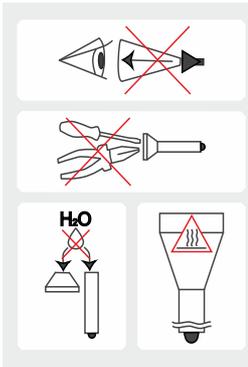


## Warnings



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 buy with the document confirming the purchase.

Guarantee does not extend to damage during:

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](http://www.armytek.com) Email: [service@armytek.com](mailto:service@armytek.com)  
Address: 13-85 West Wilmot St, Richmond Hill, Ontario, L4B 1K7, Canada

Specifications are subject to change without notice.

# Tiara Magnet USB

THE MOST TECHNICALLY ADVANCED

## 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.**

- Impressively powerful multi-flashlight with 1050 LED lumens brightness.
- Rechargeable flashlight with magnet USB charger.
- TIR-optics provides wide light for efficient area illumination.
- Easy operation and 6 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 flashlight.
- Prolonged runtimes — up to 60 days 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.
- Solid body without long wires, weak rubber connectors and unnecessary boxes.
- Total protection from water, dirt and dust penetration – flashlight continues to work even at the depth of 10 meters.

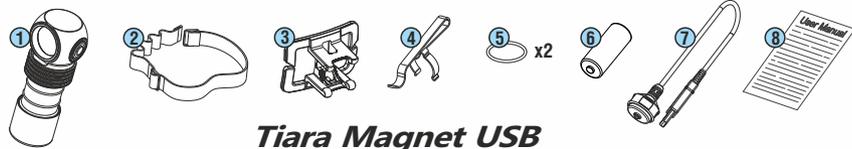
Model	Tiara C1 Magnet USB	
LED / Optics	Cree XP-L / TIR	
Brightness stabilization type	DIGITAL (CPU brightness control)	
Light output, LED / OTF lumens*	1050 / 900	
Peak beam intensity, candelas	2830	
Hotspot / spill	70° / 120°	
Beam distance*	106 meters	
Modes, light output (OTF lumens*) and runtimes (measured with 18350 Li-Ion 900 mAh until the light output drops to 10% of the initial value)	Turbo	900 lm / 30min
	Main3	220 lm / 2.4h
	Main2	90 lm / 6.5h
	Main1	34 lm / 15h
	Firefly2	2.5 lm / 8d
	Firefly1	0.4 lm / 60d
Power source	1x18350 Li-Ion	
Size and weight (without batteries)	Length 79mm, body diameter 24.5mm, head diameter 29mm, weight 60g	

\* 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.

## Set description



### Tiara Magnet USB

#### Items included in the package:

- |                    |                          |
|--------------------|--------------------------|
| 1 - Flashlight     | 5 - 2 spare O-rings      |
| 2 - Headband       | 6 - 18350 Li-Ion battery |
| 3 - Plastic holder | 7 - Magnet USB charger   |
| 4 - Clip           | 8 - User manual          |

- ! ✓ 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



#### 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.

#### How to turn on a magnet charger:

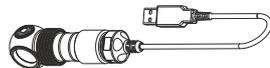
Unscrew the tailcap for 1/4 of a circle and turn on a magnet charger device to the tailcap.

Approximate time for charging a fully discharged battery is 6-8 hours. We recommend using adapters with 1A and higher.



#### Charger device battery indication:

1. Red color – the charging is going on.
2. Green color – the charging is finished.
3. Red color blinking – unscrew the tailcap for 1/4 for charging.



#### To use the headmount with the flashlight:

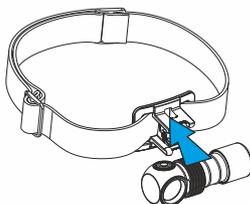
1. Put in the band in the first clasp.



2. Pass the end of the band through the second clasp and fix it.



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



## Operation

#### 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:

#### Press & Hold

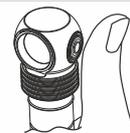


OFF → Firefly1 → Firefly2

#### Firefly

**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.

#### Click x1



OFF → Main (if last used)

#### Main

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

#### Click x2



ON → Turbo  
Turbo → Last mode

#### Turbo

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

#### Press & Hold



Main1 → Main2  
↙ ↘  
Main3

#### Cycling through Modes

**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.

#### Low Battery Indication

##### Warning



##### Critical



→ Firefly1  
→ OFF

**Low Battery Indication.** If the brightness is <25% from the nominal value, the LED flashes 2 times ONCE (after 30sec from switching on). If you are not sure if it flashed or not switch the flashlight off and on: in case the battery is low flashes will repeat. Light output decreases to Firefly mode at critical level.

**Active temperature control.** The flashlight can quickly heat up in Turbo mode. When the temperature become +60°C – the brightness decreases by small steps. After cooling-down (provided that battery voltage is sufficient) the brightness increases to the Turbo mode again. This stepping goes cyclically to maintain the user's safety and the flashlight's functionality. In conditions of good air-cooling the flashlight delivers light without stepping down even in Turbo mode. There are no preset timers for stepping, but real-time active temperature measurements.