

ACEBEAM EC20-Black-LUXEON HL4X 6500K

ACEBEAM EC20 Multi-Light Source EDC Flashlight User Manual

Model: EC20-Black-LUXEON HL4X 6500K

Brand: ACEBEAM

1. INTRODUCTION

The ACEBEAM EC20 is a versatile and powerful Everyday Carry (EDC) flashlight designed for a wide range of applications, from daily tasks to outdoor adventures. Featuring a high-performance LUXEON HL4X LED, it delivers exceptional brightness and beam distance. Its multi-light source design includes both primary white light and auxiliary colored lights, offering enhanced functionality. The EC20 is built for durability, ease of use, and portability, making it an ideal companion for camping, hiking, home security, and emergency situations.



Figure 1: ACEBEAM EC20 Multi-Light Source EDC Flashlight

2. WHAT'S IN THE BOX

Please check the contents of your package to ensure all items are present:

- ACEBEAM EC20 Multi-light Source EDC Flashlight (Battery Included) x 1
- User Manual x 1
- Lanyard x 1
- O-rings x 2
- USB Cable x 1

3. SETUP

3.1 Battery Installation

The ACEBEAM EC20 comes with a pre-installed rechargeable Lithium-Ion battery. Before first use, ensure the battery is properly seated and fully charged.

3.2 Charging the Battery

To charge the EC20 flashlight:

1. Locate the USB-C charging port on the flashlight.
2. Connect the provided USB cable to the flashlight's USB-C port.
3. Connect the other end of the USB cable to a compatible USB power source (e.g., wall adapter, computer USB port).
4. The power indicator light will show the charging status. A red light typically indicates charging, while a green light indicates a full charge. Charging takes approximately 2.5 hours for a full charge.



Figure 2: Charging the EC20 Flashlight via USB-C

4. OPERATING INSTRUCTIONS

The EC20 features an all-in-one stainless steel side switch for easy operation.

4.1 Power On/Off

- **To Turn On:** Press and hold the side switch for 0.5 seconds.
- **To Turn Off:** Press and hold the side switch for 0.5 seconds.

4.2 Main Light Modes (White Light)

The EC20 offers 3 main modes with 9 brightness levels for the white light output:

- **Mode 1 (Low to High):** From OFF, press and hold the switch to turn on. Single click to cycle through Low → Med1 → Med2 → High → Low.
- **Mode 2 (High to Low):** From OFF, double click to turn on. Single click to cycle through High → Med2 → Med1 → Low → High.
- **Mode 3 (Stepless Dimming):** From OFF, triple click to turn on. Press and hold the switch to adjust brightness steplessly. Release to set brightness.

4.3 Auxiliary Light Modes (Colored Light)

The EC20 features versatile auxiliary light modes:

- **Multi-color Automatic Cycle Mode:** From OFF, quadruple click to activate. The light will cycle through red, green, blue, and multi-color automatically.
- **RGB Color Light:** While in multi-color automatic cycle mode, single click to pause on the current color. Single click again to cycle through Red → Green → Blue.
- **Signal Light:** From OFF, five clicks to activate.
- **Strobe:** From OFF, six clicks to activate.
- **SOS:** From OFF, seven clicks to activate.



Figure 3: Auxiliary Light Modes (Red, Green, Blue, Multi-color)

Video 1: Official ACEBEAM EC20 Multi-Light Source EDC Flashlight Overview. This video demonstrates the various light modes and features of the EC20 flashlight.

5. FEATURES

5.1 High Performance Illumination

Equipped with a LUXEON HL4X LED, the EC20 delivers a maximum output of 2,800 lumens and a beam distance of up to 310 meters, providing powerful illumination for various scenarios.

Triple LEDs bring Ultimate Performance

significantly outperform their peers in luminous efficiency and beam distance.

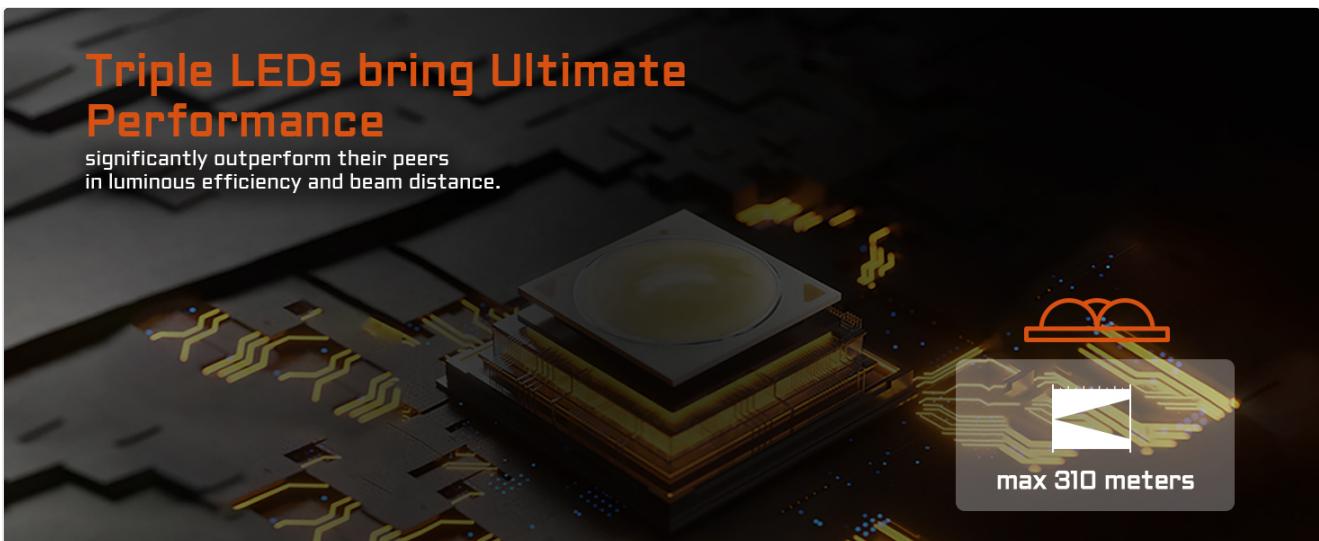


Figure 4: EC20 demonstrating its brightness and beam throw

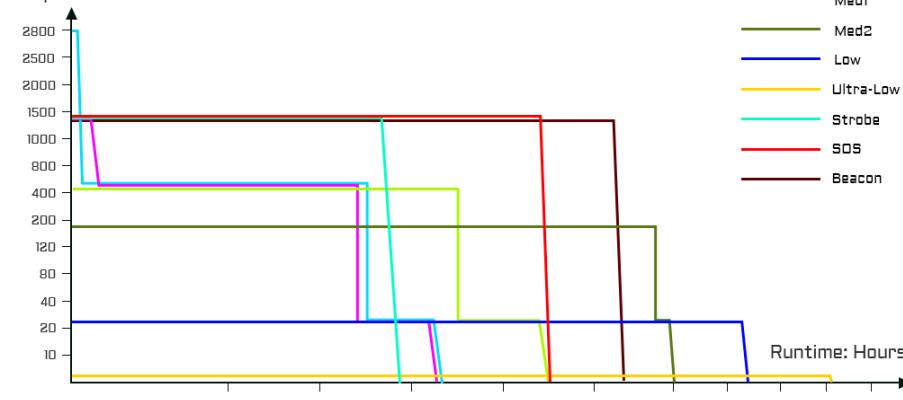
5.2 Magnetic Tail Stand

The EC20 features a magnetic tail cap, allowing it to be securely attached to any iron surface. This provides convenient, hands-free lighting, perfect for working on vehicles or in workshops.

Runtime

HL4X 6500K LEDs

Output: Lumens



Turbo	2800-650-25 lumens
High	1400-650-25 lumens
Med1	540-25 lumens
Med2	180-25 lumens
Low	25 lumens
Ultra-Low	1 lumen
Strobe	1400 lumens
SOS	1400 lumens
Beacon	1400 lumens

Figure 5: Magnetic tail stand in use, attaching to a metal surface

5.3 Durable and Resilient Design

Constructed from aero-grade aluminum with a hard-anodized finish, the EC20 is built to withstand harsh conditions. It is IPX8 water-resistant, meaning it can be submerged up to 2 meters, and boasts a 1.5-meter impact resistance.



Figure 6: EC20 demonstrating IP68 water resistance



Figure 7: EC20 demonstrating 1.5m impact resistance

5.4 Compact and Lightweight Design

Measuring 4.31 inches in length and weighing only 4.09 ounces (including battery), the EC20 is extremely portable and fits comfortably in a pocket, purse, or backpack.

Technical Parameter

FLI STANDARD	LUXEON HL4X 6500K								
	Turbo	High	Med1	Med2	Low	Ultra-Low	Strobe	SOS	Beacon
⚡ ~25lumens	2800~650 ~25lumens	1400~650 ~25lumens	540~25 lumens	180~25 lumens	25 lumens	1 lumen	1400 lumens	1400 lumens	1400 lumens
⌚	35s+ 2h30min+1h	5min+ 2h20min+1h	3.5h+ 1h	9h+ 1h	24h	36h	2h 50min	4h 30min	7h
➡	310m	120m	85m	60m	/	/	120m	120m	120m
⌚	24025cd	3600cd	1806cd	900cd	/	/	3600cd	3600cd	3600cd
	IP68								1.5 meters

Notice: The above-mentioned parameters (tested with Rechargeable battery) have been measured in accordance with the international flashlight testing standard ANSI/ PLATO FLI, and are approximate and may vary from flashlights, batteries, and environments. If you have any questions, please contact customer service.

Figure 8: EC20 demonstrating its compact size and portability

6. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your ACEBEAM EC20 flashlight.

- Cleaning:** Regularly clean the threads and O-rings with a clean cloth. Apply a thin layer of silicone grease to the O-rings periodically to maintain water resistance.
- Battery Care:** If the flashlight will not be used for an extended period, it is recommended to remove the battery to prevent potential leakage. Store the battery in a cool, dry place.
- Lens Cleaning:** Use a soft, clean cloth to wipe the lens. Avoid using abrasive materials or harsh chemicals that could scratch or damage the lens coating.
- Avoid Disassembly:** Do not attempt to disassemble the flashlight head or other sealed components, as this may damage the light and void the warranty.

7. TROUBLESHOOTING

If you encounter issues with your EC20 flashlight, please refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Flashlight does not turn on	Battery low or depleted Battery not installed correctly Loose tail cap	Charge the battery fully Ensure battery is inserted with correct polarity Tighten the tail cap securely
Light output is dim or flickers	Low battery Dirty contacts Loose components	Recharge the battery Clean battery contacts and flashlight contacts with a cotton swab Ensure all parts are tightened
Cannot switch modes	Switch malfunction Low battery	Ensure battery is charged. If issue persists, contact customer support. Recharge the battery
Flashlight gets hot quickly	Operating on high brightness for extended periods	This is normal for high-lumen flashlights. Reduce brightness or allow to cool down. The flashlight has built-in thermal regulation.

8. SPECIFICATIONS

Detailed technical specifications for the ACEBEAM EC20 Multi-Light Source EDC Flashlight:

Feature	Description
Model	EC20-Black-LUXEON HL4X 6500K
Light Source	LUXEON HL4X LED
Color Temperature	6500 Kelvin (Cool White)
Max Output	2800 Lumens
Max Beam Distance	310 Meters
Power Source	Battery Powered (1 C battery included)
Battery Type	Lithium Ion (Rechargeable)
Max Runtime	36 hours (on Ultra-Low mode)
Material	Aero-grade Aluminum
Finish Type	Matte Black
Water Resistance	IPX8 (2 meters submersible)
Impact Resistance	1.5 meters

Feature	Description
Product Dimensions	0.94"D x 1"W x 4.31"H
Item Weight	5.9 ounces
Special Features	Multiple Light Sources, Stepless Dimming, Magnetic Base, Versatile Modes (Multi-color Light Automatic Cycle Mode, RGB Color Light, Signal Light, Strobe And SOS)

9. WARRANTY AND SUPPORT

ACEBEAM stands behind the quality of its products.

9.1 Warranty Information

The ACEBEAM EC20 flashlight comes with a **5-Year Warranty** from the date of purchase. This warranty covers manufacturing defects and issues arising from normal use. Please retain your proof of purchase for warranty claims.

9.2 Customer Support

For any questions, technical assistance, or warranty claims, please contact ACEBEAM customer support. You can typically find contact information on the official ACEBEAM website or through your retailer.