

WHELEN[®]

ENGINEERING COMPANY INC.

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

Installation Guide: Highway Lightbar System Programmable Motor Option

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[®], 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

Operation of the lift motor:

This switch is programmed at the factory to raise or lower the lightbars on your "Highway Lightbar System" with a running time of 12 seconds. The switch is also programmable to between 5 and 20 seconds of running time. You may need this feature since system voltages vary and this will affect the accuracy of the operation. Most systems are 12 volts. If your system is a higher voltage, you will need less lift and lowering time, for a lower voltage system you will need more time. You can tell whether you need to adjust the programming if the bars don't raise or lower completely when you use the factory set time.

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!

Note: When power is first applied to the timer unit, it assumes the bars are in the down position. If the bar is not down, manually lower it to the down position.

WARNING! Do not raise lightbars with the vehicle moving or drive vehicle with bars raised.

For manual control: Press the UP or DOWN button for more than 1 second and hold it down, the bars will travel in that direction until you release the button.

To raise or lower the bars automatically: Press either UP or DOWN on the control switch for about 1/10 of a second, but less than 1 second.

To stop the bar in between a fully raised or lowered position: Pressing either up or down while the bar is in motion will stop the bar. You may then press either up or down to restart the bar in either direction, which will automatically engage for the correct amount of time to seat the bar in either the up or down position (no matter where you stopped the bar).

WARNING! If you keep the button depressed when the bar reaches either the up or down position, the motors clutch will slip (making a loud clicking noise). It is recommended that the clutch not be allowed to slip for an extended period of time.

Programming:

To enter the programming mode, the bar must be in the down position (status indicator off)

1. Press the DOWN button 3 short times, then a 4th time, this time holding the button for more than one second. At this time the status indicator will begin to flash rapidly.
2. Next press the UP button to raise the bar to the desired position. The status indicator will now flash once a second.
3. When the bar reaches the desired position release the button, the time is stored for future use and will be saved even if power is removed from the unit. If you release the button after less than 5 seconds, the procedure will be ignored. If you release the button after more than 24 seconds, 24 seconds will be recorded.

