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 safety 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 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 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 safely before entering an intersection, driving against traffic, responding at a high rate of speed, or walking on or around traffic lanes. Earn the full 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.

- 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 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!

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Form No.14828 (111214)
IMPORTANT! The lightbar should be a minimum of 16" from any radio antennas!

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

2014 - 15 Ford Explorer: This lightbar will mount on both the driver and passenger side, on the underside of the rear spoiler.

Preparing the spoiler:

1. Each (half) lightbar will fit between the outer end of the spoiler and the curved indentation towards the inside. Figure 1 shows where the lightbar will sit on the vehicle. Figure 2 is a closer view showing where the lightbar sits toward the inside of the vehicle.

2. Mount the rubber trim to each mounting bracket (Fig. 3). Position the passenger side of the lightbar in the exact mounting location with the rubber trim making good contact with the window. Clearly mark the two mounting hole locations onto the spoiler and remove the bracket. Repeat for the driver side of the vehicle.

3. Drill pilot holes for the four lightbar mounting holes you marked off in step 2 using a 7/64 drill bit.

4. Drill a 7/16 wire access hole in the location indicated in figure 1 on both sides of the vehicle.

5. Following factory guidelines remove the spoiler from the vehicle. Install both lightbar wire harnesses into the spoiler following the factory wire harness. Make sure the end of the lightbar harness with the connectors extends out of the wire hole you drilled just enough to connect to the lightheads.

6. Plug the wire harness into the lightbar. Before mounting the lightbar use the supplied alcohol pad to clean the area that the adhesive pad on the mounting bracket will adhere to.

7. Peel the paper backing off the adhesive pad on the mounting bracket and mount the lightbar to the spoiler with the supplied 6 X 1/2 Phillips Pan Head Sheet Metal Screws. Repeat for the opposite side of the vehicle.

8. Reinstall the spoiler to the vehicle following factory specifications.

9. Extend the wires to power and make all electrical connections using the information in the Wiring section on the next page. It is suggested that you follow the vehicle’s factory wiring whenever possible while extending the wires to power.
**Wiring:**

BLACK - Ground - Extend the GROUND wire to Chassis Ground.

RED - Positive (+) - Extend the Positive wire to +VBAT via an SP/ST switch. Fuse @ 5 AMPS.

WHITE - SYNC - Connect the WHITE wire from each side of the lightbar together to enable SYNC. You can also connect the SYNC wire to other SYNC capable lights in the vehicle.

**Operation:**

The lightheads come programmed with the default flash pattern (SignalAlert™ 75). If you wish to change the flash pattern you must program each lighthead separately. The ScanLock (WHT/VIO) wire can only be accessed separately in each lighthead.

Scan-Lock™ (WHT/VIO) - Each lighthead has a VIO ScanLock wire for pattern selection. **NOTE:** In order to change flash patterns, the light must be on.

To advance to the next flash pattern apply +VDC to the WHT/VIO wire for less than 1 second and release.

To cycle back to the previous pattern apply +VDC to the WHT/VIO wire for more than 1 second and release.

To reset the default pattern, when a pattern is displayed, allow it to run for more than 5 seconds and the light will display this pattern when initially activated.

**SYNC:** To SYNC 2 sides of the lightbar, configure the lightheads on both sides to display the same Phase 1 (Simultaneous) pattern. Turn power off and connect the WHITE wire from each side together. Activate the lightbar and their patterns will be synchronized. To configure both sides to alternate their patterns, advance either sides lightheads to Phase 2 (Alternating) of the current pattern.

**NOTE:** ALL SWITCHES AND FUSES ARE CUSTOMER SUPPLIED

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**Flash Patterns**

<table>
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<tr>
<th>(SYNC Capable)</th>
<th>9.</th>
<th>ComAlert™ 75</th>
<th>PH 1</th>
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**Important Warning!**

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