

Armytek Wizard Pro v2 XM-L2 headlamp review

Small size, high light intensity, resistance to external conditions/damages and low battery consumption – is it possible to connect these factors in one product? The answer for this question can be found below.

During few last years I was looking for a proper headlamp which would allow me to explore the beauty of the underworld. Despite, in outdoor shops there are plenty of flashlights, it is difficult to find a good quality product at a reasonable price.

Fortunately, at the end of August I was given the opportunity of testing the Armytek company product – headlamp Wizard pro v2 XM-L2, during the two-week caving expedition in Đalovića Cave in Montenegro. It was the perfect occasion for testing this headlamp in extreme conditions and to verify it's indestructibility.



Figure 1. Armytek Wizard Pro v2 XM-L2

First sight

When I first took this flashlight in my hand, my attention was caught by very solidly and wisely design body, made completely of aluminium alloy. None of long, annoying wires, external battery containers nor weak rubber connectors impede the use of flashlight. Additionally, to prevent water entering, the body is sealed with an o-ring gasket and the switch is cast from rubber.

In addition to the lamp manufacturer has supplied a lot of accessories: headband, silicon holder, clip, lanyard, magnet and two spare o-rings. 2-pieces headband is very comfortable. Thanks to central band, the headlamp remains on the head even during rapid movements. As a result, main band can remain looser and not presses the head. Additional removable clip is very useful and allows to attach flashlights e.g. to the belt or bag.

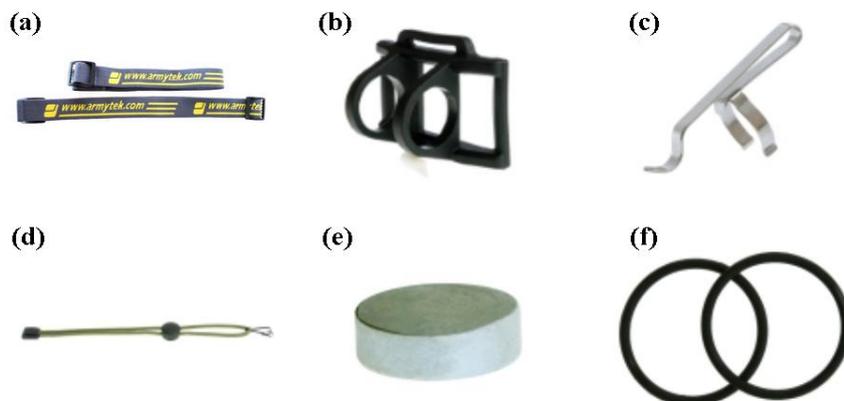


Figure 2. Additional accessories: headband (a), silicone holder (b), clip (c), lanyard (d), magnet (e), 2 spare O-rings (f)

Mounting of the headlamp is not typical. Usually elastic headband is attached to the head of the lamp. In this case, the head is independent. It can be practically used as a hand lamp. A silicone holder maintains the correct position of the lamp and secure a head of the lamp from falling out. Both the insertion and extraction of the lamp is quite difficult, but after a short struggle possible. This solution has one main advance in a lamp tilt - the adjustment is smooth in the range of $\pm 90^\circ$.

One of the most useful things constitutes removable magnet in the tailcap. In caves, during surveying (preparing plan of a cave) every iron item and magnet must be removed because of possible interference. However, during camping, magnet placed inside flashlight is very practical. Thanks to it such flashlight can be placed e.g. on a car and frequent problem - *where and how to place the flashlight?* – disappears.

As a power source different kind of batteries can be used: 1x18650 Li-Ion / 2x18350 Li-Ion / 2xR123 Li-Ion / 2xCR123A. Among them, first kind is very popular and easily accessible in Poland. However, a good idea would be to add an adapter to use most common AA or/and AAA batteries in a headlamp, which in an emergency can be purchased at any shop or can be borrowed from casual traveler.

Flashlight test – caving expedition in Montenegro

Đalovića Cave is the longest cave in Montenegro. The total length of the currently known corridors is 11 km. As in most of the caves the conditions there are rather difficult. Factors such as: high humidity, low temperature, water flowing from stalactite formations and the possibility of falling from great heights, have a negative influence on electronic devices.

During this cave expedition Armytek was my main headlamp, however small size causes that it is really comfortable to wear it on your neck, as a backup source of light.

Side switch enables comfortable one-hand operation, but mode changing is not easy to understand for beginner users. However, after manual reading it becomes clear and simple. Three main modes (420 lm, 200 lm, 70 lm), three fireflies modes (15 lm, 2 lm, 0.2 lm) with maximal and two strobe modes are more than sufficient during different kind activity. While walking through the cave the lowest main mode was sufficient for me. 18 hours provided by manufacturer were adequate for one-day caving activity. Fireflies modes were often used during stops and bivouacs in a cave. Maximal mode was used rarely, however, it was indispensable during surveying when a good look at the construction of the cave was needed.

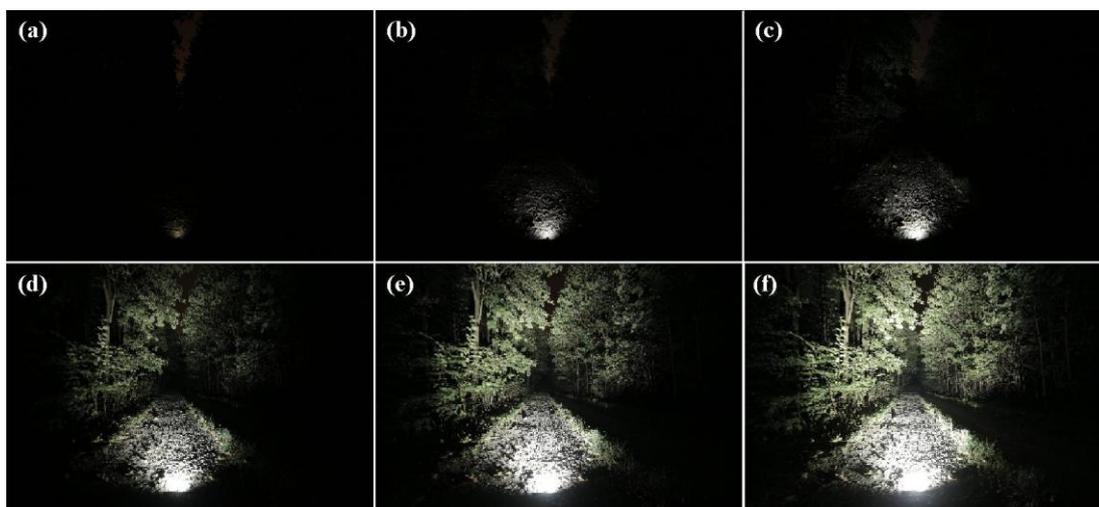


Figure 3. Three fireflies modes: 0.2 lm (a), 2 lm (b), 15 lm(c) and three main modes: 70 lm (d), 200 lm (e), 420 lm (f)



Figure 4. Maximal mode – 1120 lm

Double-click enabling changes between main and fireflies modes is quite comfortable. Also a good solution is that flashlight “remembers” last used mode and after switching it is set automatically.

One of the major advantage is warm light color, emitted by the flashlight, allowed us to see the beauty of the underworld in all its splendor. A minor disadvantage was a bit small hotspot (70°). It is quite sufficient for a trekking on the trail or camping, however during cave exploration greater angle of intense light would be appreciated.

During different kind outdoor activity it is important to be able to check the battery level. In case of Armytek, multi-colored LED, located below the button, informs about battery consumption. But, when flashlight is mounted to the helmet it is not very useful. However, in that case the user is informed about low battery level through the double flash. When I was using Armytek for the first time in a cave, I was afraid that after total battery consumption, flashlight suddenly turn off. However, Armytek Wizard Pro reduces the luminous flux in a step manner - Brightness decreases gradually as the batteries are drained - suggesting you to change the battery. If the warning was ignored and the battery has not been changed in time, flashlight switched to the weakest mode by itself. In that case changing of battery was not simple (backup source of light was helpful) but still possible. Simplicity of design allowed to change the battery without removing lamp connected to the helmet from head.

One of the main advantage in my opinion is the possibility of lamp protection against self, unwanted switching on. This is a common problem for many lamps. Two French lamps that I have, very often spontaneously turn on after putting them in the bag, causing unnecessary battery consumption. In case of Armytek this problem is solved mechanically, by turning the tailcap with a small angle. For this reason, I really liked this simple solution. No additional button is necessary!

Total protection from water, dirt and dust penetration is one of the most important parameter in case of underground activity. This flashlight was completely resistant to moist environment of caves and drops falling from formations. The manufacturer guarantees, that flashlight continues to work even at the depth of 10 meters and it is absolutely true. The lamps were submerged multiple times and it did not cause any damage. High intensity of light and water resistance caused that this flashlight was used as a light source during taking the pictures. The result is shown below.



Figure 5. Armytek Wizard Pro v2 XM-L2 was used as a light source illuminating the cave lake, formations (on the left side) and caver

High durability, which ensure impact resistance, caused that after two weeks of daily caving activity flashlight does not have any visible damages. The manufacturer guarantees, that even after falling from 10 meters, flashlight should work. After this exploration I am quite sure that this declaration is true.

Summary

Armytek Wizard Pro is the best headlamp, which I've ever had. Small size, simplicity of construction, high impact resistance and tolerance for different kind of dirt with excellent light intensity make this lamp suitable for different kind of outdoor activities, including caving.

Smooth tilt regulation, easily reachable placement of battery and the addition of a magnet into accessories make this flashlight very comfortable during using.

The main inconveniences is the lack of AA/AAA batteries adapter, which are most popular in Poland.

Definitely, it is the best of universal headlamps which I've ever had and I can recommend it for demanding tourists and for speleologists.

Agnieszka Noculak

Authors of the pictures: Michał Kamiński, Paweł Ruda



Figure 6. The beam of flashlight (Armytek Wizard Pro v2 XM-L2) on the starry sky background

Brief users reviews:

“The Armytek headlamp is very comfortable in use. You can use it in different configurations - on your helmet, clipped to your pocket or you can use the magnet to place it firmly on a metal surface. It is small and the battery last long. The number of available power outputs is very high, maybe even too high for some people. The highest power is really amazing, however it drains the battery quickly, but considering the brightens it is quite natural and cannot be considered a real drawback.” ~Magda

“Overall impression after spending a few days in a cave with this headlamp is very positive. It is small and light, fits helmet well, the regulation of tilt is properly done (it does not change by itself). The lamp is tough, I banged it pretty hard few times and it was fine. Full power drains the battery fast but it should be used only for a short time, not as a standard mode. The light beam is wide which is a big plus. The battery life on medium mode is satisfactory, but for longer operations you need spare batteries. Optional accessory allowing you to connect a cartridge of 4 accumulators would be a nice touch. So it is a light, bright, durable, waterproof and small headlamp and as such it is definitely worth recommendation.” ~Pawel

“Very well made pocket size lamp. Despite being headlight, it may also serve as pocket lamp to have with you everywhere. It gives very much light as for its size. However it heats much on maximum powers. Color of light is comfortable to work with. Beam has relatively long reach. It also illuminates sides of a field of view. However it is little too narrow for using in a cave, where one must see all possible places where feet or hand could catch a grip. Bottomline: Ideal for outdoor activities. Works very well during night hiking, as it illuminates the path in convenient way. However if you go out of paths, there could be not enough light far from the beam center.” ~Marcin

“My first thought about the Wizard was that it is very sleek looking. Fixing the headband was quite difficult, but nothing that one couldn't manage. Being used to my other headlamp being fitted with two state switch operating the Wizard was not obvious. It took me some time (and discharged Li-ion battery) to get to know how to use it. But I must say, after a while it is a very good system. The three click max output allowed me to see many beautiful parts of cave. Also it warmed my hands from time to time ;) The Firefly modes give enough light to sit and wait for others while conserving energy. The optics are very wide and give nice flood light which is use full especially when you are tired after a long time in cave. The IP68 rating was tested as I had to get underwater to look for a pulley that decided that it is time to try cave diving. The headlamp works flawlessly after almost two weeks in cave. Overall I really liked the Wizard Pro for packing many good features in a really compact package, I would recommend it to anyone looking for a quality light in a small package.” ~Piotr

“Armytek Wizard v2 pro is amazing general purpose flashlight. I've tested it in caving and warm CREE XM-L2's power is enough to light even a pretty big hall. The construction is sturdy enoguh to take a hard beat up in tight and muddy corridors. Along with high capacity Panasonic NCRs it gives a dependable source of light in a lightless environment. It's a second Armytek Wizard in my collection. I'm using the other one for mountaineering and climbing where the Wizard's lightweight construction is the most important advantage.” ~Ariel

“Light is very strong and switching to different levels of brightness is really easy. The battery lasts long and you can always easily see that it's time to change battery.” ~Jagoda