# LIGHT FOR ME

backup MINI user's manual

# MINI TEC, MINI 3XPG, MINI XML

Please read the following user's manual carefully before the first use of the products and keep it for future reference. Scuba diving is treated as an extreme sport and requires proper training and certification. Using scuba equipment by an untrained and inexperienced person without proper certification may cause health damage and even risk of death. Light-for-me backup lights are designed to be used underwater only.

#### Power source

Light-for-me backup MINI is powered by 1 x 18650 Li-Ion protected rechargeable battery. It is recommended to use battery of high quality and from a reliable source. Before inserting the battery into the backup's body, check its condition - do not use damaged or broken batteries. **The battery 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 the photo).** Placing the battery the other way may cause a complete and irreversible damage to the light diode. Do not force the battery into the body, it should go in / out easily. Charge the battery according to the specification given by its manufacturer with an appropriate and approved charger. 18650 Li-Ion batteries require a dedicated charger.

#### Switching on/off

Light-for-me backup is switched on/off by twisting the head to the body. To switch the light on, hold the body with one hand and twist the head in a clockwise direction with the other. To switch the light off, hold the body with one hand and twist the head in an anticlockwise direction with the other.

When switching the backup off under water, stop twisting the moment the light goes off. If you continue to twist the head, you may flood the backup.

Do not switch the light on when not in water for more than 5 seconds. It is allowed to switch the light on to test if it works properly, but for maximum of 5 seconds. Longer use of the light on the surface may cause the LED to get too warm and get damaged as a result. Do not direct the light into your or anyone else's eyes.



#### Maintenance

Before every dive check the condition of orings that seal the body of the backup torch. Torn, cut or damaged orings should be replaced for a new ones as they may lead to flooding of the backup.

The oring sealing the body to the head should be lightly greased with technical petroleum jelly (pure vaseline) which makes it easier to operate the light underwater and helps it stay watertight. Remove any dust, mud or sand from the orings before twisting the body to the head.

From time to time clean the surface that touches the inside of backup head (marked in the drawing) and the silver ring around the spring inside the backup head. These surfaces need to be clean and grease-free in order for the backup to work properly.

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.

After each day of diving, rinse the backup in fresh water and dry it. Check the sealing orings and grease them if necessary. Store the backup with its battery taken out.



## **Tech Specifications**

MINI TEC		MINI 3XPG		MINI XML	
Purpose	backup light	Purpose	backup light	Purpose	backup light
Material	anodised aluminium	Material	anodised aluminium	Material	anodised aluminium
Max operating depth	100m	Max operating depth	100m	Max operating depth	100m
Number of LEDs	1	Number of LEDs	3	Number of LEDs	1
LED type	XPE	LED type	XPG	LED type	XML
Power	3W	Power	12W	Power	10W
Lumen output	max 330	Lumen output	max 1050	Lumen output	max 1200
Light angle	6 degrees	Light angle	16 degrees	Light angle	+/- 5 degrees
Light temperature	>7000K	Light temperature	6300K	Light temperature	6800K
Switch type	head-to-body twist	Switch type	head-to-body twist	Switch type	head-to-body twist
Max dimensions	13.8cm (length) 3-3.8cm (Ø)	Max dimensions	13.8cm (length) 3-3.8cm (Ø)	Max dimensions	14.7cm (length) 3cm (body Ø) 3.6-4.8cm (head Ø)
Weight w/o batteries	180g	Weight w/o batteries	180g	Weight w/o batteries	215g
Weight with batteries	220g	Weight with batteries	220g	Weight with batteries	260g
Batteries	1 x 18650 Li-lon (not included)	Batteries	1 x 18650 Li-lon (not included)	Batteries	1 x 18650 Li-lon (not included)

# 18650 Li-lon battery

### Characteristics:

- cylindrical lithium-ion cell
- nominal voltage around 3.7V
- · positive terminal nub at one end and flat negative terminal at the other
- · available with an internal protection circuit to prevent over-discharge and shortcircuit damage
- 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
- recommended batteries: Panasonic, Samsung, LG

Battery should not be longer than its pocket. It should not go beyond the marked edge of the pocket. A longer battery may cause improper working of the backup torch.



Troubleshooting Problem	Solution		
I have flooded my backup. I can see some water inside the head.	In case of flooding the torch: untwist the head from the body, remove the battery and dry it, the inside should be rinsed with fresh lukewarm water and backup should be left open for the time of at least 72 hours. The head should be left to dry with the glass directed downwards while drying. The flooding of the head may result in lowering the power of emitted light. Check the battery's manufacturer advice for flooding the battery. For safety reason do not use the battery again. Contact the light-for-me manufacturer.		
The light flashes from time to time, even with fully charged batteries.	Check the battery - charge it if necessary; damaged or suspiciously looking battery should be replaced with a new one. Check the backup with a different battery. Clean the 'touch surfaces' described above. Should the issue continue, contact the light-for-me manufacturer.		
I have forgotten to take out the batteries after my last dive and the backup does not work now.	Check the battery's manufacturer for advise. Clean the 'touch surfaces' described above. Check the backup with a different battery. If the issue continues, contact the light-for-me manufacturer.		
I charge the batteries full but still get less burn time than stated.	It is recommended to use high quality genuine batteries. Burn times given with each backup torch are based on the data given by their manufacturers. Burn time may differ +/-10% from the stated one depending on the ambient conditions when diving and battery- / charger-related issues. If the burn time is visibly shorter, try the backup with a different battery. If in doubt, contact the light-for-me manufacturer.		