

HR-A290F

Professional Rechargeable Li-ion Battery

Ver: A

USER MANUAL

SWIT Electronics Co.,Ltd.



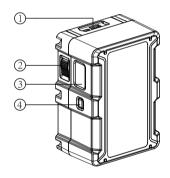
Thank you for choosing SWIT products, please read this user manual before using and keep it properly for future reference.

Warning

Remember the following precautions to avoid fire and other safety hazards!

- Do not use the battery in a place where there is fire or heat to prevent overheating and rupture.
- Do not Pierce the battery case or attempt to open the case or disassemble the battery.
- Do not use the battery outside the ambient temperature for charging, discharging, and storage.
- Do not charge the battery in the car or in direct sunlight.
- Do not use the damaged battery.
- Do not squeeze the shell which may cause physical impact.
- Make sure the power-consuming equipment(s) meet the battery specifications.
- Please use SWIT charger or SWIT recommended charger to prevent overheating, rupture and other dangers.
- Keep out of the reach of children.

Appearance



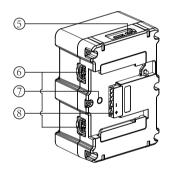


Fig.1.HB-A290B

- ① USB-A Interface: Standard protective rubber plug
- 2 Unlock button
- 3 OLED
- 4 Button

- 5 TYPE-C:Standard protective rubber plug
- 6 D-TAP: Standard protective rubber plug
- ? Lighting lamp
- ® pole of B-Mount:

Attention

- It is normal for batteries getting hot during charging and using.
- Do not use the battery in a high temperature environment above 60°C.
- Keep the electrodes clean to ensure a better use experience
- Keep the battery in a cool and dry place for long-term storage. It is recommended to keep the battery power above 50%.

Features

- OLED intelligent display of battery power and remaining running time.
- Unlock button structure based on human factor engineering, making it more convenient for users to plug and remove batteries.
- Shell with high impact resistance flame retardant material, coupled with strong structural design, all aspects to meet the safety requirements.
- Simple modular design inside, no wire welding, reduce internal resistance, stable and reliable.
- Built-in multiple protection circuit, high temperature, low temperature, over voltage, under voltage, over current, short circuit and other all-round protection, effectively prevent the safety hidden danger caused by improper use.
- Triple overcurrent protection design, meet the high start power requirements of the equipment and improve the safety performance of the battery.
- Ultra-low power consumption design: the battery automatically enters
 the low-power hibernation mode when standing, without any operation,
 and can automatically wake up when in use; After standing for a long
 time, it will automatically enter the sleep mode, which can effectively
 prevent the battery voltage from being too low due to self-consumption,
 which will affect the battery life or even scrap. Press the button to restore.
- D-TAP, Type-C, and USB-A ports all support the automatic start of device insertion detection function. When no device is connected to the port, the port is in the low-power state. When device insertion is detected, the port automatically turns on the output. Dual D-TAP interface, 16V constant voltage output, can supply power to two low voltage devices at the same time as the main output interface for high voltage devices.
- One 60W Type-C bidirectional interface, support universal Type-C charger quick charging.
- Type-C and USB-A are independently designed to meet the charging requirements of two mobile phones, tablets and other portable devices at the same time, and the charging speed is not affected by each other.
- High performance rechargeable lithium ion battery, no memory effect.
- Back light for easy use at night.

Charging Instruction

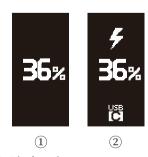
• Battery can be charged with B-Mount and Type-c interface. When the battery is inserted into the charger, the OLED thunder logo appears, indicating that it enters the charging state. The battery can be charged in a temperature range of 0~40°C, but we recommend charging in a temperature range of 10~30°C to ensure the best performance of the battery.

Discharging Instruction

- The battery can discharge at a temperature range of -20°C~50°C, but it is suggested to discharge at a temperature range of -10~40°C for the best performance of the battery.
- Press the button, and the output of USB-A and D-tap is turned on at the same time.
 If USB-A is not used within 10 seconds, the output of USB-A is turned off. If neither D-tap nor USB-A is used, the output of D-tap is turned off after 20 seconds.
- USB and D-TAP overload will cause output shutdown, press the button to recover.
- At low temperatures, the internal resistance of the battery increases, and the discharge time is shortened. When the load is heavy, the battery may be automatically cut off.

OLED Display Instruction

1. The battery is standing and charging



- 1) Show capacity percentage;
- ② Show the thunder logo when charging, Show USB-C logo when charging via TYPE-C.

2. Discharging



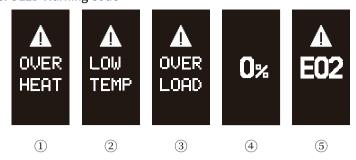
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- ① Show $0:00\sim9:59$ when remaining running time is under 10h;
- ② Show remaining running hour when over 10h;
- Show USB-A logo when discharging via USB-A;
 Show USB-C logo when discharging via TYPE-C.

3. OLED Warning Code



- ① High temperature protection, please remove the battery, place at room temperature and wait for self-recovery.
- ② Low temperature protection, please remove the battery, place at room temperature and wait for self-recovery.
- ③ There are three possibilities:
 - a. Over current, please take off the battery and put aside for 30s.
 - b. Over voltage, please take off the battery and put aside for 30s.
 - c. Battery short circuit, please make sure there is no foreign body between the electrodes or remove the battery, put aside for 120s.
- 4 Remaining power is out, please charge it on time.
- ⑤ E01~E03: The battery has an unrecoverable error. Contact the manufacturer for repair. Do not disassemble the battery by yourself.
- ⑥ After 10 days of resting, the battery shuts down and enters sleep mode.

Specification

| Model | | | HB-A290B |
|-------------------------|-------------------------------|--------|--------------------------------------|
| Interface type | | | B-Mount |
| Nominal voltage | | | 28.8V |
| Capacity | | | 290Wh,10.05Ah |
| Total output power | | | 250W |
| Charging temperature | | | 0~40°C (Suggest 10~30°C) |
| Discharging temperature | | | -20°C~50°C (Suggest -10~40°C) |
| Interface Parameters | B-Mount | Output | 21.6-33.6V/250W,10A |
| | | Input | 33.6V5A |
| | D-TAP*2 | Output | 60W,16V3.8A |
| | | Input | not support |
| | TYPE-C | Output | 60W(Max), 5V/9V/12V/15V/20V(Max)==3A |
| | | | Support protocol: |
| | | | 1.BC1.2,Itunes or SAMSUNG |
| | | | 2.QC2.0,3.0 |
| | | | 3.FCP,SCP |
| | | | 4.PD2.0,3.0 |
| | | Input | 60W(Max), 20V/15V=3A |
| | USB-A | Output | 10W,5V2A |
| Other parameters | Electromagnetic compatibility | | Conform to EN55032, EN55035 |
| | Safety | | Conform to IEC62368, UN38.3 |
| | Drop | | Meet 1.2m bare metal free drop |
| Dimension of products | | | 144 mm×100mm×70mm |
| Dimension of packing | | | 155 mm×110 mm×78 mm |
| Net weight | | | 1.52kg |