Nitecore HC60 UHE

Nitecore HC60 UHE 1600 Lumen Headlamp User Manual

Model: HC60 UHE | Brand: Nitecore

1. INTRODUCTION

The Nitecore HC60 UHE is a high-performance headlamp designed for various activities including night running, camping, hiking, hunting, and industrial work. It features a powerful 1600 lumen output, USB-C rechargeable functionality, and both white and red light beams. Constructed from durable aero-grade aluminum alloy, it is rated IP68 waterproof and impact resistant up to 2 meters.

Image 1.1: Nitecore HC60 UHE Headlamp with included accessories.

2. PACKAGE CONTENTS

Verify that all items are present in your package:

- Nitecore HC60 UHE Headlamp
- Nitecore NL1840 18650 Li-ion Battery (pre-installed)
- USB-C to USB-C Charging Cable
- Headband
- Top Strap
- Storage Case
- Nitecore Sticker

3. PRODUCT OVERVIEW

Familiarize yourself with the components of your HC60 UHE headlamp.

Image 3.1: Front view of the HC60 UHE headlamp, highlighting the primary white and auxiliary red LED lenses.

Red & White Dual Light Sources for Various Activities

| Camping | Climbing | Trekking |
| Night Running | Trail Running | Outdoor Work |

Primary White Light (Color Temperature: 6,000K)
For illuminating large spaces

Auxiliary Red Light
Effectively preserves night vision

Red Lighting

Repels mosquitoes and insects, ideal for map reading, wildlife observation, emergency response, safety warning, stargazing, night photography, and more.

8 Lumens ULTRALOW Level

Double press the Power Button to quickly turn it on. Delivers gentle and energy-saving light perfect for nighttime use, with up to 200 hours of runtime.

Image 3.3: Side view showing the battery compartment cap with 'OPEN' indicator for battery access.

4. SETUP

4.1. Battery Installation

The Nitecore NL1840 18650 Li-ion battery is pre-installed in the HC60 UHE headlamp. To access or replace the battery:

1. Unscrew the battery compartment cap located on the side of the headlamp by rotating it counter-clockwise (refer to Image 3.3).
2. Insert the 18650 Li-ion battery with the positive (+) terminal facing inwards.
3. Carefully screw the cap back on clockwise until secure. Ensure proper alignment to avoid cross-threading.

4.2. Charging

The HC60 UHE features a waterproof USB-C charging port. It is recommended to fully charge the battery before first use.

1. Locate the USB-C charging port on the headlamp.
2. Connect the included USB-C charging cable to the headlamp's port and to a USB power source (e.g., wall adapter, power bank, computer).
3. During charging, the power indicators will illuminate to show the charging status.
4. Charging is complete when all power indicators are steadily lit. A full charge typically takes approximately 2 hours.

Image 4.1: The HC60 UHE headlamp being charged via its USB-C port.

4.3. Headband Assembly

Attach the headband and optional top strap for secure and comfortable wear.

1. Thread the main headband through the bracket slots on the headlamp.
2. Adjust the length of the headband for a snug fit around your head.
3. For added stability, especially during active use, attach the top strap to the designated loops on the main headband.

5. OPERATING INSTRUCTIONS

5.1. Power On/Off

- **To Turn On:** Long press the Power Button for 1 second. The headlamp will turn on in the last used white light brightness level.
- **To Turn Off:** While the light is on, long press either the Power Button or the Mode Button until the light turns off.

5.2. White Light Brightness Levels

When the white light is on, short press the Power Button to cycle through the following brightness levels: ULTRALOW (8 lumens) → LOW (100 lumens) → MID (400 lumens) → HIGH (1000 lumens).

- **Accessing ULTRALOW:** When the headlamp is off, double press the Power Button.
- **Accessing TURBO (1600 lumens):** When the white light is on, double press the Power Button. The headlamp will temporarily activate TURBO mode.

5.3. Red Light Operation

The HC60 UHE features an auxiliary red light, useful for preserving night vision and other specific tasks.

- **To Turn On Red Light:** When the headlamp is off, long press the Mode Button for 1 second. The red light will turn on in LOW mode.

- **To Cycle Red Light Modes:** While the red light is on, short press the Mode Button to cycle through LOW → HIGH → SLOW FLASHING.

- **To Turn Off Red Light:** While the red light is on, long press the Mode Button until the light turns off.

Image 5.2: The HC60 UHE offers both primary white light and auxiliary red light for diverse applications.

5.4. Special Modes (SOS, Beacon)

These modes are accessible from the white light settings.

- **Accessing SOS/Beacon:** When the white light is on, long press the Mode Button for 1 second to activate SOS mode. Short press the Mode Button again to switch to BEACON mode.

- **Exiting Special Modes:** Long press the Mode Button to turn off the light, or short press the Power Button to return to the last used white light brightness level.

5.5. Power Indication

The headlamp features intuitive power indicators to display the remaining battery power.

- When the headlamp is off, short press the Mode Button. The blue indicators will light up to show battery status:

  - 4 constant-on indicators: 75% - 100%
  - 3 constant-on indicators: 50% - 75%
  - 2 constant-on indicators: 25% - 50%
  - 1 constant-on indicator: 0% - 25% (Recharge or replace the battery promptly)
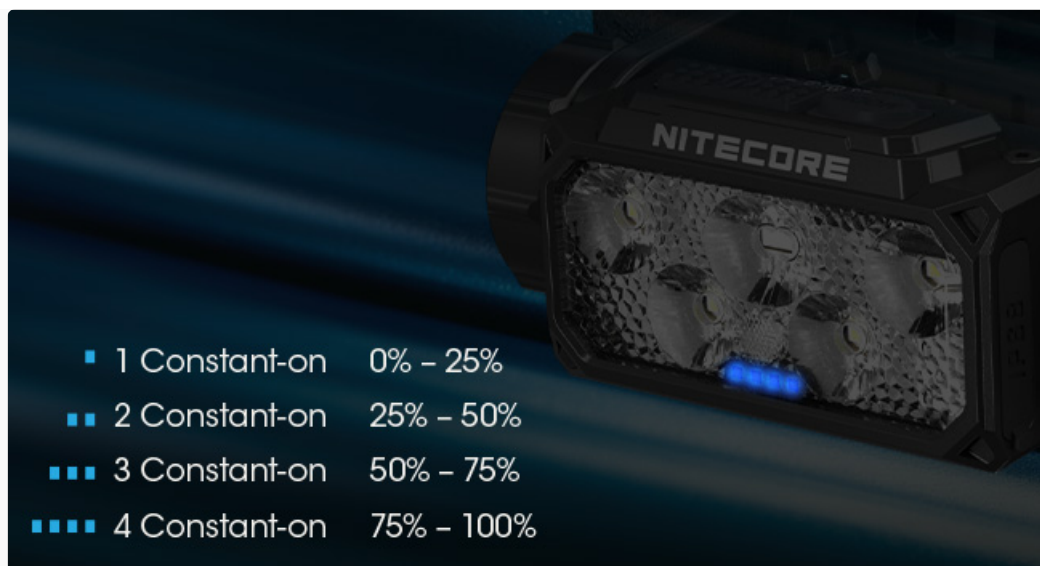
Image 5.3: The blue power indicators display the remaining battery charge.

6. MAINTENANCE

6.1. Cleaning

- Wipe the headlamp with a clean, soft cloth.
- For stubborn dirt, use a slightly damp cloth. Avoid harsh chemicals or abrasive materials.
- Ensure the USB-C port cover is securely closed to maintain its waterproof rating.

6.2. Storage

- Store the headlamp in a cool, dry place away from direct sunlight.
- If storing for an extended period, it is recommended to remove the battery to prevent potential leakage.
- Recharge the battery every three months to maintain optimal battery health.

7. TROUBLESHOOTING

If you encounter issues with your Nitecore HC60 UHE, refer to the following common problems and solutions:

- **Headlamp does not turn on:**

  - Ensure the battery is correctly installed with the positive (+) terminal facing inwards.
  - Check if the battery is charged. Connect the headlamp to a power source using the USB-C cable. If it turns on when plugged in but not otherwise, the battery may be depleted or faulty.
  - Verify that the battery compartment cap is fully and correctly screwed on to ensure proper electrical contact.

- **Light output is dim or flickers:**

  - The battery may be low. Recharge the battery.
  - Ensure the battery contacts are clean. Clean them with a cotton swab if necessary.

- **Headlamp does not charge:**

  - Ensure the USB-C cable is securely connected to both the headlamp and the power source.
  - Try a different USB-C cable or power adapter to rule out cable/adapter issues.

- Check the charging port for any debris that might obstruct the connection.

If the problem persists after attempting these solutions, please contact Nitecore customer support.

8. SPECIFICATIONS

Nitecore HC60 UHE Technical Data

Feature	Primary White Light	Auxiliary Red Light
Brightness (Lumens)	TURBO: 1600, HIGH: 1000, MID: 400, LOW: 100, ULTRALOW: 8	HIGH: 15, LOW: 5, SLOW FLASHING: 15
Runtime (Hours)	TURBO: 3h 30m, HIGH: 5h, MID: 14h, LOW: 36h, ULTRALOW: 200h	HIGH: 95h, LOW: 150h, SLOW FLASHING: 95h
Beam Distance	TURBO: 157m, HIGH: 129m, MID: 81m, LOW: 41m, ULTRALOW: 7m	N/A
Impact Resistance	2 meters	
IP Rating	IP68 (Waterproof and Submersible)	

- **Material:** Aero-grade Aluminum Alloy with HA III hard-anodized finish
- **Dimensions:** 1.91"D x 3.15"W x 1.65"H (48.5mm x 80mm x 41.9mm)
- **Weight:** 4.94 ounces (140g, including battery, bracket, and headband)
- **Battery:** 1 x Nitecore NL1840 18650 Li-ion Battery (included)
- **Light Source Type:** LED
- **Color Temperature (White Light):** 6,000K

Note: The stated data is measured using 1 x 18650 battery (4,000mAh) under laboratory conditions. This data may vary in real-world use due to different battery usage or environmental conditions.

9. WARRANTY INFORMATION

The Nitecore HC60 UHE Headlamp comes with a limited warranty. For detailed information regarding warranty terms, conditions, and duration, please refer to the official Nitecore website or contact your local distributor. Keep your purchase receipt as proof of purchase for warranty claims.

10. CUSTOMER SUPPORT

For further assistance, technical support, or inquiries regarding your Nitecore HC60 UHE Headlamp, please visit the official Nitecore website at www.nitecore.com or contact your authorized Nitecore dealer.