DLXTRMC and DLXTUMC Series

Multi-Color LED Auxiliary Light

S-LINK 2.0 SYSTEM™

IMPORTANT: ***Please read all of the following instructions before installing your new light. Failure to follow these safety precautions may result in damage to your light or vehicle and may result in serious injury or death to you and your passengers.***

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.

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.

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 Material Authorization number (RMA #) before you ship the product back. Please write the RMA # clearly on the package near the mailing label.

Installation Notes

- Installer must have firm knowledge of vehicle electrical systems & 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. Replace discolored lenses immediately!

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SINCE 1889

PLIT601 REV. C 10/26/20

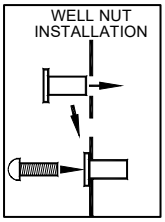
Mounting Instructions

Please Note: These instructions are provided as a general guideline only. ***Some vehicles may require special mounting, wiring, and/or weather-sealing. This is 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.

Bezel Mount - DLXTRMC-1 & 1C (4" Round) and DLXTUMC-1 (Oval)

1. Review the mounting diagram at the bottom of the page.

   - Use the #6 x ¾" self tapping screws for applications where the mounting surface is a minimum of .060" (1/16") thick and is composed of a material that will provide sufficient "bite" for the self tapping screw.
   - Use the #6-32 x ½" machine screws and well nuts if your surface is less than .060" thick and/or composed of a material insufficient for securing a self tapping screws.
2. Use the gasket as a template to mark the mounting and wire holes and drill them with the appropriate sized bit.
   - #36 (0.1065") Drill Bit for Self -Tapping Screw Holes
   - Drill 5/16" Holes if Using Rubber Well Nuts
   - Drill a 3/8" hole for the wires.

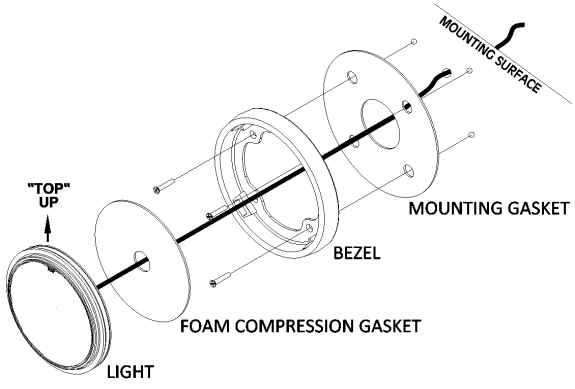


3. *If you are using the well nuts*, push the enclosed rubber well nuts through the holes until the bottom side of the wider lip rests on the surface of the vehicle.
4. Review the mounting diagram below and use the appropriate screws to mount the bezel.

   Take extreme caution not to over tighten the screws!!! Over tightening of the screws can strip the holes and result in a faulty mount.
5. With the bezel firmly attached to the mounting surface, seat the foam compression gasket inside of it. Route the wires as shown below and seal the wire hole with silicone to prevent your wires from becoming damaged.
6. Carefully press the LED head into the bezel taking care to ensure the text "TOP" is located at the top.

CAUTION !!

Check the gasket to ensure it is resting flat and that there are no gaps between the light and the mounting surface.



(MOUNTING CONT'D)

Grommet Mount - DLXTRMC-4 and DLXTUMC-4

These models are designed to fit into the standard 4½" round or oval mounting holes that are common to most commercial vehicles.

1. Insert the rubber grommet into the mounting hole.
2. Snap the light into the grommet taking care to ensure the text "TOP" is located at the top *(round only)*.

Electrical Connections

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 away 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.

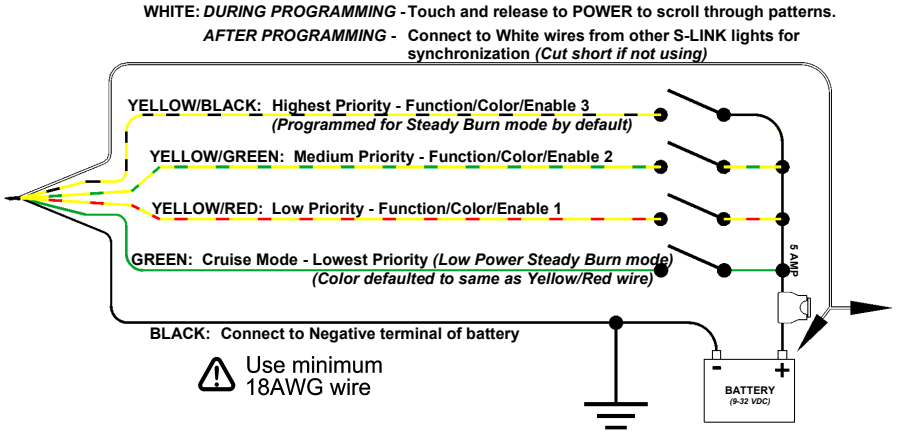
Note: The total wire length between the two farthest units should be no more than 40 feet.

After Programming has been completed, as described on the following pages, connect your wires as shown below.

Please Note: The wiring diagram below applies to all versions except the **DLXT*MC-RAW**. By default the DLXT*MC-RAW will ship in Stop/Tail/Turn Mode that is described on page 8 of the manual.

CAUTION !!

This light is NOT D.O.T approved as a stand alone STT light.



Standard Programming, Functionality, and Operation

For ease of programming, we recommend using the Android app (see page 7 for details). If you do not have access to an Android device or prefer to program the light manually, proceed below.

This section applies to the default functionality of this light. There are also several other advanced features that can be programmed. Most applications will not require reprogramming of the light, but you can find these options described in detail under the ***Advanced Programming*** section.

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.

Please Note The Following

- *Enable 3 is programmed for steady burn mode by default. If you wish to set it for one of the flash patterns, please review the* ***Advanced Programming*** *Section.*
- *Cruise Mode (GREEN wire) cannot be reprogrammed for a flashing mode.*

PATTERN SELECTION

1. Connect the BLACK wire to Ground
2. Connect the corresponding Enable wire to Power *(only one at a time)*.
3. Touch and release the WHITE wire to POWER to scroll through the patterns.

Flash Pattern #	S-LINK Pattern Type	Pattern Description
1	K	Flicker † *(Shortcut 1)*
2	L	Fast Doubleflash
3	M	Tripleflash †
4	N	Pseudo Flicker
5	O	Pseudo Random
6	F	Quadflash †
7	G	Quadflash w/Post-Pop †
8	H	Singleflash †
9	I	Doubleflash †
10	J	Variable AKA Delta-Omega
11	A21	Double Shuffle ‡ *(Shortcut 2)*
12	A22	Quad/Single
13	A23	Single Cycle
14	A24	Quad Post Pop Shuffle ‡
15	A25	Quint Shuffle
16	A26	Combo 1 5 3 ‡
17	A27	Delta Omega Nu
18	A28	Cliff
19		Double Tri-color (Phase 1)
20		Double Tri-color (Phase 2)

† - ***SAE approved patterns when properly configured***

‡ - ***SAE approved patterns when programmed for single color only***

Shortcut 1 - Hold WHITE wire to POWER for 3 seconds (light flashes once)

Shortcut 2 - Hold WHITE wire to POWER for 6 seconds (light flashes twice)

ACTIVATING MULTIPLE ENABLES

When more than one Enable line is activated at the same time, the following rules will apply:

- Enable 3 (Highest Priority) > Enable 2 > Enable 1 > Cruise (Lowest Priority)

Patterns 1–10

- Progressive Mode - Colors for each additional Enable will be added and will flash the pattern of the highest priority.

FACTORY DEFAULT ENABLE WIRE LEGEND

YELLOW w/BLACK - Enable 3 : Color/Function 3
YELLOW w/GREEN - Enable 2 : Color/Function 2
YELLOW w/RED - Enable 1 : Color/Function 1
GREEN - Cruise : Color 1

Patterns 11–18

- Non-Progressive Mode - The highest priority Enable will override the other Functions/ Colors.

(Optional: See the Additional Function Programming section on the next page to change Patterns 1-10 to non-progressive/override the mode).

ADDITIONAL FUNCTION PROGRAMMING

There are several additional programming options for each Enable wire that can be accessed through the "shortcuts" that are listed in the chart below. To set any of them, proceed as follows:

1. Connect the BLACK wire to GROUND.
2. Connect the ONE Enable wire you wish to program to POWER.
3. Hold the WHITE wire to POWER for the time indicated.
4. Repeat for other Enable wires, if desired.

***Phase 1 / Phase 2** (Patterns 1-10 only)*

By default, each Enable is set for Phase 1. If you are synchronizing this light with another and want the two lights to alternate, use the shortcut shown in the chart to the right to set the second light for Phase 2.
(See Synchronization section for details)

Steady Burn

Changes the function of that Enable wire to Steady Burn.

Cruise

Changes the function of that Enable wire to Cruise (Low intensity version of Steady Burn).

Auto-Dim

If this feature is enabled the color/function tied to that particular Enable wire will automatically dim in low light environments (ex. at night).

ADDITIONAL FUNCTION PROGRAMMING SHORTCUTS

Hold White 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	Toggles Cruise On/Off
18	6	Toggles Steady Burn On/Off
21	7	Toggle Auto-Dim On/Off
24	8	Toggles Progressive Option

***Progressive Option** (Patterns 1-10 only)*

Toggling this option changes the functionality of that Enable Wire so that activating multiple enables will only activate the highest priority function/color and will NOT add the colors of the lower priority Enables to the pattern cycle. It can be programmed for the YELLOW w/ BLACK and the YELLOW w/GREEN Enable wires.

SYNCHRONIZATION

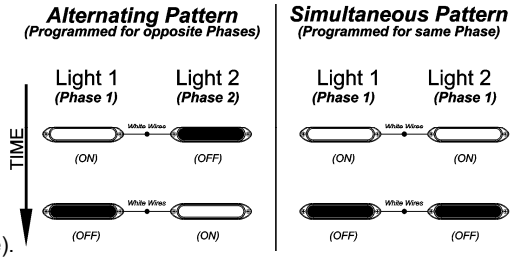
You can synchronize up to ten lights with S-LINK SYSTEM compatibility.

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

1. Power up the first unit and select a pattern.
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 completing the programming for all lights, connect the white wires together.
5. Test lights by applying power to all of them at the same time.

(STANDARD PROGRAMMING CONT'D)

RESET TO DEFAULT SETTINGS

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

- Connect the BLACK wire to Ground
- Connect the GREEN wire and any **ONE** of the Enable wires to Power
- Hold the WHITE wire to POWER for 9 seconds and release it when the light flashes 3 times.
- Disconnect the GREEN wire from Power 1 second later

Advanced Programming

⚠ STOP !!

This section is OPTIONAL. Most applications will not require any Advanced Programming. You should only need to reference this section if you require specialized programming.

CHANGING COLOR ASSIGNMENTS FOR EACH ENABLE

(applies only to Patterns 1-10, Steady Burn, and Cruise)

When shipped, each Enable wire has one color assigned to it. The table below shows the default factory settings.

To reprogram the color assigned to each Enable, or to assign multiple colors to one Enable, proceed as follows:

- Connect the BLACK wire to GROUND.
- Connect the GREEN wire and **only** the Enable wire that you wish to reprogram to POWER.
- Briefly touch and release the WHITE wire to POWER to scroll through the color combinations listed in the table below.
- Disconnect the GREEN wire from Power after 1 second.

Enable Wire Color Assignment			
Setting #	Color 3	Color 2	Color 1
1	ON	OFF	OFF
2	OFF	ON	OFF
3	ON	ON	OFF
4	OFF	OFF	ON
5	ON	OFF	ON
6	OFF	ON	ON
7	ON	ON	ON

FACTORY DEFAULT ENABLE WIRES

◄ YELLOW w/BLACK - Enable 3
◄ YELLOW w/GREEN - Enable 2
◄ YELLOW w/RED - Enable 1

CHANGING COLOR ORDER FOR EACH ENABLE

(applies only to Patterns 11-18 / 3-Phase Patterns)

When programmed for Patterns 11-18, each Enable wire has a default "Color Order" assigned to it (the order the colors are rotated through). By default, each Enable Wire has only one color assigned to it.

Using this programming option you can change the order and/or replace individual colors from the 3-Phase pattern. This can be useful if you want to utilize only one or two colors for a particular Enable, or if you have two synchronized lights and you would like a different color flashing on different lights.

To reprogram the Color Order assigned to each Enable, proceed as follows:

- Connect the BLACK wire to Ground.
- Connect the GREEN wire and the Enable wire that you wish to reprogram to POWER.
- Hold the WHITE wire to POWER for 3 seconds until the light flashes once then release it. The Color Order will scroll to the next combination listed in the table to the below.
- Repeat the process with the WHITE wire until you advance to the combination you desire.
- Disconnect the GREEN wire from Power after 1 second.

Color Order For 3-Phase Patterns				DEFAULT ENABLE WIRE COLOR ORDERS FOR 3-PHASE PATTERNS
Setting #	Phase 1	Phase 2	Phase 3	
1	C1	C1	C1	◀ YELLOW w/RED (Enable 1)
2	C2	C1	C1	
3	C3	C1	C1	
4	C1	C2	C1	
5	C2	C2	C1	
6	C3	C2	C1	
7	C1	C3	C1	
8	C2	C3	C1	
9	C3	C3	C1	
10	C1	C1	C2	
11	C2	C1	C2	
12	C3	C1	C2	
13	C1	C2	C2	
14	C2	C2	C2	◀ YELLOW w/GREEN (Enable 2)
15	C3	C2	C2	
16	C1	C3	C2	
17	C2	C3	C2	
18	C3	C3	C2	
19	C1	C1	C3	
20	C2	C1	C3	
21	C3	C1	C3	
22	C1	C2	C3	
23	C2	C2	C3	
24	C3	C2	C3	
25	C1	C3	C3	
26	C2	C3	C3	YELLOW w/BLACK
27	C3	C3	C3	◀ (Enable 3)

WIRELESS SMARTPHONE PROGRAMMING *(OPTIONAL)*

Programming this light can also be done using most Android based phones or tablets that have a flash. See the app store for a list of approved devices.

1. Download the **Star Signal Tricolor DLITMC Flasher Programmer** from the Play Store.
2. Select the desired options in the app.
3. Power up the light using two or more Enable lines and attach the WHITE wire to Power.
4. Hold the android device's flash as close as possible to the sensor in the light (location shown on the following page).
5. Press send and the Android device's flash will flash for approximately 6 seconds.
6. If the programming was successful, the light will blink for about 1.5 seconds.

   If it does not blink, there is an error:

   - Ensure the flash of the phone is as close as possible to the location shown.
   - Try blocking bright sunlight from the light.
   - Try closing open apps on your device and or resetting it.

STOP/TAIL/TURN PROGRAMMING

(DEFAULT SETTING FOR DLXT*MC-RAW MODELS)

This light has the ability to be reprogrammed so that it can be used as an auxiliary STT light.

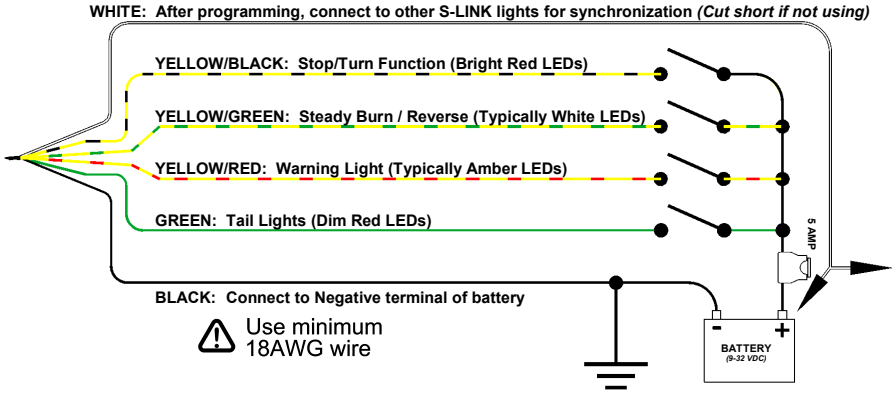
CAUTION !! These are not DOT approved STT replacement lights. They should only be used as supplemental/auxiliary lighting.

To reprogram this light for STT mode, proceed as follows:

- Connect the BLACK wire to GROUND.
- Hold the WHITE wire and the GREEN wire to POWER until the light flashes once, then twice (approximately 6 seconds).
- Release the WHITE wire, wait 1 second, then release the GREEN wire.

Smartphone App Programming: Select **"DLXT_MC_RAW_STT"** from the pulldown menu.

The light will now be programmed for STT mode and the wires will function as follows:



Please Note: This light cannot be used on vehicles with independent Stop and Turn enables unless you replace/reprogram one of the above functions for steady Red, allowing the YELLOW w/BLACK wire to perform the Stop function and the reprogrammed wire to perform the Turn function.

To reprogram the light for Warning Mode (described on page 3), proceed as follows:

- Connect the BLACK wire to GROUND.
- Hold the WHITE wire and the GREEN wire to POWER until the light flashes once, then twice, then three times (approximately 9 seconds).
- Release the WHITE wire, wait 1 second, then release the GREEN wire.

See YouTube key words "**Star DLXTRMC**" for more info.