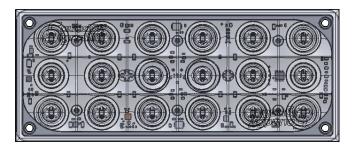


STOP/TAIL & TURN LIGHTS

EMPSC07M(x)-(x) - 7X3 Quick Mount, Screw Mount, & Stud Mount EMPSB0C9(x)-(x) - 6X4 Quick Mount, Screw Mount, & Stud Mount



7x3 Stop/Tail Shown



6x4 Stop/Tail Shown

Protected by U.S. Patent 10,703,260 and Patents Pending https://soundoffsignal.com/legal/patent-notification/



WARNING



- 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.

DIMENSIONS
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RETENTION CLIP INSTRUCTIONS 8



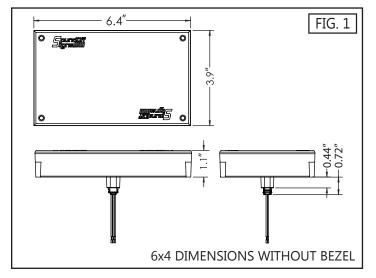
ROUTE WIRES ONLY IN LOCATIONS THAT ARE NOT SUBJECTED TO POTENTIAL WEAR. MAKE SURE TO AVOID ROUTING WIRES IN THE DEPLOYMENT AREA OF YOUR AIR BAG. REFER TO YOUR VEHICLE'S OWNER'S MANUAL FOR AIRBAG DEPLOYMENT ZONES.

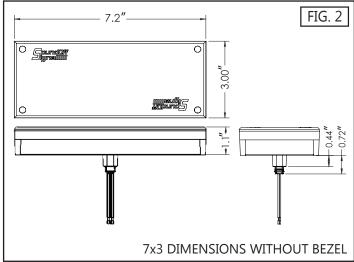


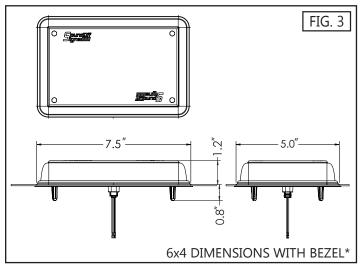
NOTICE:

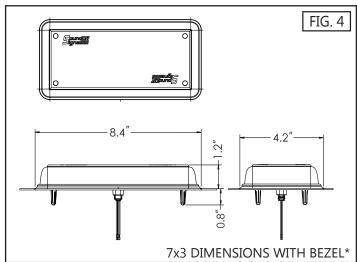
Installers and users must comply with all applicable federal, state and local laws regarding use and installation of warning devices. Improper use or installation may void warranty coverage. To review our Limited Warranty Statement & Return Policy for this or any SoundOff Signal product, visit our website 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.

DIMENSIONS & BEZEL INFORMATION:









*Single Bezels are only compatible with Stud & Screw mount versions.

7x3 & 6x4 LED OPTIONS

• Single Color

7x3 & 6x4 LED COLOR OPTIONS

- Red
- Amber (Only available for Turn Light)

7x3 & 6x4 CERTIFICATIONS

• FMVSS180

7x3 & 6x4 MOUNTING OPTIONS

- Quick Mount (Not compatible with Bezel)
- Stud Mount
- Screw Mount

PART NUMBERS (UNCONFIGURED)

- 7x3 EMPSC0 XXX-X**
- 6x4 EMPSB0 XXX-X**

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

TECHNICAL SPECIFICATIONS:

MPOWER® 7X3 & 6X4 STOP/TAIL LIGHT TECHNICAL SPECIFICATIONS			
	Input Voltage:	9-32Vdc	
	STOP/TAIL LIGHT CURRENT CONSUMPTION (Amps)		
	12.8Vdc 25.6Vdc		
	Peak	Peak	
STOP	0.42	0.21	
TAIL	0.04	0.02	

AFTER POWER IS ON, touching the WHITE wire to the ground will allow you to change various settings on the module. (Refer to **page 4**)

MPOWER® 7X3 & 6X4 TURN LIGHT TECHNICAL SPECIFICATIONS				
	TURN LIGHT CURRENT CONSUMPTION (Amps)			
	12.8Vdc		25.6	SVdc
	Peak	Average	Peak	Average
TURN	0.66	0.33	0.33	0.17

AFTER POWER IS ON, touching the WHITE wire to the ground will allow you to change various settings on the module.

(Refer to **page 4**)

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 6X4 and 7X3 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 on **Page 5**.

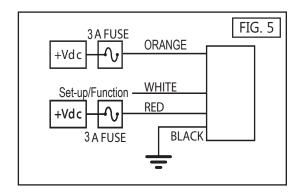
STOP/TAIL LIGHT FUNCTION TABLE			
	WIRE		LIGHT
RED	ORANGE	WHITE	
-	Х	-	TAIL FUNCTION
Х		-	STOP FUNCTION
Х	-	X	STOP FUNCTION (FLICKER PATTERN)

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

NOTE: The inputs do not support PWM input signals.

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.



Lights are chassis-grounded. If you need to ground-switch the light, you must isolate the lights metal backing, heatsink, studs and/or screws from the body of the vehicle or use a relay.

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.

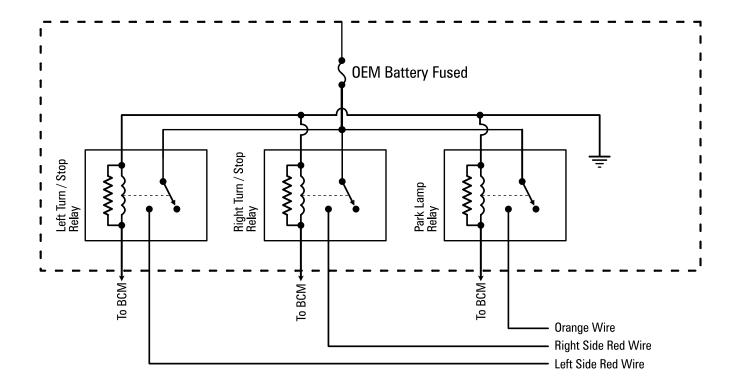
PROGRAMMING MODE NOTE: The light must be powered by the red or orange wire prior to activating the programming wire.

FACTORY RESET

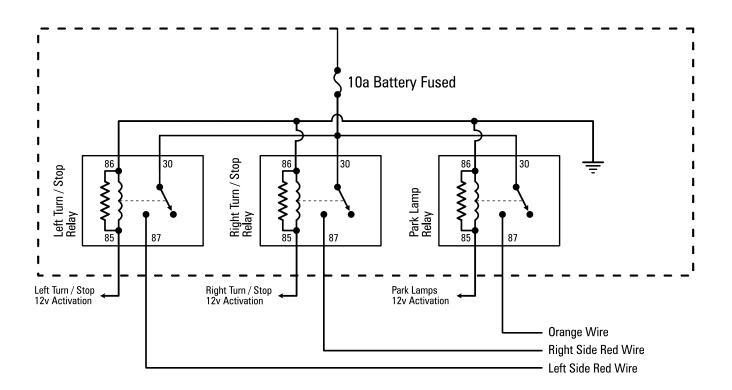
Momentarily, connect the white wire to ground for >1S and <2S (light will go steady high, steady low, and off) then release. The LED module will reset to pattern 1 and mode "run sequence once."

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

TYPICAL TRAILER CIRCUIT SCHEMATIC



AFTERMARKET RELAY ISOLATION SCHEMATIC



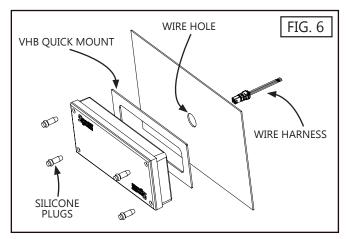
QUICK MOUNT INSTALLATION:

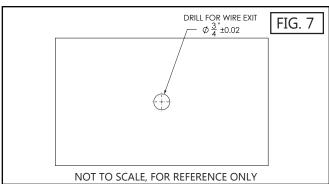
- 1. Drill a 3/4" wire hole (see Fig. 7).
- Insert (4) Silicone Plugs into Light to Seal Screw Holes. (Use a 50% Isopropyl alcohol, 50% deionized water mix for lubrication if necessary).



- 3. Prep the back of the light and vehicle mount surfaces with 50% deionozed water, 50% isopropyl alcohol wipe, and allow to dry.
- 4. Adhere VHB quick mount to the back of the light and press down firmly for 15 seconds on full surface.
- 5. Pull the wire harness through the vehicle wire hole and plug into the back of the light. Reference **page 8** for retention clip installation.
- 6. Lightly place the light against vehicle mount surface and check that the alignment is satisfactory. Once alignment is correct press firmly against light for 15 seconds to set VHB quick mount.

NOTE: Bezels will not work with the Quick Mount option.





STUD MOUNT INSTALLATION:

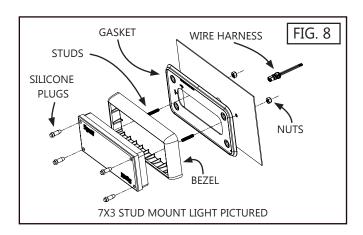
- 1. Drill (2) 1/4" holes to mount light. Drill 3/4" wire hole (see **Fig. 9**). The drill template shown is compatible with both the the 6x4 and 7x3 stud mount light.
- Insert (4) Silicone Plugs into Light to Seal Screw Holes. (Use a 50% Isopropyl alcohol, 50% deionized water mix for lubrication if necessary).

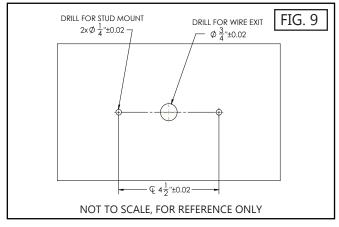


- 3. Thread studs into the back of light.
- 4. Align the gasket to the mounting surface. Horizontal and vertical orientations are indicated on gasket for proper seal.
- 5. Place the bezel over gasket.
- 6. Place the light into bezel, press firmly to make sure bezel and gasket are tight against mouting surface.
- 7. Secure the light to mounting surface using (2) supplied nuts.

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

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





SCREW MOUNT INSTALLATION:

- Drill (4) 5/16" holes to mount light. Drill 3/4" wire hole. See Fig. 11(7x3) or Fig. 12(6x4).
- 2. If a bezel is being used, place the light into the bezel.
- 3. Place the gasket on the back of the light and bezel (if used)

NOTE: Horizontal and vertical orientations indicated on gasket for proper seal.

- 4. Insert the (4) supplied screws into each screw hole in the light.
- 5. Place (4) flat washers over the screws on the back of the light.
- 6. Screw onto each fastener the (4) well nuts onto the back of the light. Tighten until snug.
- Pull the wire harness through the opening and plug into the back of the light.
- 8. With the light assembly in hand, insert the well nuts into the (4) drilled holes. Fully seat to mounting surface.
- 9. Secure the light to mounting surface. While applying pressure on each fastener, tighten the (4) screws 7 full turns.

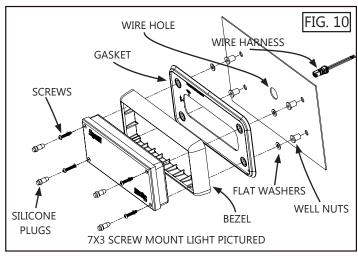
NOTE: Tighten until gasket is compressed. DO NOT over tighten.

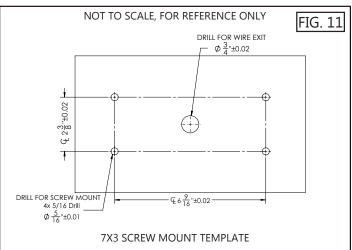
10. Insert (4) Silicone Plugs into the light to seal screw holes. (Use a 50% Isopropyl alcohol, 50% deionized water mix for lubrication if necessary).

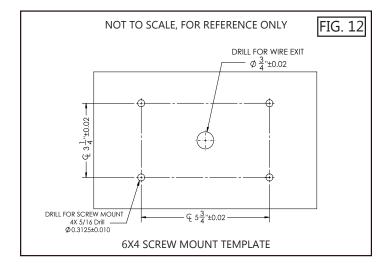
<u>NOTE</u>: Bezel required for any mounting not protected by intentionally recessed designed mounting locations.

DO NOT USE POWER DRIVER.









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.

