# LIGHT-FOR-ME



light-for-me 4XPG Hand Torch manual

# light-for-me 4XPG Hand Torch:

- up to 1600 lumens
- 4 x XPG LEDs
- protection against LEDs' overheating when the microprocessor detects too high temperature, it lowers the current flowing through LEDs
- protection against deep discharge of batteries when the microprocess detects a critical voltage, the torch flashes 5 times and then after a few minutes it switches off. Since this moment, the fifth red diode will be flashing for one minute in series: 5 flashes every 10 seconds. This means the battery level is too low to switch the torch on.
- protection against reversed polarity if by chance the batteries are placed the other way round, it will not caused any damage to or reaction by the torch

4XPG Hand Torch can be powered by:

- 2 x 18650 Li-lon batteries

or

- 2 x 26650 Li-lon batteries

It is recommended to use high quality batteries of capacity at least 2600mAh. Burntime depends on the quality, overall condition and charge level of the batteries used and ambient temperature.

The batteries should be put into the backup's body with the sign - (minus) to the head and with the sign + (plus) to the inner part of the body - see photo below.

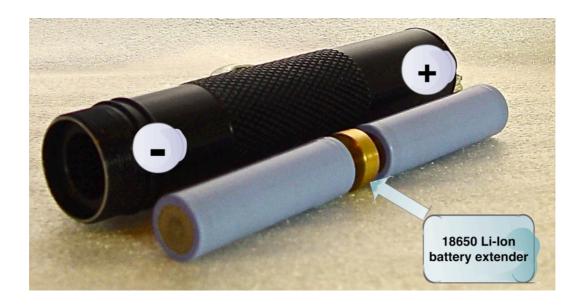
4XPG Hand Torch is equipped with protection against deep discharge of batteries so to get the best possible burntime the batteries used should be unprotected. Recommended batteries are given below.

4XPG Hand Torch is equipped with battery adaptors enabling the user to use either 18650 or 26650 batteries. Adaptors are already placed in the 4XPG body. To power the torch by 26650 Li-lon battery type, simply remove the adaptors. If later the torch is to be powered

by 2 x 18650 Li-lon batteries, first place the adaptors in the torch body and then place the batteries.



4XPG Hand Torch is also equipped with a battery extender - see photo. Depending on the brand of 18650 Li-lon battery, their length may differ. If after placing the 18650 Li-lon batteries inside the body, they are not level with the adaptor, place the battery extender between the two 18650 Li-lon batteries - see photo. Do not place the extender in any other place.



To switch the 4XPG Hand Torch twist the head as shown by arrows. To switch it off, twist the head to the first moment when the light goes off and stop.

Before every dive check the condition of orings that seal the body of 4XPG hand torch. Torn, cut or damaged orings should be replaced with new ones as they may cause flooding of the toch.

The oring sealing the body to the head should be lightly smeared with technical petroleum jelly (vaseline) or other nonaggressive mean (e.g. handcream) which makes it easier to operate the light underwater and makes it watertight.

From time to time clean the surface that touches the inside of 4XPG torch head (marked in the drawing).

Remove any dust or grain from the orings before twisting the body to the head.

While slowly twisting the body to the head make sure the sealing orings are correctly placed in their position and are not twisted or sticking out. Orings should sit firmly in their grooves and should not be too loose as they may not work properly underwater.



Recommended 18650 Li-Ion batteries:

Samsung ICR

Panasonic NCR 18650B series (see photo below)





### 18650 Li-Ion battery

#### **Characteristics:**

- cylindrical lithium-ion cell
- nominal voltage around 3.7V
- positive terminal nub at one end and flat negative terminal at the other
- for safety reasons recharging requires use of chargers specified for these cells
- dimensions: 18.3mm x 65.2mm (diameter x length)
- no memory effect and no scheduled cycling required to prolong the battery's life
- high capacity
- stable discharge voltage
- high voltage / light weight battery

## 26650 Li-Ion battery

#### **Characteristics:**

- cylindrical lithium-ion cell
- nominal voltage around 3.7V
- positive terminal nub at one end and flat negative terminal at the other
- for safety reasons recharging requires use of chargers specified for these cells
- max dimensions: 26.4mm x 66.5 (diameter x length)
- no memory effect and no scheduled cycling required to prolong the battery's life
- high capacity
- stable discharge voltage
- high voltage / light weight battery