Sofirn SC31T Manual





Thank you for purchasing Sofirn products. Contact us@sofirnlight.com or eu@sofirnlight.com if you need assistance.

Before using or charging, please: Unscrew the tail cap and remove the insulating paper and screw back again.

Sofirn SC31T is a powerful EDC flashlight for indoor or outdoor use. It uses a single 18650 battery and features a USB-C port for convenient recharging, a high efficiency DTP MCPCB board, a super bright LED with up to 1900 lumens. Furthermore, it uses Sofirn's user interface with both stepped modes and stepless ramping as well as a more advanced temperature regulation (ATR) with smart heat control.

ANSI/NEMA FL1 Chart

Group 1 Stepped Modes	Mode	ECO	Low	Medium	High	Turbo	Moon	Strobe	SOS	Beacon
	Luminous Flux [lm]	10	80	300	800	1900	1	1000	120	1000
	Runtime	187 h	30h	7.5h	3.5h	3h	85 Days	-	-	-
	Beam Distance [m]	21	44	79	121	206	-	-	-	-
	Peak Intensity [cd]	107	475	1575	3658	10633	-	-	-	-
Group 2 Ramping Mode	Mode	Ramping: Moon to Turbo						Strobe	SOS	Beacon
	Luminous Flux [lm]	1 – 1900						1000	120	1000
	Runtime	depending on ramping level						-		-
Impact Resistance		1m / 3.28 ft.								
Water Resistance		IPX-8 (up to 2 meter under water, not for diving)								
Charging Specification		USB-C port, input DC 5V 1A								
Notes		The above mentioned parameters are based on tests according to international flashlight testing standards (ANSI/NEMA FL1) using one 3000mAh 18650 Li-ion battery in our laboratory. Results may vary with different battery or under different environmental conditions. Operation temperature is 0°C - 40°C.								

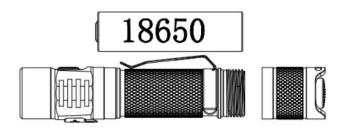
Specifications

- Emitter: 1x high power led with a lifespan of 50,000 hours
- Operating voltage: 2.7V 4.2V
- Battery options: 1x 18650 rechargeable lithium-ion battery
- Dimension: 125.5mm (length) × 24mm (head diameter)
- Weight: 67 grams (without battery)
- Flashlight body: Aerospace grade 6061 grade aluminum alloy, CNC manufactured to hard-anodized to military grade specification type III, anti-abrasive finish to get solid built body, anti-crash geometry and better heat exchange.
- Toughened mineral glass lens
- Water resistance i.a.w. IPX-8 (up to 2 meter under water, not for diving)
- Mode Memory: memorizes the last brightness level used in the general modes (ECO/Low/Med/High)
- Reverse polarity protection from improper battery installation

- Low voltage warning: When the battery voltage is too low, the LED indicator in the side switch will start to flash rapidly. Please recharge the battery.
- Low voltage protection: The flashlight steps down automatically when the voltage is lower than 3.0V. It also turns off automatically if the voltage gets too low. Please recharge the battery.
- Advanced Temperature Regulation (ATR) technology: As the temperature rises, SC31T is programmed to automatically step down and step up the brightness to prevent over-heating.

Battery Specifications

Battery Type	Dimension & Quantity	Nominal Voltage	Compatibility	
Rechargeable li-ion battery	18650x 1	3.7V	Yes, recommended	
Non-Rechargeable battery	CR123A	3V	No	



Getting started

Before using the flashlight, unscrew the tail from the tube, remove the 18650 battery (if supplied) and remove the insulating plates on the battery's poles. Reinsert the battery with the anode side (+) towards the head, then screw the tail back onto the tube. Make sure to fully charge the 18650 battery before first use. Don't use CR123A battery with SC31T. Never charge a non-rechargeable CR123A battery inside SC31T.

Power Indicator

The LED indicator in the side switch shows the power status for 5 seconds after turning SC31T on.

Green = remaining battery power is good.

Red = remaining battery power is poor (less than 30%).

Flashing Red = critical power, replace or recharge battery as soon as possible.

Recharging

SC31T offers a USB-C port for convenient recharging of its 18650 battery. Please connect it with the included USBA to USBC cable and use a USB power adapter (not included) with 5V 1A. While charging the LED power indicator flashes red. Once finished the indicator will turn green to indicate a full battery. If the the indicator flashes Green and Red alternately, please check if insulating paper was removed and if the tail and tube are screwed tightly.

*Never charge a non-rechargeable CR123A inside SC31T.

Operation Instructions

ON/OFF

Tap tail switch for momentary-on. Push down till a click for constant on. Single click turns it off.

Change Brightness or Modes

While **ON**, press and hold to side switch to cycle through stepped modes: Eco-Low – Medium – High (**Stepped mode group**); or stepless ramping from 1LM to 1900LM (**Ramping Group**). 4 fast clicks to toggle between the two groups.

Double click to activate **Turbo** mode. While in Turbo mode, single click to return to the previously used mode

Triple click to activate Strobe, double to cycle through Strobe-SOS-Beacon, another click goes back to previous mode.

While **OFF**, hold side switch, and click tail switch, you have moonlight mode.

Toggle between Stepped mode group and Ramping Group

From **ON**, 4 fast clicks to cycle between both mode groups.

Safety Instructions

- SC31T 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 SC31T 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 is visible when you unscrew the head from the tube before screwing the tube back on.

- Please unscrew the head 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 head from the tube 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 (battery voltage is below 2.7V).

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.

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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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