

WHELEN[®]

ENGINEERING COMPANY INC.

51 Winthrop Road
Chester, Connecticut 06412-0684
Phone: (860) 526-9504
Fax: (860) 526-4078
Internet: www.whelen.com
Sales e-mail: autosale@whelen.com
Canadian Sales e-mail: canadiansales@whelen.com
Customer Service e-mail: custserv@whelen.com

Installation Guide:
Traffic Advisor™
Model TA864S

Automotive: Traffic Advisor

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

Mounting: Selecting a Mounting Location:

- Be sure you can get behind the mounting area to attach and secure the mounting nuts.
- 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 its mounting surface using the supplied hardware.

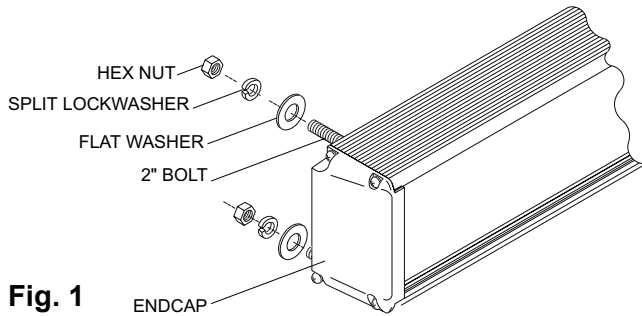


Fig. 1

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

1. The TA-864S attaches to the vehicle by the four 2" bolts extending from the rear of the housing.
2. 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.
3. Remove the unit from its mounting area and drill a hole for the 2" bolts in each of the areas scribed in the previous step.
4. Return the unit to its mounting location and using the supplied hardware, mount the unit.

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.
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.

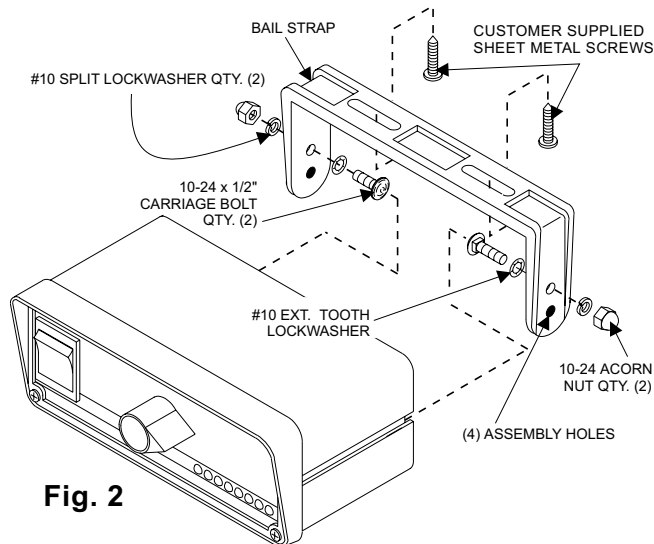


Fig. 2

3. Using the customer supplied mounting hardware, secure the bail strap to the mounting location.

NOTE: There are two sets of holes on either side of the Bail Strap that can be used when installing the TA-864S, to position the control head at 2 different heights (Fig. 2).

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 (Fig. 2)
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. Slide the control head onto the carriage bolts. Once it is in the desired position, tighten the acorn nuts until the unit is firmly secured.

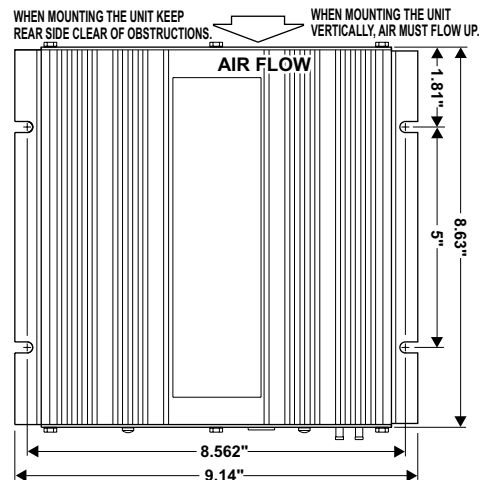
Mounting the ISP188 Power Supply:

This ISP188 Intelligent Strobe Power Supply can be installed in many different types of vehicles. The guidelines for the installation of this product are written so that no matter what vehicle is being used, the installation and operation will be simple and straight forward.

Selecting a Mounting Location:

The logical choice for a mounting area would be a trunk or similar compartment. However, due to the wide variety of vehicles onto which the ISP188 can be installed, this is not always possible. The following guidelines will help the installer select an acceptable alternative:

- The unit should be mounted on a metal surface to aid heat dissipation. Be sure that this surface is not one that either generates or is exposed to excessive heat during normal operation of the vehicle.
- Do not select a location where the power supply will be exposed to potential damage from any unsecured or loose equipment in the vehicle.
- Be sure the area selected will not allow the ISP188 to be exposed to water!
- 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.).
- Be sure your mounting location does not block the cooling fan in the rear of the unit. (See Illustration)



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!

WARNING: The strobe light power supply is a high voltage device. Do not remove strobe tubes or dismantle strobe light head assemblies in the system while it is in operation. Wait 10 minutes after turning off power before starting work or any trouble shooting.

Traffic Advisor Mode:

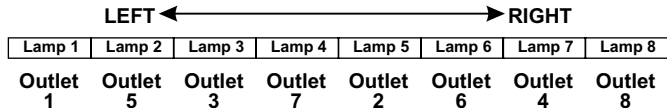
Dip Switches

The dip switch configuration for Traffic Advisor Mode:

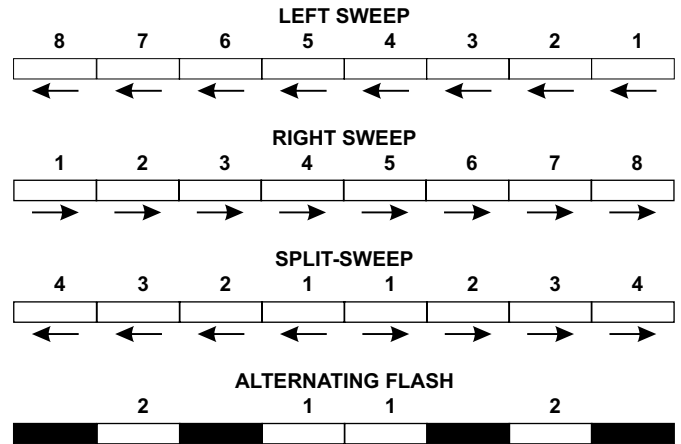
Dip Switch 1 - ON Dip Switch 4 - ON Dip Switch 7 - OFF
Dip Switch 2 - ON Dip Switch 5 - OFF Dip Switch 8 - OFF
Dip Switch 3 - ON Dip Switch 6 - ON

TRAFFIC ADVISOR

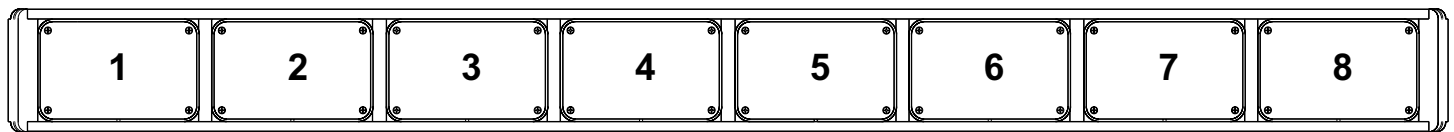
In order for the Traffic Advisor patterns to flash properly, it is necessary for the lamps to be connected to the ISP188 in the following pattern.



The Traffic Advisor (or T/A) mode is comprised of four, traffic control-oriented flash patterns.



The T/A pattern mode is enabled as indicated in table 2.



LIGHT ARRAY

TYPICAL WIRING DIAGRAM

