

# WHELEN<sup>®</sup>

ENGINEERING COMPANY INC.

51 Winthrop Road  
Chester, Connecticut 06412-0684  
Phone: (860) 526-9504  
Fax: (860) 526-4078  
Internet: [www.whelen.com](http://www.whelen.com)  
Sales e-mail: [autosale@whelen.com](mailto:autosale@whelen.com)  
Canadian Sales e-mail: [autocan@whelen.com](mailto:autocan@whelen.com)  
Customer Service e-mail: [custserv@whelen.com](mailto:custserv@whelen.com)

## Installation Guide: Edge<sup>®</sup> Ultra and LFL lightbar Personality Module

### 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.**
- **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 any 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<sup>®</sup>, 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.**
- **If this product uses a remote device to activate or control this product, make sure that this control is located in an area that allows both the vehicle and the control 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](http://www.whelen.com/warranty)**

**WARNING!** The strobe light power supply is a high voltage device. Do not remove the strobe tubes or dismantle the strobe lightheads in the system while the unit is in operation. Wait 10 minutes after turning off power Before starting any work or trouble shooting on the system.

**Note:** As shown in figure 3, your lightbar will have either the old or new version I.O. card. Although an LFL board is shown here, you can identify an old or new ULTRA board the same way. The different power cord plug. Installation is the same for both.

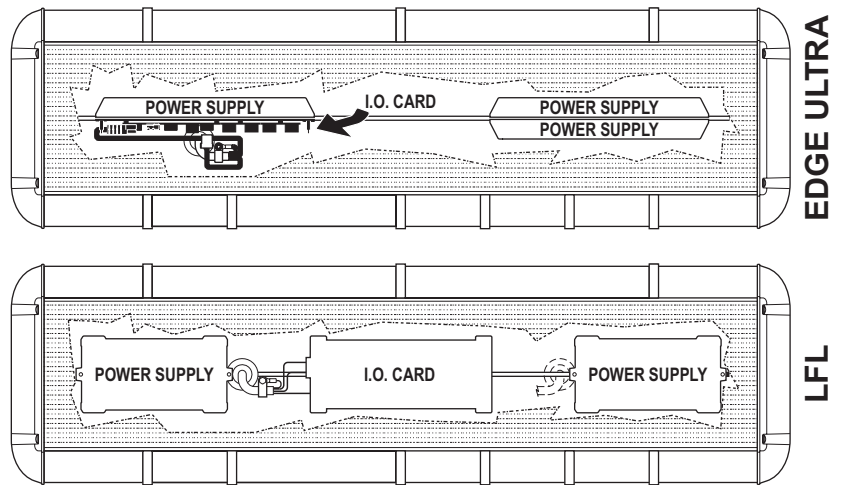
**Installing a Personality Module:  
In a lightbar that doesn't have a module.**

1. Disassemble the lightbar to access the interior and find the I.O. card (Fig. 1).
2. Disconnect the power cord from the I.O. card (Fig. 3).
3. Plug the personality module into the I.O. card then reconnect power and the installation is finished (Fig. 3).
4. Reassemble the lightbar and then verify that the lightbar is functioning correctly using the sheet provided with the personality module.

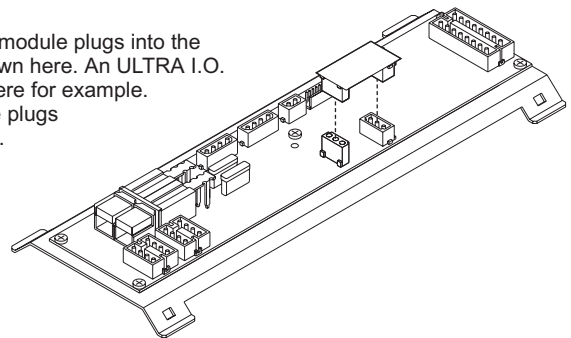
**Installing a Personality Module:  
In a lightbar that already has a module.**

1. After turning off power, disassemble the lightbar to access the interior and find the I.O. card (Fig. 1).
2. Disconnect the power cord from the I.O. card (Fig. 3) and remove the old module.
3. Now reconnect power (with no module present) and activate the strobe lights (any position), then turn power off again. This will clear the memory so the lightbar accepts the programming of the new module.
4. With power off, unplug the power cord, install the new personality module then reconnect power and the installation is finished.
5. Reassemble the lightbar and then verify that the lightbar is functioning correctly using the sheet provided with the personality module.

**Fig. 1** The I.O. Card will be found in 1 of these 2 locations in your lightbar. This cut-away view shows the location of the I.O. card inside.



**Fig. 2** The personality module plugs into the I.O. card as shown here. An ULTRA I.O. card is shown here for example. The LFL module plugs in the same way.



**Fig. 3** UNPLUG POWER OLD VERSION I.O. CARD (LFL SHOWN)

