

## Nilight 1501F-B

# Nilight Marine LED Light Bar 18W Flood Beam (Model 1501F-B) Instruction Manual

Model: 1501F-B

## 1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Nilight Marine LED Light Bar. Please read this manual thoroughly before installation and use to ensure proper function and longevity of the product.



Image 1.1: Nilight Marine LED Light Bar (Model 1501F-B) and its packaging.

## 2. PRODUCT FEATURES

- **Bright Illumination:** Equipped with 6pcs 3W high-intensity LED chips, providing 1,800 lumens of 5800K bright white light with a 60° flood beam pattern for broad visibility.
- **Durable Construction:** Features a corrosion-resistant die-casting aluminum alloy housing and an upgraded PC lens with over 90% light transmittance.
- **Efficient Heat Dissipation:** Designed with 0.25-inch spacing fins to facilitate faster heat dissipation, ensuring product longevity.
- **Waterproof Rating:** IP67 waterproof rating, tested to withstand 72-hour laboratory salt spray, ensuring performance in harsh marine environments.
- **Adjustable Mounting:** Includes 180° adjustable mounting accessories for flexible installation and beam direction adjustment.
- **Wide Voltage Compatibility:** Operates efficiently within a 10-30V DC range.

**IP67**

*Die-casting aluminum housing & advanced sealing technology, protect the led light bar from rain, wind & sand.*

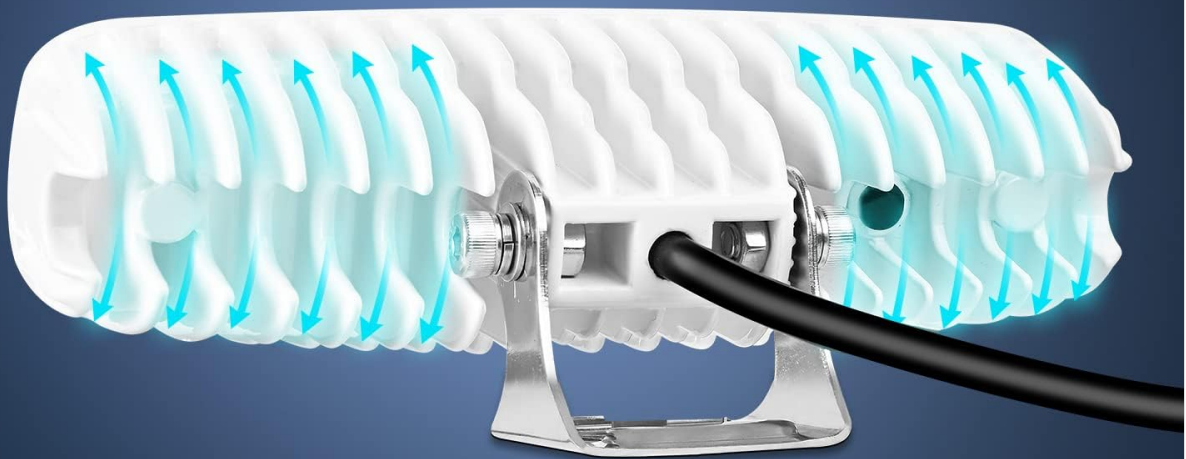


**✓ PASS**

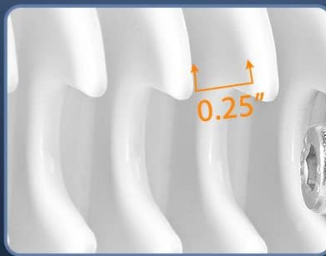
***72 HOURS NSS (Neutral Salt Spray) Test** equivalent to 3 years of exposure to the natural marine environment.*

Image 2.1: The light bar demonstrating its IP67 waterproof capability.

## HEAT DISSIPATION



**0.15 inch** fan strengthen Heat Dissipation ability



**0.25 inch** of two fans give enough space to cool fans



**16AWG** copper cord can reduce heat caused by current

Image 2.2: Illustration of the heat dissipation design with cooling fins.

### 3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 2 x 18W White Flood Beam Light Bars
- 1 x Pack of Mounting Brackets & Hardware (bolts, nuts, washers, Allen wrench)





Image 3.1: Detailed view of the light bar dimensions and included mounting hardware.

## 4. SPECIFICATIONS

Attribute	Value
Brand	Nilight
Model	1501F-B
Color	White Lights White House
Wattage	18 watts
Beam Pattern	60° Flood
Lumen Output	1,800 LM
Color Temperature	5800K (Bright White)
Operating Voltage	10-30V DC

Waterproof Rating	IP67
Housing Material	Die-casting Aluminum Alloy
Lens Material	PC (Polycarbonate)
Item Weight	1.47 pounds (per pair)
Dimensions (approx.)	5.99" x 1.75" (Light Bar)

## 5. INSTALLATION INSTRUCTIONS

Follow these steps for proper installation:

1. **Choose Mounting Location:** Select a suitable location on your boat, vehicle, or other application that provides the desired light coverage and allows for secure mounting. Ensure the surface is stable and can support the weight of the light bar.
2. **Assemble Mounting Brackets:** Attach the provided mounting brackets to the light bar using the included bolts, washers, and nuts. The brackets allow for 180° adjustment.
3. **Secure Light Bar:** Position the light bar with the assembled brackets onto your chosen mounting surface. Mark the drilling points for the bracket base.
4. **Drill Holes:** Carefully drill pilot holes at the marked locations.
5. **Mount Brackets:** Secure the brackets to the mounting surface using appropriate fasteners (not always included, depending on surface material). Ensure a tight and stable fit.
6. **Adjust Angle:** Loosen the side bolts on the brackets to adjust the light bar to the desired angle. Tighten the bolts securely once the angle is set.
7. **Wiring:**
  - Connect the red wire (+) from the light bar to a positive (+) 10-30V DC power source.
  - Connect the black wire (-) from the light bar to a negative (-) ground connection.
  - It is recommended to use an inline fuse and a switch (not included) for protection and control.
  - Ensure all connections are secure and properly insulated to prevent short circuits and corrosion, especially in marine environments.
8. **Test Functionality:** Before final use, test the light bar to ensure it powers on and functions correctly.



Image 5.1: Adjustable mounting bracket for flexible positioning.



Image 5.2: Example installation of the light bars on a boat.

## 6. OPERATING INSTRUCTIONS

---

The Nilight Marine LED Light Bar is designed for straightforward operation:

1. **Power On/Off:** Once properly wired to a power source and switch (if installed), activate the switch to turn the light bar on. Deactivate the switch to turn it off.
2. **Beam Direction:** If the light bar's beam direction needs adjustment, carefully loosen the mounting bolts on the side of the brackets, reposition the light to the desired angle, and then securely tighten the bolts.

## 7. MAINTENANCE

---

To ensure optimal performance and extend the lifespan of your Nilight Marine LED Light Bar, follow these maintenance guidelines:

- **Regular Cleaning:** Clean the lens and housing periodically with a soft cloth and mild soap and water. Avoid abrasive cleaners or harsh chemicals that could damage the lens or finish.
- **Inspect Wiring:** Regularly check all wiring connections for signs of corrosion, fraying, or loose contacts.



Secure or replace any damaged wiring.

- **Check Mounting:** Periodically inspect the mounting brackets and hardware to ensure they remain tight and secure. Tighten any loose bolts or nuts.
- **Environmental Protection:** While the light bar is IP67 waterproof and corrosion-resistant, prolonged exposure to extreme conditions (e.g., direct saltwater spray without rinsing) can still affect its appearance over time. Rinsing with fresh water after marine use is recommended.

## 8. TROUBLESHOOTING

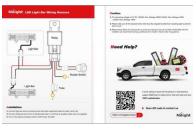
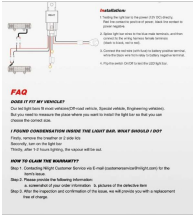
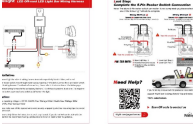
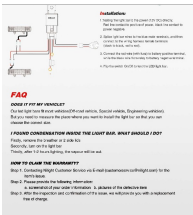
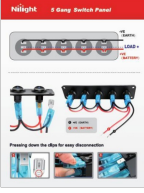

If you encounter issues with your Nilight Marine LED Light Bar, refer to the following troubleshooting steps:

Problem	Possible Cause	Solution
Light bar does not turn on.	No power supply, loose wiring, blown fuse, faulty switch.	<ul style="list-style-type: none"><li>◦ Verify power connection to the light bar.</li><li>◦ Check all wiring for secure connections.</li><li>◦ Inspect the fuse (if installed) and replace if blown.</li><li>◦ Test the switch for proper functionality.</li></ul>
Light output is dim or flickers.	Insufficient power, loose connection, damaged wiring, dirty lens.	<ul style="list-style-type: none"><li>◦ Ensure the power source provides adequate voltage (10-30V DC).</li><li>◦ Check wiring for loose connections or corrosion.</li><li>◦ Clean the light bar lens with a soft cloth.</li></ul>
Moisture inside the lens.	Seal compromise, extreme temperature changes.	<ul style="list-style-type: none"><li>◦ Small amounts of condensation may dissipate naturally.</li><li>◦ If persistent or significant, inspect the seals for damage. Contact customer support if the issue persists.</li></ul>

## 9. WARRANTY AND SUPPORT

Nilight products are designed for durability and performance. For warranty information, technical support, or any questions regarding your product, please refer to the official Nilight website or contact their customer service directly. Keep your purchase receipt for warranty claims.

For more information, visit: [Nilight Official Store](#)

	<p><a href="#">Nilight LED Light Bar Wiring Harness Installation Guide</a></p> <p>Step-by-step instructions and safety precautions for installing a Nilight LED Light Bar Wiring Harness. Includes wiring diagram explanation and support contact information.</p>
	<p><a href="#">Nilight LED Light Bar Installation and FAQ - ZH303 Model</a></p> <p>Learn how to install your Nilight ZH303 LED light bar, troubleshoot common issues like condensation, and understand the warranty claim process. Includes wiring diagram explanation.</p>
	<p><a href="#">Nilight LED Off-road Light Bar Wiring Harness Installation Guide</a></p> <p>Comprehensive guide for installing the Nilight LED Off-road Light Bar Wiring Harness, including wiring methods, specifications, and safety precautions.</p>
	<p><a href="#">Nilight LED Light Bar Installation Guide &amp; Troubleshooting</a></p> <p>Comprehensive guide for installing your Nilight LED light bar, including wiring instructions, troubleshooting common issues like condensation, and warranty claim procedures. Includes a detailed description of the wiring diagram.</p>
	<p><a href="#">Nilight 5 Gang Switch Panel Installation and Wiring Guide</a></p> <p>A guide to installing and wiring the Nilight 5 Gang Switch Panel, including wiring diagrams and disconnection instructions.</p>
	<p><a href="#">Nilight 60 Inch Truck Bed Light Strip Installation Guide</a></p> <p>Step-by-step installation guide for the Nilight 60-inch truck bed light strip, detailing wire placement, mounting, electrical hook-up, and the use of additional hardware for pickup trucks, SUVs, and RVs.</p>