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 device. 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 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 communication 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 dislocate 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 period 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 Biphenoil 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 the 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 shards 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 and may damage or dislocate 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.

- 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!

©2005 Whelen Engineering Company Inc.
Form No.14015E (112008)
For warranty information regarding this product, visit www.whelen.com/warranty
IMPORTANT! Do not install this product or route any wires in the deployment area of your air bag (see air bag warning on first page).

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

Important installation note for Chevrolet Impalas:
When mounting this product in a Chevrolet Impala, an optical gasket must be installed as shown here and below. Failure to do so could result in reflected light within the passenger compartment.

Installation:
When routing the wires, it is important to choose a path that will keep the wires away from excessive heat or any vehicle equipment that could compromise the integrity of the wires.

1. Locate and install the rubber window seal onto the lower, leading edge of the housing.
2. Using an appropriately sized Torx head screwdriver, loosen the three screws securing the driver-side visor swivel bracket to the vehicle. Do not remove these screws.
3. Remove the screws securing the visor clip to the vehicle. Remove and retain the clip and all hardware.
4. Locate the driver-side mounting bracket (indicated with a “D” label) and orient as shown.
5. Slide the mounting bracket fingers between the loosened swivel bracket and the headliner. The bracket fingers should straddle the inner section of the swivel bracket when properly oriented.
6. Position the keyed opening of the mounting bracket directly under the mounting location for the visor clip removed in step 2. With the bracket in this position, remount the visor clip in its original location using the original hardware.
7. Firmly tighten any hardware loosened in this procedure.
8. Repeat this procedure for passenger-side (indicated with a “P” label).

Wiring:
IMPORTANT: All customer supplied wires that connect to the positive terminal of the battery must be sized to supply at least 125% of the maximum operating current and FUSED at the battery to carry that load. DO NOT USE CIRCUIT BREAKERS WITH THIS PRODUCT!

Operation:
With the lightbar on:
• Applying +12 volts to the WHT/BLK wire activates the take-downs.
• With the take-downs activated, applying +12 volts to the BLUE wire will cause the take-down lights to flash.
• Applying +12 volts to the ORANGE wire causes all lightheads to flash.
• Apply +12 volts to the WHT/ORG wire to activate the steady burn lightheads (optional).

Scan-Lock™ / WHITE/GREEN
To change a flash pattern, turn on the desired lighthead:
CYCLE THROUGH ALL PATTERNS: To cycle forward, apply +12 volts to the WHT/GRN wire for less than 1 second and release. To cycle backward, apply +12 volts to the WHT/GRN wire for more than 1 second and release.

9. Using the hardware provided (#10-32 x 3/8” black oxide screws), secure the lightbar to the mounting brackets. Tighten this hardware firmly. Route lightbar cable down vehicle A-pillar to your control head. Make wiring connections as shown here.

<table>
<thead>
<tr>
<th>Wire Color</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRN</td>
<td>- Low Power</td>
</tr>
<tr>
<td>WHT/GRN</td>
<td>&quot;Scan-Lock™&quot;</td>
</tr>
<tr>
<td>WHIT/GRN</td>
<td>Steady Burn lightheads / Optional</td>
</tr>
<tr>
<td>WHIT/ORG</td>
<td>Causes Takedowns to flash</td>
</tr>
<tr>
<td>BLUE</td>
<td>Activates Takedowns</td>
</tr>
<tr>
<td>WHIT/BLK</td>
<td>Causes all lightheads to flash</td>
</tr>
<tr>
<td>ORG</td>
<td>Flasher / Ground</td>
</tr>
<tr>
<td>BLK</td>
<td>&quot;Scan-Lock™&quot;</td>
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</tbody>
</table>

Note:
Depending on the vehicle’s roofline, it may be necessary to bend the mounting brackets to position the housing against the windshield.

Hi/Low Power / BROWN
This feature allows the user to step the unit down to low power operation for nighttime use. The type of switch used depends on how the operator wishes the Hi/Low feature to function:

Latching Mode: By applying positive voltage to the BROWN wire for less than 1 second, the lightbar is “latched” into low power. The unit must be turned off and then back on to restore normal, high power operation (A momentary switch is preferred).

Level Mode: Applying positive voltage to the BROWN wire for more than 1 second holds the lightbar in low power mode until voltage is removed (A toggle switch is preferred).