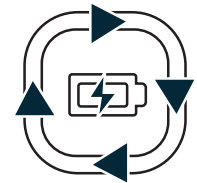
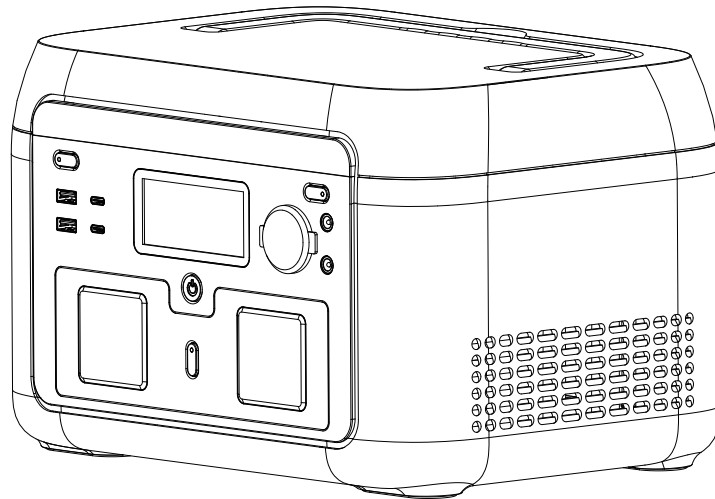


V-TAC

Meaningful Innovation.

INSTRUCTION MANUAL PORTABLE POWER STATION



3000
LIFE CYCLE

02 YEAR
WARRANTY*

MODEL	VT-603
SKU	12705



Smart Life
App

INTRODUCTION

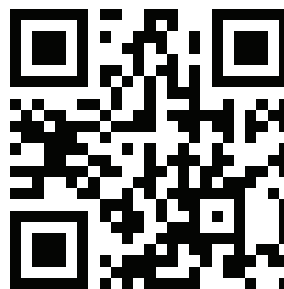
Thank you for selecting and buying V-TAC Product. V-TAC will serve you the best. Please read these instructions carefully & keep this user manual handy for future reference. If you have any another query, please contact our dealer or local vendor from whom you have purchased the product. They are trained and ready to serve you at the best.



Caution, risk of electric shock.



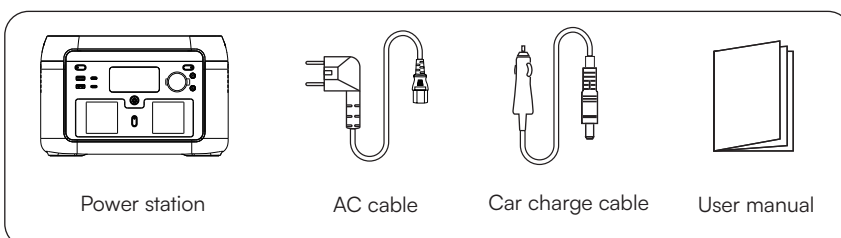
This marking indicates that this product should not be disposed of with other household wastes.



MULTI-LANGUAGE MANUAL QR CODE

Please scan the QR code to access the manual in multiple languages.

PACKAGE CONTAINS



Power station

AC cable

Car charge cable

User manual



FR
Les piles
et batteries
se recyclent

À DÉPOSER
EN MAGASIN



À DÉPOSER
EN DÉCHÈTERIE



OU

Points de collecte sur www.quefairedemesdechets.fr

IN CASE OF ANY QUERY/ISSUE WITH THE PRODUCT, PLEASE REACH OUT TO US AT: SUPPORT@V-TAC.EU
FOR MORE PRODUCTS RANGE, INQUIRY PLEASE CONTACT OUR DISTRIBUTOR OR NEAREST DEALERS.
V-TAC EUROPE LTD. BULGARIA, PLOVDIV 4000, BULL.KARAVELOW 9B

TECHNICAL DATA

NET WEIGHT	≈7kg (≈15lbs)
DIMENSION	301x227x193mm (11.8x8.9x7.6in)
BATTERY CAPACITY	512Wh, 25.6V \approx , 20Ah
WI-FI	supported

OUTPUT SPECIFICATIONS

UK/EU/FR/AU/ZA

AC SOCKET X2 (INVERTER MODE)	Pure sine-wave, total 600W (peak 1000W), 220—240V~, 50Hz/60Hz, 3A
AC SOCKET (BYPASS MODE)	220—240V~, 50Hz/60Hz, 600W Max., 3A

US

AC SOCKET X2 (INVERTER MODE)	Pure sine-wave, total 600W (peak 1000W), 100—120V~, 60Hz, 6A
AC SOCKET (BYPASS MODE)	100—120V~, 60Hz, 600W Max., 6A

ADDITIONAL PORTS

• USB-A1/A2	5V \approx 2.4A, 12W Max.
• USB-C1/C2	5/9/12/15 \approx 3A, 20V \approx 5A, 100W Max.
• CAR CHARGER	12.6V \approx 10A, 126W Max.
• DC5521 OUTPUT X2	12.6V \approx 3A

NOTES

- Car charger and DC5521 outputs share power, 126W Max.
- INVERTER MODE AC output comes from the battery, not the grid.
- BYPASS MODE AC output comes from the grid, not the battery.

INPUT SPECIFICATIONS

UK/EU/FR/AU/ZA

• AC INPUT POWER	1200W Max., 6A
• AC INPUT VOLTAGE	220—240V~, 50Hz/60Hz

US

• AC INPUT POWER	1200W Max., 10A
• AC INPUT VOLTAGE	100—120V~, 60Hz

PV & CAR CHARGING

• PV CHARGE	200W Max., 12—20V \approx , 10A
• CAR CHARGING INPUT	12V battery supported, 8A by default

INPUT CHARGING POWER

• AC CHARGING POWER	600W Max.
• PV / CAR CHARGING POWER	200W Max.
• AC + PV CHARGING POWER	600W Max.

BATTERY SPECIFICATIONS

• CELL TYPE	Lithium iron phosphate battery (LiFePO ₄)
• LIFE CYCLE	3000 cycles
• PROTECTION TYPE	Over temperature protection, Low temperature protection, Over discharge protection, Over charge protection, Over load protection, Short circuit protection, Over current protection

Test conditions: 95% DOD, 0.5C charge & 1.0C discharge at +25±3°C

OPERATING TEMPERATUR

- OPTIMAL OPERATING TEMPERATURE 20°C~30°C (68°F~86°F)
- DISCHARGE TEMPERATURE RANGE -20°C~45°C (-4°F~113°F)
- CHARGE TEMPERATURE RANGE 0°C~45°C (32°F~113°F)
- STORAGE AMBIENT TEMPERATURE -20°C~45°C (20°C~30°C PREFERRED)
[-4°F~113°F(68°F~86°F PREFERRED)]

*Whether the product can be charged or discharged is subject to the actual battery pack temperature.

SAFETY GUIDELINES

WARNING

1. Do not let a working power station be close to the heat source, such as fire or heater.
2. Do not make power station contact with any liquid.
3. Do not use power station in a strong electrostatic or strong magnetic field environment.
4. Do not disassemble power station in any way or pierce it with a sharp object.
5. Do not short power station by wire or other metal objects.
6. It is forbidden to step on, sit or climb on this product.
7. Do not use ingenuine parts or accessories. For part or accessory replacement, please visit official sales channel for purchase information.
8. When using power station, please follow the operating temperature defined in this user manual strictly. If the temperature is too high, battery may catch fire or even explode. If the temperature is too low, power station performance will be seriously impaired, even normal use will be impacted.
9. Do not stack heavy objects on power station.
10. Do not stop the fan by force or expose power station in an unventilated or dusty environment when it is working.
11. Please avoid collision, drop, and violent vibration. If severe impact happens, shut down the power supply immediately. Please fix power station firmly during transportation to avoid vibration and impact.
12. If power station falls into water accidentally, place it in a safe and wide area, and keep yourself away from it until it's dry. Dried product shall not be used again. Dispose it properly according to chapter 2.2 in this user manual. If power station is on fire, please use fire extinguishing equipment in the recommended order: water or water mist, sand, fire blanket, dry powder, dioxide carbon fire extinguisher.
13. If there is dirt, use a dry cloth to wipe it.
14. Place power station carefully to prevent damage. If power station is tipped over and seriously damaged, turn off power station immediately and place the battery in a spacious place and keep it away from flammable materials and people, and scrap it in accordance with the requirements of local laws and regulations.
15. Keep power station out of the reach of children and pets.
16. Keep power station in a dry and ventilated place.
17. In humid environment (seaside, water, etc.), it is recommended to equip power station with moisture-proof bag. If water is found inside product, do not use/start it again. Please take countermeasures to prevent electric shock before touching power station. Put it in a safe and waterproof open area, and contact customer service immediately.
18. It is not recommended to use power station to supply power for safety-related emergency medical equipment, including but not limited to medical grade breathing machine (hospital version CPAP: Continuous Positive Airway Pressure), artificial lung (ECMO, Extracorporeal Membrane Oxygenation). It can be used to supply power for home version CPAP at home and does not require continuous professional monitoring. Please follow your doctor's advice and consult the manufacturer for any restrictions on the use of the device. For general medical equipment, please pay attention to the power condition to ensure that power does not run out.
19. Power supplies will inevitably generate electromagnetic fields when it is in use, which might affect the implantable medical device or normal operation of personal medical device, such as pacemaker devices, cochlear implants, hearing AIDS, defibrillators, etc. If any of these medical devices are used, please consult the manufacturer about the restrictions on the use to ensure that power station is operated at a safe distance from implanted medical devices such as pacemakers, cochlear implants, hearing AIDS, defibrillators, etc.
20. When the power station is connected to a refrigerator, it may automatically shut down because of the power fluctuation property of the refrigerator. When connecting the power supply to a refrigerator that stores medicine, vaccines or other valuable items, it is recommended to set the AC output to "Never off" in the APP, so as to ensure continuous power. Users should pay attention to power consumption.
21. During the push-pull movement of this product, it is forbidden to put other items on this product.

DISCARD

- Conditions permitting, be sure to discharge the battery completely, and then put power station in the specified battery recycling bin. Power station contains batteries, which are dangerous. It is strictly prohibited to discard them in ordinary dust bins. For details, follow local laws and regulations on battery recycling and disposal.
 - If the battery cannot be discharged completely due to product failure, do not discard the battery directly in the battery recycling bin. Contact a professional battery recycling company for further disposal.
 - The battery will not start after over discharge. Please dispose it as discarded.
-

NOTE

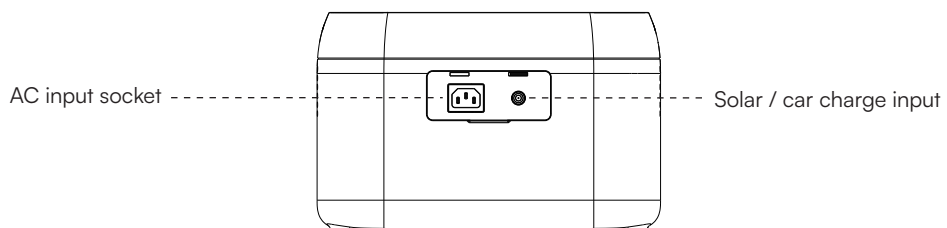
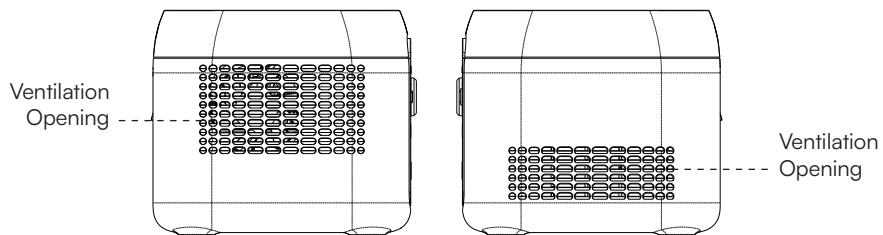
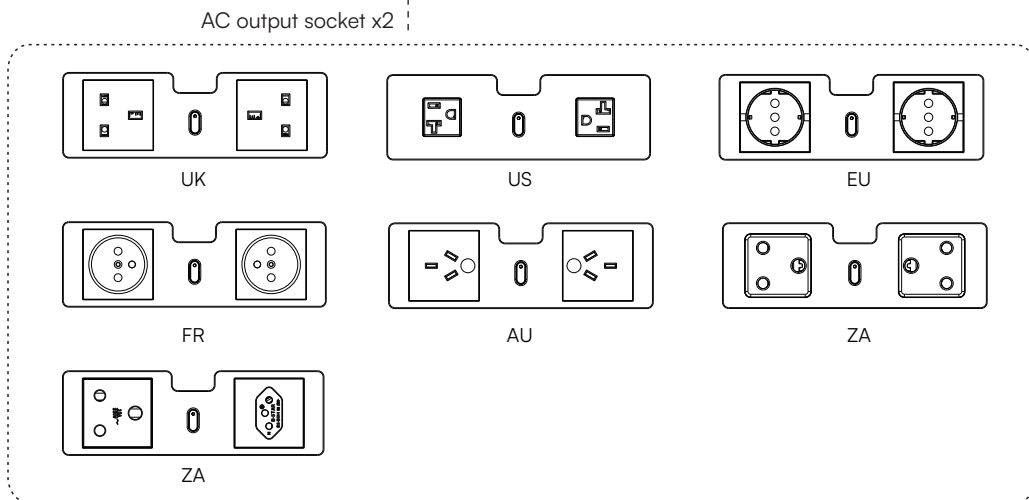
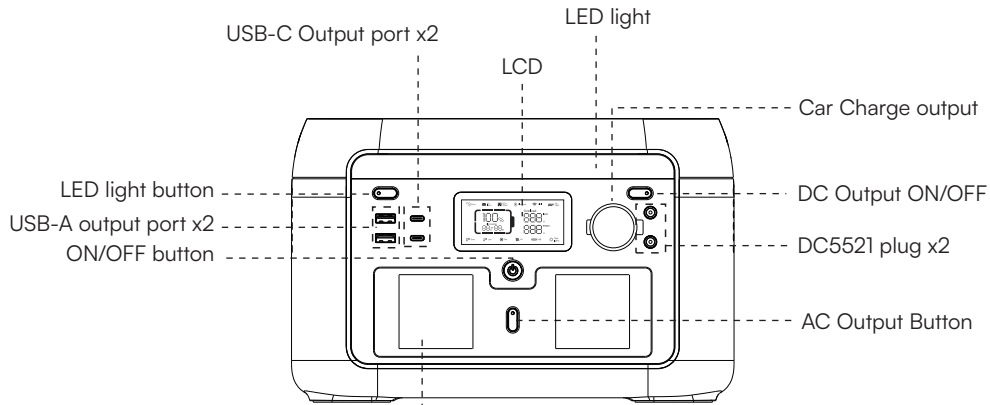
- This device requires Wi-Fi Frequency 2.4GHz
- Operating frequency (maximum transmitted power) 2.412-2.484Ghz



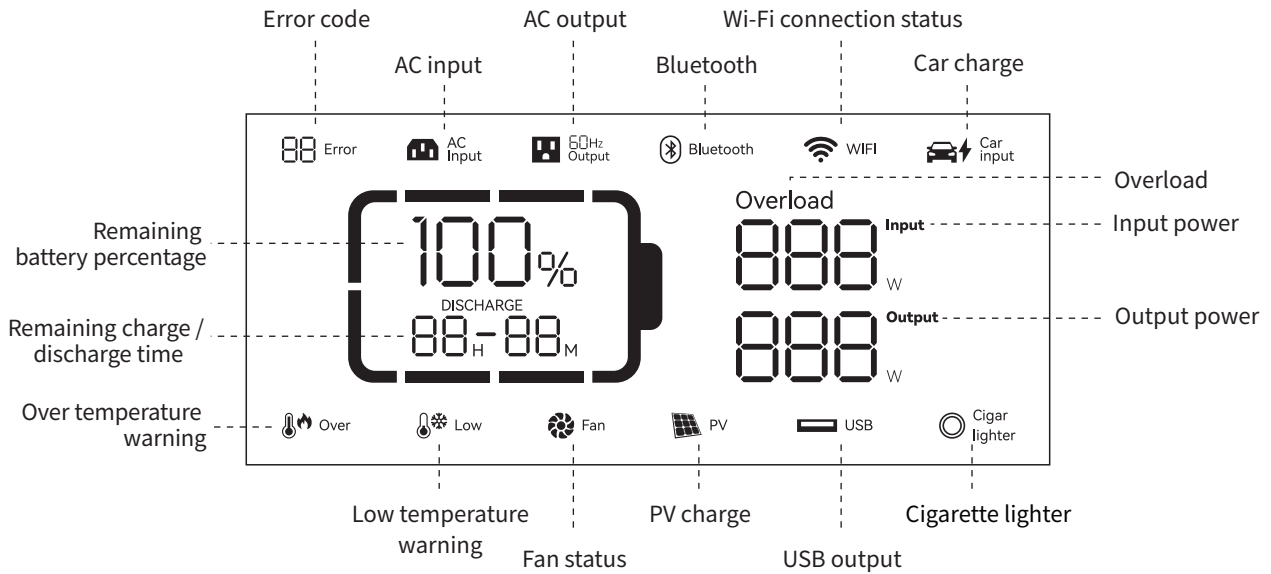
WARNING SYMBOLS USED

This is the safety alert symbol. This symbol alerts you to potential hazards that could result in property damage and/or serious bodily harm or death.

PRODUCT OVERVIEW



LCD SCREEN



BATTERY CAPACITY

- When the power station is charging, the SOC (State of Charge) icon will flicker

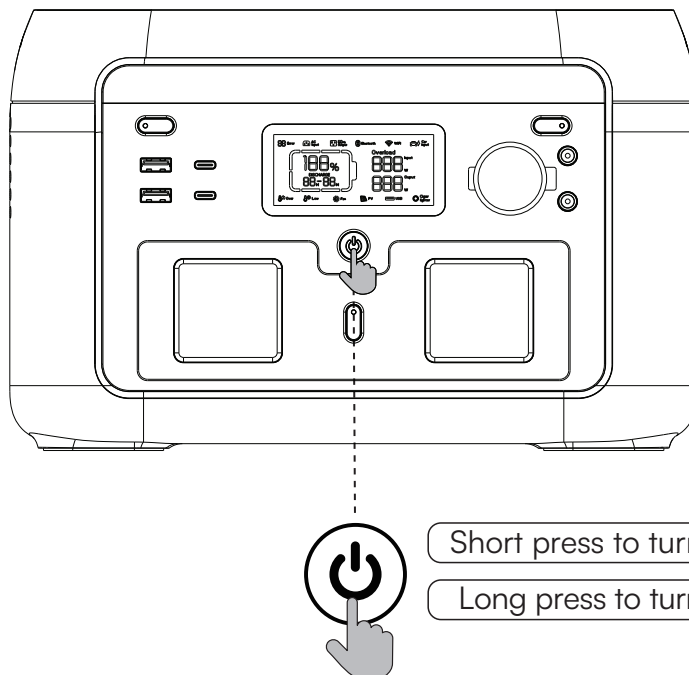
WI-FI CONNECTION STATUS

- When Wi-Fi is reset, the Wi-Fi icon flashes for 3 seconds.
- The icon lights up when Wi-Fi is connected.
- The icon turns off when Wi-Fi is disconnected

BLUETOOTH CONNECTION STATUS

- The Bluetooth icon lights up when the product is wirelessly paired.
- It remains lit when the Bluetooth link is successful.
- The icon turns off when Bluetooth is disconnected

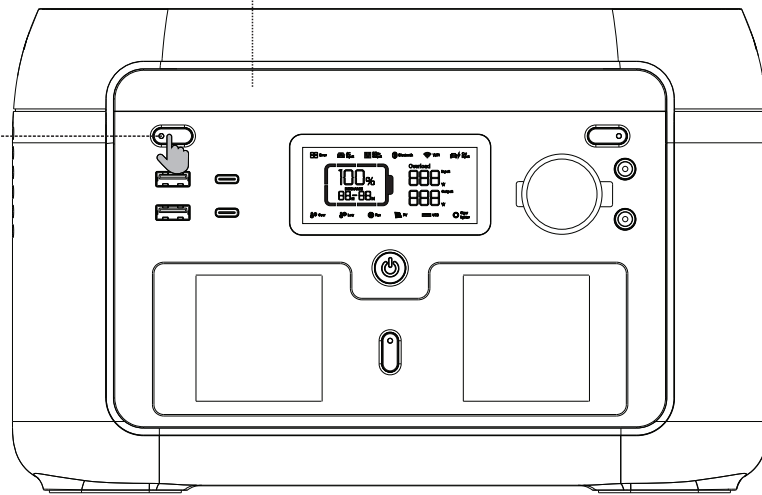
OPERATING INSTRUCTIONS





- Press the main power switch to turn on the device. The screen and main power indicator light will illuminate.
 - If the device remains idle for 5 minutes, the LCD display will automatically turn off. It will light up again when plugged in or unplugged from mains, PV, car charger, or upon key operation. To manually toggle the LCD display, press the main power switch.
 - Press and hold the main power switch to turn off the power station.
 - In normal mode (battery above 5%):
 - Default standby time is 2 hours.
 - If AC output is off and there's no charge/discharge activity for 2 hours, the unit will automatically shut down.
 - Standby time can be adjusted via the APP.
 - If battery is at 5% or below, the unit enters low power mode and adjusts standby time based on battery level before auto shutdown.
 - In normal mode, long press the LED light button to exit automatic shutdown setting. The battery icon (🔋) will flash.
 - Long press again to enter automatic shutdown setting. The battery icon (🔋) will not flash.
- (This setting protects battery life. Exiting it may reduce battery longevity—use with caution.)

LED Lights

Short press the LED light button to switch four gears, which are low light, medium light, high light, SOS and light off.



**Short press
LED light button**

Note: When no AC input, long press the above AC output button, you can switch the AC off-grid output frequency ( 50Hz Output /  60Hz Output), long press 2s to switch, the AC output icon will flash 3 times after successful switching.

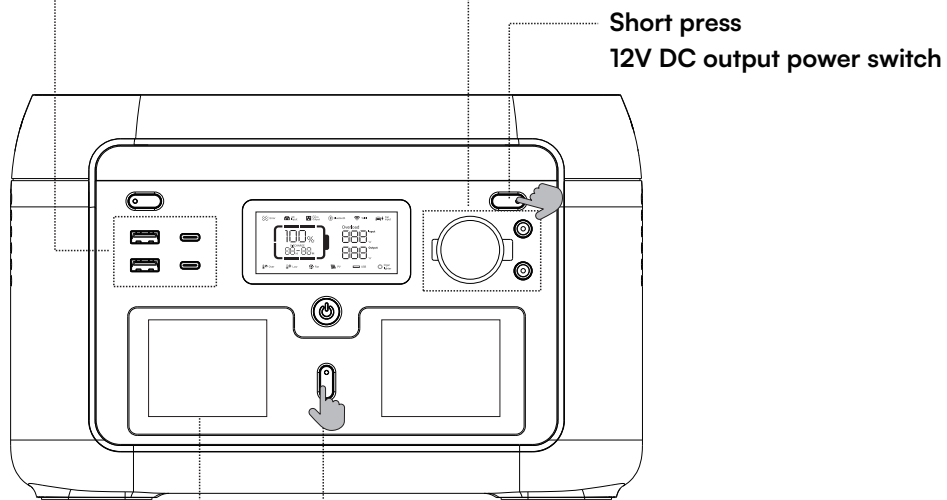
AC OUTPUT INSTRUCTIONS

USB Output

USB output is enabled by default after the main power switch is turned on.

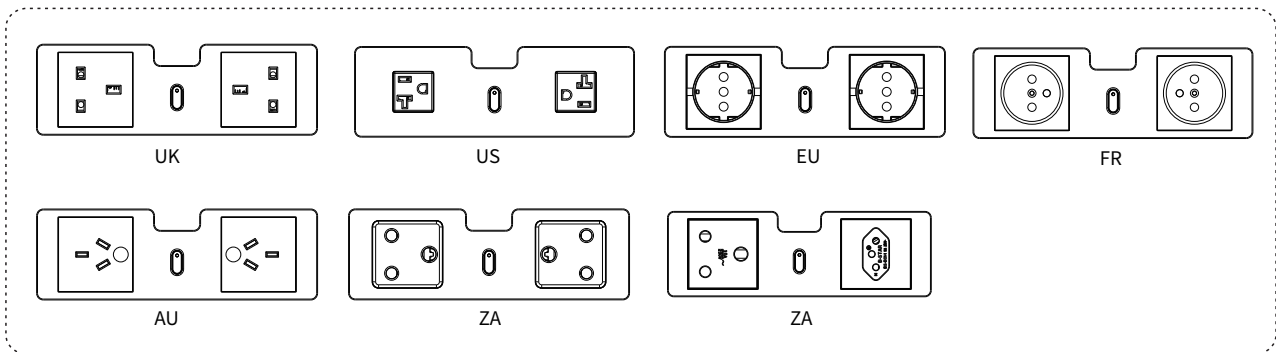
- After the main power switch is turned on, press the 12V DC Output power switch to enable the DC output port.
- Press the 12V DC output power switch again to turn it off.



12V DC output



Short press
12V DC output power switch

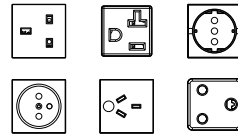
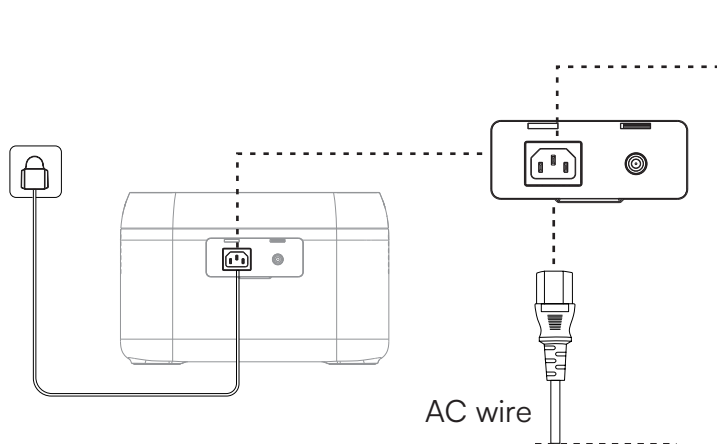
Short press AC output power switch



- After ensuring the main power is turned on, short press the AC output power switch to turn on AC output.
- Short press again to turn it off.
- The default standby time for the AC output port is 1 hour.
- If no load is detected for 1 hour, AC output will automatically turn off.
- In normal mode, long press the LED light button to exit automatic shutdown setting.
- The battery icon () on the screen will flash.
- Long press again to enter automatic shutdown setting.
- The battery icon () will not flash.
- Long pressing the LED light button to exit automatic shutdown is recommended for AC equipment below 10W and pulse working equipment.
- When AC output is not in use, turn it off to save power

AC CHARGING

When the product is turned on, the default fast charging mode is working. If your product has a wifi function, you can control the recharge rate through the APP.

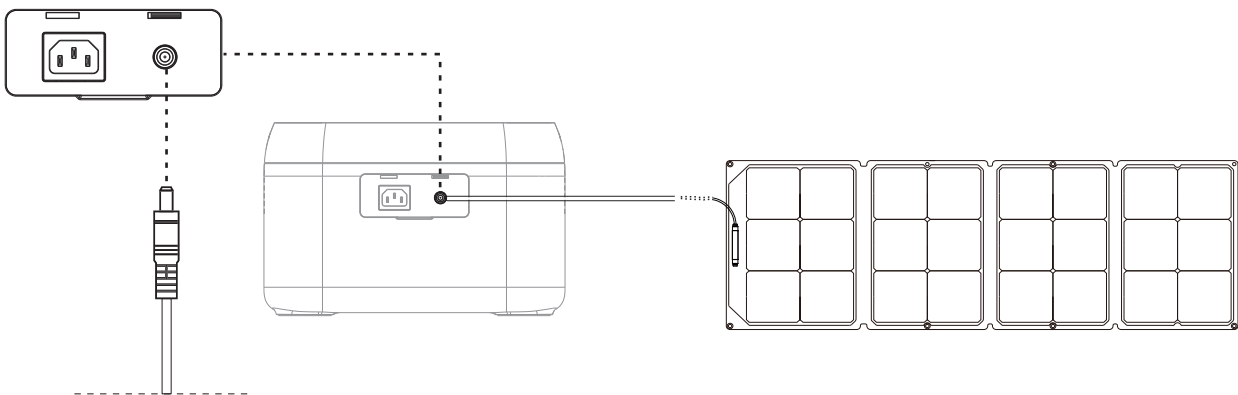


In fast charging mode, it takes about 1.4 hours to fully charge.

- AC Fast Charging Mode: Charging time deviation $\pm 0.1h$.
- Conditions: New battery, fully discharged at 1C rate under room temperature, then rested for 2 hours before performing AC fast charging at room temperature.

Please use the standard AC cable for charging. AC charging cable should directly plug into 10A (or above) wall-mounted socket. We take no responsibilities for any damage caused by using unofficial AC charging cable, and other failures to follow instructions.

PV CHARGING



Charge the power station by solar panel.

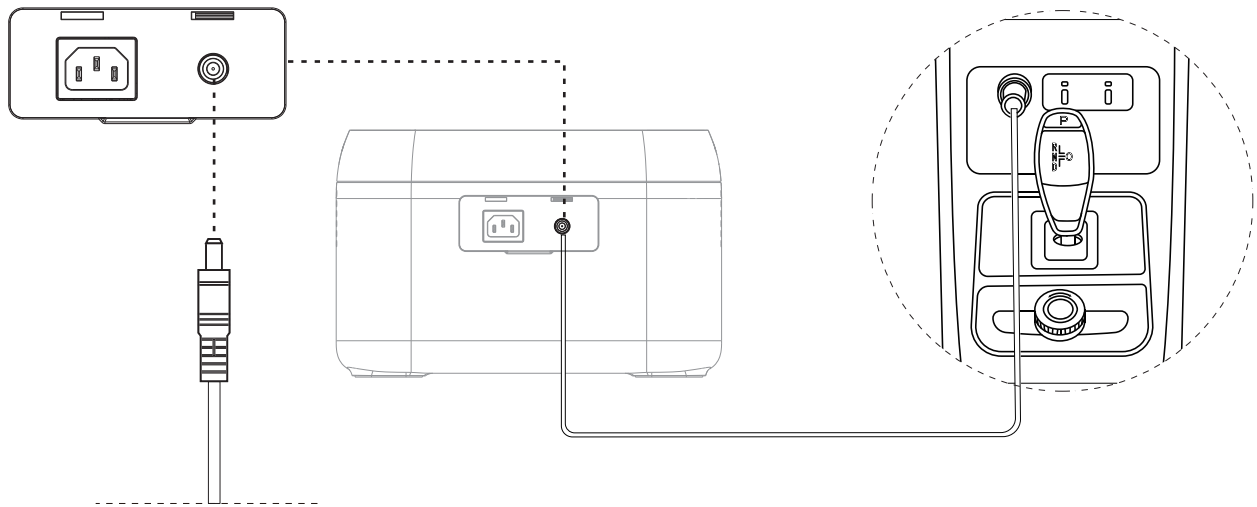
SOLAR CHARGING CABLE (DC7909)

- Please follow the user manual to connect the solar panels.
- Before connecting the solar panel, check whether its output voltage is within the power station specifications to avoid damage.

Note

- The interface of this product is DC7909.
 - If you need an adapter cable from MC4 to DC7909, please purchase it separately.
-

CAR CHARGING



CAR CHARGER CABLE (DC7909)

- The power station can be charged via a car charging port.
- It should be charged only after the car has started, to avoid car battery loss and failure to start.
- Ensure a good connection between the car charging port and the cigarette lighter.

Disclaimer

The manufacturer takes no responsibility for any loss caused by improper operation.

CONSTANT POWER

With the constant power output function, you can use the product to power appliances that exceed the rated power of the device without disruption caused by overload protection. When the power supply needs to drive high-power electrical appliances, the inverter will intelligently regulate the output power to maintain a constant actual output, ensuring reliable operation.

Important Notes

1. The constant power output function is not enabled by default. It can be turned on or off via the App.
2. The function is not enabled in the following cases:
 - (1) AC output is turned on while charging (bypass mode).
 - (2) Constant power output function is turned off.
3. When using an appliance that exceeds the rated power, connect only one appliance. Multiple devices may experience voltage fluctuations affecting performance.
4. This function is more suitable for heaters and motors, and not recommended for sensitive equipment with voltage protection (e.g., precision instruments). Suitability depends on actual testing.

APP INSTRUCTIONS

You can control and view information and data about this product via the App.

To download the software:

- Search for [Smart Life] in the Google App Store or Apple App Store
- Download, register, and open the app
- Or scan the QR code provided to download directly

For detailed usage of the app, please refer to the APP Operation Guide.

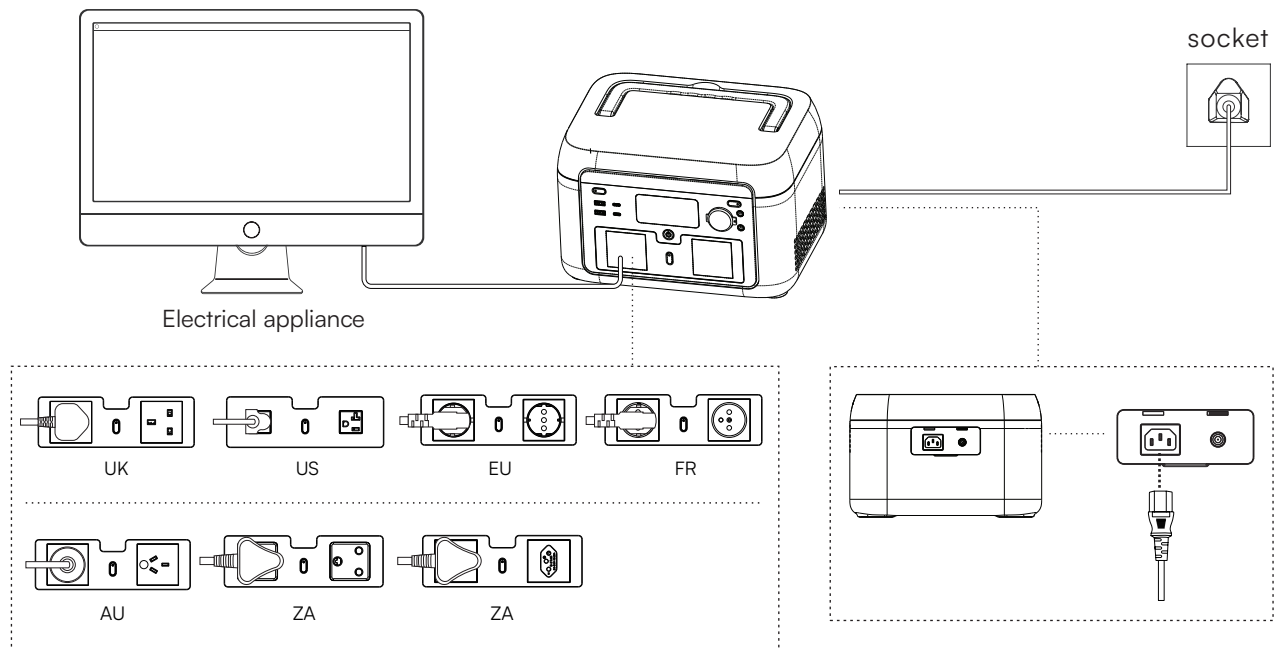


EPS FUNCTION

This product supports the EPS (Emergency Backup Power) function.

You connect the power grid and the AC input port of this product using the AC charging cable.

- In Bypass mode, AC power comes from the grid, not the battery.
- When the grid suddenly loses power, the product automatically switches to battery power supply mode within 10 milliseconds.
- At that point, it operates in Inverter mode, where AC power comes from the battery, not the grid.



Important Notes

- This function does not support 0ms switching.
- Do not connect to devices requiring high uninterrupted power supply, such as data servers and workstations, unless compatibility is confirmed through multiple tests.
- It is recommended to use only one device at a time to avoid triggering overload protection.
- The company will not be responsible for any data loss or malfunction resulting from failure to follow these instructions.

FAQS (FREQUENTLY ASKED QUESTIONS)

What kind of battery is used?

- Lithium iron phosphate battery (LiFePO₄).

What equipment can be connected to the AC output ports?

- The AC output port has high rated and peak power, suitable for small household equipment.
- Confirm the total power of all connected devices is below the rated power before use.

How to know the supply time?

- The LCD displays estimated supply time for equipment with stable power consumption.

How to know it is charging?

- During charging, the LCD shows remaining charging time, SOC flickers, and input power is displayed.
-

How to clean the unit?

- Use a dry, soft, and clean cloth or tissue.



How to store the unit?



- Turn off the unit and store in a dry, ventilated place away from water.
- For long-term storage: every 3 months, discharge to 0%, charge to 100%, then discharge to 48%—52%.

Can it be taken on board?

- No.

ERROR MESSAGES & SOLUTIONS

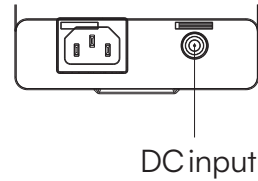
Icon	Fault Description	Solution
02 Error Error code always on	Pressure difference is too large	Automatic recovery after fault clearing; 3 consecutive locks within a certain period of time, longer recovery time.
 Over 04 Error High temperature icon always on Error code always on	Battery OTP (over temperature protection) fault	Auto shutdown, fault cleared when temperature is restored.
 Low 05 Error Low temperature icon always on Error code always on	Battery UTP (under temperature protection) fault	
06 Error Error code always on	OCP (over current protection) fault	Remove the over-power device, and it will automatically recover after the fault is cleared; if it is triggered continuously for 3 times within 1 minute, it will be locked, and the recovery time will be prolonged, and it can be recovered by powering on and off again.
08 Error Error code always on	Abnormal precharge	Power on and off again to clear the fault.
09 Error Error code always on	Battery under voltage fault	charging process, Repeated charging failures or failure to charge, please contact customer service.
11 Error Error code always on	Abnormal INV battery voltage	Automatic recovery after the fault is cleared; if it is triggered 3 times within 1 minute, it will be locked, and the recovery time will be extended, and it can be recovered by powering on and off again.
12 Error Error code always on	Grid voltage or frequency fault	The fault is cleared when the grid returns to normal.
13 Error Error code always on	Abnormal INV BUS voltage	Automatic recovery after the fault is cleared; if it is triggered times within 1 minute, it will be locked, and the recovery time will be extended, and it can be recovered by powering on and off again.
14 Error Error code always on	Abnormal INV output	
Overload 15 Error Overload icon always on Error code always on	INV discharge overload	Remove the over-power device, and it will automatically recover after the fault is cleared; if it is triggered continuously for 3 times within minute, it will be locked, and the recovery time will be prolonged, and it can be recovered by powering on and off again.
Overload 16 Error Overload icon always on Error code always on	Charge overload	Automatic recovery after the fault is cleared; if it is triggered 3 times within minute, it will be locked, and the recovery time will be extended, and it can be recovered by powering on and off again.

Icon	Fault Description	Solution
17 Error Error code always on	INV Tz	Auto recover after fault is cleared.
 Over 20 Error High temperature icon always on Error code always on	MOSFET OTP fault	After removing the device and restarting, the fault is cleared.
21 Error Error code always on	Fan stop	Exclude the fan abnormality, turn on and off, contact after sales if still not fixed.
23 Error Error code always on	Charge soft start fault	Automatic recovery after the fault is cleared; if it is triggered 3 times within 1 minute, it will be locked, and the recovery time will be extended, and it can be recovered by powering on and off again.
24 Error Error code always on	MOSFET UTP fault	Automatic recovery after the product heats up.
27 Error Error code always on	DC input hardware overcurrent protection	Remove DC charge, auto recover after connecting DC and turn on.
28 Error Error code always on	DC input software overcurrent protection	DC charging stops and will automatically resume after the fault is eliminated.
30 Error Error code always on	Car charger output/ DC5521 output Over current protection	Turn off output, manual recover after fault is cleared.
31 Error Error code always on	PV output OVP (over voltage protection) fault	Removing the PV charging interface will automatically restore it after a certain period of time.
32 Error Error code always on	DC input voltage overvoltage protection	Remove the DC charging interface for a certain period of time to automatically recover or check whether the DC output fuse is disconnected.
 Over 35 Error High temperature icon always on Error code always on	DC input over temperature protection	Stop DC. Auto recover after fault is cleared.
38 Error Error code always on	Abnormal communication	Turn on and off, or change operation environment. Contact after sales if still not fixed.
43 Error Error code always on	The battery voltage is too low. The battery is broken	Contact after-sales processing.

If none of the above information can solve the problem you encounter, please contact customer service for consultation.

If a warning occurs during use and the warning icon does not disappear after restarting the device, stop using it immediately (do not attempt to charge or discharge).

Note: Both PV and Car Charger are DC input sharing the same DC Ports.



MAINTENANCE

- It is recommended to use or store the power station at an ambient temperature of 20—30°C.
- Keep it away from water, heaters, and metal parts.
- For long-term storage, perform a charge-discharge cycle every 3 months:
 - Discharge to 0%, then charge to 100%, and finally discharge to 48%—52%.
- For safety, do not store the power station at temperatures above 45°C or below -10°C.
- If the capacity drops below 1%, charge it to 60%.
- Long-term storage with low power can cause irreversible damage to the battery and shorten its lifespan.
- If the battery is severely depleted and idle for too long, the product will enter deep sleep mode.
- It can only be used again after charging.
- After charging or discharging, wait at least 30 minutes before using the product.

DISCLAIMER

- This product includes a built-in battery management system with protections against over-charge, overdischarge, overcurrent, short circuit, high/low temperature, and abnormal communication.
 - These protections may trigger and interrupt output during use.
 - The company is not responsible for indirect losses caused by accidental power failure when supplying power to special equipment such as medical devices or servers.
 - Any accidents resulting from illegal use, self-dismantling, or man-made damage are also not the company's responsibility.
 - Before using the power station, read this user manual thoroughly to ensure proper understanding and safe operation.
 - Keep the manual for future reference.
 - Improper use may lead to serious injury, product damage, or property loss.
 - By using the power station, you are deemed to have understood and accepted all terms and conditions.
 - Users are responsible for their actions and any resulting consequences.
 - The company is not liable for losses due to failure to follow this manual.
 - In compliance with laws and regulations, the company reserves the final interpretation rights for this document and all related materials.
 - Content is subject to update, revision, or termination without prior notice.
 - Please visit the official website for the latest product information
-

IMPORTANT NOTES

- This product contains battery type "Secondary" (rechargeable).
- Electrical and electronic equipment that has become waste is known as old equipment/device. Old devices must not be disposed of with other household waste.
- Owners of old devices at the end of its service life must return the device by taking them to the collection points set up by public waste disposal authorities or distributors. This return does not entail any costs for you.
- Owners of old devices have an obligation to remove accessible batteries / rechargeable batteries as well as non-destructively removable lamps from the old device prior to return. This does not apply if old devices are being prepared for reuse with the participation of a public law firm.
- Battery removal warning: The battery contained in this product must be removed only by professional personnel only. The battery must never be removed by the end user, if not removed correctly it could damage the battery which could cause fire.
- Batteries removed from an old electronic device should be disposed of separately. This return of battery does not entail any costs for you and the user is obliged to return the battery.
- Please make sure that this product is not powered on when removing the battery. Fire hazard! Avoid short-circuiting the contacts of a detached battery. Do not incinerate the battery. Please handle the battery with Caution!
- If electrical appliances or batteries are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.



- The symbol of "Crossed rubbish bins "indicates that this product should not be disposed of with other household wastes and must be collected separately from unsorted municipal waste at the end of its service life.
- Please use the link below to view the online directory of the collection and return points:<https://www.ear-system.de/ear-verzeichnis/sammel-und-ruecknahmestellen>



V-TAC WEST EUROPE LTD. IN CASE OF ANY QUERY/ISSUE WITH THE PRODUCT, PLEASE REACH OUT TO US AT:
SUPPORT@V-TAC.EU FOR MORE PRODUCTS RANGE, INQUIRY PLEASE CONTACT OUR DISTRIBUTOR OR NEAREST DEALERS.
V-TAC WEST EUROPE LTD. GROUND FLOOR, 71 LOWER BAGGOT STREET, DUBLIN O2, IRELAND DO2 P593

V-TAC UK LTD. IN CASE OF ANY QUERY/ISSUE WITH THE PRODUCT PLEASE REACH OUT TO US AT
SUPPORT@VTACEXPORTS.COM V-TAC, 5A TUNGSTEN PARK, DOWNS ROAD, WITNEY, OXFORDSHIRE, OX29 OAX