

# **K90 EMERGENCY WARNING LAMP INSTALLATION MANUAL**

## Safety

- lamp to be safely installed. Before installing this product, the installer must fully read and understand this manual. Important information is contained within which could prevent serious injury or death.
- Installer must have a working understanding of vehicle service procedures, automotive electronics and electronic systems.
- Installer is responsible to insure that no vehicle components or vital parts are inadvertently damaged during the drilling process.
- · Avoid installation of any wires or equipment in the deployment area of the air bag or safety restraint systems. Installer assumes full responsibility for determining proper mounting locations which are in compliance with manufacturer recommendations.
- Use only soap and water to clean outer lens. Certain chemical solvents can damage lens surface resulting in a loss of performance and appearance. Damaged lenses should be replaced immediately.

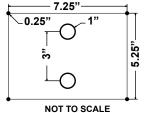
■ This document provides the necessary information to allow your TecNiq warning ■ This is a high performance electrical device. All wires and conductors must be sized to carry a minimum of 125% of the maximum operating current of the light system and fused at the battery to carry that load. It is the sole responsibility of the installer to choose appropriate wiring design for the vehicle.

> IMPORTANT: THIS FLASHER IS DESIGNED FOR 9 - 15 VOLTS AND DRAWS AN INSTANTANEOUS CURRENT OF 3 AMPS PER EACH LIGHT MODULE WITH AN AVERAGE CURRENT OF 1 AMP PER MODULE. K90 LAMPS CONTAIN 2 LIGHT MODULES PER LAMP. ALL SIGNAL AND POWER WIRES MUST BE WITHIN THIS VOLTAGE RANGE FOR **PROPER** LONG TERM OPERATION.

> FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN DAMAGE TO THE VEHICLE, SERIOUS INJURY OR DEATH.

## Installation

- 1) Using a straight edge, measure the hole (see below). Take extreme care to ensure that the lamp will not interfere with the function of any other device on the vehicle and be aware of any objects on the opposite side of the mounting Check all measurements surface. carefully before cutting mounting holes.
- 2) Following the template dimensions, drill or punch 2 - 1" wire holes, drill 4 -0.250" diameter screw anchor holes



- appropriate distance from wire 3) Using TecNiq rotation-lock anchors, insert anchors with pliers and rotate anchors in holes with to properly engage lamp base.
  - Connect lamp wires to the vehicle according to the wire connection table. Use appropriate sized wire and fuse the +12V lead. Test lamp function before tightening to the vehicle. Make sure unused wire ends are properly insulated.
  - 5) Use 4 #10 SS screws included tighten the lens, lamp body and body gasket to the vehicle surface. Visually check to insure that good contact is made between rubber gasket and vehicle body.

### Pattern Control (AutoSync Equipped Lamps Only)

TecNiq AutoSync uses a high accuracy internal timer (patent pending) to . synchronize light modules over a wide temperature range and many hours of These lamps do not require an external circuit to provide a synchronization signal, the moment of power-on is all that is required to guarantee properly synchronized flashing for hours of continuous operation. Lamps are re-synchronized each time power is applied.

TO CHANGE PATTERNS: Each time the operator connects the white wire to +12 Volts, the lamp will re-start counting from pattern 1. Connect the white wire repeatedly to 12 volt power to select the desired pattern. Each time the tap is delayed for more than 1 second, the counter restarts at pattern 1. E.g. For pattern 3, tap the white wire rapidly 3 times to the 12 volt power. To set pattern 4, wait more than 2 seconds and tap the wire 4 times.

- SAVING FLASH PATTERN: Simply allow the lamp to flash for 5 complete cycles in the newly selected pattern. The lamp will indicate the pattern is saved by emitting a single, long low-intensity flash . The next time the lamp is powered, it will use the saved pattern.
- ALTERNATE FLASH PATTERN: Connect blue wire with white stripe to 12 Volts and lamp will flash with alternate pattern to other lamps. When properly installed, this option allows the configuration of an entire vehicle's operational pattern without the use of a central control module or interconnecting wires.

#### Steady On Lamps

Steady on lamps are designed to be used with an external flash controller. These lamps are thermally designed for a maximum of 50% duty cycle but meet all intensity requirements at 37%. Extended operation at 100% duty cycle creates higher temperature conditions which may shorten lamp life.

## **Preprogrammed Patterns:**

- 10) Nova Flash 75 Single Flash 75 KKK 1)
- Double Flash 75 2)
- 11) Power Flash 75
- Triple Flash 75 3)
- 12) Power Flash 150
- 4) Quad Flash 75
- 13) Dual Bright 75
- 5) Single Flash 150
- Double Flash 150 6)
- 14) Ramp Flash 75
- 15) Ramp Flash 150 16) Action Ramp 75/150
- Triple Flash 150
- Quad Flash 150 Active Flash 75/150

	AutoSync	Steady on
Red	12 Volt Power	
Black	Ground	
Yellow (Night Mode)	Connect to 12V for low intensity night mode	Dual Function wire; accepts 12V power or 12V low current signal
White	Connect momentary to 12V for pattern change	
Blue Wire w/ White Stripe	Connect to 12V for alternating flash.	