

# 说明书



## D510

最高亮度 900 流明

### 产品介绍

ORCATORCH D510是一款采用机械式旋转开关的技术潜水手电。机械式开关，稳定可靠。采用美国最新的Cree XM-L2(U2) LED，可输出高达900流明的亮度；使用3节C电池，续航时间长达4小时。配合简约大气的外观、专业的抗压防水结构，相信ORCATORCH D510会是您值得信赖的潜水照明伙伴。

### 产品特点

- ✓ 采用Cree XM-L2(U2) LED，亮度900流明
- ✓ 使用3节C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
- ✓ 标配手臂套，固定手电于手臂，水下便携
- ✓ 高效恒流电路，亮度恒定
- ✓ 电子防反接设计，防止电池反装对电路造成损害
- ✓ 采用高强度航空级铝材
- ✓ 表面军规三级硬质阳极氧化抗海水腐蚀处理
- ✓ 专业光学分析设计的铝合金光杯
- ✓ 钢化玻璃镜片，深水抗压能力强

### 技术参数

ANSI/NEMA FL1	档位
☀️ 亮度	900流明
🕒 续航时间	4小时
📏 最远射程	325米(陆地)
🌞 最大光强	26400坎德拉
📏 防跌落高度	1米
🌊 防水等级	水下150米
⚡ 工作电压范围	3-4.5V
📏 尺寸	209mm(长) x 35mm(直径) x 49mm(筒头)
⚖️ 净重	313g(不包括电池)
📎 附件	O型圈、手绳、手臂套、硅胶脂

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3节碱性C电池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. 开关机：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. 建议入水前拧紧筒头开启手电，出水后拧松筒头关闭手电，以防进水。



### 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。



### 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。
- ◇ 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。
- ◇ 拧紧电筒所有连接处后方可入水。对于旋转开关手电，建议入水前拧紧开关开启手电，出水后拧松开关关闭手电，以防进水。

- ◇ 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）及螺纹转动顺畅，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：电池电量不足，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：ORCATORCH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者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、2年免费保修期：ORCATORCH产品自售出之日起2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2年免费保修时间外，ORCATORCH将提供有偿保修服务，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。
- 警示：本产品亮度极高，请勿直视发光体，以免造成视力损伤。

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## User manual



# D510

Max **900** Lumens

### PRODUCT INTRODUCTION

ORCATORCH D510 is a portable flashlight with a mechanically rotary switch for technical diving use. The rotary switch offers high reliability underwater. Using the latest USA CREE XM-L2(U2) LED, it can reach 900 lumens output. And using three C batteries, its runtime can be over 4 hours. Plus simple style appearance, robust water pressure resistant construction, we believe it will be a reliable lighting tool for diving.

### PRODUCT FEATURES

- ✓ Cree XM-L2(U2) LED, 900 lumens output
- ✓ Uses 3°C batteries
- ✓ Mechanically head rotary switch offers high reliability underwater
- ✓ Water pressure resistant construction, depth rated to 150 meters
- ✓ Standard included arm strap, fastens the light to your arm
- ✓ High efficiency constant current circuit, constant brightness
- ✓ Reverse polarity protection, to protect from improper battery installation
- ✓ Aircraft-grade high strength aluminum material
- ✓ Premium Type III military hard-anodized seawater-corrosion-resistance finish
- ✓ Alloy aluminum reflector with professional optical analysis
- ✓ Toughened glass with high water pressure resistance under deep water

### TECHNICAL PARAMETERS

ANSI/NEMA FL1	Mode
Output	900 Lumens
Runtime	4h
Beam Distance	325m (on land)
Intensity	26400cd
Impact Resistant	1m
Waterproof	under water 150m
Working voltage	3 – 4.5 V
Dimension	209mm(Length) x 35mm(Diameter) x 49mm(Head)
Net weight	313g (excluding battery)
Accessories	O-ring, lanyard, arm strap, silicone grease

**Notice:** Stated data has been measured according to the international flashlight test standards ANSI/NEMA FL1 using three C batteries 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. We recommend to 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.



### BATTERY REPLACEMENT

1. As shown in the figure, insert the battery with the anode side (+) toward the light head.
2. Please do not reverse the battery to avoid damage to the flashlight and battery.
3. Please do not use battery with higher voltage than the 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 flashlight with fresh water 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. For head rotary switch flashlight, we recommend to 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
- ✦ 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 24 months of purchase if problems develop under normal use; if repair is required after 24 months from the date of purchase, we will charge for parts. The total repair fee is dictated by the cost of the replaced materials.

### Warning

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

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