

## IMALENT HT50

# IMALENT HT50 Rechargeable Headlamp User Manual

MODEL: HT50

Information	Setup	Operation	Introduction Maintenance & Support	Safety Troubleshooting	Specifications	Warranty
-------------	-------	-----------	--	---------------------------	----------------	----------

## 1. Introduction

Thank you for choosing the IMALENT HT50 Rechargeable Headlamp. This manual provides essential information for the safe and efficient use of your headlamp. Please read it thoroughly before first use and retain it for future reference.

The IMALENT HT50 is a high-performance headlamp designed for various outdoor activities such as camping, running, trekking, biking, and industrial maintenance. It features a powerful 3000-lumen output, adjustable white light modes, and an auxiliary red light function.

## 2. Safety Information

- **Eye Safety:** Do not shine the light directly into eyes. The powerful beam can cause temporary vision impairment or permanent eye damage.
- **Heat:** The headlamp may become hot during prolonged use at high brightness levels. Avoid direct contact with hot surfaces to prevent burns.
- **Battery Safety:** Use only the specified rechargeable battery. Do not attempt to disassemble, puncture, or short-circuit the battery. Keep batteries away from children.
- **Water Resistance:** The HT50 is IP66 rated for water resistance, meaning it is protected against powerful water jets. It is not designed for submersion. Ensure the charging port cover is securely closed before exposure to water.
- **Children:** Keep the headlamp and its accessories out of reach of children.

## 3. Setup

### 3.1 Unboxing and Components

Upon opening the package, verify that all components are present:

- IMALENT HT50 Headlamp
- Rechargeable Battery
- Type-C Charging Cable
- Headband (with top strap)
- Storage Case
- O-rings
- Clip
- User Manual

### 3.2 Battery Installation

The HT50 headlamp comes with a rechargeable battery. Ensure the battery is correctly inserted according to the polarity markings.

### 3.3 Headband Adjustment

Attach the headlamp to the adjustable headband. The headband is designed for comfort and can be adjusted to fit various head sizes. The top strap provides additional stability, especially during active use.

### 3.4 Charging

The HT50 features a built-in Type-C charging port. Connect the provided Type-C charging cable to the headlamp and a suitable USB power source. The charging indicator will show red while charging and turn green when fully charged. A full charge takes approximately 3 hours and 10 minutes.



Image: IMALENT HT50 Headlamp connected to a Type-C charger, with indicators showing red for charging and green for fully charged.

### 3.5 Initial Unlock

Before first use, or if the headlamp is locked, press the power switch button 3 times consecutively to unlock the flashlight.

Your browser does not support the video tag.

Video: This video demonstrates the unboxing, assembly, and basic operation, including unlocking and cycling through light

## 4. Operation

---

### 4.1 Power On/Off

Press and hold the power button to turn the headlamp on or off.

### 4.2 White Light Modes

Once powered on, single-click the power button to cycle through the white light brightness levels: 5 Lumens (Moonlight), 150 Lumens, 450 Lumens, 900 Lumens, 1800 Lumens, and 3000 Lumens (Turbo).



Image: IMALENT HT50 Headlamp emitting a powerful 3000 lumens max output, illuminating a large rock formation at night.

### 4.3 Moonlight Mode

From the OFF state, press and hold the power button for 1 second to directly access Moonlight mode (5 Lumens).

### 4.4 Red Light Mode

Double-click the power button to activate the auxiliary red light. Double-click again to switch to the red flashing warning mode. The red light is useful for preserving night vision, wildlife observation, stargazing, or as an emergency signal.



Image: IMALENT HT50 Headlamp's auxiliary red light illuminating the rear of a car at night, ideal for emergency situations or preserving night vision.

#### 4.5 Beam Adjustment

The headlamp unit can be rotated 180 degrees, allowing you to adjust the beam angle to eliminate blind spots and direct light precisely where needed.



Image: IMALENT HT50 Headlamp showing its 180-degree adjustable pivot mechanism, ensuring no blind spots in outdoor environments.

#### 4.6 Dual Light Source

The HT50 combines a primary white light with an auxiliary red light, offering versatility for various application scenarios. The white light provides both spotlight and floodlight capabilities for a soft, wide field of vision.



Image: Diagram illustrating the IMALENT HT50's dual light source, showing both primary white light and auxiliary red light for different scenarios.



Image: IMALENT HT50 Headlamp combining spotlight and floodlight features, illuminating a dock and boats with a soft, wide field of vision.

Your browser does not support the video tag.

Video: This video showcases the IMALENT HT50 Headlamp's powerful 3000 lumens output in various outdoor settings, demonstrating its brightness and utility.

## 5. Maintenance

- **Cleaning:** Clean the headlamp with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **O-rings:** Periodically check and lubricate the O-rings to maintain water resistance. Replace O-rings if

they are damaged.

- **Battery Care:** Recharge the battery regularly, even if not in use, to prolong its lifespan. Avoid fully discharging the battery.
- **Storage:** Store the headlamp in a cool, dry place away from direct sunlight and extreme temperatures. Remove the battery if storing for extended periods.

## 6. Troubleshooting







Problem	Possible Cause	Solution
Headlamp does not turn on.	Battery is depleted or incorrectly installed. Headlamp is locked.	Charge the battery or ensure correct polarity. Press the power button 3 times to unlock.
Low brightness output.	Battery is low. Incorrect mode selected.	Recharge the battery. Cycle through modes to select a higher brightness setting.
Headlamp gets hot.	Operating at high brightness for extended periods.	This is normal for high-lumen devices. Reduce brightness or allow to cool down.
Charging not working.	Cable or adapter issue. Charging port obstruction.	Try a different Type-C cable or USB adapter. Ensure the charging port is clean and free of debris.

## 7. Specifications

Feature	Detail
Model	HT50
Light Source Type	LED
White Brightness	Up to 3000 Lumens
Special Features	High Power, Lightweight, Long Range, Portable, Rechargeable, Multi-color, Emergency Signaling
Power Source	Battery Powered (1 Lithium Ion battery included)
Material	Aluminum
Product Dimensions	3.7"D x 1.43"W x 1.04"H
Item Weight	10.5 ounces
Water Resistance Level	IP66 Rated
Impact Resistance	2 Meters
Color Temperature	6500 Kelvin

### 7.1 ANSI/NEMAFL1 Performance Data

# HT50 TECHNICAL DATA

ANSI/NEMAFL1	PRIMARY WHITE LIGHT						AUXILIARY RED LIGHT		
	Turbo	High	Middle II	Middle I	Middle Low	Moonlight	High	Middle	Low
	3000 ± 900 Lumens	1800 ± 900 Lumens	900 Lumens	450 Lumens	150 Lumens	5 Lumens	50 Lumens	25 Lumens	5 Lumens
	90s+ 2h35min	4min20s+ 2h33min	2h55min	5h36min	17h40min	350h	5h40min	22h10min	113h
	318m								
	25290cd								
	2m								
	IP66								

Note: The stated data is measured in accordance with the international flashlight testing standard ANSI/PLATO FL-1-2019, using battery (5,000mAh) under laboratory conditions. The data may vary in real world use due to different battery usage or environmental conditions.

Image: ANSI/NEMAFL1 performance data for IMALENT HT50, detailing lumens, runtime, and other metrics for various light modes.

## 8. Warranty & Support

### 8.1 Warranty Information

The IMALENT HT50 Headlamp comes with a limited warranty. For specific details regarding warranty coverage, duration, and terms, please refer to the warranty card included in your product packaging or visit the official IMALENT website.

### 8.2 Customer Support

If you encounter any issues or have questions not covered in this manual, please contact IMALENT customer support. Contact information can typically be found on the official IMALENT website or on the product packaging.