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**User Manual and Installation Instruction** 

# LL120 Hide A Way Led Headlight



# Introduction

LL120 LED Hide A-way light adopts high power Gen IIILEDs as light sources with unique appearance, compact structure, convenient operation and diversified flash patterns. With superior circuit design, its characteristics are high brightness, low working current, easy installationand long service time. It is specially designed to assist all typed of emergency vehicles. Users can easily find out and confirm the flashing mode needed by special indication.

# **Features**

- Ultra small, self-contained, for internal mount within composite head lamps, cornering lamps and tail light assemblies.
- selectable flash patterns, includes synchronize feature for alternating and synchronous flashing of multiple lamps.
- Flange kit options for surface mounting anywhere on your vehicle, not only a hideway mounting.
- New lens technology enhances light distribution for optimum dispersion and intensity of the warning signal at critical angles.
- Aluminum base and advanced thermal heat management system is designed for endless years of trouble free service.
- Lamp and in-line lamp driver are fully encapsulated for moisture and vibration resistance.
- Omni-directional lighthead mounts in any position (orientation), vertically or horizontally.
- Available in red, amber, white and blue. LED color must match color of the lens it is installed behind, except for clear lens
- No RFI noise emitted.
- Two screws hold the lamp securely in place.
- Simple installation with no separate lamp drivers, flashers, ballast or power supplies to install.

# Size

# Units=mm

# **Technical Data**

Working voltage: DC10V-DC30V

Lighting power: 10W

Colour options: Red, Blue, Amber, White

Flash pattern: 14

Mounting: Permanent

# Installation & Operations:



This light utilizes High-intensity LED Lamps. DO NOT stare directly into the light while it is on. As momentary blindness and/or permaent eye damage may result.

# **IMPORTANT**

Please read all of the following instructions before Installing your new light.

- 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.
- 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 assumesfull 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.
- Use only soap and water to clean the outer lens. Use of other chemicals could result in premature lens cracking (crazing) and discoloration. Lenses 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.

### FAILURE TO FOLLOW THESE PRECAUTIONS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PRODUCT OR VEHICLE AND/OR SERIOUS INJURY TO YOU AND YOUR PASSENGERS!

# Installation

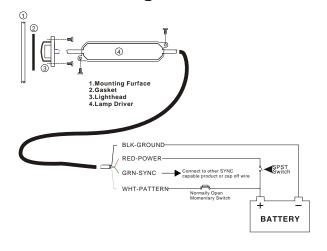
Select the mounting location for the LL120LED headlight, keeping in mind the following:

- 1. Choose a surface in the rear or bottom of the housing which is as flat as possible. Using a
- hole saw, cut a 25mm hole in the housing and de-burrthe hole.

  2. Insert the LED lamp assembly into the reflector housing. Mark the location for the two
- mounting holes. Removethe lamp assembly and drill the holes.

  3. Install the lamp assembly and gasket using the two provided metal screws and secure the lampto the reflector assembly.
- Remount both Lighthead assemblies to the vehicle and route the connector cables to their designated control switches.
   Mounting the lampdriver using the twoprovided metal screws.

# **Mounting Schematic**



# Wiring&Operation:

LL120 HIDE-A-WAY LED is powered & controlled by the 4-wire cable coming from the light assembly. Theirfunctions are as follows:

RED: POSITIVE-Extend the REDwire to a +12VDC power source

BLACK:GROUND-Extend BLACK wire tonegative terminal of battery.

GREEN: SYNC-Connect GREEN wire toother SYNC capable lights to synchronize output. Cap this wire off if it is not used.

WHITE:PATTERN-Extend theWHTwire to a customer supplied momentary switch.

In order to program flash patterns, the lighthead must be on. With the appropriat lighthead(s) activated:

TO CHANGE PATTERNS:To advance to the next available pattern apply +12VDC to the WHT wire for less than 1 second and release. To cycle back to the previous pattern apply +12VDC to the WHT wire formore than 1 second and release.

TO CHANGE THE DEFAULT PATTERN: When the desired pattern is displayed, allow it to runfor more than 5 seconds. The lighthead will now display this pattern when initially activated.

TO RESTORE THEFACTORY DEFAULT PATTERN: This will reset all patterns back to their default settings. With thelight turned off, apply power to theWHT wire. With power applied to theWHTwire, turn light on. Allow the unit to run for 3 seconds before removing power from the

A normally open momentary switch should be used to control PATTERN operation

### Flash Patterns/SYNC

- 1.Quad flash and Single flash (T=710ms) 2.Quad flash (T=710ms) 3. Double flash
- (T=710ms) 4. Single flash
- (T=710ms) 5. Double flash and Single flash (T=710ms)
- 6. Five consecutive flash (T=710ms)
- 7. Single flash 1 and Single flash 2 (T=710ms)
- 8. Single flash (T=1000ms)
- 9. Single flash (T=400ms) 10.Single flash (T=200ms)
- 11.Singleflash (T=800ms) 12. Single flash
  - (T=800ms) 13.slow Single flashand Quick single flash
- 14.slow Single flashand Quick single flash (T=1180ms)