

# EC2 User Manual

### **Features**

- CREE XP-G (R5) LED
- · Maximum output of up to 320 lumens
- High efficiency constant current circuit enables maximum run time of up to 220 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 lumens)
- 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: 99mm Head Diameter: 25.4mm Tail Diameter: 24mm Weight: 59g (without battery)

### **Accessories**

Quality holster, lanyard, spare O-ring

# **Battery Options**

	SIZE	Nominal voltage	Compatible
Primary Lithium battery	CR123	3V	Y (Recommended)
18650 Rechargeable Li-ion battery	18650	3.7V	Y (Recommended)
Rechargeable Li-ion battery	RCR123	3.7V	Y

#### Note:

When EC2 is driven by 2 RCR123 batteries, the battery capacity indicator function cannot be activated normally.

# **Brightness & Runtime**

FL1 STANDARD	TURBO	HIGH	MID	LOW	MICRO		
31/5	320 LUMENS	220 LUMENS	80 LUMENS	15 LUMENS	2 LUMENS		
()	_	3h	11h	50h	220h		
	<b>150m</b> (Beam Distance)						
	5650cd (Peak Beam Intensity)						
	1.5m (Impact Resistant)						
	IPX-8, 2m (Waterproof AND Submersible)						

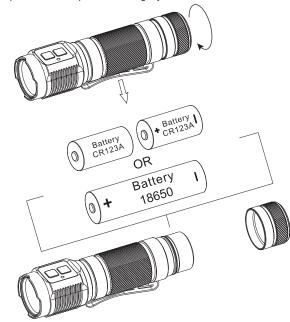
### NOTICE

The stated data has been measured in accordance with the international flashlight testing standards ANSI/NEMA FL1, using two 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.
- Insert two CR123 batteries or one 18650 battery with the positive poles of the batteries pointing toward the head.
- 3. Replace the tail cap and fasten tightly



#### Note

EC2 is compatible with two primary CR123 Lithium batteries and one 18650 rechargeable Li-ion battery. When installing battery, EC2'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 EC2 is off, the power indicator (red light) will flash once every 3 seconds to act as a locator. In this mode, the EC2 consumes a very little amount of current (about 0.2mA) to maintain working of the built-in MCU and power indicator. Under such status, two CR123 batteries will last about 1 year in this mode.

### **Brightness Selection**

With the flashlight switched on, each time you press the "MODE" button, it will go through the different preset brightness levels as follows: ultra-low mode—low mode—medium mode—high mode then repeat. Under this mode, the flashlight has a memory function. It can memorize the selected brightness after turning the light off, while 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, EC2 will enter Turbo mode. Press the MODE button again, the flashlight will retreat from turbo brightness and resume to previous brightness. In Turbo mode EC2 circuit will deliver maximum current to make brightness as high as possible.



#### Note:

- After 30 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 100 lumens. Due to adaptability of human eyes, this brightness increase may not be apparent within close range observation. In real-world usage, Turbo mode can help EC2 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, EC2 power source system will shut down most of the circuit components to reduce its power consumption. The MCU only consumes small amount of power to maintain its work. The red light indicator also switches off to save energy. Under this mode, the maximum consuming current is about 0.1mA, which ensures two CR123 batteries can maintain its work for around 2 years. In lockout mode, the 2 buttons on EC2 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 advise 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  $\pm 0.1 \text{V}$ ) with a series of flashes. For example, if the battery voltage is 4.2V, the indicator will flash 4 times, followed by a one 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

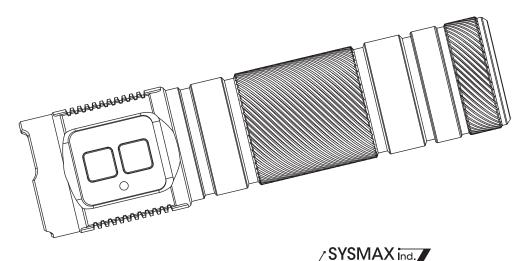
Every 6 months, the threads should be wiped with a clean cloth followed by a thin coating of silicon-based lubricant.

# **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:

- 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.

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