



## User manual



# D520

## Max 1000 Lumens

### PRODUCT INTRODUCTION

ORCATORCH D520 is a palm-sized diving light with a mechanically rotary switch. The rotary switch offers high reliability underwater. Using the USA CREE neutral white LED, its max output can reach 1000 lumens, meanwhile the 5000K LED color temperature provides superb color rendition. Powered by one 18650 battery, its max runtime can reach 2 hours. Plus robust water pressure resistant construction, high portability and easy operation, D520 would be qualified for both recreational diving as a primary light and deep diving as a backup light.

### PRODUCT FEATURES

- ✓ Cree LED, max 1000 lumens output
- ✓ Uses 1\*18650/2\*CR123A/2\*16340 battery
- ✓ Mechanically head rotary switch offers high reliability underwater
- ✓ Water pressure resistant construction, depth rated to 150 meters
- ✓ Reverse polarity protection, to protect from improper battery installation
- ✓ Over-discharge protection function
- ✓ Aircraft-grade high strength aluminum material
- ✓ The latest diamond grade hard-anodized seawater-corrosion-resistance finish
- ✓ Alloy aluminum reflector with professional optical analysis
- ✓ Two sides coated toughened glass with high water pressure resistance under deep water

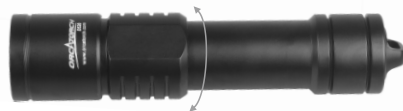
### TECHNICAL PARAMETERS

ANSI/NEMA FL1	Mode
Output	1000 lumens
Runtime	2h
Beam Distance	220m (On land)
Intensity	12000cd
Impact Resistant	1m
Waterproof	under water 150m
<b>Working voltage</b>	3 – 8.4 V
<b>Dimension</b>	134.5mm(Length) x 24mm(Diameter) x 30mm(Head)
<b>Net weight</b>	129g (excluding battery)
<b>Accessories</b>	18650 3400mAh USB Type-C Rechargeable Battery x 1, USB Type-C Charging Cable x 1, Lanyard x 1, Spare O-ring x 3

Notice: Stated data has been measured according to the international flashlight test standards ANSI/NEMA FL1 using one OrcaTorch 18650 Li-ion battery (3.7V, 3400mah) under laboratory conditions. The parameters are approximate and may vary between flashlights, batteries, and environments.

### OPERATION INSTRUCTIONS

1. ON/OFF: Insert the battery and tighten the light head to turn on the flashlight, unscrew the light head to turn it off.
2. Please tighten the light head to turn on the light before you go underwater, and do not unscrew the light head until you have gone out of water to avoid leaking underwater.
3. The total runtime will be extended significantly if the light is used discontinuously.



### BATTERY REPLACEMENT

1. As shown in the figure, insert the battery with the anode side (+) toward the light head.
2. Please do not reverse battery to avoid damage to the flashlight and battery.
3. Please do not use battery with higher voltage than flashlight working voltage.
4. Please do not use battery with damaged surface or deformation to avoid short circuit, explosion, leakage, etc.



### USAGE AND MAINTENANCE

Please clean the surface of the light with fresh water and wipe it dry after use in case of the seawater corrosiveness.

Do not drop or place the light on sand in case iron sand stick or go into switch section or screw thread.

Tighten all the connections of the light before going underwater.

Please take out the batteries after each diving.

Please don't disassemble the sealed head, doing so may cause damage to the flashlight and will void the warranty.

We recommend the use of high quality batteries. If the flashlight will not be used for a long time, remove the batteries to avoid damage from electrolyte leakage or battery explosion.

Please replace the O-rings if they are damaged after prolonged use and regularly lubricate the O-rings so as to not erode the rubber. Doing so will keep the flashlight properly sealed against water.

Please clean the contacts of your light from time to time, especially when the light flickers or doesn't light up. There are probably several reasons for a flickering or not working light:

Reason A: The batteries need to be replaced.

Solution: Replace batteries (Please confirm correct installation of + and - terminals).

Reason B: The threads, PCB board contact or other contacts are dirty.

Solution: Clean the contact points with an alcohol soaked cotton swab.

If the methods above don't work, please contact the distributors and refer to the warranty policy.

### PRODUCT WARRANTY

We will replace products afflicted with manufacturing defects within 30 days of purchase and repair a light free of charge within 12 months of purchase if problems develop under normal use; if repair is required after 12 months from the date of purchase, we will charge for parts. The total repair fee is dictated by the cost of the replaced materials.

Please register your OrcaTorch products through official website [www.orcatorch.com](http://www.orcatorch.com) to get extra 1 year warranty.

### Warning

The flashlight is high intensity lighting device and capable of causing eye damage, please avoid shining the light directly into the eyes.

### ORCATORCH TECHNOLOGY LIMITED

Tel: +86-755-33560383 Fax: +86-755-29454989

Email: [info@orcatorch.com](mailto:info@orcatorch.com) [www.orcatorch.com](http://www.orcatorch.com)

Address: 4th Floor, Building 6, Huafeng Science and Technology Park, 535 Fengtang Avenue, Fuyong, Bao'an District, Shenzhen, China (518103)



[www.orcatorch.com](http://www.orcatorch.com)

# ORCATORCH

## 说明书



### D520

最高亮度 1000 流明

### 产品介绍

ORCATORCH D520是一款轻便小巧的机械式旋转开关潜水手电。机械式开关，稳定可靠。采用美国Cree中白光LED,可输出高达1000流明的亮度,同时5000K的色温提供了绝佳的显色性;使用1节18650电池,续航时间长达2小时。配合简约大气的外观、专业的抗压防水结构,加上小巧便携、易于操作的特性,无论是休闲潜水还是作为深潜备用灯,D520均可轻松胜任。

### 产品特点

- ✓ 采用美国cree LED,最高亮度1000流明
- ✓ 使用1\*18650/2\*CR123A/2\*16340电池
- ✓ 头部机械式旋转开关,稳定可靠
- ✓ 专业抗压防水结构设计,潜水深度达150米
- ✓ 防反接设计,防止电池反装对电路造成损害
- ✓ 过放保护功能
- ✓ 采用高强度航空级铝材
- ✓ 表面采用新一代钻石级抗腐蚀氧化处理
- ✓ 专业光学分析设计的铝合金光杯
- ✓ 双面镀膜防刮抗压钢化玻璃镜片,深水抗压能力强

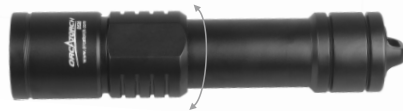
### 技术参数

ANSI/NEMA FL1	档位
☀️ 亮度	1000流明
🕒 续航时间	2小时
📏 最远射程	220米(陆地)
🔍 最大光强	12000坎德拉
📏 防跌落高度	1米
🌊 防水等级	水下150米
🔌 工作电压范围	3-8.4V
📏 尺寸	134.5mm(长) x 24mm(直径) x 30mm(筒头)
📏 净重	129g(不包括电池)
📎 附件	18650 3400mAh USB Type-C 可充电锂离子电池 x 1, USB Type-C 充电线 x 1, 手绳x1, 备用O型防水圈x3

注:以上参数按照国际手电筒测试标准ANSI/NEMA FL1所述测量方法,使用1节OrcaTorch 18650锂离子电池(3.7V, 3400mah)在实验室环境中测试所得。测试参数为近似值,可能会随着手电、电池和使用环境而发生变化。

### 操作说明

1. 开机:装入电池拧紧筒头,即可开启手电,拧松筒头即可关闭手电。
2. 拧紧筒头开启手电方可入水,出水后方可拧松筒头关闭手电,以防进水。
3. 手电在不连续使用的情况下,总续航时间将会显著延长。



### 更换电池

- 1.如图,将电池正极朝灯头方向,负极朝筒尾方向装入筒身;
- 2.请勿反装,以免造成手电和电池的损坏;
- 3.请勿使用超电压电池,以免损坏手电;
- 4.请勿使用表面有破损或变形的电池,以免发生短路、爆炸、漏液等情况。



USB Type-C 充电

### 使用与维护

由于海水具有腐蚀性,请在使用后用清水冲洗手电表面,并擦干水份。请勿将手电放在沙地上,以防止细沙进入手电开关或螺纹缝隙。拧紧筒头所有连接处后方可入水。每次潜水后将电池取出。请勿拆卸灯具头部密封部件,否则将会导致保修失效并可能损坏灯具。

请使用优质电池,并且当长期不用灯具时将电池从灯具中取出,否则可能因电池漏液或者爆炸,造成灯具损坏。长期使用后,灯具的O型圈可能受到损坏。如果发现了这种情况,请您更换O型圈以维持手电的防水性能。为保持O型圈(密封胶圈)及螺纹旋转顺畅,请定期在其表面涂抹硅脂润滑。请经常清洁灯具的导电接触面以保证灯具的正常工作,特别是当灯具出现异常的闪烁或者无法点亮的时候。以下是几个可能导致灯具出现异常的闪烁或者无法点亮的原因:

- 原因一:电量不足,需要更换。  
解决方案:更换电池(装入新电池时请注意正负极方向)
- 原因二:螺纹或者PCB板的导电接触面或其他接触面/接触点被弄脏了。  
解决方案:用酒精棉签清洁导电接触面或接触点。  
如果上述方法无效,请联系经销商并按照售后服务条款保修。

### 保修条款

- 一、30天包换期:本产品自售出之日起30天内,在正常使用情况下,出现产品质量问题,客户可选择维修服务或更换同型号同规格的新品。如同型号同规格的产品停止生产或因其他原因不能在合理时间内安排更换,则调换不低于原产品性能的同品牌产品。
- 二、1年免费保修期:本产品自售出之日起1年内,用户在正常使用情况下,出现产品质量问题,则享受免费维修服务。因使用不当或擅自改装、维修而引起的产品缺陷、损坏,不在保修范围内。
- 三、终身有限保修:在超过1年免费保修时间外,ORCATORCH将提供有偿维修服务,费用以实际更换材料费用为准,不另收取人工费用。
- 四、消费者保修时凭ORCATORCH《保修卡》、购物发票或收据、网上购物时销售商提供的销售凭证与经销商联系,由经销商对消费者提供服务,我公司将对经销商提供服务支持。

请通过官方网址 [www.orcatorch.com](http://www.orcatorch.com) 注册您的产品以获得1年质保。

警示:本产品亮度极高,请勿直视发光体,以免造成视力损伤。

深圳市拓飞电子有限公司

电话: +86-755-33560383 传真: +86-755-29454989  
邮箱: info@orcatorch.com 网址: www.orcatorch.com  
地址: 深圳市宝安区福永镇凤塘大道535号塘尾华丰科技园6栋4楼  
邮编: 518103



[www.orcatorch.com](http://www.orcatorch.com)