

# WHELEN<sup>®</sup>

ENGINEERING COMPANY INC.

Route 145, Winthrop Road,  
Chester, Connecticut 06412

Phone: (860) 526-9504

Fax: (860) 525-4078

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 BL5150C Taillight Flasher

### Automotive: Serial Communication

#### 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 product is mounted with 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 owners 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 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.**
- **If this product contains strobe light(s), halogen light(s) or high-intensity LED's, 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. Lens' 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!**

## Selecting a mounting location...

The logical choice for a mounting area would be one where access to the vehicle's taillight wiring harness can be easily achieved. However, due to the wide variety of vehicles onto which the BL5150 could be installed, this is not always possible. The following guidelines will help the installer select an acceptable alternative:

- The BL5150 should be mounted on a metal surface to aid heat dissipation. Be sure that this surface is not one that either generates or is exposed to excessive heat during normal operation of the vehicle.
- Do not select a location where the BL5150 will be exposed to potential damage from any unsecured or loose equipment in the vehicle.
- If possible, try to situate the BL5150 as close to the taillights as possible.
- When routing the BL5150's wires, it is important to choose a path that will keep these wires away from excessive heat and from any vehicle equipment that could compromise the integrity of the wires (ex. trunk lids, door jams, etc.)

**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 the load!**

### UNIT SPECIFICATIONS.

V BATTERY	13.5 VDC ±20%
P OUT (AUX)	100 WATTS (MAX)
I OUT (AUX) @ 13.5VDC	8 AMPS (TYP.)
I OUT (AUX) SURGE	75 AMPS (MAX)
P OUT (LEFT/RIGHT)	50 WATTS (MAX)
I OUT (LEFT/RIGHT) @ 13.5VDC	4 AMPS (TYP.)
I OUT (LEFT/RIGHT) SURGE	35 AMPS (MAX)
COMMUNICATIONS	RS-485
BAUD RATE	9600 BPS
FLASHRATE (PER OUTLET)	70 SFPM ±5%
	140 SFPM ±5%
	60 DFPM ±5%
	60DFPM/70SFPM ±5%
	60DFPM/140SFPM ±5%
	70SFPM/140SFPM ±5%
	ON STEADY
FLASH PATTERN (ALTERNATING)	LEFT/RIGHT/HI STOP BACKUP/AUX
DUTY CYCLE	50% ±5%
SFPM = <b>S</b> ingle <b>F</b> lash <b>P</b> er <b>M</b> inute	
DFPM = <b>D</b> ouble <b>F</b> lash <b>P</b> er <b>M</b> inute	

**WARNING! When extending the communication wires (BLUE & GREY), similar "twisted pair" wires MUST be used!**

Refer to your MPC01 operating manual for information on how to operate the BL5150 taillight flasher.

