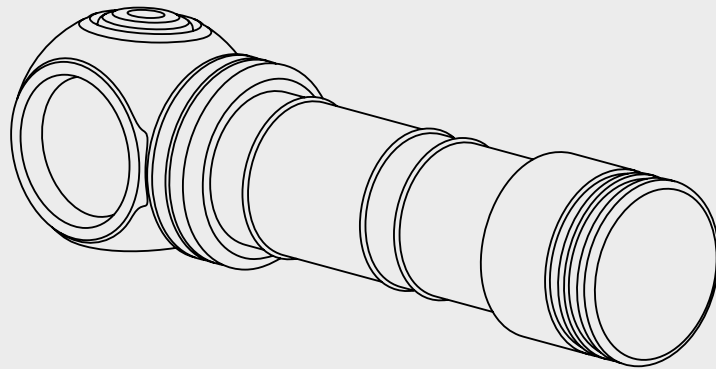


ARMYTEK

ELF C2

MULTI FLASHLIGHT



ENG USER MANUAL

Thank you for choosing the products of Armytek Optoelectronics Inc.
Please read this manual carefully before using the flashlight.

Specifications

Headlamp: simple one-hand operation, reliable headmount for running. Solid body without long wires, weak rubber connectors and unnecessary boxes. The flashlight is easily installed, removed and 180° rotatable in the mount. Quick-release rubber ring provides additional fixation

Every Day Carry light: compact design, convenient side button, special matt anti-abrasive finish without rough knurling. Strong built-in magnet and robust steel clip. Constant light without flickering

Bicycle light: made from aircraft-grade aluminium, optional durable quick-release mount

Lamp mode: works without batteries directly from a Powerbank or any USB adapter

- Convenient wide beam of the TIR-optics, protected from scratches by tempered glass with anti-reflective coating
- Innovative technology allows safe use of any 18650 Li-Ion batteries even without additional protection circuit board

- Active real-time temperature control to prevent overheating above 58 °C and warning indication of low battery level
- Total protection from water, dirt and dust – flashlight continues to work even at 10 meters depth
- Robust and water resistant Micro USB socket even without rubber cover

Set description

Flashlight, 18650 Li-Ion battery, Micro USB cable, clip, headmount, 2 spare O-rings, user manual.

The flashlight and accessories can inconsiderably differ from the pictures in the manual. The producer reserves the right to change the package at his own discretion without modifying this manual. Specifications are subject to change without notice.

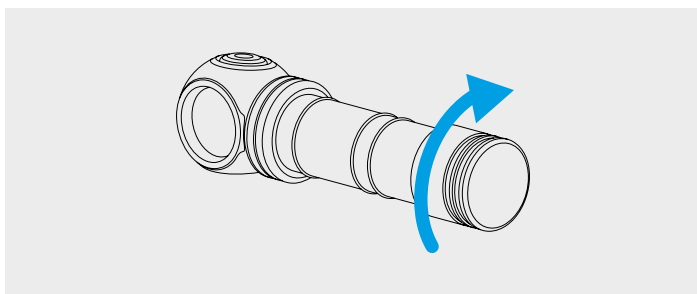
Model	Elf C2	
LED/Optics	Samsung LH351D / TIR	
Brightness stabilization type	Digital	
Light output	1100 lm	
Peak beam intensity	2770 cd	
Hotspot : Spill	70°:120°	
Beam distance	105 m	
Modes, light output (OTF lumens) and runtimes (measured with 18650 Li-Ion 3200 mAh battery until the light output drops to 10% of the initial value)	Turbo	1100 lm / 2 h 32 min (650 lm after 4 min)
	Main3	500 lm / 3 h 45 min
	Main2	220 lm / 10 h
	Main1	40 lm / 51 h
	Firefly2	2 lm / 26 d
	Firefly1	0.11 lm / 200 d
Power source	1x18650 Li-Ion	
Length/Body diameter/Head diameter	111.3 mm/20.4 mm/33 mm	
Weight without/with battery	65 g/115 g	
Submersion and Impact resistance	IP68, 10 m for 2 h. Height up to 10 m	

* Light output for flashlights with Warm light is about 7% less, beam distance is about 3% less.

** All the above specifications are test results based on ANSI/NEMA FL1-2009 Standard. The tests are performed using the battery included in the set. The data may vary due to environment, heat dissipation and other factors.

Initial Service

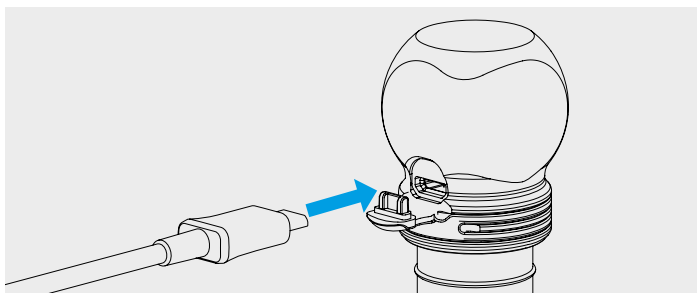
TO SET/REPLACE BATTERY



1. Unscrew the tailcap.
2. Place the battery with the positive contact (+) facing the head of the flashlight.
3. Adjust the tailcap and tighten it as far as it can go.

The flashlight is ready for operation.

FLASHLIGHT CHARGING



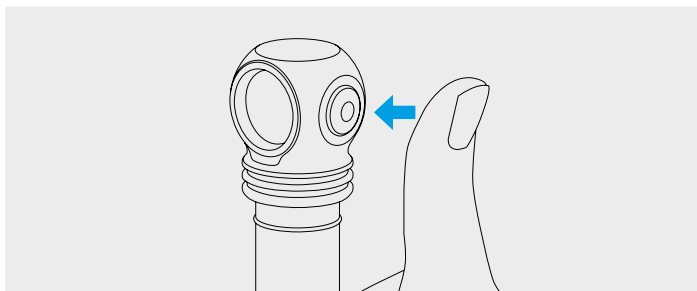
Turn off the flashlight and connect the cable. The color of the button displays the charging stage: red – the flashlight is charging, green – the flashlight is charged. If there is no indication, the battery is removed or installed in the wrong polarity. Approximate time for charging a fully discharged battery is 8 hours. We recommend using adapters with 1A and higher.

Operation

Before use: Tighten the tailcap.

In OFF state:

1 click: To turn on the last used mode.



Press and hold: To start cycling through Firefly modes. Release to select. Keeping button pressed will start cycling through Main modes.

In ON state:

1 click: To turn off the flashlight.

Press and hold: To start cycling through Main modes from any mode. In Firefly1 cycling through Main modes starts after cycling through Firefly modes. Release to select.

2 clicks: To turn on Turbo mode from any mode. The second double click brings back last used mode.

MOMENTARY ACCESS

Firefly. Press and hold the button in OFF state to start cycling through Firefly modes. Release to select. Keeping button pressed will start cycling through Main modes.

Main. Short click from OFF state activates Main mode if it was the last used mode.

Turbo. Double click in any mode in ON state. The second double click brings back last used mode.

Cycling through Main modes. In ON state press and hold the button in any mode. Main modes will start switching cyclically. In Firefly1 cycling through Main modes starts after cycling through Firefly modes. Release to select.

Lamp mode. The flashlight can work without battery in Firefly1, Firefly2 and Main1 modes. For this connect the Micro USB cable to the flashlight and power source, remove the battery.

1 click: To turn on/off the flashlight.

Press and hold: To start cycling through modes.

Press and hold: To turn on Firefly1 mode [Section 1].

Automemorizing. After switching off the last used mode is memorized for quick access at next switching on.

Lock-out function. Unscrew the tailcap to 1/4 for the protection from accidental switching on.

Warning indication shows the battery level and the temperature inside the flashlight.

Low battery level. When battery level is approximately <25%, the color LED will show the warning level – flashing in orange color once in 2 second. With further voltage reduction brightness will start to decrease in steps for safety of the battery and user. If brightness of the mode (except Firefly modes and Main1) is approximately <25% from nominal value, the main LED will flash 2 times. Critical battery level approximately <10% is indicated red once a second.

High temperature. When the temperature increases to the warning level, the color LED flashes orange 3 times once in 2 seconds. At critical level it flashes by red 3 times once in 1 second. Brightness starts to reduce to safe level.

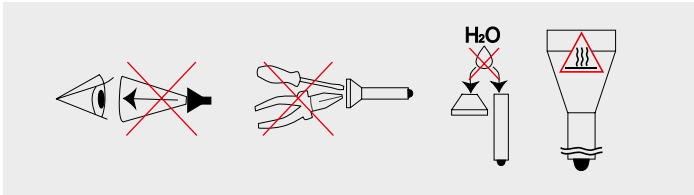
⚠ Warnings

For effective operation of the flashlight we recommend branded 18650 Li-Ion batteries without PCB (unprotected) no more than 70 mm long.

The flashlight can get hot in Turbo mode quickly and discharge the battery with high current. Don't leave it without your attention as very bright light might heat objects and cause fire.

1. Always follow the instructions from this manual and recommendations on battery usage.
2. Apply only the recommended power sources.
3. Do not reverse battery polarity.
4. Do not modify or recast the flashlight and its components as it will deprive you of the warranty.
5. Do not allow water or any other liquid to leak into the flashlight.
6. Do not aim a switched-on flashlight at people's or animals' eyes – it can cause temporary blindness.
7. Do not allow children to use the flashlight without your assistance.

The producer will not be liable for any harm done to the user if it was caused by improper use of the product.



Care and Storage

It is recommended to clean the threads and O-rings off dirt and old grease once or twice per year. Remember that reliable protection from water and dust cannot be provided by worn out sealing. The fouling as well as lack of lubricant cause fast wear-out of threads and sealing rings.

To clean the threads do the following:

1. Unscrew the tailcap and remove the sealing ring carefully with a toothpick (do not use sharp metal things as they can damage the ring).
2. Wipe the sealing ring thoroughly with a soft cloth (or tissue). Do not use solvents. If the sealing ring is worn out or damaged replace it by a new one.
3. Clean the metal threads with a brush using ethanol. Be careful not to allow the applied liquid to get inside the flashlight or tailcap as it can cause fails in functionality of the flashlight.

After cleaning lubricate the thread and the sealing ring with polyal-phaolefin-based silica grease, e.g. Nyogel 760G. The application of other types of grease is unacceptable. In case of active operation and exploitation in dusty environments, it is recommended to perform cleaning and lubricating of the parts as often as required.

WE DO NOT RECOMMEND to leave power sources inside the flashlight for a long storage period, as batteries (especially non-rechargeable) can leak for various reasons and damage the inner parts of the flashlight. If you want to keep your flashlight in a stand-by state with batteries in, previously install new and high-quality batteries, store the flashlight in acceptable for batteries operational temperature and revise the batteries' state at least once a month. If you have noticed any signs of defects, withdraw the batteries from the flashlight and dispose of them.

Warranty and Service

Armytek provides free warranty repairs for 10 years (excluding batteries, chargers, switches and connectors, which have 2-year warranty) from the date of purchase if there is a document confirming the purchase. The warranty does not extend to damage during:

1. Improper usage.
2. Attempts to modify or repair the flashlight by nonqualified specialists.
3. Long-term application in chlorinated and contaminated liquids or sea water.
4. Exposure to high temperatures and chemicals (including the liquids from defected batteries).
5. Usage of low-quality batteries.

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