

# SWIT®

## Rechargeable Li-ion Battery Pack

Ver:C

# USER MANUAL

SWIT Electronics Co.,Ltd.

Tel:+86-25-85805753  
Fax:+86-25-85805296  
<http://www.swit.cc>  
E-mail: [contact@swit.cc](mailto:contact@swit.cc)

Congratulations on your purchase of this product. Please read this user manual carefully.

### ⚠ Warning

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

- Do not use battery in fire or hot places to prevent overheating, cracking and other hazards.
- Please do not pierce the battery shell or try to open the shell and decompose the battery.
- Do not use battery beyond charge, discharge and storage environment temperature.
- Do not charge the battery in the car or in direct sunlight.
- Do not use damaged battery.
- Do not squeeze the battery shell which may cause physical damage.
- Make sure the power-consuming equipment(s) meet the battery specifications.
- Use SWIT charger or SWIT recommended charger to charge the battery to avoid overheating or beak.
- Keep out of the reach of children.

### Description of appearance

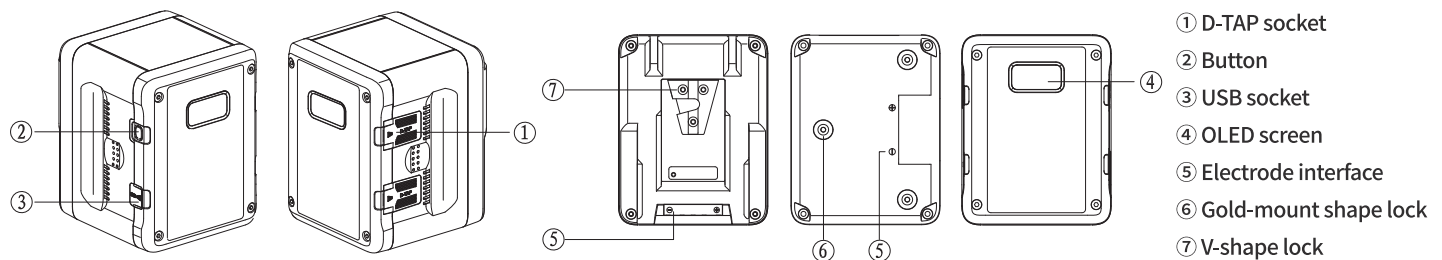


Fig 1: PB-S220S/A

### Caution

- Fully charged battery will discharge naturally and please use it as soon as it gets charged.
- The battery may become warm in use or while being charged. This is normal.
- Never expose the battery to temperature above 60°C.
- Keep the battery terminals clean and never short-circuit the battery terminals.
- When stored for a long time, please keep the battery power between 50% and 90%.
- Battery will automatically enter the sleep mode if rest in 10 days, the output will be shut off. Press the button to restore output.

### Features

- High performance rechargeable lithium ion battery, no memory effect.
- OLED screen display battery capacity and remaining running time.
- Built in multiple control circuit, to protect the battery all-round regarding temperature, voltage and current.
- D-tap DC output, to power the camera and other equipment simultaneously.
- USB 5V/2A output, which can be used to charge mobile phones, tablets and other portable devices.
- 6A fast charging (only PB-S220A/S by using SWIT fast charging charger).

### Charging

- After the battery is plugged into the charger, a lightning icon will appear in the OLED to indicate that it enters the charging state.
- The battery can be charged at a temperature range of 0~40°C, but we recommend charging at a temperature range of 10~30°C to ensure the best performance of the battery.
- During battery charging, press the button to turn on the USB output.

### Discharging

- 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.
- During the battery discharge, after pressing the button, OLED displays the remaining time and turns on USB output. Press the button briefly to switch to display the percentage of battery power, and press the button long to display the battery cycle times from 0 to 999.
- In low temperature, the internal resistance of the battery will increase, the discharging time will be shortened, and the load may be automatically cut off when the load is heavier.
- The USB output will shut off if the load is too heavy, press the button to restore.

## OLED display instruction

### 1. Battery in rest or charging status

- ① Display Capacity percentage;
- ② Press the button long to display battery cycle time from 0 ~ 999;
- ③ Lightning icon is displayed during charging.



### 2. Battery in discharging status

- ① Display remaining working time;
- ② Press button short to display the remaining capacity percentage;
- ③ If the working time is less than ten hours, it will be displayed as 0~9hours59minutes;
- ④ If the working time is more than ten hours, it will be displayed as the remaining working hours.



### 3. OLED alarm code description

- ① P01 ~ P13: The battery trigger protection function and it can be recovered;
- ② E01 ~ E03: Not recoverable error, please contact manufacturers to repair, do not disassemble the battery;
- ③ When the battery rests over 10 days or runs out of power, it will enter sleep mode and the OLED will not display.



#### Common battery protection code:

P01	Run out of power, please charge the battery asap.
P03 ~ P04	Over-current when charging, please remove the battery, and it will restore after 30 seconds' standing.
P05 ~ P07	The load is too heavy, please remove the battery, and it will restore after 30 seconds' standing.
P08 ~ P09	Battery short circuit, please make sure that there is no foreign body between the electrodes or remove the battery, and it will restore after 30 seconds' standing.
P10 ~ P13	Temperature protection, please remove the battery and place at room temperature to recover.

## Specification

Model	PB-S98S	PB-S98A	PB-S146S	PB-S146A	PB-S220S	PB-S220A
Battery plate	V-mount	Gold-mount	V-mount	Gold-mount	V-mount	Gold-mount
Nominal voltage	14.4V	14.4V	14.4V	14.4V	14.4V	14.4V
Capacity	98Wh,6.8Ah	98Wh,6.8Ah	146Wh, 10.1Ah	146Wh, 10.1Ah	220Wh,15.3Ah	220Wh,15.3Ah
Max output	Electrodes	150W,12A	150W,12A	200W,16A	200W,16A	200W,16A
	D-TAP	120W,10A	120W,10A	120W,10A	120W,10A	120W,10A
	USB	10W,5V/2A	10W,5V/2A	10W,5V/2A	10W,5V/2A	10W,5V/2A
	In total	150W	150W	200W	200W	200W
Dimension	121×95×59mm	121×95×62mm	121×95×59mm	121×95×62mm	121×95×96mm	121×95×99mm
Net weight	0.809kg	0.800kg	0.878kg	0.873kg	1.440kg	1.435kg
Max charging current	4A	4A	5A	5A	7A	7A
D-TAP socket number	2	2	2	2	4	4
USB socket number	1	1	1	1	1	1
Charging temperature	0 ~ 40°C (10 ~ 30°C recommended)					
Discharging temperature	-20°C ~ 50°C (-10 ~ 40°C recommended)					