

## Fenix HP12R-T

# Fenix HP12R-T USB-C Rechargeable LED Trail Running Headlamp User Manual

Model: HP12R-T

## 1. INTRODUCTION

Thank you for purchasing the Fenix HP12R-T USB-C Rechargeable LED Trail Running Headlamp. This manual provides detailed instructions for the proper use, maintenance, and troubleshooting of your device. Please read this manual thoroughly before operating the headlamp to ensure optimal performance and safety.

The Fenix HP12R-T is a high-performance headlamp designed for trail running and other outdoor activities, offering a maximum output of 1300 lumens, multiple light sources (white, neutral white, and red), and a balanced weight distribution for comfort during extended use. It features USB-C recharging, dual switch operation, and an IP66 water resistance rating.

## 2. PACKAGE CONTENTS

Verify that all items are present in your package:

- Fenix HP12R-T Headlamp
- Fenix ARB-L18-4000 Rechargeable 4000mAh Battery
- USB Type-C Charging Cable
- Spare O-Ring
- Cable Clips (Qty 2)
- HP12R-T User Manual (this document)



Image: The Fenix HP12R-T headlamp, its packaging, and included accessories such as the USB-C charging cable and battery.

### 3. PRODUCT OVERVIEW

The Fenix HP12R-T headlamp features a split design for balanced weight distribution, with the light unit at the front and the battery case at the rear. It incorporates dual switches for intuitive control of its multiple light sources.

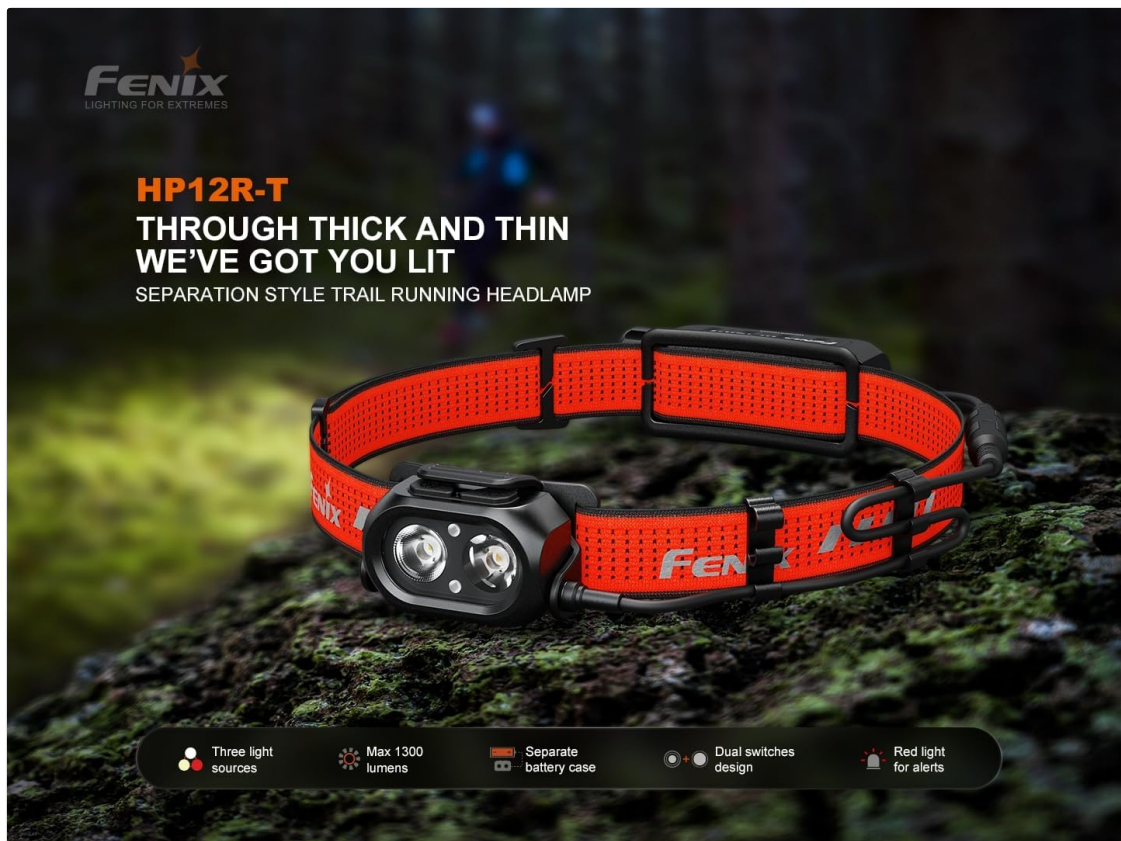


Image: The Fenix HP12R-T headlamp shown on a natural surface, illustrating its design and key features like three light sources, 1300 lumens, separate battery case, dual switches, and red light for alerts.

## 4. SETUP

### 4.1 Battery Installation

1. Unscrew the battery case cover located at the rear of the headlamp.
2. Insert the Fenix ARB-L18-4000 rechargeable 4000mAh battery with the positive (+) terminal facing inwards.
3. Screw the battery case cover back on securely. Ensure the O-ring is properly seated to maintain water resistance.

### 4.2 Charging

The HP12R-T features a USB-C charging port for convenient recharging.

1. Locate the USB-C charging port on the battery case.
2. Plug the provided USB Type-C charging cable into the port.
3. Connect the other end of the cable to a USB power source (e.g., computer, wall adapter, power bank).
4. The battery level indicator lights will show charging status. A full charge is indicated when all lights are solid.

**Note:** The headlamp can be operated while charging, but charging time may be extended.

## 5. OPERATING INSTRUCTIONS

### 5.1 Power On/Off

- **To Turn On:** Long press either the white light switch or the neutral white light switch for 0.5

seconds.

- **To Turn Off:** Long press either switch for 0.5 seconds when the light is on.

## 5.2 Mode Switching (White, Neutral White, Red)

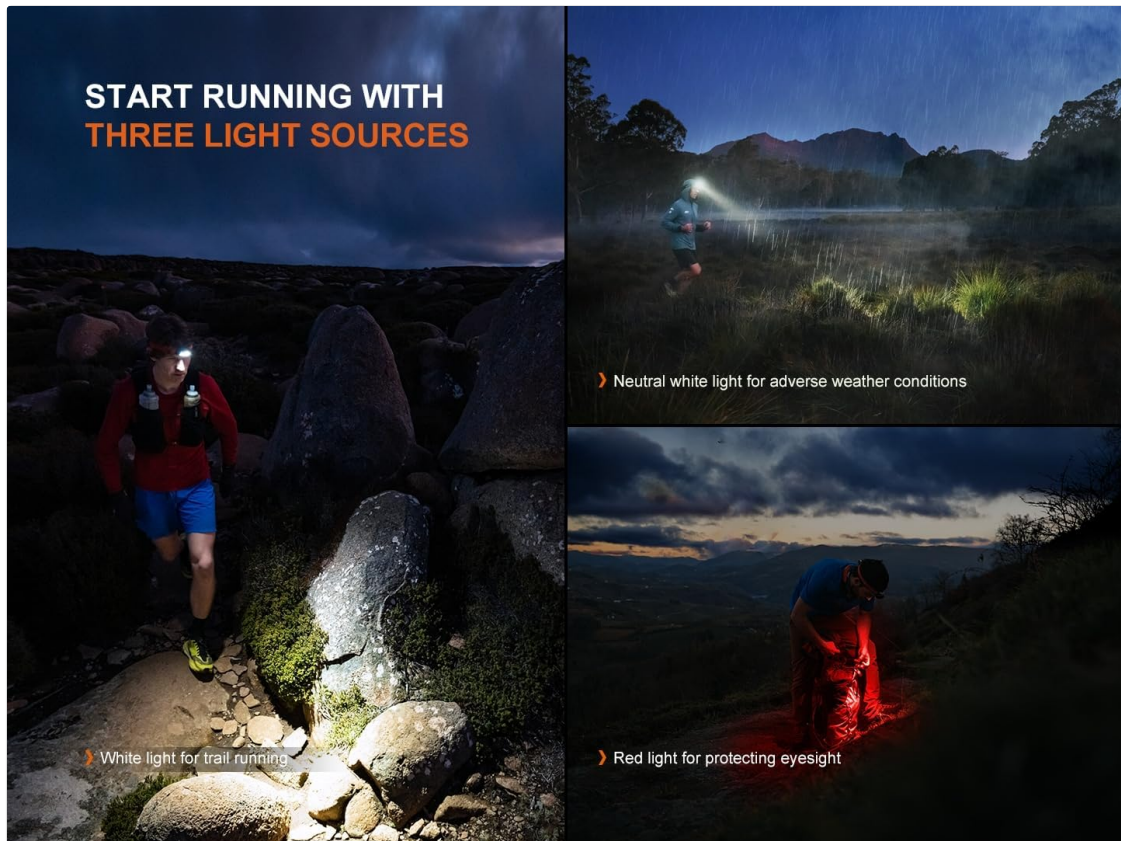


Image: A collage showing the Fenix HP12R-T headlamp in use with its three light sources: white light for trail running, neutral white light for adverse weather conditions, and red light for protecting eyesight.

- **White Light & Neutral White Light:** These are controlled separately by their respective switches.
- **Red Light Mode:** Double click either switch to activate the red light mode.

## 5.3 Output Selection (Brightness Levels)



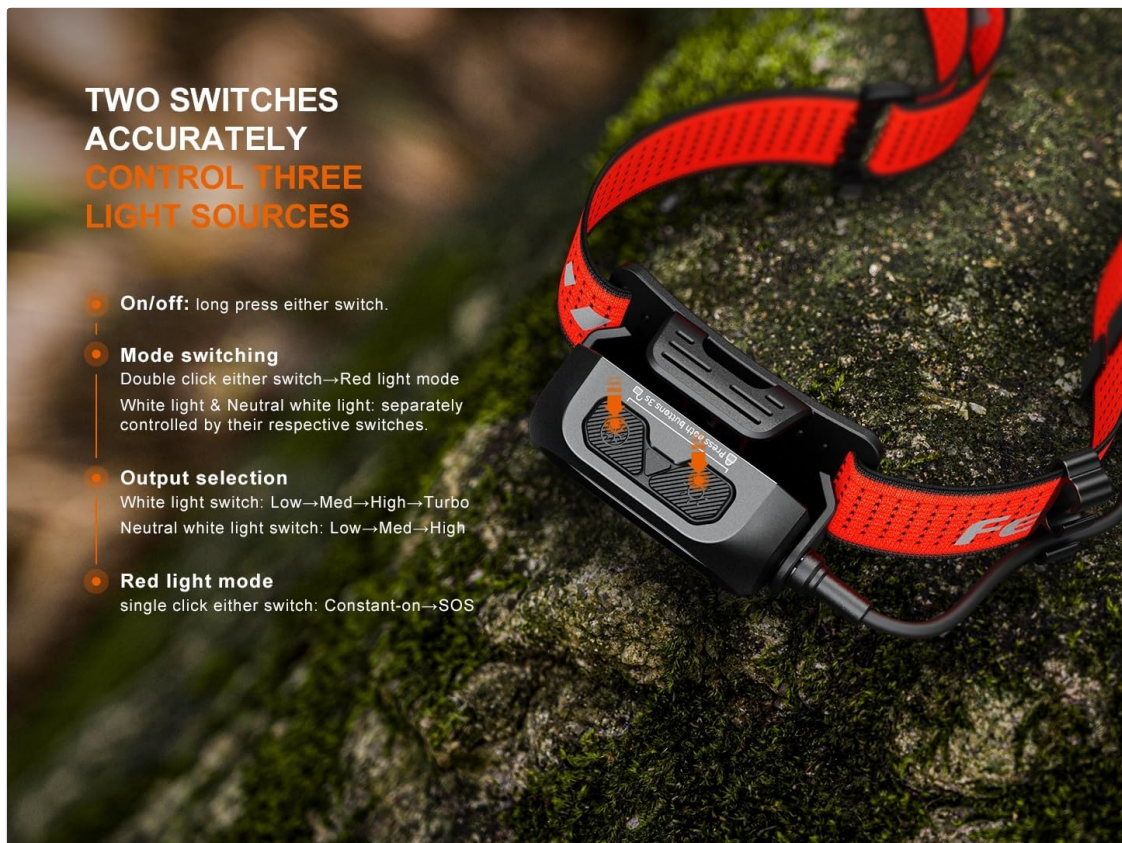


Image: A detailed view of the Fenix HP12R-T headlamp's dual control switches, illustrating the functions for power on/off, mode switching, and output selection for white, neutral white, and red light modes.

- **White Light Switch:** Single click to cycle through Low → Med → High → Turbo.
- **Neutral White Light Switch:** Single click to cycle through Low → Med → High.
- **Red Light Mode:** Single click either switch to cycle through Constant-On → SOS.

## 5.4 Rear Red Light Operation

The battery case features a rear red light for enhanced visibility and safety.

- **Constant-On:** The rear red light automatically turns on when the headlamp is activated.
- **Flash:** To switch to flash mode, press the small button on the battery case. Press again to return to constant-on.

## 5.5 Lockout Function

The HP12R-T includes both electronic and physical lockout features to prevent accidental activation.



Image: Two views of the Fenix HP12R-T headlamp demonstrating its dual lockout mechanisms: electronic lockout via button sequence and physical lockout by sliding a cover over the switches.

- **Electronic Lockout:** With the light off, press and hold both switches simultaneously for 3 seconds. The light will flash twice to indicate lockout. To unlock, press and hold both switches again for 3 seconds.
- **Physical Lockout:** Slide the protective cover over the switches to physically prevent them from being pressed.

## 6. MAINTENANCE

- **Cleaning:** Regularly clean the headlamp body with a soft cloth. For stubborn dirt, use a mild detergent. Avoid abrasive materials.
- **O-Ring Maintenance:** Inspect the O-ring periodically for wear and tear. Replace it if damaged to maintain the IP66 water resistance rating. Lubricate the O-ring with silicone grease as needed.
- **Battery Care:** Store the battery in a cool, dry place. Recharge the battery every four months if not in regular use to prolong its lifespan.
- **Charging Port:** Keep the USB-C charging port clean and free of debris.

## 7. TROUBLESHOOTING

If your Fenix HP12R-T headlamp is not functioning correctly, please refer to the following common issues and solutions:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Headlamp does not turn on.	Battery is depleted or incorrectly installed. Headlamp is in lockout mode.	Recharge or reinstall the battery correctly. Unlock the headlamp (see Section 5.5).
Light output is dim or flickers.	Low battery level. Poor contact between battery and contacts.	Recharge the battery. Clean battery contacts with a cotton swab.
Headlamp gets hot during use.	High output levels generate heat.	This is normal for high-lumen devices. The headlamp has intelligent overheat protection to reduce output if necessary.
Water ingress.	Damaged or improperly seated O-ring.	Inspect and replace the O-ring if damaged. Ensure battery case cover is tightly secured.

If the problem persists, please contact Fenix customer support for assistance.

## 8. SPECIFICATIONS

Size

Headlamp: 2.40" x 1.46" x 1.10"/61 x 37 x 28 mm

Battery case: 3.62" x 1.38" x 1.42"/92 x 35 x 36 mm

Weight

7.02 oz/199 g (including battery).

ANSI/PLATO FL1

MODE		OUTPUT	RUNTIME	DISTANCE	INTENSITY	IMPACT RESISTANCE	WATERPROOF
White light+ Neutral white light	Turbo	1300 lumens	4 hours 40 minutes*	200 meters	9973 candela	2 meters	IP66
	Low	70 lumens	18 hours 20 minutes	47 meters	564 candela		
White light	Turbo	1000 lumens	5 hours*	170 meters	6967 candela		
	High	350 lumens	16 hours 20 minutes	98 meters	2412 candela		
	Med	70 lumens	30 hours	44 meters	473 candela		
	Low	5 lumens	310 hours	12 meters	36 candela		
Neutral white light	High	500 lumens	6 hours 10 minutes	130 meters	4290 candela		
	Med	200 lumens	16 hours	79 meters	1552 candela		
	Low	70 lumens	24 hours 30 minutes	47 meters	551 candela		
Headlamp red light	Constant-on	5 lumens	160 hours	4 meters	5 candela		
	SOS	5 lumens	320 hours	/	/		
Battery case red light	Constant-on	3 lumens	108 hours	/	/		
	Flash	3 lumens	216 hours	/	/		

Note: According to the ANSI/PLATO FL1 standard, the above specifications are from the results produced by Fenix through its laboratory testing using one ARB-L18-4000 battery under the temperature of 21±3°C and humidity of 50% - 80%. The true performance of this product may vary according to different working environments and the actual battery used.

\*The Turbo output is measured in total of runtime including output at reduced levels due to temperature or protection mechanism in the design.

Image: A detailed table outlining the ANSI/PLATO FL1 standards for the Fenix HP12R-T, including various light modes (White+Neutral, White, Neutral White, Red), their respective outputs, runtimes, beam distances, intensities, impact resistance, and IP66 waterproof rating.

Feature	Detail
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Feature	Detail
Maximum Output	1300 Lumens
Light Sources	White, Neutral White, Red LED
Beam Distance	Up to 200 meters (656 feet)
Battery	1 x Fenix ARB-L18-4000 4000mAh Li-ion (included)
Charging	USB Type-C Rechargeable
Maximum Runtime	310 hours (on Low White Light mode)
Water Resistance	IP66 rated (Dustproof and protected against powerful water jets)
Impact Resistance	2 meters
Headlamp Dimensions	2.4" (W) x 1.46" (H) x 1.10" (D)
Battery Case Dimensions	3.62" (W) x 1.42" (H) x 1.38" (D)
Weight	7.02 ounces (including battery)
Material	Anodized Aluminum

*Note: The above specifications are from the results produced by Fenix through its laboratory testing using one ARB-L18-4000 battery under the temperature of 21±3°C and humidity of 50% - 80%. The true performance of this product may vary according to different working environments and the actual battery used.*

## 9. WARRANTY AND SUPPORT

Fenix provides a limited warranty for its products. For detailed warranty information and to register your product, please visit the official Fenix website or contact their customer service.

For technical support, troubleshooting assistance beyond this manual, or warranty claims, please contact Fenix customer service directly. Refer to the warranty card included in your package for specific contact details or visit [www.fenixlight.com](http://www.fenixlight.com).

**Customer Service Email:** [service@fenixlight.com](mailto:service@fenixlight.com)