

Features

1. High-power CREE LED with a lifespan of up to 100,000 hours.
2. Surface-coated optical glass lens resists abrasions and scratches, also provides an effective transmittance.
3. Aircraft-grade aluminum body, processed through CNC machine center, is tough and exquisite.
4. Surface is anodic oxidation finished.
5. Using Ferei own-developed & most advanced intelligent circuit control system.
6. Waterproofness: up to IPX8 (150 meters underwater).
7. Magnetic switch can be rotated either left or right, easy for operation.
8. Powered by 1 piece 18650 rechargeable Li-ion battery.
9. Lighting options: Red (Max / Med) & White (Max / Med).
10. Designed with low battery warning function.
11. The light is protected from battery over-discharging to ensure the lifetime of the Li-ion battery.
12. The light is protected from battery wrong polarity placed so not to damage the LED emitter and the circuit.
13. The torch features a unique thermostatic circuit to regulate temperature and prevent overheating.

Specifications

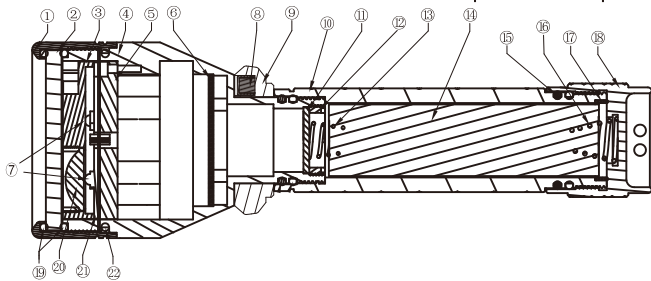
Type	W153			
LED	2*CREE XP-E (Red)		1*CREE XM-L2 (Cool White)	
ANSI/FSC	Max	Med	Max	Med
Brightness percentage	100%	50%	100%	50%
Output(LM)	500LM	250LM	800LM	400LM
Runtime (indoor static testing at 28°C on table)	2.4 hours	4.3 hours	3 hours	5.1 hours
Maximum intensity	8000CD(Wide angle)			
Beam angle	80 degree			
Anti-drop	1M			
Waterproof grade	IPX8(150M)			
Dimension	50mm(Head)×26.5mm×160mm(Length)			
Battery	1*18650 rechargeable Li-ion battery			
Net weight	175g(battery excluded)			
Underwater weight	125g(battery included)			
Underwater Runtime (Red At Max. Output)	1.1Hours			
Underwater Runtime (Cool White At Max. Output)	1.3Hours			

Runtime declaration : The data-based duration test in land at room and not in the water.

If the light use under water or cool condition , the runtime about 1 to 5 times less than instruction.

Pictorial overview

* Photos are for reference only, products in kind prevail!



- ① Head Bezel ② LED Socket ③ Magnetic Switch ④ Spring positive pole ⑤ Tail Cap
 ⑥ Glass Lens ⑦ Driver Board ⑧ Battery Tube/Body ⑨ Battery ⑩ O-ring ⑪ O-ring
 ⑫ Lens fixing plate ⑬ LED ⑭ PCB ⑮ O-ring ⑯ Spring negative pole ⑰ convex lens
 ⑱ Head Tube ⑲ Magnet ⑳ Plastic Pressing Ring ㉑ Contacting Ring ㉒ aluminum base

Usage instructions

1. W153 operates on a single rechargeable 18650 Li-ion battery
2. Do recharge the 18650 battery to 100% before the first usage.
3. How to recharge the battery:
Put the 18650 battery correctly into Ferei special designed battery holder; Insert the 3.5DC 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. Battery installation: Unscrew the W153's tail cap and insert a single 18650 into the battery tube with the positive (+) end facing forward. Replace the tail cap ensuring it is fully tightened.
5. To turn W153 ON and OFF, simply rotate the magnetic switch at the front of the battery tube.
6. W153 has two kinds of lighting options: Red (Max / Med) and White (Max / Med).
 a. Red option (100% - 50%): OFF *rotate left* RED (Max) *rotate left* RED (Med) *rotate left* RED (Max) *rotate left* RED (Med) ... cycles likes this.
 b. To exit RED option / Turn off: Rotate to right at any RED option (100% or 50%), the torch is turned off.
 c. White option (100% - 50%): OFF *rotate right* white (Max) *rotate right* white (Med) *rotate right* white (Max) *rotate right* white (Med) ... cycles likes this.
 d. To exit white option / Turn off: Rotate left at any white option (100% or 50%), the torch is turned off.

7. Low battery warning system: When battery capacity reaches about 20%, the W153 will blink 5-6 times fast, warning to recharge or change the battery.
8. Wrong polarity protection for battery: When the battery is put in with wrong polarity, the circuit of W153 will automatically stop working to ensure the safety of the light.
9. W153 is designed with intelligent over-discharging detection. When the battery gets to the lower limit, the light will shut off automatically. Now, the battery must be recharged before next time use. (Over-discharging will cause low voltage of the battery. If continuing using it, the battery may get inflated and produce harmful gas. In order to avoid this, W153 is designed with a lower limit for the battery voltage. When the battery gets low, the light will shut off automatically to protect the battery from over-discharging.)

Intelligent Temperature Control 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 cooling-down (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 good air-cooling the lamp delivers light without stepping 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 .

Warm tips

In order to avoid accidents, please pay attention to the following tips:

- a. Never use damaged, discolored or leaking batteries.
- b. Never use batteries with a damaged sleeve or foil covering.
- c. Always use 18650 batteries with safety certificates.
- d. If the light gets unusually hot when in use, turn it off and check battery appearance .
- e. Never store the battery into the battery holder.
- f. Recharging is finished when the LED indicator turns to green.
- g. The battery remains at a normal temperature during recharging. If it gets unusual hot, stop recharging and take the battery out.
- h. Do not disassemble the charger kit by yourself if the battery couldn't be recharged.
- i. 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.
- j. Make sure the battery is recharged at safety environment and is looked after by certain people while recharging.

Maintenance

1. Using a soft cloth clean the glass lens and tail cap thread periodically.
2. Every 6 months lubricate the tail cap thread with a light application of silicon grease.
3. After every three times use in water, apply a light application of silicon oil to the magnetic switch, turning it on and off several times to work the oil into switch's friction points.
4. Be sure to rinse the light thoroughly with fresh water after every use in saltwater.
5. Replace the damaged O-rings in time to ensure its waterproofness.

Note:

Never disassemble 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 W153 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 disassemble 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.
- Ferei reserves the right of interpretation of this manual.

☆☆☆ patented product, counterfeiting not allowed ☆☆☆

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