

SWIT®

CIMO-98S/160S/200S/290S

Rechargeable Li-ion Battery

Ver:C

USER MANUAL

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Thank you for choosing SWIT products, please read this user manual before using and keep it properly for future reference.

⚠ SAFETY IN STRUCTIONS

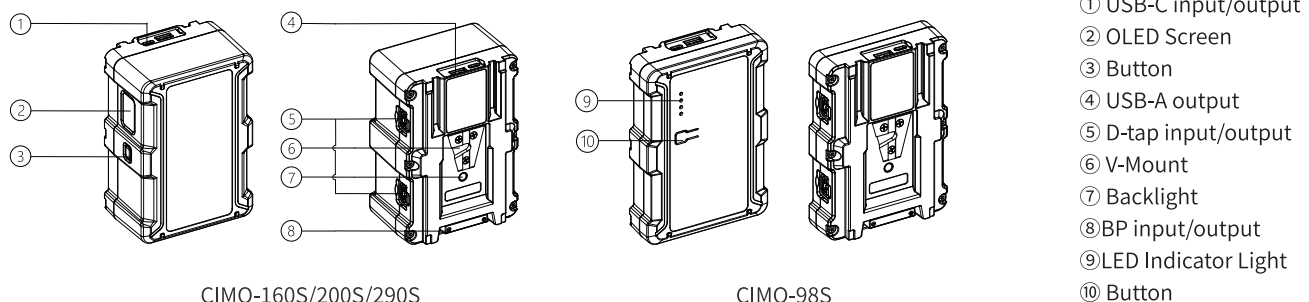
Keep the following precautions in mind to avoid fire and other safety hazards!

- Make sure the battery is fully charged before use.
- When the battery is not in use, remove it from any equipment.
- Do not short-circuit the terminals.
- Use the battery only under proper environmental conditions: 14°F to 122°F (-10°C to 50°C) and with arelative humidity (RH) less than 85%.
- Storage environment: short-term (one month) -4°F to 122°F (-20°C to 50°C) and RH 45% to 75%; medium-term(three months) -4°F to 104°F (-20°C to 40°C) and RH 45%to 75%; long-term (one year) 23°F to 86°F (-5°C to 30°C)and RH 45% to 75% .
- The battery should be charged up to 50% for long-termstorage.
- Keep the battery out of fire,heat,and high pressure.
- Do not expose the battery to rain or moisture.
- Do not drop the battery or expose it to strong shocks.
- Keep this unit away from water and any flammable gases or liquids.
- Keep this product away from children.
- Store the battery in a cool, dry place.

Features

- Versatile Interface Design: Equipped with built-in USB-C, D-TAP, USB-A, DC, and BP interfaces to fulfill power supply requirements for cameras, film and television lights, mobile phones, laptops, and other devices. The USB-C, D-TAP, and BP ports are bidirectional, offering flexibility in charging the battery from any interface.
- CIMO-160S/200S/290Sboasts a high-definition OLED screen that accurately reflects the battery's current status. This screen is designed with a sunken feature, effectively safeguarding it from damage caused by accidental drops or impacts.
- Constructed with high impact and flame retardant materials, the shell, coupled with its robust structural design, fulfills all safety standards across various aspects.
- The internal bracket securely holds the core group in place, completely isolating it from the circuit board. This innovative design offers greater safety and reliability compared to traditional solutions.
- Utilizing high-quality lithium ternary cells with high energy density, these batteries undergo rigorous screening and pairing processes. Additionally, an internal self-balancing circuit enhances reliability and durability.
- Equipped with a dual-level multi-protection circuit, it provides comprehensive safety protection. The first level comprises temperature, voltage, and current restoration capabilities, while the second level offers non-restorable protection against temperature, voltage, and current, effectively mitigating potential hazards in case of first-level protection failure.
- An ultra-low power mode is automatically activated after ten days of inactivity, preserving battery life.

Appearance



Recharge

- Supports charging with a SWIT V-mount charger or a suitable USB-C charger. You are recommended to use the USB-C charger with corresponding specifications to prevent not being able to charge.
- Charging Status Indicator: During CIMO-160S/200S/290S charging, the icon  is displayed to indicate the charging status, disappearing once the charging process is complete. During CIMO-98S charging, the battery indicator continuously shows the battery level (25%, 50%, 75%, 100%), and the indicator goes out when the charging is finished.
- USB-C Connection Notification: Upon plugging in the USB-C cable, the icon  appears, signaling the connection status.
- Optimal Charging Temperature: It is recommended to charge the battery within an optimal temperature range of 10°C to 30°C. The battery can be charged within a maximum allowable range of 0°C to 40°C for extended compatibility.

Discharge

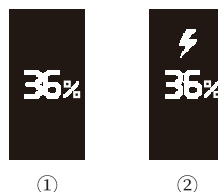
- During discharge, the OLED screen of the CIMO-160S/200S/290S accurately displays the remaining battery power and estimated duration, providing users with real-time information.
- During the discharge process of the CIMO-98S, when the battery power reaches below 10%, the 25% indicator will flash, clearly indicating a low battery level. It is advisable to replace the battery promptly to avoid any interruption.
- To activate the USB-A port, simply press the designated button. The corresponding icon  will appear on the display, indicating its activation. If the port is not used within 10 seconds after activation, it will automatically turn off to conserve power.
- Upon insertion of a device, the USB-C port icon  will appear on the display, providing visual confirmation of a successful connection..
- Temperature Considerations: It is important to note that at lower temperatures, the battery discharge time may be reduced. Additionally, under heavy loads, automatic cutoff may occur to protect the battery. The batteries are designed to operate within a temperature range of -20°C to 50°C, with optimal performance achieved between -10°C and 40°C. It is recommended to use the batteries within this optimal range to ensure maximum efficiency and safety.

Display & Alarms

CIMO-160S/200S/290S:

1. Battery resting or charging

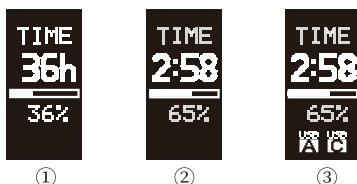
- ① Percentage of electricity;
- ② The icon  Lights up to indicate charging.



2. Discharging

To toggle between displaying the battery percentage and remaining runtime, simply touch or press the button:

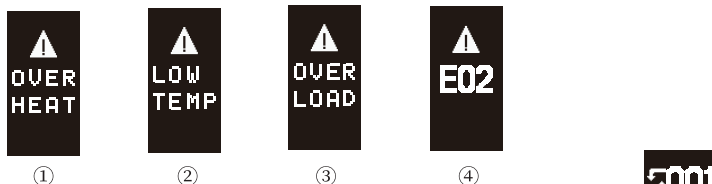
- ① For runtimes exceeding 10 hours, the duration and battery charge percentage will be shown in hourly increments.
- ② For runtimes up to 10 hours, the display will range from 0:00 to 9:59 along with the battery percentage.
- ③ When either the USB-A or USB-C port is in use, the corresponding interface icon will automatically appear on the display.



3. Alarm Code

The icon  shows Battery status abnormality, during the time touch or press the key to display the alarm code:

- ① Battery over-temperature (ot), please leave it at room temperature and wait for its own recovery;
- ② Battery low temperature (lt), please leave it at room temperature and wait for its own recovery;
- ③ Battery overcurrent (oc), please unplug the battery and make sure there is no foreign matter between the electrodes, it can be recovered after 20s.
- ④ E01 to E06: An irrecoverable error has occurred in the battery, please contact the manufacturer for repair, do not disassemble it by yourself;
- ⑤ Automatically enters ultra-low power mode after ten days of inactivity, press button to resume normal use.



4. Battery Health

Long press button to display battery health, Battery cycle times and full charge capacity.

CIMO-98S:

- The red LED indicators from E to F represent 25%, 50%, 75% and 90% of the battery charge in the discharged and rested states respectively.

Percentage of power	F ← E
≥90%	●●●●
75% ~ 89%	☀●●●
50% ~ 74%	○☀●●
25% ~ 49%	○○☀●
<25%	○○○☀
0%	○○○○

- Special status display

	Battery discharge protection occurs. Please leave the battery at room temperature, wait for some time and check the status of the indicator. When it returns to the battery percentage display, the battery has been restored.
	Charge protection has occurred in the battery. Please leave the battery at room temperature, wait for some time and check the status of the indicator. When it returns to the battery percentage display, the battery has been restored.
	The battery cannot be charged or discharged. Please put the battery at room temperature and wait (recommended >30min), check the status of the indicator. If it returns to the percentage of power display, then it has been restored. Otherwise, please return the battery for repair.

Specification

Models			CIMO-98S	CIMO-160S	CIMO-200S	CIMO-290S
Capacity			98Wh, 6.8Ah	160Wh, 11.1Ah	196Wh, 13.6Ah	290Wh, 20.1Ah
Primary Interface Type			V-Mount			
Rated voltage			14.4V			
Parameters	BP×1	Discharge	150W, 12A	200W, 16A		250W, 20A
		Charging	16.8V--- 4A (MAX)	16.8V--- 8A (MAX)		16.8V--- 10A (MAX)
	D-TAP×2	Discharge	150W, 12A	200W, 16A		250W, 20A
		Charging	16.8V--- 4A (MAX)	16.8V--- 8A (MAX)		16.8V--- 10A (MAX)
	TYPE-C×1	Discharge	65W(Max), 5V/9V/12V/15V---3A/20V(Max)---3.25A Supported Protocols: 1.BC1.2, Apple and Samsung mobile phones 2.QC2.0,3.0 3.FCP,SCP 4.PD2.0,3.0			
		USB-C Charger Request	USB-C to C Charger: PD2.0/3.0≥45W USB-A to C Charger: 5V only	USB-C to C Charger: PD2.0/3.0≥60W USB-A to C Charger: 5V only		
	USB-A×1	Discharge	18W(Max), 5V/9V (Max)---2A Supported Protocols: 1.BC1.2, Apple and Samsung mobile phones 2.QC2.0,3.0 3.FCP,AFC,SFCP			
	Total Discharge Power		150W, 12A	200W, 16A		250W, 20A
Size			144×100×35mm	144×100×51mm		144×100×67mm
Size with packing			151×106×42mm	151×106×57mm		151×106×77mm
Net weight			642g	1085g		1509g
Weight with packaging			677g	1127g		1568g
Charging temperature			0℃～ 40℃(suggestion 10℃～ 30℃)			
Discharging temperature			-20℃～ 50℃(suggestion -10℃～ 40℃)			
Storage temperature			-20℃～ 50℃			
Others	EMC		EN55032,EN55035			
	Safety standard		UN38.3, IEC62368			
	Drop		1.2m Drop test			