NITECORE ®
ALL-ROUND Flashlight Expert

EC1 User Manual

Features

• CREE XP-G (R5) LED
• Maximum output of up to 280 lumens
• High efficiency constant current circuit enables maximum run time of up to 70 hours
• 5 brightness levels
• Momentary push-on strobe and SOS modes
• Dual electronic switches ensure very easy user interface
• Secondary red light mode (0.2 lumen)
• Power indicator light also serves as a battery voltage indicator (accurate to 0.1V)
• Power indicator light serves as standby indicator light when powered down
• Broad voltage circuit accepts both rechargeable and non-rechargeable lithium batteries
• Toughened ultra-clear mineral glass with dual-side anti-reflective coating
• Elaborate alloy reflector is purpose-designed for exceptionally long throw
• Constructed from aero grade aluminum alloy
• HAIII military grade hard-anodized
• Stainless steel bezel retaining ring protects core components from damage
• Detachable two-way anti-rolling clip
• Waterproof in accordance with IPX-8 (2 meters submersible)
• Tail stand function

Dimensions

Length: 65mm
Head Diameter: 25.4mm
Tail Diameter: 22mm
Weight: 42.5g (without battery)

Accessories

Quality holster, lanyard, spare O-ring

Battery Options

	SIZE	Nominal voltage	Compatible
Primary Lithium battery	CR123	3V	Y (Recommended)
Rechargeable Lithium battery	RCR123	3.7V	Y

Brightness & Runtime

| FL 1 STANDARD	TURBO	HIGH	MID	LOW	MICRO
☀	280 LUMENS	200 LUMENS	75 LUMENS	25 LUMENS	4 LUMENS
🕐	—	1h20min	5h	12h	70h
◀	141m (Beam Distance)				
◎	5000cd (Peak Beam Intensity)				
✓	1.5m (Impact Resistant)				
⬇	IPX-8, 2m (Waterproof AND Submersible)				

NOTICE

The stated data has been measured in accordance with the international flashlight testing standards ANSI/NEMA FL1, using SYSMAX CR123 battery (3V, 1550mAH) under laboratory conditions. The data may vary in real-world use due to different battery usage or environmental conditions.

Operation instructions

Battery installation

1. Unscrew (counterclockwise) and remove the tail cap.
2. Insert one lithium CR123 or RCR123 li-ion battery with the positive pole of the battery pointing toward the head.
3. Replace the tail cap and fasten tightly
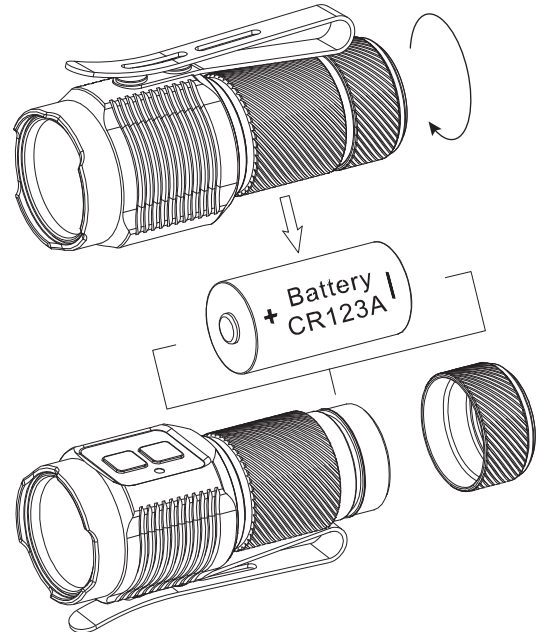
Note:

EC1 is compatible with primary CR123 Lithium batteries and 3.7V rechargeable CR123 Li-ion batteries. When installing battery, EC1's built-in MCU will automatically detect the installed battery type, and then automatically select the best suited driving data and battery capacity detecting data.

WARNING

Always ensure batteries are inserted with the positive (+) ends pointing toward the flashlight head. If incorrectly installed, the flashlight will not work.

Switching ON/OFF

To switch ON: Press the "ON/OFF" button once to turn the light on.
To switch OFF: Press the "ON/OFF" button once again to turn the light off.

Note: When EC1 is off, the power indicator (red light) will flash once every 3 seconds to act as a locator. In this mode, the EC1 consumes a very little amount of current (about 0.2mA) to maintain working of the built-in MCU and power indicator. In this mode, 1 CR123 battery will last about 1 year.

Brightness Selection

With the flashlight switched on, each time you press the "MODE" button, it will go through the different preset brightness modes as follows: ultra-low mode→low mode→medium mode→high mode then repeat. In this mode, the flashlight has a memory function. It can memorize the selected brightness after turning the light off. The next time turning on the light, it automatically resumes to the previously selected mode.

Entering Turbo Mode

With the flashlight switched on, press the "MODE" button for more than 1 Second, EC1 will enter Turbo mode. Press the MODE button again, the flashlight will retreat from turbo brightness and resume to previous brightness. In Turbo mode EC1 circuit will deliver maximum current to make brightness as high as possible.

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Note:
1. After 3 minutes working in Turbo mode, the flashlight will automatically restore to the previously selected brightness level to safeguard against overheating.
2. While activating Turbo mode, the brightness level increases about 80 lumens. Due to adaptability of human eyes, brightness increase may not be apparent within close range observation. In real-world usage, Turbo mode can help EC1 throw to a longer range.

Entering Strobe and SOS Mode

With the light switched off, press the "ON/OFF" button for more than 1 second to enter Strobe mode. In strobe mode, press any button (ON/OFF or MODE) to exit strobe and switch the light off.
With the light switched off, press the "ON/OFF" button for more than 1 second to enter SOS mode. In SOS mode, press any button (ON/OFF or MODE) to switch off the light and quit SOS mode.

Red Light Mode

With the light switched off, press the "MODE" button to enter red light mode. In this mode, the power indicator will continuously emit red light (0.2 lumens). Press the "MODE" button once again to quit the red light mode.

Lockout Mode

With the light switched on, press the ON/OFF button for over 1 second to enter lockout mode. In lockout mode, EC1 power source system will shut down most of the circuit components to reduce its power consumption. The MCU only consumes a small amount of power. The red light indicator also switches off to save energy. Under this mode, the maximum consuming current is about 0.1mA, which ensures 1 CR123 battery can last for around 2 years. In lockout mode, the 2 buttons on EC1 will not work, which can prevent the light from being turned on accidentally.
To exit lockout mode, simply press the ON/OFF button for more than 1 second.

Note: When entering lockout mode, the red light indicator light will continuously flash to notify you of battery voltage. Please refer to the "Power Indication" section below.

Power Indication

With the light switched on, and when the battery power has been consumed by about 50%, the power indicator light (on the control panel) will flash once every 6 seconds as a reminder of battery capacity.
When the battery power is almost depleted, the power indicator light will flash 3 times every 3 seconds to indicate low battery capacity.
When entering lockout mode, the power indicator will automatically detect and notify you of battery voltage (accurate to ±0.1V) with a series of flashes. For example, if the battery voltage is 4.2V, the indicator will flash 4 times, followed by a 1 second pause and then another 2 flashes.

Battery Replacement

If battery level is low, the red power indicator light will flash three times every 3 seconds. If the power level is critically low, the light will become very dim and unresponsive to brightness adjustment. A replacement battery is required at this time.
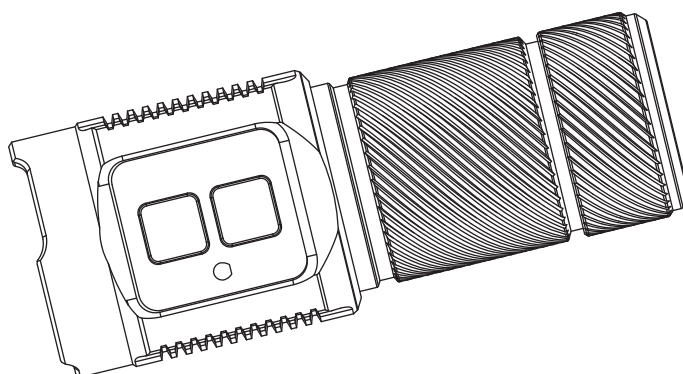
Maintenance

Every 6 months, the threads should be wiped with a clean cloth followed by a thin coating of silicon-based lubricant.

Warranty Service

All NITECORE® products are warranted for quality. DOA / defective products can be exchanged for replacement though a local distributor/dealer within the 14 days of purchase. After 14 days, all defective / malfunctioning NITECORE® products will be repaired free of charge for a period of 18 months from the date of purchase. After 18 months, a limited warranty applies, covering the cost of labor and maintenance, but not the cost of accessories or replacement parts. The warranty is nullified in all of the following situations:
1. The product(s) is/are broken down, reconstructed and/or modified by unauthorized parties.
2. The product(s) is/are damaged through improper use.
3. The product(s) is/are damaged by leakage of batteries.

For the latest information on NITECORE® products and services, please contact your national NITECORE® distributor or visit our official website: www.NITECORE.com

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