Star Split Phantom™

Model ULB24-DLP
Undercover Interior LED Split Lightbar
With Takedown and Directional Pursuit Lights
(Gen 4 Starburst LEDs)

> *Please Note:* These instructions are provided as a general guideline only. Specific mounting and/or wiring, may be necessary and are the sole responsibility of the installer.   Star Headlight & Lantern Co., Inc. assumes no responsibility for the integrity of the installation for this or any of its products.

> ⚠ **WARNING!** This light utilizes high-intensity LED Lamps. DO NOT stare directly into the light while it is on, as momentary blindness and/or permanent eye damage may occur.

PROUDLY MADE IN THE USA
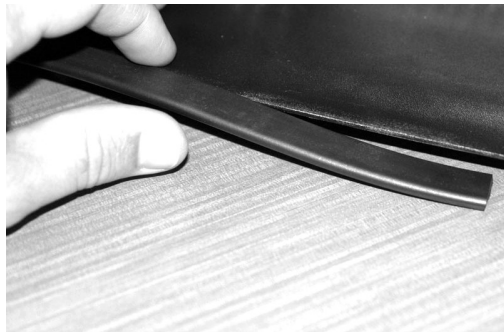*An ISO 9001:2008 Certified Company*

IMPORTANT:	Please read all of the following instructions before installing your new *Split Phantom*™ LED undercover lightbar.
CAUTION:	Please be sure to check that your cigarette plug outlet is properly fused. **Testing the light before this fuse is properly installed will void the warranty on the light.**
WARNING!!!!	*Care should be taken when positioning this warning light so that the light and/or cord does not interfere with the proper operation of the driver-side or passenger- side airbag! Failure to heed this warning may result in serious or fatal injury.*

Gasket Installation

Before installing any of the brackets, slide the enclosed rubber channel over the front edge of the baffle .

Mounting

There are several optional mounting brackets that can be used to mount your *Star Phantom*™. Each light is packaged with the bracket that was selected at the time the light was ordered. Please review the separate mounting instructions that are included with each bracket. You can visit www.star1889.com for a detailed list of available mounting brackets and their known vehicle compatibility.
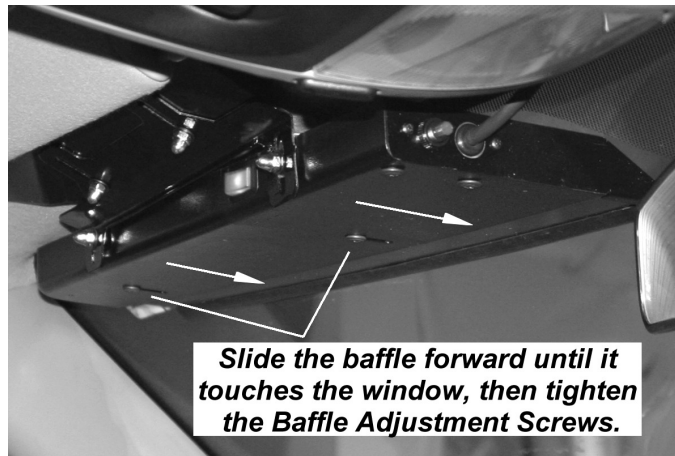
⚠ **WARNING!** *Star Headlight & Lantern Co., Inc. assumes no responsibility for the secure mounting of this light. It is the responsibility of the installer and/or owner to ensure the lightbar is mounted securely. Check your light every time you enter the vehicle to ensure that it is mounted securely.*

Baffle Adjustment

1. After the light has been mounted *(see separate mounting instructions),* if adjustments permit, slide the light forward until the top of it is touching the windshield.

2. Loosen the baffle screws and carefully slide the baffle forward until the gasket is forced slightly downward by the pressure of the windshield.

3. Tighten the Baffle Adjusting Screws to secure the baffle in place .

   <u>*CAUTION:*</u> *Take extreme caution not to over tighten the screws!!! Over tightening of the screws can strip the holes.*

Slide the baffle forward until it touches the window, then tighten the Baffle Adjustment Screws.
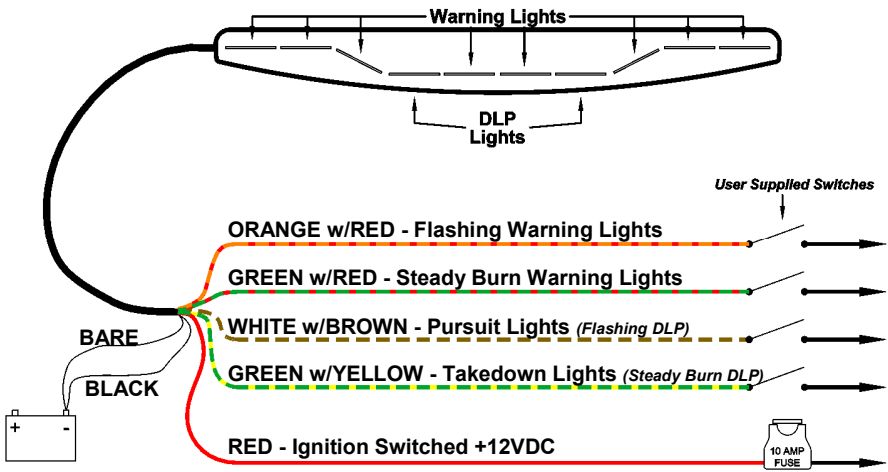
4. Once all of the brackets are securely tightened, check your mount to ensure the desired angle is achieved. Stand in front of the vehicle and inspect the light through the front windshield. The screws may be loosened slightly to allow for any final adjustments necessary.

Wiring

For proper installation and full operability, this light requires a 10.5A ignition switched power source, connections to the negative terminal of the battery, and four external switches rated for a minimum 1A *(user supplied).*

ORANGE w/RED - Flashing Warning Lights

GREEN w/RED - Steady Burn Warning Lights

WHITE w/BROWN - Pursuit Lights *(Flashing DLP)*

GREEN w/YELLOW - Takedown Lights *(Steady Burn DLP)*

RED - Ignition Switched +12VDC

All wires connected to the positive terminal of the battery should be fused <u>at the battery</u> for their rated load. **Testing the light before this fuse is properly installed will void the warranty on the light.**

Please Note: *When the red wire is connected to +12VDC the light will draw a small current (5 mA). Occasionally vehicles may sit for extended periods of time (i.e. more than a few days), thus we recommend that the red wire be routed through an ignition switched power source.*

Operating Instructions

Main control of this light is done though four of the wires in the harness. They should be connected to +12VDC through 4 switches *(user supplied)* as described in the **Wiring** section above.

Indicator LED *(some versions)*

Located on the bottom of some versions of *The Star Phantom*®, is an Indicator LED. When your light is activated in any mode, this LED will flash to alert you to the lightbar activity in the daylight.

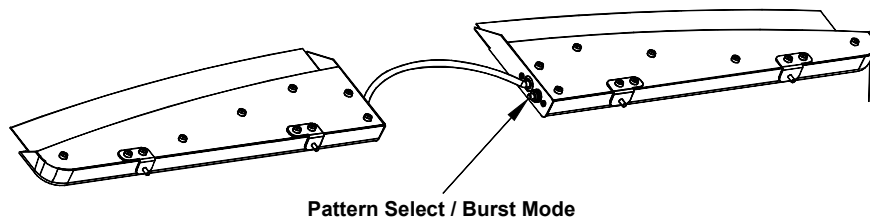| *Active Mode*	*Indicator LED Display*
Warning LED Flashing Mode	Fast Flash
DLP LED Flashing Mode	Slow Flash *(overrides Fast Flash)*
Warning LED Steady Burn or DLP Takedown (Steady Burn)	Steady *(overrides Fast or Slow Flash)*
Warning LED Burst Mode	Flicker *(overrides Steady, Fast or Slow Flash)*

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Pattern Select/Burst Mode Button

The button on the right half of the light is the **Pattern Select/Burst Mode** button. This is a momentary switch and has four different functions, depending upon which mode the light is in (i.e. which wire is activated).

⚠️ ***Please note that this button only functions properly if ONLY the single wire indicated has +12VDC applied to it. If multiple functions are activated, the Indicator LED (if present) will flash four (4) quick times, indicating an error.***

Pattern Select / Burst Mode

Warning LEDs in Flashing Mode (Only Orange w/Red wire activated):
If the *Star Phantom*® is in Flashing Mode, the **Pattern Select/Burst Mode** button will act as the Pattern Select button. Each time this switch-button is depressed, *The Star Phantom*® will cycle to the next pattern. *The Star Phantom*® is designed with thirty-five different patterns *(see next page)*.

DLP LEDs activated in Pursuit (flashing) Mode:
If *only* the **Red** and **White w/Brown** wires have +12VDC applied to them, the DLP lights will be in Pursuit Mode (alternating back and forth). The **Pattern Select/Burst Mode** button will allow you to select which speed you would like these lights to alternate at 1.6FPS or 2.4FPS. Each time this switch-button is depressed and released, the DLP lights will change speed. *Note: The indicator LED will momentarily go off while the button is pressed in.*

Warning LEDs in Steady Burn (Takedown) Mode (Only Green w/Red wire activated)
Or
DLP LEDs in Steady Burn (Takedown) Mode (Only Green w/Yellow wire activated):
If the *Star Phantom*® DLP LEDs are in the Steady Burn Mode, the **Pattern Select/ Burst Mode** button will "burst" them into a super-bright, high-power mode (takedowns). This mode will activate for approximately 30 seconds then revert to the standard steady burn mode. ***Please Note:*** Immediately after the 30 second "Burst Mode" has ended, the light will be "locked out" of Burst Mode for 30 seconds.

Pattern List

1   Slow Warn *
2   Fast Warn
3   Superfast Warn
4   Warn Fade
5   Pre-Pop Warn
6   All Singleflash
7   Alt. Tripleflash
8   All Tripleflash
9   Alt. Quadflash w/Post Pop
10   All Quadflash w/Post Pop
11   Alt. Quintflash
12   All Quintflash
13   Alt. Pre-pop Quintflash
14   All Flicker
15   Alt. PSU Flicker
16   One Side Pop, Other Side Rapid Fire
17   One Side Rapid Fire, Other Pop
18   Comet 1
19   Comet 2
20   Delta Omega (Flash Rate Sweep)
21   Slow Warn, Superfast Warn
22   All Singleflash, All Flicker
23   Alt. Double, ALT. Quad w/Post Pop
24   All Double, ALL. Quad w/Post Pop
25   Alt Double, Alt. Pre-Pop Quad, Alt. Quad w/Post Pop, Alt Flicker
26   All Double, All Quintflash, All Quadflash w/Post Pop, All Flicker
27   All Quadflash w/Post Pop, All Doubleflash, All Flicker
28   Alt. Pre-Pop Triple, Alt. Doubleflash, Alt Flicker **
29   Alt. Pre-Pops, Alt. Flicker, Superfast Warn
30   Delta Omega, All. Double, All. Flicker
31   One Side Steady---Other side Singleflash
32   One Side Steady---Other Side Short-Long
33   Warn Medium (Alt. Long Singleflash)
34   Alt. Short - Alt. Long
35   Cycle All

*   Default Pattern #1
**   Default Pattern #2

- If at anytime you would like to go directly to the Slow Warn (pattern #1), simply press, and hold the pattern select button for approximately 3 seconds. When the LEDs flash once, release the button and the light will be in the Slow Warn pattern.

- If you would like to place the light back into the default pattern (Pattern 28: Alt. Pre-Pop Triple, Alt. Doubleflash, Alt Flicker), simply press and hold the pattern select button until the LED's flash twice (approx. 6 seconds). Then release the button and the light should be in the default pattern.

- **_Toggle Mode:_** Pressing and holding the pattern select button until the LED's flash three times (approx. 9 seconds) will toggle the "steady side" for patterns 31 and 32.

- **_Indicator LED_** *(some models):* Pressing and holding the pattern select button until the LED's flash four times (approx. 12 seconds) will disable or enable the indicator LED.

- The *Split Phantom* will remember the pattern it was in when turned off and display the same pattern when re-activated.

Service

These lights use state-of-the-art Light Emitting Diode (LED) technology. These warning lights are comprised of ultra-high intensity LEDs that are controlled by a solid state flasher unit to efficiently produce light output with lifetimes up to 100,000 hours. Under normal circumstances, you will not need to replace any LEDs in this light. If any of the LED's in your light do fail, please contact Star Headlight for arrangements to have them repaired. The flasher unit and heads CANNOT be serviced in the field and any attempt to do so will

LED FIVE YEAR LIMITED WARRANTY

The manufacturer warrants this LED light against factory defects in material and workmanship for five years after the date of purchase. The owner will be responsible for returning to the Service Center any defective item(s) with the transportation costs prepaid. The manufacturer will, without charge, repair or replace *at its option*, products, or part(s), which its inspection determines to be defective. Repaired or replacement item(s) will be returned to the purchaser with transportation costs prepaid from the service point. A copy of the purchaser's receipt must be returned with the defective item(s) in order to qualify for the warranty coverage. Exclusions from this warranty include, but are not limited to, domes, and/or the finish. This warranty shall not apply to any light, which has been altered, such that in the manufacturer's judgment, the performance or reliability has been affected, or if any damage has resulted from abnormal use or service.

There are no warranties expressed or implied (including any warranty of merchantability or fitness), which extend this warranty period. **The loss of use of the product, loss of time, inconvenience, commercial loss or consequential damages, including costs of any labor, are not covered**. The manufacturer reserves the right to change the design of the product without assuming any obligation to modify any product previously manufactured.

This warranty gives you specific legal rights. You might also have additional rights that may vary from state to state. Some states do not allow limitations on how long an implied warranty lasts. Some states do not allow the exclusion or limitation of incidental or consequential damages. Therefore, the above limitation(s) or exclusion(s) may not apply to you.

NOTE: Most failures can be traced to wiring and battery problems. Check "quick-connects" and wiring to insure that correct voltage/polarity is reaching the electronic strobe light/LED beacon.

If you have any questions concerning this or any other product, please contact our **Customer Service Department** at (585) 226-9787.

If a product must be returned for any reason, please contact our
Customer Service Department to obtain a Returned Materials Authorization
number (RMA #) before you ship the product back.
Please write the RMA # clearly on the package near the mailing label.

Star Headlight & Lantern Co., Inc.

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NOTICE

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