

sofirn SC21

Sofirn SC21 Mini Flashlight User Manual

Model: SC21 | Brand: sofirn

1. INTRODUCTION

Thank you for choosing the sofirn SC21 Mini Flashlight. This compact and powerful LED flashlight is designed for everyday carry (EDC) and various lighting needs, offering high brightness, convenient Type-C recharging, and durable construction. Please read this manual carefully before use to ensure proper operation and maintenance.



Figure 1: Sofirn SC21 Mini Flashlight (Red)



Figure 2: The compact size of the SC21, highlighting its small and lightweight design with dimensions of 22.5mm diameter and 73mm length, weighing 60g.



Figure 3: Key features of the SC21, including Max Output 1000 LM, Max Range 135 M, IPX8 waterproof rating, Type-C Rechargeable, and 90 High CRI 5000K tint.

2. SAFETY INFORMATION

- Do not point the flashlight directly at eyes. The powerful beam can cause temporary vision impairment.
- Keep out of reach of children.
- Do not disassemble the flashlight head or battery compartment unless instructed. This may damage the device and void the warranty.
- Use only the specified battery type (16340 Lithium Polymer) and charging method.
- Avoid exposing the flashlight to extreme temperatures or direct sunlight for prolonged periods.
- While IPX8 waterproof, this flashlight is not designed for diving. Avoid prolonged submersion beyond specified depth.

3. WHAT'S IN THE BOX

- Sofirn SC21 Mini Flashlight (Red)
- 16340 Lithium Polymer Battery (pre-installed)
- USB-A to USB-C Charging Cable
- Pocket Clip (pre-installed)
- Lanyard
- Spare O-rings
- User Manual

4. SETUP

4.1 Battery Installation

The 16340 Lithium Polymer battery is typically pre-installed. If not, unscrew the tail cap, insert the battery with the positive (+) end facing towards the flashlight head, and screw the tail cap back on securely.

4.2 Charging

The SC21 features a built-in USB Type-C charging port for convenient recharging. A 5V 1A adapter (not included) is recommended.

1. Locate the Type-C charging port on the flashlight body, usually covered by a rubber flap.
2. Open the rubber flap and insert the provided USB-A to USB-C charging cable.
3. Connect the USB-A end of the cable to a compatible USB power source (e.g., wall adapter, power bank, computer USB port).
4. The indicator LED on the switch will flash **RED** while charging.
5. Once fully charged, the indicator LED will turn solid **GREEN**.
6. Charging typically takes approximately 1 hour.
7. Close the rubber flap securely after charging to maintain water resistance.



Figure 4: The SC21 flashlight connected to a power source via its Type-C USB port for recharging.

5. OPERATING INSTRUCTIONS

5.1 Basic Operation

- **Turn On/Off:** Single click the side switch to turn the flashlight ON or OFF.
- **Change Brightness Levels (Stepped Ramping):** When the flashlight is ON, press and hold the side switch to cycle through brightness levels: Moonlight → Low → Medium → High. Release the switch to select the desired level.
- **Memory Function:** The flashlight will remember the last used brightness level (except for Moonlight, Turbo, Strobe, SOS, and Beacon modes) and turn on at that level.

5.2 Advanced Modes

- **Moonlight Mode:** When the flashlight is OFF, press and hold the side switch for 1 second to activate Moonlight mode (1 lumen).
- **Turbo Mode:** Double-click the side switch from any state (ON or OFF) to activate Turbo mode (1000 lumens). Double-click again to return to the previous mode.
- **Strobe/SOS/Beacon:** Triple-click the side switch from any state to activate Strobe mode. Triple-click

again to cycle through SOS and Beacon modes. Single click to turn off.

- **Lockout Function:** From OFF, four quick clicks of the side switch will activate the electronic lockout. The main LED will flash once to confirm. To unlock, four quick clicks again. When locked, holding the switch will activate Moonlight mode temporarily.

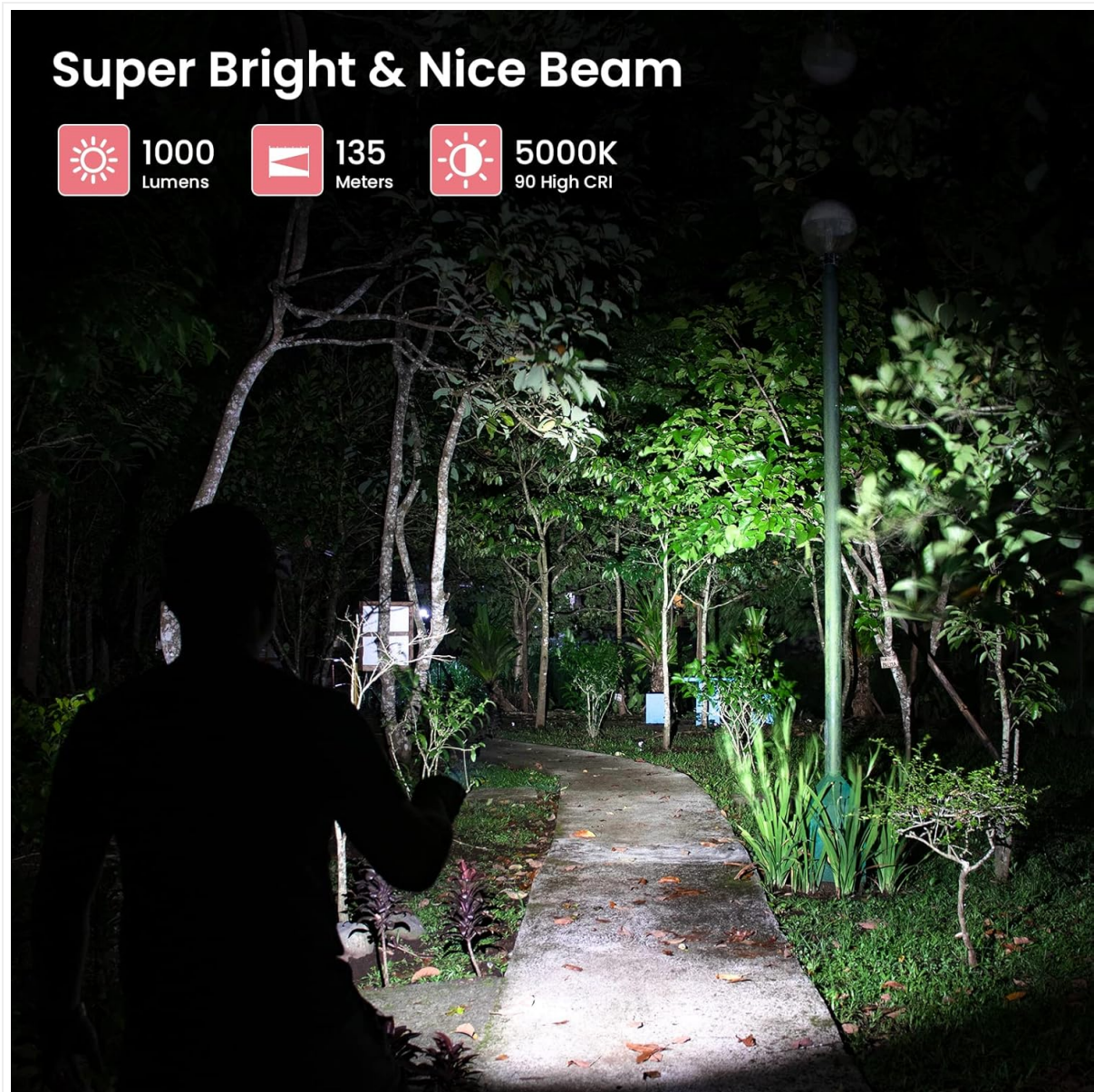


Figure 5: The SC21 providing a super bright and nice beam, illuminating a path up to 135 meters with 1000 lumens and a 5000K 90 High CRI tint.



Figure 6: Visual comparison demonstrating the superior color rendering (90 High CRI) of the 5000K tint, making colors appear more natural and vibrant compared to lower CRI lights.

5.3 Magnetic Tail Cap & Clip

The SC21 is equipped with a strong magnetic tail cap, allowing it to be attached to ferrous metal surfaces for hands-free lighting. The dual-way pocket clip provides versatile carrying options, such as clipping to a pocket, belt, or hat brim.



Magnetic tail cap



Dual-way clip



Figure 7: Demonstrating the utility of the magnetic tail cap for hands-free use, such as attaching to a car hood, and the dual-way clip for securing to a hat.

6. MAINTENANCE

- **Cleaning:** Clean the flashlight body with a soft, damp cloth. For optical surfaces, use a lens cleaning cloth.
- **Lubrication:** Apply a thin layer of silicone grease to the O-rings periodically to maintain water resistance.
- **Battery Care:** Recharge the battery regularly, even if not in frequent use, to prolong its lifespan. Avoid fully discharging the battery.
- **Storage:** If storing the flashlight for an extended period, remove the battery to prevent potential leakage. Store in a cool, dry place.



Figure 8: The SC21's IPX8 waterproof rating ensures reliable performance even in rainy conditions.



Figure 9: The robust construction of the SC21 provides good impact resistance, designed to withstand accidental drops.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Flashlight does not turn on.	Battery is low or depleted. Battery not inserted correctly. Flashlight is in lockout mode.	Recharge the battery. Ensure battery is inserted with positive (+) end towards the head. Perform 4 quick clicks to unlock.
Light flickers or turns off unexpectedly.	Low battery. Loose tail cap. Dirty contacts.	Recharge the battery. Tighten the tail cap securely. Clean battery and flashlight contacts with a clean cloth.
Cannot change brightness levels.	Switch not held long enough. Flashlight in a special mode (e.g., Strobe).	Press and hold the switch to ramp brightness. Single click to exit special modes, then try again.

8. SPECIFICATIONS

Feature	Specification
Model	SC21
Light Source	LED (LH351D)
Max Brightness	1000 Lumens
Max Beam Distance	135 Meters
Color Temperature	5000K (High CRI)
Material	Aluminum
Battery Type	1 x 16340 Lithium Polymer (included)
Charging Port	USB Type-C
Water Resistance	IPX8 (2 meters underwater, not for diving)
Dimensions	2.87"D x 0.89"W x 0.89"H (73mm x 22.5mm x 22.5mm)
Weight	2.29 ounces (65 Grams)
Special Features	Rechargeable, Magnetic Tail Cap, Pocket Clip

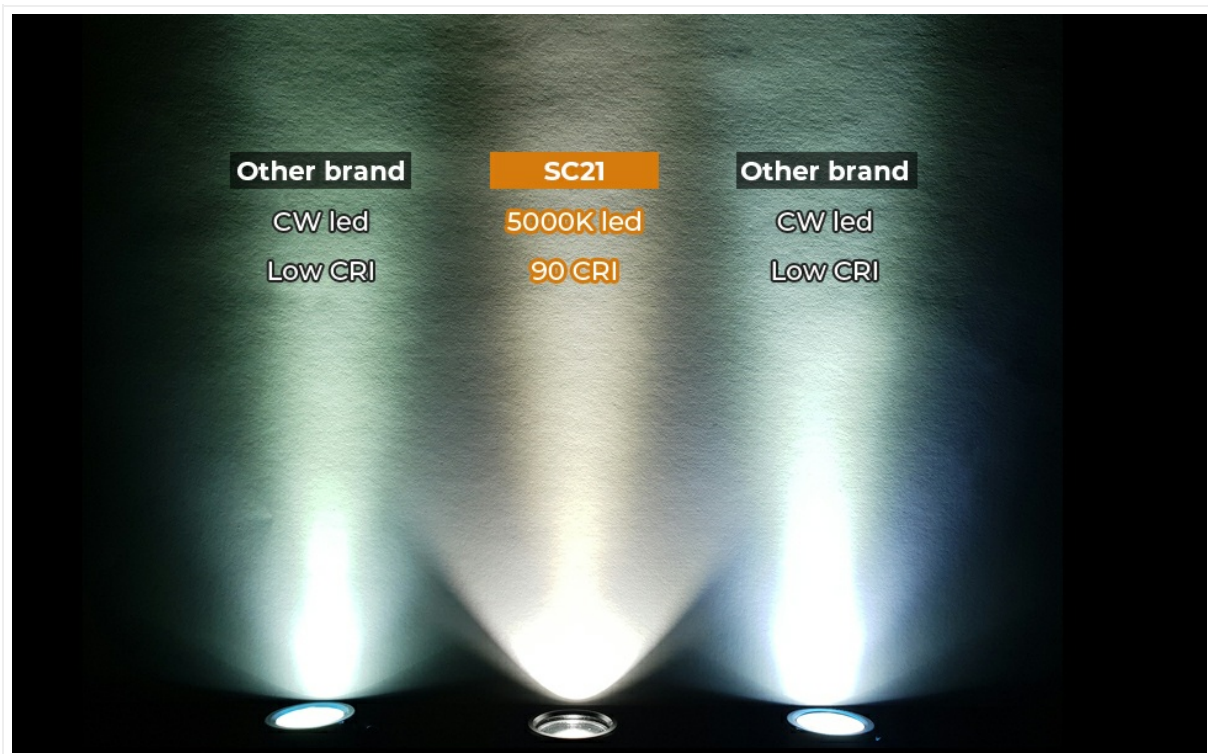


Figure 10: Detailed performance parameters for the SC21 across various modes (Turbo, High, Medium, Low, Moonlight, Strobe, SOS, Beacon), including luminous flux, runtime, beam distance, and peak intensity.

9. WARRANTY AND SUPPORT

Sofirn products are manufactured to high-quality standards. For warranty information, technical support, or any inquiries regarding your SC21 Mini Flashlight, please refer to the official Sofirn website or contact their customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.

Related Documents - SC21

ST10 is a compact and versatile EDC flashlight featuring a white main light, white side light, and red side light. It comes with a magnetic tail cap and magnetic clip for hands-free use in various scenarios. For specific features, consult the user manual and safety guide for every variation.

Main Light					
Model	Beam	Range	Power	Mode	Notes
ANSI/IESNA FL1 Chart	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Side White Light					
Model	Beam	Range	Power	Mode	Notes
ANSI/IESNA FL1 Chart	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Side Red Light					
Model	Beam	Range	Power	Mode	Notes
ANSI/IESNA FL1 Chart	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W

Sofirn ST10 Compact EDC Flashlight: Features, Specifications, and Operation

Explore the Sofirn ST10, a versatile EDC flashlight with white main, white side, and red side lights. Learn about its specifications, general operation, battery indicator, and safety warnings.

SOFIRN IF23 PRO MANUAL

CE, RoHS, REACH

Sofirn IF23 PRO LED Flashlight User Manual

Comprehensive user manual for the Sofirn IF23 PRO, an upgraded, powerful, and rechargeable LED flashlight. Includes specifications, operation instructions, battery indicators, and contact information.

Sofirn SF15 Manual

CE, RoHS, REACH

Thank you for purchasing this flashlight product. Please read the user manual carefully before using it. It contains important information about the flashlight's features, operation, safety, and maintenance. It also provides technical specifications and performance data. Please keep this manual for future reference.

The Sofirn SF15 is an advanced, multi-functional, and powerful pen flashlight with dual white/UV LED modes. The flashlight features a compact design, ergonomic grip, and a magnetic tail cap. The flashlight is powered by a rechargeable battery. The flashlight is designed for use in various scenarios, including outdoor activities, emergency situations, and professional work. The flashlight is also suitable for use as a keychain or a pocket light. The flashlight is made of high-quality materials and is built to last. The flashlight is also available in different colors and finishes. Please refer to the user manual for more information.

ANSI/IESNA FL1 Chart

Main Light		Side Light		Power	
Model	Beam	Range	Power	Mode	Notes
ANSI/IESNA FL1 Chart	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W

Sofirn SF15 Pen Flashlight User Manual: Operation, Specs & Safety

Official user manual for the Sofirn SF15 pen flashlight. Details include dual white/UV LED modes, 300-lumen output, ANSI FL1 performance chart, specifications, battery installation, operation instructions, safety warnings, and troubleshooting tips.

Sofirn SC28 Manual

CE, RoHS, REACH

Thank you for purchasing this flashlight product. Please read the user manual carefully before using it. It contains important information about the flashlight's features, operation, safety, and maintenance. It also provides technical specifications and performance data. Please keep this manual for future reference.

The Sofirn SC28 is a compact and powerful EDC flashlight with a rechargeable battery. The flashlight features a compact design, ergonomic grip, and a magnetic tail cap. The flashlight is powered by a rechargeable battery. The flashlight is designed for use in various scenarios, including outdoor activities, emergency situations, and professional work. The flashlight is also suitable for use as a keychain or a pocket light. The flashlight is made of high-quality materials and is built to last. The flashlight is also available in different colors and finishes. Please refer to the user manual for more information.

ANSI/IESNA FL1 Chart

Main Light		Side Light		Power	
Model	Beam	Range	Power	Mode	Notes
ANSI/IESNA FL1 Chart	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W

Sofirn SC28 Rechargeable EDC Flashlight User Manual

Comprehensive user manual for the Sofirn SC28 rechargeable EDC flashlight, covering specifications, operation, safety, and troubleshooting. Features 2800 lumens output and ANSI/NEMA FL1 performance data.

Sofirn SC32 Manual

CE, RoHS, REACH

Thank you for purchasing this flashlight product. Please read the user manual carefully before using it. It contains important information about the flashlight's features, operation, safety, and maintenance. It also provides technical specifications and performance data. Please keep this manual for future reference.

The Sofirn SC32 is a compact and powerful EDC flashlight with a rechargeable battery. The flashlight features a compact design, ergonomic grip, and a magnetic tail cap. The flashlight is powered by a rechargeable battery. The flashlight is designed for use in various scenarios, including outdoor activities, emergency situations, and professional work. The flashlight is also suitable for use as a keychain or a pocket light. The flashlight is made of high-quality materials and is built to last. The flashlight is also available in different colors and finishes. Please refer to the user manual for more information.

ANSI/IESNA FL1 Chart

Main Light		Side Light		Power	
Model	Beam	Range	Power	Mode	Notes
ANSI/IESNA FL1 Chart	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W

Sofirn SC32 Flashlight User Manual: Features, Operation, and Specifications

Comprehensive user manual for the Sofirn SC32 flashlight, detailing its features, ANSI/NEMA FL1 performance, operation modes, charging, safety instructions, and troubleshooting. Learn how to use your 2000-lumen LED flashlight.

The SR23 is a high-performance flood flashlight featuring a powerful white light, an ultra-bright red light, and a powerful UV light. The flashlight is designed for use in various scenarios, including outdoor activities, emergency situations, and professional work. The flashlight is also suitable for use as a keychain or a pocket light. The flashlight is made of high-quality materials and is built to last. The flashlight is also available in different colors and finishes. Please refer to the user manual for more information.

ANSI/IESNA FL1 Chart

Main Light		Side Light		Power	
Model	Beam	Range	Power	Mode	Notes
ANSI/IESNA FL1 Chart	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W
Beam	10m	100m	100W	100W	100W

Side Light		Power	
Model	Beam	Power	Notes
ANSI/IESNA FL1 Chart	10m	100W	100W
Beam	10m	100W	100W
Beam	10m	100W	100W
Beam	10m	100W	100W
Beam	10m	100W	100W

UV Light		Power	
Model	Beam	Power	Notes
ANSI/IESNA FL1 Chart	10m	100W	100W
Beam	10m	100W	100W
Beam	10m	100W	100W
Beam	10m	100W	100W
Beam	10m	100W	100W

Sofirn SR23 High-Performance Floodlight: Features, Specifications, and Operation

Detailed overview of the Sofirn SR23 flashlight, including its powerful white and UV light modes, ANSI/NEMA FL1 performance data, technical specifications, battery indicators, charging information, and important safety warnings.

