sofirn C8L-6500K-Kit

Sofirn C8L Tactical Flashlight User Manual

Model: C8L-6500K-Kit (C8-001)

Brand: Sofirn

1. Introduction

The Sofirn C8L is a high-performance rechargeable tactical flashlight designed for various applications including emergency situations, heavy-duty tasks, search operations, and general outdoor use. This manual provides detailed instructions for the safe and effective operation and maintenance of your C8L flashlight.



Image 1.1: The Sofirn C8L Tactical Flashlight, showcasing its robust design and textured grip.



Image 1.2: Illustration of the Sofirn C8L's maximum output of 3100 lumens and a beam range of 531 meters, illuminating a distant landscape at night.

2. PACKAGE CONTENTS

Please verify that all items are present in your package:

- 1x Sofirn C8L Flashlight
- 1x USB Charging Cable (Type-C)
- 1x Lithium Ion Battery (included inside the flashlight)
- 1x User Manual

3. SETUP

3.1 Battery Installation

The Sofirn C8L flashlight requires one 18650 or 21700 Lithium Ion battery. The included battery is typically pre-installed. To install or replace the battery:

- 1. Unscrew the tail cap of the flashlight.
- 2. Insert the battery with the positive (+) terminal facing towards the head of the flashlight.
- 3. Screw the tail cap back on securely.

3.2 Initial Charging

Before first use, it is recommended to fully charge the battery. The C8L features a convenient USB-C charging port.

- 1. Locate the USB-C charging port on the side of the flashlight, usually covered by a rubber flap.
- 2. Open the rubber flap to expose the port.
- 3. Connect the provided USB-C charging cable to the flashlight and plug the other end into a compatible USB power source (e.g., wall adapter, power bank, computer USB port).
- 4. The indicator light on the side switch will show the charging status: Red indicates charging, Green indicates fully charged.
- 5. A full charge typically takes approximately 3 hours at a maximum charging rate of 2.5A.
- 6. Once charging is complete, disconnect the cable and securely close the rubber flap to maintain water resistance.

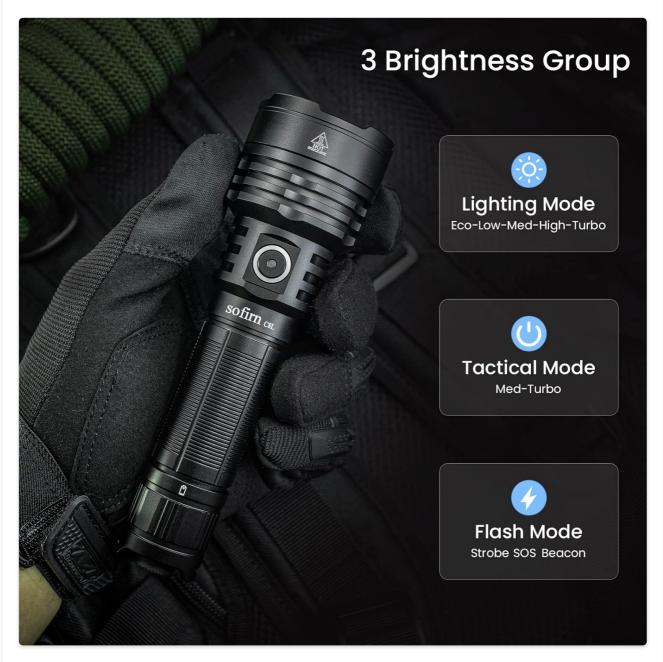


Image 3.1: The Sofirn C8L flashlight connected via its USB-C port for charging, with an indicator light showing charging status.

4. OPERATING INSTRUCTIONS

The Sofirn C8L features a dual-switch interface for intuitive control: a tactical tail switch and a side switch.

4.1 Switch Functions

· Tactical Tail Switch:

- Partially press for momentary-on (light turns on while pressed).
- $\circ~$ Fully press until it clicks to turn the flashlight ON or OFF.

Side Switch:

- When the flashlight is ON, hold the side switch to cycle through brightness settings (Eco, Low, Medium, High, Turbo).
- Single click to change modes within a brightness group (e.g., from Lighting Mode to Tactical Mode).



Image 4.1: Close-up view highlighting the side switch and the tactical tail switch of the Sofirn C8L flashlight.

4.2 Brightness Modes and Groups

The C8L offers multiple brightness levels and three distinct mode groups:

- Lighting Mode: Cycles through Eco, Low, Medium, High, Turbo.
- Tactical Mode: Offers Medium and Turbo for quick access to powerful illumination.
- Flash Mode: Includes Strobe, SOS, and Beacon for signaling or emergency use.

The flashlight features mode memory, meaning it will turn on in the last used brightness level (except for Strobe, SOS, and Beacon modes).



Image 4.2: Visual representation of the three brightness groups: Lighting Mode, Tactical Mode, and Flash Mode, with their respective settings.



Image 4.3: Depiction of various brightness levels (Eco, Low, Medium, High, Turbo) and special modes (Strobe, SOS, Beacon) with their corresponding lumen outputs.

4.3 Battery Level Indicator

The side switch incorporates a battery level indicator to keep you informed of the remaining power:

Constant Green: Power 70-100%
Flashing Green: Power 40-70%
Constant Red: Power 10-40%

• Flashing Red: Power <10% (recharge immediately)



Image 4.4: Visual guide to the battery level indicator colors on the side switch, showing constant green, flashing green, constant red, and flashing red states.

5. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your Sofirn C8L flashlight.

- **Cleaning:** Wipe the flashlight body with a clean, soft cloth. For stubborn dirt, use a slightly damp cloth. Avoid abrasive cleaners.
- **Lubrication:** Periodically apply silicone grease to the O-rings and screw threads to maintain water resistance and smooth operation.
- **Battery Care:** Recharge the battery regularly, especially if the flashlight will not be used for an extended period. Store the flashlight with a partially charged battery (around 50%) if storing for several months.
- Water Resistance: The C8L is rated IPX8 water resistant, meaning it can be submerged up to 2 meters. Ensure all seals (like the USB-C port cover and tail cap) are properly closed and tightened before exposing to water. This rating is for incidental submersion, not for diving.
- **Durability:** Constructed from aerospace-grade aluminum, the C8L is designed to resist scratches, abrasion, and corrosion. Avoid dropping the flashlight from significant heights or subjecting it to extreme impacts.



Image 5.1: The Sofirn C8L flashlight shown in a wet environment, illustrating its IPX8 waterproof rating.



Image 5.2: The Sofirn C8L flashlight positioned under a vehicle tire, demonstrating its robust construction and resistance to pressure.

6. TROUBLESHOOTING

If you encounter issues with your Sofirn C8L flashlight, please refer to the following common problems and solutions:

· Flashlight does not turn on:

- Ensure the battery is correctly inserted with the positive (+) terminal facing the head.
- Check if the battery is charged. Recharge if necessary.
- Tighten the tail cap and head assembly securely. A loose connection can prevent operation.
- Clean the battery contacts and flashlight contacts with a clean cloth.

· Light output is dim or flickers:

- The battery may be low. Recharge the battery.
- Ensure the battery is fully inserted and contacts are clean.
- Check for any debris in the head or tail cap threads.

• Flashlight gets hot during use:

- High brightness modes (especially Turbo) generate significant heat. This is normal. The C8L features Advanced Temperature Regulation (ATR) technology to automatically adjust output to prevent overheating.
- If the flashlight becomes uncomfortably hot, reduce the brightness level.

• USB-C charging not working:

- Ensure the USB-C cable is fully inserted into both the flashlight and the power source.
- Try a different USB-C cable or power adapter.
- Check if the charging port is free of debris.

7. SPECIFICATIONS

Detailed technical specifications for the Sofirn C8L Tactical Flashlight:

Image 7.1: A comprehensive table detailing the performance metrics of the Sofirn C8L across various modes, including lumens, beam distance, candela, and runtime.

Feature	Specification	
Model	C8L-6500K-Kit (C8-001)	
Light Source Type	LED	
White Brightness	Up to 3100 Lumens	
Max Beam Distance	Up to 531 meters	
Power Source	Battery Powered (1x Lithium Ion battery)	
Battery Cell Composition	Lithium Ion	
Rechargeable	Yes, USB-C (5V/2.5A)	
Material	Aerospace Grade Aluminum	
Water Resistance Level	IPX8 (up to 2 meters underwater, not for diving)	
Product Dimensions	7"D x 2.5"W x 2.5"H (approx. 17.8 cm x 6.35 cm x 6.35 cm)	
Item Weight	14.08 ounces (approx. 399 grams)	
Color Temperature	6500 Kelvin	
Special Features	Portable, Rechargeable, Advanced Temperature Regulation (ATR), Mode Memory	



Image 7.2: A close-up view of the LED emitter and reflector inside the head of the Sofirn C8L flashlight.



Image 7.3: Illustration comparing the throw beam angle (26 degrees) and flood beam angle (82 degrees) of the Sofirn C8L flashlight.

8. WARRANTY AND SUPPORT

Sofirn products are designed for reliability and performance. For any questions, concerns, or warranty claims, please contact Sofirn customer service. The product package includes a manual and helpful customer service information.

Please retain your proof of purchase for any warranty-related inquiries.

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Related Documents



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.

Sofirn SC28 Manu



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.

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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.



Sofirn SP35T Tactical Flashlight Manual: Features, Specs, and Operation

Comprehensive user manual for the Sofirn SP35T tactical flashlight. Learn about its 3800-lumen output, USB-C recharging, operation modes, safety guidelines, and troubleshooting. Includes ANSI/NEMA FL1 chart and specifications.