

WHELEN[®]

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Installation and Operating Guide: Traffic Advisor™ LED Control Head Model TACTLD1 (12-volt)

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.

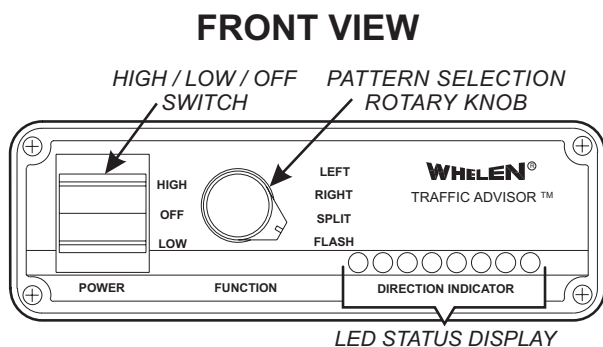
- **Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures.**
- **If mounting this product requires drilling holes, the installer MUST be sure that no vehicle components or other vital parts could be damaged by the drilling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

IMPORTANT! This product is designed for use with several different Traffic Advisor™ models. As such, the information presents a more generalized approach to installation procedures. The product manual included with each Traffic Advisor contains information specific to its particular installation and should therefore be considered the controlling document.

The TACTLD Series Control Head features a four-function rotary switch that allows the user to select from left arrow, right arrow, split arrow, or flash pattern. Dip switches on the rear panel determine which of the following patterns will be displayed when “flash” is selected (see “Dip Switch Programming” on page 3).

- **One Lamp Sequence to CometFlash® w/Flicker**
- **Sequence ON / Sequence w/Flicker**



- **Sequence On / Sequence Off / DoubleSweep™**
- **Single Lamp / End Steady**

Remote Flash Control is the new feature on the TACTLD1. This allows for the remote activation of the flash function when the T/A head is off. Turning on the control head overrides the auxiliary control. This is ideal for activation with a slide switch control.

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

Installation: Mounting Control Head

1. Position the bail strap in the selected mounting location. Using an awl or other suitable tool, scribe the surface where the mounting holes are to be drilled.

Caution: As mounting the TACTLD will require drilling, it is absolutely necessary to make sure that no other vehicle components could be damaged in the process. Check both sides of the mounting surface before starting. If damage is likely, select a different mounting location.

2. Drill the mounting holes in the areas scribed in step 1. The size of the drill bit should be determined by the size of the mounting hardware (customer supplied) and thickness of the mounting surface.
3. Using your mounting hardware, secure the bail strap to the mounting location.

Note: There are 2 sets of holes on the bail strap for positioning the control head at 2 different heights (see page 3).

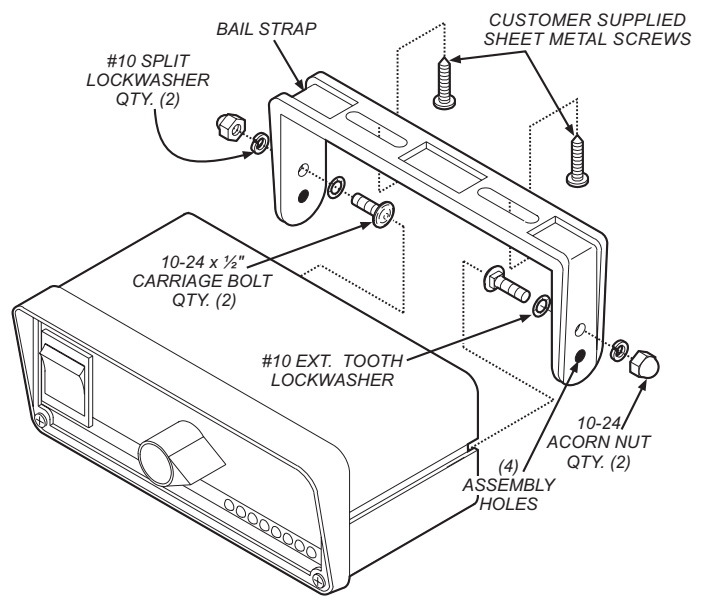
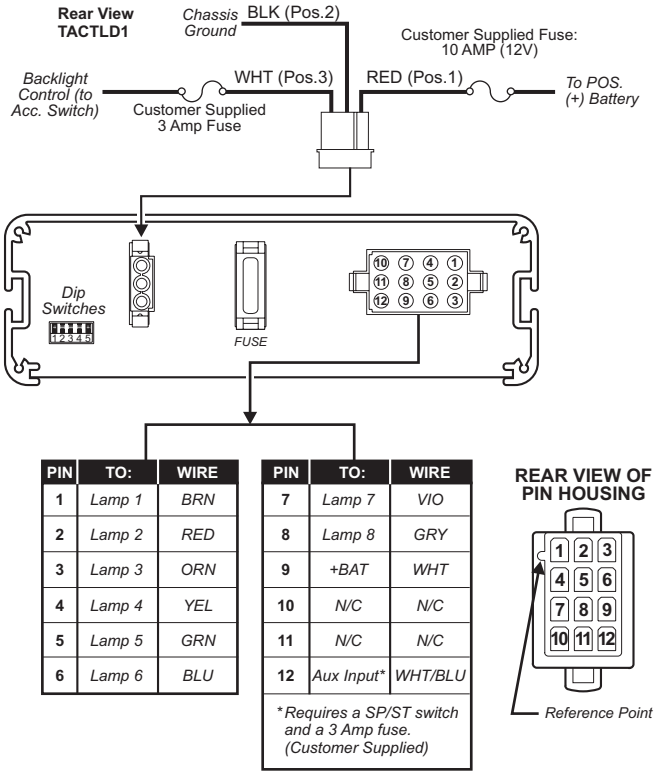
4. With the bail strap in place, insert the carriage bolt along with the external tooth lockwasher (supplied) into the assembly hole from the inner side of the bail strap as shown.
5. Place the split lockwasher and the acorn nut on the protruding bolt on the outer side of the bail strap. Loosely secure the acorn nut to the carriage bolt.
6. Now slide the control head onto the carriage bolts. Once it is in the position that the customer has chosen, tighten the acorn nuts until the unit is firmly secured.

Wiring the Traffic Advisor System

1. Plug the 3-position connector into the back of the control head unit (see “Rear View” on next page).
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 accessory switch for the back light controls.
6. Route the cable from the T/A to the control head.
7. Following the pin chart on page 3, insert the contact wires into their positions. Check that the wires are fully inserted by pulling back on them firmly.
8. Plug the connector(s) into the back of the control head.

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! (see “Wire Chart” on page 3)

The installation of your Traffic Advisor control head 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 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.



RECOMMENDED WIRE SIZE			
POWER WIRES		AUXILIARY CONTROL WIRES	
13 FT.	14 AWG	26 FT.	18 AWG
21 FT.	12 AWG	42 FT.	16 AWG
33 FT.	10 AWG		

DIP SWITCH PROGRAMMING:

1	2	3	4	5	Function
DN	DN	X	X	X	Set for 8 lamps
DN	UP	X	X	X	Set for 7 lamps
UP	DN	X	X	X	Set for 6 lamps
UP	UP	X	X	X	Set for 5 lamps
X	X	DN	DN	X	Single Lamp / End CometFlash® with Flicker
X	X	DN	UP	X	Sequence ON / Sequence with Flicker
X	X	UP	DN	X	Sequence ON / Sequence Off/DoubleSweep™
X	X	UP	UP	X	Single Lamp / End Steady
X	X	X	X	DN	ModuFlash™
X	X	X	X	UP	ActionScan™