NITECORE P20iX USB-C Rechargeable Flashlight User Manual

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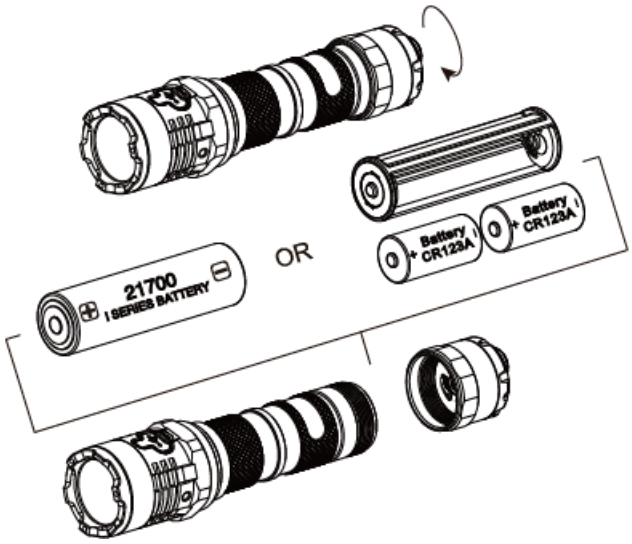
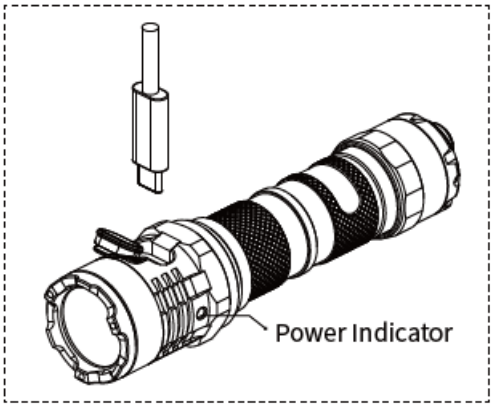
NITECORE®

NITECORE P20iX USB-C Rechargeable Flashlight

Battery Installation



Charging Function



Features

- Utilizes 4 x CREE XP-L2 V6 LEDs with a max output of 4,000 lumens
- An optical system combined with crystal coating and “Precision Digital Optics Technology” (PDOT)
- Max peak beam intensity of 12,200cd and max throw of 221 meters
- Highly efficient constant current circuit provides a stable output for up to 350 hours
- Dual tail switches enable intuitive operations for tactical applications
- STROBE READY™ Technology to enable a quick access to STROBE Mode (Patent No. 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 (NL2150HPi 5,000mAh)
- A power indicator beside the charging port indicates the remaining battery power
- The power indicator can display the battery voltage (±0.1V)
- Strike bezel uses high strength silicon nitride ceramics to enable excellent glass breaking performance
- Incorporated Advanced Temperature Regulation (ATR) module (Patent No. 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**: 141.5mm (5.57″)
- **Head Diameter**: 31.8mm (1.25″)
- **Tube Diameter**: 25.4mm (1″)
- **Tail Diameter**: 28.5mm (1.12″)
- **Weight**: 116g (4.09oz)

Accessories

NITECORE 21700 Rechargeable Li-ion Battery (NL2150HPi 5,000mAh), Tactical Holster NTH20, Clip, Lanyard, Spare O-ring, CR123 Battery Magazine, USB-C Charging Cable

Battery Options

The P20iX 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 P20iX to charge CR123/RCR123 batteries.
2. The P20iX is NOT compatible with conventional 21700/18650 batteries.
3. The TURBO / HIGHER Level is inaccessible when using CR123/RCR123 batteries

Technical Data

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

FL1 STANDARD	TURBO	HIGHER	HIGH	MID	LOW	ULTRALOW	STROBE
	4,000 Lumens	1,700 Lumens	850 Lumens	300 Lumens	50 Lumens	2 Lumens	4,000 Lumens
	*30min	2h	2h30min	7h15min	38h	350h	—
	221m	145m	103m	60m	25m	5m	—
	12,200cd	5,250cd	2,670cd	920cd	150cd	5cd	—
	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. The runtime of TURBO is tested without the temperature regulation.

Using 2 x CR123 Batteries:

FL1 STANDARD	HIGH	MID	LOW	ULTRALOW	STROBE
	1,060 Lumens	300 Lumens	50 Lumens	2 Lumens	1,060 Lumens
	1h	3h 30min	14h	120h	—
	116m	60m	25m	5m	—
	3,360cd	920cd	150cd	5cd	—
	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

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 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 P20iX 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 P20iX 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 off. 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 (5,000mAh) is approx. 3 hours 45 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 P20iX provides 2 user modes for different users and situations.

- **Daily Mode (Default Setting)**: In this user mode, there are 6 brightness levels [TURBO, HIGHER, HIGH (850 Lumens), MID, LOW and ULTRALOW] and STROBE Mode available. The P20iX will memorize and re-access 5 of the brightness levels (TURBO excluded) or STROBE Mode when reactivated, unless it has been switched to the other user mode.
- **Tactical Mode**: In this user mode, there are only 4 brightness levels [TURBO, HIGH (850 Lumens), MID and LOW] and STROBE Mode available. The P20iX will only memorize and re-access the TURBO Level or STROBE Mode when reactivated, unless it has been switched to the other user mode.

Note: When using CR123/RCR123 batteries, there are 4 brightness levels [HIGH (1,060 Lumens), MID, LOW and ULTRALOW] and STROBE Mode available in Daily Mode. There are 3 brightness levels [HIGH (1,060 Lumens), MID and LOW] and STROBE Mode available in Tactical 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 TURBO Level or STROBE Mode while simultaneously loosening the tail cap.
3. Once the tail cap has been loosened, the primary white LEDs 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: ULTRALOW – LOW – MID – HIGH – HIGHER.
- **Tactical Mode**: When the light is on, short press the Mode Button (STROBE READY™) to cycle through the following brightness levels: TURBO – HIGH – MID – LOW

Momentary Access to TURBO

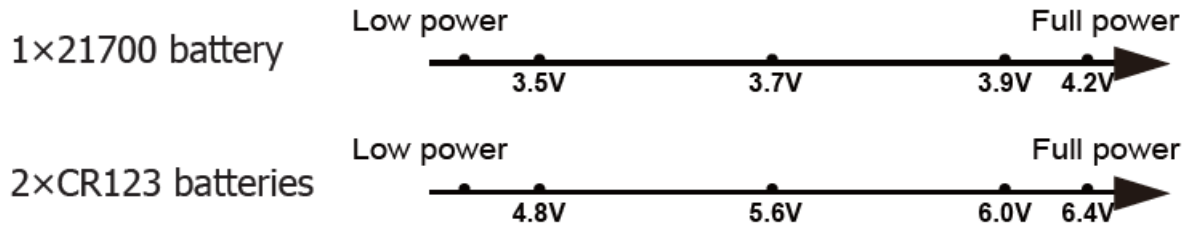
- **Daily Mode**: When the light is on, press and hold the Mode Button (STROBE READY™) to access the TURBO Level (4,000 Lumens). Release to return to the previous status.
- **Note**: When using CR123/RCR123 batteries, it will access the HIGH Level (1,060 Lumens) instead

STROBE READY™

- When the light is off in either user mode, press and hold the Mode Button (STROBE READY™) to access the STROBE Mode. Release to turn it off.
- When the light is on in either user mode, triple 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. (This access will memorize the STROBE Mode.)
- **Tactical Mode**: When the light is on, 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. (This access will not memorize the STROBE Mode.)

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 (±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 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 P20iX 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

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Documents / Resources

	NITECORE P20iX USB-C Rechargeable Flashlight [pdf] User Manual P20iX USB-C Rechargeable Flashlight, P20iX, USB-C Rechargeable Flashlight, Rechargeable Flashlight, Flashlight

References

- NITECORE