NITECORE®
The All-Round Flashlight Expert

TM28 User Manual

Features

- Rechargeable searchlight
- Utilises 4 CREE XHP35 HI LEDs, max output up to 6000 lumens
- Powered by 4 18650 batteries, compatible with li-ion/IMR batteries
- Max runtime up to 1000 hours
- Max throw up to 655 metres
- Onboard OLED display provides real-time data for brightness, battery power, voltage
- Reflectors with PDOT incorporated
- Intelligent charging circuit
- Temperature regulation to prevent overheating
- 5 brightness levels and 3 special functions available
- Dual-stage multi-functional single switch provides access to all functions (Patent No. ZL201120062948.1)
- Built-in power indicator to report battery level (Patent No. ZL201220057767.4)
- Onboard tripod receptacle
- Mineral optic lenses with anti-reflective coating
- Retaining rings protect core components from damages
- Made from aerospace grade aluminium alloy
- HAIII hard anodising
- Waterproof in accordance with IPX8 (2 metres submersible)
- Tail stand

Dimensions

Length: 5.59”
Head: 2.23”x 2.23” (Height/Width)
Tail diameter: 1.97”
Weight: 14.6oz (battery excluded)

Accessories

Holster, adaptor, lanyard, O-ring, charging port cover, flat top battery connector

Bettery options

	TYPE	Nominal voltage	Compatible
Li-ion 18650	18650	3.7V	Yes (Recommended)
IMR18650	18650	3.6V	Yes (Recommended)
NBP68 High Discharge	Batt Pack	3.7V	Yes (Recommended)

⚠ **WARNING**: Must not be used with CR123/RCR123 batteries.
*Nitecore 18650 are recommended to ensure complete compatibility.

Output & Runtime

FL1 STANDARD	TURBO	HIGH	MID	LOW	Ultralow
4x IMR 18650	6000 LUMENS	2300 LUMENS	1000 LUMENS	320 LUMENS	2 LUMENS
	*45min	*2h	4h30min	11h15min	1000h
4xLi-ion 18650	4500 LUMENS	2300 LUMENS	1000 LUMENS	320 LUMENS	2 LUMENS
	*1h	*2h15min	5h	14h30min	1000h
	655m (Beam Distance)				
	107,200cd (Peak Beam Intensity)				
	1m (Impact Resistant)				
	IPX8, 2m (Waterproof AND Submersible)				

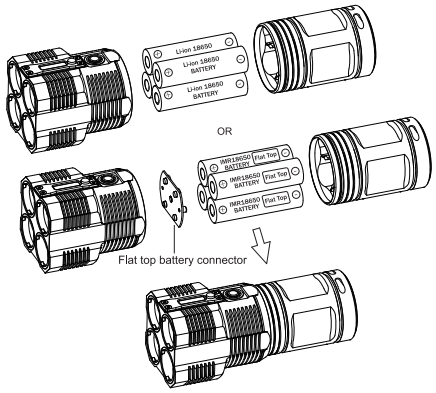
NOTE: The stated data has been measured in accordance with the international flashlight testing standards ANSI/NEMA FL1, using 4x IMR18650 batteries (3.6V, 3100mAh) or 4 x Li-ion 18650 batteries (3.7V, 3400mAh) under laboratory conditions. The data may vary in real-world use due to different battery use or environmental conditions.
* Runtimes for turbo and high are calculated based on theoretical arithmetic.
* To use the 6000 lumens output, all 18650 batteries must be rechargeable and have at least 8A discharge current each or use with NITECORE NBP68HD battery pack.

Battery installation

Insert four 18650 Li-ion or four 18650 IMR batteries with the positive terminal pointing towards the correct direction, as illustrated in the diagram below. When using flat top 18650 batteries, ensure the flat top battery connector is placed on the positive terminal of the batteries.

⚠ **WARNING**:

1. Insert batteries with polarity pointing towards the right direction as labelled on inside of the battery compartment, incorrectly inserted batteries will render the product inoperative and poses risk of short-circuiting.
2. When using flat top IMR batteries, ensure the flat top battery connector is placed on top of the positive terminal.
3. It is not recommended to use the product with less than 4 x 18650 batteries, this may cause the product to function improperly and shorten battery life span.
4. Do not mix batteries of different brands/types and different capacity.



Battery selection

Upon each battery installation, a battery selection prompt comes up on the OLED display, select the correct battery type by pressing the display switch and press the power switch to confirm:
1. Li-ion. Regular rechargeable li-ion batteries allowing for max output of 4500 lumens.
2. IMR. High discharge li-ion batteries allowing for max output of 6000 lumens.
3. Batt Pack. NBP68HD, optional battery pack allowing for max output of 6000 lumens.
If no action is taken for 10 seconds after battery installation, the OLED display will enter standby mode.

Caution: Correct battery type must be selected upon battery installation, setting battery type to IMR while using regular 18650 li-ion batteries may render the product inoperative when switching to turbo (when OLED shows 6000 lumens).

Solution: Reinstall batteries and select the correct battery type when prompted. To guarantee the best user experience, it is recommended to use NITECORE IMR18650 batteries.

Operating instructions

Note: This product uses a two-stage power switch, access to its various functions depends on the extent the switch is pressed.

ON/OFF

With the light turned off, pressing the power switch partway or all the way down will turn the light on, press the switch all the way down again to turn the light off.

Modes

The TM28 comes with 2 modes:

-Daily mode: This mode has 4 brightness levels, press the switch partway down to turn the light on in daily mode, pressing the switch partway down repeatedly cycles the brightness through Ultralow-Low-Mid-High, this mode has memory feature.

-Search mode: This mode has 2 brightness levels, press the power switch all the way down to turn the light on in search mode, pressing the switch partway down cycles brightness through High-Turbo. Alternatively, hold the switch all the way down to turn the light on at “Turbo”, releasing the switch turns the light off.

Special functions

With the light turned on, press the switch twice in quick succession to enter strobe, press the switch partway down repeatedly to cycle through Strobe-SOS-Beacon, press the switch all the way down to turn the light off.

OLED display

This product has an onboard OLED display that provides real-time operating data:
1. When the light is turned on at level 1-5, a series of data sets will be shown in the order of brightness level-battery voltage-battery level-remaining runtime-operating temperature-standby, with a 1.8 second delay before the next data set comes up on display.
2. When using any of the special functions, the name of the function will be displayed.

Lockout

With the light turned on, hold down the switch for 1 second to enter lockout mode, this is designed to prevent accidental activation. To unlock, hold down the switch for 1 second again. Batteries are expected to last for 12 months in lockout mode.

Thanks for purchasing NITECORE!

NITECORE®

The All-Round Flashlight Expert

Note: When the product is expected to be left unattended for extensive period, it is advised to loosen the tail cap.

Power tips

When the product is turned on, the built-in power indicator under the switch will blink to indicate remaining battery:

1. When batteries are full, the indicator will stay lit.
2. When batteries reach 50%, the indicator will blink once every 2 seconds.

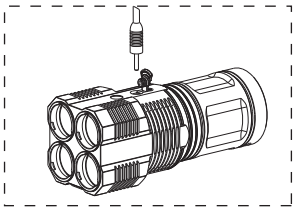
3 When batteries reach 10%, the indicator will blink rapidly.

Note: When the product is turned off, press the display switch and battery voltage information will be shown for 10 seconds.

Recharge

To initiate the charging process, connect the charging port to a power outlet with the adaptor provided:

1. **Charging in progress:** "charging…" will come up on the OLED display, the power indicator will blink once every half a second.
2. **Charging anomaly (damaged batteries/no batteries presented):** "Error" will come up on the OLED display, the power indicator will blink rapidly. This usually indicates no battery, incompatible or damaged batteries, or flat-top batteries are installed without the battery connector.
3. **Charging complete:** "Chg.Finished" will come up on the OLED display, the power indicator will stay lit.
4. **Charging duration:** Fully charging four 18650 batteries takes approximately 7 hours.



Note: When done charging, push the charging port cover back into the charging port to prevent dust and water ingression.

Temperature regulation

Heat generated by the LEDs can be substantial, prolonged operation at "Turbo" level will significantly increase operating temperature. Therefore, it is not recommended to use "Turbo" for long period of time. The TM28 has temperature regulation, when operating temperature reaches 60° Celsius (max bearable temperature by human skin), the TM28 automatically lowers its output to prevent temperature from increasing.

Note: Do not submerge the product in water or any liquid when it has generated sufficient heat, doing so will cause pressure inequalities and significantly increase risk of water damages.

Cautions

- ◆ Avoid direct eye exposure, it may impair vision permanently.
- ◆ Do not disassemble, modify this product, doing so may damage the product and void the warranty.
- ◆ Use quality protected batteries only. If the product will be left unattended for extensive period, remove batteries to avoid leakage and explosion caused by inferior batteries.
- ◆ This product incorporates voltage sensitive protection feature, when voltage drops below a certain threshold, output will gradually decrease to the lowest level; When voltage drops below 3V, the product will shut down to protect batteries.
- ◆ Replace the O-ring immediately when it is found damaged.
- ◆ Every 6 months, threads should be wiped with a clean cloth followed by a thin coating of silicon-based lubricant.

Warranty Details

Our authorized dealers and distributors are responsible for warranty service. Should any problem covered under warranty occurs, customers can contact their dealers or distributors in regards to their warranty claims, as long as the product was purchased from an authorized dealer or distributor. NITECORE's Warranty is provided only for products purchased from an authorized source. This applies to all NITECORE products.

Any DOA / defective product can be exchanged for a replacement through a local distributor/dealer within the 15 days of purchase. After 15 days, all defective / malfunctioning NITECORE® products can be repaired free of charge for a period of 60 months (5 years) from the date of purchase. Beyond 60 months (5 years), a limited warranty applies, covering the cost of labor and maintenance, but not the cost of accessories or replacement parts.

The warranty is nullified if the product(s) is/are broken down, reconstructed and/or modified by unauthorized parties, or damaged by batteries leakage.
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 occurs between this manual and information specified on www.nitecore.com. Sysmax Industry Co., Ltd. reserves the rights to interpret and amend the content of this document at any time without prior notice.

SYSMAX Ind.
SYSMAX Industry Co., Ltd.
TEL: +86-20-83862000
FAX: +86-20-83882723
E-mail: info@nitecore.com
Web: www.nitecore.com
Address: Rm1401-03, Glorious Tower, 850 East Dongfeng Road, Guangzhou, China 510600

Please find us on facebook: Nitecore Flashlight

CE

20161122

Thanks for purchasing NITECORE!