

CODE 3 Installation and Operation Instructions SB48 Series

The SB48 LED beacons are designed to meet SAE J845 Class I specifications. The 3" tall SB48 features two rows of LEDs, available in single color.

Specifications include 12-24VDC operation, multiple flash patterns including simulated rotate and synchronization capability. This manual provides information about installation, function, safety, maintenance, replacement parts and warranty.



WARNING!

Failure to install or use this product according to manufacturer's recommendations may result in property damage, serious injury, and/or death to those you are seeking to protect!



Do not install and/or operate this safety product unless you have read and understand the safety information contained

1. Proper installation combined with operator training in the use, care, and maintenance of emergency warning devices are essential to ensure the safety of you and those you are seeking to protect.
2. Exercise caution when working with live electrical connections.
3. This product must be properly grounded. Inadequate grounding and/or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or severe vehicle damage, including fire.
4. Proper placement and installation are vital to the performance of this warning device. Install this product so that output performance of the system is maximized and the controls are placed within convenient reach of the operator so that s/he can operate the system without losing eye contact with the roadway.
5. Do not install this product or route any wires in the deployment area of an air bag. Equipment mounted or located in an air bag deployment area may reduce the effectiveness of the air bag or become a projectile that could cause serious personal injury or death. Refer to the vehicle owner's manual for the air bag deployment area. It is the responsibility of the user/operator to determine a suitable mounting location ensuring the safety of all passengers inside the vehicle particularly avoiding areas of potential head impact.
6. It is the responsibility of the vehicle operator to ensure during use that all features of this product work correctly. In use, the vehicle operator should ensure the projection of the warning signal is not blocked by vehicle components (i.e., open trunks or compartment doors), people, vehicles or other obstructions.
7. The use of this or any other warning device does not ensure all drivers can or will observe or react to a warning signal. Never take the right-of-way for granted. It is your responsibility to be sure you can proceed safely before entering an intersection, driving against traffic, responding at a high rate of speed, or walking on or around traffic lanes.
8. This equipment is intended for use by authorized personnel only. The user is responsible for understanding and obeying all laws regarding warning signal devices. Therefore, the user should check all applicable city, state, and federal laws and regulations. The manufacturer assumes no liability for any loss resulting from the use of this warning device.

Specifications:

Size: SB48XX: 6.5" L x 6.5" W x 3.3" H

Weight: SB48XX:-----1.5 lbs.

Input Voltage:-----12-24 VDC

Current Draw: SB48XX:-----6.14A MAX

Installation & Mounting:

Before installation, examine the LED beacon for transit damage. Do not use damaged or broken parts.

Mounting:

Mount the beacon, by drilling (4) 1/8" Diameter pilot holes for the provided sheet metal screws and (1) 3/8" diameter hole for the cable in the desired location (See drawing view Figure 1 on page 2).

Feed the cable through the 3/8" hole, position the beacon over the 1/8" mounting holes and fasten with the provided sheet metal screws.

Important! This unit is a safety device and it must be connected to its own separate, fused power point to assure its continued operation should any other electrical accessory fail.

Caution: When drilling into any vehicle surface, make sure the area is free from any electrical wires, fuel lines, vehicle upholstery, etc. that could be damaged

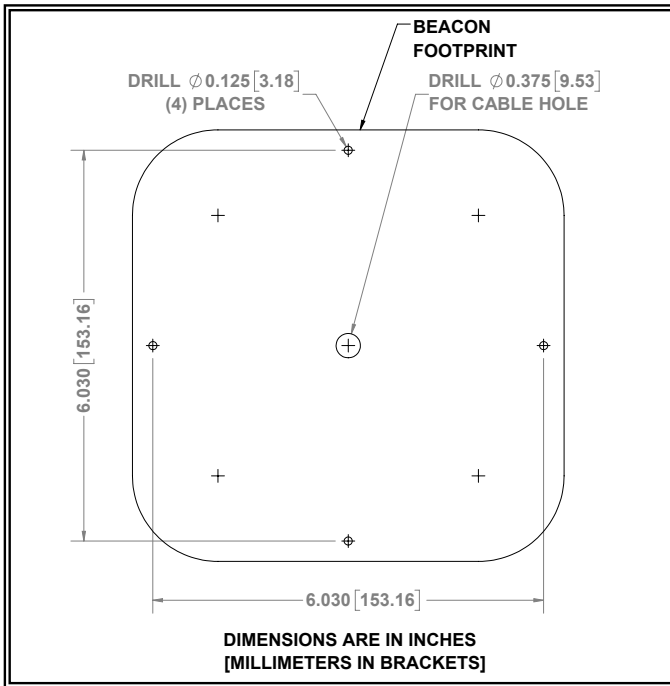


Figure 1

Wiring Instructions:

Wire functions are as follows:

- Black Wire:** Ground. Connect to either the battery negative terminal or a suitable chassis point.
- Red Wire:** Power. Switch to 12-24V to operate the beacon. Must be powered through the fuse, located as close to the battery terminal as possible. Use a 10A fuse.
- Blue Wire:** Flash pattern set. Touch wire to Ground momentarily (< 1 sec) to cycle through the available flash patterns (see table below).
- Yellow Wire:** Sync. Connect yellow wires of all beacons together for synchronization.
- Purple Wire:** Low power dim. Connect wire to chassis ground.

Blue Wire Function Table

Push Time	Function
0-1 Sec.	Next Pattern/on
1-3 Sec	Previous Pattern
3-5 Sec.	Factory Default(Pattern 1: Single Flash 120 FPM p1)
5- Sec.	OFF

Flash Patterns:
 SB48 series beacons can be configured to flash the following patterns (in the order below) as described in the wiring section. The LED head must be powered through the black and red wires to allow pattern selection.

Flash Pattern	Phase	SAE										T13							
		SB48RR	SB48BB	SB48AA	SB48CR	SB48CB	SB48CA	SB48RR	SB48BB	SB48AA	SB48CR	SB48CB	SB48CA						
Single 120	Ph1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1												
	Ph2	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1												
Double 120	Ph1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1												
	Ph2	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1												
Quad 120	Ph1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1												
	Ph2	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1												
Rotate 120	CCW	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1												
	Ph1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B
Single 75	Ph2	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B
	Ph1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B
Double 75	Ph1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B
	Ph2	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B
Quad 75	Ph1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B
	Ph2	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B
Rotate 75	CCW	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B	CLASS B
	Steady																		

Manufacturer Limited Warranty Policy:

Manufacturer warrants that on the date of purchase this product will conform to Manufacturer's specifications for this product (which are available from the Manufacturer upon request). This Limited Warranty extends for Sixty (60) months from the date of purchase.

DAMAGE TO PARTS OR PRODUCTS RESULTING FROM TAMPERING, ACCIDENT, ABUSE, MISUSE, NEGLIGENCE, UNAPPROVED MODIFICATIONS, FIRE OR OTHER HAZARD; IMPROPER INSTALLATION OR OPERATION; OR NOT BEING MAINTAINED IN ACCORDANCE WITH THE MAINTENANCE PROCEDURES SET FORTH IN MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS VOIDS THIS LIMITED WARRANTY.

Exclusion of Other Warranties:

MANUFACTURER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE IMPLIED WARRANTIES FOR MERCHANTABILITY, QUALITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE ARE HEREBY EXCLUDED AND SHALL NOT APPLY TO THE PRODUCT AND ARE HEREBY DISCLAIMED, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. ORAL STATEMENTS OR REPRESENTATIONS ABOUT THE PRODUCT DO NOT CONSTITUTE WARRANTIES.

Remedies and Limitation of Liability:

MANUFACTURER'S SOLE LIABILITY AND BUYER'S EXCLUSIVE REMEDY IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR UNDER ANY OTHER THEORY AGAINST MANUFACTURER REGARDING THE PRODUCT AND ITS USE SHALL BE, AT MANUFACTURER'S DISCRETION, THE REPLACEMENT OR REPAIR OF THE PRODUCT, OR THE REFUND OF THE PURCHASE PRICE PAID BY BUYER FOR NON-CONFORMING PRODUCT. IN NO EVENT SHALL MANUFACTURER'S LIABILITY ARISING OUT OF THIS LIMITED WARRANTY OR ANY OTHER CLAIM RELATED TO THE MANUFACTURER'S PRODUCTS EXCEED THE AMOUNT PAID FOR THE PRODUCT BY BUYER AT THE TIME OF THE ORIGINAL PURCHASE. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR LOST PROFITS, THE COST OF SUBSTITUTE EQUIPMENT OR LABOR, PROPERTY DAMAGE, OR OTHER SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES BASED UPON ANY CLAIM FOR BREACH OF CONTRACT, IMPROPER INSTALLATION, NEGLIGENCE, OR OTHER CLAIM, EVEN IF MANUFACTURER OR A MANUFACTURER'S REPRESENTATIVE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. MANUFACTURER SHALL HAVE NO FURTHER OBLIGATION OR LIABILITY WITH RESPECT TO THE PRODUCT OR ITS SALE, OPERATION AND USE, AND MANUFACTURER NEITHER ASSUMES NOR AUTHORIZES THE ASSUMPTION OF ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH PRODUCT.

This Limited Warranty defines specific legal rights. You may have other legal rights which vary from jurisdiction to jurisdiction. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages.

Product Returns:

If a product must be returned for repair or replacement*, please contact our factory to obtain a Return Goods Authorization Number (RGA number) before you ship the product to Code 3®, Inc. Write the RGA number clearly on the package near the mailing label. Be sure you use sufficient packing materials to avoid damage to the product being returned while in transit.

*Code 3®, Inc. reserves the right to repair or replace at its discretion. Code 3®, Inc. assumes no responsibility or liability for expenses incurred for the removal and/or reinstallation of products requiring service and/or repair, nor for the packaging, handling, and shipping; nor for the handling of products returned to sender after the service has been rendered.



10986 North Warson Road

St. Louis, MO 63114

Technical Service

(314) 996-2800

c3_tech_support@code3esg.com

www.code3esg.com

An ECCO SAFETY GROUP™ Company

www.eccosafetygroup.com