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- HIGH CURRENT interconnects must be properly terminated. Poor crimp quality can cause heat build-up and fire. Follow the crimp connector manufacturer instructions.
- DO NOT install this product or route any wires in the Air Bag Deployment Zone. Refer to vehicle Owner's Manual for deployment zones.
- Do NOT use system to disconnect headlights, brake lights or other safety equipment.
- Unit may become hot to touch during normal operation.
- Failure to properly install connectors, fuses or wiring may cause vehicle failure or fire.
- Installation must only be performed by trained technician. Installer must determine vehicle wiring configuration and proper integration of system.
- Use proper wire gauge. All power wires connecting to positive (+) or negative (-) battery terminal or local chassis ground (-) must be sized to supply at least 125% of max. current and properly fused at power source.
- Install protective grommets when routing wire through firewall or metal.
- Petroleum/silicone based lubricants will cause the silicone lens to discolor.

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## 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 ZONES.



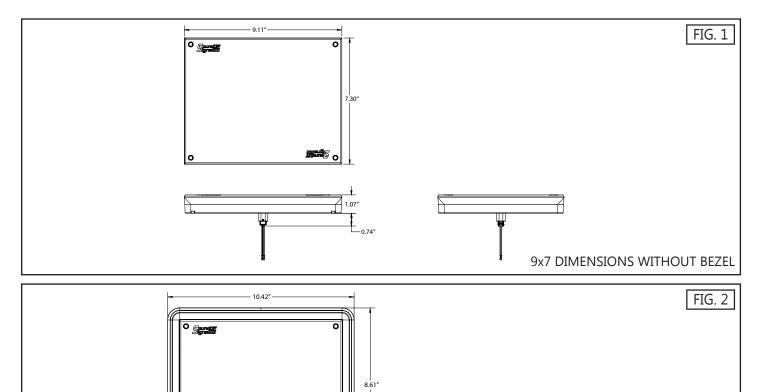
#### NOTICE:

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**.

1.800.338.7337 / www.soundoffsignal.com

ENHANCING SAFETY THROUGH INNOVATION

## DIMENSIONS & BEZEL INFORMATION:



1.26

0.55'

# WARNING LIGHT OPTIONS:

## **9x7 LED OPTIONS**

• Single Color

## **9x7 LED COLOR OPTIONS**

- Red
- Amber (Only Available for Turn)

### **9x7 CERTIFICATIONS**

• FMVSS108

## 9x7 MOUNTING OPTIONS

- Stud Mount
- Screw Mount

## PART NUMBERS (UNCONFIGURED)

• 9x7 - EMPSE15C(X)-(X)\*\*

\*\*See SoundOff Signal configurator or sales representative for specific color, lens, and mounting options.

9x7 DIMENSIONS WITH BEZEL

MPOWER <sup>®</sup> 9X7 STOP/TAIL LIGHT TECHNICAL SPECIFICATIONS			
	Input Voltage:	9-32Vdc	
	STOP/TAIL LIGHT CURRENT CONSUMPTION (Amps)		
	12.8Vdc	25.6Vdc	
	Peak	Peak	
STOP	0.26	0.13	
TAIL	0.05	0.03	

MPOWER <sup>®</sup> 9X7 TURN LIGHT TECHNICAL SPECIFICATIONS				
	STOP/TAIL LIGHT CURRENT CONSUMPTION (Amps)			
	12.8Vdc		25.6Vdc	
	Peak	Average	Peak	Average
TURN	0.30	0.15	0.17	0.09
AFTER POWER IS ON, touching the WHITE wire to the ground will allow you to change various settings on the module. (Refer to <b>page 4</b> )				

# WIRING AND TABLE INFORMATION:

## **OVER-VOLTAGE PROTECTION**

When an over-voltage condition is detected, the module will flash an overvoltage warning pattern of 50mS ON/950mS OFF to alert of the overvoltage condition and protect the electronics from damage due to heat/voltage.

### THERMAL COMPENSATION PROTECTION

The LED module is designed to provide maximum power output while providing protection to the electronic components by reducing the output power at extreme temperatures.

### **STOP/TAIL/TURN MODEL - WIRING DIRECTLY TO VEHICLE LIGHTING** (Does not apply to bluePRINT® Installation)

On some vehicles, the 9X7 mpower Stop and Turn models may not be compatible without additional wiring due to Pulse Width Modulation (PWM) on the vehicle's Stop, Turn, or Tail lamp circuits. The PWM cycling can cause the lights to activate unintentionally when they are directly connected to the vehicle circuits. Using a BCM driven relay circuit such as the trailer circuit provided in most trucks allow for an isolated activation to the mpower lights. In cases where the vehicle does not have trailer circuits available, aftermarket relays may be used. Please see the schematics in **FIG. 3**.

STOP/TAIL LIGHT FUNCTION TABLE			
WIRE			LIGHT
RED	ORANGE	WHITE	
-	Х	-	TAIL FUNCTION
Х		-	STOP FUNCTION
Х	-	Х	STOP FUNCTION (FLICKER PATTERN)

TURN LIGHT FUNCTION TABLE			
WIRE			LIGHT
RED	ORANGE	WHITE	
-	Х	-	TAIL FUNCTION
Х	-	-	TURN FUNCTION

NOTE: The inputs do not support PWM input signals.

## FOR TURN LIGHT ONLY:

### **ADVANCE PATTERN**

Flash pattern can only be changed when the LED module is in a flashing mode (disabled in cruise or steady ON functions). When the light is flashing, momentarily connect the white wire to ground for >250mS and <1S (light will go steady high) then release. The flash pattern will advance to the next pattern. If the light module was at the last pattern, the pattern will reset to the 1st pattern.

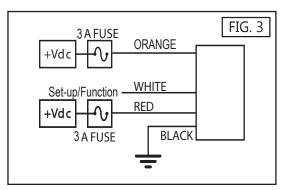
## **TOGGLE MODE**

Momentarily, connect the white wire to ground for >2S and <3S (light will go steady high, and steady low) then release. The output mode will toggle between "repeat sequence" and "run sequence once" modes.

**PROGRAMMING MODE NOTE:** The light must be powered by the red or orange wire prior to activating the programming wire.

WIRE HOOK-UP TABLE		
WIRE COLOR: FUNCTION:		
RED	Power (Stop/Turn Function)	
BLACK	Ground	
GREEN**	Reserved - Factory Use	
WHITE to POWER	(Flicker Stop Pattern)	
ORANGE	Power (Tail Function)	

- \*\* To sync multiple mPower lights, connect the Green wire from each light together.
- \* Will NOT work w/ other sync products such as Ghost, LED3, & 4 wire Intersector w/external flasher
- \* Will Work with Sync 2 products nFORCE Secondary Lights, nFORCE FIT and 5 wire Intersector Lights.



### **FACTORY RESET**

Momentarily, connect the white wire to ground for >1S and <2S (light will go steady high, steady low, and off) then release. The LED module will reset to pattern 1 and mode "run sequence once."

FLASH PATTERNS			
PATTERN #	FLASHES PER MINUTE		
1	1 (Steady)		
2	60		
3	90		
4	120		

# STUD MOUNT INSTALLATION:

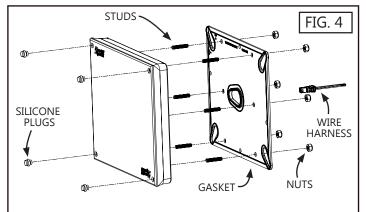
- 1. Remove the four, white packaging extrusions from the perimeter of the light.
- 2. Drill (6) 1/4" holes to mount light and 3/4" wire hole (see **Fig. 5**).
- 3. Insert (4) Silicone Plugs into Light to Seal Screw Holes. (Use a 50% Isopropyl alcohol, 50% deionized water mix for lubrication if necessary).



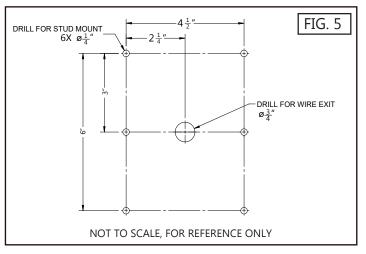
- 4. Thread studs into the back of light.
- 5. Align the gasket to the mounting surface. Horizontal and vertical orientations are indicated on gasket for proper seal.
- 6. Press light assembly against gasket, against mount surface.
- 7. Secure the light to mounting surface using (6) supplied nuts, on the back side of vehicle mount surface.

**NOTE**: Tighten until gasket is compressed. DO NOT over tighten and strip casting threads. **DO NOT USE POWER TOOLS TO TIGHTEN.** 

 Plug the wire harness into the back of the light. Reference page 8 for retention clip installation.







# **STUD MOUNT (WITH BEZEL) INSTALLATION:**

1. Remove the four, white packaging extrusions from the perimeter of the light.

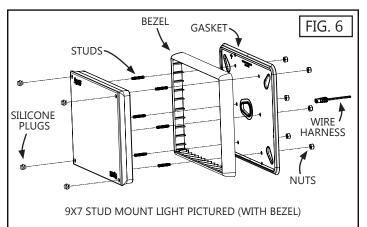
- 2. Drill (6) 1/4" holes to mount light and 3/4" wire hole (see Fig. 5).
- 3. Insert (4) Silicone Plugs into the light to seal screw holes. (Use a 50% Isopropyl alcohol, 50% deionized water mix for lubrication if necessary).



- 4. Thread studs into the back of light.
- 5. Place the bezel behind the light.
- 6. Align the gasket to the mounting surface. Horizontal and vertical orientations are indicated on gasket for proper seal.
- 7. Press light/bezel assembly against gasket, against mount surface.
- 8. Secure the light to mounting surface using (6) supplied nuts, on the back side of vehicle mount surface.

**NOTE**: Tighten until gasket is compressed. DO NOT over tighten and strip casting threads. **DO NOT USE POWER TOOLS TO TIGHTEN.** 

 Plug the wire harness into the back of the light. Reference page 8 for retention clip installation.

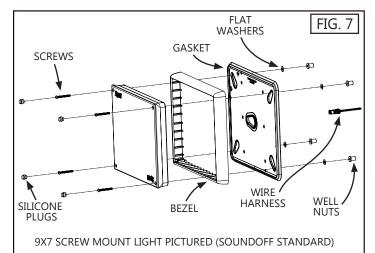


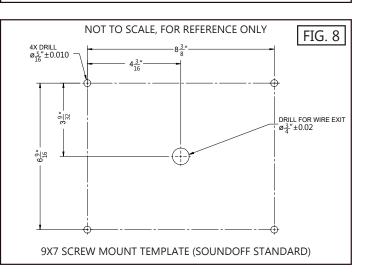
# SCREW MOUNT (SOUNDOFF STANDARD) INSTALLATION:

- 1. Remove the four, white packaging extrusions from the perimeter of the light.
- 2. Drill for SoundOff Signal mount pattern. Reference **Fig. 8** for hole sizes.
- 3. Place the bezel behind the light.
- 4. Place Bezel and light onto gasket.
- 5. Insert supplied screws through the bezel, light, and gasket.
- 6. Place flat washers onto inserted screws.
- 7. Attach the well nuts to the screws. Hold the screws in place and hand tighten the well nuts against the flat washers to secure. Ensure the lip of the bezel is properly seated in the gasket.
- 8. Pull the wire harness through the opening and plug into the back of the light (see wiring diagram). Reference **page 8** for retention clip installation.
- 9. Secure the entire light assembly to the mounting surface. Insert the well nuts into the drilled holes and tighten to 7 turns past full contact.
- 10. Insert (4) Silicone Plugs into the light to seal screw holes. (Use a 50% Isopropyl alcohol, 50% deionized water mix for lubrication if necessary).

**NOTE**: Tighten until gasket is compressed. DO NOT over tighten. <u>DO NOT USE POWER DRIVER</u>. Horizontal and vertical orientations indicated on gasket for proper drainage.





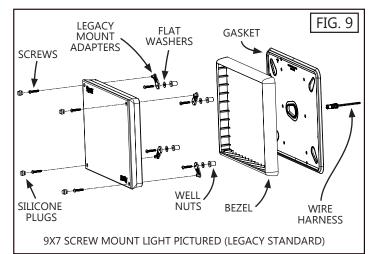


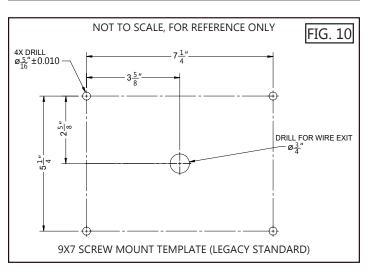
SCREW MOUNT (LEGACY STANDARD) INSTALLATION:

- 1. Remove the four, white packaging extrusions from the perimeter of the light.
- 2. Drill for Legacy Standard hole pattern. Reference **Fig. 10** for hole sizes.
- 3. Insert well nuts into drilled holes, fully seat to mount surface.
- 4. Align gasket to mount surface (note horizontal and vertical orientations indicated on gasket for proper seal).
- 5. Place (4) adapter castings into gasket openings.
- Insert (4) screws through (4) adapter castings into (4) washers and (4) well nuts and tighten to secure to vehicle surface. Tighten to 7 turns past full contact (Press screw into well nut to improve bite and prevent spinning. Hand tighten until well nut is secure).
- 7. Pull the wire harness through the opening and plug into the back of the light (see wiring diagram). Reference **page 8** for retention clip installation.
- 8. Place the bezel behind the light.
- 9. Place the light an bezel into gasket, pressing light, bezel, and gasket against mount surface.
- 10. Secure the assembly using (4) supplied screws. Tighten to 1/8 turn past full contact.
- 11. Insert (4) Silicone Plugs into the light to seal screw holes. (Use a 50% Isopropyl alcohol, 50% deionized water mix for lubrication if necessary).

**NOTE**: Tighten until gasket is compressed. DO NOT over tighten. <u>DO NOT USE POWER DRIVER</u>. Horizontal and vertical orientations indicated on gasket for proper drainage.



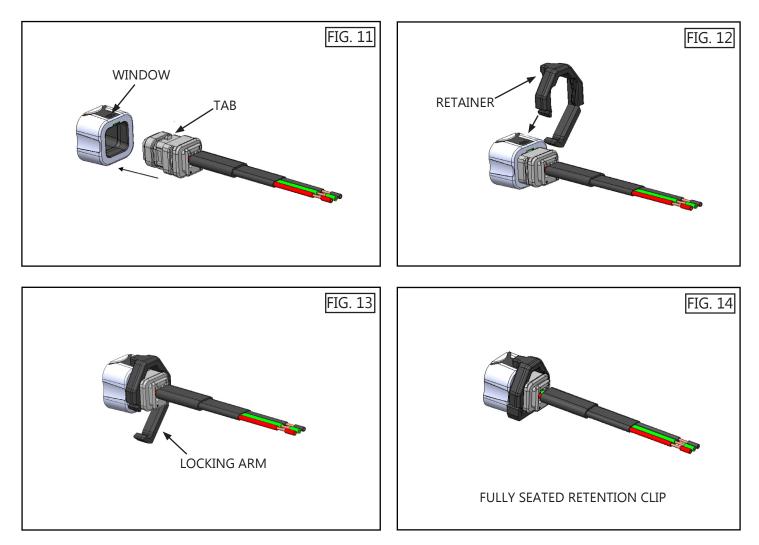




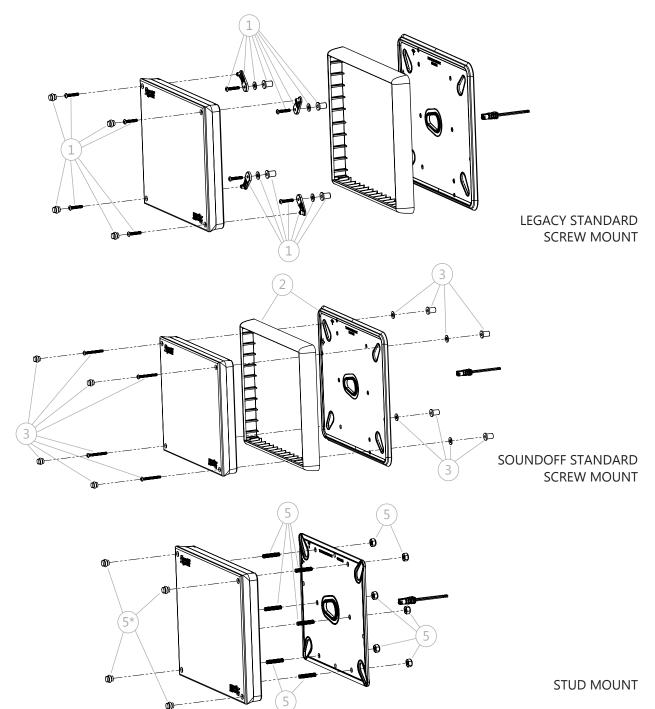
# **RETENTION CLIP INSTRUCTIONS:**

**NOTE**: In the event the harness needs to be disengaged from the light, these instructions can be used to reattach and apply the retention clip.

- 1. Plug harness into light housing, aligning tab to window, as shown in Fig 13.
- 2. Install the retainer clip over harness/light interface, inserting retainer into window, as shown in Fig. 14.
- 3. Press retainer clip's locking arm to snap closed.



## **9X7 SILICONE REPLACEMENT PARTS & ACCESSORIES:**



ITEM #	PART#	DESCRIPTION
1	PMP9HK01-SM	LEGACY MOUNT ADAPTER KIT
2	PMP9BZL01B	MPOWER 9X7 SINGLE BLACK
2	PMP9BZL01C	MPOWER 9X7 SINGLE CHROME
3	PMP9HK02-SM	SCREW MOUNT KIT (FOR SUBSTRATE UP TO 0.157" THICK)
4	PMP9HK03-SM	SCREW MOUNT KIT (FOR SUBSTRATE 0.157" TO 0.354" THICK) (NOT SHOWN)
5	PMP9HK05-ST	STUD MOUNT KIT
6	PMP9HK04	MPOWER 9X7 CORNER PLUG KIT*

\*mPower Corner Plug Kit (PMP9HK04) is included in Item #1, #3, #4, & #5 along with being sold separately as Item #6.

C

## WARRANTY & RETURN GOODS PROCEDURE

#### **CLEANING & CARE OF YOUR LIGHT:**

Keeping the lenses clean and scratch free will optimize the performance of the light. The exterior of the light 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** - CARE MUST BE TAKEN WHEN DRILLING THROUGH 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.

**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 scan QR code or visit https://soundoffsignal.com/support-page/returns/.



Alternatively 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.