

## Features

- Unibody die-cast, lightweight and rugged
- Dual-source headlamp with CREE XP-G2 LED and two F5 red LEDs
- Powered by two AA batteries for a maximum output up to 300 Lumens
- High efficiency circuit board provides up to 160 hours runtime
- Integrated "Precision Digital Optics Technology" provides extreme reflector performance
- Five brightness levels and three concealed special modes to select from
- Red LEDs provide constant/flashing illumination
- Displays battery voltage with red light (accurate to 0.1V)
- Features intelligent memory effect
- Innovative single button two-stage switch is remarkably user-friendly (Chinese Patent: ZL201120062948.1)
- Tilting mechanism provides 90° vertical movement to eliminate illumination blind zones
- A custom catoptrics-based system produces an extremely wide 100° beam angle
- Featuring Advanced Temperature Regulation (ATR) technology to dynamically adjust output performance according to its internal temperature
- Comfortable chafe-free and breathable nylon headband
- Toughened ultra-clear mineral glass with anti-reflective coating
- Constructed from aero-grade aluminum alloy
- Waterproof in accordance with IP67
- Impact resistant to 1.5 meters

## Dimensions

Size: 3.54" x 2.18" x 1.98" (90mm x 55.4mm x 50.4mm)  
 Head diameter: 0.94" (24mm)  
 Weight: 2.17oz (61.4g) (without battery)

## Accessories

Spare O-ring

## Battery Options

	TYPE	Nominal voltage	Compatible
Primary AA battery	AA	1.5V	Y (Recommended)
Rechargeable AA battery	AA	1.2V	Y (Recommended)
Primary AA Lithium battery	L91	1.5V	Y

## Output & Runtime

FL1 STANDARD	TURBO	HIGH	MID	LOW	ULTRALOW
	300 LUMENS	160 LUMENS	90 LUMENS	30 LUMENS	1 LUMEN
	1h45min	2h30min	5h45min	17h	160h
	110m (Beam Distance)				
	3050cd (Peak Beam Intensity)				
	1.5m (Impact Resistant)				
	IP67 (Dust & Water Resistant)				

### NOTICE

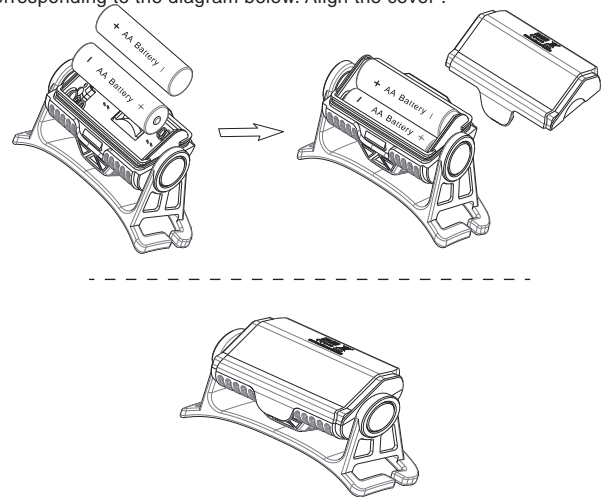
The above data has been measured in accordance with the international flashlight testing standards ANSI/NEMA FL1 using 2 x 1.2V 2400mAh AA batteries under laboratory conditions. The data may vary slightly during real-world use due to battery type, individual usage habits and environmental factors.

## Operating Instructions

HA20 utilizes a two-stage switch to enable various operations based on finger pressure.

## Battery Installation

Insert two AA batteries with the positive (+) and negative (-) ends corresponding to the diagram below. Align the cover.



**Note:** Each time batteries are inserted, the red LEDs will blink to indicate battery voltage. Please refer to the "Power Tips" section in this manual for details.

**Caution:** DO NOT direct the beam towards human or animal eyes when using HA20.

## On/Off Operations

To turn HA20 on: Press the switch all the way down until a "Click" is heard;

To turn HA20 off: Press the switch all the way down again until a "Click" is heard.

## Brightness Levels

With HA20 turned on, press the switch partway down to cycle through brightness levels: ultralow, low, medium, high-turbo. HA20 has memory effect for brightness levels. Each time it is turned on, HA20 will enter the brightness level last used.

## Special Modes(Police Warning/Location Beacon/SOS)

With HA20 turned on, press the switch all the way down for over one second to enter police warning mode. Press the switch partway down to cycle through location beacon-SOS-police warning modes. To exit, press the switch all the way down to turn HA20 off.

## Constant/Flashing Red Illumination

With the light turned off, press the switch partway down for over one second to enter constant red illumination mode (7 hours and 25 minutes runtime at 16 Lumens);

In red illumination mode, press the switch partway down to switch between constant and flashlight red illumination. To exit, press the switch all the way down to turn HA20 off.

## Power Tips

Upon battery installation, the red LEDs will blink to indicate battery voltage (accurate to 0.1V). For example, when battery voltage is 2.4V, red LEDs blink twice, followed by a 1.5 second pause, and blink four

times.

With HA20 turned off, pressing the switch partway down will have red LEDs indicate battery power levels:

1. Three times for battery levels over 50%;
2. Twice for battery levels below 50%;
3. Once for battery levels close to depletion (below 10%).

## Advanced Temperature Regulation (ATR)

Advanced temperature regulation (ATR) technology allows HA20 to dynamically adjust output performance based on its internal temperature. This prevents damage from overheating and prolongs its working life.

## Changing Batteries

Batteries should be replaced when any of the following occurs: The output appears to be dim or unresponsive.

## Maintenance

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

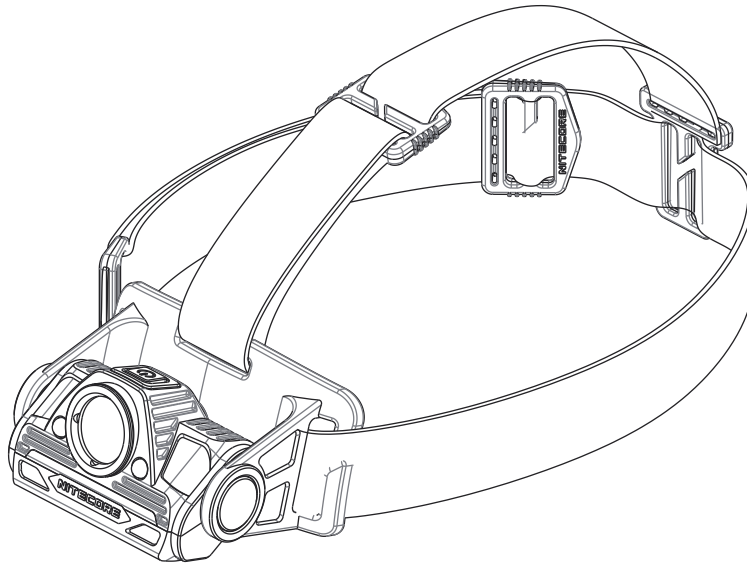
## Warranty Service

All NITECORE® products are warranted for quality. Any defective / malfunctioning NITECORE® product 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 in all of the following situations:

1. 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.
- 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)

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**SYSMAX ind.**

SYSMAX Industry Co., Ltd.

TEL: +86-20-83862000

FAX: +86-20-83882723

E-mail: [info@nitecore.com](mailto:info@nitecore.com)

Web: [www.nitecore.com](http://www.nitecore.com)

Address: Rm1401-03, Glorious Tower, 850 East Dongfeng Road, Guangzhou, China 510600



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