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 (SRS) 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 SRS 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.

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 the waterproof butt splices and/or connectors that if 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, 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!

For warranty information regarding this product, visit www.whelen.com/warranty
IMPORTANT! The lightbar should be a minimum of 16" from any radio antennas!

Mounting your Lightbar:

This lightbar mounts with 4 bolts affixed to mounting plates that slide into the track on the bottom of the lightbar base. Figures 1 and 1a show how the slide bolt assembly slides into your lightbars base and mounts onto the vehicle. Use an appropriately sized drill bit sized for a 1/2 - #13 X 2” bolt, to drill the mounting holes. When securing the slide bolts to the bottom of the lightbar base, be sure the outside bolts are spaced far enough apart and near enough to the ends of the vehicle roof.

Lightbar Cables:

This lightbar uses a 3-conductor cable for LEDs, a 6 conductor cable for HALOGEN and a 4-conductor cable for BRAKE/TAIL lights. Extend the 3- and 6-conductor cables towards your switch panel. The instructions included with your switches will provide switch wiring information. The 4-conductor cable connects to your brake light. There are also 2 wires for Scan-Lock™ (flash pattern selection).

Refer to the parts illustration on the next page for wire designations and fusing.

WARNING! 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!

Scan-Lock™

In the Scan-Lock™ cable the RED wire controls the front LEDs and the GREEN wire controls the rear LEDs. The LEDs must be on for flash pattern selection.

TO CHANGE PATTERNS: Apply +12 volts to the Scan-Lock™ wire for less than 1 second and release to cycle forward to the next available pattern. Apply +12 volts to the the Scan-Lock™ wire for more than 1 second and release to cycle back to the previous pattern.

TO CHANGE THE DEFAULT PATTERN: When the desired pattern is displayed, allow it to run for more than 5 seconds. The lighthead will now display this pattern when initially activated.

TO RESTORE THE FACTORY DEFAULT PATTERN: Apply +12 volts to the Scan-Lock™ wire. With Scan-Lock™ activated, turn power to the lighthead on. The factory default pattern will now be displayed.

A normally open momentary switch can be used to control Scan-Lock operation.

Available Flash Patterns:

1C: SignalAlert™ 3 cycles of 1A and 3 cycles of 1S
1A: SignalAlert™ 1 Alternates with 2
1S: SignalAlert™ 1 & 2 Simultaneous
2A: CometFlash® 1 Alternates with 2
2S: CometFlash® 1 & 2 Simultaneous
2C: CometFlash® 3 cycles of 2A and 3 cycles of 2S
3A: DoubleFlash 1 Alternates with 2
3S: DoubleFlash 1 & 2 Simultaneous
3C: DoubleFlash 3 cycles of 3A and 3 cycles of 3S
4A: SingleFlash 1 Alternates with 2
4S: SingleFlash 1 & 2 Simultaneous
4C: SingleFlash 3 cycles of 4A and 3 cycles of 4S
5: SteadyFlash 1 & 2 Steady / 3 & 4 SingleFlash / SIM
6: Steady 1, 2, 3 & 4 Steady
Steady: Full power 1 second, then slow ramp to 40

Servicing your Lightbar

Use the illustrations shown if you need to gain access to the lightbar to service or replace parts.

Without Alley Light

With Alley Light

Endcap: Lighthead and Gasket

Place the endcap gasket onto the endcap matching up all the tabs and holes.