



# Installation Instructions EB7800 Series Rotating Beacon



## WARNING!

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



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

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:

Voltage: Models EB7810-EB7816: 12 or 24\* VDC

Model Number	Size	Weight
EB7810	6" dia. x 8.3 height	1.70 lbs
EB7813	6" dia. x 5.7 height	1.20 lbs
EB7813-MG	6.6" dia. x 6 height	2.05 lbs
EB7816	6" dia. x 7.3 height	1.55 lbs

Current Draw: 1.36 Amps @ 12 VDC, 0.64 Amps @ 24 VDC

Flash Rate: 180 per minute

\*See wiring instructions below for 24 VDC systems

### Installation & Mounting:

Carefully remove the rotating beacon and examine the unit for transit damage, broken lamps, etc. If damage is found, contact the transit company or ECCO. Do not use broken or damaged parts.



## CAUTION:

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

**Three Bolt Mount Rotating Beacon: EB7813 (Refer to FIGURE 1) Quick Connect (DIN/Pole Mount) Rotating Beacon: EB7810**

1. Select the mounting location for the beacon on a flat, smooth surface. If the beacon is to be mounted on a curved surface, such as on the roof of the vehicle, choose a placement with the least amount of curvature. The mounting location for the beacon should be chosen such that there is maximum visibility to the oncoming traffic.
2. Remove the three (3) mounting bolts from the base.
3. Place the unit in the desired mounting position, and mark the position of the mounting holes.
4. Drill the three mounting holes using a 5/16" (8mm) drill size.
5. Drill a 3/8" hole for the beacon's power supply wires, and deburr. The hole should be underneath where the beacon will be mounted. Note: the use of a grommet is recommended, to protect the wires from the sharp edges of the hole.
6. Wire the beacon as shown in FIGURE 4. Apply sealant around the wires where they pass through the mounting surface to prevent leakage.
7. Mount the beacon, using the holes drilled in step 3. Secure in place using included hardware.

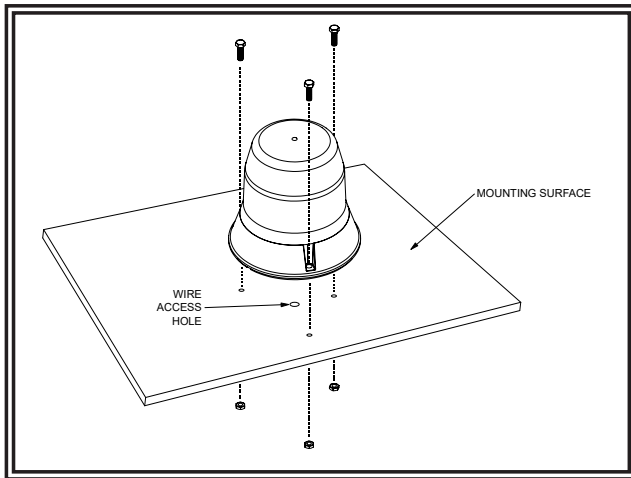



FIGURE 1

**Magnet Mount Rotating Beacon: EB7813-MG**

The Magnet Mount features a magnet for temporary mounting. The beacon should be placed in the center of the roof where the least amount of curvature occurs. Before installing, make sure there is no debris on the bottom of the beacon or on the roof of the vehicle, which could reduce the holding power of the magnet. Place and remove the beacon without sliding to avoid scratching the paint on the vehicle. After placement, the beacon should adhere firmly to the surface. If the unit slides or moves easily, a proper installation has not been obtained. **Do not attempt to attach the beacon to an ice covered surface.**



**WARNING!**  
**Maximum recommended vehicle speed for safe operation using the Magnet Mount model is 65 mph (104 km/h) on a well maintained road, when fitted to the center of a vehicle roof of steel construction. Higher speeds could cause the mount to fail, resulting in the beacon flying off of the vehicle, which could cause damage to other vehicles and injury or death to the passengers. The magnet mount is not intended as a permanent mounting for the beacon. The magnet mount unit must be mounted on a magnetic surface (i.e. no fiberglass, etc.). Insure that the magnet is kept clean.**

These beacons are designed for pipe mounting on a 3/4" pipe, and connected to power via a standard DIN connector (See FIGURE 2). To mount, simply plug in the DIN connector, place on the pipe, and tighten the wing nut. The unit can be easily removed for storage and security.

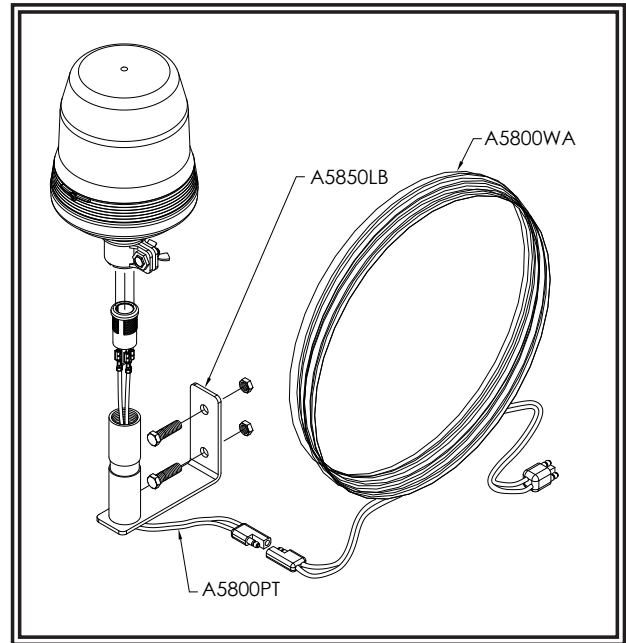


FIGURE 2

**One Bolt Mounting Rotating Beacon: EB7816**

1. Select the mounting location for the beacon on a flat, smooth surface. If the beacon is to be mounted on a curved surface, such as on the roof of the vehicle, choose a placement with the least amount of curvature. The mounting location for the beacon should be chosen such that there is maximum visibility to the oncoming traffic.
2. Remove the nut and two washers from the base.
3. Place the unit in the desired mounting position, and mark the mounting hole.
4. Drill and deburr a 9/16" (14mm) hole for mounting.
5. Wire the beacon as shown in FIGURE 4. Apply sealant around the wires where they pass through the mounting surface to prevent leakage.
6. Mount the beacon, using the hole drilled in step 4. Secure the unit using the previously removed hardware. As shown in FIGURE 3.

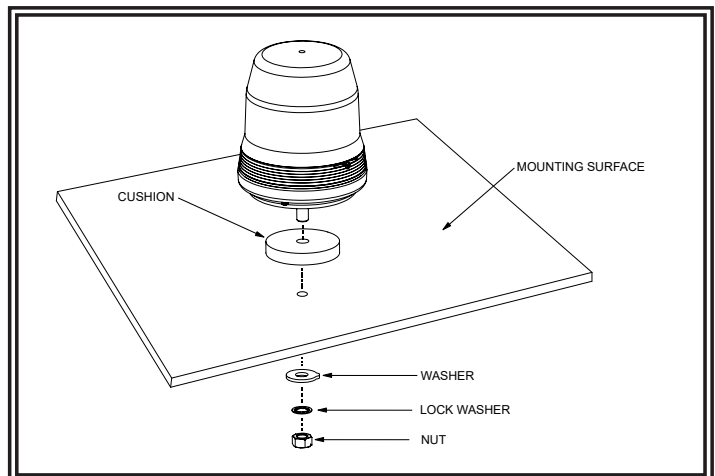


FIGURE 3

## Wiring Instructions:

**Important!** Disable power before wiring the beacon.

The wiring is as shown in FIGURE 4. All wiring should be a minimum of 18AWG. The positive line must have a 5 amp fuse, as shown. A switch may be used to control the on/off function. Route the ground wire directly back to negative battery terminal. Pack dielectric grease, such as Dow Corning 4, around each electric connection exposed to moisture or the ambient environment. For a 24 VDC system, remove the lens, move the belt to the upper slot on the pulley as shown in FIGURE 5 and reattach the lens.

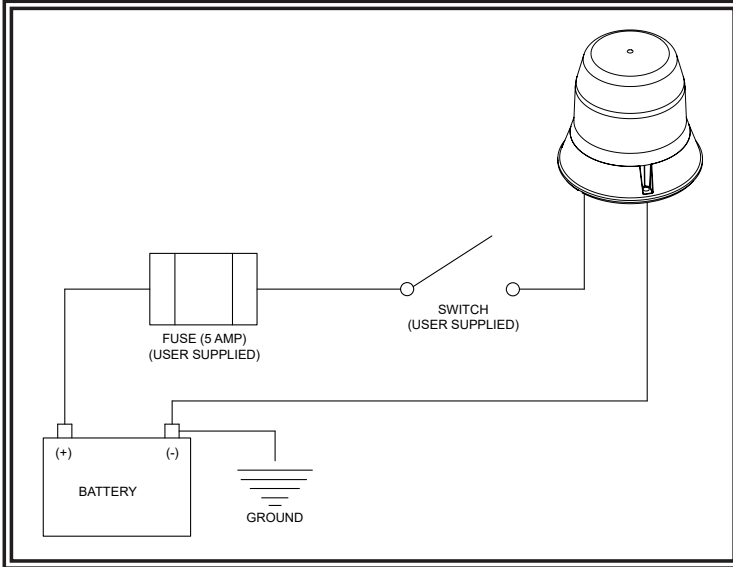


FIGURE 4

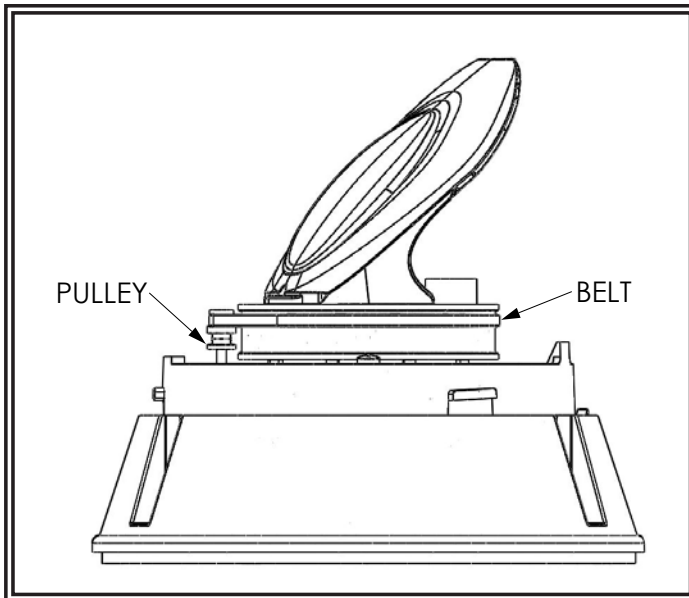


FIGURE 5

**Note:** Operating the vehicle without the lens installed on this product will result in damage that will not be covered under warranty.

## Replacement Parts and Accessories:

Description	Part Number
Replacement Lens, Amber	R5810LA
Replacement Belt	R5801B
"L" Bracket (for Quick Connect mounting)	A5850LB
"T" Bracket (for Quick Connect mounting)	A5850TB

\*Available colors include A: Amber, B: Blue, & R: Red