

Aurora ALO-10-P4AE4K-M

Aurora 10-Inch All Weather Series LED Light Bar

Model: ALO-10-P4AE4K-M

Brand: Aurora

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, maintenance, and troubleshooting of your Aurora 10-Inch All Weather Series LED Light Bar. Please read this manual thoroughly before installation and use to ensure proper function and safety. This product is designed for universal fit in automotive applications, offering robust lighting performance in various conditions.

2. SAFETY INFORMATION

- Always disconnect the vehicle's battery before performing any electrical work.
- Ensure all wiring connections are secure and properly insulated to prevent short circuits.
- Mount the light bar securely to prevent detachment during vehicle operation.
- Do not look directly into the light bar when it is illuminated, as it can cause eye strain or damage.
- Consult a professional if you are unsure about any installation steps.

3. PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- Aurora 10-Inch All Weather Series LED Light Bar (1 unit)
- Deluxe Wiring Harness (includes on/off switch with LED indicator, in-line fuse, 12V 40A relay)
- Mounting Brackets and Hardware
- Deutsch Connector

4. PRODUCT FEATURES

The Aurora 10-Inch All Weather Series LED Light Bar is engineered for durability and performance:

- **Advanced Lens Technology:** Crafted from high-quality GE Lexan, 300 times stronger than glass, resistant to corrosive acids, chemicals, scratches, and UV radiation.
- **Condensation Prevention:** Equipped with a special breather apparatus to prevent condensation and water intrusion.
- **Waterproof Connectivity:** Features a Deutsch connector, renowned for its waterproof capabilities and ease of use.
- **Noise Reduction:** Integrated Wind Reducers minimize wind noise during high-speed travel.
- **Durable Housing:** Outdoor Dupont painting coats the housing, ensuring its integrity for 5 years.
- **High-Performance LEDs:** Utilizes Cree LED chips (Made in the USA) for low forward voltage, low heat generation, long life, and high ESD tolerance.
- **Optimized Circuitry:** PCBA (Printed Circuit Board Assembly) features unique temperature, voltage, and current protection designs to maximize efficiency and durability, preventing electromagnetic interference.
- **Over Voltage Protection:** An integrated system prevents premature failure from accidental voltage fluctuations.
- **Robust Construction:** IP69 rated housing constructed from 6063 aluminum, sealed with 316 stainless steel screws every 1.5 inches.
- **Multi-functional Lighting:** Offers three distinct lighting options (Bright White, Warm White, Amber Light) within a single unit.

ALL WEATHER LIGHT BAR



Super
Brightness



IP68, IP69K
Waterproof



Long
Lifespan



Easy
Installation



Image: Aurora All Weather Light Bar highlighting key features like super brightness, IP68/IP69K waterproof rating, long lifespan, and easy installation.

5. SETUP & INSTALLATION

Follow these steps for proper installation of your LED light bar:

1. **Mounting:** Securely attach the light bar to your desired location using the provided mounting brackets and hardware. Ensure the mounting surface is strong enough to support the light bar's weight and withstand vehicle vibrations.
2. **Wiring Harness Connection:**
 - Connect the Deutsch connector from the light bar to the corresponding connector on the deluxe wiring harness.
 - Connect the positive (+) wire from the harness to the positive terminal of your vehicle's 12V battery.
 - Connect the negative (-) wire from the harness to the negative terminal of your vehicle's battery or a suitable

ground point on the chassis.

- Route the wiring harness, including the in-line fuse and 12V 40A relay, away from moving parts and heat sources. Secure the wiring with zip ties or clips.
- Install the on/off switch in a convenient location within the vehicle's cabin.

3. **Testing:** Once all connections are made, reconnect the vehicle's battery. Turn on the light bar using the switch to verify proper operation of all lighting modes.



Image: Detailed view of the included deluxe wiring harness, showing the Deutsch connector, in-line fuse, relay, and switch for professional installation.

6. OPERATING INSTRUCTIONS

The Aurora All Weather Series LED Light Bar features multiple lighting modes for various conditions. Use the included switch to cycle through the modes:

- **Mode 1: Bright White (5500-6000K)** - General, all-purpose lighting for maximum visibility.

- **Mode 2: Warm White (3500-4000K)** - Ideal for severe weather conditions like rain and snow, reducing glare.
- **Mode 3: Amber Light (3500K)** - Best for extreme severe weather such as fog, sand, smoke, or dusty conditions, enhancing contrast and reducing backscatter.

To change modes, simply toggle the power switch off and on quickly. The light bar will cycle to the next mode. If the light bar is off for an extended period, it may default to Mode 1 upon reactivation.

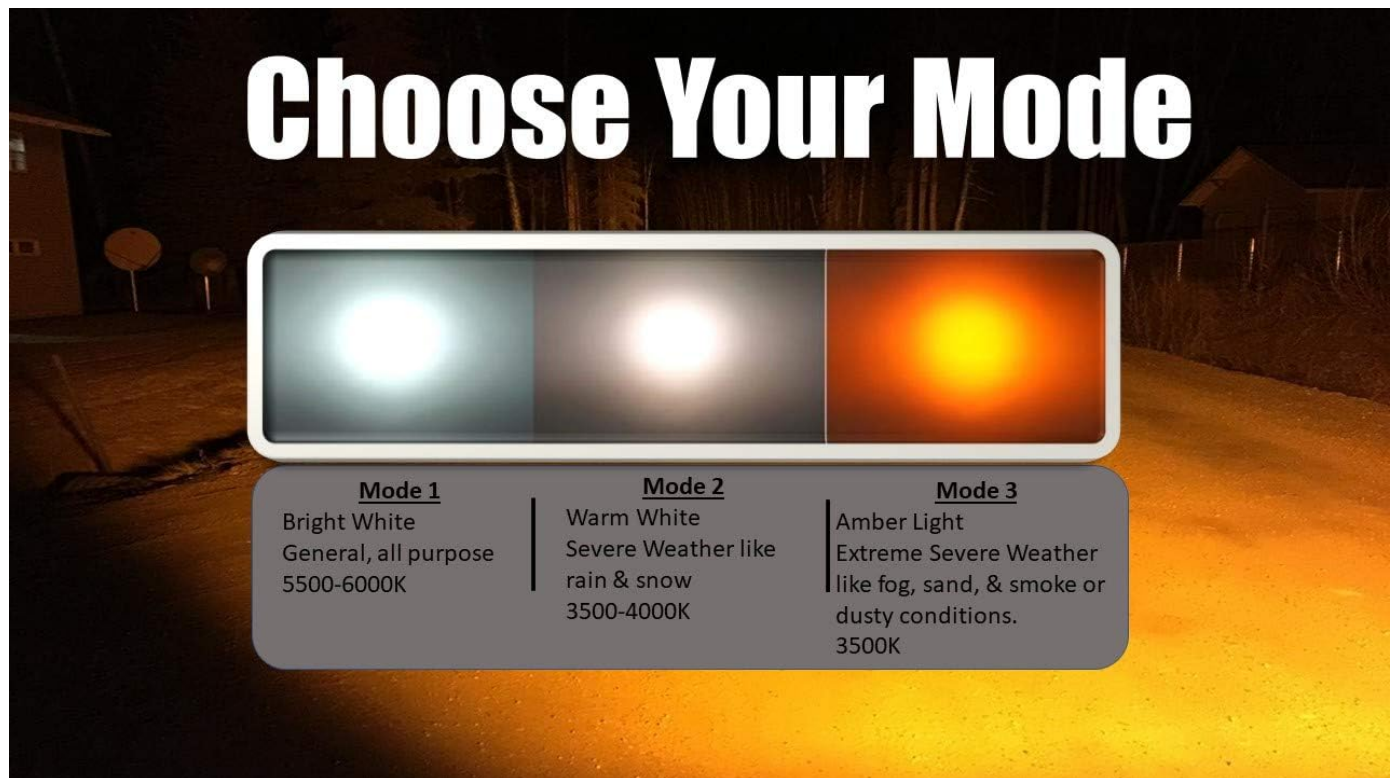


Image: Visual representation of the three distinct lighting modes: Bright White, Warm White, and Amber Light, with descriptions of their intended use.



Image: Example of the amber light output illuminating a dark outdoor environment, demonstrating its effectiveness in low visibility conditions.

7. MAINTENANCE

The Aurora LED Light Bar is designed for minimal maintenance due to its durable construction. However, regular checks can ensure optimal performance and longevity:

- **Cleaning:** Clean the lens periodically with a soft cloth and mild soap and water. Avoid abrasive cleaners or harsh chemicals that could damage the Lexan lens or Dupont coating.
- **Inspection:** Regularly inspect the mounting hardware for tightness and the wiring for any signs of wear, fraying, or corrosion. Ensure the Deutsch connector remains securely sealed.
- **Breather Valve:** Ensure the breather apparatus is clear of debris to allow proper ventilation and prevent condensation.

8. TROUBLESHOOTING

If you encounter issues with your LED light bar, refer to the following common problems and solutions:

- **Light Bar Does Not Turn On:**
 - Check the vehicle's battery connections for corrosion or looseness.
 - Verify the in-line fuse in the wiring harness. Replace if blown.
 - Ensure the Deutsch connector is fully seated and secure.

- Test the on/off switch for proper function.

• **Flickering or Dim Light:**

- Inspect all wiring connections for looseness or damage.
- Check for adequate voltage supply (12 Volts).
- Ensure the vehicle's charging system is functioning correctly.

• **Condensation Inside Lens:**

- Verify the breather apparatus is not obstructed.
- Ensure the Deutsch connector is properly sealed.

If problems persist after attempting these solutions, contact customer support.

9. SPECIFICATIONS

Feature	Detail
Model Number	ALO-10-P4AE4K-M
Dimensions (L x W x H)	29.21 x 8.89 x 8.38 cm (11.5 x 3.5 x 3.3 inches)
Weight	3.63 kg (8 lbs)
Voltage	12 Volts
Light Source Type	LED (Cree LED Chips)
Power Output	60 Watts
Lumen Output	2,400 Lumens
Beam Pattern	Combination
Material	Aluminum, Stainless Steel (Housing), GE Lexan (Lens)
IP Rating	IP69 Waterproof & Shock Resistant
Special Features	5 Watt Cree LED Chips, Deluxe Wiring Harness, Deutsch connector, Dupont Coating, ESD Resistant, GE Lexan Lens, ISO9001 Certified, Integrated Temperature protection, Patented Military Breather, SAE Certified
Fit Type	Universal Fit

Exterior

- Industry rated to IP69K which means this products will survive the harshest elements you can throw at it.
 - "IP" Stands for Ingress Protection which is an international recognized system used for rating the products ability to withstand contamination from water and debris.
 - The #6 means that the product is rated to allow no dust particles to enter the sealed LED light
 - The #9 means the product is rated to allow no liquid to enter either due to submersion or steam jet cleaning.
- The housing is constructed of high quality 6063 aluminum which is durable enough for the most extreme conditions.
- The lens is crafted from high quality GE Lexan which is 300 times stronger than glass plus its resistant to corrosive acids and other chemicals such as gasoline. The lens is also manufactured to be scratch resistant and UV resistant.
- The product is equipped with a special breather apparatus that is uniquely designed to prevent condensation and water intrusion.
- Equipped with a Deutsch connector which is globally renowned for its ability to be waterproof and its ease of use.
- To prevent unwanted wind noise Wind Reducers are equipped to ensure a quiet experience during high speed travel.
- The product is held together with 316 stainless steel screws every 1.5" of surface area to ensure an impenetrable seal.
- Outdoor Dupont painting coats the housing guaranteeing the housing will remain unchanged for 5 years.

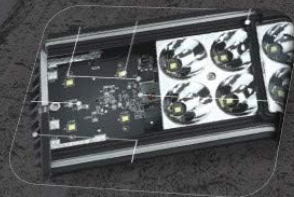
AURORA

Off Brand Products.com

Image: Overview of the light bar's exterior features, including IP69K rating, 6063 aluminum housing, GE Lexan lens, breather apparatus, Deutsch connector, wind reducers, and Dupont painting.

Interior

- These products are all made with Cree LED chips (Made in the USA) which allow for low forward voltage, low heat generation, long life and high ESD tolerance and resistance.
- The PCBA (Printed Circuit Board Assembly) is engineered with unique temperature protection, voltage protection and current protection designs to maximize efficiency and increase durability. This unique design means no electromagnetic interference with other nearby electronics on your vehicle.
- Over voltage protection is installed prevent premature failure from accidental voltage fluctuations.



AURORA

Off Brand Products.com

Image: Details on the light bar's interior components, highlighting Cree LED chips, PCBA with protection designs, and over voltage protection.

Testing & Certifications

- **Salt & Fog Testing:** A highly corrosive testing measure involving a high saline environment. The purpose of this test is to allow the product to retain its coating from salt sprayed on the roads in the winter seasons which also means the product can withstand sea water.
- **Lens Impact Test:** A 17 ounce iron Ball is dropped onto the glass from a height of 40 inches to mimic the impact of a rock or other foreign debris coming into contact with the LED light.
- **Vibration Test:** Ensures the product is stable enough to remain on the vehicle during extreme driving conditions like trail riding, off roading, rock climbing, etc.
- **UV Test:** Product is placed in a special UV emitting machine for two days which simulates an environment equal to 5 years of direct UV lighting exposure.
- **Temperature Test:** The product undergoes both extreme high and low temperature conditions to make ensure the housing will not discolor.
- The lights are CE Certified which is a manufacturer's declaration that the product complies with the essential requirements of the relevant European health, safety and environmental protection legislation
- RoHS Certified Supplier which means the supplier does not engage in any illegal hazardous waste dumping.



Image: Information on the rigorous testing and certifications, including Salt & Fog, Lens Impact, Vibration, UV, and Temperature tests, along with CE and RoHS certifications.

10. WARRANTY INFORMATION

The Aurora 10-Inch All Weather Series LED Light Bar comes with a **5-Year Warranty**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims. The warranty does not cover damage caused by improper installation, misuse, accidents, or unauthorized modifications.

11. SUPPORT & CONTACT INFORMATION

For technical support, warranty claims, or any questions regarding your Aurora LED Light Bar, please contact Aurora customer service. Refer to the official Aurora website for the most current contact details.

Manufacturer: Aurora LED Lighting

Website: www.szaurora.com

Email: info@szaurora.com

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question