Sofirn SC21 Pro Manual

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

Sofirn SC21 Pro is the upgraded version of SC21. It features the latest Anduril 2.0 UI, which is different from its predecessor. SC21 Pro is a powerful EDC flashlight for indoor or outdoor use. It uses a single 16340 battery and features a USB-C port for convenient charging, super bright LH351D LED with up to 1100 lumens to meet your different lighting uses.

ANSI/NEMA FL1 Chart

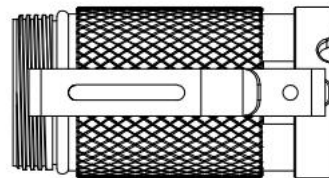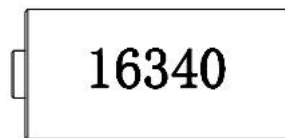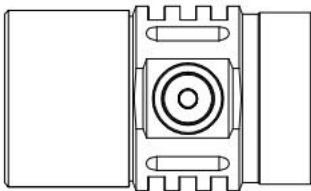| Mode	A	B	C	D	E	F	G	H
Luminous Flux [lm]	1100lm	600lm	450lm	250lm	150lm	80lm	25lm	5lm
Runtime	1h	54min	52min	1h18min	1h54min	3h51min	9h52min	-
Beam Distance [m]	131	99	82	64	51	35	21	10
Peak Intensity [cd]	4267	2450	1667	1025	642	308	116	23
Impact Resistance	1m / 3.28 ft.							
Water Resistance	(up 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 700mAh 16340 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 LH351D with a lifespan of 50,000 hours
- ❖ Operating voltage: 2.7V – 4.2V
- ❖ Driver: buck driver
- ❖ Battery options: 1x 16340 rechargeable lithium-ion battery
- ❖ Dimension: 73mm (length) × 22.5mm (head diameter)
- ❖ Weight: 36 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
- ❖ Mode Memory: memorizes the last brightness level used
- ❖ 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, SC21 Pro 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	16340 x 1	3.7V	Yes, recommended

Getting started

Before using the flashlight, unscrew the head from the tube, remove the 16340 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 head back onto the tube. Make sure to fully charge the 16340 battery before first use.

Power Indicator

The LED indicator in the side switch shows the power status for 5 seconds after turning SC21 Pro 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

SC21 Pro offers a USB-C port for convenient recharging of its 16340 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.

Operation Instructions

Quick Start

After putting a battery in the light and tightening the parts together, the light should quickly blink once to confirm it has power and is now operational. After that, basic usage is simple:

Click to turn the light on or another click to turn it off.

- Hold the button to change brightness.

- Release and hold again to change brightness the other way.

That is all the user needs to know for basic use, but there are many more modes and features available for people who want more.

Before reading the rest of this manual, it is recommended that users look at the Anduril UI diagram(s), which should be provided along with the flashlight.
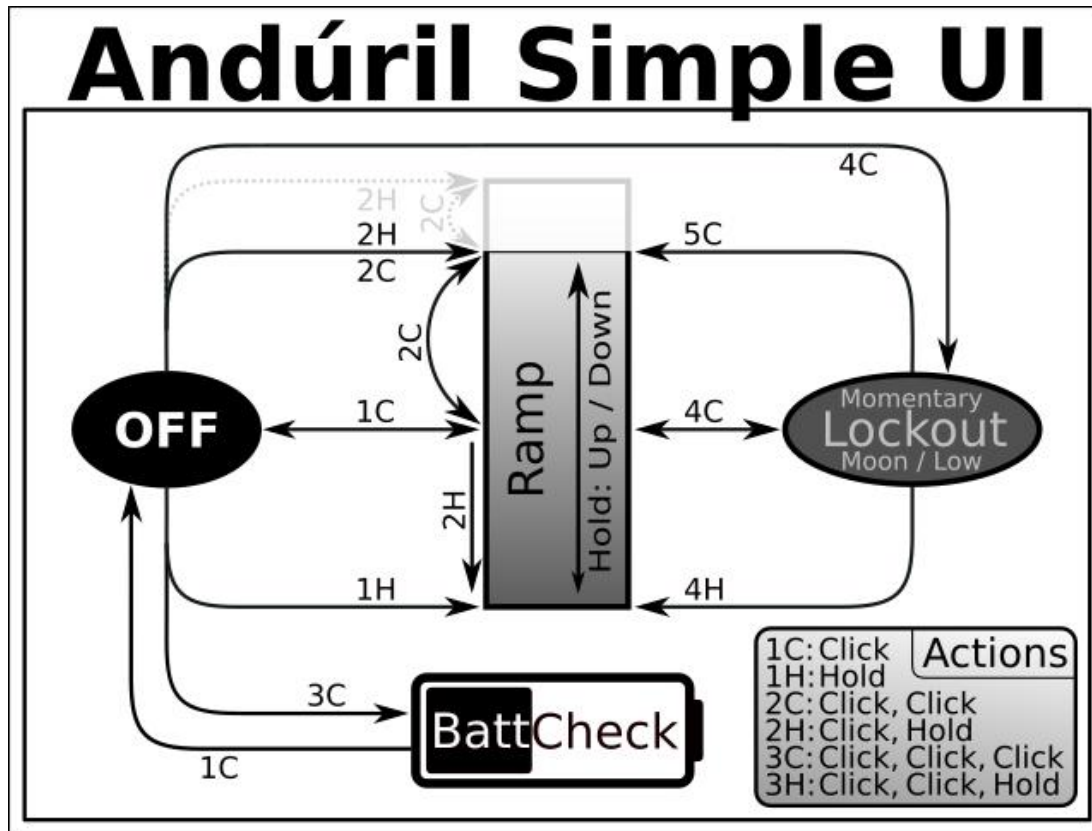
Button presses

Button presses are abbreviated using a simple notation:

- 1C: One click.   Press and then quickly release the button.

- 1H: Hold.   Press the button, but keep holding it.

- 2C: Two clicks.   Press and release quickly, twice.

- 2H: Click, hold.   Click two times, but hold the second press.

- 3C: Three clicks.   Press and release quickly, three times.

- 3H: Click, click, hold.   Click three times, but hold the final press.

The same pattern is used with higher numbers too. For example, 10C means ten clicks...   and 10H

means ten clicks but hold the final press.

Simple UI Diagram   Not everything is covered in the diagram, please read the text.

Simple UI

By default, the light uses a simple UI. This is useful if you lend the light to someone else, or if you just don't want to bother with any crazy disco modes.

Simple UI has all the basic functions needed to work as a flashlight, but the minimum and

maximum brightness are limited to make it safer, and any complex or advanced functions are blocked.

Functions available in Simple UI include:

  - 1C: On / off

  - 1H: Ramp up (or down, if button was released less than a second ago)

  - 2H: If light is on : ramp down

     If light is off: momentary high mode

  - 2C: Double click to go to / from highest safe level

  - 3C: Toggle between SMOOTH RAMPING and STEPPED RAMPING (while light is on)

  - 4C: Lockout mode.

Some other modes and functions are available too. When the light is off, these are the options:

- 3C: Battery check mode.   (displays voltage once, then turns off)

- 4C: Lockout mode.

- 10H: Switch to Advanced UI.

- 15C or more: Version check.

In Lockout mode with Simple UI, there are a few functions:

- 1H: Momentary moon

- 2H: Momentary low

- 4C: Unlock and turn on

- 4H: Unlock and turn on at low level

- 5C: Unlock and turn on at high level

To **change between Simple UI and Advanced UI**, turn the light off and then do one of these:

In Simple UI:

- 10H: Go to Advanced UI.

In Advanced UI:

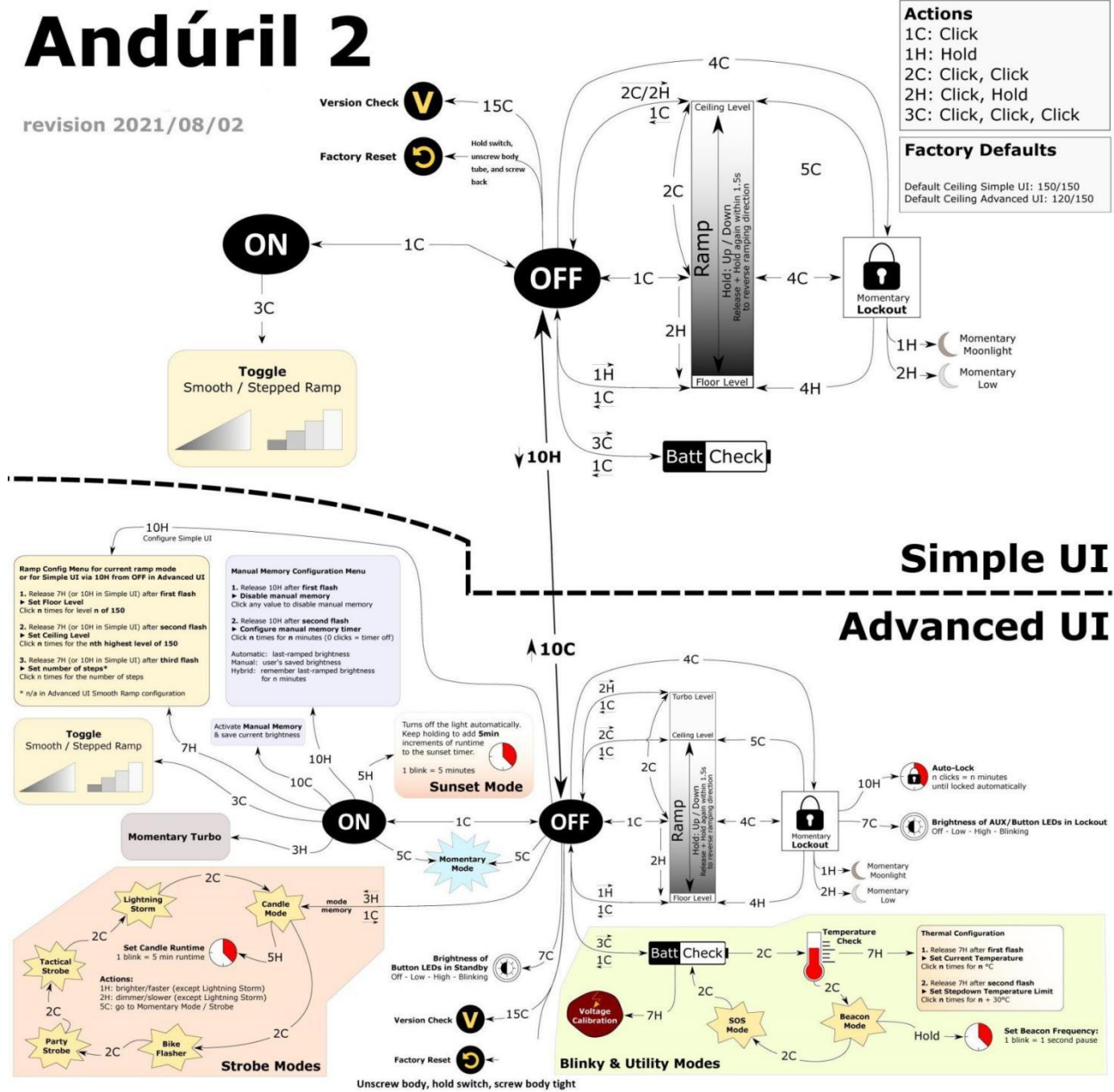- 10C: Go to Simple UI.

- 10H: Configure Simple UI.

If you get lost, or if you want to auto-calibrate the temperature sensor, do a **Factory Reset**. The process for this is:

- Loosen body tube

- Hold button

- Tighten body tube

- Keep holding button for about 4s

The light should flicker while getting brighter, then briefly burst to full power. Hold until it reaches full power to do a reset, or let go of the button early to abort.

Advanced UI

Advanced UI has all the advanced functions which are fun to play with but also hard to learn. Please refer the UI diagram below. Please ask us for pdf file so you can ready easily. We can also send video link to show how to play with Anduril2

Safety Instructions

- ❖ SC21 Pro 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 SC21 Pro 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.

Sofirn Limited:

Tel: +86-755-23440047   Fax: +86-755-23440141
Web: www.sofirnlight.com
E-mail: us@sofirnlight.com   eu@sofirnlight.com

Please contact us if you have any questions.

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

Manufacturer: Shenzhenshi Jinba Technology Co.,Ltd
Address: 1/F to 9/F, 1st Building, NO.110 Tenglong Industrial Center, Guanlan Street, Longhua New District, Shenzhen 518000, China