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. 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.

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 Lead which is known to the State of California to cause cancer and 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 that 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 integral 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!
Installation:

Preparing the spoiler:
1. Remove the rear spoiler from the vehicle. 5 bolts hold the spoiler on (Fig. 1).
2. Drill two 7/16" wire holes on each side of the spoilers brake light (Fig. 2) and two holes opposite these holes on the inside of the spoiler housing and run both wire harnesses through as shown in Figure 2.
3. Drill two more 7/16" holes (Fig. 2) in the center of the spoiler to run the passenger side lighthead harness through to the flasher.
4. There is a circular mark on the spoiler for a cable cut-out. Use this mark to locate the control cable hole (Fig. 2). Drill a 7/16" control cable hole into the spoiler.
5. Mount the flasher to the spoiler as shown (Fig. 2). Mount the flasher as far in from the edge as possible to keep it from hitting the rear window.
6. Feed the 2 lightbar harness cables into the holes you drilled near the brake light and up to the flasher. Also feed the control cable into the hole you drilled and run it out through the existing hole as shown in Figure 2. NOTE: You must install the lightbar harness cables onto the correct sides of the lightbar. The “driver side” cable will be the longer of the two cables. Also, be sure the connectors coming from the flasher plug into the correct harness.
7. Attach the Deutsch connectors to the lighthead wiring harness and control cable as shown in the wiring diagram. Plug the cables into the flasher and dress connectors approximately as shown.
8. Drill a 7/16" hole into the vehicle next to the existing vehicle brake light cable hole.
9. Run the control cable out through the hole you drilled in step 8 and remount the spoiler (Fig. 3).
10. Connect to power to check the lightheads for proper operation.

Mounting the housings:
1. Hold the housing onto the mounting surface in its exact mounting location and trace the top and bottom outline onto the vehicle with a grease pencil (Fig. 4).
   IMPORTANT: There is a driver and passenger side housing. Be sure to mount them on the correct side. The passenger side housing has a cut-out on the bottom to allow the rear wiper to clear the housing.
2. Using the isopropyl alcohol (70%), clean the vehicle where it will come in contact with the mounting tape. Within the outlines you traced, prime the areas that come in contact the mounting tape with the supplied 3M Keel Primer (Fig. 4).
3. Plug the lighthead cable into the lightheads following the wiring diagram.
4. Place the housing back in its exact mounting position. The backing on the mounting tape has leaders. Be sure the leaders are protruding from under the housing so that you can pull them off once the housing is in place.
5. Hold the housing firmly in place in the exact mounting location while you pull the backing off of the tape being very careful not to move the housing.
6. With the backing removed, press the housing firmly against the mounting surface where tape is, to secure it. WARNING! The adhesive used in this procedure is fully bonded after 72 hours @ 70°F (21°C). During this period, do not expose the lights to any unnecessary force, such as a high-pressure car wash.

Operation:

- WHITE (Scan-Lock™) Activate the RED wire to turn on the lightbar (lightbar will be flashing) and choose a pattern. Or you may activate the function you wish to change and choose a pattern.
- To cycle forward through patterns apply power to the WHT wire for less than 1 second and release.
- To cycle backward through patterns apply power to the WHT wire for over 1 second and release. When the desired pattern is displayed, allow it to run for more than 5 seconds. The lighthead will now display this pattern when active.

- To reset to the factory default pattern Turn off power. Apply power to the WHT wire while turning power back on.

- Function Wires:
  - RED (model OE13UR8) (Flashes): Apply power to the RED wire activates all lightheads in flash mode.
  - RED (model OE13URST) (Power): Connects to the positive terminal of the battery and provides power to the lighthead.
  - ORANGE (model OE13UR8) (Low Power): Apply voltage to the ORANGE wire to make the lighthead step down to low power and remove voltage for normal operation.

ORANGE (model OE13UR8T) (End Flashers) Apply power to the orange wire engages the end flashers.

- BLUE (Sequence to Left): With the unit activated, applying +12V DC to the BLUE wire causes lightheads to flash, starting at RIGHT and flashing toward LEFT.
- GREEN (Sequence to Right): With the unit activated, applying +12V DC to the GREEN wire causes lightheads to flash, starting at LEFT and flashing toward RIGHT.
- BLUE and GREEN (Split TA): Activating both the GREEN and BLUE wires at the same time will give you a split TA pattern.

Caution: Permanent mounting of this product will require drilling. It is absolutely necessary to make sure that no other vehicle components could be damaged by this process. Check both sides of the mounting surface before starting. If damage is likely, select a different mounting location.

IMPORTANT! Before returning the vehicle to active service, visually confirm the proper operation of this product, as well as all vehicle components/ equipment.
FLASH PATTERNS
SignalAlert™ 75 / Default
CometFlash® 75
Single Flash 375
Single Flash 150
Single Flash 75
ActionFlash™
ActionScan™
Seq. On Solid
Seq. ON - Seq. Off
1 Lamp Triple Flash
2 Lamp Triple Flash

TA SEQUENCES
RIGHT SIDE
ASSEMBLY SHOWN

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!

NOTE: Activating both the BLUE and GREEN wires simultaneously will give you a split TA pattern.

NOTE: All fuses and switches are customer supplied.

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

IMPORTANT WARNING!