

# 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: 200 Series LED Lighthouse

### 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.

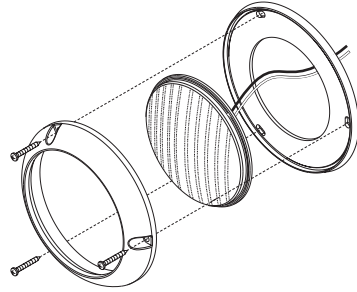
- **Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures.**
- **If mounting this product requires drilling holes, the installer MUST be sure that no vehicle components or other vital parts could be damaged by the drilling 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)**

### Flange Mount:

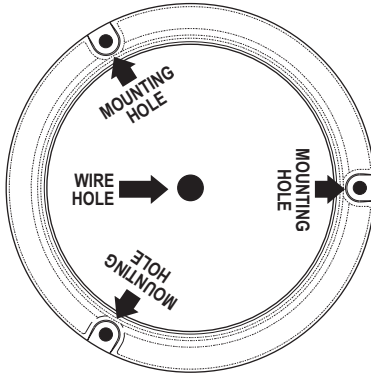
Make sure the lighthead will not interfere with existing equipment and be aware of any items on the opposite side of the mounting surface.

1. Position the flange against the proposed mounting location and then, (using a scribe or similar tool), mark off the 3 mounting holes. Also mark off an area in the center where the 1" wire passage hole will be drilled.



**IMPORTANT:** Always check all measurements before drilling.

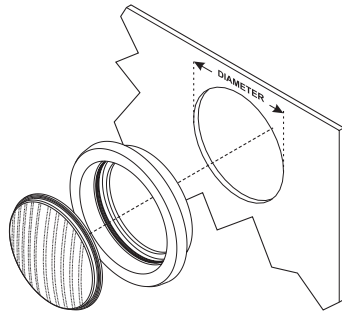
2. Using a drill bit sized for a #8 sheet metal screw (and the thickness of the mounting surface) drill the 3 mounting holes.
3. Drill a 1" dia. wire passage hole in the area marked. Be sure to install a grommet (customer supplied) into this hole. Using appropriately sized wires (minimum 18 AWG), extend the lighthead wires to their designations. Fuse the +12VDC connections at 3 Amps and test the lighthead, then secure it to the vehicle with the supplied mounting hardware.



### Grommet Mount:

Make sure the lighthead will not interfere with existing equipment and be aware of any items on the opposite side of the mounting surface.

1. Mark the center of the mounting location onto the mounting surface. Scribe a circle onto the mounting surface using this point as the center. Refer to the grommet mounting hole chart for the proper diameter.



### GROMMET MOUNTING / HOLE CHART

Mounting Surface Thickness	Mounting Hole Diameter
.0625" (1/16")	4.47"
.125" (1/8")	4.50"
.1875" (3/16")	4.50"
.25" (1/4")	4.53"
.375" (3/8")	4.56"

2. Cut the grommet hole out and deburr it.
3. Using appropriately sized wires (Minimum 18 AWG), extend the lighthead wires to their designations. Fuse the +12VDC connections at 3 Amps and test the lighthead before securing it to the vehicle.
4. Insert the lighthead into the grommet then secure it to the vehicle by snapping the grommet into the mounting hole as shown above.

### Scan-Lock™ Operation (Brake/Tail/Turn Only):

**To cycle through all patterns:** Apply Positive (+) voltage to the WHITE-VIOLET wire for less than 1 second and release to cycle forward. Apply Positive (+) voltage for more than 1 second and release to cycle backward.

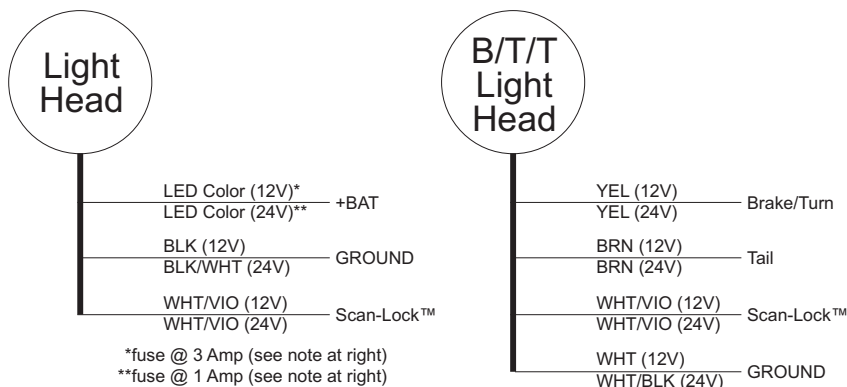
**To set a pattern as default:** When the desired pattern is displayed, allow it to run for more than 5 seconds. The beacon will now display this pattern when activated.

**To reset to the factory default pattern:** Turn off power. Now, while applying Positive (+) voltage to the WHITE-VIOLET wire, turn power back on.

### Available Patterns:

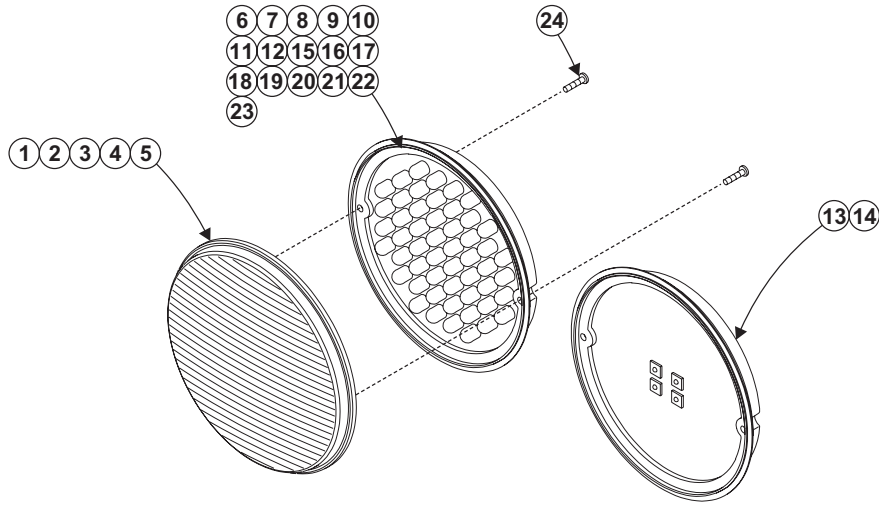
- Steady
- SignalAlert™ Steady

## Wiring Diagrams



This product draws significantly less current than a standard incandescent automotive bulb. If your flasher does not operate properly, it may be necessary to replace your existing flasher module with a Whelen 3TERM flasher.

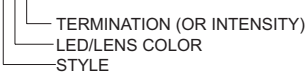
**NOTE: All customer supplied wires must be sized to supply at least 125% of the maximum operating current and be sized at the battery to carry the load.**



QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION	
																	*		01-06837842R0	200 SERIES LED BRAKE/TAILO/TURN (MIN) - RED	
																	*		01-06837844A0	200 SERIES LED TURN - AMBER	
																	*		01-06837845A0	200 SERIES LED WIDE-ANGLE - AMBER	
																	*		01-06837845B0	200 SERIES LED WIDE-ANGLE - BLUE	
																*			01-06837845C0	200 SERIES LED WIDE-ANGLE - WHITE	
																*			01-06837845G0	200 SERIES LED WIDE-ANGLE - GREEN	
															*				01-06837845R0	200 SERIES LED WIDE-ANGLE - RED	
															*				01-06837848A0	200 SERIES LED CLEARANCE - AMBER	
															*				01-06837848R0	200 SERIES LED CLEARANCE - RED	
															*				01-06837849C2	200 SERIES LED COMPARTMENT (24 LED) - WHITE	
															*				01-06837849C4	200 SERIES LED COMPARTMENT (48 LED) - WHITE	
															*				01-06837849C8	200 SERIES LED COMPARTMENT (84 LED) - WHITE	
															*				01-0683784BR0	200 SERIES LED BRAKE/TAILO/TURN (MAX) - RED	
															*				01-0683784ER0	200 SERIES LED (24V) BRAKE/TAILO/TURN (MAX) - RED	
															*				01-0683784JR0	200 SERIES LED (24V) BRAKE/TAILO/TURN (MIN) - RED	
															*				01-0683784KA0	200 SERIES LED (24V) WIDE-ANGLE - AMBER	
															*				01-0683784KR0	200 SERIES LED (24V) WIDE-ANGLE - RED	
															*				01-0683784LA0	200 SERIES LED (24V) TURN - RED	
1	-	1	-	-	-	-	-	-	-	1	-	-	-	-	1	1	-	1	68-1963447-1S	LENS, OPTIC - AMBER with SEAL	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	2	68-1963447-2S	LENS, OPTIC - BLUE with SEAL	
-	-	-	-	-	-	1	1	1	-	-	-	-	1	-	-	-	-	3	68-1963447-3S	LENS, OPTIC - CLEAR with SEAL	
-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	4	68-1963447-4S	LENS, OPTIC - GREEN with SEAL	
-	1	-	1	1	1	-	-	-	1	-	1	-	-	-	-	-	-	1	5	68-1963447-5S	LENS, OPTIC - RED with SEAL
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6	01-0283771-52	LED BRAKE/TAILO/TURN ASS'Y (MIN) - RED
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	01-0283771-14	LED TURN ASS'Y - AMBER	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	8	01-0283771-15	LED WIDE-ANGLE ASS'Y - AMBER	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	9	01-0283771-25	LED WIDE-ANGLE ASS'Y - BLUE	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	10	01-0283771-35	LED WIDE-ANGLE ASS'Y - WHITE	
-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	11	01-0283771-45	LED WIDE-ANGLE ASS'Y - GREEN	
-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	12	01-0283771-55	LED WIDE-ANGLE ASS'Y - RED	
-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	13	01-0263314-13	LED CLEARANCE ASS'Y - AMBER	
-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	14	01-0263314-53	LED CLEARANCE ASS'Y - RED	
-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	15	01-0283771-32	LED COMPARTMENT ASS'Y (24 LED) - WHITE	
-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	16	01-0283771-34	LED COMPARTMENT ASS'Y (48 LED) - WHITE	
-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	17	01-0283771-38	LED COMPARTMENT ASS'Y (84 LED) - WHITE	
-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	18	01-0283771-5B	LED B/T/T ASS'Y (MAX) - RED	
-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	19	01-0283771-5E	LED (24V) B/T/T ASS'Y (MAX) - RED	
-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	01-0283771-5J	LED (24V) B/T/T ASS'Y (MIN) - RED	
-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	01-0283771-1K	LED (24V) WIDE-ANGLE - AMBER	
-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	01-0283771-5K	LED (24V) WIDE-ANGLE - RED	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	01-0283771-1L	LED (24V) TURN - AMBER	
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	24	15-045410-060	SCREW, #4 X 3/8" PPH PLASTI-LOC	

**PART NUMBER KEY:**

01-0683784



**STYLE**

- 2 = B/T/T (MIN)
- 4 = TURN
- 5 = WIDE/ANGLE
- 8 = CLEARANCE
- 9 = COMPARTMENT
- B = B/T/T (MAX)
- E = 24V B/T/T (MAX)
- J = 24V B/T/T (MIN)
- K = 24V WIDE-ANGLE
- L = 24V TURN

**LED / LENS COLOR**

- A = AMBER/AMBER
- B = BLUE/BLUE
- C = WHITE/CLEAR
- G = GREEN/GREEN
- R = RED/RED
- 1 = AMBER/CLEAR
- 2 = BLUE/CLEAR
- 4 = GREEN/CLEAR
- 5 = RED/CLEAR

**TERMINATION**

- 0 = NONE

**INTENSITY**

- (Compartment Only)
- 2 = 24 LEDs LOW
- 4 = 48 LEDs MED
- 8 = 84 LEDs HIGH