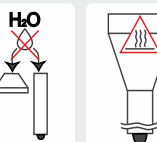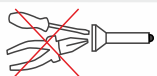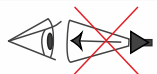## Warnings

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 use different power sources together, i.e. old ones with new ones, charged with discharged. Do not use different types of batteries combined as the element with less capacity can be damaged.
5. Do not modify or recast the flashlight and its components as it will deprive you of the warranty.
6. Do not allow water or any other liquid to leak into the flashlight.
7. Do not aim a switched-on flashlight at people's or animals' eyes – it can cause temporary blindness.
8. 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 polyalphaolefin-based silica grease, e.g. Nyogel 760G. The application of automotive and other improper grease can cause swelling and damage of the sealing rings.

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.

Service and Warranty

Armytek provides free warranty repair for 10 years (excluding batteries, chargers, switches and connectors which have 2 years warranty) from the date of purchase.

Warranty doesn't cover damage caused by:

1. Improper usage.
2. Attempts to modify or repair the flashlight by nonqualified specialists.
3. Longtime application in chlorinated or polluted water, or other liquids (other than water).
4. High temperatures and chemicals' exposure (including the exposure of liquid from defected batteries).
5. Usage of low-quality batteries.

Armytek Optoelectronics Inc.
Web: www.armytek.com Email: service@armytek.com
Address: 13-85 West Wilmot St, Richmond Hill, Ontario, L4B 1K7, Canada

Specifications are subject to change without notice.

Elf Micro-USB

THE MOST TECHNICALLY ADVANCED FLASHLIGHTS IN THE WORLD

—• USER MANUAL •—

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

Specifications

Armytek Optoelectronics Inc. is a Canadian manufacturer that produces powerful and reliable flashlights designed especially for your needs. The components made in the USA and Japan. **10 years no-hassle warranty**.

- Amazingly powerful multi-flashlight with up to 1050 LED lumens brightness powered by only one battery.
- Rechargeable flashlight with Micro-USB cable.
- TIR optics with light angles 70°:120° for wide light without a "tunnel vision" effect.
- Reliable headband made of soft elastic material for comfortable fixation of the lamp on the head.
- Easy operation and 6 convenient brightness modes.
- Due to a side switch button you can operate the multi-flashlight easily with one hand without shifting it aside.
- Magnet in the tailcap, removable clip and possibility of tail-stand for multipurpose use.
- Compact and light-weight but at the same time durable and multi-functional flashlight.
- Record runtimes – up to 200 days of operation on one battery.
- Removable clip for fixation on a belt and flat tailcap for vertical standing.
- Total protection from water, dirt and dust penetration – flashlight continues to work even at the depth of 10 meters. Solid body without long wires, weak rubber connectors and unnecessary boxes.
- Multicolor State Indication and ultra low current drain in OFF-state – more than 25 years.

Model		Elf C1 Micro-USB	Elf C2 Micro-USB
LED / Optics		Cree XP-L / TIR	
Brightness stabilization type		DIGITAL (CPU brightness control)	
Light output, LED / OTF lumens*		1050 / 900	
Peak beam intensity, candelas		2830	
Hotspot / spill		70° / 120°	
Beam distance*		106 meters	
Modes, light output (OTF lumens*) and runtimes (measured with 18350 Li-Ion 900 mAh / 18650 Li-Ion 3400mAh until the light output drops to 10% of the initial value)	Turbo	900 lm / 40min	900 lm / 2h
	Main3	340 lm / 1h	340 lm / 4h
	Main2	150 lm / 2.5h	150 lm / 10.5h
	Main1	30 lm / 15h	30 lm / 55h
	Firefly2	2.3 lm / 7d	2.3 lm / 25d
	Firefly1	0.4 lm / 54d	0.4 lm / 200d
Power source		1x18350 Li-Ion	1x18650 Li-Ion
Size and weight (without batteries)		Length 83mm, body diameter 24.5mm, head diameter 29mm, weight 62g	Length 112mm, body diameter 24.5mm, head diameter 29mm, weight 65g

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

! *Remember that old or low-quality disposal batteries can be damaged under heavy load and explode.*
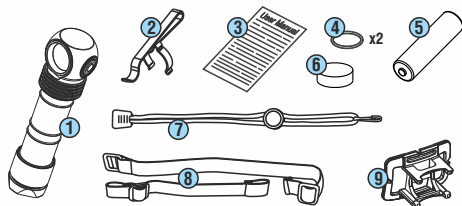
Items included in the package:

1 - Flashlight
2 - Clip
3 - User manual
4 - 2 spare O-rings
5 - 18650 Li-Ion battery (Elf C2 Micro-USB)
    18350 Li-Ion battery (Elf C1 Micro-USB)
6 - Magnet
7 - Lanyard

8 - Headband (2 straps for Elf C2 Micro-USB)
9 - Plastic holder

Elf Micro-USB

! ✓ *Your flashlight 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.*

Initial Service

1. **2.** **3.**
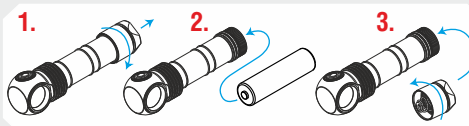
To set/replace batteries:
1. Unscrew the tailcap.
2. Place the batteries with the positive contact (+) facing the head of the flashlight.
3. Adjust the tailcap and tighten it as far as it can go.

**The flashlight is ready for operation.**

! *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 then use new and high-quality batteries and 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 batteries' defects then withdraw them from the flashlight and utilize. It is also recommended to replace discharged batteries with new ones before the storage as the chance of leakage is higher with discharged batteries.*

To use the headmount with the flashlight:

1. Pass the end of the band **B** through the clasp. (for Elf C2 Micro-USB)

B

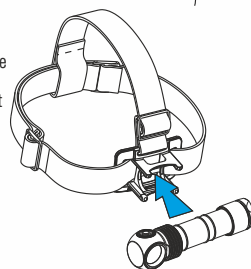**2.** Pass the band **A** through the eye of the band **B**. (for Elf C2 Micro-USB)

B
A
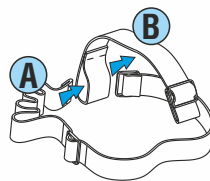
3. Put in the band **A** in the first clasp.

A

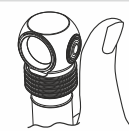**4.** Pass the end of the band **A** through the second clasp and fix it.

A

5. Put in the bands through the slots in the plastic holder and fix the flashlight. Adjust elastic bands to the size of your head.

Click x1 — **Main**

OFF ➔ **Main** (if last used)

Press & Hold — **Firefly**

OFF ➔ **Firefly1** ➔ **Firefly2**

Click x2 — **Turbo**

ON ➔ **Turbo**

Turbo ➔ **Last mode**

Press & Hold — **Cycling through Modes**

Main1 ➔ Main2
↗ ↙
Main3

Warning / **Critical** — **Low Battery Indication**

2 sec / 1 sec
< 25% / < 10%

Warning / **Critical** — **High Temperature Indication**

2 sec / 1 sec
WARM / HOT

OFF — **Flashlight charging**

In OFF state:
Click: To turn on the last used mode.
Press and hold: To go through 2 Firefly modes (release to select). Keeping button pressed will start cycling through the Main modes.

In ON state:
Click: To turn off the flashlight.
Press and hold: To start cycling through the Main modes.
Double click: To turn on the Turbo mode. The second double click brings back the last used mode.

For comfortable operation you have a convenient momentary access to all the following modes:

Main. Short click from OFF-state activates the Main mode (if it was the last mode used previously).

Firefly. Press and hold the button in OFF-state to turn on the desired Firefly mode and then release immediately. Keeping the button pressed will start cycling through the Main modes.

Turbo. The mode is activated by double click, when the flashlight is on. To return to the last mode make double-click again.

Cycling through the Main modes. In ON-state press and hold the button (in any mode): the 3 Main modes will start switching cyclically. Release the button to select the desired mode. In Turbo mode it starts cycling through the Main modes.

Automemorizing. After switching off the last used Mode is memorized for quick 1-click 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 it is < 25%, the color LED will show the warning level – flashing in orange color once in 2 second. With a further voltage reducing brightness will start to decrease in steps for safety of the battery and user. If brightness will be <25% from nominal value, the main LED will flash 2 times. Critical battery level <10% is red indicated once a second.

High temperature. When it increases to the warning level – the color LED flashes by orange 3 times once in 2 seconds. At critical level – it flashes by red 3 times once in 1 second, brightness starts to reduce. After cooling down the brightness increases to usual level.
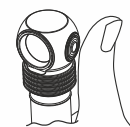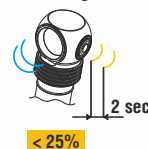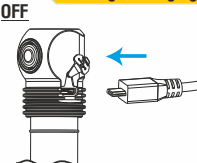
Flashlight charging. Turn off the flashlight and connect the cable. The color of the button displays the charging stage: red – the flashlight is charging, green – the flashlight is charged. If there is no indication, the battery is removed or installed in the wrong polarity. Approximate time for charging a fully discharged battery is 6-8 hours. We recommend using adapters with 1A and higher.

Lamp mode. The flashlight can work in lamp mode without battery, in Firefly1, Firefly2, Main1 and Main2 modes. To do this, connect the cable and remove the battery. In this mode, the selection of brightness modes is carried out by holding the button. Turn on and off – click. There is no color indication in the lamp mode.