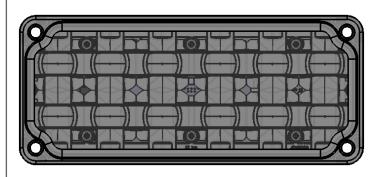
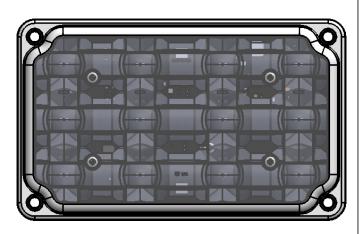
P SERIES WARNING LIGHT EPSSCOJ(xx)-(x) -- 7X3 Screw Mount & Stud Mount EPSSBOJ(xx)-(x) -- 6X4 Screw Mount & Stud Mount



7x3 Dual Color Shown



6x4 Dual Color Shown

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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.

DIMENSIONS
WARNING LIGHT OPTIONS 2
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WIRING INFORMATION 4-7
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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.

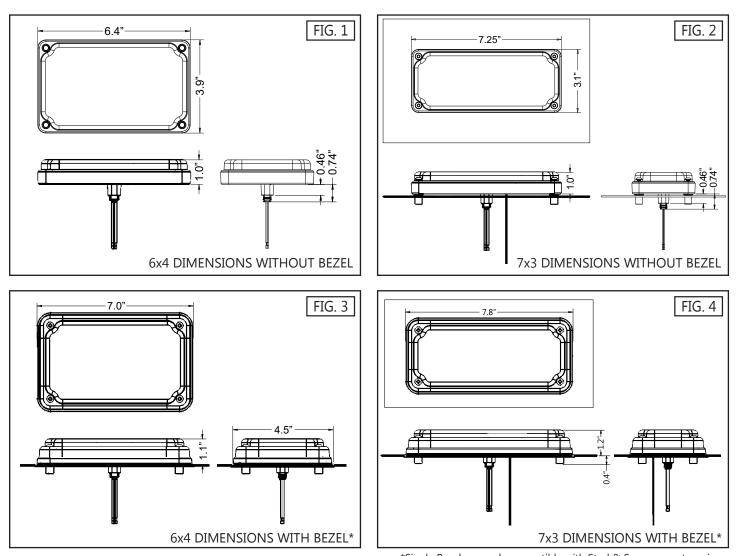


NOTICE:

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**.

ENHANCING SAFETY THROUGH INNOVATION

DIMENSIONS & BEZEL INFORMATION:



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

WARNING LIGHT OPTIONS:

Green

Green

7x3 & 6x4 LED OPTIONS

- Single Color
- Dual Color
- Split Color

7x3 & 6x4 LED COLOR OPTIONS • White

- Red
- Amber
- Blue

7x3 & 6x4 LENS COLOR OPTIONS Clear

- Red
- Amber
- Blue

7x3 & 6x4 CERTIFICATIONS

- SAEJ595
- NFPA 1901-2009
- California Title 13 • KKK-A-1822 (July 2021)

7x3 & 6x4 MOUNTING OPTIONS

- Stud Mount
- Screw Mount

7x3 & 6x4 AVAILABLE FLASH PATTERNS

- Double*
- Double 2*
- Inter-cycle
- Power Pulse*
- Q-switch
- Quad*
- Quad 2*
- Quad Pulse-pop*

PART NUMBERS (UNCONFIGURED)

- 7x3 EPSSC0J XX-X**
- 6x4 EPSSB0J XX-X**

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

*Certified Flash Patterns

- Road Runner*
- Steady-Burn Driver Title 13 Quad
- Steady-Burn/Road Runner
- Quint* • Random 1
 - Random 2
 - Warp

7X3 & 6X4 P SERIES WARNING LIGHT TECHNICAL SPECIFICATIONS				
	Input Voltage: 9-32Vdc WARNING LIGHT CURRENT CONSUMPTION (Amps)		9-32Vdc	
	12.8Vdc 25.6Vdc			ōVdc
	Peak	Average	Peak	Average
Red	1.55	0.78	0.78	0.39
Amber, Blue, Green, or White	1.90 0.95 0.95 0.48			
AFTER POWER IS ON, touching the WHITE wire to the ground will allow you to change various settings on the module. (Refer to page 5)				

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.

SYNC 2

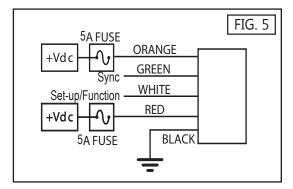
Synchronizing the flashing of multiple light modules is accomplished by connecting the Green wires of different light modules together. Up to 24 light modules can be connected for synchronized flashing. All light module flash patterns must be set to the same flash pattern # to ensure proper operation. Refer to the Sequence Type section in Set-Up Table (**page 8**) to setup light modules to flash in alternate or simultaneous flash pattern. NOTE: Will NOT work with non-Sync 2 products such as Ghost, LED3, and 4 wire Intersector. WILL WORK with Sync 2 products nFORCE Secondary Lights, nFORCE FIT and 5 wire Intersector Lights.

WIRE H	HOOK-UP TABLE
WIRE COLOR:	FUNCTION:
RED	Power (Primary)
BLACK	Ground
GREEN**	Sync2 *
WHITE to GROUND	Setup Wire (See pg. 6*)
WHITE to POWER	Function Wire
ORANGE	Power (Secondary)

** To sync multiple mPower lights, connect the Green wire from each light together.

- ^t 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.

	FLASH PATTE	RNS	CER	TIFICATIO	NS
PATTERN #	SINGLE COLOR	DUAL COLOR	FLASHES PER MINUTE	HIGH POWER	LOW POWER
1	QUI	NT	70	SAE, KKK	SAE, KKK
2	WA	RP	360	NA	NA
3	INTER-0	CYCLE	-	NA	NA
4	DOU	BLE	70	SAE, KKK	SAE, KKK
5	QUA	AD.	80	SAE, NFPA, KKK	SAE, NFPA, KKK
6	POWER	PULSE	180	SAE, NFPA, KKK	SAE, NFPA, KKK
7	ROAD R	UNNER	118	SAE, CA13*, NFPA, KKK	SAE, CA13*, NFPA, KKK
8	Q-SW	ITCH	-	NA	NA
9	STEADY-BURN / ROADRUNNER (SEQUENCE TYPE 1: STEADY BURN, SEQUENCE TYPE 2: ROADRUNNER)		- / 118	NA	NA
10	STEADY-BURN DRIVER TITLE 13 QUAD (SEQUENCE TYPE 1: STEADY BURN, SEQUENCE TYPE 2: TITLE 13 QUAD)		- / 65	NA	NA
11	QUA	D 2	67	SAE, KKK	SAE, KKK
12	DOUBLE 2		95	SAE, NFPA, KKK	SAE, NFPA, KKK
13	RANDOM 1		-	NA	NA
14	RAND	DM 2	-	NA	NA
15	QUAD PU	LSE-POP	75	SAE, CA13*, NFPA, KKK	SAE, CA13*, NFPA, KKK



CERTIFICATION	APPLICABLE COLORS
SAEJ595	Red, Amber, Blue, White, Green
CALIFORNIA TITLE 13	Red, Amber, Blue
NFPA 1901-2009	Red, Amber, Blue, White
KKK-A-1822F (JULY 2021)	Red, Amber, Blue, White, Green

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.

*CA13 AMBER is met in Low Power Only

WIRING AND TABLE INFORMATION (CONT.):

FUNCTION TABLES

The functional operation of the LED module can be changed while applying the +V to the Red wire with the Black wire connected to ground. When the light is flashing, momentarily connect the White wire to ground for >4S and <5S (light will go steady high, steady low, off, steady high, steady low) then release. The function table will now advance to the next table (table 1 to table 2, table 2 to table 3, table 3 to table 4, or table 4 to table 1. In the case that the custom table is programmed, the order is 1 to 2, 2 to 3, 3 to 4, or 4 to 7 (custom), and 7 to 1.) Repeat above process until required function table is active.

	FUNCTION TABLE 1				
	WIRE		LIG	нт	
RED	ORANGE	WHITE	SINGLE	DUAL	
+9-32V			FLASH	FLASH DUAL	
	+9-32V		CRUISE	STEADY COLOR 2	
+9-32V	+9-32V		FLASH	STEADY COLOR 2	
		+9-32V	NO OP	NO OP	
+9-32V		+9-32V	LOW PWR FLASH	FLASH COLOR 1	
	+9-32V	+9-32V	CRUISE	FLASH COLOR 2	
+9-32V	+9-32V	+9-32V	LOW PWR FLASH	FLASH DUAL	

	FUNCTION TABLE 3				
	WIRE		LI	GHT	
RED	ORANGE	WHITE	SINGLE	DUAL	
+9-32V			FLASH	FLASH DUAL	
	+9-32V		LOW PWR FLASH	FLASH DUAL LOW PWR	
+9-32V	+9-32V		LOW PWR FLASH	FLASH DUAL LOW PWR	
		+9-32V	NO OP	NO OP	
+9-32V		+9-32V	LOW PWR FLASH	FLASH DUAL LOW PWR	
	+9-32V	+9-32V	LOW PWR FLASH	FLASH DUAL LOW PWR	
+9-32V	+9-32V	+9-32V	LOW PWR FLASH	FLASH DUAL LOW PWR	

EXAMPLE:

If the light is using Function Table 2 with the Orange wire to power, which steady burns color 2, and you then apply the White wire to ground, to change the Function Table to number 3, this would cause the light to start flashing dual low power.

	FUNCTION TABLE 2					
	WIRE		LIG	нт		
RED	ORANGE	WHITE	SINGLE	DUAL		
+9-32V			FLASH	FLASH COLOR 1		
	+9-32V		STEADY COLOR 1	STEADY COLOR 2		
+9-32V	+9-32V		STEADY COLOR 1	STEADY COLOR 2		
		+9-32V	NO OP	NO OP		
+9-32V		+9-32V	CRUISE	FLASH DUAL		
	+9-32V	+9-32V	STEADY COLOR 1	STEADY COLOR 2		
+9-32V	+9-32V	+9-32V	STEADY COLOR 1	STEADY COLOR 2		

	FUNCTION TABLE 4				
	WIRE		LIG	HT	
RED	ORANGE	WHITE	SINGLE	DUAL	
+9-32V					
	+9-32V				
+9-32V	+9-32V				
		+9-32V			
+9-32V		+9-32V			
	+9-32V	+9-32V			
+9-32V	+9-32V	+9-32V			

AFTER SELECTION The light will "wink" to indicate which of the new tables is selected. Custom table will "wink" 7 times.

WIRING AND TABLE INFORMATION (CONT.):

REMOTE MODE: For use with bluePRINT® system only

Connecting the Green wire to ground before applying power to the Red or Orange wires will place the LED module into remote mode and the light output color will be directly controlled by the input wires as shown below.

For Cruise mode or Low Power control of the LED module, the signal to the control wires must be 100 +/- 2Hz using the duty cycle inputs listed below to produce the light output.

6x4 & 7X3 P SERIES LED LIGHT REMOTE MODE FUNCTIONALITY					
		SINGLE CO	LOR	DUAL	COLOR
RED WIRE	ORANGE WIRE	COLOR SWAP = OFF	COLOR SWAP = ON	COLOR SWAP = OFF	COLOR SWAP = ON
CRUISE	-	CRUISE COLOR 1		CRUISE COLOR 1	CRUISE COLOR 2
-	CRUISE			CRUISE COLOR 2	CRUISE COLOR 1
CRUISE	CRUISE			CRUISE COLOR 2	CRUISE COLOR 1
FLASH	-	FLASH COLOR 1		FLASH COLOR 1	FLASH COLOR 2
-	FLASH			FLASH COLOR 2	FLASH COLOR 1
FLASH	FLASH			FLASH COLOR 2	FLASH COLOR 1
STEADY ON	-	STEADY ON COLOR 1		STEADY ON COLOR 1	STEADY ON COLOR 2
-	STEADY ON			STEADY ON COLOR 2	STEADY ON COLOR 1
STEADY ON	STEADY ON			STEADY ON COLOR 2	STEADY ON COLOR 1
CRUISE	FLASH			FLASH COLOR 2/CRUISE COLOR 1 DURING OFF CYCLE OF FLASH	FLASH COLOR 1/CRUISE COLOR 2 DURING OFF CYCLE OF FLASH
CRUISE	STEADY ON			STEADY ON COLOR 2	STEADY ON COLOR 1
Flash	Steady ON			Steady ON Color 2	Steady ON Color 1

CRUISE MODE DUTY CYCLE (@ 100HZ)		
INPUT	LIGHT OUTPUT	
40%	OFF	
50%	5%	
60%	10%	

LOW POWER FLASH D.C. (@ 100HZ)		
INPUT	LIGHT OUTPUT	
70%	30%	
80%	40%	
90%	50%	

WIRING AND TABLE INFORMATION (CONT.):

COLOR SWAP

This function is only valid for dual and tri-color warning light modules and can only be changed when the light module is in a flashing mode (disabled for single color modules and when light module is operating in cruise or steady ON functions). When the light is flashing, momentarily connect the white wire to ground for >2S and <3S (light will go steady high, steady low, off) then release. The light module will switch between Color Swap OFF and Color Swap ON. When Color Swap is OFF, the 1st color will flash 1st on a dual/tri color pattern. When Color Swap is ON, the 2nd color will flash 1st on a dual/tri color pattern.

SIMULTANEOUS/ALTERNATE

This function can only be changed when the LED module is in a flashing mode (disabled in cruise or steady ON functions) and only has an effect when at least 2 LED modules have the green sync wire connected together. When the light is flashing, momentarily connect the white wire to ground for >3S and <4S (light will go steady high, steady low, off, steady high) then release. The light module will switch between Simultaneous and Alternate each time this sequence is done. To have light modules flash simultaneously, both light modules need to be set to the same sequence type (Set-Up Table). To have light modules flash alternately, the light modules need to be set to different sequence types (Set-Up Table).

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.

BACKUP PATTERN

This function is only valid 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 >1S and < 2S (light will go steady high, steady low) then release. The flash pattern will backup to the previous pattern. If the light module was at the first pattern, the pattern will change to the last pattern on the list.

PATTERN RESET

This function is only valid 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 >5S and <6S (light will go steady high, steady low, off, steady high, steady low, off) then release. The flash pattern will reset to the 1st pattern in the list.

FACTORY RESET

This function is only valid 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 >6S and <7S (light will go steady high, steady low, off, steady high, steady low, off, steady high) then release. The LED module will reset to: pattern=1, Function Table=1, Color Swap=OFF, Simultaneous.

LOCKOUT CONFIGURATION WIRE

This function will disable the wire tap configuration mode that is activated by holding the white wire to ground. The lock out is activated by applying ground to the white wire for >7 seconds and <8 seconds per the table below. The function can be disabled by tapping the wire to ground and releasing 8 times within 5 seconds. The light will flash 8 times when the feature is enabled or disabled to notify the user of a setting change.

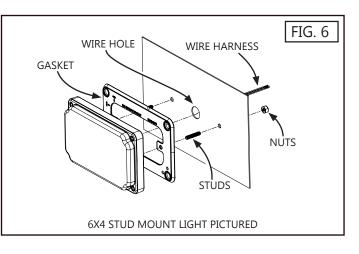
SETUP TABLE			
SECONDS		USER INTERFACE	
FROM	TO	VISUAL FEEDBACK	ACTION TAKEN
0	1	STEADY-HIGH (60%)	FORWARD ONE PATTERN
1	2	STEADY-LOW (30%)	BACKWARD ONE PATTERN
2	3	OFF	COLOR SWAP (OFF OR ON)
3	4	STEADY - HIGH (60%)	SEQUENCE TYPE: SIMULTANEOUS OR ALTERNATE
4	5	STEADY - LOW (30%)	SEE FUNCTION TABLE
5	6	OFF	RESET TO PATTERN 1
6	7	STEADY-HIGH (60%)	FACTORY RESET (PATTERN 1, COLOR SWAP: OFF, SIMULTANEOUS) SEPARATE COLOR CONTROL: OFF
7	8	STEADY - LOW (30%)	LOCK OUT WHITE CONFIGURATION WIRE
If held longer than 8 seconds, the light will go back to flashing the current pattern and no action will be taken.			

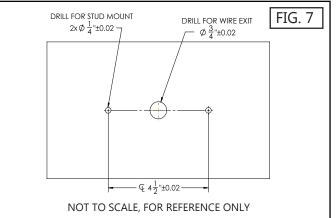
STUD MOUNT INSTALLATION:

- 1. Drill (2) 1/4" holes to mount light and 3/4" wire hole (see **Fig. 7**). The drill template shown is compatible with both the the 6x4 and 7x3 stud mount light.
- 2. Thread studs into the back of light.
- 3. Place bezel over front of light.
- 4. Align the gasket to the mounting surface. Horizontal and vertical orientations are indicated on gasket for proper seal.
- 5. Press light/bezel assembly against gasket, against mount surface.
- 6. Secure the light to mounting surface using (2) 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.**

8. Plug the wire harness into the back of the light. Reference **page 10** for retention clip installation.





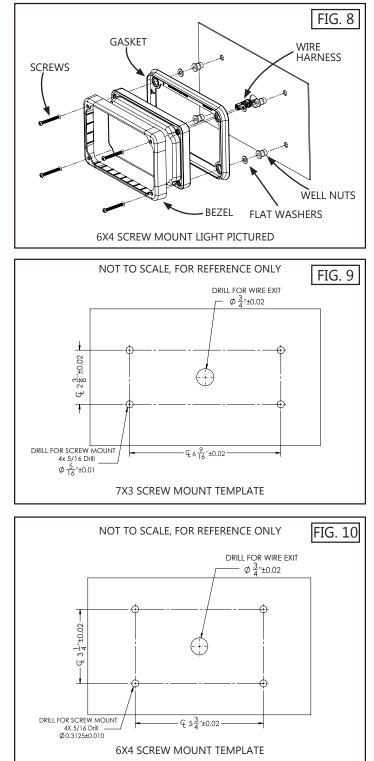
SCREW MOUNT INSTALLATION:

- Drill (4) 5/16" holes to mount light. Drill 3/4" wire hole. See Fig. 9 (7x3) OR Fig. 10 (6x4).
- 2. If a bezel is being used, place bezel over light.
- 3. Place the gasket on the back of the light and bezel (if used).

<u>NOTE</u>: Horizontal and vertical orientations indicated on gasket for proper seal.

- 4. Insert the (4) supplied screws into each screw hole.
- 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.
- 7. Pull the wire harness through the opening and plug into the back of the light. Reference page 8 for retention clip installation.
- 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.

<u>NOTE</u>: Tighten until gasket is compressed. DO NOT over tighten.



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.

