Warnings to Installers

Whelen’s emergency vehicle warning devices must be properly mounted and wired in order to be effective and safe. Read and follow all of Whelen’s written instructions when installing or using this product. Emergency vehicles are often operated under high speed stressful conditions which must be accounted for when installing all emergency warning devices. Controls should be placed within convenient reach of the operator so that they can operate the system without taking their eyes off the roadway. Emergency warning devices can require high electrical voltages and/or currents. Properly protect and use caution around live electrical connections. Grounding or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or vehicle damage, including fire. Many electronic devices used in emergency vehicles can create or be affected by electromagnetic interference. Therefore, after installation of any electronic device it is necessary to test all electronic equipment simultaneously to insure that they operate free of interference from other components within the vehicle. Never power emergency warning equipment from the same circuit or share the same grounding circuit with radio communications equipment. All devices should be mounted in accordance with the manufacturer’s instructions and securely fastened to vehicle elements of sufficient strength to withstand the forces applied to the device. Driver and/or passenger air bags (SR5) will affect the way equipment should be mounted. This device should be mounted by permanent installation and within the zones specified by the vehicle manufacturer, if any. Any device mounted in the deployment area of an air bag will damage or reduce the effectiveness of the air bag and may damage or dislodge the device. Installer must be sure that this device, its mounting hardware and electrical supply wiring does not interfere with the air bag or the SR5 wiring or sensors. Mounting the unit inside the vehicle by a method other than permanent installation is not recommended as unit may become dislodged during swerving; sudden braking or collision. Failure to follow instructions can result in personal injury. Whelen assumes no liability for any loss resulting from the use of this warning device. PROPER INSTALLATION COMBINED WITH OPERATOR TRAINING IN THE PROPER USE OF EMERGENCY WARNING DEVICES IS ESSENTIAL TO INSURE THE SAFETY OF EMERGENCY PERSONNEL AND THE PUBLIC.

Warnings to Users

Whelen’s emergency vehicle warning devices are intended to alert other operators and pedestrians to the presence and operation of emergency vehicles and personnel. However, the use of this or any other Whelen emergency warning device does not guarantee that you will have the right-of-way or that other drivers and pedestrians will properly heed an emergency warning signal. Never assume you have the right-of-way. It is your responsibility to proceed safely before entering an intersection, driving against traffic, responding at a high rate of speed, or walking on or around traffic lanes. Emergency vehicle warning devices should be tested on a daily basis to ensure that they operate properly. When in actual use, the operator must ensure that both visual and audible warnings are not blocked by vehicle components (i.e.: open trunks or compartment doors), people, vehicles, or other obstructions. It is the user’s responsibility to understand and obey all laws regarding emergency warning devices. The user should be familiar with all applicable laws and regulations prior to the use of any emergency vehicle warning device. Whelen’s audible warning devices are designed to project sound in a forward direction away from the vehicle occupants. However, because sustained periodic exposure to loud sounds can cause hearing loss, all audible warning devices should be installed and operated in accordance with the standards established by the National Fire Protection Association.

Safety First

This document provides all the necessary information to allow your Whelen product to be properly and safely installed. Before beginning the installation and/or operation of your new product, the installation technician and operator must read this manual completely. Important information is contained herein that could prevent serious injury or damage.

⚠️ WARNING: This product can expose you to chemicals including Methylene Chloride which is known to the State of California to cause cancer, and Bisphenol A, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

- Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures.
- Whelen Engineering requires the use of waterproof butt splices and/or connectors if that connector could be exposed to moisture.
- Any holes, either created or utilized by this product, should be made both air- and watertight using a sealant recommended by your vehicle manufacturer.
- Failure to use specified installation parts and/or hardware will void the product warranty.
- If mounting this product requires drilling holes, the installer MUST be sure that no vehicle components or other vital parts could be damaged by the drilling process. Check both sides of the mounting surface before drilling begins. Also de-burr the holes and remove any metal shavings or remnants. Install grommets into all wire passage holes.
- If this manual states that this product may be mounted with suction cups, magnets, tape or Velcro®, clean the mounting surface with a 50/50 mix of isopropyl alcohol and water and dry thoroughly.
- Do not install this product or route any wires in the deployment area of your air bag. Equipment mounted or located in the air bag deployment area will damage or reduce the effectiveness of the air bag, or become a projectile that could cause serious personal injury or death. Refer to your vehicle owner’s manual for the air bag deployment area. The User/Installer assumes full responsibility to determine proper mounting location, based on providing ultimate safety to all passengers inside the vehicle.
- For this product to operate at optimum efficiency, a good electrical connection to chassis ground must be made. The recommended procedure requires the product ground wire to be connected directly to the NEGATIVE (-) battery post (this does not include products that use cigar power cords).
- If this product uses a remote device for activation or control, make sure that this device is located in an area that allows both the vehicle and the device to be operated safely in any driving condition.
- Do not attempt to activate or control this device in a hazardous driving situation.
- This product contains either strobe light(s), halogen light(s), high-intensity LEDs or a combination of these lights. Do not stare directly into these lights. Momentary blindness and/or eye damage could result.
- Use only soap and water to clean the outer lens. Use of other chemicals could result in premature lens cracking (crazing) and discoloration. Lenses in this condition have significantly reduced effectiveness and should be replaced immediately. Inspect and operate this product regularly to confirm its proper operation and mounting condition. Do not use a pressure washer to clean this product.
- It is recommended that these instructions be stored in a safe place and referred to when performing maintenance and/or reinstallation of this product.
- FAILURE TO FOLLOW THESE SAFETY PRECAUTIONS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PRODUCT OR VEHICLE AND/OR SERIOUS INJURY TO YOU AND YOUR PASSENGERS!
**Removal or Installation / Halogen or LED Lighthead:**

1. Disconnect the lighthead from its power source and first remove the lens or lenscap necessary to access the lighthead you wish to service or replace.
2. Pull the clips back on the mounting bracket that secure the lighthead as you lift the lighthead off of the raised bosses on the bracket.
3. Carefully lift the lighthead out of the lightbar base, disconnect its connector from the lightbar wiring harness, then lift the lighthead out of the lightbar.
4. To reinstall the lighthead, plug the lighthead connector into the lightbar, snap it back into the brackets and replace any lenses or lenscaps you had to remove.

**Halogen Lighthead: Load Light / Rear Facing**

**Removal:**

1. Disconnect the lighthead from its power source and remove the lens and/or endcap in front of the lighthead you wish to service.
2. Unscrew the 4 lens screws holding the lighthead to its 2 brackets.
3. Disconnect the lighthead from power, then remove the lighthead from the lightbar.

**Installation:**

1. Plug the lighthead into the wiring harness (C).
2. Attach the lighthead (and lens) to its mounting brackets using the lens screws you removed.
3. Replace the lighthead lenses or endcaps and the installation is complete.

**Wiring:**

Extend the control wires to your switch panel and make the appropriate connections using the wiring information provided in this manual.

**Servicing your Lighthead:**

This section will cover the removal and installation of the components of your lighthead for repair or replacement purposes.

**Lens or Lenscap: Removal or Installation**

To remove a lenscap, remove the 2 screws from the end of the lenscap that thread into the lightbar base. Remove the 2 screws from the opposite side that thread through the lens retainer into the lighthead mounting bracket. Push the lenscap off.

To remove a lens, remove the 4 phillips head screws that thread through the lens retainer into the lighthead mounting bracket and then pull the lens off. NOTE: Be sure the gaskets are properly seated before remounting.

**Corner Linear-LED® Removal:**

1. Disconnect the lighthead from its power source and remove the endcap in front of the lighthead you wish to replace or service.
2. Spread the ends of the corner strobe support bracket (A) apart to disengage it from the tab on the lighthead, and lift this end of the lighthead out.
3. Pull the clips back on the mounting bracket (B) as you lift the lighthead off of the two raised bosses on the bracket, then carefully lift the lighthead out of the lightbar base and disconnect the power cord (C), and remove the lighthead from the lightbar.

**Corner Linear-LED® Installation:**

1. Plug the lighthead into the wiring harness (C).
2. Insert the end of the bracket into the 2 bosses, and snap the side of the lighthead into the clips in the bracket (B), then snap the lighthead tab into the corner strobe support bracket (A) and replace the endcap. Reconnect to power.

**IMPORTANT! The lighthead should be located a minimum of 16" from any radio antennas!**

**Installation:**

**Note:** When routing the wires, it is important to choose a path that will keep these wires away from excessive heat and from any vehicle equipment that could compromise the integrity of the wires (ex. trunk lids, door jams, etc.).

1. This lighthead attaches to the vehicle by 1-1/4" bolts extending from the rear of the housing. Position the unit in its proposed mounting location to ensure that it fits properly. With the lighthead in place, use an awl or other suitable tool and scribe the areas to be drilled.
2. Remove the lighthead from its mounting area and, using an appropriately sized drill bit, drill a hole in each of the areas scribed in step 1.
3. Return the lightbar to its mounting location and using the supplied hardware, secure it to the vehicle.

**Removal:**

1. Disconnect the lighthead from its power source and first remove the lens or lenscap (Do not remove).
2. Pull the clips back on the mounting bracket that secure the lighthead as you lift the lighthead off of the raised bosses on the bracket.
3. Carefully lift the lighthead out of the lightbar base, disconnect its connector from the lightbar wiring harness, then lift the lighthead out of the lightbar.

**Service your Lightbar:**

This section will cover the removal and installation of the components of your lightbar for repair or replacement purposes.