

# INSTALLATION AND INSTRUCTION MANUAL



## MODEL 9100LED MINIBAR



### NOTICE

Due to continuous product improvements, we must reserve the right to change any specifications and information, contained in this manual at any time without notice. Star Headlight & Lantern Co., Inc. makes no warranty of any kind with regard to this manual, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Star Headlight & Lantern Co., Inc. shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this manual.

***Please Note:*** These instructions are provided as a general guideline only. Specific mounting, wiring, and/or weather-sealing 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.



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.

## Star Headlight & Lantern Co., Inc.

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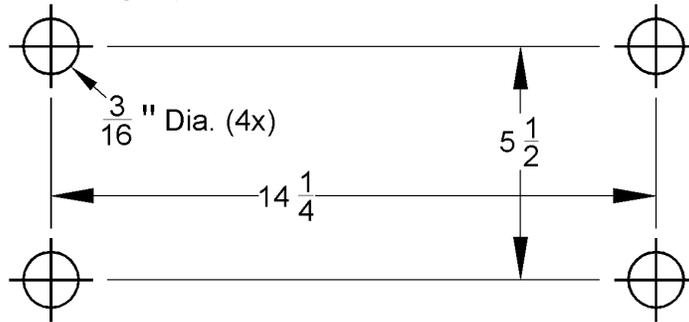


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PLIT470 REV. - 11/17/11

## **Permanent Mounting Instructions**

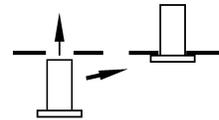
1. **IMPORTANT:** Please read all of the following instructions before installing your new warning light.
2. **CAUTION:** All of our DC powered warning lights are polarity sensitive. These lights are polarity protected *only if the appropriate fuse* is used. All wires connected to the positive terminal 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.**
3. Permanent mount lights are mounted using four bolts that screw into molly well nuts in each corner of the minibar. Mark the four mounting holes (and the center wire hole, if you will be needing one). Mark the holes on the corners of a 14-1/2" x 5-1/2" rectangle.



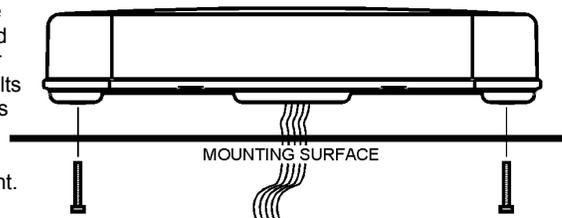
4. Check the underside of the marked locations to ensure that you do not damage any wires or other components. Drill a 3/16" hole in the four marked spots for the mounting bolts, and one in the center for your wires (if applicable).

**CAUTION: Take care not to drill through the headliner below.**

5. If the 4 threaded molly well nuts are not already installed in the base of your bar, install them by pressing one into each of the four holes found on the corners of the base of the light until the lip rests on the bottom surface of the base.



6. Route your wires through the center hole (if applicable) and attach the light using the four enclosed bolts. Insert the bolts from below, through the holes you drilled in the mounting surface and screw them into the molly well nuts on the light. Tighten until snug.



## **Vacuum Magnet Mounting Instructions**

*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. Since 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 on a moving vehicle. **It is the sole responsibility of the owner to ensure the warning light is secure.***



Care should be taken when routing the cig plug cord so that it 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.

## ***Hard Wire Instructions (Perm Mount Models)***

- Black** - (Ground) Connect to the negative side of the battery.
- Purple** - (Optional - High/Low) Used to switch the light between High and Low power.
- Leave disconnected for High Power only (cover with wirenut or tape).
  - Connect to Ground for Low Power only.
  - Connect to Ground through a switch for High/Low switching option.
- White** - (Synchronization) Used to synchronize two lights together. If you are only installing one unit, cut the White wire short and tape the end. If you will be synchronizing two or more approved synchronizable lights, leave the white wire disconnected for now. Connect the white wires from both units together **ONLY AFTER PROGRAMMING** them for the **same** pattern (see Pattern Programming).
- Red** - (Power) Connect to +12-24 VDC through your switch. *Be sure to use a 10 amp fuse when connecting the switch to the positive side of the power supply.*
- Red w/Green** - (Pattern Select) Touch and release to +12-24 VDC to change patterns.

## ***Pattern Programming***

1. To begin the programming sequence, power up the light so that it is flashing.
2. To change the flash pattern, press and release the Pattern Select Button (*cig plug models only*) or briefly touch and release the Red w/Green Stripe wire to +12-24VDC (*hard-wired versions only*). Repeat this to scroll through the patterns listed below. The cycle repeats after the last pattern.



There are several patterns that you can “jump” to via programming shortcuts. Touch and hold the Red w/Green Stripe Wire to +12/24VDC (or hold the Pattern Select Button) for the length of time that corresponds to the pattern you would like to jump to.

<b><i>Hold For</i></b>	<b><i>Unit Blinks</i></b>	<b><i>Shortcut to</i></b>
<b>3 seconds</b>	<b>1 time</b>	<b>Pattern 1</b>
<b>6 seconds</b>	<b>2 times</b>	<b>Pattern 6</b>
<b>9 seconds</b>	<b>3 times</b>	<b>Pattern 13</b>
<b>12 seconds</b>	<b>4 times</b>	<b>Pattern 16</b>

3. Once you find the pattern you wish to display, tape off the Red w/Green wire (*hard-wire only*) and deactivate the light. This will store the selected pattern.

<b>Flash Pattern #</b>	<b>Pattern Type</b>	<b>Pattern List</b>	<b>CPS</b>
1	K	Alternating Flicker †	1.0
2	L	Alternating Fast Doubleflash	3.3
3	M	Alternating Tripleflash	2.5
4	N	Alternating PSU Flicker	0.7
5	O	Alternating PSU Random	0.6
6	F	Alternating Quadflash ††	1.0
7	G	Alternating Quadflash w/Post-Pop	1.0
8	H	Alternating Singleflash	1.0
9	I	Alternating Doubleflash	1.0
10	J	Alternating Variable	0.3
11	C	Post Pop	1.4
12	E	Random	0.4
13	P	Alternating Quintflash †††	1.2
14	R	Alt. Fast Doubleflash, Alt. Flicker	N/A
15	S	Alt. Quad, Alt. Flicker, Alt. Double, Flicker	N/A
16	G	Sim. Quad w/Post Pop (Phase 1) ††††	1.0
17	G	Sim. Quad w/Post Pop (Phase 2)	1.0
18	U	Alt. Triple, Alt. Non-Synch Double, Alt. Quint, Flicker	N/A
19	V	Steady burn one side, Other side Single Flash	1.0
20	NONE	Cycle All	N/A

† = Programming Shortcuts 1, 2, 3, and 4 (see table above)

## Parts

Outer Dome ( * = color).....	910-3*
Dome Gasket (Neoprene Cord) /ft.....	P30047-145
Cig Plug ( <i>Mag Mount Only</i> ).....	920-PAT18HI
Mag Mount Kit (4 Magnets).....	910-177K
Vacuum Magnet.....	920-16V

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



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An ISO 9001:2008 Certified Company

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