**NITECORE® The All-Round Flashlight Expert**

**EC20 User Manual**

**Features**
- Utilizes a CREE XM-L2 U2 LED
- Maximum output of up to 960 lumens
- Integrated "Precision Digital Optics Technology" provides extreme reflector performance
- Boasts a peak beam intensity of 12,450 cd and a throw distance of up to 222 meters
- Innovative single button offers access to seven brightness levels and modes
- High efficiency constant current circuit board provides max runtime of 920 hours
- Integrated power indicator light displays remaining battery power (Patent NO. ZL201200578774.6)
- Power indicator’s secondary function displays battery voltage (accurate to 0.1V)
- Instant access to ultra-low output
- Reverse polarity protection prevents damage from incorrectly inserted batteries
- Constructed from zero grade aluminum alloy with HAII military grade hard-anodized finish
- Waterproof in accordance to IPX-8 (two meters submersible)
- Impact resistant to 1 meter
- Tailstand capability

**Dimensions**
- Length: 128mm (5")
- Head diameter: 25.4mm (1")
- Tube diameter: 25.4mm (1")
- Weight: 76g (2.68oz) (without battery)

**Battery Options**

<table>
<thead>
<tr>
<th>Type</th>
<th>Nominal Voltage</th>
<th>Compatible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Lithium battery</td>
<td>3V</td>
<td>Y (Recommended)</td>
</tr>
<tr>
<td>18650 Rechargeable Li-Ion battery</td>
<td>3.7V</td>
<td>Y (Recommended)</td>
</tr>
<tr>
<td>Rechargeable Li-Ion battery</td>
<td>3.7V</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Output & Runtime**

<table>
<thead>
<tr>
<th>Voltage</th>
<th>960 Lumens</th>
<th>210 Lumens</th>
<th>50 Lumens</th>
<th>1 Lumen</th>
<th>Low power</th>
<th>Full power</th>
</tr>
</thead>
<tbody>
<tr>
<td>1h 15min</td>
<td>6h 28h</td>
<td>520h</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>222m</td>
<td>67m 33m</td>
<td>6m</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>12450cd</td>
<td>1900cd</td>
<td>280cd</td>
<td>10cd</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1m (Impact Resistant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

IPX8, 2m (Waterproof and Submersible)

**Brightness Levels**
With the EC20 switched on, press and hold the button for more than 0.5 second to cycle through brightness levels of ultra-low, low, medium and turbo. To select a desired brightness level, simply release the button when that level is being displayed. This mode provides an intelligent memory function to ensure direct access to the previously used brightness level when the EC20 is reactivated.

**Note:** When in turbo mode, the EC20 will reduce output luminance automatically after 5 minutes of use to prevent overheating and extend battery longevity.

**Instant Ultra Low**
With the EC20 switched off, press and hold the button for more than one second to access an ultra-low output mode of 1 lumen.

**Special Strobe / SOS mode and Location Beacon**
Press the button twice in quick succession in any state to enter Strobe mode. When in Strobe mode, press the switch all the way down and hold for more than one second to cycle through Strobe, SOS and Location Beacon modes. To exit any of these special modes, simply press the button again. The EC20 does not have a memory function for special modes.

**Power Tips**
1. When the light is on, the power indicator will blink once every two seconds when power levels reach 50%.
2. When the light is on, the power indicator will blink quickly when power levels are low.
3. Each time batteries are inserted, the power indicator light will blink in varying patterns to indicate battery voltage (accurate to ±0.1V).

**Replacing Batteries**
Batteries should be replaced when any of the following occurs: The power indicators blink rapidly, output appears to dim or the flashlight becomes unresponsive.

**Maintenance**
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 occur, 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® reserves the right to refuse products purchased from unauthorized sources. This applies to all NITECORE products.

Any ODA / 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) were 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.

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Thanks for purchasing NITECORE!