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 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 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. Installers 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.

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 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, 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!
**Important!** The lightbar should be a minimum of 16" from any radio antennas!

**Mirror Mounting:**
This light is available with a 1" bolt for mounting to a DOT mirror. The mirror bracket and mounting hardware are not supplied. A West Coast bracket is shown here for example.

**Important!** It is the responsibility of the installation technician to make sure that the installation and operation of this product will not interfere with or compromise the operation or efficiency of any vehicle equipment!

**Connection and Operation:**
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 be FUSED at the battery to carry that load. DO NOT USE CIRCUIT BREAKERS WITH THIS PRODUCT!

**VI POD** - This light can not be run without being connected to an external flasher. If allowed to run in steady burn, the lightheads will be damaged. The light is designed to run in either COLOR 1 or COLOR 2. It is recommended that you use the Whelen® VI POD flasher (or equivalent).

**Warning:** Do not run both colors at once. The lightheads will be damaged.

This lightbar is activated by a 4 conductor cable which must be connected to a flasher for operation.

**Flasher Operation:**

To Negative battery

To Positive battery

+12 volts activates Color 1

+12 volts activates Color 2

+12 volts controls Scan-Lock (see copy)

Synchronizes flashers (see copy)

Function terminals on side of flasher:

- **Color 1 & Color 2:** Apply +12VDC to either color 1 or 2 to activate the desired color in the split lightheads.
- **Scan-Lock™:** Selects flash patterns for lightheads (See Scan-Lock™).
- **SYNC:** Connect to the SYNC wire of another flasher to synchronize the flash patterns between 4 POD Lights.

**Power/Ground terminals on top of flasher:**

- **POD A-B Ground:** Connects to POD cable providing ground for PODs.
- **POD A-B Power:** Connects to POD cable providing power to PODs.

**Flasher Specifications:**

**Input Voltage:** .......................... 12.8 VDC +/- 20%
**Output Voltage:** .......................... Input voltage minus 0.2 VDC
**Output Current:** .......................... 10 AMPS Max
**Input Current:** .......................... 40 AMPS Max
**Control 1:** .......................... (Color 1)
**Control 2:** .......................... (Color 2)

**Input Voltage:** .......................... 12.8 VDC +/- 20%

**Output Current:** .......................... 10 AMPS Max

**Output Voltage:** .......................... Input voltage minus 0.2 VDC

**Input Current:** .......................... 40 AMPS Max

**Control 1:** .......................... (Color 1)

**Control 2:** .......................... (Color 2)

**Sync-Lock™ / Flash Pattern Selection:**

To change the flash pattern, the light must be powered up.

**To Change Patterns:** To advance to the next pattern apply +12VDC to the Scan-Lock™ wire for less than 1 second and release. To cycle back to the previous pattern apply +12VDC to the Scan-Lock™ wire for more than 1 second and release.

**To Change the Default Pattern:** When the desired pattern is displayed, allow it to run for more than 5 seconds. The light will now display this pattern when initially activated.

**To Restore the factory Default Pattern:** With the light turned off, apply power to the Scan-Lock™ wire. With power applied to the Scan-Lock™ wire, turn the light on. Allow the unit to run for 5 seconds before removing power from the Scan-Lock™ wire.

A Normally Open momentary switch should be used for control.

**Flash Patterns:**

1. SignalAlert™ ALT
2. SignalAlert™ SIM
3. SignalAlert™ ALT-SIM
4. CometFlash® ALT
5. CometFlash® SIM
6. CometFlash® ALT-SIM
7. DoubleFlash 75 ALT
8. DoubleFlash 75 SIM
9. DoubleFlash 75 ALT-SIM
10. SingleFlash 75 ALT
11. SingleFlash 75 SIM
12. SingleFlash 75 ALT-SIM
13. LongBurst™ ALT
14. LongBurst™ SIM
15. LongBurst™ ALT-SIM
16. SingleFlash 60 ALT
17. SingleFlash 60 SIM
18. SingleFlash 60 ALT-SIM
19. SingleFlash 90 ALT
20. SingleFlash 90 SIM
21. SingleFlash 90 ALT-SIM
22. SingleFlash 120 ALT
23. SingleFlash 120 SIM
24. SingleFlash 120 ALT-SIM
25. SingleFlash 240 ALT
26. SingleFlash 240 SIM
27. SingleFlash 240 ALT-SIM
28. MicroBurst™ ALT
29. MicroBurst™ SIM
30. MicroBurst™ ALT-SIM
31. ActionFlash™ ALT
32. ActionFlash™ SIM
33. PingPong™ ALT
34. PingPong™ SIM
35. FlimFlam / ALT
36. FlimFlam / SIM
37. ModuFlash / ALT
38. ModuFlash / SIM
39. ActionScan / SIM
40. ActionScan / ALT

**Sync / Light Synchronization:**

To Sync two or more flashers, configure both flashers to display the same "ALT" pattern. Turn power off and connect the SYNC ports from each flasher together. When activated, the patterns from each flasher will be synchronized. For a flasher to alternate patterns with another flasher, advance the pattern of either flasher to "SIM" of the current pattern.

**Important!** Before returning the vehicle to active service, visually confirm the proper operation of this product, as well as all vehicle components/equipment.

**Important Warning!**

CAUTION! DO NOT LOOK DIRECTLY AT THESE LED'S WHILE THEY ARE ON. MOMENTARY BLINDNESS AND/OR EYE DAMAGE COULD RESULT!