Nitecore MT2A Pro

Nitecore MT2A Pro High Performance Rechargeable AA Flashlight User Manual

Model: MT2A Pro

1. INTRODUCTION

The Nitecore MT2A Pro is a high-performance rechargeable AA flashlight, designed for various applications including everyday carry, emergency lighting, and outdoor work. It incorporates a UHi 20 LED, providing enhanced brightness and an extended beam distance compared to previous models. This manual provides essential information for the safe and effective operation, maintenance, and care of your MT2A Pro flashlight.

Image 1.1: Nitecore MT2A Pro Flashlight with Keychain

2. PACKAGE CONTENTS

Please verify that all items are present in your package:

- NITECORE MT2A Pro Flashlight
- NL1416R USB-C Rechargeable Li-ion Battery
- Clip
- Lanyard
- NITECORE Keychain Tag

3. FEATURES

- **UHi 20 LED Technology:** Equipped with a UHi 20 LED, the MT2A Pro achieves a brightness of 1,000 lumens, representing a 190% increase over its predecessor.

- **Extended Beam Distance:** Provides a maximum throw of 255 meters, suitable for illuminating distant objects.
- **Dual Battery Compatibility:** Operates with the included NL1416R rechargeable Li-ion battery (1,600mAh, 5A continuous discharge, USB-C charging port) or two standard AA batteries (alkaline, lithium, or rechargeable).
- **Compact and Portable Design:** Features a tube diameter of 17.2mm (0.68") and weighs 87.6g (3.45 oz) without the clip, making it suitable for concealed carry.
- **Durable Construction:** Crafted with precision CNC machining and anti-slip knurling for a secure grip.
- **User-Friendly Interface:** Utilizes a single tail switch for all operations.
- **Tail Stand Capability:** The U-shaped tail cap allows for tail standing and helps prevent accidental activation.
- **Environmental Resistance:** IP68 rated for dust and water resistance, and capable of withstanding drops from 1 meter.

Ultra High Intensity UHi LED

NiteLab UHi LED
UHi LED inside **UHi 20**

Both NiteLab and NITECORE belong to SYSMAX which is dedicated to exploring LED technology to reinvent the flashlight LED solutions. NiteLab cooperates with an industrial partner to jointly develop the UHi LED Series, specially designed for flashlights.Featuring high light density and high beam intensity, the UHi LED utilizes the round light emitting surface (LES) to achieve an optimal lighting effect and beam distance, which challenges the impossible and begins a new era of the flashlight LED.

UHi LED Family
UHi 10   UHi 20   UHi 40   UHi 50   UHi 100

Image 3.1: UHi 20 LED Specifications

First NITECORE Flashlight With UHi 20 LED
(20W Max Power)

Ultra Mini Design

| UHi 20 | ▫ | 2.26 mm² | Approx. 41% ↓ |
| SFT40 LED On the Market | ◻ | 3.83 mm² | |

Ultra High Light Density
(Max brightness per square millimeter of the light emitting surface)

| UHi 20 | ▫ | 876 Lumens / mm² | Approx. 43% ↑ |
| SFT40 LED On the Market | ◻ | 611 Lumens / mm² | |

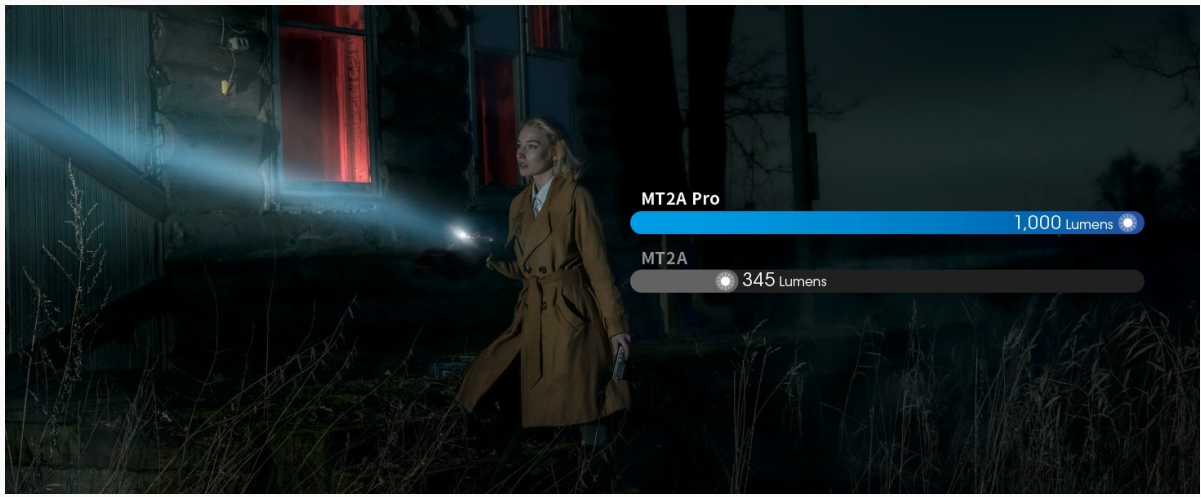Image 3.2: 1000 Lumens Output Demonstration

Image 3.3: 255 Meters Long Range Coverage
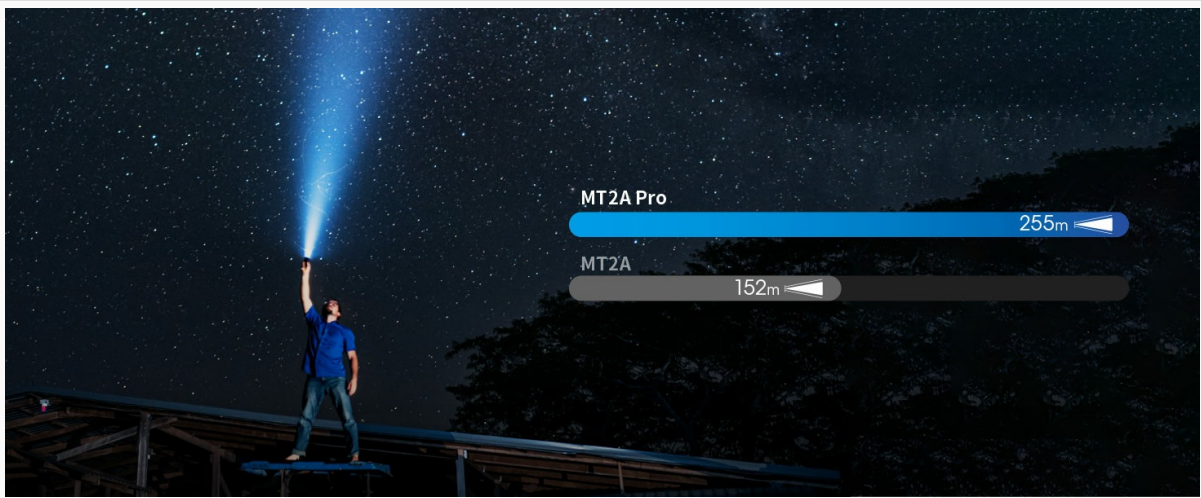

Image 3.4: Dual Battery Options

Image 3.5: Compact and Portable Design

Image 3.6: Tail Stand Capability

4. SETUP

4.1 Battery Installation

1. Unscrew the tail cap of the flashlight.
2. Insert the Nitecore NL1416R rechargeable Li-ion battery with the positive (+) terminal facing towards the head of the flashlight. If using AA batteries, insert two AA batteries with the positive (+) terminals facing the head.
3. Screw the tail cap back on tightly to ensure proper contact and water resistance.

4.2 Charging the NL1416R Battery

The included NL1416R Li-ion battery features a built-in USB-C charging port.

1. Connect a USB-C charging cable to the port on the battery.
2. Connect the other end of the cable to a USB power source (e.g., USB adapter, computer).
3. The charging indicator on the battery will illuminate to show charging status. Refer to the battery's specific instructions for indicator details.

5. OPERATING INSTRUCTIONS

5.1 Power On/Off

- **To Turn On:** Fully press the tail switch until a click is heard.
- **To Turn Off:** Fully press the tail switch again until a click is heard.

5.2 Brightness Levels Adjustment

When the flashlight is on, half-press the tail switch repeatedly to cycle through the available brightness levels. The flashlight features a memorized brightness level function, meaning it will turn on at the last used brightness setting.

Image 5.1: Tail Switch Operation

Your browser does not support the video tag.

Video 5.1: Demonstration of MT2A Pro Flashlight Features and Operation.

6. MAINTENANCE

- **Cleaning:** Periodically clean the flashlight's threads and O-rings with a clean cloth.
- **Lubrication:** Apply a thin layer of silicone lubricant to the O-rings to maintain water resistance.
- **Battery Care:** Remove batteries if the flashlight is not used for an extended period to prevent leakage. Store rechargeable batteries in a cool, dry place.
- **Contact Points:** Keep battery contact points clean to ensure reliable operation.

7. TROUBLESHOOTING

- **Flashlight Not Turning On:**
  - Ensure batteries are inserted correctly with proper polarity.
  - Check if the tail cap is screwed on tightly.
  - Verify batteries are charged or replace with fresh ones.
  - Clean battery contact points and threads.

- **Flickering or Intermittent Operation:**
  - Tighten the tail cap.
  - Clean battery contact points and threads.
  - Replace batteries if they are low on power.

- **Reduced Brightness:**
  - Charge or replace batteries.
  - Ensure the lens is clean.

8. SPECIFICATIONS

Specification	Value
Model	MT2A Pro
LED	UHi 20 LED
Max Brightness	1000 Lumens
Max Beam Distance	255 Meters
Power Source	1x NL1416R Li-ion Battery (included) or 2x AA Batteries
Material	Aluminum
Product Dimensions	0.8"D x 0.8"W x 5.6"H (approx. 19.7mm Head Diameter, 19.5mm Tail Diameter, 142.8mm Length)
Item Weight	87.6 Grams (3.09 ounces) (Clip Excluded)
Water Resistance	IP68
Drop Resistance	1 Meter

Full Press:
On / Off

Half Press:
Brightness Levels Adjustment

Image 8.1: Product Dimensions

9. SAFETY INFORMATION

- **Eye Safety:** Do not shine the flashlight directly into eyes. The intense light output can cause temporary vision impairment or permanent eye damage.
- **Heat Warning:** The flashlight may become warm during prolonged use, especially at higher brightness levels. Exercise caution when handling.
- **Battery Safety:**
  - Use only recommended batteries.
  - Do not mix old and new batteries, or different types of batteries.
  - Do not dispose of batteries in fire.
  - Keep batteries out of reach of children.
- **Disassembly:** Do not attempt to disassemble or modify the flashlight, as this may void the warranty
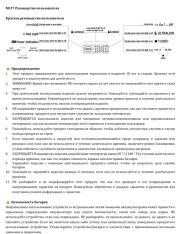
10. Warranty and Support

Nitecore products are backed by a warranty. For detailed warranty information, service, or technical support, please refer to the official Nitecore website or contact your local distributor. Keep your purchase receipt for warranty claims.

Related Documents - MT2A Pro

	[NITECORE MT2A Pro High Performance Rechargeable Flashlight](#) User manual for the NITECORE MT2A Pro flashlight, detailing its features, specifications, operation, charging, maintenance, and warranty. This high-performance flashlight utilizes a UHi 20 LED with a maximum output of 1,000 lumens and is powered by a 14100 Li-ion battery or AA batteries.
	[NITECORE EDC37 User Manual: Features, Specifications, and Operation Guide](#) Comprehensive user manual for the NITECORE EDC37 flashlight, detailing its advanced features, technical specifications, operational instructions, safety guidelines, and warranty information.
	[Nitecore EDC17 User Manual: Features, Specifications, and Operation](#) Comprehensive user manual for the Nitecore EDC17 flashlight, detailing its features, specifications, operation, charging, and maintenance. Includes information on white light, UV light, and green laser modes.
	[NITECORE EDC35 User Manual: Powerful 5000 Lumen Tactical LED Flashlight](#) Comprehensive user manual for the NITECORE EDC35 flashlight, detailing its features, specifications, operation, safety warnings, battery safety, charging instructions, and warranty information. Learn how to use this high-performance, USB-C rechargeable tactical LED torch.
	[NITECORE TM39 / TM39 Lite User Manual - High-Performance LED Flashlight](#) Comprehensive user manual for the NITECORE TM39 and TM39 Lite LED flashlights, detailing features, specifications, operating instructions, charging, and maintenance for these powerful, multi-functional lighting tools.