

WHELEN[®]

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Installation Guide
Traffic Advisor models
TA650 (6 LED)
TA850 (8 LED)
TALL (6 LED + 2 Flasher LED)

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 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!**

Mounting the Lightbar: Selecting a Location

- When routing the 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.).
- When the best mounting location has been determined, secure the unit to its mounting surface using the supplied hardware.

Caution: As it will be necessary to drill holes into the mounting surface, the installer **MUST** be sure that no vehicle components or other vital parts will be damaged by the drilling process. Check both sides of the mounting surface before drilling begins!

Note: When facing the display, the cable harness should exit from the right side of the bar.

1. Position the unit in its proposed mounting location to ensure that it fits properly. With the unit in place, use an awl or other suitable tool and scribe the areas to be drilled.
2. Using an appropriately sized drill bit, drill a hole in each of the areas scribed in step 1.
3. Remove the unit from its mounting area and, using a 1" drill bit, drill a hole for the cable harness to pass (see below for important mounting dimensions).

4. Apply a bead of RTV Silicone around the area where the cable exits the backside of the extrusion. Make sure that this bead is large enough to surround the holes drilled in the previous step and prevent water entry.
5. Return the unit to its mounting location and using the supplied hardware, mount the unit as shown.

Note: Do not install the 10 amp fuse required in the fuse block, until all wire connections are completed.

The TACTLD1 Control Head is used to operate the TA model represented in this manual. A four function rotary switch selects from: left arrow, right arrow, split arrow, or flash pattern. A Dip switch on the rear panel selects the available pattern.

A Center-Off Rocker Switch is used to turn the unit On and Off, in either High or Low power mode. The TACTLD1 also features an LED status display that provides a visual indication of the current light pattern.

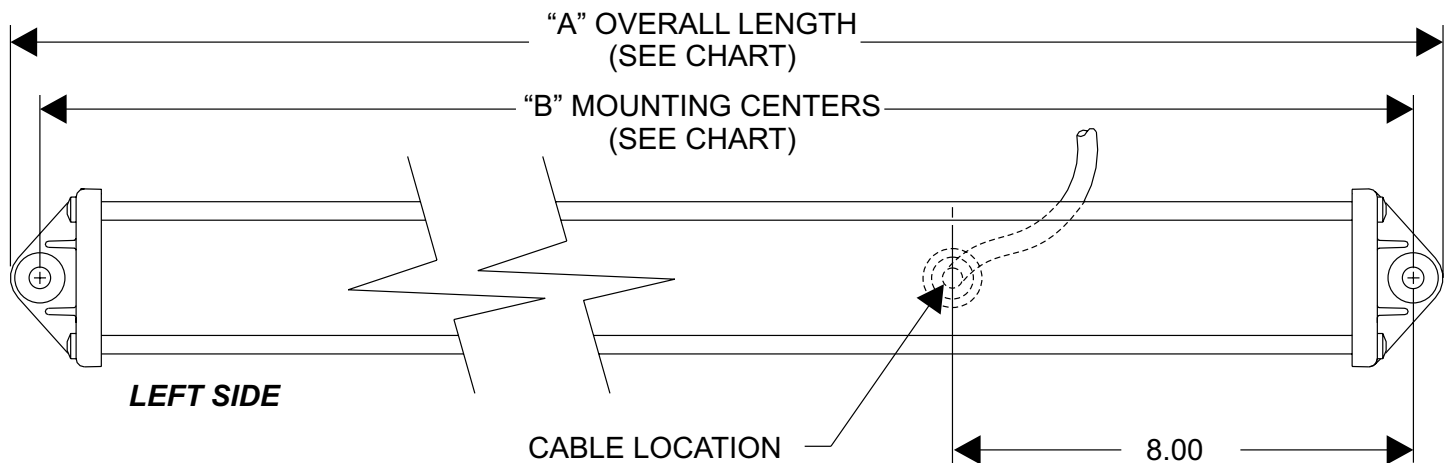
For TACTLD1 Installation and all settings, adjustments and operating instructions, refer to the TACTLD1 instruction sheet included with the unit.

NOTE: It is important to make sure that Dip Switches #1 & #2 are positioned correctly for your T/A:

| | #1 | #2 |
|------------------|------|------|
| TA650/TALL | UP | DOWN |
| TA850 | DOWN | DOWN |

| DESCRIPTION | DIMENSION "A" | DIMENSION "B" |
|--------------|---------------|---------------|
| TA650 | 35.33 | 33.57 |
| TA850 & TALL | 44.95 | 44.07 |

READ BEFORE INSTALLING!!!
 Do not install this product or route any wires in the deployment area of your airbag. Equipment mounted or located in the airbag deployment area will damage or reduce the effectiveness of the airbag, 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. Whelen Engineering Co. assumes no liability or responsibility for determining individual applications or exact installation location criteria.



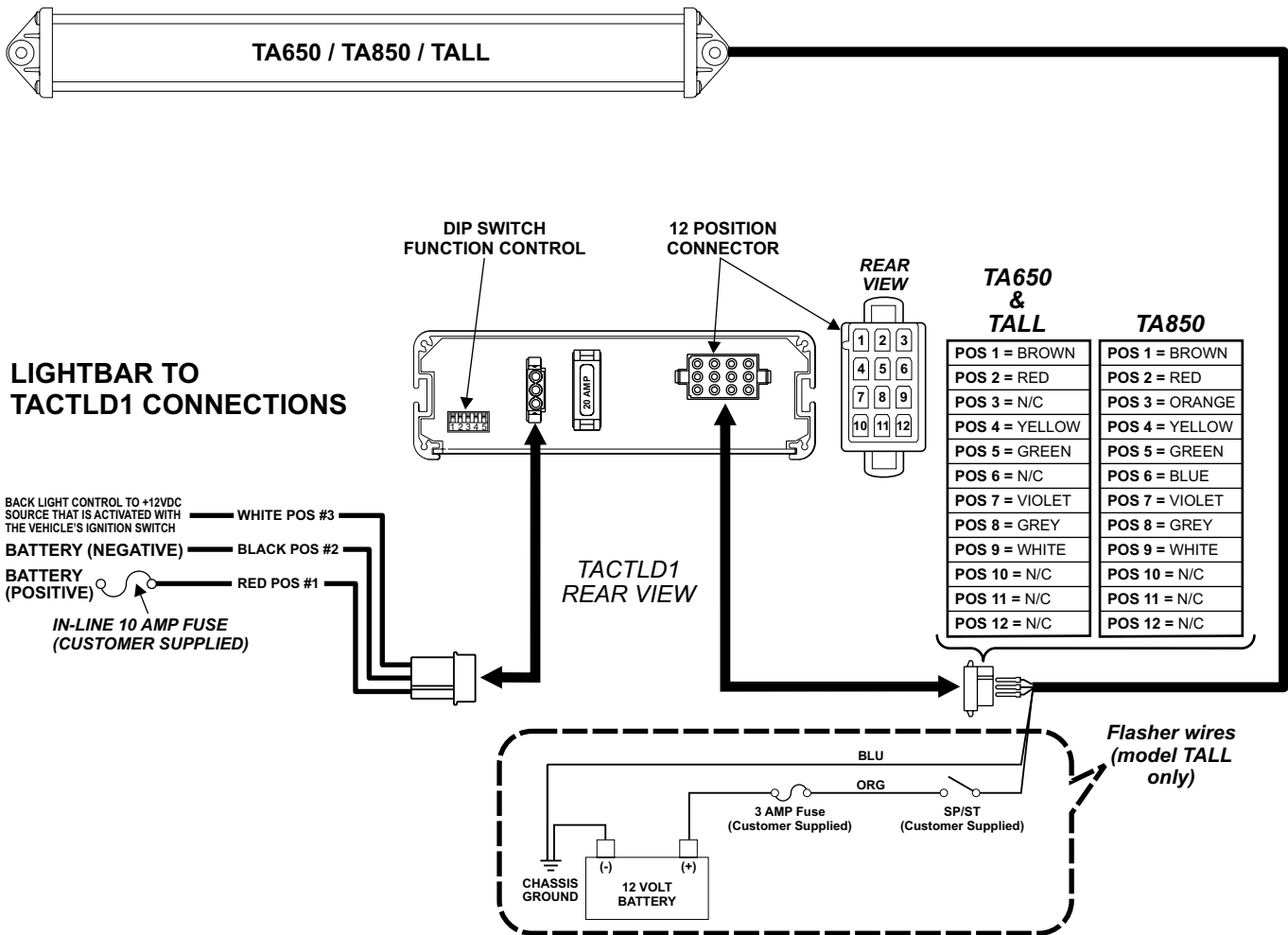
Wiring the Traffic Advisor System:

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.

1. Insert the 3-position connector into the back of the control head and extend the RED and BLACK wires to the battery.
2. Connect the RED wire to one end of a user supplied fuse block. **Do not connect this unit to the battery yet!**
3. Connect the BLACK wire to the vehicle's chassis ground.
4. Extend the WHITE wire to a +12VDC source that is activated with the vehicle's ignition switch.
5. With the control head wired, route the cable from the T/A to the control head.

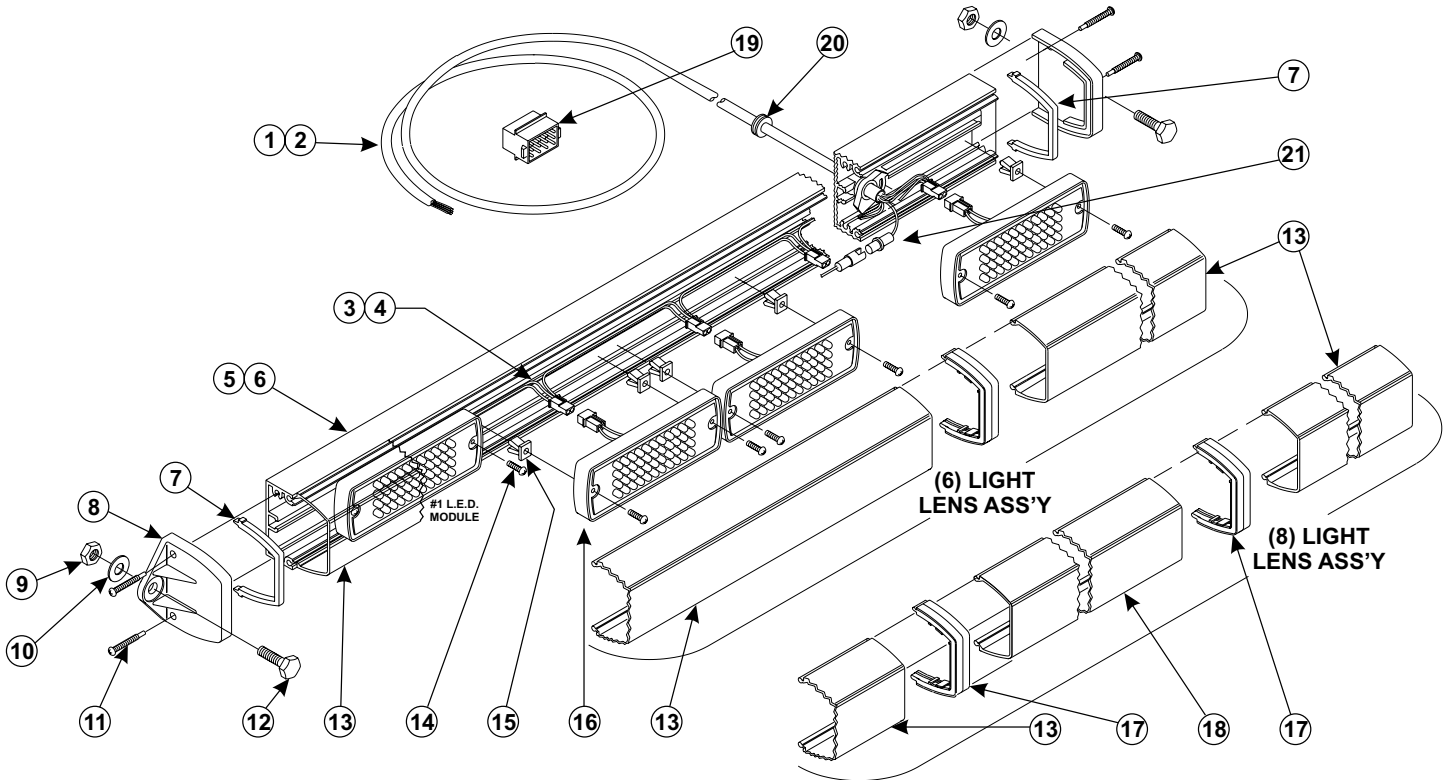
6. Following the pin chart below, insert the contact wires into their assigned positions. A gentle pull on the wires will confirm they were properly inserted.
7. Plug 12-position connector into the back of the control head.

The installation will be complete after the fuse block wire is connected to the POSITIVE (+) terminal of the battery. After this connection has been made, inspect the fuses at the control head and at the battery. If either of these fuses are blown, carefully inspect all of the circuit wires and make sure they are wired correctly. Replace the blown fuses with one of an identical amp rating as the original. If these fuses blow after installation or activation, contact Whelen Engineering Technical Support.



| QTY. | QTY. | ITEM | PART NUMBER | DESCRIPTION |
|------|------|------|----------------|--------------------------------------|
| | * | | 01-0683733-01 | TA ASSY, LOW PROFILE - TA850 (8 LT) |
| | * | | 01-0683733-02 | TA ASSY, LOW PROFILE - TA650 (6 LT) |
| - | 1 | 1 | 46-0763517-20 | CABLE ASSY, 9/C (20') (8 LIGHT) |
| 1 | - | 2 | 46-0763517-21 | CABLE ASSY, 9/C (20') (6 LIGHT) |
| - | 1 | 3 | 46-0963519-00 | HARNESS ASS'Y (8 LIGHT) |
| 1 | - | 4 | 46-0963519-01 | HARNESS ASS'Y (6 LIGHT) |
| - | 1 | 5 | 11-363440-042 | EXTRUSION, HOUSING - MACH'D (42.75") |
| 1 | - | 6 | 11-363440-032 | EXTRUSION, HOUSING - MACH'D (32.25") |
| 2 | 2 | 7 | 38-0263302-00 | GASKET, DIVIDER |
| 2 | 2 | 8 | 11-263424-007 | ENDCAP, BLACK |
| 2 | 2 | 9 | 13-148120-080 | NUT, 5/16-18 HEX - ELASTIC STOP |
| 2 | 2 | 10 | 16-1402420-05 | WASHER, 5/16 FLAT |
| 4 | 4 | 11 | 14-104286-16JA | SCREW, #10-24 X 1.25" TX PHD |
| 2 | 2 | 12 | 14-148436-120 | BOLT, 5/16-18 X 3/4 HHSS |
| 2 | 2 | 13 | 68-1983567-10 | LENS, AMBER (15.800) |
| 12 | 16 | 14 | - | SCREW, #6 X 1 1/4 PPHSMS |
| 12 | 16 | 15 | 13-062C40-16J | SCREW GROMMET, #6 FASTEX |
| 6 | 8 | 16 | 02-036330921A | S/A 500 LED W/O FLG ST MAX AMB 2 POS |
| 1 | 2 | 17 | 02-0342791-00 | ASSY, LENS DIVIDER |
| - | 1 | 18 | 68-1963333A05 | LENS, AMBER (10.156" LONG) |
| 1 | 1 | 19 | 39-0412014-14 | HOUSING, PIN 12 POS. AMP |
| 1 | 1 | 20 | 21-11122002-0 | GROMMET, 5/8" |
| 1 | 1 | 21 | 39-0401323-04 | HOUSING, SOCKET 1 POS. AMP |

The outer surfaces of this product may be cleaned with mild soap and water. Use of any other chemicals may void product warranty. Do not use a pressure washer.



| QTY. | ITEM | PART NUMBER | DESCRIPTION |
|------|------|----------------|---------------------------------------|
| * | | 01-0683812-() | TAASSY, LOW PROFILE - "TALL" SERIES |
| 1 | 1 | 46-0763517-21 | ASSY, 9/C CABLE |
| 1 | 2 | 11-363440-042 | EXTRUSION, HOUSING - MACH'D (42.75") |
| 2 | 3 | 38-0263302-00 | GASKET, DIVIDER |
| 2 | 4 | 11-263424-007 | ENDCAP, BLACK |
| 2 | 5 | - | NUT, 5/16-18 HEX - ELASTIC STOP |
| 2 | 6 | - | WASHER, 5/16 FLAT |
| 4 | 7 | - | SCREW, #10-24 X 1.25" TORX PHD |
| 2 | 8 | - | BOLT, 5/16-18 X 3/4 HHSS |
| A/R | 9 | 02-0363309215 | S/A 500 LED W/O FLG FLASHER AMB 2 POS |
| A/R | 10 | 02-0363309225 | S/A 500 LED W/O FLG FLASHER BLU 2 POS |
| A/R | 11 | 02-0363309235 | S/A 500 LED W/O FLG FLASHER CLR 2 POS |
| A/R | 12 | 02-0363309245 | S/A 500 LED W/O FLG FLASHER GRN 2 POS |
| A/R | 13 | 02-0363309255 | S/A 500 LED W/O FLG FLASHER RED 2 POS |
| 16 | 14 | 13-062C40-16J | SCREW GROMMET, #6 FASTEX |
| 6 | 15 | 02-036330921A | S/A 500 LED W/O FLG ST MAX AMB 2 POS |
| 16 | 16 | - | SCREW, #6 X 1 1/4 PPHSMS |
| A/R | 17 | 68-1963333A06 | LENS, AMBER (5-1/4 LONG) |
| A/R | 18 | 68-1963333B06 | LENS, BLUE (5-1/4 LONG) |
| A/R | 19 | 68-1963333C06 | LENS, CLEAR (5-1/4 LONG) |
| A/R | 20 | 68-1963333G06 | LENS, GREEN (5-1/4 LONG) |
| A/R | 21 | 68-1963333R06 | LENS, RED (5-1/4 LONG) |
| 3 | 22 | 02-0342791-00 | ASSY, LENS DIVIDER |
| 2 | 23 | 68-1963333A07 | LENS, AMBER (15-7/16" LONG) |
| 1 | 24 | 39-0412014-14 | 12 POS. AMP PIN HSG. |
| 1 | 25 | 21-11122002-0 | GROMMET, 5/8" |
| 1 | 26 | 26-0121053-00 | CLAMP, 3/8" RICHCO SHC-23 |
| 1 | 27 | 46-0963519-01 | HARNESS ASSY, (6 LIGHT) |
| 1 | 28 | 46-0742890-00 | HARNESS ASS'Y, LED FLASHER |
| 1 | 29 | 39-0402023-04 | HOUSING, PIN 2 POS AMP |
| 1 | 30 | 39-0401323-04 | HOUSING, SOCKET 1 POS AMP |

