

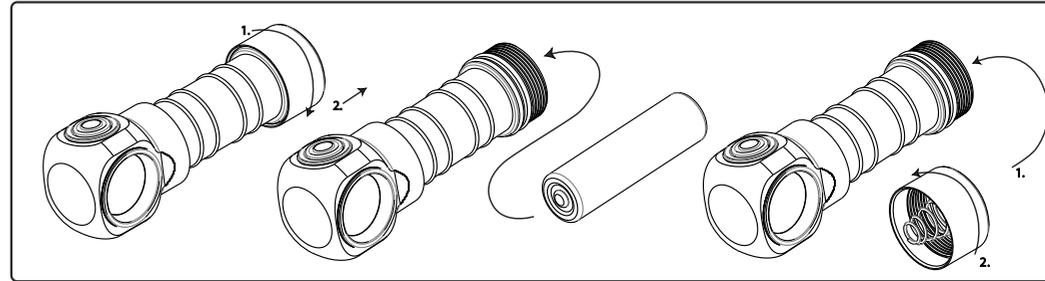
Thank you for choosing the products of Armytek Optoelectronics Inc., Canada.  
Please read this manual carefully before using the flashlight.

### Specifications

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

- Impressively powerful headlamp with 950 lumens brightness running on one AA / CR123A battery
- TIR-optics provides wide light for efficient area illumination
- Easy operation and 4 comfortable modes of light output
- Reliable headband made of soft and flexible materials for comfortable fixation of the flashlight on the head
- Small and light, but at the same time durable and multi-functional headlamp
- Prolonged runtimes — up to 15 hours with one power element
- Removable pocket clip and flat tailcap for vertical standing
- Complete correspondence to the highest standards of durability and reliability: the flashlight easily withstands fallings, impacts and vibration

### Initial Service



To set/replace batteries:

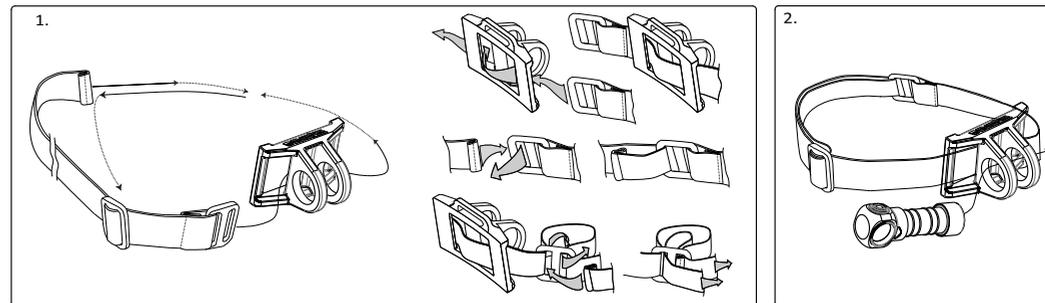
1. Unscrew the tailcap.
2. Place the batteries with the positive contact (+) facing the head of the flashlight.
3. Adjust the tailcap and tighten it as far as it can go.



**We recommend NOT 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, use new and 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 batteries' defects, withdraw them from the flashlight and take out of operation. 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 light with the headlamp:

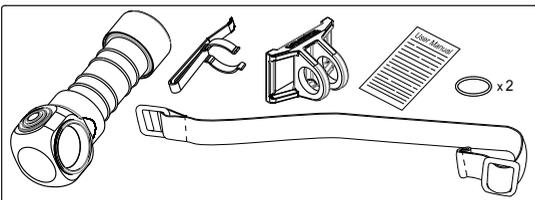
1. Pass the ends of the strap through the slots in the silicone holder, conjoin them in a ring (fig. 1).
2. Fix the headlamp in the headband (fig. 2) and adjust the elastic band to the size of your head.



Model	Tiara A1	Tiara A1 (Warm)	Tiara C1	Tiara C1 (Warm)
LED	Cree XM-L2	Cree XM-L2 (Warm)	Cree XM-L2	Cree XM-L2 (Warm)
Optics	TIR		TIR	
Brightness stabilization type	FULL stabilization (constant brightness)			
Light output, LED lumen	550 / 950	520 / 890	720 / 950	670 / 890
Hotspot/spill	70° / 120°		70° / 120°	
Beam distance	44 yards / 40 meters		44 yards / 40 meters	
Hotspot diameter at 16feet / 5meters	7.6 yards / 7meters		7.6 yards / 7meters	
Modes and runtimes (measured for Sanyo Eneloop AA 2000 mAh / Armytek CR123A 1500 mAh to the decrease to 10 % of initial brightness)	Firefly: 2 lm/200h Main1: 12 lm/25h Main2: 85 lm/3h Main3: 250 lm/1h 10min Max: 550 lm / 30min	Firefly: 2 lm/200h Main1: 11 lm/25h Main2: 80 lm/3h Main3: 230 lm/1h 10min Max: 520 lm / 30min	Firefly: 2 lm/300h Main1: 12 lm/40h Main2: 85 lm/5h Main3: 250 lm/2h Max: 720 lm / 35min	Firefly: 2 lm/300h Main1: 11 lm/40h Main2: 80 lm/5h Main3: 230 lm/2h Max: 670 lm / 35min
Recommended power source	1xAA / 1x14500 Li-Ion		1xCR123A / 1xR123 Li-Ion	
Size	Length 3.31" / 84mm, body diameter 0.9" / 23mm		Length 2.76" / 70mm, body diameter 0.9" / 23mm	
Weight (w/o batteries and headband)	1.80oz / 51g		1.62oz / 46g	

**We recommend to use Sanyo Eneloop AA rechargeable batteries instead of ordinary AA batteries to obtain higher brightness and longer runtimes.**

### Set description



Items included in the package:

- Headlamp
- Headband
- Silicone holder
- 2 spare O-rings
- Clip
- User manual



1. Depending on the model, your headlamp can inconsiderably differ from the pictures in the manual.
2. The producer reserves the right to change the package at his own discretion without modifying this manual

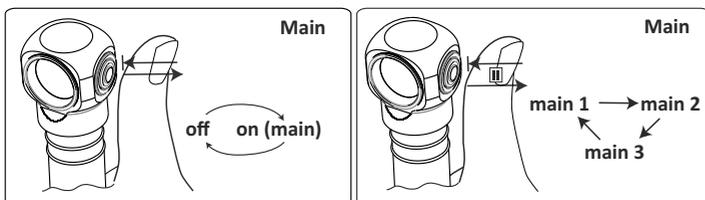
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Operation

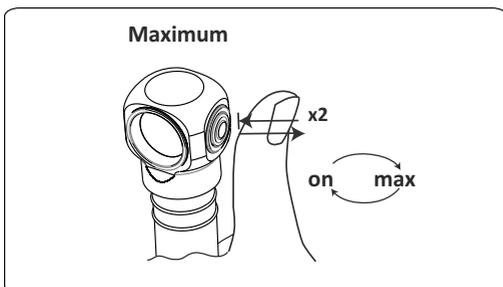
Warnings

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

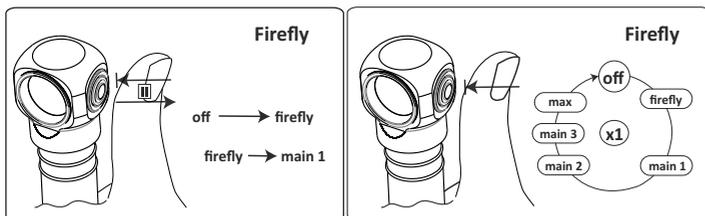
**Main.** Click the button in OFF-state. Press and hold — to switch main modes in a cycle, and release — to select one.



**Maximum.** Double click in Main mode for persistent activation (returns with another double click).



**Firefly.** Press and hold in OFF-state to activate. Release — for selection. Double click — returns to the Main1 mode. If press and hold after Firefly activation, the headlamp will go through the 3 main modes, then Maximum and turn off (as the protection from accidental switching in a bag or pocket will work out).



**Automemorizing.** After switching off the last used Mode is memorized for quick 1-click access at next switching on.

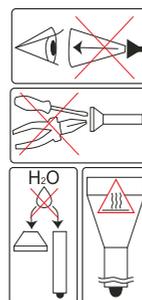
**Warning Indication.** In ON-state shows the battery voltage and the temperature inside the headlamp.

**The voltage.** When it drops the main LED flashes 3 times. At critical level light output decreases by 25%.

**The temperature.** When it increases to +70°C the main LED flashes 5 times. After +75°C the light output decreases to Main3 mode. At critical level >+80°C light output decreases to Firefly mode.

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

With ambient temperature is +25..+30°C the headlamp delivers light in Maximal mode for about 5-7 minutes and then the brightness steps down to the Main3 mode. 10-60 seconds afterwards the brightness increases to the Maximal level again. This stepping goes cyclically to maintain the user's safety and the headlamp's functionality. In the conditions of good air-cooling the headlamp produces constant light even in Maximal mode.



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 turned-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.

**!** Armytek Optoelectronics Inc. shall 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-ring off dirt and old grease. Remember that secure protection from water and dust cannot be provided by worn out sealing. And 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 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, even if it is more than twice a year.

Service and Warranty

**Armytek provides free warranty repair for 10 years from the 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.  
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Specifications are subject to change without notice.

The most technically advanced flashlights in the world.