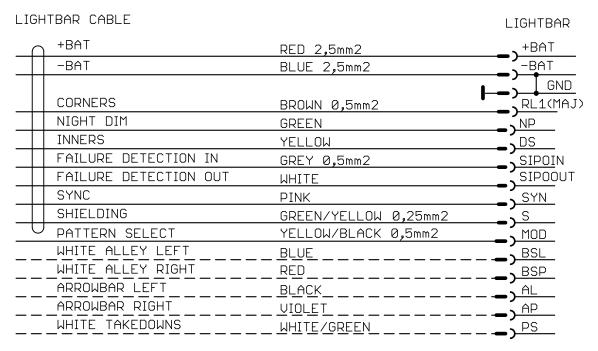
ELECTRICAL INSTALLATION

Featured Highlights:

Flash pattern Select: The MAGNUM™ H Lightbar is equipped with selectable flash pattern configuration via the discrete input wire. This feature allows to pre-select flash pattern into the Lightbar's nonvolatile memory.

Night DIM: Allows the user to activate night low power operation.

Directional Arrow Built-in: If the lightbar was purchased with a directional arrow, the directional controller is built-in the lightbar to allow 2-wire control: left / right / warning



WIRE SIZE 0,35mm2 UNLESS OTHERWISE SPECIFIED

A 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.



ELECTRICAL INSTALLATION (CONTINUED)

Power Cable:

- 1. Route lightbar power cables as close to vehicles power source (battery) as possible.
- 2. Install a 10Amp 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 (60cm) of wire between the battery terminal and the fuse. Ensure the wire is protected and secured from being cut into: this non-fused wire
- 4. Connect the BLUE wire to the factory chassis ground right next to the battery.

Low Power (Standby) Mode

If there is no function input wire activated for 1 second, 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. In standby mode, the standby current is <0.01A.

FLASH PATTERNS INSTRUCTIONS

Pattern Selection

- a. First review the Pattern Table before attempting pattern selection to familiarize yourself with available patterns
 - i. Depending on the Lightbar configuration purchased, the Arrow Pattern Table may or may not be applicable.
- b. Select input for CORNERS (RL1/MAJ) and apply (+) to activate.
- c. Momentarily apply (+) to the PATTERN SELECT input wire (MOD) to advance to the next pattern. See Flash Pattern Table.
 - i. Once the last pattern is reached, the next pattern advance will cycle back to pattern #1.
- d. Once the desired pattern is reached, simply disconnect the CORNERS input wire.
 - i. The pattern is saved in non-volatile memory every time it is advanced.

#	pattern name	sequence
1	E-pattern double flash	alternating
2	E-pattern double flash	simultaneous
3	E-pattern tripple flash	alternating
4	E-pattern tripple flash	simultaneous
5	E-pattern quad flash	alternating
6	E-pattern quad flash	simultaneous

A 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.

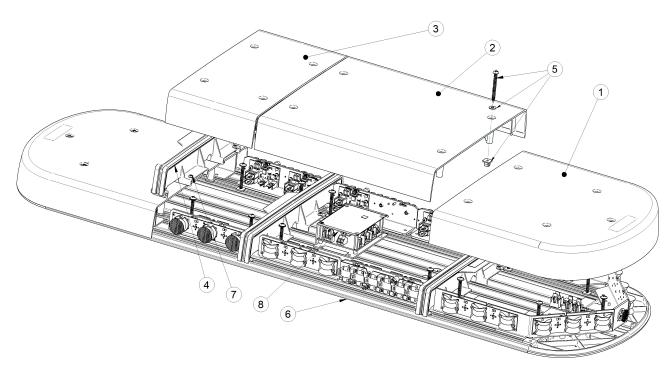
IMPORTANT

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



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.



REPLACEMENT PARTS & ACCESSORIES

ITEM #	PART#	DESCRIPTION
	PEMG2K00	EXTRA LOW MOUNTING FOOT KIT
	PESF1K00	LOW PROFILE MOUNTING FOOT - EXT.
	PEMG2K01	PREMIUM FIXED HEIGHT FOOT KIT - STANDARD PAD
	PEMG2K02	PREMIUM FIXED HEIGHT FOOT KIT - EXT
	PENG2K03	PREMIUM FIXED HEIGHT FOOT KIT - THICK PAD
	PESF1HK16	FLAT MOUNT HARDWARE KIT
	PETLF(xx)	LOW PROFILE HOOK KITS
	PETLF00	PERMANENT MOUNT HARDWARE KIT
	PETLR(xx)	ROOF RACK HOOK KITS
		ROOF GROMMET
	PEPX3GA01	BASE T-SLOT GASKET ROUND
8		MAINBOARD ASSEMBLY
1	PEMG2DECL(x)	ENDCAP LEXAN DOME (COLOR)
3	PEMG2DMSL(x)	INNER DOME LEXAN 6" (COLOR)

ITEM #	PART#	DESCRIPTION	
2	PEMG2DMLL(x)	INNER DOME LEXAN 12" (COLOR)	
*	PEMG2DMML(x)	INNER DOME LEXAN 3" (COLOR)	
4	PEMG2DVDLC	DIVIDER (LEXAN/CLEAR)	
		ALLEY LIGHT MODULE	
*	PEMG2HR103W	LED TAKEDOWN/WORK LIGHT (SINGLE)	
*	PEMG2HR106W	LED TAKEDOWN/WORK LIGHT (DOUBLE)	
*	PEMG2HR109W	LED TAKEDOWN/WORK LIGHT (TRIPLE)	
	PEMG2LR103(x)	6" 3 LED INBOARD MODULE (COLOR)	
*	PEMG2LR106(x)	6 LED INBOARD MODULE (COLOR)	
*		12 LED CORNER MODULE ECE AMBER	
5	PEMG2HDDR	SINGLE DOME REPLACEMENT HARDWARE KIT	
7	PEMG2HDDM	SINGLE DIVIDER/MODULE SCREW KIT	
	PEMG2HNMS	MAIN WIRE HARNESS	
* SEE PA	* SEE PAGE 2 FOR ILLUSTRATIONS, † PART NUMBER FOR BOTH SOLID AND SPLI		



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:

HOLOMY s.r.o. ATTN: RMA # / Technical Services Hemy 829 75701 Valasske Mezirici, Czech Republic

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.

 $\label{locument} \mbox{Document effective date on cover and below supersedes previously dated policies and statements.}$

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.