

# INSTALLATION AND INSTRUCTION MANUAL

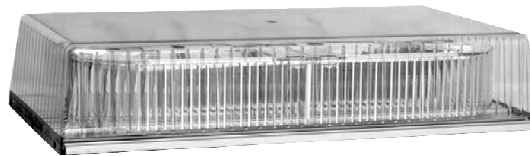


Model

# 9016LED



## M-Tech® Plus Minibar



Patents 9,291,328 and D683,252

### 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.

### 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.



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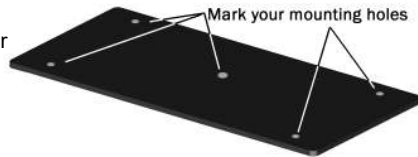
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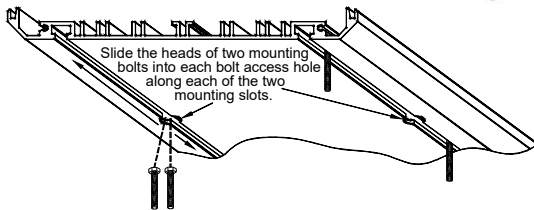
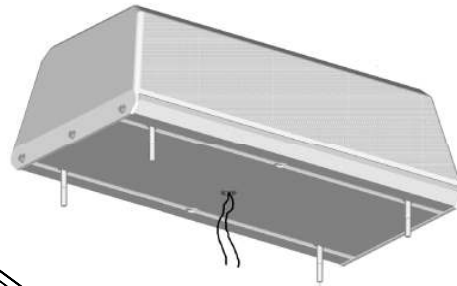
**IMPORTANT:** Please read all of the following instructions before installing your new warning light.

## Permanent Mounting

1. Using the gasket as a template, mark the four bolt holes on the mounting surface (and the center wire hole, if you will be needing one).
2. Drill a 9/32" hole in the four marked spots on the mounting bolts.  
**CAUTION: Take care not to drill through the headliner below.**



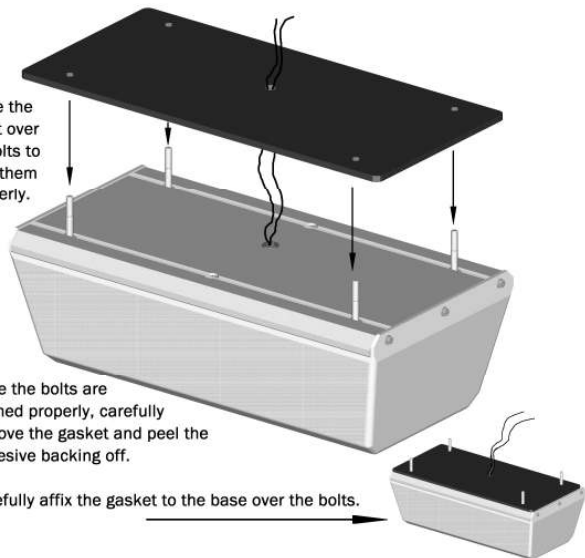
3. Insert the head of two mounting bolts into each of the access holes found along the slots on the bottom of the bar and slide one to each end of the base.



4. Route the wires through the center of the gasket and align the bolts properly **BEFORE REMOVING THE BACKING.**

5. **Remove the adhesive backing on the gasket and carefully stick the gasket onto the base**, over the bolts, with the wires routed through the center hole.

Place the gasket over the bolts to align them properly.



6. Route your wires through the mounting surface if applicable.


7. Install your light with the four bolts going through your mounting holes. Place a washer and nut on each of the bolts and tighten until snug.

## Wiring for Permanent Mount Models

**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.**

- 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.*
- Black** - (Ground) Connect to the negative side of the battery.
- Purple** - (Optional - High/Low) Switches the light between High and Low power.
- **High Power Only:** Leave disconnected (cover wire with wire nut or tape)
  - **Low Power Only:** Connect to Ground
  - **High/Low Switching Option:** Connect to Ground through a switch
- Red w/Green** - (Pattern Select) Touch and release to +12-24 VDC to change patterns (see next page).
- White** - (Synchronization) If you are only installing one unit, cut the White wire short and tape the end.
- Connect the white wires from both units together **ONLY AFTER PROGRAMMING** them for the **same** pattern.

## Synchronization of Multiple Lights

You can synchronize up to six lights with  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 with the same **Pattern**.
  - The two lights will flash together (simultaneous).
  - Optionally you can program one light for Pattern 16 and the other for Pattern 17. This will cause the lights to flash opposite one another (alternate).
3. After programming all lights, tie off the green wires and connect the white wires together.
4. Test lights by applying power to all of them at the same time.

## Magnet Mounting

*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.

## Pattern Programming

- To change patterns, 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*).
- The cycle repeats after the last pattern.
- **Pattern 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.



Once you find the pattern you wish to display, connect the Pattern Select wire to ground (*hard-wire only*) and deactivate the light. This will store the selected pattern.

Flash Pattern #	Pattern	Shortcut
1	Alternating Flicker	3 Sec / 1 Flash
2	Alternating Fast Doubleflash	
3	Alternating Tripleflash	
4	Alternating PSU Flicker	
5	Alternating PSU Random	
6	Alternating Quadflash	6 Sec / 2 Flash
7	Alternating Quadflash w/Post-Pop	
8	Alternating Singleflash	
9	Alternating Doubleflash	
10	Alternating Variable	
11	Alternating Post Pop	
12	Alternating Random	
13	Alternating Quintflash	9 Sec / 3 Flash
14	Alt. Fast Doubleflash, Alt. Flicker	
15	Alt. Quad, Alt. Flicker, Alt. Double, Flicker	
16	Sim. Quad w/Post Pop (Phase 1)	12 Sec / 4 Flash
17	Sim. Quad w/Post Pop (Phase 2)	
18	Alt. Triple, Alt. Non-Synch Double, Alt. Quint, Flicker	
19	Steady burn one side, Other side Single Flash	
20	Cycle All	



**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.

**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.