

High Power Diving Scuba **LED Flashlight**

USER MANUAL

FEATURES

- 1 High Power Diving scuba LED Flashlight.
- 2 IPX8 with 150 meters waterproof.
- **3** It can be use without water like general LED flashlight.
- **4** An intelligent circuit provides a temperature-control system for overheating, over-discharge protected and wrong polarity of battery inset protected.
- **5** Frame is processed with solid and aerospace-grade aluminum alloy CNC, Type **III** hardest anodized in black.
- 6 Toughened ultra clear glass lens.
- **7** The aluminum alloy reflector laminates the alloy reflective film with an ultra-high temperature treatment method to get better luminous effectiveness and focus, as well as a longer illumination distance.
- **8** 360 degree rotated magnet control switch to turn on/off and brightness mode of flashlight.
- **9** 20 to 30 minutes low voltage blinking warning for continues, when battery level gets below warning value before the torch shut down.
- **10** Functions: Max Mid Low SOS Low Battery Warning.

USAGE INSTRUCTIONS

- **1** W158ll operates on 2 pcs rechargeable 18650 Li-ion batteries.
- **2** Do recharge the 18650 batteries to 100% before the first use.
- **3** How to recharge the batteries: Put the 18650 batteries correctly into Ferei special designed battery holde. Insert the 3.5 DC end of Ferei charger into the hole of Ferei holder, then connect the other side of the charger with the power supply. Thus recharging begins. Recharging cycle is finished when the indicator LED turns from red to green.
- **4** Batteries installation: Unscrew the W158ll's tail cap and insert 2 x 18650 into the battery tube with the positive (+) end facing forward. Replace the tail cap ensuring it is fully tightened.
- **5** W158II series have 4 modes: High Middle Low Blinking. To turn the light on, simply rotate the magnet switch 1/4 of a turn, clockwise or anticlockwise, then light is on. Repeat the above step (within 2s), the mode changes, in sequence they are High- Middle-Low-Blinking-Off. **Note:** Once stay at one mode for more than 2s, the mode is remembered. And rotate the switch

again, the light shut down directly. When you turn the light on next time, it is the same mode as what it was when you shut it down.

- **6** Low battery warning: When the battery capacity reaches about 20%, W158II will blink periodically at once per minute until it is automatically shut off. This is reminding that batteries should be charged.
- **7** W158II features intelligent over-discharge detection. If batteries reach a critically low voltage, W158II will shut off automatically to prevent damage to the batteries and/or flashlight. When this occurs, the batteries should be recharged as soon as possible.

Note: Over-discharging Li-ion batteries can cause them to inflate and vent a harmful gas. In order to avoid this, W158II is designed to function on a safe upper voltage limit.

PRODUCT SCHEMATIC





INTELLIGENT TEMPERATURE CONTROL AND RUNTIME INSTRUCTIONS

This product is designed with a temperature control circuit. The LED is a heating device that is sensitive to temperatures, especially high levels of power and brightness. High temperatures will easily damage or shorten the life of the LED. Ferei designs its products with an intelligent temperature-control circuit. It measures the temperature within the LED filament. As the structure of the lamp differs, the thermal conductivity of the entire lamp is not the same. In general, the constant surface temperature of the lamp is 50°C to 60°C. When it exceeds its programmed temperature, it will automatically reduce its power to cool down, and the brightness decreases by small steps. After coolingdown (provided that battery voltage is sufficient) the power with brightness increases again. The process of improving its brightness is relatively discrete and will not produce a flashing effect.

This stepping goes cyclically to maintain the user's safety and the light's functionality. In conditions of

ping down even in high levels brightness mode. There are no preset timers for stepping, but real-time active temperature measurements, So the actual runtime of the lamp base on active temperature control to faster or slower battery discharge, may be slightly longer or shorter runtime than the lamp of data provided.

good air-cooling the lamp delivers light without step-

WARM TIPS

In order to avoid accidents, please pay attention to the following tips: • Never use damaged, discolored or leaking batteries • Never use batteries with a damaged sleeve or foil covering • Always use 18650 batteries with safety certificates • If the light gets unusually hot when in use, turn it off and check battery appearance • Never store the battery into the battery holder • Recharging is finished when the LED indicator turns to green • The battery remains at a normal temperature during recharging. If it gets unusual hot, stop recharging and take the battery out • Do not dissemble the charger kit by yourself if the battery couldn't be recharged • The battery can be used at any time once being recharged. If it is left unused for long periods, it should be recharged for 4 hours every three months. After being charged they should be slightly discharged for 10-20 minutes before storage • Make sure the battery is recharged at safety environment and is looked after by certain people while recharging.

MAINTENANCE

• Using a soft cloth clean the glass lens and tail cap thread periodically • Every 6 months lubricate the tail cap thread with a light applica-



tion of silicon grease • Every 3 times use in water, apply a light application of silicon oil to the magnetic switch, turn the torch on and off several times to work the oil into the switch, as shown in picture above • Be sure to rinse the light thoroughly with fresh water after every use in saltwater • Replace the damaged O-rings in time to ensure its waterproofness. **Note:** Never dissemble the head or touch the inside of the reflector. Do not use general purpose oil for lubricating the switch as it may damage the silicone O-ring.

PRECAUTIONS AND WARNINGS

• It is a lighting tool, not a toy. Keep it away from children
• The W158 has a highly intense beam and should not be aimed directly at the eyes of human • Do not place the light face / lens down when turned on as this may cause it to overheat and void warranty • The surface of the flashlight may become hot during extended use • Do not dismantle or dissemble any part of the light as this will void warranty and affect the waterproof seal • Rinse the lights surface with fresh water and dry with soft cloth after exposure to salt water or any corrosive substance • Always remove batteries during long periods of inactivity • Always make sure to recharge/discharge the 2pcs batteries at the same time so to keep them at the same voltage. Otherwise, batteries might be damaged • Ferei reserves the right of interpretation of this manual.

SPECIFICATIONS								
TYPE	W158 II (COOL WHITE)				W158B II (NEUTRAL WHITE)			
LED	1 X CREE XHP50.2 LED							
ANSI/FSC	LOW	MID	MAX	FLASHING	LOW	MID	MAX	FLASHING
OUTPUT (LM)	310	1250	2060	2060	290	1150	1920	1920
RUNTIME (HOURS) (indoor static testing at 28°C on table)	8.15	4.6	3.5	>3.5	8.15	4.6	3.5	>3.5
MAXIMUM INTENSITY	22952 CD				21609 CD			
RANGE	OVER 303 METERS				OVER 294 METERS			
BEAM ANGLE	9 DEGREE							
WATERPROOOF GRADE	IPX8 (150 M)							
ANTI-DROP	1 M							
DIMENSION (MM)	51 (HEAD) X 27.5 X 210							
BATTERY TYPE	2 X 18650 RECHARGEABLE LI-ION BATTERIES							
NET WEIGHT	227 G (BATTERY EXCLUDED)							
UNDERWATER WEIGHT	163 G (BATTERY INCLUDED)							
UNDERWATER RUNTIME (AT MAX, OUTPUT)	2.1HOURS							

Shenzhen FEREI Lighting Co., Ltd. 3rd Industrial Zone, Xiakeng Village, Tongle, Longgang District, Shenzhen 518116, China. TEL: 0086 755 8480 7942 / 0086 755 8480 7943

FAX: 0086 755 8480 7944 E-mail: ferei@ferei.com www.ferei.com

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