



NITECORE P20i UV i-Generation 21700 Dual Output Flashlight User Manual

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Operating Instructions

Battery Installation

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

Note: After the battery insertion, the 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 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 P20i UV 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 power indicator will flash slowly to inform the user
- When the battery is fully charged, the P20i UV will cease the charging process and the power indicator will become steadily turned on to inform the user
- When the light is on, connecting to a power source will automatically turn the light The light will return to its previous status when it is disconnected from the power source.

- The charging time for a 21700 Li-ion battery (4,000mAh) is 3 hours 30 minutes. (Charged via the 5V/2A adapter)

Tactical Momentary Illumination

Half press and hold the Power Button to turn on the light momentarily. Release to turn it off.

On / Off

- **On:** When the light is off, press the Power Button until a click sound is heard to turn it on
- **Off:** When the light is on, press the Power Button until a click sound is heard to turn it off.

User Mode Selection

The P20i UV provides 2 user modes for different users and situations.

- **Daily Mode (Default Setting):** In this user mode, the P20i UV will memorize and re- access any of the 3 brightness levels, UV or STROBE Mode when reactivated, unless it has been switched to the other user mode.
- **Tactical Mode:** In this user mode, the P20i UV will only memorize and re-access the HIGH Level or STROBE Mode when reactivated, unless it has been switched to the other user mode.

To select a desired user mode:

1. Ensure the tail cap is fully tightened.
2. Keep holding the Mode Button (STROBE READY™) on the tail cap and the flashlight will access the STROBE Mode while simultaneously loosening the tail cap.
3. Once the tail cap has been loosened, the primary white LED will indicate a user mode selected by flashing once for Daily Mode and flashing twice for Tactical Mode.
4. Release the Mode Button (STROBE READY™) and tighten the tail cap.

Brightness Levels

- **Daily Mode:** When the light is on, short press the Mode Button (STROBE READY™) to cycle through the following brightness levels: UV – LOW – MID – HIGH
- **Tactical Mode:** When the light is on, short press the Mode Button (STROBE READY™) to cycle through the following brightness levels: HIGH – MID – LOW –UV

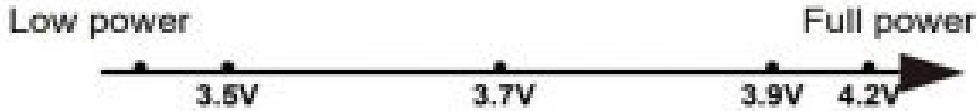
STROBE READY™

- When the light is off in either user mode, press and hold the Mode Button (STROBE READY™) to access the STROBE Release to turn it off.
- When the light is on in either user mode, long press the Mode Button (STROBE READY™) to access the STROBE Mode. Short press the Mode Button (STROBE READY™) to return to the previous status, or click the Power Button to turn off the light

Power Indication

- When the battery is inserted, or the flashlight is disconnected from the power source during the charging process, the 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:

1×21700 battery



2×CR123 batteries



- When the light is on, the power indicator will indicate the remaining battery
 - Being steadily turned on indicates that the power is above 50%.
 - Flashing slowly indicates that the power is below 50%.
 - Flashing quickly indicates that the power is below 10%.

Note:

- When using two CR123/RCR123 in series, the indicator will show the average voltage between the two batteries.
- 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 P20i UV 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.

Features

- The white light utilizes a Luminus SST-40-W LED with a max output of 1,800 lumens
- The UV light utilizes 4 x UV LEDs (320mW, wavelength 365nm)
- An optical system combined with crystal coating and "Precision Digital Optics Technology" (PDOT)
- Highly efficient constant current circuit provides a stable output for up to 50 hours
- Dual tail switches enable intuitive operations for tactical applications

- STROBE READY™ Technology to enable a quick access to STROBE Mode (Patent ZL201320545349.4)
- STROBE Mode uses randomly changing frequencies for stronger dizzying effects
- Tactical Mode and Daily Mode available
- Intelligent Li-ion battery charging circuit with a USB-C port
- NITECORE 21700 Li-ion battery included (NL2140i 4,000mAh)
- A power indicator beside the charging port indicates the remaining battery power (Patent ZL201220057767.4)
- The power indicator can display the battery voltage ($\pm 0.1V$)
- Strike bezel uses high strength silicon nitride ceramics to enable excellent glass breaking performance
- Incorporated Advanced Temperature Regulation (ATR) module (Patent ZL201510534543.6)
- 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 2 meters

Specifications

- **Length:** 150.5mm (5.93")
- **Head Diameter:** 31.8mm (1.25")
- **Tube Diameter:** 25.4mm (1")
- **Tail Diameter:** 28.5mm (1.12")
- **Weight:** 124g (4.37oz)

Accessories

NITECORE 21700 Rechargeable Li-ion Battery (NL2140i 4,000mAh), Tactical Holster NTH20, Clip, Lanyard, Spare O-ring, CR123 Battery Magazine, USB-C Charging Cable

Battery Options







The P20i UV is only compatible with NITECORE 21700 i Series batteries with an output over 8A and CR123/RCR123 batteries.

Note:

1. DO NOT attempt to use the P20i UV to charge CR123/RCR123
2. The P20i UV is NOT compatible with conventional 21700/18650 batteries







Technical Data

Using a 4,000mAh 21700 Li-ion Battery

FL1 STANDARD	HIGH	MID	LOW	UV	STROBE
	1,800 Lumens	250 Lumens	35 Lumens	320mW	1,800 Lumens
	1h 45min	8h 30min	38h	30h	—
	337m	115m	45m	—	—
	28,500cd	3,450cd	530cd	—	—
	2m (Impact Resistance)				
	IP68, 2m (Waterproof and Submersible)				

Note: The stated data is measured in accordance with the international flashlight testing standard ANSI/PLATO FL 1-2019, using 1 x 21700 Li-ion battery (4,000mAh) under laboratory conditions. The data may vary in real world use due to different battery usage or environmental conditions.

Using a 5,000mAh 21700 Li-ion Battery:

FL1 STANDARD	HIGH	MID	LOW	UV	STROBE
	1,800 Lumens	250 Lumens	35 Lumens	320mW	1,800 Lumens
	2h 30min	12h	50h	40h	—
	337m	115m	45m	—	—
	28,500cd	3,450cd	530cd	—	—
	2m (Impact Resistance)				
	IP68, 2m (Waterproof and Submersible)				

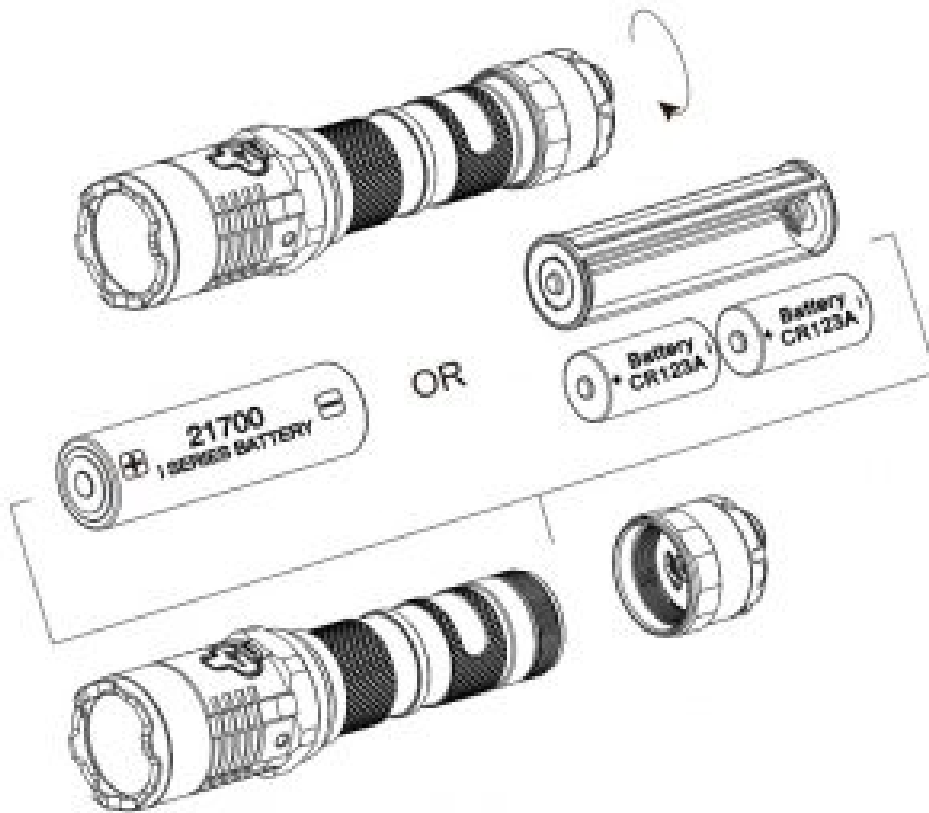
Note: The stated data is measured in accordance with the international flashlight testing standard ANSI/PLATO FL 1-2019, using 1 x 21700 Li-ion battery (5,000mAh) under laboratory conditions. The data may vary in real world use due to different battery usage or environmental conditions.

Using 2 x CR123 Batteries:

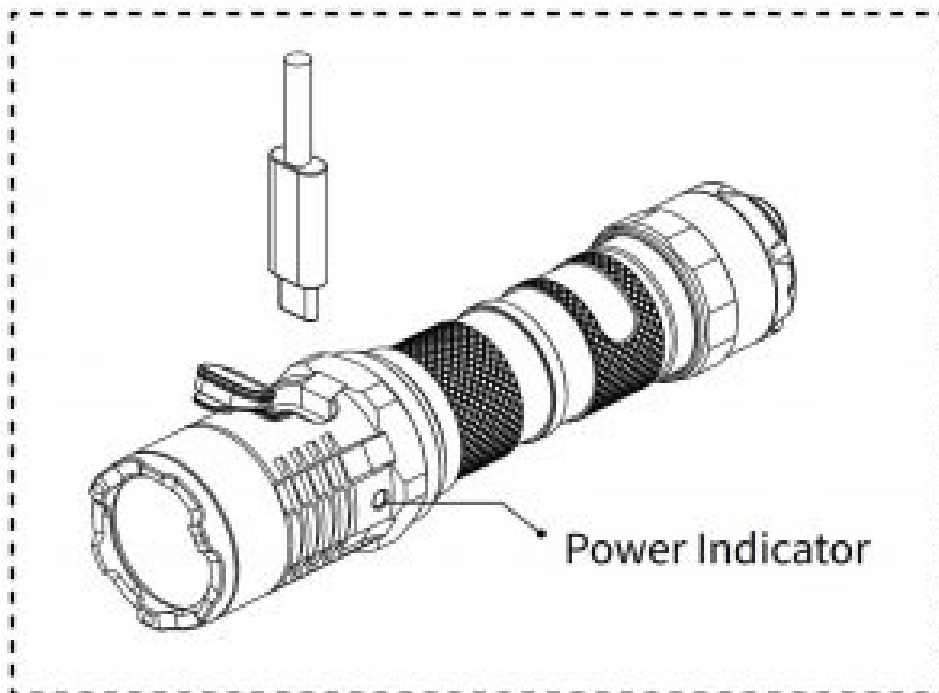
FL1 STANDARD	HIGH	MID	LOW	UV	STROBE
	1,100 Lumens	250 Lumens	35 Lumens	320mW	1,100 Lumens
	1h	3h 15min	18h	18h	—
	263m	115m	45m	—	—
	17,370cd	3,450cd	530cd	—	—
	2m (Impact Resistance)				
	IP68, 2m (Waterproof and Submersible)				

Note: The stated data is measured in accordance with the international flashlight testing standard ANSI/PLATO FL 1-2019, using 2 x CR123 lithium batteries (1,700mAh) under laboratory conditions. The data may vary in real world use due to different battery usage or environmental conditions.

Battery Installation



Charging Function



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
2. the product(s) is/are damaged due to improper (e.g. reversed polarity installation)
3. the product(s) is/are damaged due to battery

For the latest information on NITECORE® products and services, please contact a local NITECORE® distributor or send an email to 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, Sysmax Innovations Co., Ltd. reserves the rights to interpret and amend the content of this document at any time without prior notice.

Documents / Resources

	NITECORE P20i UV i-Generation 21700 Dual Output Flashlight [pdf] User Manual P20i UV, i-Generation 21700 Dual Output Flashlight
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References

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