

# 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: [canadiansales@whelen.com](mailto:canadiansales@whelen.com)  
Customer Service e-mail: [custserv@whelen.com](mailto:custserv@whelen.com)

## Installation Guide: Inner Edge<sup>®</sup> Traffic Advisor<sup>™</sup> Series Rear Deck Interior Lightbar 2011 Dodge Charger

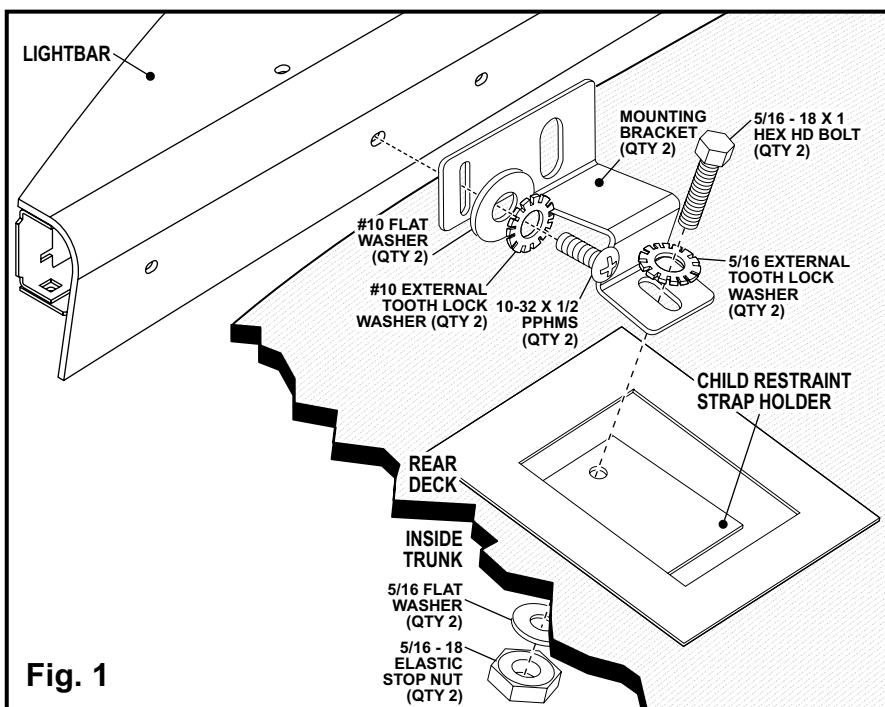
### Safety First

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.**
- **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 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. 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!**

**For warranty information regarding this product, visit [www.whelen.com/warranty](http://www.whelen.com/warranty)**

**IMPORTANT!** Do not install this product or route any wires in the air bag deployment zone of your vehicle. Equipment mounted or located in air bag deployment zones 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 to learn the air bag deployment zones for the vehicle. The User/Installer assumes full responsibility to determine proper mounting location, based on providing ultimate safety to all passengers inside the vehicle.



**Fig. 1**

**Installation:**

**IMPORTANT!** The lightbar should be located a minimum of 16" from any radio antennas!

1. On the rear deck, locate the passenger-side outboard cap covering the child restraint strap holder. Remove this cover to access the tether strap holder.
2. For the next step you must remove the plastic panel located inside the trunk to access the bottom side of the child restraint brackets. This panel is held on with christmas tree plugs and magnets.
3. Locate the passenger side lightbar mounting bracket included with the mounting kit. Secure the mounting bracket onto the strap holder using the hardware shown (Fig. 1). Tighten the hardware firmly.
4. Repeat steps 1 thru 3 for the Driver-side mounting bracket then replace the plastic panel you removed in step 2.
5. Position the lightbar onto the rear deck. Secure the lightbar to the mounting brackets using the hardware shown. Do not tighten this hardware yet.

Make sure that the rubber window seal on the lightbar housing fully engages the rear window. To ensure this, hold the lightbar housing firmly against the glass while tightening the hardware securing lightbar to mounting bracket.

While still maintaining pressure on the lightbar, tighten the hardware used to secure lightbar mounting bracket to the child restraint holder.

The lightbar should maintain the seal against the windshield when the pressure is released. If not, loosen the appropriate hardware and repeat this tightening procedure until properly mounted.

6. Route the input cable to your control head (refer to the installation manual included with your control head for important mounting and wiring information).

**IMPORTANT!** When routing the lightbar cable, it is left to the installation technician's discretion to select a path for these cables that will both protect the cables from possible damage and not interfere with the operation of any other vehicle components or equipment. Refer to the instructions included with your switches for switch wiring information.

**Wiring and Operation:**

**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!**

**BLACK - Ground**

Extend and connect the BLK wire to the ground terminal of the vehicle battery.

**RED - Main Power**

Route the RED wire to an unused, ignition-controlled circuit fused @ 10 Amps. Do not connect to this circuit yet.

**NOTE:** When this product is wired as outlined here, the lightbar will not function until the ignition switch is in the ON, RUN or ACC position.

**WHT-ORG - Scan-Lock™ Flash patterns**

When the TA feature is active, this wire will select TA patterns; when the end flasher feature is active, this wire will select the end flasher patterns. Do not use Scan-Lock while both features are simultaneously active.

**TO CYCLE THROUGH ALL PATTERNS:** Apply +12 volts to the WHT/ORG wire for less than 1 second and release to cycle forward. Apply +12 volts 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 TA will now display this pattern when active.

**TO RESET TO THE FACTORY DEFAULT PATTERN:** Turn off power, apply +12 volts to the WHT/ORG wire, then turn power on.

A Normally Open Momentary Switch is best for this circuit. Fuse @1A.

**Scan-Lock End Flasher Patterns:**

- |                    |                   |
|--------------------|-------------------|
| 1. SignalAlert™    | 4. SingleFlash 75 |
| 2. CometFlash®     | 5. ActionFlash™   |
| 3. SingleFlash 375 | 6. ActionScan™    |

**Traffic Advisor Patterns:**

- |                      |                        |
|----------------------|------------------------|
| 1. Sequence to Solid | 3. 1-Lamp TripleFlash™ |
| 2. Seq. On/Seq. Off  | 4. 2-Lamp TripleFlash  |

**WHT/GRN - Low Power Operation**

For low power operation apply +12VDC to the WHT/GRN wire. The unit will continue to operate in Low Power mode until this voltage is removed. A SP/ST switch is best suited for this circuit. Fuse this wire @1A.

**BROWN - End Flashers**

Applying +12VDC to this wire activates the end flashers. A SP/ST switch is best suited for this circuit. Fuse this wire @1A.

**BLUE - TA Flash**

When +12VDC is applied to this wire, the Traffic Advisor™ lightbar function becomes active. A SP/ST switch is best suited for this circuit. Fuse this wire @1A.

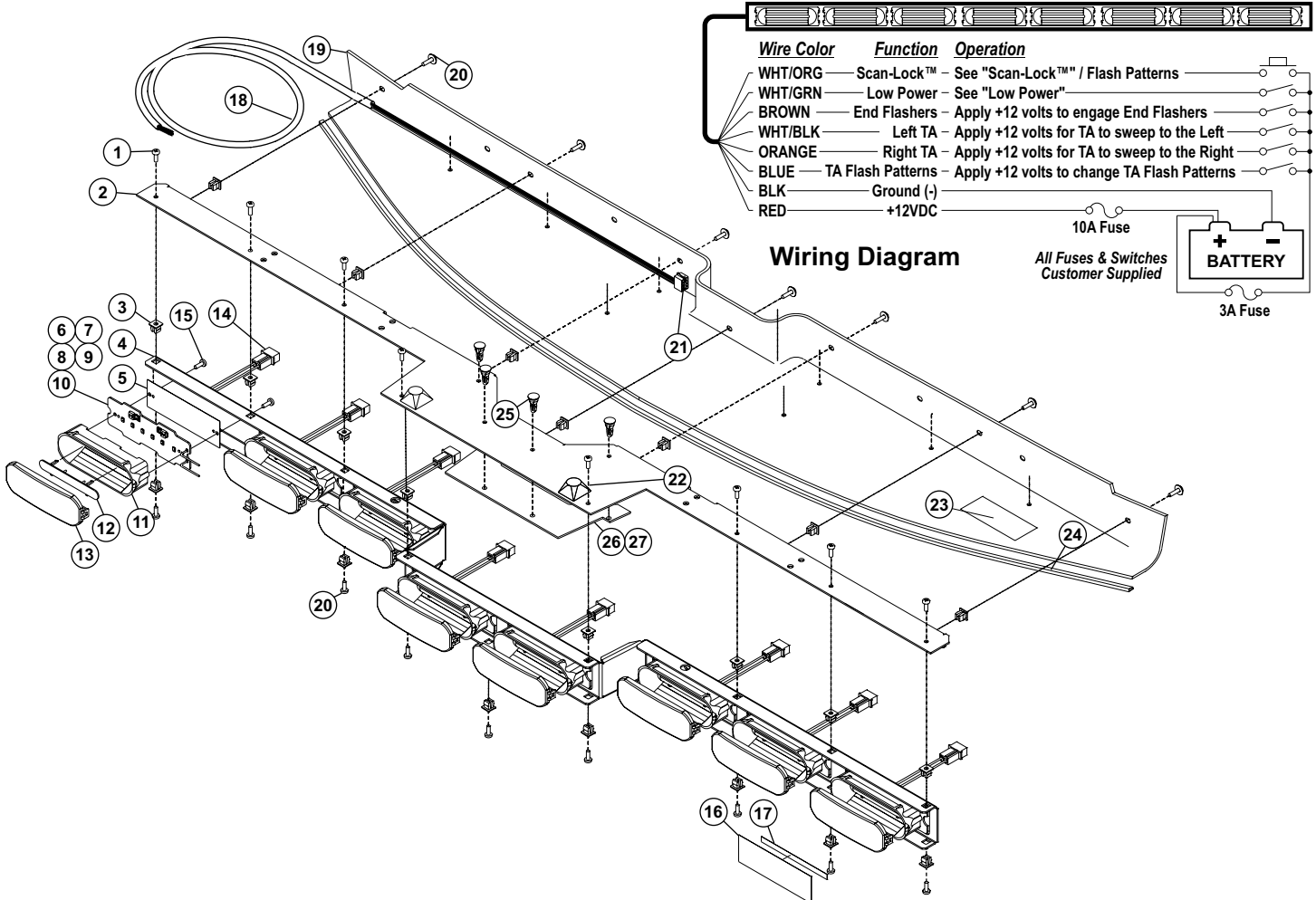
**WHITE/BLACK - Left**

When +12VDC is applied to this wire, the lights sweep from right to left. A SP/ST switch is best suited for this circuit. Fuse this wire @1A.

**ORANGE - Right**

When +12VDC is applied to this wire, the lights sweep from left to right. A SP/ST switch is best suited for this circuit. Fuse this wire @1A.

**NOTE:** If you apply power to both the WHT/BLK and ORG wires simultaneously, you will get a split pattern. Both sides will start at the center and sweep outward.



QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
		*		01-0686994-01	INNER EDGE LINEAR 6-LT, 2011 CHARGER
		*		01-0686994-02	INNER EDGE LINEAR 8-LT, 2011 CHARGER
		*		01-0686994-03	INNER EDGE LINEAR 6-LT TA, END FL '11 CHARGER
8	8	8	1	15-06521B-060	SCREW, #6 X 3/8 PPH PLASTI-LOK SS BLACK OX
1	1	1	2	07-784399-023	PLATE, MOUNTING
24	24	24	3	13-062C40-16J	SCREW GROMMET, #6/#8 FASTEX
1	1	1	4	07-286896-023	BRACKET, LIGHTHEAD
8	8	6	5	56-043592-000	THERMAL PAD
A/R	A/R	A/R	6	02-016D248-A0	ASSY, PCB REAR DECK AVENGER 6 LED AMB
A/R	A/R	A/R	7	02-016D248-20	ASSY, PCB REAR DECK AVENGER 6 LED BLU
A/R	A/R	A/R	8	02-016D248-30	ASSY, PCB REAR DECK AVENGER 6 LED WHT
A/R	A/R	A/R	9	02-016D248-40	ASSY, PCB REAR DECK AVENGER 6 LED GRN
A/R	A/R	A/R	10	02-016D248-50	ASSY, PCB REAR DECK AVENGER 6 LED RED
8	8	6	11	68-596A596-01	REFLECTOR, AVENGER METALIZED
8	8	6	12	68-1943588-30	LENS, OPTIC COLLIMATOR AVENGER
8	8	6	13	68-396A597-30	LENS NON OPTIC, LINEAR AVENGER SERIES

8	8	6	14	39-0402313-04	HOUSING, 2 POS PIN CMNL
16	16	12	15	15-045410-060	SCREW, 4-20 X 3/8 PPH THDFORM PLASTI-LOC
-	-	2	16	09-1323251-00	FILLER PANEL
-	-	2	17	66-0422815-00	TAPE, MOUNTING
1	1	1	18	46-0743243-01	CABLE ASSY, 9/C 18GA. TPR 20"
1	1	1	19	11-486992-000	HOUSING, INT LIGHTBAR '11 CHARGER REAR
16	16	16	20	15-M2B31C-120	SCREW, M4.2 X 12MM PWISMS BLACK OXIDE
1	1	1	21	39-0408323-04	HOUSING, SOCKET - 8 POS AMP CMNL
2	2	2	22	08-0616092-00	RUBBER BUMPER, .52 X .81
1	1	1	23	10-0523252-__	LABEL, INNER EDGE LINEAR TA
1	1	1	24	38-0543284-45	SEAL, EXTRUDED - HOUSING/WINDSHIELD
4	4	4	25	20-0017569-00	SPACER, MTG - PCB
1	-	1	26	02-0164351-02	PCB ASSY, CONTROL BOARD 6-LT (REAR)
-	1	-	27	02-0164351-01	PCB ASSY, CONTROL BOARD 8-LT (REAR)
2	2	2	28	46-0764463-00	HARNASS ASSY, INNER EDGE LINEAR
A/R	A/R	A/R	29	26-0215001-03	TY WRAP 3"
1	1	1	30	01-0486994-00	MOUNTING KIT, '11 CHARGER REAR