

SWIT®

VOLTA PRO
Portable Power Station
Ver: A

USER MANUAL

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Thank you for choosing our products, please read the instruction manual before using and keep it for future reference.

Warnings

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

- Avoid using batteries in areas where there is fire or heat
- Don't allow this product to contact any liquid or place it in a humid place.
- Do not use this product in a strong static or magnetic field environment.
- Do not place this product in an extremely low-pressure environment.
- Do not disassemble this product by yourself. Repairs should only be performed by qualified personnel.
- Do not touch the inside of this product with metal or conductive objects.
- Do not puncture the case of this product.
- Do not use or store this product outside the specified temperature range.
- Do not block the heat dissipation duct when using this product.
- Do not connect to an AC power source that exceeds the voltage range of the product.
- Keep batteries out of the reach of children!

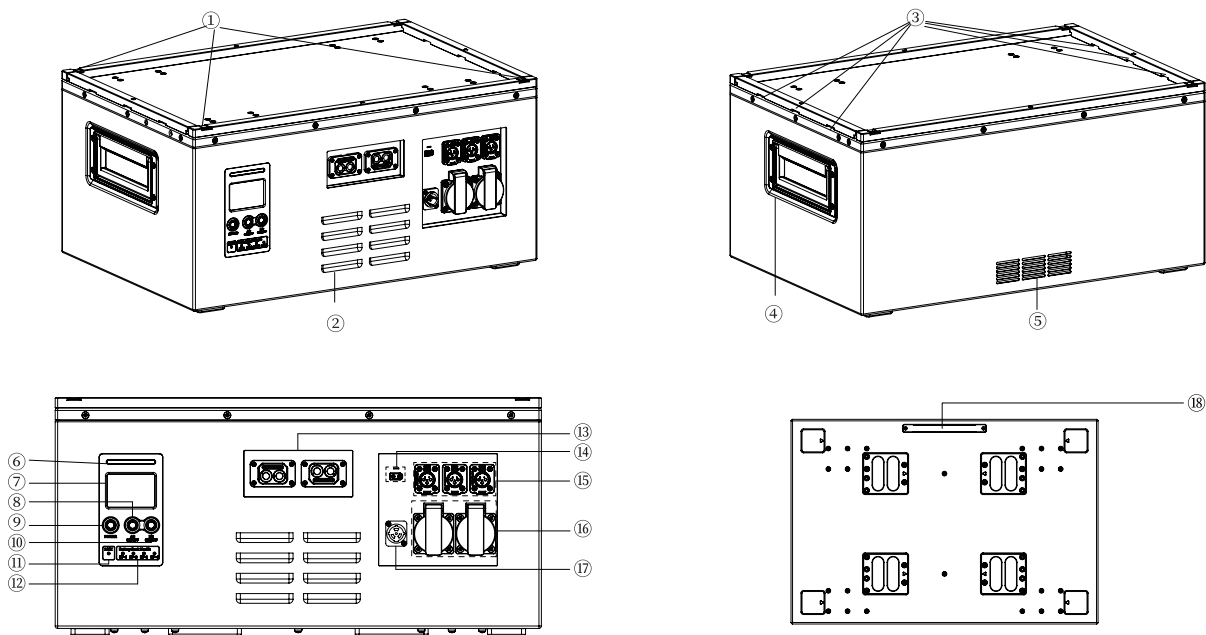
Caution

- Ensure that the electrodes remain clean and prevent any short circuits between them.
- If this product is deformed due to severe external impact, please stop using it immediately.
- Please use the original standard parts or accessories to avoid damaging the device.
- Please place it on a stable surface to prevent it from falling and causing damage to the product.
- The product may heat up during charging and discharging, which is normal.
- The power of this product will be naturally consumed during storage. Please place it in a cool and dry place for long-term storage.
- Please use this product within the parameters marked on this product.

Features

- EU standard storage box structural design, enabling reliable stacking between products or between products and storage boxes.
- Modular design of the battery pack for easy replacement, allowing the flexible assembly of 1 to 4 battery packs. Each battery pack has a capacity of 2222.64Wh, and with all 4 battery packs installed, the total capacity is 8890.56Wh.
- IP54 dust and water resistance.
- Supports cascading of products with different remaining capacities, with hot-swapping functionality during the cascading.
- Multiple output interface design: 2 AC output ports and 3 DC output ports; supports simultaneous power supply through all interfaces.
- Supports solar charging: Built-in MPPT module, compatible with solar panels charging in the range of 12-60V.
- Supports simultaneous charging and discharging.
- Supports lifting: Four M8 mounting holes reserved on the top for the installation of lifting rings.
- Utilizes both a digital color screen and high-brightness LED indicators. From a distance, the basic battery status can be viewed via the high-brightness LED, while detailed battery information can be checked up close using the digital color screen.
- 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. Simply pressing the button or charging the battery resumes normal usage.
- Equipped with an intelligent balancing function.

Appearance



① Lifting ring mounting hole

② Air intake

③ Drainage outlet

④ Handle

⑤ Air outlet

⑥ Charge and discharge status indicator

⑦ Charge and discharge status display screen

⑧ AC power button with light

⑨ Power button

⑩ DC power button with light

⑪ Cascading status indicator

⑫ Health status indicator

⑬ Cascading interface

⑭ Solar charging interface

⑮ DC 48V output

⑯ AC 230V output

⑰ AC charging interface

⑱ Dust filter replacement port

Power On/Off

- In screen-off state: Press the power button briefly to power on and turn on the display.
- In screen-on state: Press and hold the power button for 3 seconds to turn off the AC, DC, and display.

Charging

- Supports AC and solar charging separately or simultaneously
- when AC or solar panels are connected, charging begins automatically
- 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.

Discharging

- In screen-off state: Press and hold the AC button for 3 seconds to turn on or off the AC output and indicator.
- In screen-off state: Press and hold the DC button for 3 seconds to turn on or off the DC output and indicator light.
- When 2-4 battery packs are installed inside the product, the maximum AC and DC discharge power is 3200W; when only 1 battery pack is installed, the maximum AC and DC discharge power is 1600W.
- When AC and DC are turned off and there is no charging, the screen will automatically turn off after 20 seconds.
- When AC and DC are turned on, and there is no charging or discharging activity, the AC, DC, and display will automatically turn off after 12 hours.
- The AC and DC outputs will automatically turn off when the battery level is too low.
- If an overload protection occurs during AC and DC discharging, the button indicator light will turn off. After removing the load, press and hold the button for 3 seconds to turn it back on.
- This product can discharge within a temperature range of -20°C to 50°C; it operates optimally within a temperature range of -10°C to 40°C

Status indicator

⑥ Charge and Discharge Status Indicator

Status	Battery Level	Indicator Status
Charging	0-79%	Red light steady on
	80-99%	Red light flashing slowly
	100%	Green light steady on
Discharging	100%-10%	Green light steady on
	9%-0% and remaining time less than 15 minutes	Green light flashing slowly
	Under-voltage	Light off
Abnormal Operation	/	Red light flashing rapidly

Note: When charging and discharging simultaneously, if the charging power is greater than the discharging power, the indicator will show the charging status. If the charging power is less than the discharging power, the indicator will show the discharging status.

⑪ Cascading Status Indicator

Green light steady on: Cascading successful.

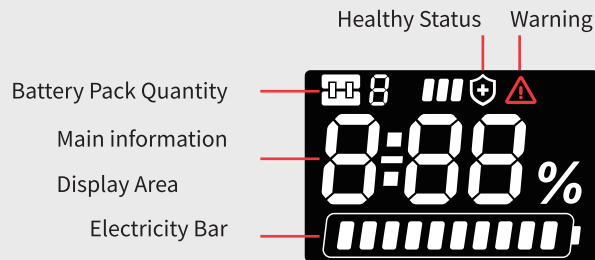
⑫ Health Status Indicator

BP-1, BP-2, BP-3, BP-4 represent the health status of the 4 battery packs.

Indicator Light Color	Health Status
Green	Healthy
Yellow	Moderately Healthy
Red	Unhealthy

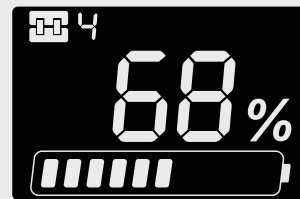
Charge and Discharge Status Display

Digital Presentation Of All information



1. Standby Status

Displays the number of battery packs, battery percentage, and the battery level bar.

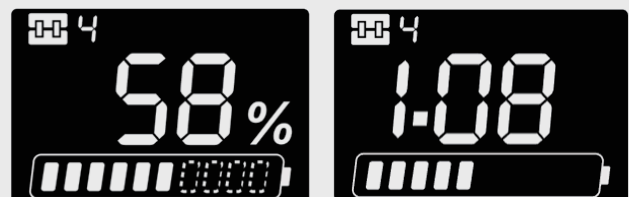


2. Charging Status

When AC and DC are off: The battery percentage and battery level bar are continuously displayed, with the battery bar dynamically showing from the current charge level to full charge.

When AC or DC is on: The battery percentage and discharging power alternate every 3 seconds, with the battery bar dynamically showing from the current charge level to full charge.

Discharging power unit: kW

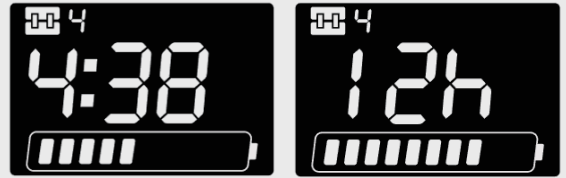


3. Discharging Status

When AC and DC are off: The remaining battery percentage and runtime alternate every 3 seconds (this only occurs when in cascading mode).

When AC or DC is on: The remaining battery percentage, runtime, and discharging power alternate every 3 seconds.

If the runtime is within 10 hours, it shows hours and minutes; if the runtime exceeds 10 hours, only hours are displayed.



4. Alarm Code

When the alarm icon is displayed, click to show the protection code.

① Protection Location:

=0: Functional module.

② =1-4: Represents the 4 battery packs.

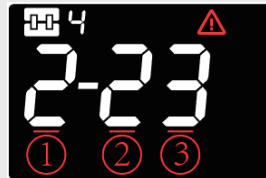
Protection Category:

=1: Class 1 Protection: Battery pack protection, self-recoverable.

The protection reason can be referenced in the protection code.

Once the protection is automatically cleared, it can be used again.

=2: Class 2 Protection: Battery pack protection, non-self-recoverable. If this protection occurs, the product needs to be sent back for repair.



③ =3: Class 3 Protection: Functional module protection, protection reason can be referenced in the protection code. Cannot be recovered by restarting or self-recovery, requires factory repair.

④ Protection Code:

Class 1 Protection	Class 3 Protection
0-2: Overvoltage and undervoltage protection	1: Control module temperature too high
3-8: Overcurrent and short circuit protection	2-7: AC functional module protection or fault
9-D: Temperature protection	8-D: DC functional module protection or fault
E-F: Others	E-F: Other modules

- Note: Special Protection Code: When the total AC and DC output power exceeds 3.2KW and the duration exceeds 1 minute, the AC and DC outputs will be turned off, and the display will show "OL" :
- In cascading mode, if other products are still discharging, this product will continuously display "OL" until the protection item is cleared by pressing the power button.
- In cascading mode, if other products are not discharging, this

product will continuously display "OL" for 2 minutes and automatically enter sleep mode. After 2 minutes or following sleep mode, the protection item can be cleared by pressing the power button.

- In standalone use, it will continuously display "OL" for 2 minutes and automatically enter sleep mode. After 2 minutes or following sleep mode, the protection item can be cleared by pressing the power button.

Cascading Function

1. Cascade Function:

Each product has A and B cascading ports. Use the provided connection cables to link the A cascading port of one product to the B cascading port of another product.

In cascading status:

- Press the power button on any one power station, and all power stations will light up their screens simultaneously.
- When any station is in charging or discharging mode, the other stations will keep their screens on.
- When none of the stations are in charging or discharging mode, all stations will gradually turn off their screens after 20 seconds.
- During the cascading startup process, pressing and holding the power button will only turn off the current station.

2. Cascading Charging and Discharging Function:

- 1) In cascading mode, the AC and DC outputs of all products can be used. Each product's output needs to be turned on individually by pressing and holding the corresponding button.
 - 2) When the stations are the cascade and have different battery levels, the station with the higher battery level will prioritize supplying power. The total maximum output power of the cascading products is 3200W.
 - 3) When the stations in the cascade have the same battery level, all stations will supply power simultaneously, and the total maximum output power is 3200W multiplied by the number of cascading products.
 - 4) Cascading mode supports simultaneous charging and discharging. Stations with AC output turned off can charge via the AC charging port; stations with AC output turned on cannot charge via the AC charging port.
 - 5) Hot-swapping in cascading mode: Supports disconnecting and adding stations in the cascade without interrupting the power supply. The station with the highest battery level will always supply power, until all stations are depleted.
- Note: AC charging is prohibited during cascading operations.**

Battery Pack Replacement

- This product features a modular design, allowing users to replace all battery packs themselves or selectively replace battery packs based on their health status.
- After replacing the battery pack, charge it to 100% before use.

Specification

Model		VOLTA PRO	
Capacity (Battery Pack×4)		2222.64Wh×4	
Charging Parameters	AC Charging	Input Voltage Range	180V-264V
		Input Frequency Range	50Hz
		Maximum Input Power	2400W
		Maximum Charging Power	1500W
	Solar Charging	Input Voltage Range	12V~60V
		Maximum Charging Power	800W
Discharging Parameters	48V DC Output*3	Output Voltage Range	48.5V±1V
		Maximum Output Power	800W*3
		Overpower Protection Point	≥800W / Protection triggered after 30 seconds ≥≥ 1000W / Protection triggered after 5 milliseconds
	AC Input*2	Output Voltage	230VAC
		Output Frequency	50HZ
		Maximum Output Power	2400W
		Output Overload Protection	≥2500W / Protection triggered after 60 seconds ≥3100W / Protection triggered after 3 seconds ≥4800W / Protection triggered after 1 second
	Total Discharge Power		Single battery pack ≤1600W
			Multiple battery packs ≤3200W
	Product Dimensions		600 x 400 x 293mm
Dimensions with Packaging		755 x 555 x 620mm	
Net Weight		65.5kg	
Weight with Packaging		84.5kg	
Charging Temperature		0°C~ 40°C (recommended 10°C~ 30°C)	
Discharge Temperature		-20°C~ 50°C (recommended -10°C~ 40°C)	
Storage and Transport Temperature		-20°C~ 60°C	
Other Performance Parameters	Electromagnetic Compatibility (EMC)	EN55032、EN55035	
	Safety	EN62368、J61233、UN38.8	