

WHELEN[®]

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Installation Guide TA85LL**

(6 LED Panels + 2 LED Flasher Panels)

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 LED's 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 TA85LL** 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, securely fasten the unit to it's 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: There are two ways to mount the TA85LL** Light Array. Both methods require the unit to be secured to the mounting surface using the supplied sheet metal screws. The cable harness can either be routed directly into the mounting surface or routed out the side of the end cap (see illustration below). When facing the L.E.D. 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, based on the desired style.

Style 1 - Remove the unit from its mounting area and, using a 5/8" drill bit, drill a hole for the cable harness to pass. Affix the 5/8" grommet to the hole and feed the cable harness through the grommet.

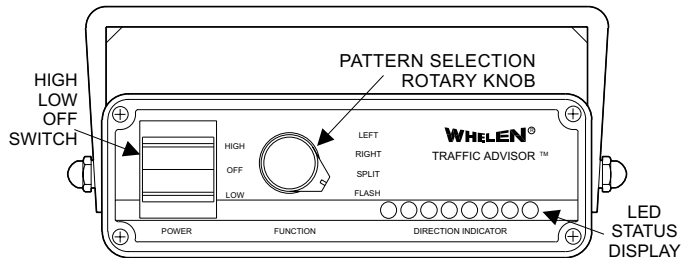
Style 2 (OPTIONAL) - To route the cable harness through the end cap a 5/8" passage hole must be drilled. Remove the endcap from the light array, via. the machine screws, as to prevent damage to the cable harness and drill the hole. Place the 5/8" grommet on the hole and feed the cable through. Once this is done, secure the endcap back onto the light array.

2. Using an appropriately sized drill bit, drill a hole in each of the areas scribed in the previous step.
3. Return the unit to its mounting location and using the supplied hardware, mount the unit as shown below.

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

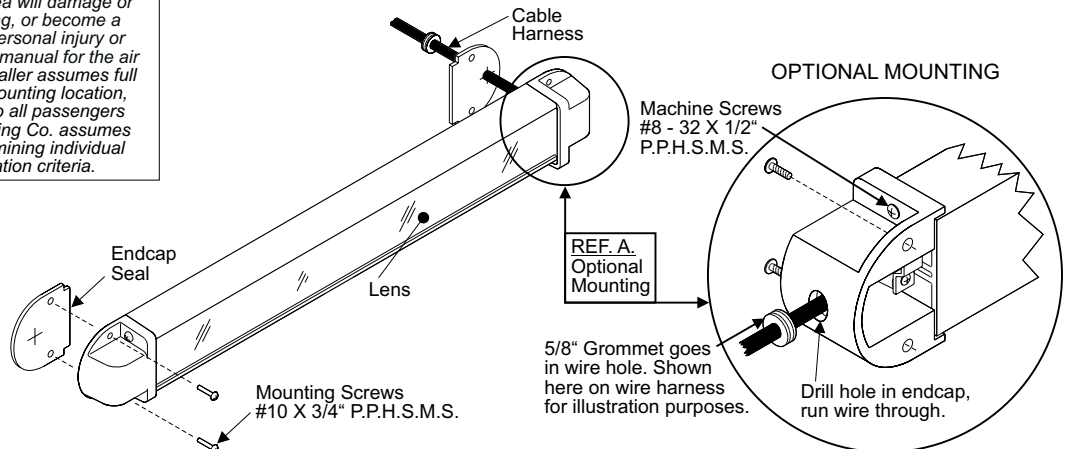
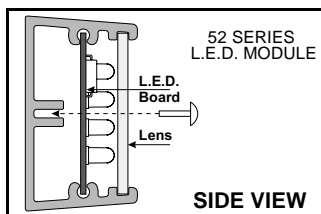
The TACTL1A Control Head is used to operate the TA model represented in this manual. Please refer to the TACTL1A manual (included with your TACTL1A) for installation, settings and operating instructions.

- One Lamp Sequence to Double Flash
- One Lamp Sequence to Triple Flash
- Two Lamp Sequences
- Three Lamp Sequences
- Four Lamp Sequences
- Sequence ON / Sequence OFF
- Sequence to Solid
- Solid Arrow

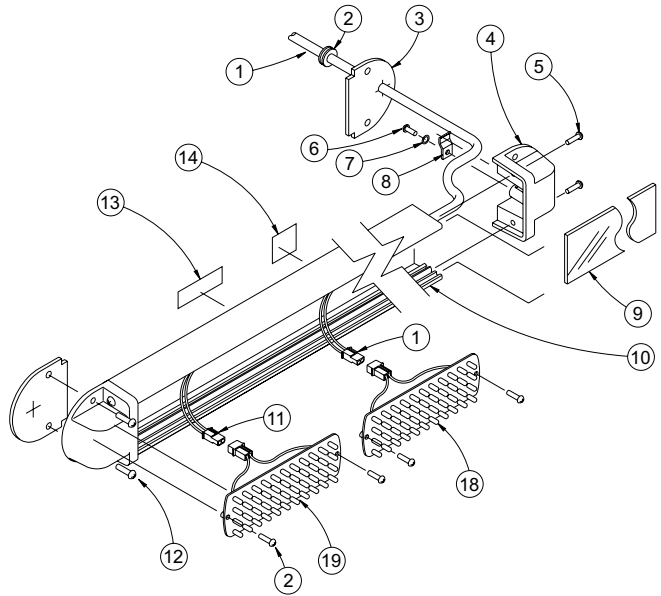


FRONT VIEW

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.



QTY.	ITEM	PART NUMBER	DESCRIPTION
1	1	46-0962857-01	ASS'Y, CABLE INPUT HARNESS (6 LIGHT)
1	2	21-11122002-0	GROMMET, 5/8"
2	3	38-0242596-00	SEAL, ENDCAP
2	4	11-262846-001	CASTING, ENDCAP (BLACK)
4	5	14-082216-083	#8-32 X 1/2" PPHMS SELF TAP TYPE F
1	6		#6-32 X 3/8" PPHMS
1	7		#6 INTERNAL TOOTH LOCKWASHER
1	8	07-222519-000	BRACKET, STRAIN RELIEF
1	9	68-3942710-30	LENS, CLEAR 40.200" LG.
1	10	11-342568-000	EXTRUSION, 40.260" LG. (BLACK)
1	11	02-0240938-00C	CRUISE LIGHT HARNESS
4	12		#10 X 3/4" PPHMS SS
1	13	10-0522729-02	LABEL, MODEL NO. TA8FHP
1	14	10-0320776-00	LABEL, MADE IN USA FLAG
1	15	39-0412313-04	12 POS. AMP PIN HSG.
1	16	39-0402313-04	2 POS. AMP PIN HSG.
2	17	39-0501316-04	AMP PIN 61118-1
6	18	01-0262856-A0	ASS'Y, 52 SERIES L.E.D. MODULE (AMBER)
A/R	19	01-0262856-B1	ASS'Y, 52 SERIES L.E.D. FLASHER (BLUE)
A/R	-	01-0262856-R1	ASS'Y, 52 SERIES L.E.D. FLASHER (RED)
A/R	-	01-0262856-A1	ASS'Y, 52 SERIES L.E.D. FLASHER (AMBER)
A/R	-	01-0262856-G1	ASS'Y, 52 SERIES L.E.D. FLASHER (GREEN)



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.
2. Extend the RED and BLACK wires to the battery.
3. Connect the RED wire to one end of a user supplied fuse block. **Do not connect this unit to the battery yet!**
4. Connect the BLACK wire to the vehicle's chassis ground.
5. Extend and connect the WHITE wire to the dash board light circuit.
6. With the control head wired, route the cable from the TA to the control head (see below).

7. Following the pin chart, insert the contact wires into their given positions. Check the wire's retention fingers by gently pulling back on them to make sure that they are holding the contact.
8. Plug 12-position connector into the back of the control head.
9. The remaining ORANGE and BLUE wires control the LED flasher panels. Connect the ORANGE wire to a customer supplied SP/ST switch. Extend an appropriately sized wire (see warning) to +12VDC and fuse at 3 amps (customer supplied). Extend the BLUE wire to chassis ground.

The installation of your Traffic Advisor System 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.

