

OPERATING INSTRUCTIONS

out bulb or short in the system by lighting the corresponding lamp on the controller Display.

To change the Flash Pattern, use the Horizontal Arrow Keys to select the Function Mode. Use the Vertical Arrow Keys to scroll through the Flash Patterns. Each Flash Pattern will be shown on the Display. When the desired pattern is on the Display, press the "Enter" key to start this pattern. Pressing the Enter key will automatically put the controller in the "Diagnostic Mode" and show the selected Flash Pattern on the Display.

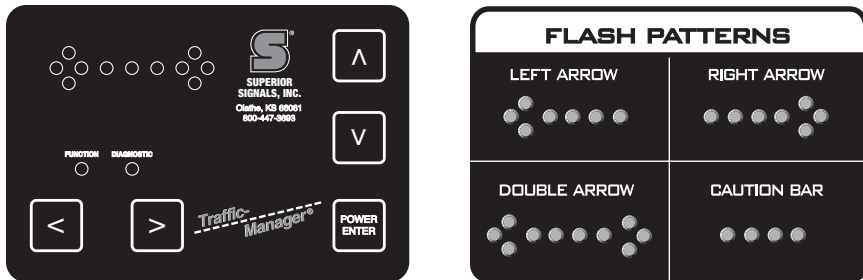


Figure 1

MAINTENANCE AND TROUBLESHOOTING

If the unit is not working

1. Check all of the cable connections
2. Check the (+) 12VDC power supply
3. Check the controller connection
4. Check the individual lamps.

Bulb Replacement

1. Mark the bulb(s) that need replacement.
2. Shut the unit off, and disconnect the unit from 12VDC supply.
3. Unplug the marked bulb(s)
4. Push the marked bulb(s) out from the back side of the arrow board.
5. Replace the bulb(s), press in the new bulbs.
6. Reconnect the plugs and the new bulb(s)
7. Reconnect the 12VDC power supply and test unit.

SY812: replacement bulb for 12VDC models

SY824: replacement bulb for 24VDC models



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EL510-3901



INCANDESCENT AND LED WARRANTY AND INSTALLATION INSTRUCTIONS



ONE YEAR WARRANTY

This product is warranted against defects in materials or workmanship for one year from the date of purchase. Should service be required, the customer should return the product for warranty consideration. Shipping will be prepaid via ground transportation. All products requiring warranty service shall be returned within one year from the date of purchase. Exclusions from this warranty are the finish, light bulbs, and damage caused by improper installation or use.

The manufacturer assumes no liability for costs incurred to remove or reinstall the product, or for lost revenues due to equipment downtime.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

INSTALLATION INSTRUCTIONS



Electrical/Electronic Device – Potential Shock Hazard

Safety is never optional, so please read and follow all instructions shipped with the products and the warnings that follow. These instructions are for the installation of the system on a mobile vehicle. The installer is required to have a good working knowledge of vehicle electrical systems and the ability to work on such systems, safely.

- *Do not attempt this installation unless you have been properly trained in the maintenance and troubleshooting of vehicle electrical systems.*
- *Before drilling into any vehicle structure, be sure that each side of the surface is free of anything that might be damaged.*
- *Failure to follow these safety precautions may result in property damage, serious injury or death to you, to passengers, or to others.*

1. Select locations to mount the Arrow Board, Controller Module, and Electronic Driver, and select a route for each cable, make sure each cable is long enough to reach with some slack. (6 inches min.) Each item must be securely mounted to prevent failure.
2. The Arrow Board has predrilled holes for mounting, additional holes can be drilled per mounting requirements. Use the arrow board as a pattern to mark the hole locations.

CAUTION - The arrow board is not intended to support any external loads.

TIP – Mount the arrow board as high as possible for better visibility.

3. The Controller Module comes with two different mounting brackets (top and front mount). Use the bracket as a pattern to mark hole locations. Drill a .125 diameter hole, number 6 screws are included.
4. The Electronic Driver has two holes for mounting, **DO NOT** drill holes through the driver, as this will damage the unit. Use the Driver housing as a pattern to mark the hole locations.

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5. Connect the wires per the chart below:

ELECTRONICS DRIVER

Green - 4 conductor
Red - 4 conductor
Black - 4 conductor
White - 4 conductor
Controller Cable
Black - single
Red - single

ARROW BOARD

Green - 4 conductor
Red - 4 conductor
Black - 4 conductor
White - 4 conductor
Controller Module
Power Source (-) negative
Power Source (+) positive

These connections are for a rear facing arrow boards. For front facing arrow boards switch the red and green four conductor wires.

TIP – Coat the connectors with an electrically conductive grease before installation.

6. Secure the controller cable with the included P-clamp.

TIP – Secure all cables with P-clamps or Zip ties. Use grommets where the cables pass through drilled holes.

7. Connect the unit to a 12VDC power source, either the battery or fuse panel. Do not use a Cigarette Lighter Adapter with this product. Suggest adding a 30AMP in-line fuse. This product does not have any internal over current protection.

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Check all connections before turning on Arrow Light.

The controller interface, shown in figure 1, next page, has a **Power/Enter Key, Vertical Arrow Keys, Horizontal Arrow Keys, and Display.**

The "Power / Enter" key energizes the Arrow Light. The Display will show the default Flash Pattern when the Arrow Light is first energized. Press and hold "Power / Enter" key to turn unit off.

The "Power / Enter" Key is also used to start a selected Flash Pattern.

The Horizontal Arrow Keys are used to switch between "Function" and "Diagnostic" modes.

The Function mode is used to change the Flash Pattern.

The Diagnostic mode is used to watch the flash pattern being displayed on the Arrow Light. Also, Diagnostic mode will show a burnt

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