



# NITECORE i-Generation 21700 High Output Searchlight User Manual

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**NITECORE**  
**i-Generation 21700 High Output Searchlight**  
**User Manual**

Model: P30i



## **Warranty Service**

All NITECORE® products are warranted for quality.

Any DOA / defective product can be exchanged for a replacement through a local distributor/dealer within 15 days of purchase. After that, all defective / malfunctioning NITECORE® products can be repaired free of charge within 60 months from the date of purchase. Beyond 60 months, a limited warranty applies, covering the cost of labor and maintenance, but not the cost of accessories or replacement parts.

The warranty will be nullified if

1. the product(s) is/are broken down, reconstructed and/ or modified by unauthorized parties;
2. the product(s) is/are damaged due to improper use; (e.g. reversed polarity installation)
3. the product(s) is/are damaged due to battery leakage.

For the latest information on NITECORE® products and services, please contact a local NITECORE® distributor or send an email to **[service@nitecore.com](mailto:service@nitecore.com)**

❖ All images, text and statements specified herein this user manual are for reference purpose only. Should any discrepancy occur between this manual and information specified on [www.nitecore.com](http://www.nitecore.com), Sysmax Innovations Co., Ltd. reserves the rights to interpret and amend the content of this document at any time without prior notice.

## **Features**

- Utilizes a CREE XHP35 HI LED with a max output of 2,000 lumens
- An optical system combined with crystal coating and “Precision Digital Optics Technology” (PDOT)

- Max peak beam intensity of 250,000cd and max throw of 1,000 meters
- Powered by a 21700 i Series Battery while compatible with CR123 batteries, to provide a runtime up to 100 hours
- The tactical tail switch and the metal side switch control 5 brightness levels and 2 special modes
- Dual power indicators are available to indicate battery power (Patent No. ZL201220057767.4)
- The power indicators can display the battery voltage ( $\pm 0.1V$ )
- Anti-impact reverse polarity protection mechanism specially designed for shooting sports (Patent No. ZL201220677948.7)
- Intelligent Li-ion battery charging circuit with a USB-C port
- Highly efficient constant current circuit provides a stable output
- Incorporated Advanced Temperature Regulation (ATR) module (Patent No. ZL201510534543.6)
- NITECORE 21700 Li-ion battery (NL2150HPi 5,000mAh) and Remote Switch RSW2i (Cable Part) included
- Optical lenses with double-sided scratch resistant coating
- Constructed from aero grade aluminum alloy
- HA III military grade hard-anodized finish
- Waterproof and dustproof rating in accordance with IP68 (2 meters submersible)
- Impact resistant to 1 meter

## Specifications

- **Length:** 177.5mm (6.99")
- **Head Diameter:** 65mm (2.56")
- **Tube Diameter:** 25.4mm (1")
- **Tail Diameter:** 28.5mm (1.12")
- **Weight:** 255.5g (9.01oz)

## Accessories

- NITECORE 21700 Rechargeable Li-ion Battery (NL2150HPi 5,000mAh),
- Remote Switch RSW2i (Cable Part),
- USB-C Charging Cable,
- CR123 Battery Magazine,
- Clip,
- Spare O-ring,
- Holster

## Battery Options







The P30i is only compatible with NITECORE 21700 i Series batteries with an output over 15A and CR123/RCR123 batteries.

### Note:

1. DO NOT attempt to use the P30i to charge CR123/RCR123 batteries.

2. The P30i is NOT compatible with conventional 21700/18650 batteries.

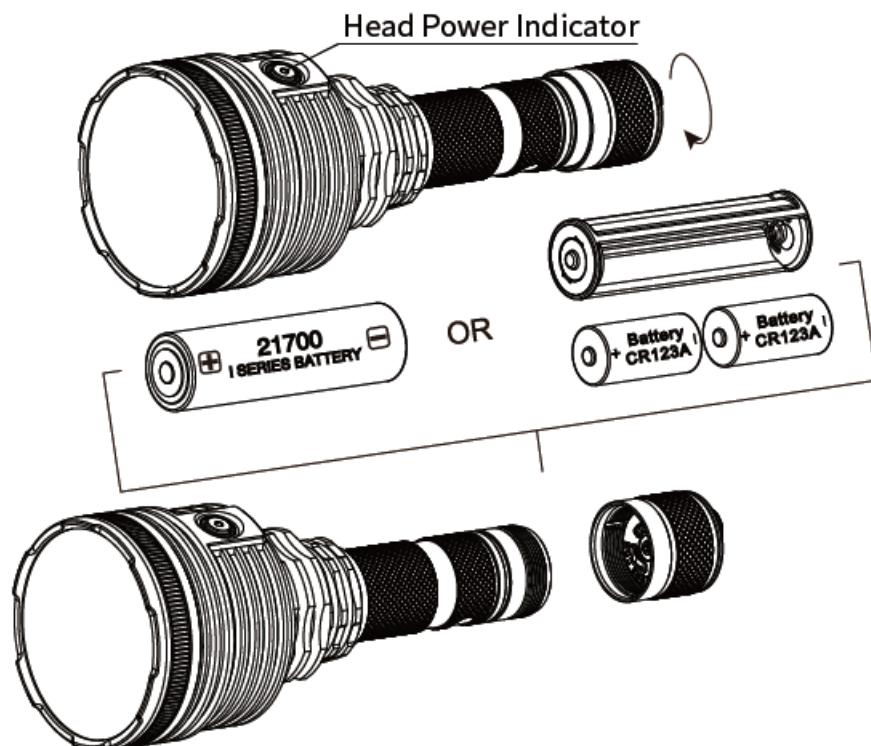
## Technical Data

FL1 STANDARD	TURBO	HIGH	MID	LOW	ULTRALOW	BEACON	SOS
	2,000 Lumens	1,000 Lumens	385 Lumens	85 Lumens	6 Lumens	2,000 Lumens	2,000 Lumens
	*30min	1h 30min	4h	18h	100h	—	—
	1,000m	722m	447m	209m	40m	—	—
	250,000cd	130,500cd	50,000cd	11,000cd	400cd	—	—
	1m (Impact Resistance)						
	IP68, 2m (Waterproof and Submersible)						

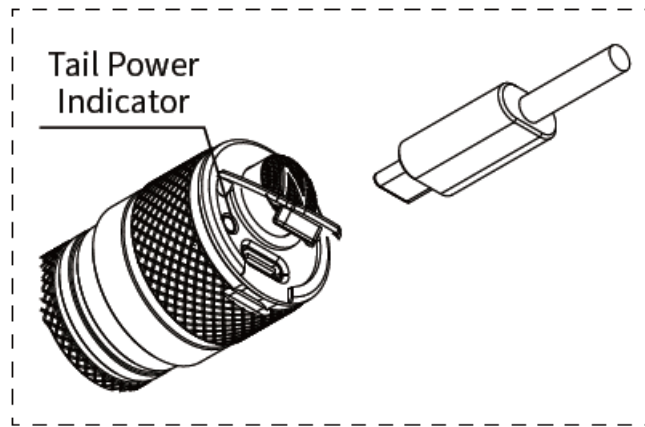
Note: The stated data is measured in accordance with the international flashlight testing standards ANSI/PLATO FL1-2019, using 1 x 21700 Li-ion battery (5,000mAh) under laboratory conditions. The data may vary in real world use due to different battery usage or environmental conditions.

- The runtime of TURBO is tested without the temperature regulation.
- TURBO Availability: The TURBO level is only accessible when using a 21700 i Series battery with an output over 15A. It is inaccessible when using CR123/RCR123 batteries.

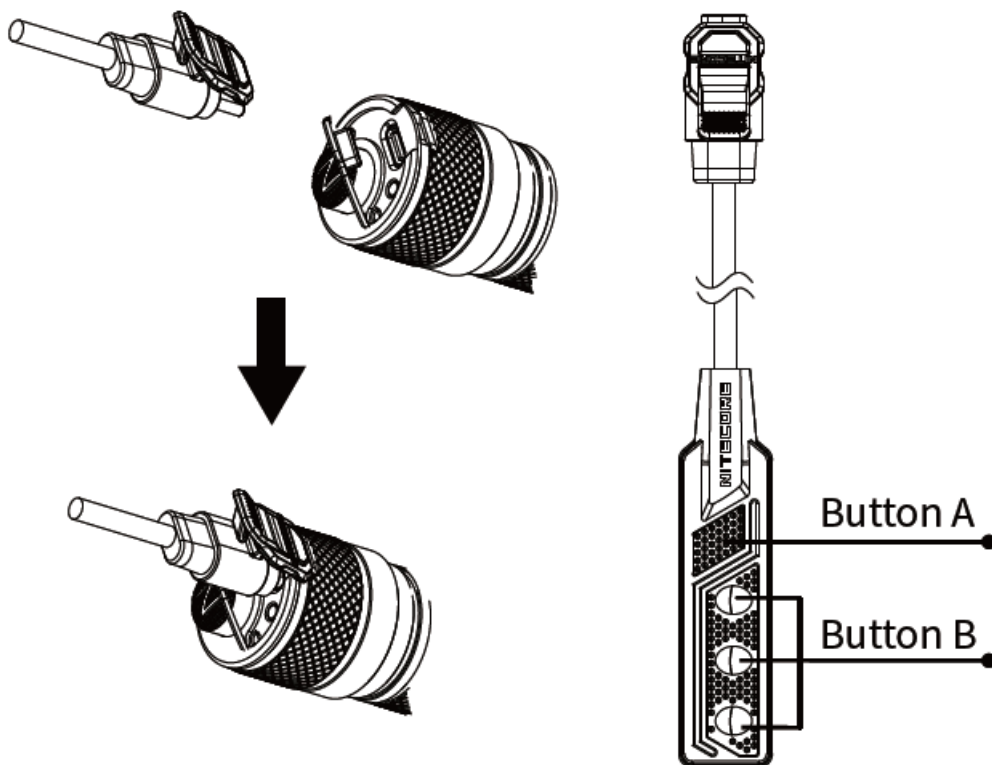
## Battery Installation



## Charging Function



## Remote Switch



## Operating Instructions

### Battery Installation

Insert the battery(s) as illustrated and screw to tighten the tail cap.

**Note:** After the battery insertion, the head power indicator will flash to indicate the battery voltage. Please refer to the "Power Indication" section of this manual for more details.

### Warnings:

1. Ensure the battery(s) is/are inserted with the positive end towards the head. The product will not work if the battery(s) is/are incorrectly inserted.
2. **CAUTION!** Possible dangerous radiation! Don't look into the light! May be dangerous for your eyes.

3. When the power level is low, please stop using the product and replace or recharge the battery to prevent damage to the battery.
4. When the product is kept in a backpack or left unused for prolonged time, please remove all batteries to prevent accidental activation or battery leakage.
5. DO NOT submerge the light into any liquid when it is hot.  
Doing so may cause irreparable damage to the light due to the difference of air pressure inside and outside of the tube.

## **Charging Function**

The P30i is equipped with an intelligent charging system. As illustrated, after inserting the battery and tightening the tail cap, use the USB cable to connect an external power supply (e.g. a USB adapter or other USB charging devices) to the charging port to begin the charging process.

- During the charging process, the tail power indicator will flash slowly to inform the user.
- When the battery is fully charged, the P30i will cease the charging process and the tail power indicator will become steadily turned on to inform the user.
- When the charging status is abnormal (e.g. the battery is broken/inserted incorrectly), the P30i will cease the charging process and the tail power indicator will flash quickly to inform the user.
- The charging time for a 21700 Li-ion battery (5,000mAh) is approx. 4 hours. (Charged via the 5V/2A adapter)

## **Tactical Momentary Illumination**

Half press and hold the Tail Switch to turn on the light momentarily. Release to turn it off.

### **On / Off**

**On:** When the light is off, press the Tail Switch until a click sound is heard to turn it on.

**Off:** When the light is on, press the Tail Switch until a click sound is heard to turn it off.

## **Brightness Levels**

When the light is on, short press the Mode Button to cycle through the following brightness levels: ULTRALOW – LOW – MID – HIGH – TURBO.

(This access has memory function. When reactivated, the flashlight will automatically access the previous memorized brightness level.)

## **Direct Access to TURBO**

- When the light is off, press and hold the Mode Button to access TURBO momentarily. Release to turn it off.
- When the light is on, long press the Mode Button to access TURBO directly. Short press the Mode Button to return to the previous brightness level, or it will automatically return to the previous brightness level if there is no operation in 30 seconds.

## **Special Modes (BEACON / SOS)**

- When the light is off, triple press the Mode Button to access the BEACON Mode.

- When the BEACON Mode is on, long press the Mode Button each time to switch between SOS and BEACON.
- When either special mode is on, short press the Mode Button to turn off the light.

## Remote Switch

As Illustrated, plug in the cable part of the RSW2i to the USB port and clip to fasten the cable on the tail cap.

## Tactical Momentary Illumination

When the light is off, press and hold Button B to turn it on momentarily. Release to turn it off.

## On / Off

**On:** When the light is off, short press Button A to turn it on.

**Off:** When the light is on, short press Button A to turn it off.

## Brightness Levels

When the light is on, short press Button B to cycle through the brightness levels.

## Direct Access to TURBO

When the light is on, long press Button B to access TURBO directly. Short press Button B to return to the previous brightness level, or it will automatically return to the previous brightness level if there is no operation in 30 seconds.

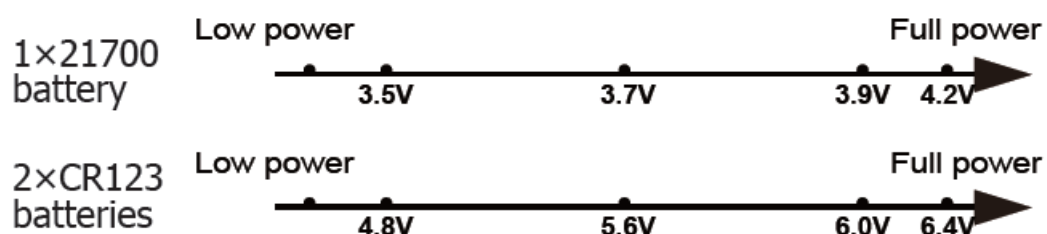
## STROBE READY™

- When the light is off, press and hold Button A to access the STROBE Mode. Release to return it off.
- When the light is on, long press Button A to access the STROBE Mode. Short press Button B to return to the previous status, or short press Button A to turn off the light.

## Power Indication

- When the battery is inserted, the head power indicator will flash to show the battery voltage ( $\pm 0.1V$ ).
- When it is disconnected from the power source during the charging process, the tail power indicator will flash to show the battery voltage ( $\pm 0.1V$ ).

For example, when the battery voltage is at 4.2V, the power indicator will flash 4 times followed by a 1.5-second pause and 2 more flashes. Different voltages represent the corresponding remaining battery power levels:



- When the light is on, the head power indicator will indicate the remaining battery power.

1. Being steadily turned on indicates that the power is above 50%.
2. Flashing slowly indicates that the power is below 50%.
3. Flashing quickly indicates that the power is below 10%.

### Note:

1. When using two CR123/RCR123 in series, the indicator will show the average voltage between the two batteries.
2. The batteries should be replaced or recharged when the output appears to be dim or the flashlight becomes unresponsive due to low power.

### ATR (Advanced Temperature Regulation)

The integrated ATR technology regulates the output of the P30i according to the working condition and ambient environment to maintain the optimal performance.

### Maintenance

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

### Documents / Resources



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### References

- [NITECORE](#)
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