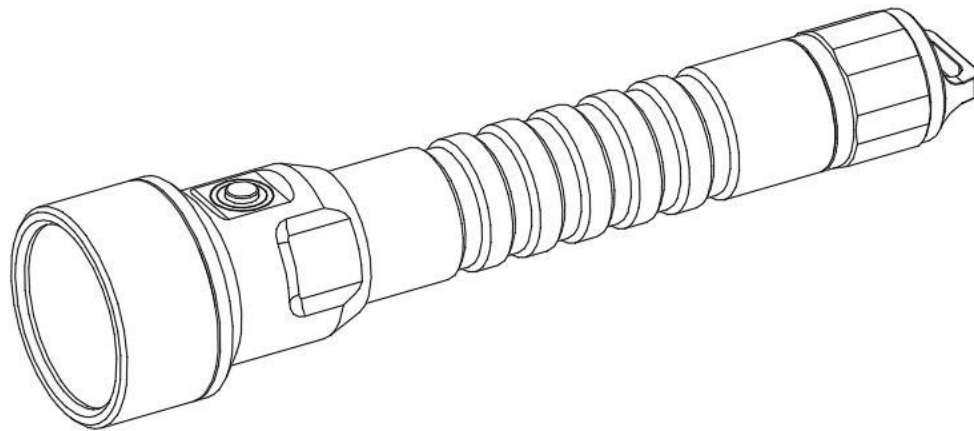


# Sofirn SD09L Manual



Thank you for purchasing Sofirn products.

Contact us@sofirnlight.com or eu@sofirnlight.com if you need assistance.

**NOTE: AUTOMATIC LOCKOUT FEATURE**, when the flashlight turns off after 1 minute, it will automatically enter lockout mode. Double-click the switch to unlock the flashlight.

Compare SD09 with SD09L, SOFIRN diving flashlight SD09L is brighter and can work longer than that of the SD09. For those looking for more power, the SD09 uses two 21700 batteries to deliver a whopping 6800 lumens. It's capable of functioning at depths of up to 100m, making it the ideal companion for deep-sea diving and underwater exploration. With its sleek and durable design, this diving flashlight is built to withstand the toughest of environments.

## ANSI/NEMA FL1 Chart

Mode	Low	Medium	High	Turbo	Strobe
Luminous Flux [lm]	500	1200	3400	6800	3400
Runtime [h]	20	9	3	2	-
Beam Distance [m]	140	235	375	542	-
Peak Intensity [cd]	1433	13783	35100	73417	-

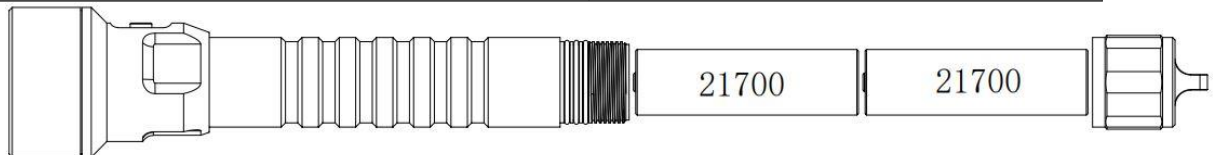
<b>Impact Resistance</b>	1m / 3.28 ft.	
<b>Water Resistance</b>	IPX8	
<b>Notes</b>	The above mentioned parameters are based on tests according to international flashlight testing standards (ANSI/NEMA FL1) using two 4,000mAh 21700 Li-ion batteries in our laboratory. Results may vary with different battery or under different environmental conditions.	

## Specifications

- ❖ Emitter: 3 \* LUMINUS SST-40 LEDs with a lifespan of 50,000 hours
- ❖ Operating voltage: 6V-8.4V
- ❖ Battery options: 2 x 21700 rechargeable lithium-ion batteries
- ❖ Size: 48 mm × 26 mm × 251.1 mm
- ❖ Weight: 221 grams (without battery)
- ❖ Flashlight body: A6061-T6 aluminum alloy.
- ❖ Toughened mineral glass lens
- ❖ Water resistance i.a.w. IPX8
- ❖ Boost driver
- ❖ Standby Current:  $\leq 50\mu\text{A}$ .
- ❖ Mode Memory: the light memorizes the last brightness level used. (Low/Med/High/Turbo).
- ❖ Reverse polarity protection from improper battery installation.
- ❖ Low voltage warning: When the battery voltage is lower than 2.8V, the LED indicator will start to flash red. Please recharge the flashlight or insert new batteries.

## Battery Specifications

Battery Type	Dimension & Quantity
Rechargeable lithium-ion battery	21700 x 2



## Battery Installation

Before first use, please unscrew the tail cap and remove the insulating sticker. If the battery needs to be replaced, please make sure that the positive end of the new battery faces the flashlight's head when you put the battery in.

## Battery Level Indicator

The indicator shows the power status for 5 seconds after turning SD09L on.

**Green** = remaining battery power is 75%-100%.

**Flashing Green** = remaining battery power is 50%-75%.

**Red** = remaining battery power is 25%-50%

**Flashing Red** = critical power (less than 25%), please replace or recharge battery as soon as possible.

## Operation Instructions

**ON/OFF:** Press and hold the switch to turn the light on/off.

**CHANGE BRIGHTNESS LEVEL:** When the flashlight is on, single-click the switch and it will start from the present brightness level, cycle through Low, Medium, High and Turbo modes. The mode is selected when the switch has been released.

**DIRECT ACCESS TO STROBE MODE:** When the flashlight is on/off (not in lock mode), quickly double-click the switch to activate Strobe mode, and single-click again to return to the previously used mode.

**LOCK/UNLOCK:** When the flashlight is off, 2 fast clicks on the switch to lock the flashlight. LED blinks twice to signal that the light is in lock mode. And two clicks on the switch to unlock it returning to previously used mode. You can only access to momentary-low by holding the switch while being locked. LED will flash twice to indicate the flashlight is in lock mode when you try other operations.

## Safety Instructions

- ❖ SD09L is a powerful flashlight. Never point it directly at a person, animal or moving vehicles. Doing so could cause retinal damage. Please do not allow children to play with it. Strobe mode may cause seizure in persons with photosensitive epilepsy.
- ❖ Operating SD09L for a long time in high powered modes will quickly heat up the flashlight. This is normal.
- ❖ Pay close attention to the proper installation of the battery. Always check that the positive end of the battery faces the flashlight's head.
- ❖ Please unscrew the tailcap half a turn to avoid unwanted activation during transport. It also prevents the battery from draining while the flashlight is in standby.
- ❖ Avoid hitting or dropping the flashlight.

## Troubleshooting and Maintenance

- ❖ Disassembling the sealed head can damage the flashlight and voids the warranty.
- ❖ Sofirn, Ltd. recommends using high-quality brand batteries. Damage by battery leakage voids the warranty.
- ❖ Remove the battery if the flashlight will not be used for an extended period of time.
- ❖ To prevent self-discharge or accidental activation during storage or transportation, unscrew the tailcap by half a turn or remove the battery.
- ❖ Every 6 months threads should be wiped with a clean cloth followed by a thin layer of silicone grease.
- ❖ To maintain a proper level of waterproofness, replace worn-out o-rings with an approved spare.
- ❖ Troubleshooting: Clean battery contacts regularly as dirty contacts may impair the performance of the flashlight. If you experience problems (flicker, shine intermittently or failure turn on) the following root causes and solutions should be tried:

Reason A: The battery needs a replacement.

Solution: Replace the battery with an approved type of a fully charged battery.

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

Solutions: Please clean the contact points with a cotton swab soaked in rubbing alcohol.

Reason C: The flashlight will not turn on upon first use.

Solution: Please do not forget to remove the insulation sticker from the battery on first use.

If the above methods do not work please refer to the warranty policy before contacting your authorized distributor.

### **Sofirn Limited:**

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**Please contact us if you have any questions.**

**If your product is defective please contact us for replacement within warranty period.**

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