

Micro-Star® DLITDC Series

Low Profile Dual-Color LED Auxiliary Light

Installation Notes

- Installer must have firm knowledge of vehicle electrical systems and emergency equipment. **It is the sole responsibility of the installer to ensure the warning light is secure. The manufacturer assumes no responsibility for the secure mounting of this light.**
- If you need to drill any holes when installing this light, please take care to check that BOTH SIDES of your drilling surface are clear from obstructions.
- Choose a mounting location away from any air bag deployment areas.
- Controls should be placed within convenient reach of the driver.
- Use only soap and water when cleaning product. Use of other chemicals may discolor lens and/or housing, diminishing light output.

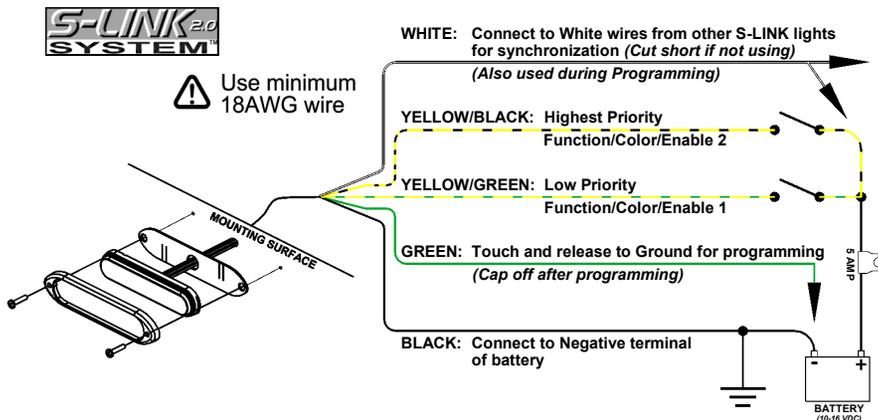
Wiring Notes



When wiring your lights, it is recommended that you take the following precautions to reduce any Electromagnetic Interference (EMI).

- Keep LED modules and any radios as far from each other as possible.
- Separate the radio wires and the LED wires.
- Any excess wires should be cut short.
- The Ground wire, Power wire, and Synchronization wire should be bound tightly together as they run from light to light, through your switchbox, and to the battery.
- **Do not ground each unit independently to the chassis.** Run the ground for each unit in a "bus" like structure, to the negative terminal on the battery.

Note: The total wire length between the two farthest units should be no more than 40 feet.



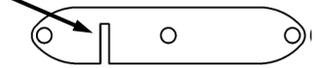
Several optional brackets are available for various applications where mounting directly to the surface is not desired. Please visit our website (www.starheadlight.com) for a complete list of brackets.

Surface Mounting Instructions

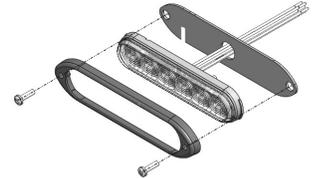
This light includes a front mounting bezel (P30019-317) for installation on a flat surface. To install, use the gasket as a template to mark and drill three holes for the self tapping screws and wires.

Remove the one gasket slit that is open to the bottom and ensure it is aligned with the Gortex™ pad on the rear of the light. This will allow air to circulate through the pad, helping reduce condensation.

Rubber Mounting Gasket P30047-174



**MUST DRILL HOLES THE SPECIFIED SIZES!!!
MUST USE #6 STAINLESS STEEL SCREWS!!
DO NOT OVER TIGHTEN SCREWS!!
TORQUE TO 10 IN.-LBS.!!
LIGHT MUST BE MOUNTED COMPLETELY FLAT!!**



FLAT SURFACES (Outer mounting holes) **SLIGHTLY CURVED SURFACES** (Inner mounting holes)



If you are mounting this light to a curved surface, or desire a discreet mount, please order the optional **S30019-320 Reverse Mounting Bezel**.

Once the wires are run, the use of a small amount of silicone or other similar sealant (not included) is recommended to seal the wire hole and prevent your wires from becoming damaged.

Programming, Functionality, and Operation

The recommended first step is to identify what color is defaulted to each input. To do this:

- Connect the BLACK wire to GROUND.
- Touch only one of the Enable wires to POWER and note which color is activated.
- Repeat for each Enable wire.

STANDARD PROGRAMMING

Follow the instructions below to program any of the options listed in the chart to the right. Each Enable wire is programmed independently.

1. Connect the BLACK wire to GROUND.
2. Connect the corresponding Enable wire to POWER (*only one at a time*).
3. Hold (or touch and release) the GREEN wire to GROUND to set the options listed to the right.
4. Disconnect wires when finished programming.

STANDARD PROGRAMMING CHART		
Hold Green to Power (sec)	# Flashes	Effect On That Enable Wire
0-2	N/A	Advances to next pattern
3	1	Advances to Pattern 1
6	2	Advances to Pattern 11
9	3	Set Enable to Phase 1
12	4	Set Enable to Phase 2
15	5	Set Enable to Cruise Mode
18	6	Set Enable to Full Steady

Pattern Programming

With one of the colors activated, touch and release the GREEN wire to GROUND to scroll through the patterns to the right (or hold it to advance directly to the shortcuts).

Phase 1 / Phase 2

All lights are shipped with both Enables (colors) set for Phase 1. If you are synchronizing this light with another and want the same color on the two lights to alternate, while one color is activated, use the shortcut shown in the **Standard Programming Chart** (previous page) to set the corresponding color on the second light for Phase 2.

(See Synchronization section for details)

Note: When both colors are activated on one light, Color 1 will always be forced into the opposite Phase of Color 2.

Full Steady or Cruise Mode

If you want either color to be **Full Steady Burn** or **Cruise Mode** (low intensity Steady Burn mode), activate that and use the shortcut shown in the **Standard Programming Chart** (previous page) to set the corresponding Enable wire for the corresponding mode.

Exit either mode by holding the GREEN wire to GROUND for 3 seconds/1 blink.

ADVANCED PROGRAMMING

Priority

By default, Color 2 (YELLOW w/BLACK wire) is set for high priority. And functions as follows

- **Both Enables set for Flashing:**
Both colors will flash in the pattern of Color 2. Additionally, Color 1 will automatically flash in the opposite Phase of Color 2.
- **One or both Enables set for Steady:**
Only Color 2 will activate. Color 1 will de-activate.

If you would like to change the priority of the colors, so that Color 1 overrides Color 2, proceed below:

1. Connect the BLACK wire to Ground.
2. Connect POWER to the WHITE wire and Enable 1 (i.e. the color that you want to be High-Priority).
3. Hold the GREEN wire to GROUND until the light flashes once (~3 seconds).
4. Disconnect wires when finished programming.

RESET TO DEFAULT SETTINGS

To reset all settings to the factory defaults, proceed as follows:

- Connect the BLACK wire to GROUND.
- Connect the WHITE wire and any **ONE** of the Enable wires to POWER.
- Connect the GREEN wire to GROUND and the light will illuminate in a Steady Burn mode. Keep the GREEN wire connected for 9 seconds and release it when the light flashes 3 times.
- Disconnect the WHITE wire from POWER 1 second later.

PATTERN PROGRAMMING			
Flash Pattern #	Pattern Type	Pattern Description	Shortcut
1	K	Flicker	← Pattern 1 3 Sec/1 Blink
2	L	Fast Doubleflash	
3	M	Tripleflash	
4	N	Psuedo Flicker	← Pattern 7 6 Sec/2 Blink
5	O	Psuedo Random	
6	F	Quadflash †	
7	G	Quadflash w/Post-Pop †	
8	H	Singleflash †	
9	I	Doubleflash †	
10	J	Variable AKA Delta-Omega	← Pattern 15 15 Sec/5 Blinks
11	C	Post-pop	
12	E	Random	← Pattern 18 18 Sec/6 Blinks
N/A		Cruise Mode	
N/A		Full Steady	

Shortcuts - Hold GREEN wire to Ground for length of time shown

† - SAE Class 1 approved for Amber, Blue, Red, and White. Green on its own cannot be used in applications that require Class 1 or 2 performance.

SYNCHRONIZATION

You can synchronize up to ten lights with **FLINK SYSTEM** compatibility.

DO NOT CONNECT WHITE WIRES UNTIL PROGRAMMING HAS BEEN COMPLETED FOR ALL LIGHTS!!

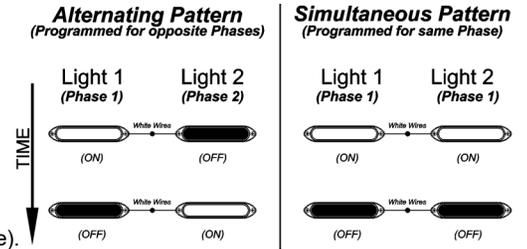
1. Power up the first unit and select a pattern. Touch and release the GREEN wire to GROUND to change patterns.

2. Program the second light for the same **Pattern**.

3. If applicable, program the **Phase** of the second light.

Lights set for the **SAME** phase flash together (simultaneous).

Lights set for **DIFFERENT** phases flash opposite one another (alternate).



4. After programming all lights, tie off the GREEN wires and connect the WHITE wires together.

5. Test lights by applying power to all of them at the same time.

DUMMY HEAD MODE

To utilize this light with an external flasher, place the light in "Dummy Head" mode by keeping the GREEN wire permanently connected to GROUND. Both Enable wires will be placed into in a Steady Burn mode that is compatible with external flashers.

NOTE: Heads **MUST** be flashed at 50% or lower total on time. They can be pulse width modulated as low as 15% and at 100hz or higher.

LED FIVE YEAR LIMITED WARRANTY

Star Safety Technologies warrants this LED light against factory defects in material and workmanship for five years after the date of manufacture. 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.** Star 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.

If a product must be returned for any reason, please contact our Repair Department at (585) 226-9500 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
Safety Technologies by **Grate**

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