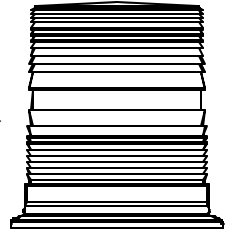
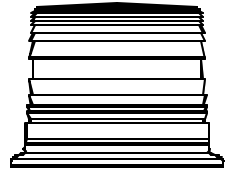


255 Series LED Lights

SAEJ845 Class II: 255TCL / 255TCLV / 255TSL / 255TSLV

SAEJ845 Class I: 255HTCL / 255HTCLV / 255HTSL / 255HTSLV



IMPORTANT: Please read all of the following instructions before installing your new warning light.

Mounting Instructions

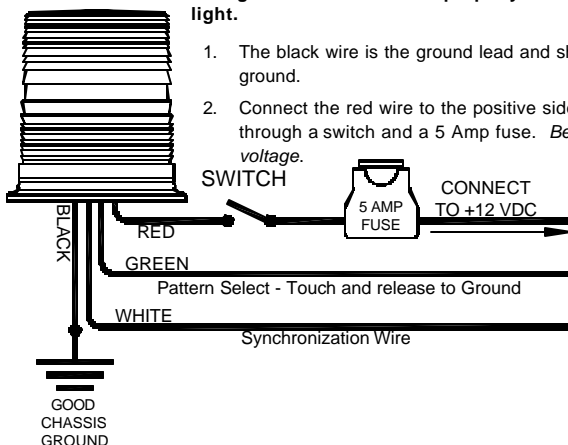
If you are installing a vacuum-magnet version (255TCLV, 255TSLV, 255HTCLV, or 255HTSLV), please skip to the **Pattern Programming** section on the next page.

1. Your new warning light comes complete with one foam mounting gasket, one wire grommet, two wire splicing terminals, three mounting screws, three lock washers, and three hex nuts.
2. These warning lights come equipped with a combination base, allowing the light to be mounted on either a 1" NPT conduit pipe or permanently mounted. For the permanent mount, proceed to Step 3. For NPT pipe, mount the light using the threaded entrance hole in the base of the light, and then skip to the Wiring Instructions on the following page.
3. Before installing this light onto a flat surface, it is recommended that you seal up the pipe mount hole with a small amount of RTV. This will help prevent water damage.
4. Using the base as a template, mark three holes (on a 2.975" radius) on the mounting surface. Take care to ensure that the base does not move while you are marking each of the three holes.
5. Remove the base and drill a 7/32" hole in the marked spots.
CAUTION: Take care not to drill through the headliner of the vehicle below.
6. **If your wires will not be routed through the mounting surface skip to Step 8.** If you are routing your wires through the mounting surface, then remove the headliner from the inside of the vehicle (if applicable), and drill a 3/8" hole in the center to route the wires through.
7. Insert the enclosed rubber wire grommet into the center hole. Place the light on the surface of the vehicle, and route the wires through the grommet.
8. Align the outer holes of the base with the holes in the mounting surface, install the screws and nuts, and tighten until snug.

Wiring Instructions

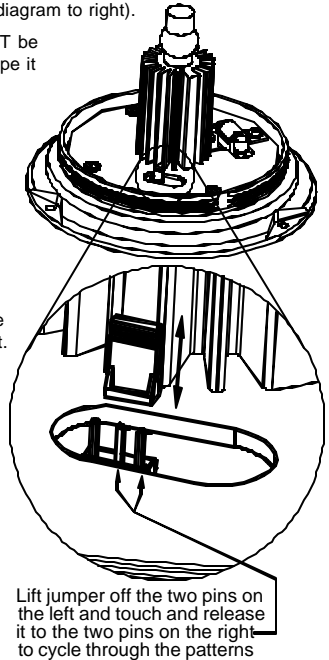
CAUTION: All of our DC powered warning lights are polarity sensitive. These lights are polarity protected *only if the appropriate fuse* is used. All wires connected to the positive terminal of the battery should be fused at the battery for their rated load. **Testing the light before this fuse is properly installed will void the warranty on the light.**

1. The black wire is the ground lead and should be connected to a good chassis ground.
2. Connect the red wire to the positive side of your power source (+12-24VDC) through a switch and a 5 Amp fuse. *Be sure to check your light for proper voltage.*



Pattern Programming For Installation of a Single Light

1. Setting the flash pattern of your light can be performed using either the green wire (*permanent mount versions only*) or an internal jumper (see diagram to right).
2. If you are installing a permanent mount version and you will NOT be synchronizing two lights together, cut the white wire short and tape it off so that it does not come into contact with anything.
3. After the black and red wires are connected (permanent mount versions) or the cig plug is inserted into a live receptacle (vacuum-magnet mount versions) you may set the flash pattern. The green wire (perm mount only) or internal jumper will be used to preset the desired flash pattern.
4. This light has 10 patterns in either of two "phases" to select from (see chart to the bottom right).
5. The lights are preset at the factory for Pattern #7 (Quadflash). You can cycle through the other patterns by briefly touching the green wire to ground for approximately 1 second and releasing it. Touch and release the green wire to ground until you find the desired pattern. The internal jumper can also be used to change the pattern in the same fashion as the green wire. Remove the jumper from the left two pins. Then touch and release it to the right two pins to scroll through the patterns as described previously. Once you have selected the pattern you desire, replace the jumper on the left two pins.
6. After the pattern has been set, tape, or place a wirenut over the end of the green wire to prevent it from coming into contact with ground again (perm mount) or replace the jumper on the left two pins. The light will "remember" the pattern when switched off and that pattern will be displayed the next time the light is switched on.
7. **SHORTCUTS:** There are a number of "shortcuts" available to make the programming of your light easier:



- Touching the green wire to ground (or holding the jumper on the right two pins) until the lights stop blinking (approx. 1 sec.), and releasing it advances the light to the next pattern.
- Touching the green wire to ground (or holding the jumper on the right two pins) until the unit BLINKS 1 time (approx. 3 sec.) takes you directly to pattern #7 (Quadflash).
- Touching the green wire to ground (or holding the jumper on the right two pins) until the unit BLINKS 2 times (approx. 6 sec.) jumps to pattern #1 (Singleflash).
- Touching the green wire to ground (or holding the jumper on the right two pins) until the unit BLINKS 3 times (approx. 9 sec.) jumps to pattern #17 (Quadflash – see next section for info on patterns 11-20).

Flash Pattern #	Phase	Pattern Description	Pattern Type
1	1	<i>Singleflash</i> ** †	<i>H</i>
2		<i>Flicker</i> †	<i>K</i>
3		<i>Quadflash with Post Pop</i> †	<i>G</i>
4		<i>PSU Flicker</i>	<i>N</i>
5		<i>PSU Random</i>	<i>O</i>
6		<i>Doubleflash</i> †	<i>I</i>
7		<i>Quadflash</i> * †	<i>F</i>
8		<i>Fast Doubleflash</i>	<i>L</i>
9		<i>Tripleflash</i>	<i>M</i>
10		<i>Variable</i>	<i>J</i>
11	2	<i>Singleflash</i> †	<i>H</i>
12		<i>Flicker</i> †	<i>K</i>
13		<i>Quadflash with Post Pop</i> †	<i>G</i>
14		<i>PSU Flicker</i>	<i>N</i>
15		<i>PSU Random</i>	<i>O</i>
16		<i>Doubleflash</i> †	<i>I</i>
17		<i>Quadflash</i> *** †	<i>F</i>
18		<i>Fast Doubleflash</i>	<i>L</i>
19		<i>Tripleflash</i>	<i>M</i>
20		<i>Variable</i>	<i>J</i>

* = Default 1 ** = Default 2 *** = Default 3

† - Class 1 for HTCL in Amber and TCL in Blue and White
Variable

Synchronization of Multiple Lights

(Permanent Mount Versions Only)

You can synchronize up to six total approved lights.

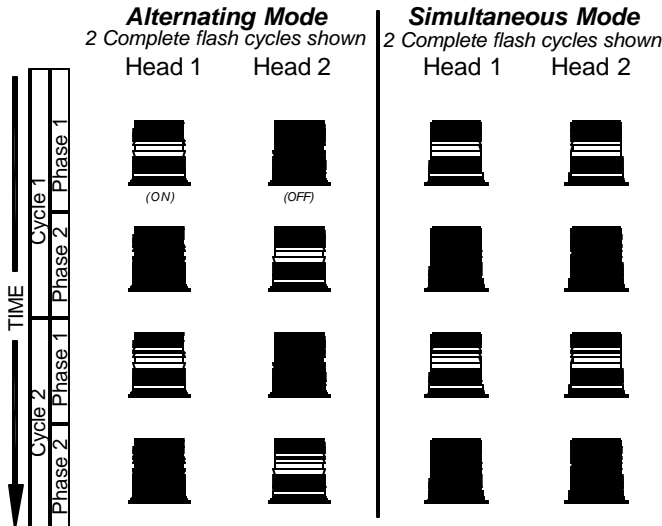


If you will be synchronizing two or more units together, leave the white wires disconnected until programming for each has been completed. Connect the white wires from the units together **ONLY AFTER PROGRAMMING** them all for the same **Pattern Type** (Phase MAY differ).

If you will be synchronizing your light with any of our "synchronizable" products, please note the following:

- All units that are to be synchronized **MUST** have the same **Pattern Type**.
 - To check pattern compatibility with other "synchronizable" products, review the **Pattern List** for each product, noting the **Pattern Type**. Certain patterns are compatible with some lights, but not compatible with others.
 - Although the programmable **Flash Patterns** can vary in each of our different lights, Pattern Types F, G, H, I, & J are the patterns fully compatible with ALL of our other "synchronizable" products.
1. Determine whether you want the two lights to flash alternately or simultaneously (*Review the diagram below for examples of Alternating and Simultaneous flashing*).
 2. Review the **Pattern List** for each product you will be synchronizing, noting the **Pattern Type** for each product.
 3. Select a Pattern Type that is compatible with all of the flasher units/lights you will be synchronizing.
 4. Program each light according to the instructions enclosed with each. **For lights that have patterns with a Phase:** All lights programmed for the same Phase will flash ON and OFF at the same time (flash simultaneously). Lights that are programmed for different phases will flash opposite one another (alternate).
 5. **After** you have the correct patterns programmed in for ALL of the lights you wish to synchronize, **turn all of the lights off** and connect the white wires from all units together.
 6. Power all of the lights up **at the exact same time** to verify they are flashing in the desired pattern. **Power MUST be applied to all synchronized lights simultaneously.** Excessive switch bounce or attempting to power the units up independently will result in erratic operation.

All lights synchronized by the connection of the white wire must be programmed with the same **Pattern Type**. Only the **Phase** can differ.



Magnet Mount Lights

WARNING!!!! Care should be taken when positioning any warning light on the roof, dash, or instrument panel of the vehicle, so that the light and/or cord does not interfere with the proper operation of any airbags! Failure to heed this warning may result in serious or fatal injury.

*If you are mounting the light on the roof of your vehicle, take extreme care to ensure that the magnet is firmly seated on your roof, and that the pull of the magnet is sufficient to secure the light in place. As the composition of the metal in the roofs of different vehicles may vary, as well as the contour, texture and/or condition, Star cannot guarantee the ability of the light to remain in place upon a moving vehicle. **It is the sole responsibility of the owner to ensure the warning light is secure.***

- **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.**
- Once the light is secured, route your cord such that it does not interfere with the vision of the driver or the operation of any controls, including, but not limited to, the steering wheel, gear shifter, and/or airbag.
- This light has been factory tested and approved. If the light fails to work when the plug is inserted into the cigarette plug socket, twist the plug a few times to remove any ash or other deposits which might be preventing a good contact from being made. If the problem persists, check for a fuse inside of the plug itself. If present, remove the fuse from the circuit, check to see if it has blown, and clean the lighter socket and contact surfaces. Reconnect the fuse and test the light again.

ONE YEAR LIMITED WARRANTY

The manufacturer warrants each new product, under normal use, against factory defects in material and workmanship for one year 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, bulbs, strobe tubes, 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. This warranty does not apply to defect or damage occurring as a result of disaster, accident, abuse, misuse, lightning, power surges, or failure to follow instructions in any enclosed manuals. Any damage or defects occurring as a result of any unauthorized service or repairs by unauthorized persons shall be excluded from this warranty.

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, and/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 which 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 Goods Authorization number (RGA #) before you ship the product back.

Please write the RGA # clearly on the package near the mailing label.

Star Headlight & Lantern Co., Inc.

455 Rochester Street Avon, NY 14414

Phone: 585-226-9787 FAX: 888-478-2797



www.starheadlight.com