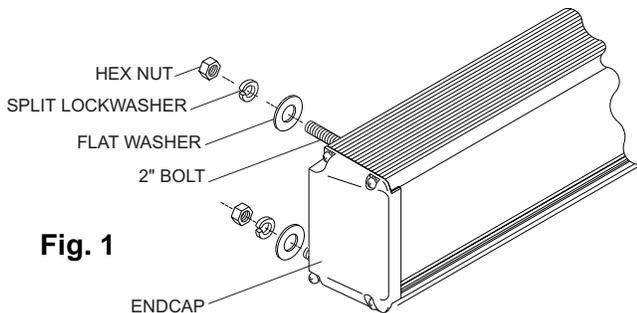


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## Mounting the TA-864S2 Lightbar . . . Selecting a Mounting Location:

- A) Be sure you can get behind the mounting area to attach and secure the mounting nuts.
- B) 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.).
- C) 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 could be damaged by the drilling process. Check both sides of the mounting surface before drilling begins!



**Fig. 1**

1. The TA-864S2 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, using an appropriately sized drill bit, drill a hole 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.

**IMPORTANT:** 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.

## **IMPORTANT WARNING!!! READ THIS 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.

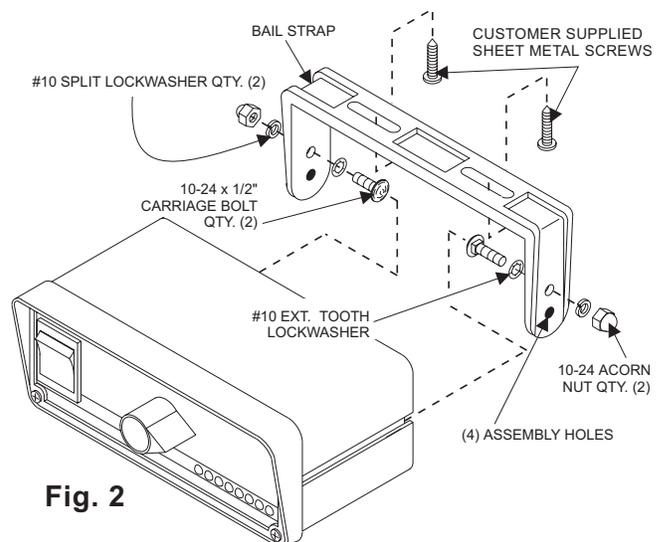
Whelen Engineering Company Inc. assumes no liability or responsibility for determining individual applications or exact installation location criteria.

## 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 TA-864S2 Control Head 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 and if damage is likely, select a different mounting location.

2. Carefully drill the mounting holes in the areas scribed in step one. The size of the drill bit should be determined by the size of the mounting hardware (customer supplied) and the thickness of the mounting surface.



**Fig. 2**

- 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-864S2, to position the control head at 2 different heights (Fig. 2).

- 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)
- 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.
- 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 ISP18824 Power Supply:

This ISP18824 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:

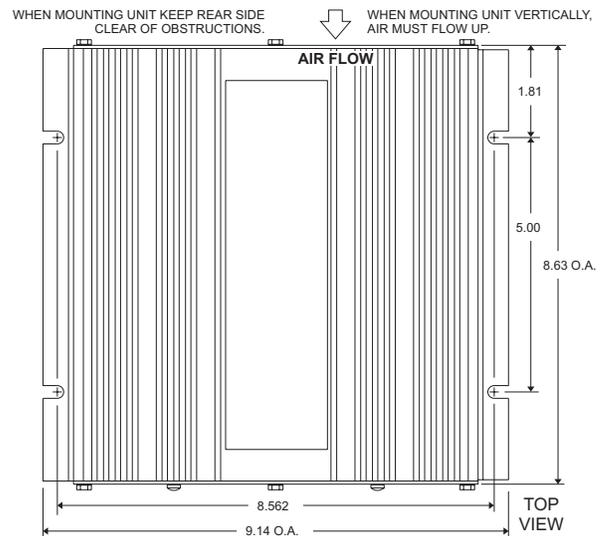
The logical choice for a mounting area would be a trunk or similar compartment. However, due to the wide variety of vehicles onto which the ISP18824 can be installed, this is not always possible. The following guidelines will help the installer select an acceptable alternative:

- 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 ISP18824 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 the load!

**WARNING!** The strobe light is a high voltage device. DO NOT TOUCH the strobe lamp assembly or the strobe power supply assembly while the unit is in operation! WAIT 10 MINUTES after turning power off before starting any work or troubleshooting.

**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 could be damaged by the drilling process. Check both sides of the mounting surface before drilling begins!



### Traffic Advisor Mode...

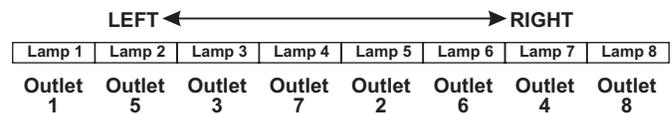
#### Dip Switches

The dip switch configuration for Traffic Advisor Mode:

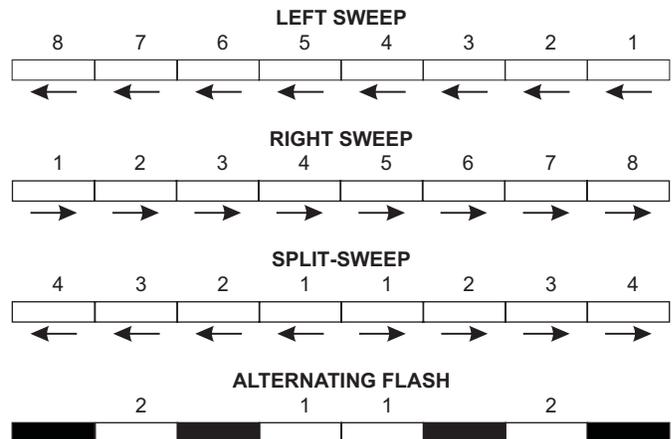
- Dip Switch 1 - ON    Dip Switch 4 - ON    Dip Switch 7 - OFF
- Dip Switch 2 - ON    Dip Switch 5 - OFF    Dip Switch 8 - OFF
- Dip Switch 3 - ON    Dip Switch 6 - ON

### TRAFFIC ADVISOR

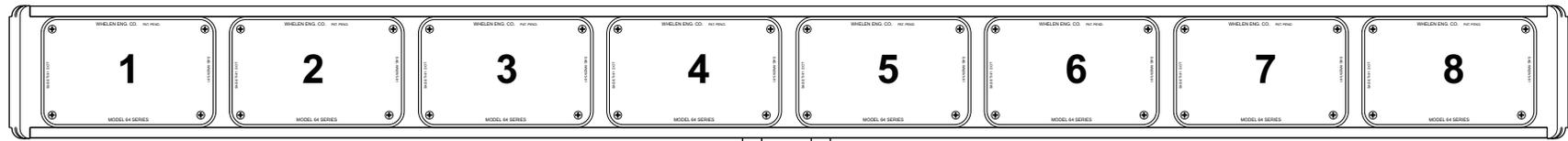
In order for the Traffic Advisor patterns to flash properly, it is necessary for the lamps to be connected to the ISP188 in the following pattern.



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

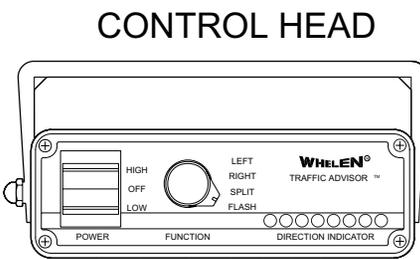
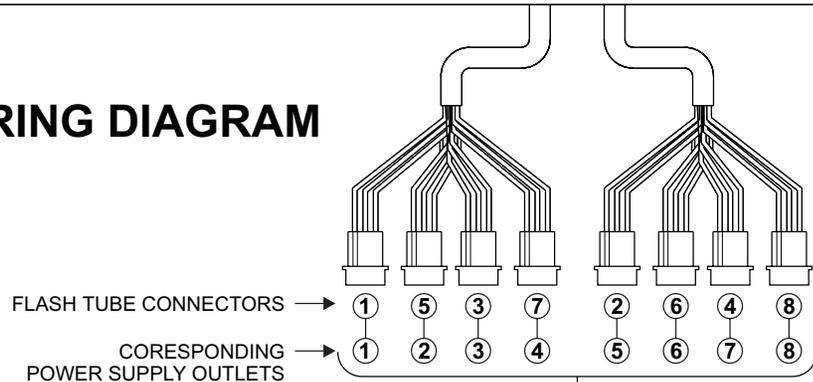


The T/A pattern mode is enabled as indicated in table 2.



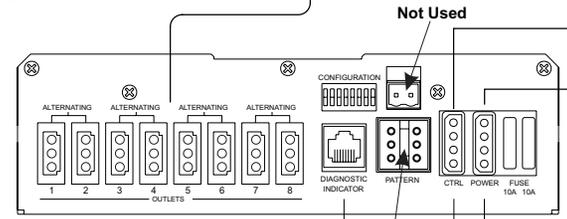
LIGHT ARRAY

# TYPICAL WIRING DIAGRAM



CONTROL HEAD

CABLE ASSY.  
8 POS.  
TELEPHONE 25'



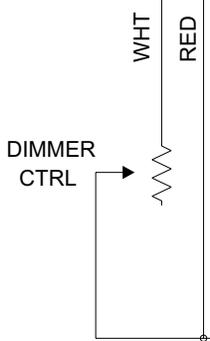
- PIN 1 - CTRL 1 (+24V)
- PIN 2 - CTRL 2 (+24V)
- PIN 3 - CTRL 3 (+24V)
- PIN 4 - LO POWER (+24V)
- PIN 1&2 - +24V
- PIN 3&4 - GROUND

POWER SUPPLY

- 14AWG RED - PIN 1 - (+24V)
- 14AWG RED - PIN 2 - (+24V)
- 14AWG BLK. - PIN 3 - (GROUND)
- 14AWG BLK. - PIN 4 - (GROUND)

- YEL — PIN 1 — CTRL 1
- GRN — PIN 2 — CTRL 2
- BLU — PIN 3 — CTRL 3
- VIO — PIN 4 — HI/LO
- BLK — NEG. BATTERY

Butt Splices (included)



RED - POS. BATTERY

