

## Nitecore EA81

# Nitecore EA81 Cree XHP50 Searchlight Flashlight User Manual

Model: EA81

## 1. INTRODUCTION

---

Thank you for choosing the Nitecore EA81 Cree XHP50 Searchlight Flashlight. This powerful and durable flashlight is designed for various applications, including border security, search and rescue operations, and general outdoor use. Featuring a cutting-edge Cree XHP50 LED, the EA81 delivers an impressive 2150 lumens of white light, providing an extended-range beam. This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your EA81 flashlight.

## 2. PRODUCT OVERVIEW

---

The Nitecore EA81 is engineered for high performance and reliability. Key features include:

- Utilizes a CREE XHP50 LED for maximum output up to 2150 lumens.
- High efficiency circuit board provides up to 810 hours runtime.
- Boasts a peak beam intensity of 53,300cd and a throw distance up to 462 meters.
- Five brightness levels and three special modes to select from.
- A micro-textured reflector offers wide angle lighting.
- Features Advanced Temperature Regulation (ATR) technology.
- Direct access to ultralow and turbo modes.
- Innovative dual switch for user-friendly interface.
- Integrated power indicator light displays remaining battery power.
- Reverse polarity protection.
- Constructed from aerospace grade aluminum alloy with HAIII military grade hard-anodized finish.
- Waterproof in accordance with IPX-8 (two-meter submersible) and 1.5 meters impact resistance.



Figure 2.1: The Nitecore EA81 Cree XHP50 Searchlight Flashlight.



Figure 2.2: Nitecore EA81 held comfortably in hand, demonstrating its ergonomic design.



Figure 2.3: The Nitecore EA81 illuminating a dark area, showcasing its powerful beam.

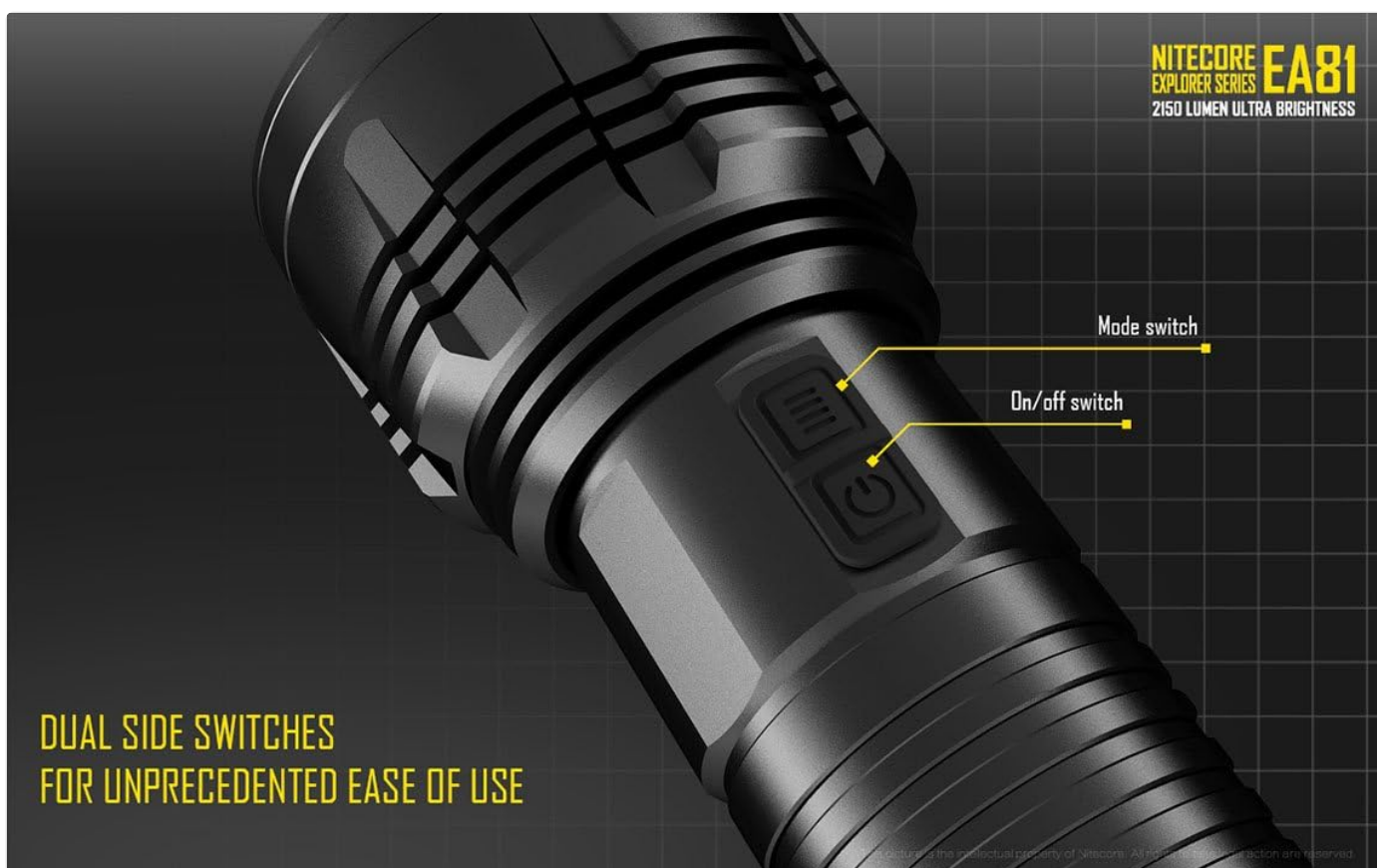


Figure 2.4: Close-up of the dual side switches on the Nitecore EA81, designed for intuitive control.



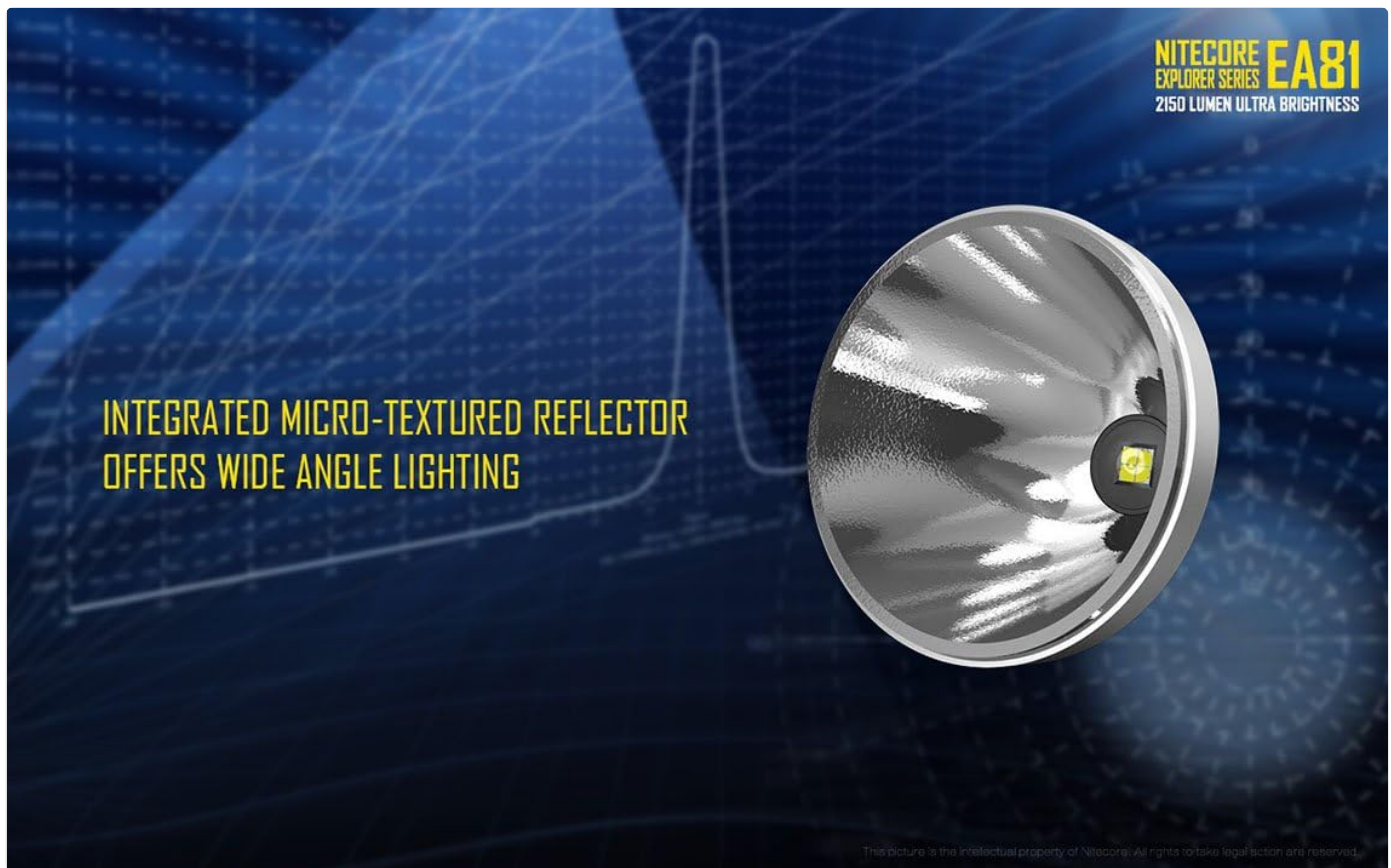


Figure 2.5: The integrated micro-textured reflector of the Nitecore EA81, designed for wide-angle lighting.

## 3. SETUP

---

### 3.1 Battery Installation

The Nitecore EA81 requires 8 AA batteries for operation.

1. Unscrew the tail cap of the flashlight by turning it counter-clockwise.
2. Insert 8 AA batteries according to the polarity markings (+/-) inside the battery compartment. Ensure correct orientation to prevent damage.
3. Screw the tail cap back on clockwise until it is securely tightened.

**IMPORTANT WARNING: DO NOT USE RECHARGEABLE BATTERIES ON THIS LIGHT! Using rechargeable batteries or certain alkaline batteries may lead to leakage and damage to the flashlight. Always use high-quality, non-rechargeable AA batteries and inspect them regularly.**

### 3.2 Initial Check

After installing batteries, briefly press the power button to ensure the flashlight turns on. If it does not, check battery orientation and ensure the tail cap is fully tightened.

## 4. OPERATING INSTRUCTIONS

---

### 4.1 Power On/Off

- To turn on the flashlight, press the On/Off switch (lower switch) until it clicks.
- To turn off the flashlight, press the On/Off switch again until it clicks.

### 4.2 Brightness Levels

The EA81 features five brightness levels: Ultralow, Low, Mid, High, and Turbo.

- With the light on, press the Mode switch (upper switch) repeatedly to cycle through the brightness levels in ascending order: Ultralow → Low → Mid → High → Turbo.
- The flashlight will memorize the last used brightness level (except for Turbo and Ultralow) and will turn on in that mode next time.

### 4.3 Direct Access Modes

The EA81 provides quick access to the lowest and highest output levels.

- **Instant Turbo (2150 lumens):** With the light turned off, hold the Mode switch for more than one second.
- **Instant Ultralow (1 lumen):** With the light turned off, hold the On/Off switch for more than one second.

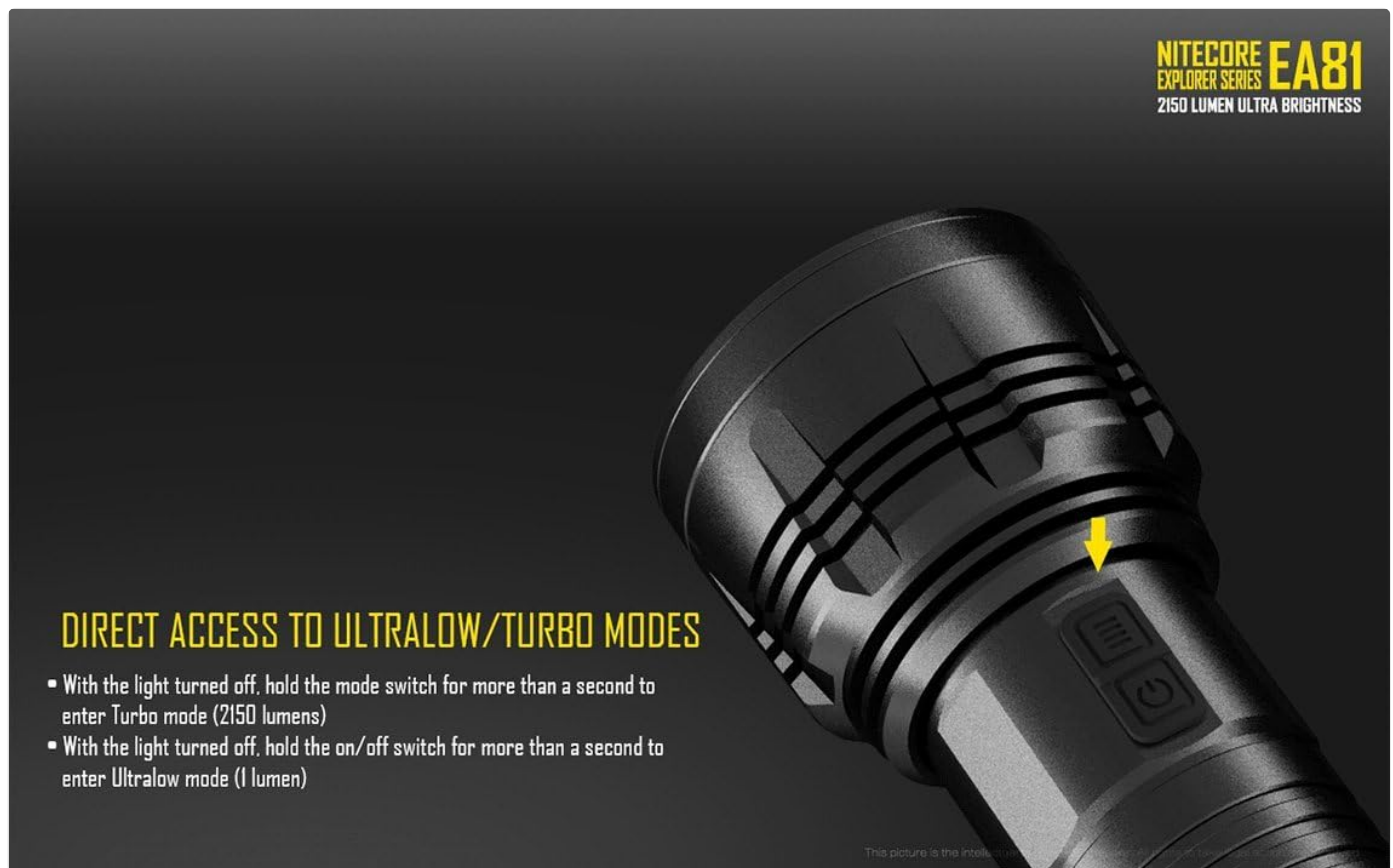


Figure 4.1: Illustration of direct access to Ultralow and Turbo modes using the dual switches.

### 4.4 Special Modes (Strobe, SOS, Location Beacon)

The EA81 has three concealed special modes for emergency or signaling purposes.

- With the light on, press and hold the Mode switch for more than one second to activate Strobe mode.
- Once in Strobe mode, press the Mode switch again to cycle through SOS and Location Beacon modes.
- To exit special modes, briefly press the Mode switch. The flashlight will return to the previously used brightness level.

### 4.5 Advanced Temperature Regulation (ATR)

The EA81 incorporates ATR technology, which dynamically adjusts output performance according to its internal temperature. This prevents overheating and prolongs the lifespan of the flashlight. When the flashlight heats up, the output may automatically decrease to maintain a safe operating temperature.

## 4.6 Power Indicator Light

The integrated power indicator light, located beneath the switches, displays the remaining battery power.

- When the battery level is above 50%, the indicator light will flash once every two seconds.
- When the battery level is below 50%, the indicator light will flash rapidly.
- When the battery level is critically low, the indicator light will flash very rapidly, indicating that batteries should be replaced soon.

## 5. MAINTENANCE

### 5.1 Cleaning

Regularly clean the flashlight body with a soft, damp cloth. For the lens, use a lens cleaning cloth and solution to avoid scratches. Keep the threads of the tail cap clean and lubricated with silicone grease to ensure smooth operation and maintain waterproofing.

### 5.2 Battery Care and Storage

To prevent battery leakage and potential damage to the flashlight:

- Always remove batteries from the flashlight if it will not be used for an extended period.
- Inspect batteries regularly for any signs of leakage or corrosion. Replace them immediately if any issues are observed.
- Store the flashlight in a cool, dry place away from direct sunlight and extreme temperatures.
- As previously stated, **DO NOT USE RECHARGEABLE BATTERIES** with this device.

### 5.3 O-Ring Replacement

The EA81 comes with a spare O-ring. If the original O-ring around the tail cap becomes damaged or worn, replace it to maintain the flashlight's waterproof rating. Lubricate the new O-ring with silicone grease before installation.

## 6. TROUBLESHOOTING

If you encounter issues with your Nitecore EA81, please refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Flashlight does not turn on.	Batteries inserted incorrectly.	Check and correct battery polarity.
	Batteries are depleted.	Replace with new, non-rechargeable AA batteries.
	Tail cap is loose.	Tighten the tail cap securely.
	Corroded battery contacts.	Clean battery contacts with a clean cloth.
Light output is dim or flickers.	Low battery power.	Replace batteries.
	Loose head or tail cap.	Ensure head and tail cap are fully tightened.
	Overheating (ATR activated).	Allow the flashlight to cool down.

Problem	Possible Cause	Solution
Battery leakage observed.	Use of incompatible batteries (e.g., rechargeable). Defective or old alkaline batteries. Batteries left in flashlight for too long.	Immediately remove all batteries. Clean the battery compartment thoroughly with a cotton swab dipped in vinegar (for alkaline leaks) or rubbing alcohol. Ensure only high-quality, non-rechargeable AA batteries are used. Remove batteries during extended storage.
Cannot switch modes.	Switches are dirty or obstructed. Internal electronic issue.	Clean the area around the switches. If the problem persists, contact Nitecore customer support.

## 7. SPECIFICATIONS

Detailed specifications for the Nitecore EA81 flashlight are provided below:

Feature	Value
Brand	Nitecore
Model Number	EA81
Light Source Type	LED (Cree XHP50)
Maximum Output	2150 Lumens
Peak Beam Intensity	53,300cd
Throw Distance	Up to 462 meters
Runtime	Up to 810 hours (Ultralow mode)
Power Source	8 x AA batteries (non-rechargeable)
Material	Aerospace grade aluminum alloy
Finish	HAIII military grade hard-anodized
Waterproof Rating	IPX-8 (2 meters submersible)
Impact Resistance	1.5 meters
Length	193 mm / 7.6 in
Head Size	60 mm / 2.36 in
Weight	282 g / 9.95 oz (without batteries)
Included Components	Holster, Lanyard, Spare O-ring







EA81 SPEC.					
FLI STANDARD	TURBO	HIGH	MID	LOW	ULTRALOW
	2150 Lumens	1200 Lumens	460 Lumens	80 Lumens	1 Lumen
 AA x 8	1 h 45 min	2 h 30 min	7 h	32 h	810 h
	462m (Beam Distance)				
	53300cd (Peak Beam Intensity)				
	1.5m (Impact Resistant)				
	IPX-8, 2m (Waterproof and Submersible)				
The above data has been measured in accordance with the international flashlight testing standards ANSI/NEMA FLI using 8 x 1.2V 2450mAh AA batteries under laboratory conditions. The data may vary slightly during real-world use due to battery type, individual usage habits and environmental factors.					

Figure 7.1: Official specifications table for the Nitecore EA81, detailing performance metrics.

## 8. WARRANTY AND SUPPORT




Nitecore products are known for their quality and durability. While specific warranty details may vary by region and retailer, Nitecore typically offers a warranty period for their flashlights, often cited as 5 years for manufacturing defects. For detailed warranty information, technical support, or service inquiries, please visit the official Nitecore website or contact your authorized Nitecore dealer.

**Official Nitecore Website:** [www.nitecore.com](http://www.nitecore.com)

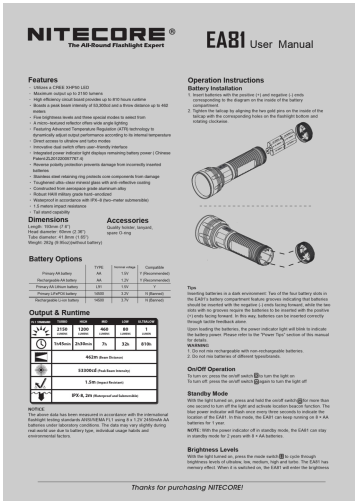
© 2025 Nitecore. All rights reserved.

This manual is for informational purposes only. Specifications are subject to change without notice.

### Related Documents - EA81

	<a href="#">KRUPS Espresso Automatic EA80/EA81 User Manual</a> Comprehensive guide to operating and maintaining the KRUPS Espresso Automatic coffee machine, series EA80 and EA81. Learn about preparation, cleaning, descaling, and troubleshooting.
	<a href="#">Krups Espresso Automatic EA80/EA81 User Manual and Guide</a> Comprehensive user manual for the Krups Espresso Automatic EA80 and EA81 series coffee machines, covering setup, operation, maintenance, troubleshooting, and recipes.
	<a href="#">Krups Bean to Cup Machine Offer: Free Pact House Coffee Beans</a> Information on how to claim a free bag of Pact House coffee beans with the purchase of a Krups Bean to Cup machine between November 30, 2017, and March 31, 2018. Includes terms and conditions and eligible machine models.



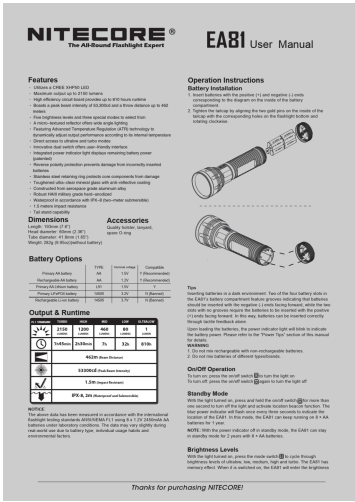


[pdf] User Manual Dimension Guide

User Manual Manuel utilisateur Nitecore EA81 nitecore france media 41072 80

The All-Round Flashlight Expert **EA81** User Manual Features Utilizes a CREE XHP50 LED Maximum output up to 2150 lumens High efficiency circuit board provides up to 810 hours runtime Boasts a peak beam intensity of 53,300cd and a throw distance up to 462 meters Five brightness levels and ...

lang:en score:46 filesize: 927.08 K page\_count: 2 document date: 2015-11-04



[pdf] User Manual Dimension Guide

Nitecore EA81 UM en data wilcon hu nitecore

The All-Round Flashlight Expert **EA81** User Manual Features Utilizes a CREE XHP50 LED Maximum output up to 2150 lumens High efficiency circuit board provides up to 810 hours runtime Boasts a peak beam intensity of 53,300cd and a throw distance up to 462 meters Five brightness levels and ...

lang:en score:37 filesize: 926.34 K page\_count: 2 document date: 2015-08-17



[pdf] Catalog

Завантажити інструкцію Ліхтар Nitecore EA81 Cree XHP50 2150 люмен 8 режимів 8xAA Інтернет магазин fonarevka Купити ціна відгуки фото відео ua nitecore ea81 rus home catalog product5024 file

|||

The All-Round Flashlight Expert **EA81** CREE XHP50 2150 810 53,300cd 462 Advanced Temperature Regulation ATR HAIII IPX-8 1.5 : 193mm 7.6 : 60mm 2.36 : 41.8mm 1...

lang:en score:36 filesize: 1.73 M page\_count: 2 document date: 2015-10-20





[\[pdf\]](#) Specifications Accessories Catalog

PRODUCT CATALOGUE 2019 Nitecore Italia Scenarios About NITECORE Patent Awards Others Knowledge Lighting — Tiny Monster Series Precise Smart Ring Tactical 1550116224267288710fad9a7b flashlight nitecore Uploads file material  
www.nitecore.com SYSMAX Innovations Co., Ltd. Rm 2601-06, Central Tower, No.5 Xiancun Road, Tianh ... arance, these ultracompact lights, ranging from the thumbsized EC11 to the 8xAA powered searchlight **EA81**, are ideal for hiking, camping, searching and caving, providing the avid outdoorsmen with unpre...  
lang:en score:23 filesize: 15.7 M page\_count: 54 document date: 2019-02-14



[\[pdf\]](#)

2019 15476094433cc2d891e8c72285 flashlight nitecore cn Uploads file material |||  
www.nitecore.cn 5 2601-06 510623 400 8869828 info nitecore.com 2019 Vrg Fotografia Tactic ... ECORE EC4 CNC 37 30 200 4000K 80 NITECORE : HC30W, MH12W, MH20W, EH1W, EH1SW, EC4SW, **EA81W**, EA41W Black Light NITECORE : P20UV, CU6, MH27UV, TUBE UV, THUMB LEO, MT1UGEM8UVGEM10UV ...  
lang:i-klngon score:22 filesize: 12.26 M page\_count: 54 document date: 2019-01-16



[\[pdf\]](#) Specifications Accessories Catalog

PRODUCT CATALOGUE 2019 NITECORE A helmet clip allows for mounting a headlamp on thin edged that does not include clips Specially designed law enforcement NTC1 is 155106751408109347cd5f4376 flashlight nitecore Uploads file material |||  
www.nitecore.com SYSMAX Innovations Co., Ltd. Rm 2601-06, Central Tower, No.5 Xiancun Road, Tianh ... arance, these ultracompact lights, ranging from the thumbsized EC11 to the 8xAA powered searchlight **EA81**, are ideal for hiking, camping, searching and caving, providing the avid outdoorsmen with unpre...  
lang:en score:22 filesize: 15.7 M page\_count: 54 document date: 2019-02-25



[\[pdf\]](#) Specifications Accessories Catalog

flashlight nitecore Uploads SYSMAX Innovations Co Ltd Rm 2601 06 Central Tower No 5 Xiancun Road Tianhe District Guangzhou 510623 Guangdong China 1530591442c8cfbf44baff809 file material When there is darkness CONTENTS Scenarios About NITECORE Patent Awards Knowledge Lighting — Tiny Monster Series Precise Smart Ring Tactical Chameleon Rechargeable  
www.nitecore.com PRODUCT CATALOGUE SYSMAX Innovations Co., Ltd. Rm 2601-06, Central Tower, No.5 ... bility, ruggedness and light weight are also a plus. Recommended models : TM28, TM38, MH23, TM26GT, **EA81**, R40, EC4SW, HC33, HC70 Scenarios -- 3 Tactical As a simple and intuitive UI is most importan...  
lang:en score:22 filesize: 8.79 M page\_count: 54 document date: 2018-07-02

[\[pdf\]](#) Specifications Accessories Catalog

flashlight nitecore Uploads PRODUCT CATALOGUE Nitecore Flashlight NITECORE SYSMAX Industry Co Ltd Rm 2601 06 Central Tower No 5 Xiancun Road Tianhe District Guangzhou 510623 Guangdong China Tel 86 20 83862000 Fax 110 \*80\*50mm Wegiht 0 13 kg Charging time for EH1 8h EH1S 4h FEATURES SPECIFICATIONS Model Car adapter DCW Input DC12 24V Recommended models NU05 NU20 CRI NU25 NU30 For long distance running runners may prefer a lightweight headlamp with flood light and 1523507301e555f1a4a4473d3a 1523505445e555f1a4a4473d3a file material vape e  
www.nitecore.com SYSMAX Industry Co.,Ltd. Rm 2601-06, Central Tower, No.5 Xiancun Road, Tianhe Distr ... bility, ruggedness and light weight are also a plus. Recommended models : TM28, TM38, MH23, TM26GT, **EA81**, R40, EC4SW, HC33, HC70 Scenarios -- 3 Tactical As a simple and intuitive UI is most importan...  
lang:en score:21 filesize: 8.94 M page\_count: 54 document date: 2018-04-12



[\[pdf\]](#) Specifications Accessories Catalog

nitecore batteries Kupifonar kz Scenarios About NITECORE Patent Awards Knowledge Lighting — Tiny Monster Series Precise Smart Ring Tactical Chameleon 1517818886abac797398b741a9 photo Uploads file material 1517818987abac797398b741a9 flashlight SYSMAX Industry Co Ltd Rm 2601 06 Central Tower No 5 Xiancun Road Tianhe District Guangzhou 510623 Guangdong China Tel 86 20 83862000 Fax PRODUCT CONTENTS Rechargeable  
www.nitecore.com SYSMAX Industry Co.,Ltd. Rm 2601-06, Central Tower, No.5 Xiancun Road, Tianhe Distr ... bility, ruggedness and light weight are also a plus. Recommended models : TM28, TM38, MH23, TM26GT, **EA81**, R40, EC4SW, HC33, HC70 Scenarios -- 3 Tactical As a simple and intuitive UI is most importan...  
lang:en score:21 filesize: 9.12 M page\_count: 54 document date: 2018-01-16



[\[pdf\]](#) Specifications Accessories Catalog

PRODUCT CATALOGUE 2019 NITECORE When there is darkness Scenarios About Patent Awards Others Knowledge Lighting — Tiny Monster Series Precise Smart Ring Tactical MH27 the first USB rechargeable and tri colored tactical flashlight to win Red Dot Award possessing high output up 1000 lumens beam distance CONTENTS Chameleon Rechargeable 15480361024ba7ebcbd42303bd nitecore Uploads file material  
www.nitecore.com SYSMAX Innovations Co., Ltd. Rm 2601-06, Central Tower, No.5 Xiancun Road, Tianh ... arance, these ultracompact lights, ranging from the thumbsized EC11 to the 8xAA powered searchlight **EA81**, are ideal for hiking, camping, searching and caving, providing the avid outdoorsmen with unpre...  
lang:en score:20 filesize: 15.67 M page\_count: 54 document date: 2018-12-21



[\[pdf\]](#) Specifications Accessories

2017 Nitecore Flashlight 2 About NITECORE 8 Knowledge 16 Tiny Monster Series 18 Precise 22 SmartRing 15122070597ec30452bd3da7c6 flashlight nitecore Uploads file material @ cn 850 1401 1403 400 8869828 info@nitecore 2017 1  
www.nitecore.cn 850 1401-1403 400 8869828 info nitecore.com 2017 2017 1 2 About ... TM03CRI, TIPCRI, NU20CRI, NU30CRI 13 4000K 80 : HC30W, MH12W, MH20W, EH1W, EH1SW, EC4SW, **EA81W**, EA41W, EC4W, P36W, P10W, P12W, TM15W UV Black Light : P20UV, CU6, MH27UV, TUBE UV, TH...  
lang:tl score:20 filesize: 9.62 M page\_count: 46 document date: 2017-06-27







[\[pdf\]](#) Catalog

2019 NITECORE Catalog EN nitecorestore s3 amazonaws Nitecore catalogue |||

www.nitecore.com All images, text and statements specified here in this catalogue are for referen ... arance, these ultracompact lights, ranging from the thumbsized EC11 to the 8xAA powered searchlight **EA81**, are ideal for hiking, camping, searching and caving, providing the avid outdoorsmen with unpre...

lang:en score:19 filesize: 12.49 M page\_count: 54 document date: 2019-05-30



[\[pdf\]](#) Catalog

2020 NITECORE PRODUCT CATALOGUE EN for web nitecorestore s3 amazonaws Nitecore catalogue

www.nitecore.com All images, text and statements specified here in this catalogue are for reference ... ance, these ultra-compact lights, ranging from the thumb-sized EC11 to the 8xAA powered searchlight **EA81**, are ideal for hiking, camping, searching and caving, providing the avid outdoorsmen with unpre...

lang:en score:19 filesize: 12.08 M page\_count: 54 document date: 2020-03-16



[Nitecore Product Catalog - Lighting Solutions](#)

Comprehensive catalog of Nitecore's innovative lighting products, including tactical flashlights, headlamps, camping lanterns, and battery chargers. Explore detailed specifications, features, and applications.

lang:i-klingon score:19 filesize: 16.03 M page\_count: 54 document date: 2019-02-14

[illegible]

[\[pdf\]](#) Confidentiality Request Letter

Stocking Dealer Pricing Sheet nitecorestore s3 amazonaws Sheets |||

2000 Windy Ter. BLDG 5B Cedar Park,TX 78613 Flashlights don t usually come with batteries unless th ... ITE-DL10 Explorer Series FL-NITE-EA11 FL-NITE-EA21 FL-NITE-EA41 FL-NITE-EA41NW FL-NITE-EA42 FL-NITE-**EA81** FL-NITE-EC11 FL-NITE-EC20 FL-NITE-EC22 FL-NITE-EC23 FL-NITE-EC23-GIFT FL-NITE-EC4GT FL-NITE-EC4...

lang:en score:18 filesize: 249.63 K page\_count: 7 document date: 0000-00-00



[\[pdf\]](#) Catalog

PRODUCT CATALOGUE 2019 Nitecore Flashlight All images text and statements specified here in this catalogue are for reference purpose only Should any discrepancy occurs between

15688841685705b5ede0fcf912 flashlight nitecore Uploads file material When there is darkness ® purpose information on

www.nitecore.com All images, text and statements specified here in this catalogue are for referen ... arance, these ultracompact lights, ranging from the thumbsized EC11 to the 8xAA powered searchlight **EA81**, are ideal for hiking, camping, searching and caving, providing the avid outdoorsmen with unpre...

lang:en score:17 filesize: 12.46 M page count: 54 document date: 2019-09-19

[pdf] Catalog

flashlight nitecore Uploads file material 15898509292c8dd1eb1203fd64 PRODUCT CATALOGUE

Nitecore Flashlight When there is darkness 2020 ABOUT NITECORE Since its inception in 2007 has long been on top of the hierarchy LED lighting and battery charger markets backed by 11 mag — High output red caution light are required when necessary For those who enjoy leisurely urban night running a high performance headlamp ensures their All images text statements specified here this catalogue for reference pur pose only Should any discrepancy occurs between information

www.nitecore.com All images, text and statements specified here in this catalogue are for reference ... ance, these ultra-compact lights, ranging from the thumb-sized EC11 to the 8xAA powered searchlight **EA81**, are ideal for hiking, camping, searching and caving, providing the avid outdoorsmen with unpre...

lang:en score:17 filesize: 12.31 M page\_count: 54 document date: 2020-01-08



[pdf]

EA81 T220180212 1521785498 flashlight nitecore cn Uploads FLASHLIGHTS |||

lang:en score:13 filesize: 1.89 M page\_count: 2 document date: 2018-02-12



[pdf]

EA81 T220180212 NITECORE Title Created Date 2 12 2018 3 15 32 PM 1521596889 nitecore Uploads FLASHLIGHTS Nitecore Flashlight To turn off press the on switch O again to light 53300cd 29800cd 10800cd 1500cd 8cd 1m Impact Resistant IPX8 2m Waterproof and flashlight

lang:en score:11 filesize: 1.72 M page\_count: 2 document date: 2018-02-12

