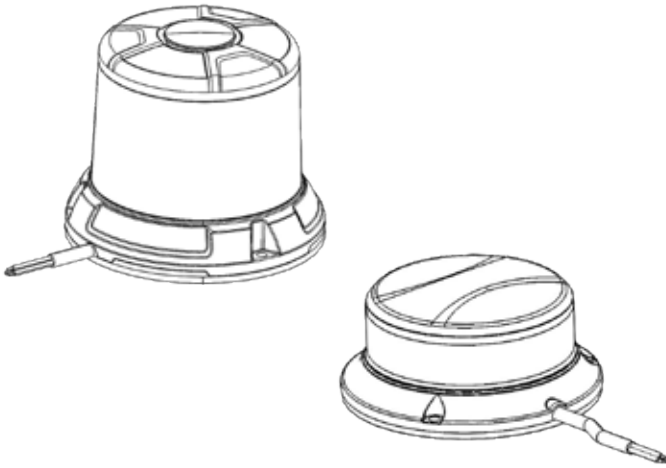


2400 Series LED Beacon



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 beacon requires the installer to have a thorough knowledge of automotive electronics, systems, and procedures. Beacons provide an essential function of an effective visual warning system. The use of the beacon does not ensure 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 beacon 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 beacon is securely fastened to the vehicle and properly functioning before operating vehicle. The beacon 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 local, 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 - 2400 Series Beacon

Unpack Beacon

1. Remove the beacon 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

- #2 Phillips Head Screwdriver

SOUND OFF[®]
commercial vehicle solutions

1.616.662.6199 / www.soundoffcvs.com

TABLE OF CONTENTS

PAGE	CONTENT
1	COMPONENTS/ CONTENTS
2	POWER / TECHNICAL SPECIFICATIONS & FLASH PATTERNS
3	MOUNTING
4	INPUT WIRE DEFINITIONS

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.



WARNING

This product contains high intensity LED devices. To prevent eye damage, **DO NOT** stare into the light beam at close range.

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 CVS product, visit our website at www.soundoffcvs.com/sales-support/warranty. If you have questions regarding this product, contact **Customer Service**, Monday - Friday, 8 a.m. to 5 p.m. at 1.616.662.6199. Questions or comments that do not require immediate attention may be emailed to orders@soundoffcvs.com.*

SUPERIOR CUSTOMER RELATIONSHIPS. SMARTLY DESIGNED LIGHTING & ELECTRONIC SOLUTIONS.

2400 Series LED Beacon

POWER SPECIFICATIONS

	Short	Tall
Input Voltage Range:	10 - 30 Vdc	10 - 30 Vdc
Reverse Polarity:	Protected	Protected
Load Dump:	Protected	Protected
Wiring:	Power & Control Cable/ Cig Plug - 12ft 18 AWG	
Number of LEDs and Max Current Draw @ 12.8Vdc:	48 LEDs, 1.75 Amps Max	64 LEDs, 2.2 Amps Max
Number of LEDs and Max Wattage @ 12.8 Vdc (All Lights Flashing):	48 LEDs, 23.6 Watts Max	64 LEDs, 29.7 Watts Max

TECHNICAL SPECIFICATIONS

Top Cover Material: Lens Material:	UV Resistant Polycarbonate (PC) UV Resistant Polycarbonate (PC)
Roof Attachment Options:	Surface Mount Magnet Mount
Operating Temp:	-40° to +65° C
Dimensions:	Short: 4.8 in x 1.9 in
	Tall: x 4.8 in x 3.5 in

fpm=Flashes per Minute
fps=Flashes per Second

FLASH PATTERNS

Default

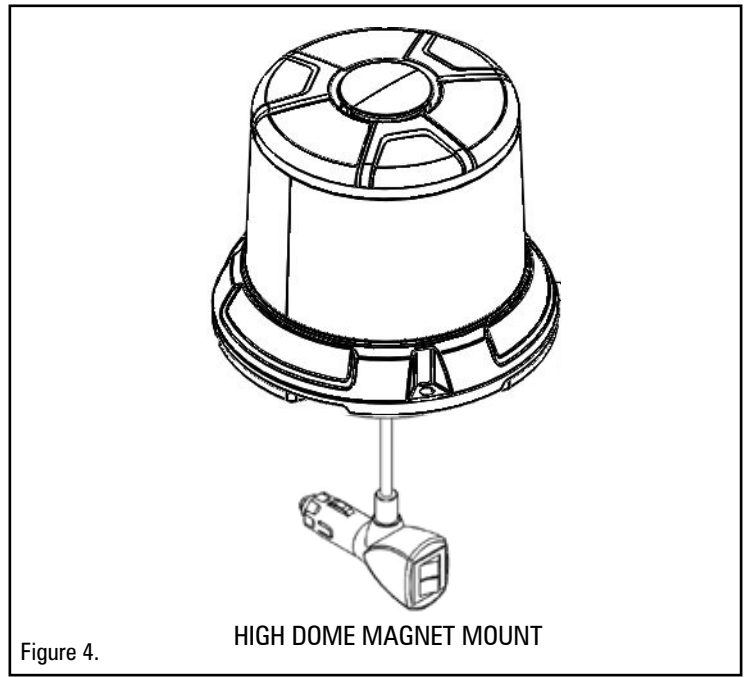
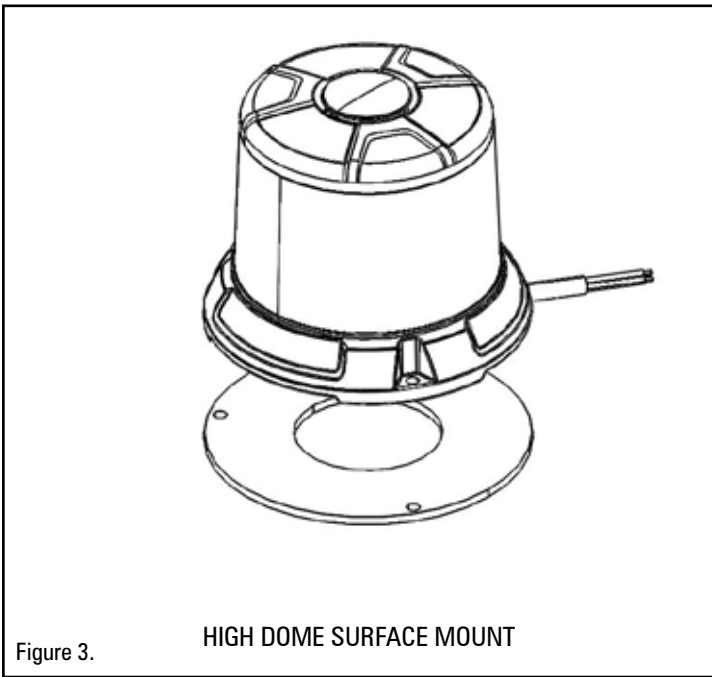
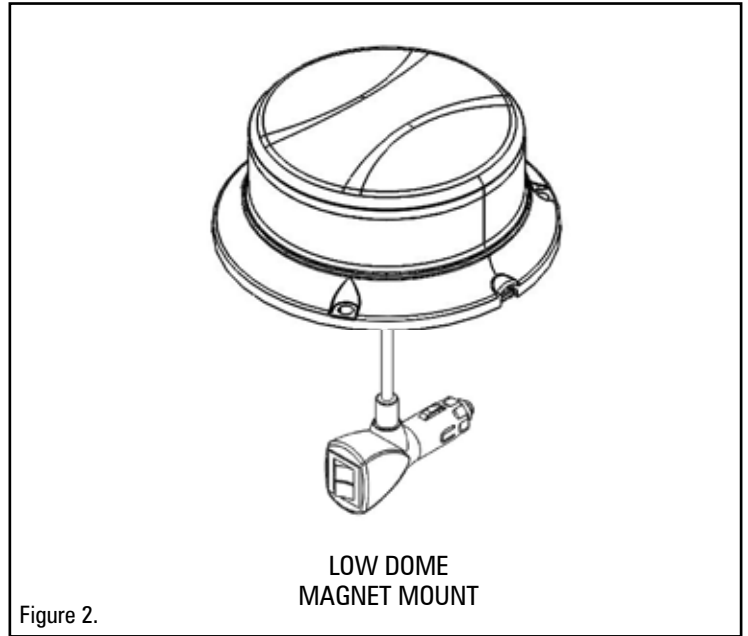
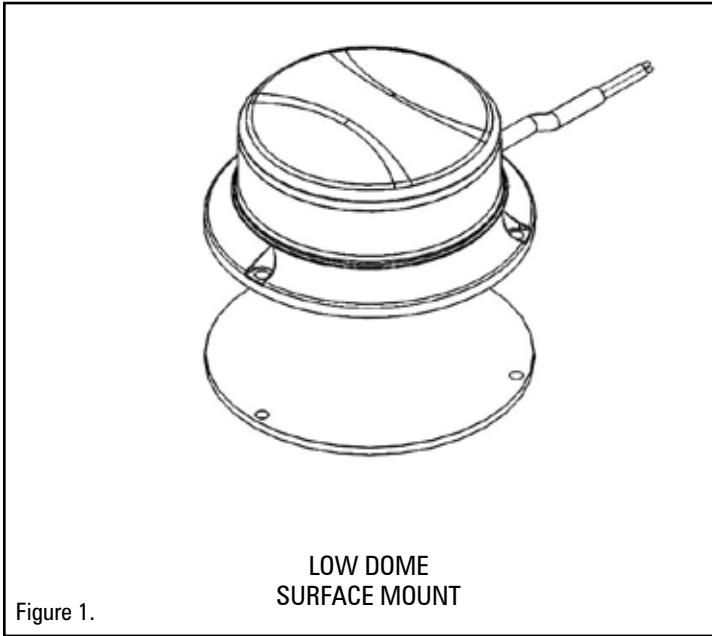
LOW DOME

Pattern	Description	FPM
1	Single	125
2	Single	75
3	Double	285
4	Double	150
5	Triple	219
6	Quad	292
7	Split	300
8	Split	150
9	Rotate	75
10	Rotate	150
11	Cruise	-

HIGH DOME

Pattern	Description	FPM
1	Single	125
2	Rotate	120
3	Triple	225
4	Quad	300
5	Quint	337
6	Combo	88
7	Rotate	84
8	Combo	127
9	Combo	94
10	Strobe	150
11	Cruise	-

MOUNTING



WARNING

Damages or injury may occur from improper use of a lighting product intended for vehicle use.

Auxiliary vehicle lighting products, when used on highway use vehicles, are always recommended to use secure, permanent mounting for maximum safety. In some instances, a more temporary vehicle attachment, such as optional magnet mounting (lighting product vehicle retention is based on magnets on the lighting product to the vehicle's steel/ferrous flat metal components) is offered. The effectiveness of magnet mounting is reduced by factors that include the contour, texture, curvature, snow, ice, and general cleanliness of the mounting location, and also with newer vehicle non-magnetic metal such as aluminum. Due to the potential for low effective magnetic mount retention, it is recommended to use magnets for stationary vehicle use. High driving speeds, rapid accelerations, or rapid decelerations (including accidents or rough road conditions or weather related conditions) may cause a magnet mounted light to unexpectedly detach from the vehicle.

It is the sole responsibility of the user to ensure proper mounting and safe operating conditions and end user awareness of the safe operating conditions.



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.

2400 Series LED Beacon

Power Cable:

1. Route lightbar power cables as close to vehicles power source (battery) as possible.
2. Connect the 18AWG BLACK wire to the factory chassis ground right next to the battery.
3. Install a maximum of 5Amp Fuse (customer supplied) to the end of the RED wire of the Beacon Power Cable.
 - a. Remove the fuse before connecting any wires to the battery.
 - b. DO NOT USE CIRCUIT BREAKER OR FUSIBLE LINK.
4. 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.

Control Wire Connections:

Based on required functions of the beacon, connect the following wires to switches capable of providing +12V at a minimum of 10A to the 1 or 2 control wire harness.

Amber Only Lightbar, 3 Conductor Cable		
Wire Color	Gauge	Wire Functions
RED	18AWG	(+10-30Vdc) Warning Flash
YELLOW	18AWG	(+) Pattern Select
BLACK	18AWG	(-) Ground

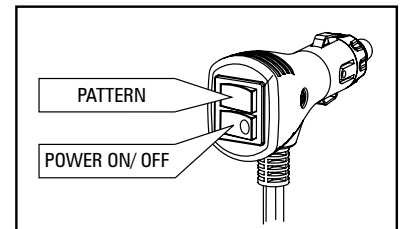
Warning Flash Pattern Configuration:

Permanent Mount

- a. Apply power to product.
- b. Connect RED wire to (+) Power & BLACK wire to (-) Ground.
- c. Momentarily connect Pattern Select wire to (+) Power for 1 second to change the flash pattern per table on Page 2.
- d. To return to default flash pattern: press and hold pattern select for 3 seconds and then release.

Magnet Mount

- a. See Cig Plug diagram at right for POWER ON/OFF and PATTERN SELECT switch locations.
- b. Turn beacon ON by pressing the POWER ON/OFF switch to the ON position.
- c. To advance flash pattern: turn on beacon. Press and hold the pattern select switch, until all modules are solid on, and then release.
- d. To return to default flash pattern: press and hold pattern select for 3 seconds and then release.



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.

⚠ 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.