### Ultra Violet Diving **LED Flashlight**

# **USER MANUAL**

#### **PRODUCT HIGHLIGHTS**

- Professional Ultra Violet (UV) diving flashlight, especially for underwater photography and fluorescence photography. With different color filters to achieve different results with beautiful photos.
- Worked as underwater supplementary lighting either in day or night time, especially for photography which requires high sensitivity on colors.
- 10 x blue LED with 455nm wavelength, 30 watt output, max med min brightness adjustable to meet different lighting needs.
- Aircraft grade hard anodized aluminum is used for light body, withstanding cold or high temperature, toughened and durable.
- Waterproof up to 200 meters, rotating switch at tail to control on/off and brightness adjustment.
- 2 pcs 18650 rechargeable Li-lon batteries with 500 cycles lifespan, environmental without waste.
- Super intelligent circuit prevents over-discharge or damages which caused by polar reversing, effectively protect and prolong the lifespan of the lamp.
- 10 times blinking for low power warning, reminding battery power consumption.

### **USAGE AND OPERATION**

- **1** This diving flashlight is equipped with two 18650 rechargable lithium batteries.
- **2** The 18650 rechargable lithium batteries should be fully recharged when they are used for the first time.
- **3** The recharging method of the battery: Place the batteries into the lithium battery recharge stand in accordance with the correct polarity, insert the 3.5 DC plug of Ferei specific recharger into the recharging hole of the lithium battery recharge stand. Red indicator light means the battery is recharging, and the green indicator light means the battery is fully recharged.
- **4** Battery placing: turn on the end cap of flashlight anticlockwise, insert two 18650 batteries correctly in accordance with the identification of polarity, and then tighten the end cap clockwise. Now the flashlight should be lightened, rotate the switch a quarter cycle anticlockwise will turn it off.
- **5** Brightness level: high-midium-low.
- **6** Switch: in the state of turning off, rotete the switch clockwise tightly will enable the high blue light mode,

rotate the switch a quarter cycle anticlockwise will turn it off. And then, rotete the switch clockwise tightly again will enable the midium blue light mode, rotate the switch a quarter cycle anticlockwise will turn it off. Finally, rotate the switch clockwise tightly again will enable the low blue light mode, rotate the switch a quarter cycle anticlockwise will turn it off.

- **7** Low power alert: there will be ten times' quick flash when the power of the battery is low (20%), and then the flashlight will work normally until there is no power and the flashlight is turned off automaticily.
- **8** The product is equipped with an intelligent over-discharge detection function, the light will be turned off automaticcly when the discharging level of battery reaches the lower limit. At this time, the battery should be recharged.

## INTELLIGENT TEMPERATURE CONTROL INSTRUCTIONS

The flashlight is designed with the Intelligent temperature control system. As we know, LED is a component which can make heat and is sensitive to the temperature, it will be damaged or its working life will be shorten by the overheat temperature, especially the powerful and brightness LED. So the Intelligent temperature control system works when the flashlight's designation and structure cannot realize the heat-radiation temperature from the high brightness LED lighting. The system controls the temperature of the LED lamp wick, obviously, the flashlight gets different Thermal Conductivity with different structure, and generally speaking, the surface temperature of the flashlight constant between 50°C to 60°C, when the flashlight runs heat, the Intelligent temperature control function will help to reduce the power to cool down the lamp wick, the brightness of the light will corresponding fell and get lower. And in comparison outdoor using with the indoor using, outdoor area using will get wind to cool it down and heat-radiation is better, the LED will crank up the power and the lights become brighter, and the process of ascension brightness will smooth and slow without flashes.

At the same time, the intelligent temperature control system will lead the run time get longer (may be the standard of twice to five times). Particularly, the run time will depend on the temperature, running speed

even the wind strength, so the actually run time will be a little different according to the environment of the flashlight using.

### **MAINTENANCE**

- **1** Cleaning the glass lenses regularly with a soft cloth to ensure the best light transmittance. (Do not use any corrosive detergent).
- **2** Please keep the battery box cleaning, free of dust or debris
- **3** Please rinse the light with fresh water and dry it after each diving in sea/salt water.

### **CAUTION**

Please pay great attention to the followings to prevent unnecessary accidents from happening:

- **1** Do not use a damaged batteries or batteries with signs of electric leakage.
- **2** Please do not use batteries with sign of damages on the metal surface of battery.
- **3** Please use 18650 batteries with safety certification.
- **4** Please avoid storing batteries inside headlamp for over 30 days.
- **5** Please neither remove any part of the lamp, such as switch, lamp holder, etc., nor attempt to repair it by yourself.

### WARNINGS

- **1** This product is not a toy, please keep it away from children.
- 2 Do not shoot eyes directly with the headlamp.
- **3** Do not place the lamp holder downwards after it is turned on.
- **4** Slight warm on the surface of the lamp while using is normal phenomenon.
- **5** Disassembling of the lamp structure parts, especially the seal structure parts is prohibited.
- **6** The surface should be wipe-dried immediately if the product contacts corrosive substances or water.

TAILCAP ROTATING SWITCH

NEGATIVE SPRING

- **7** When the light is not used for long period, please fully charge the battery every 3 months and then slightly discharge for 20 minutes before storage.
- **8** The final interpretation of product instruction is subjected to Ferei.

O-RING 2

SPECIFICATIONS			
MODEL NAME	TINT		
LED	10 X CREE XP-E 455nm		
ANSI/FSC	MAX	MID	MIN
BRIGHTNESS (LUMEN)	288	138	54
RUNTIME (TESTED IN 28C INDOOR SETTING)	3 H (HIGH)		
LIGHT INTENSITY	102 CD		
RANGE (M)	10 M		
WATERPROOF RATING	IPX8 (150 M)		
DROP PROOF	1 M		
DIMENSION	50 X 24 X 175 MM		
BATTERY TYPE	2 X 18650 BATTERY		
WEIGHT	170 G (BATTERIES NOT INCLUDED)		
NOTE: THE ABOVE PARAMETER WERE TESTED BY USING 2pcs 3400mAh 18650 BATTERIES.			



BATTERY TUBE / BODY

**PRODUCT SCHEMATIC** 

O-RING 1

POSITIVE SPRING

E-mail: ferei@ferei.com • Web: http://www.ferei.com

CREE XP-E

HEAD COVER