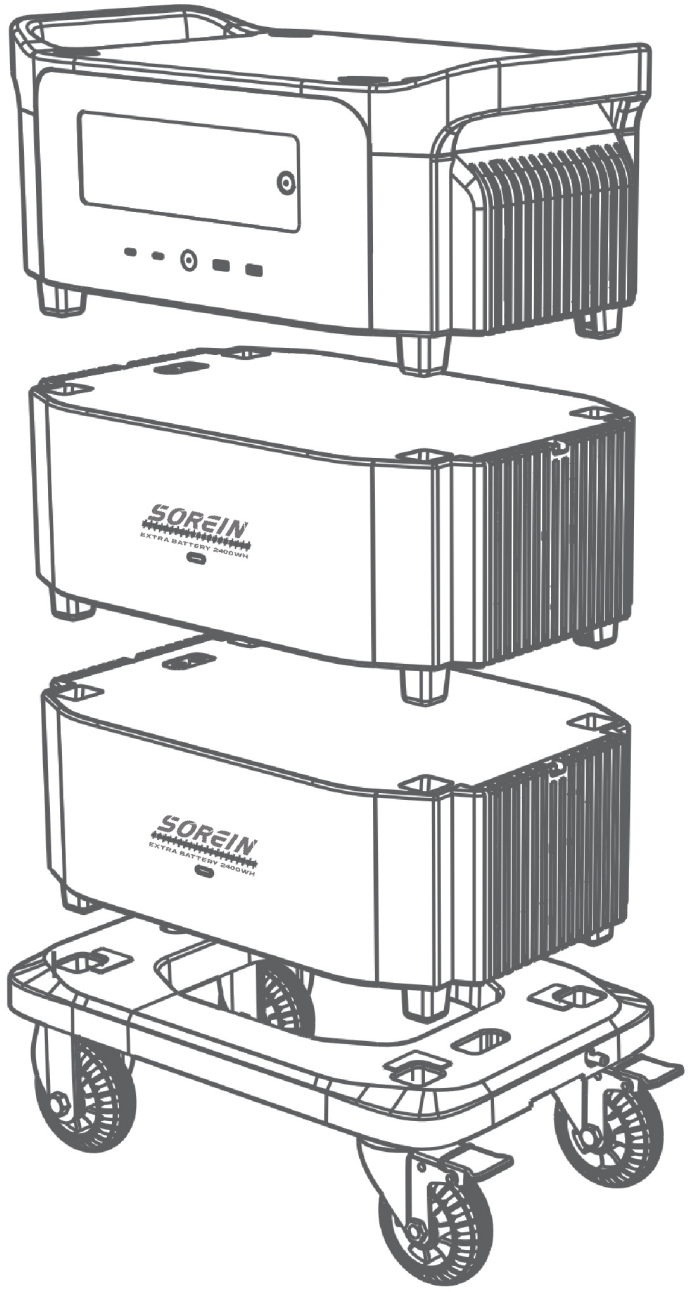


MODULAR PORTABLE POWER STATION

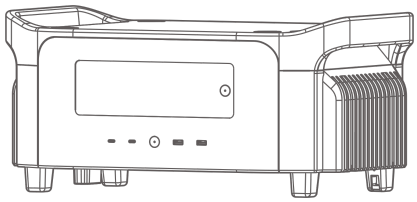
User Manual

USER MANUAL

Portable Power Station

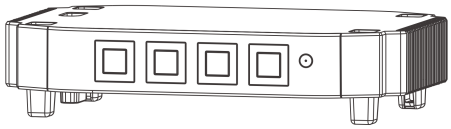
A complete guide to the operation, management, and maintenance of your portable power station.

01



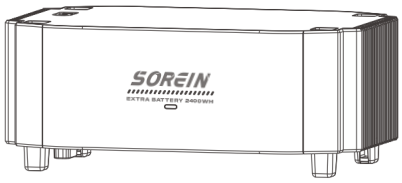
MAIN BASE

02



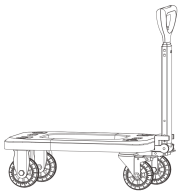
EXTRA INVERTER

03



EXTRA BATTERY

04



OFF-ROAD MOBILE CHASSIS

CONTENTS

1 About this Manual

2 Safety Information

3 Product Overview

4 Getting Started

5 Charging the Power Station

6 Management via the Companion App

7 Expanding the System

8 Storage and Maintenance

9 Regulatory Compliance

1 About this Manual

- This manual provides detailed instructions on the operation, management, and maintenance of the portable power station.
- Documentation content is subject to change (updates, revisions, or termination) without notice. To obtain the latest documentation, visit the official support website.
- The availability of certain accessories and features described in this manual may vary depending on your country or region.
- The illustrations in this documentation are for demonstrative purposes only and may differ from the actual product you received.

IMPORTANT

Please read the product documentation thoroughly and ensure you understand it before using the product. Improper use may cause serious injury, product damage, or property loss. Always refer to the most up-to-date documentation available on the official support website. This documentation takes precedence over all other versions.

By using this product, you acknowledge and agree to all terms and conditions stated in the documentation. The manufacturer is not liable for losses caused by improper use or failure to adhere to the provided instructions. Subject to applicable laws and regulations, the manufacturer reserves the right to the final interpretation of this document and all documents related to the product.

2 Safety Information

2.1 General Requirements

- Do not disassemble, repair, or modify the device by yourself. For any maintenance or service, contact Customer Service.
- Disconnect the device from all external power sources before attempting any service or maintenance.
- To reduce the risk of damage to the electric plug and cord, pull the plug rather than the cord when disconnecting the device from the power source.
- Do not pierce the device with sharp objects.
- Do not insert fingers or hands into the ports on the device.
- Do not insert wires or other metal objects into the device, to prevent short circuits.
- Do not block or restrict the air vent during operation.
- Do not use any unofficial or unrecommended components or accessories. For any replacement, contact Customer Service for further assistance.
- Do not operate the device if the cord, plug, or any output cable is damaged.
- Do not stack any heavy objects on the device.
- Place the device on a stable and flat surface. Avoid damage to the device or personal injury caused by the product falling or tipping over.
- The AC output socket is automatically disabled if it remains idle for a certain period. To ensure a continuous power supply, set the Power Saving Mode in the companion app. Additionally, regularly check the power station's battery level.
- This device is not intended to power life-sustaining medical equipment, such as medical-grade ventilators (e.g. hospital-grade CPAP machines) or artificial lungs (e.g. ECMO systems). If you intend to use it with non-life-sustaining medical equipment, consult the equipment manufacturer first to confirm compatibility with an external power source.
- Power supply devices generate electromagnetic fields during use, which might affect the normal operation of medical implants or personal medical equipment such as pacemakers, cochlear implants, hearing aids, and defibrillators. If such medical equipment is in use, contact its manufacturer to inquire about any restrictions. These measures are fundamental to ensuring a safe distance between medical implants and this product while in use.

- The plug of the included charging cable is a disconnecting device, and the wall outlet to which it is connected must be easily accessible and well grounded.
- Electrical appliances connected to this device shall comply with local certification requirements.
- Do not use the device to power tools for cutting into live parts, wiring, or materials that might conceal live parts or wiring.
- During use in a repair facility such as a vehicle repair center or workshop, or any other place where repairs are conducted, do not place the device on the floor or at a height less than 457 mm (18 inches) above the floor.
- This product must be grounded. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. For your safety, the manufacturer provides a cord with an equipment grounding conductor and a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- Improper connection of the equipment grounding conductor might result in a risk of electric shock. If you encounter either of the following situations, consult a qualified electrician instead of modifying the plug provided with the product:
    - You are unsure whether the product is properly grounded.
    - You find that the plug provided with the product does not fit the outlet.

2.2 Emergency Measures

- In case of any emergency, take precautions against electric shock before touching the device, such as wearing insulating gloves.
- If the product gets wet, stop using it immediately and refrain from further operation or powering it on. Place the product in a secure, waterproof, and well-ventilated area, then contact Customer Service for assistance.
- If the product falls into water, place it in a secure, waterproof, and well-ventilated area, and keep it away from contact until it is completely dry. The dried product should not be used again and must be properly disposed of according to local laws and regulations.
- If the product catches fire, use fire extinguishers in the following order: water or water mist, sand, fire blanket, dry powder, and finally a carbon dioxide fire extinguisher.

- If the device is overturned and severely damaged, wear insulating gloves to power it off, place it in an open area far from flammable materials and people, and dispose of it according to local laws and regulations.

2.3 Disposal and Recycling

- A device with severe damage, malfunction, or a depleted battery should be properly disposed of or recycled.
- The product contains batteries. Dispose of the product following local laws and regulations for battery disposal and recycling. Do not dispose of it with household waste, to avoid environmental pollution and safety hazards.
- If possible, ensure the battery is completely discharged (to 0% capacity) before disposing of the device. If not, do not place the battery directly into the recycling box; contact an authorized battery recycling company for proper handling.

3 Product Overview

3.1 Appearance

MAIN BASE

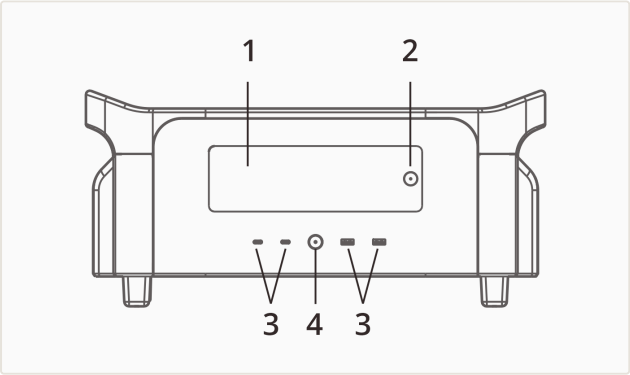


Figure 1. Main base, front view.

1	Display screen
2	Power ON/OFF button
3	USB output ports
4	USB ON/OFF button

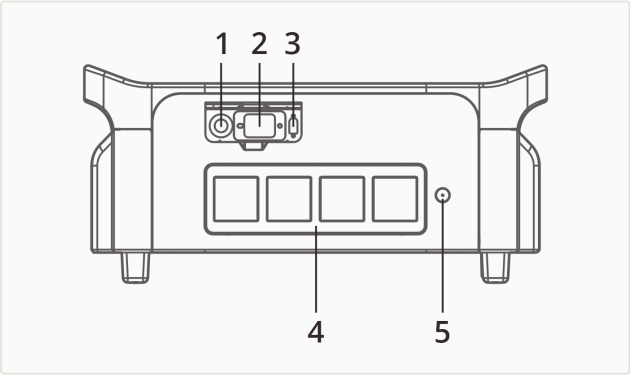


Figure 2. Main base, rear view.

1	Overload protection switch
2	AC input port
3	Solar input port
4	AC output socket
5	AC on/off button

BUTTON COMBINATIONS

FUNCTION	COMBINATION OF BUTTONS	DURATION
Turn the power station on / off	POWER ON/OFF button	2 seconds
Power Saving Mode on / off	POWER ON/OFF button + USB ON/OFF button	3 seconds
Child Lock on / off	POWER ON/OFF button + USB ON/OFF button	1 second
Wi-Fi reset	USB ON/OFF button	5 seconds
Factory reset	POWER ON/OFF button	15 seconds
Enter Warehouse Mode	POWER ON/OFF button + USB ON/OFF button	15 seconds

WAREHOUSE MODE

Warehouse Mode means that the power station is completely powered off. It is recommended when the device will not be used for an extended period of time or when it is being returned to the factory. Once in Warehouse Mode, the device must be recharged via AC or solar panel to reactivate.

EXTRA INVERTER

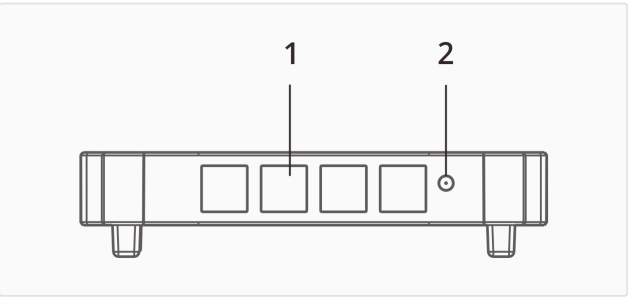


Figure 3. Extra inverter, front view.

1. AC output socket
2. AC on/off button

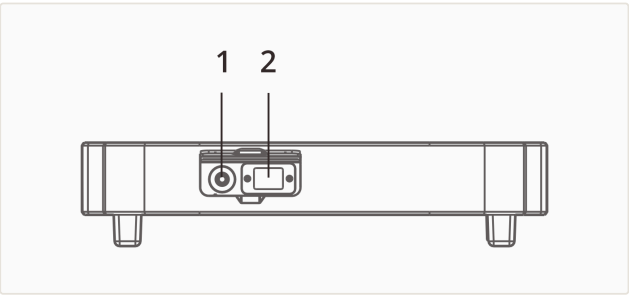


Figure 4. Extra inverter, rear view.

1. Overload protection switch
2. AC input port

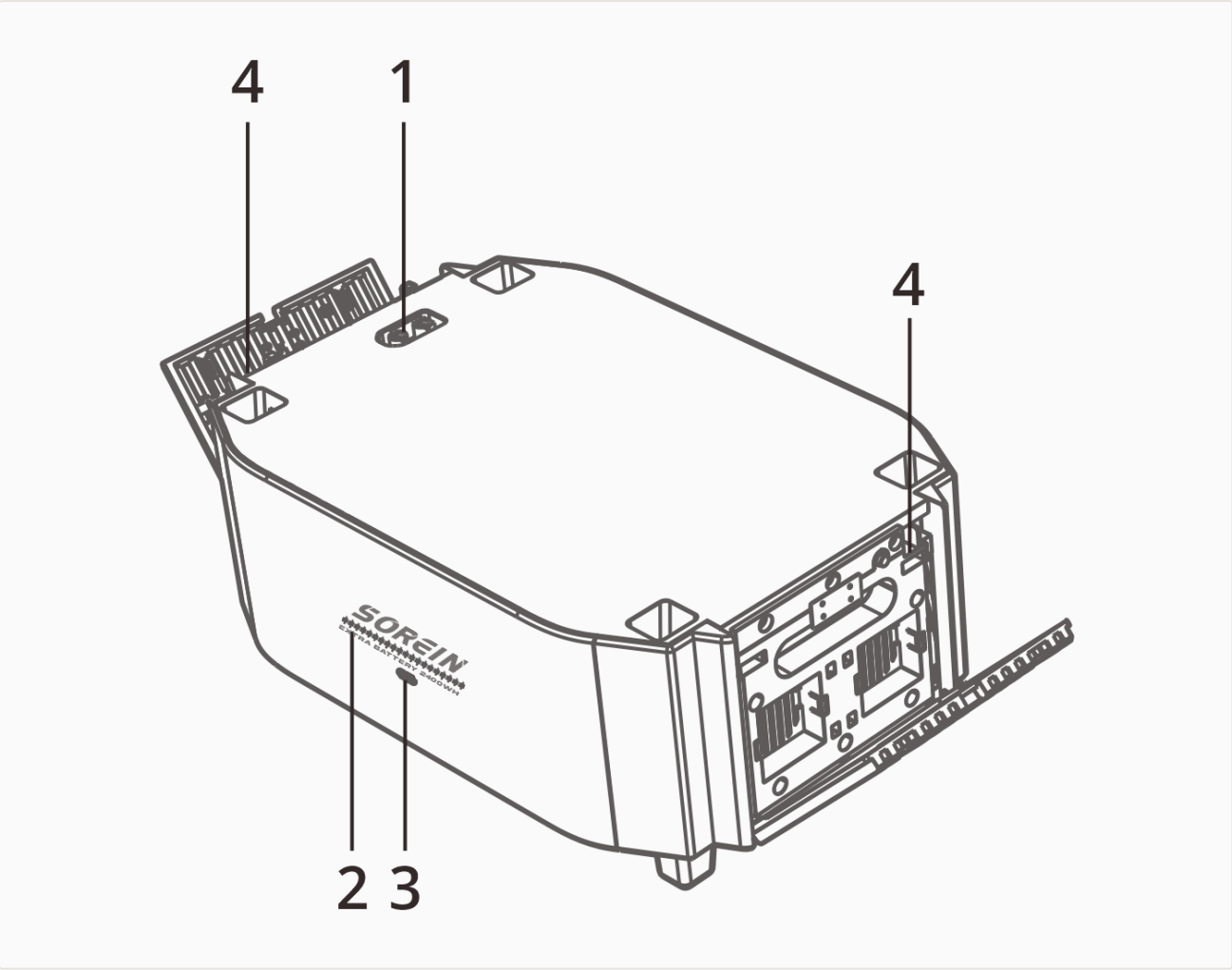


Figure 5. Extra battery module.

1	Battery port	3	LED indicator button
2	LED indicator	4	Latch

3.2 Display Screen

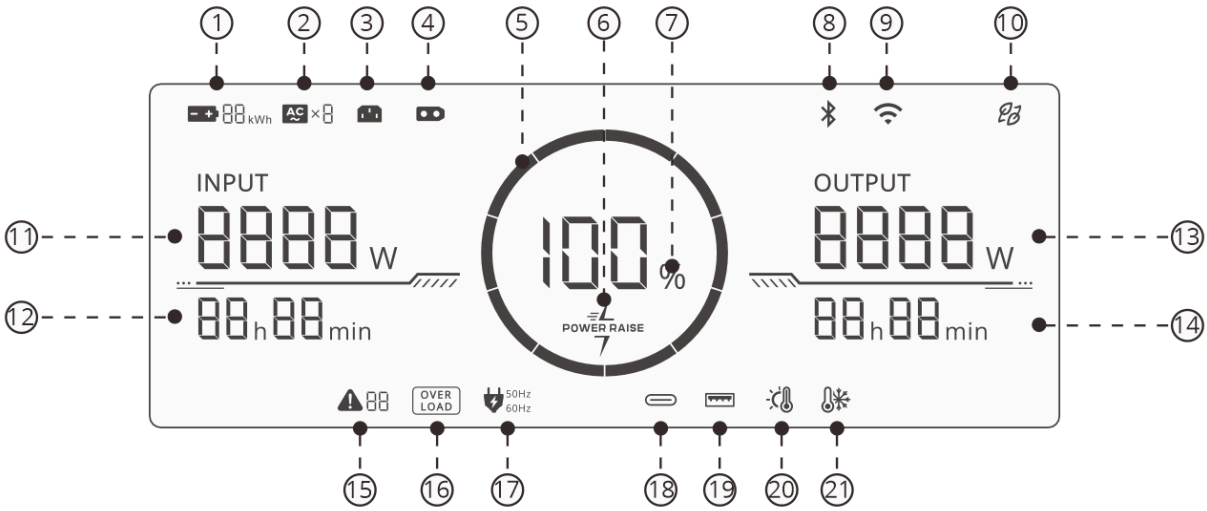


Figure 6. Display screen indicators and readouts.

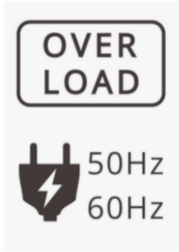
SCREEN INDICATORS

1	Total battery capacity (kWh)
2	Total number of inverter modules
3	AC charging
4	Solar charging
5	Remaining battery indicator
6	PowerRaise indicator
7	Remaining battery percentage
8	Bluetooth connection
9	Wi-Fi connection
10	Power Saving Mode
11	Total power input
12	Remaining charge time
13	Total power output
14	Remaining discharge time
15	Warning and error code
16	Overload warning
17	AC output
18	USB-C output
19	USB-A output
20	High-temperature warning
21	Low-temperature warning

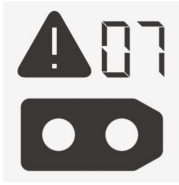
- When Power Saving Mode is on, the screen automatically turns off after 5 minutes of inactivity to conserve power. To wake it, briefly press the Power button.
- Error codes, overload, high-temperature warnings, and low-temperature warnings appear only if there is an abnormality in the unit.

3.3 Warning and Error Messages

The display screen shows warning and error indicators when the unit detects an abnormality. The table below lists each indicator, its meaning, and the recommended corrective action.

LCD INDICATOR	ISSUE DESCRIPTION	SOLUTION
	Child Lock Protection	Press and hold the Power ON/OFF button and the USB ON/OFF button simultaneously for 1 second to disable the child lock.
	High Temperature Protection	1. If you are using many appliances or a high-power appliance, try reducing the number of appliances or suspending the use of high-power appliances. 2. If high-power charging is in progress, try switching to low power or simply stop charging. When the high-temperature indicator has cleared, you can restart the relevant module manually. Installing the official SOREIN air cooler for the extra battery is recommended.
	Low Temperature Protection	1. Place the unit in a warm place to use. 2. If the unit has shut off due to low temperature, move it to a location above 10°C for more than half an hour before switching it on again.
	AC Output Overload Protection	1. Ensure that the power of each appliance connected to the AC outlet does not exceed the rated power; if it does, disconnect the appliance. 2. Ensure that the total power output of all AC outlets on each level does not exceed the rated power; if it does, remove some equipment. 3. Check for short-circuited equipment and remove it if found. Restart the AC module by pressing the AC output switch once all issues have been rectified.

LCD INDICATOR	ISSUE DESCRIPTION	SOLUTION
	USB Output Overload Protection	Up to 100 W devices are supported. Remove the overload device from the port, then short-press the USB outputs ON/OFF button to restart the module.
	Excessive AC Charging Voltage Protection	1. Make sure the AC input voltage does not exceed the maximum limit (135 V in USA/Japan; 240 V in Europe). 2. If the limit is exceeded, connect an appropriate converter before charging. 3. Reconnect the AC charging cable and restart AC charging after the issue has been resolved.
	Low AC Charging Voltage Protection	1. Make sure the AC voltage is not below the minimum limit (80 V in USA/Japan; 210 V in Europe). 2. If below the minimum, connect an appropriate converter before charging. 3. Re-plug the AC charging cable and restart AC charging after the issue has been rectified.
	Excessive AC Charging Current Protection	1. Disconnect all electrical appliances connected to the unit. 2. Press the overload protection button on the back of the unit, then re-plug the AC charger cable. 3. If the unit charges normally, resume use. If the issue persists, contact customer service.
	Excessive AC Output Voltage Protection	1. Disconnect all equipment connected to the unit. 2. Restart the unit by pressing the switch on the AC module.

LCD INDICATOR	ISSUE DESCRIPTION	SOLUTION
	Low XT60 Charging Voltage Protection	1. Ensure the input voltage is not less than 10 V and the power is not less than 50 W (e.g. ensure the solar panel has sufficient sunlight). 2. Check for broken or shorted input cables and replace if necessary. 3. Re-plug the XT60 cable and restart XT60 charging after the issue has been rectified.
	Excessive XT60 Charging Voltage Protection	1. Ensure the XT60 input voltage does not exceed 100 V. 2. If it does, reduce the XT60 input voltage (e.g. by reducing the number of solar panel cells connected in series). 3. Re-plug the XT60 cable and restart XT60 charging after the anomaly has been rectified.
	XT60 Charging Voltage Too High	The input voltage is too high and the MPPT module may be damaged. Contact customer service directly.
	Two Inverters Directly Connected	Do not directly connect two inverters. Set up your system as follows: inverter 1 → battery 1 → inverter 2 → battery 2...
	Internal Communication Error	Reboot the power station. If the problem persists, contact SOREIN official customer service.
	Device Damaged	Do not disassemble the equipment. Power off the device and contact SOREIN official customer service for assistance.

3.4 Specifications

PRODUCT NAME	MAIN BASE	EXTRA INVERTER	EXTRA BATTERY	OFF-ROAD MOBILE CHASSIS
GENERAL INFO				
Net weight	9.5 kg	7.1 kg	22 kg	6.5 kg
Dimensions (L × W × H)	465 × 300 × 103 mm	465 × 300 × 103 mm	465 × 300 × 186 mm	581 × 410 × 192 mm
Battery capacity	N/A	N/A	2400 Wh, 48 V	N/A
OUTPUT PORTS				
AC outlet	· EU: 3600 W · US: 3300 W · JP: 3000 W	· EU: 3600 W · US: 3300 W · JP: 3000 W	N/A	N/A
USB-A	18 W × 2, total 36 W	N/A	N/A	N/A
USB-C	100 W × 2, total 100 W	N/A	N/A	N/A
INPUT PORTS				
AC charging	· EU: 2200 W · US: 1800 W · JP: 1500 W	· EU: 2200 W · US: 1800 W · JP: 1500 W	N/A	N/A
Solar charging (XT60)	11–60 V, 20 A max, 1000 W max	N/A	N/A	N/A
BATTERY INFO				
Capacity	N/A	N/A	2400 Wh LFP, 48 V	N/A
OPERATING TEMPERATURE				
Optimal operating temperature	20°C – 30°C (68°F – 86°F)			
Discharging temperature	–20°C – 45°C (–4°F – 113°F)			

PRODUCT NAME	MAIN BASE	EXTRA INVERTER	EXTRA BATTERY	OFF-ROAD MOBILE CHASSIS
Charging temperature	0°C – 45°C (32°F – 113°F)			
Storage temperature	0°C – 45°C (32°F – 113°F)			

4 Getting Started

4.1 Battery Installation

The device works together with a compatible battery pack to provide energy storage and output. For proper operation, install the battery using the portable stand included in the package.

1. Install the mobile chassis.

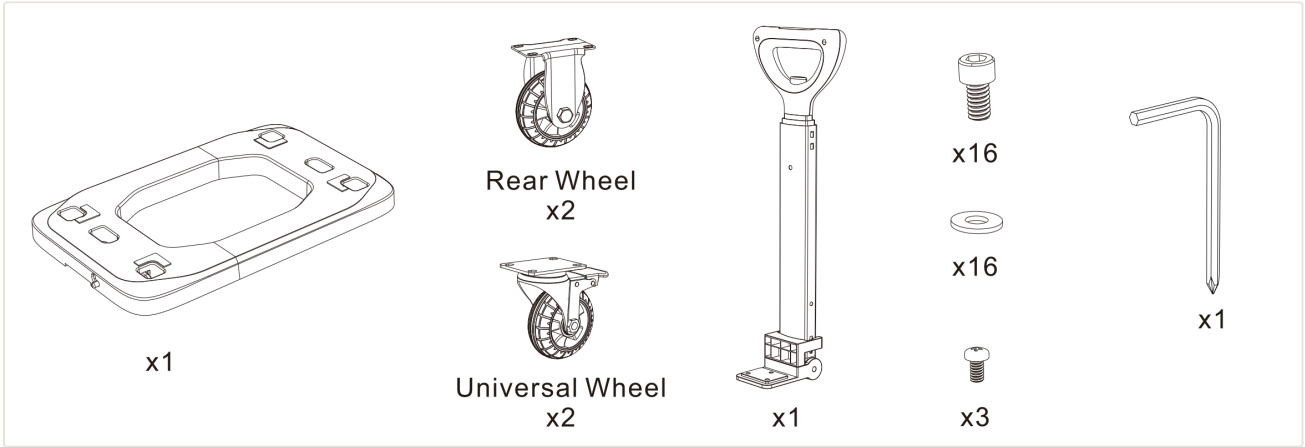


Figure 7. Parts and hardware included.

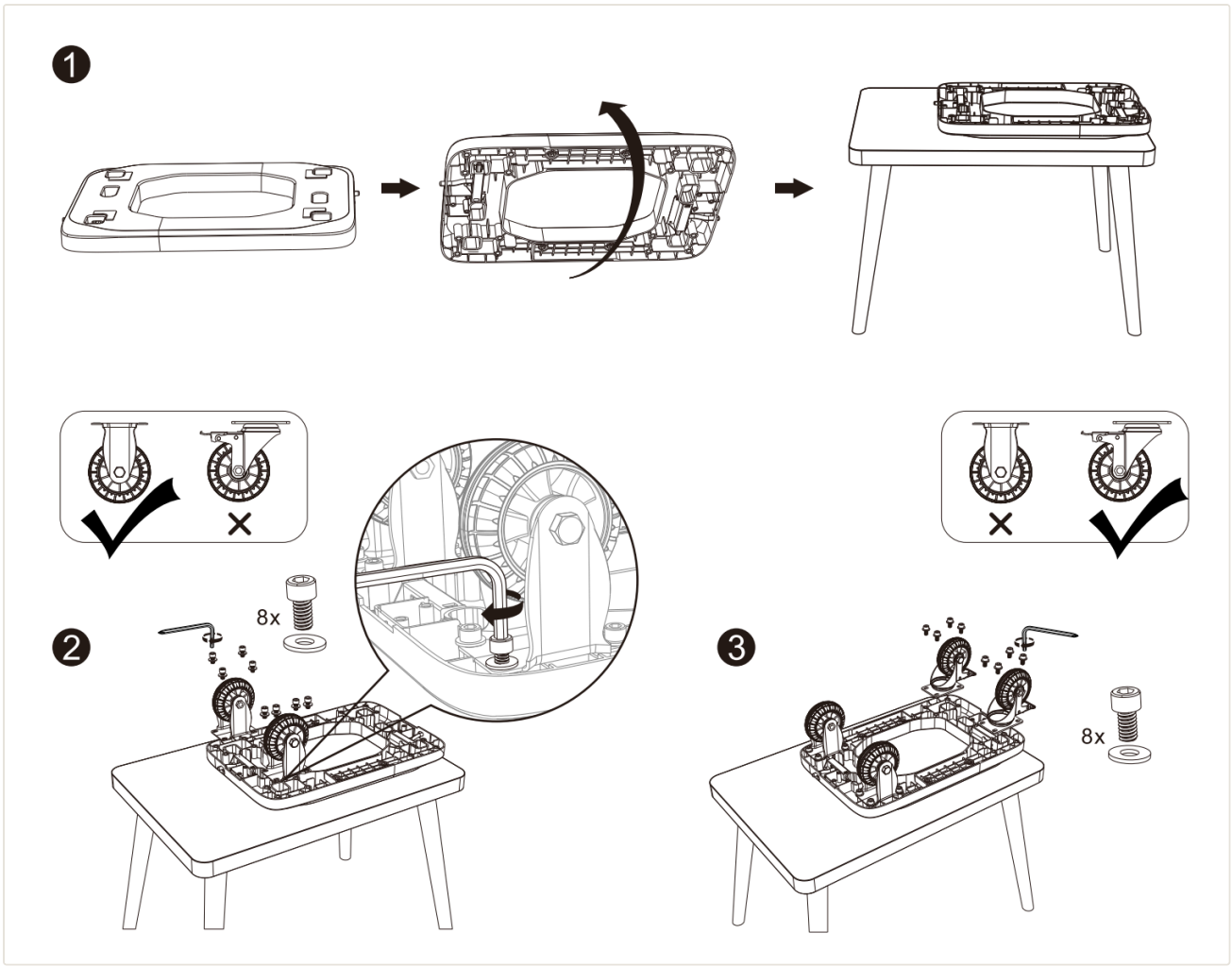


Figure 8. Attaching the casters to the chassis (steps 1–3).

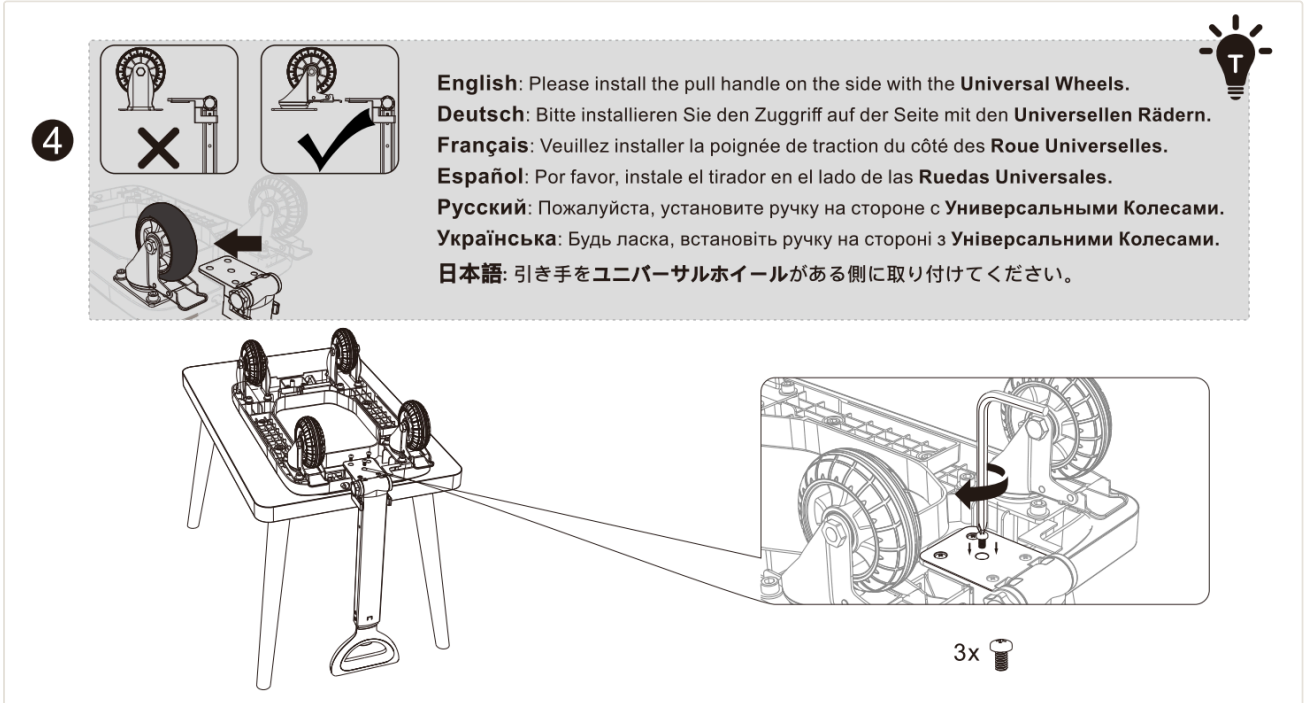


Figure 9. Installing the pull handle (step 4). Fit it on the side with the universal wheels.

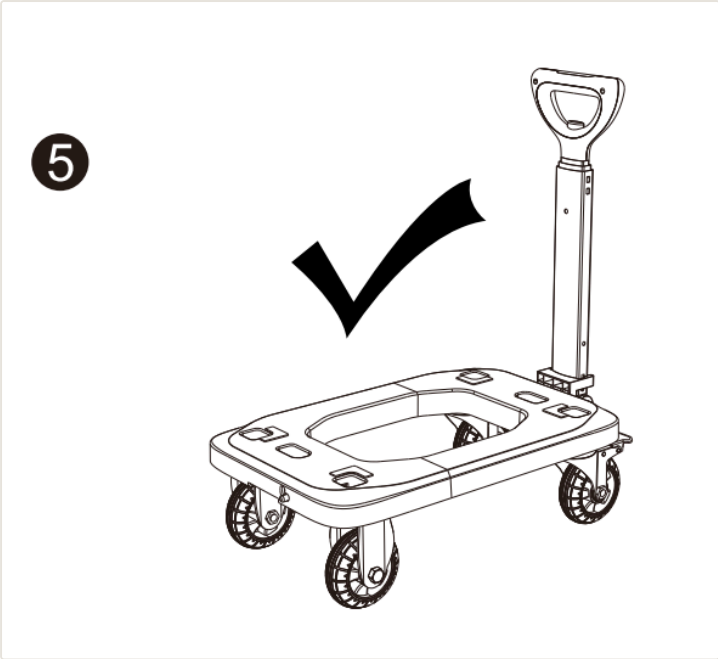


Figure 10. The fully assembled mobile chassis (step 5).

2. Carefully place the battery module onto the mobile chassis, then place the inverter module onto the battery module, and finally place the main base on top. Ensure that the inverter and battery are properly aligned with the corresponding locking latch.

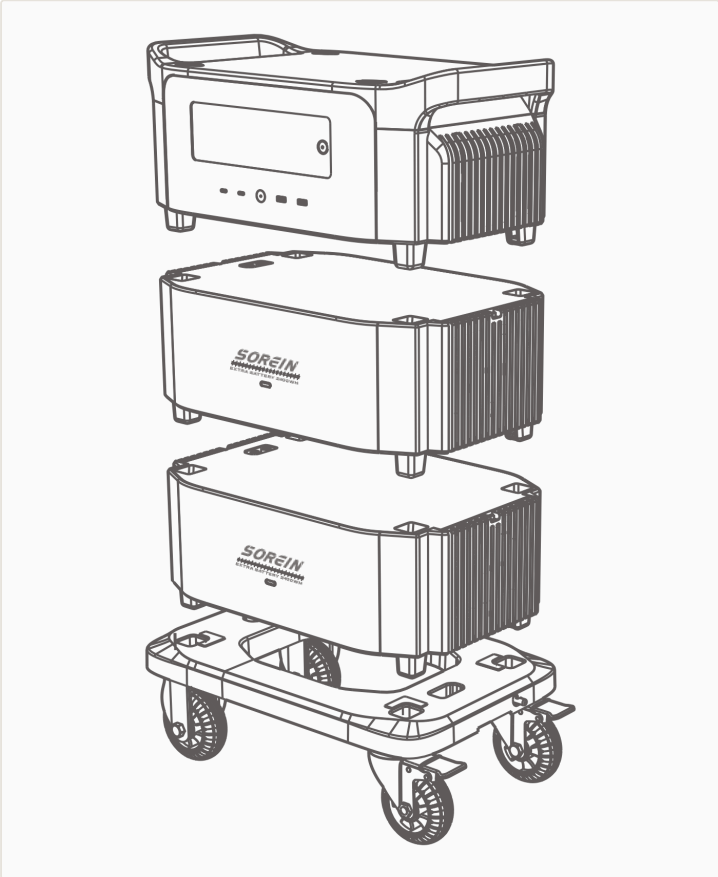
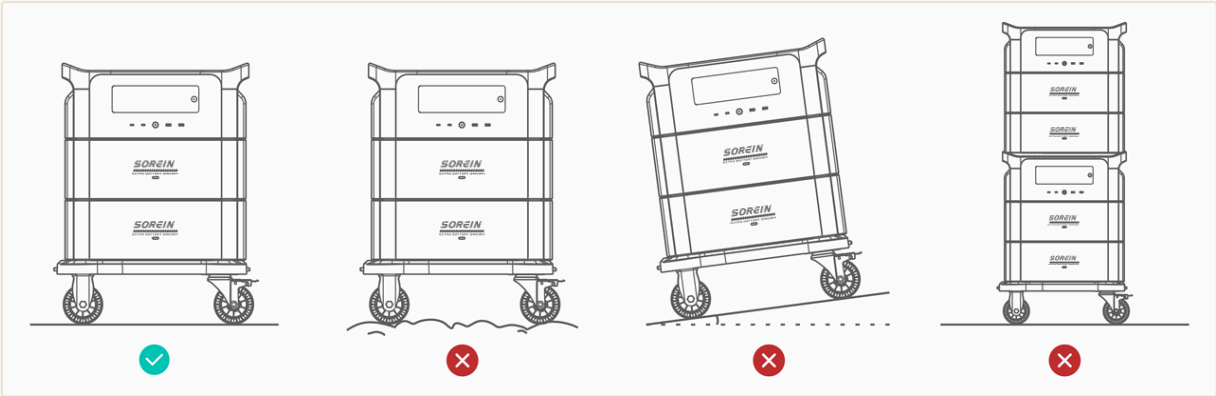


Figure 11. Correct stacking order and latch alignment.

CAUTION

- Because the device is very heavy, two people should carry it to avoid potential personal injury.
- The device must be used as a single, non-stacked unit on a hard, flat surface rather than soft surfaces (for example, dirt or sand). Do not place the portable stand on a tilted surface, as it may cause the product to topple over, potentially resulting in personal injury or product damage.



4.2 Power On / Off

To power on the device, press and hold the power button for 2 seconds.

To power off the device, press and hold the power button for 2 seconds until the display screen turns off.

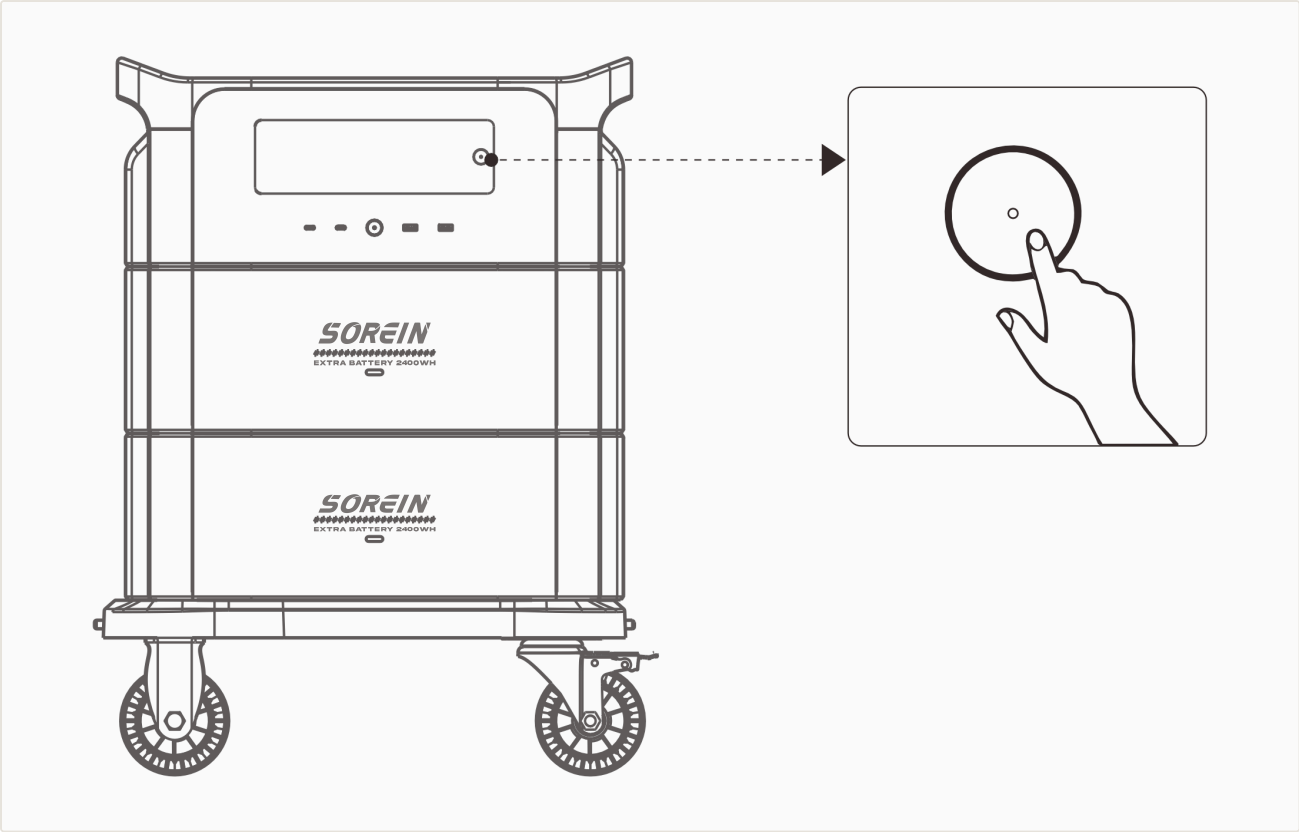


Figure 12. Powering the device on and off.

- When the device is powered off, it automatically powers on when connected to solar or AC power for charging; the screen takes 5 to 10 seconds to light up.
- When the device is powered on, press the power button once to turn the screen on or off.

4.3 Powering Your Appliances

When powering your appliances, ensure both ends of the cable are securely connected.

When the device is powered on, press the AC output button to enable the AC output socket. Then connect your AC load equipment to the AC output socket to charge or power it.

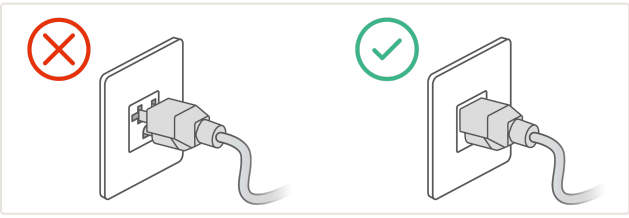


Figure 13. Securing both ends of the cable.

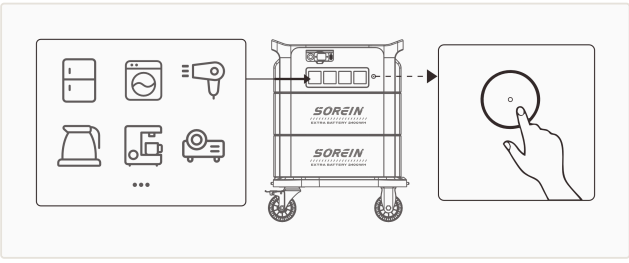


Figure 14. Enabling the AC output.

NOTE

The AC output socket is automatically disabled if it remains idle for a certain period. To ensure a continuous power supply, turn off Power Saving mode. Additionally, regularly check the power station's battery level.

5 Charging the Power Station

When charging your power station, ensure both ends of the cable are securely connected.

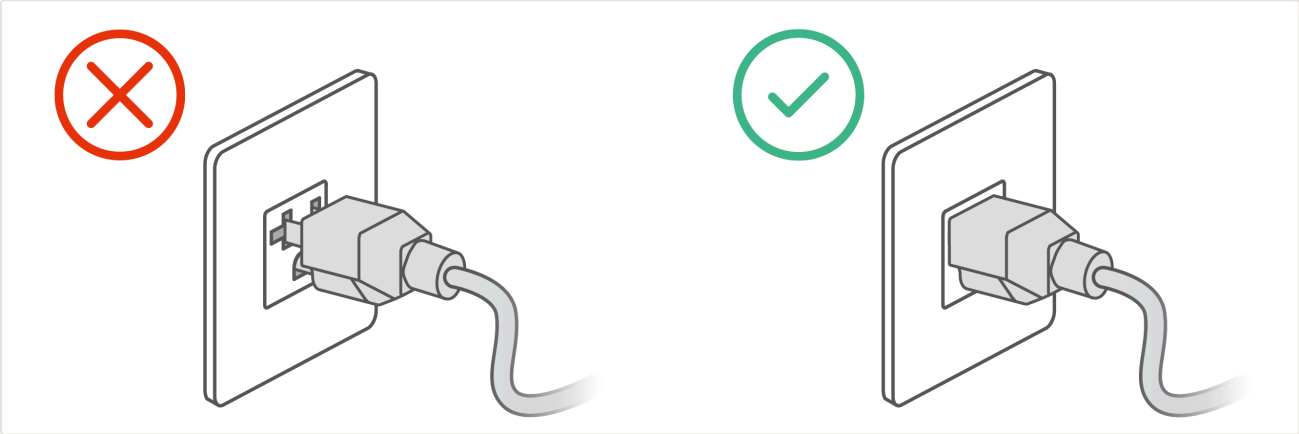


Figure 15. Connecting the charging cable.

VIA SOLAR PANEL

You can charge the device by connecting it to a solar panel. Ensure that the solar panel connectors are compatible with the port on the device.

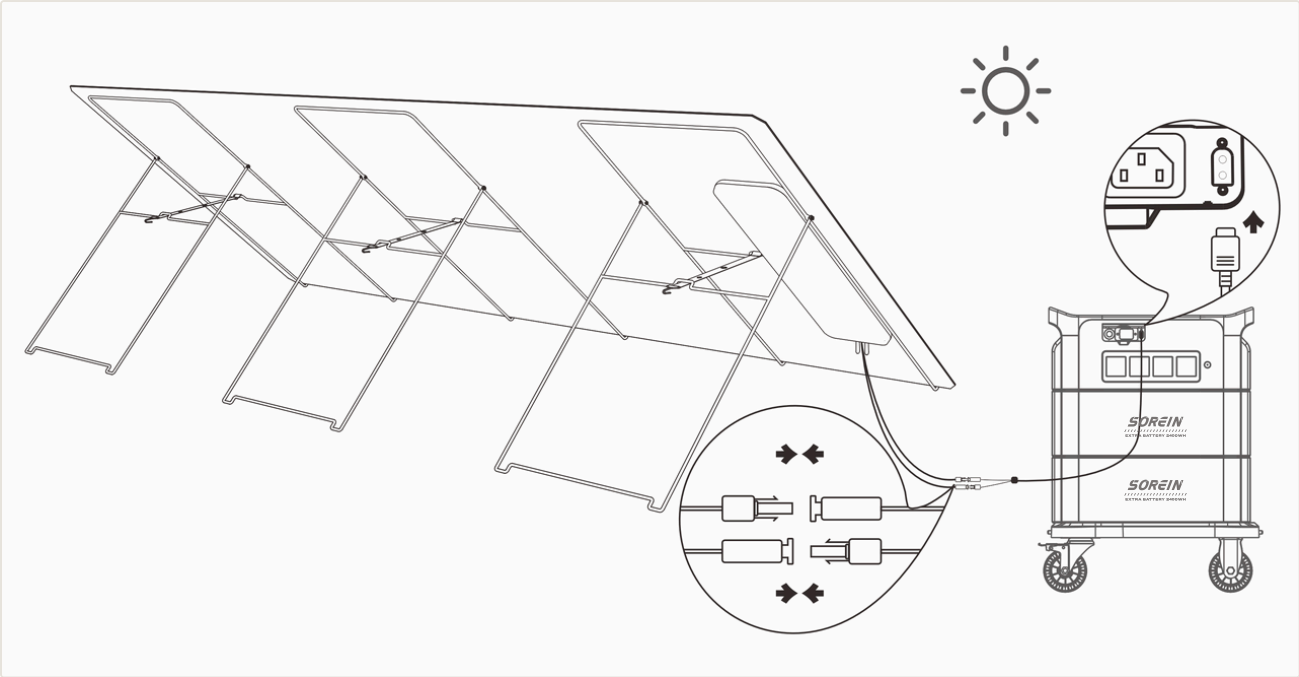


Figure 16. Charging via solar panel.

VIA WALL OUTLET

You can charge the device by connecting it to a wall outlet.



Figure 17. Charging via wall outlet.

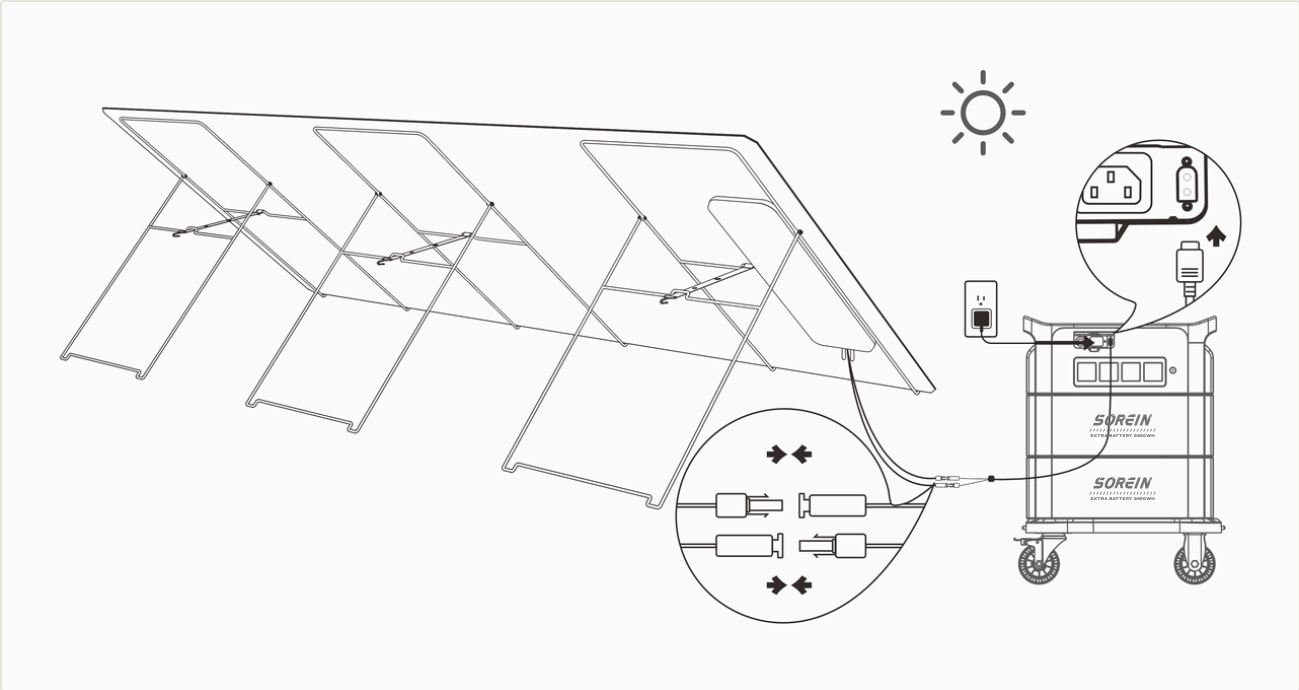


Figure 18. Simultaneous solar and wall-outlet charging.

6 Management via the Companion App

6.1 Download the Companion App

The companion app is a one-stop solution that lets you monitor the status of all your devices in real time, manage them from one place, control them remotely, and customize all settings — such as battery life, input/output, and more.

To download the app, search for *EnergyKeeper* in the iOS App Store or on Google Play.

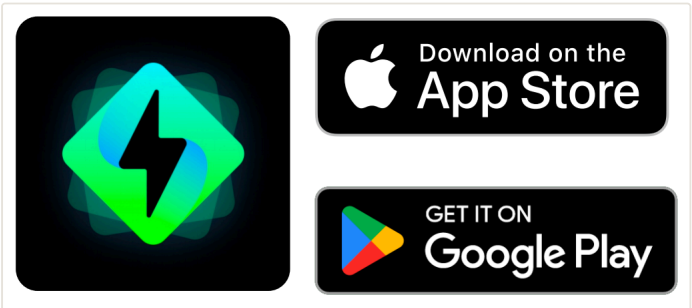


Figure 19. Downloading the EnergyKeeper app.

6.2 Add the Device and Connect to the Network

You can add the device to the companion app to manage and control it anywhere, at any time. To add the device and set up the Internet connection, do the following:

1. Open the app and log in to your account. If you don't have an account, create a new one.
2. Tap the button that lets you add a device.
3. Select the device from the device list and follow the on-screen instructions to add the device and set up the Wi-Fi network.

6.3 General Settings

After binding your device to your account, you can manage settings such as:

- Rename your device.
- Share your device with others.
- Customize power input or output.
- Set the charge and discharge limits.
- Change the operating mode.
- Upgrade firmware.

For the specific functions and settings of your device, refer to the companion app. You can configure your device based on your use scenario and preferences. The app may receive periodic feature updates, so explore it on the actual user interface.

7 Expanding the System

7.1 Expand Battery Capacity

If you frequently encounter power-intensive scenarios or require prolonged usage during power outages, you can proactively install additional batteries. Your device can connect up to 23 extra battery packs, with 5 packs per stack.

The following illustrations show how to connect different numbers of extra battery packs.



Figure 20. Connecting 2–5 extra batteries.

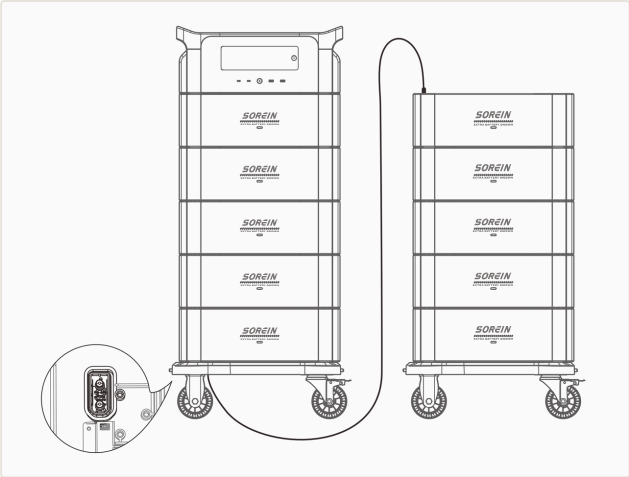


Figure 21. Connecting 6–10 extra batteries (10 shown).

Each stack supports up to 5 × extra battery. If more than 10 batteries are used, divide them into separate stacks.

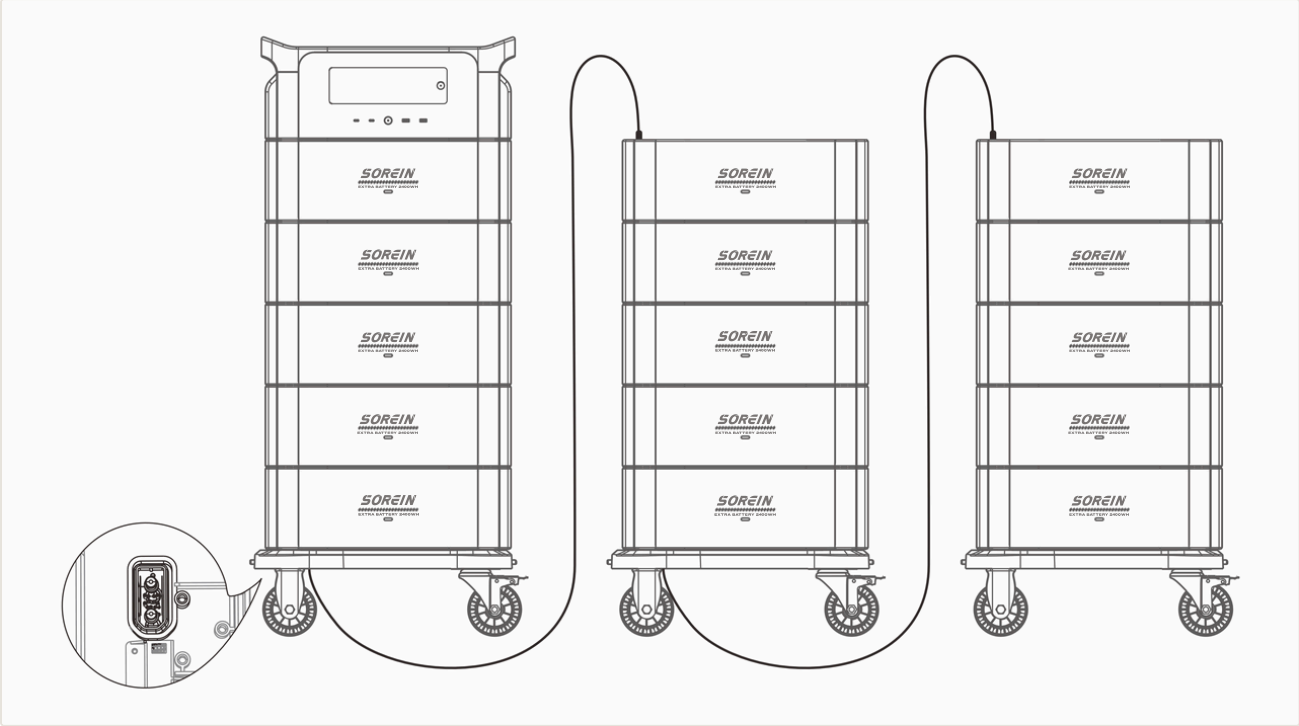


Figure 22. Dividing more than 10 batteries into separate stacks.

NOTE

- The rated capacity of one extra battery pack is 2.4 kWh. You can expand capacity by connecting up to 23 battery packs to achieve a total capacity of 55.2 kWh.
- To connect more than 5 battery packs, you may need to purchase another portable stand and connecting cable.
- If you use more than 5 battery packs, arrange them in two stacks with even distribution to ensure balanced weight, symmetrical cable routing, and stable system performance.

7.2 Maximize Power Output

When using the device to power more appliances, you can connect up to 4 extra inverters. This setup allows all connected units to work together as one integrated system, combining their total output up to 18 kW(EU version) / 16.5kW(US version) / 15kW(JP version) and total capacity to 55.2 kWh to power your entire home.

NOTE

To achieve the maximum output power of 18 kW(EU version) / 16.5kW(US version) / 15kW(JP version) , connect 4 extra inverters with at least 10 extra battery packs connected separately. For details, see "Expand battery capacity."

7.3 Maintain Uninterrupted Power

When connected to the grid, the power station functions as a reliable UPS (uninterruptible power supply) — a device or system that provides continuous backup power during a grid power outage. In the event of a sudden power outage, it automatically switches to battery power within 20 ms, ensuring your connected devices stay up and running without interruption.

If the device works together with 2 extra inverters, the automatic switching time can be within 0 ms.

UPS MODE	UPS 1	UPS 2
Inverter requirement	1 inverter	2 or more inverters
Connection topology	1 inverter IN and OUT	Main base: AC IN · Extra inverter: AC OUT
LCD display	UPS 1	UPS 2
Maximum AC output power	1800 W (EU) · 1300 W (US & JP)	3600 W (EU) · 3300 W (US) · 3000 W (JP)
Switching latency	<20 ms	0 ms
Noise level	Low	High
Inverter power loss	Low	High
Recommended appliances	Fridge, TV, modem, Wi-Fi router, game console, etc.	Computers, network-attached storage (NAS), and multiple devices with a total rated power under 3000 W.

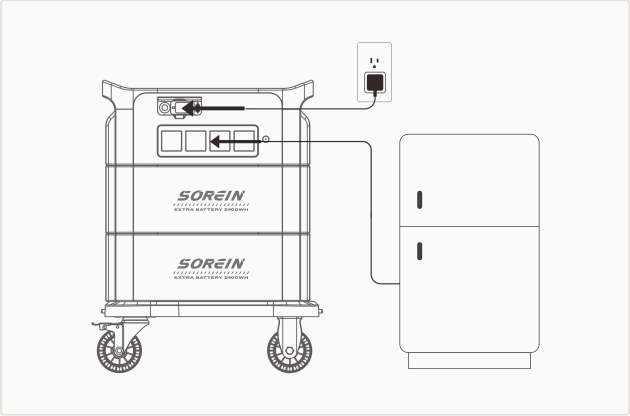


Figure 24. UPS 1 configuration.

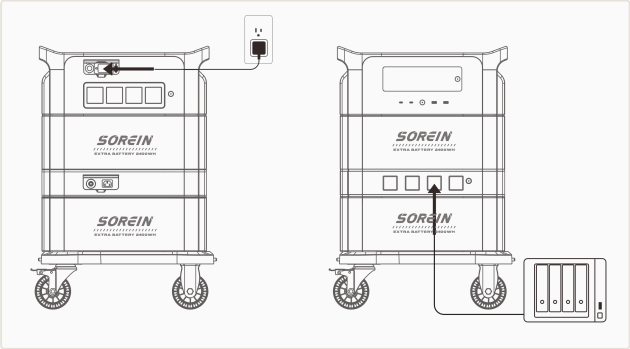


Figure 25. UPS 2 configuration.

8 Storage and Maintenance

8.1 Storage

- Store the device in a dry, cool, well-ventilated environment where the temperature is between −10°C and 45°C. The recommended range for optimal battery health is 0°C to 30°C.
- Place the device on a flat, non-slip surface to reduce the risk of falling.
- Keep the device away from water sources, heat sources, strong magnetic fields, environments with corrosive gases, and any flammable or explosive substances.
- For long-term storage, charge and discharge the product every 3 months (fully charge it, then discharge to 60% for storage) to maintain battery health.
- Do not leave this product unused or without charging for more than six months, as this will void the warranty.

8.2 Cleaning

- Before cleaning, power off the device and unplug all cables.
- Use a soft, dry cloth to wipe the surface.
- Do not use water, solvents, or chemical cleaners that might damage internal components or ports.
- Do not spray any liquid directly onto the device.
- Do not disassemble the device to clean internal components. Improper operation might void the warranty and cause safety hazards.

8.3 Maintenance

- Periodically check for dust or debris in vents or ports and clean the device if needed.
- Do not deeply discharge the device frequently, as this will shorten the battery lifespan.
- Ensure all cables and connectors are intact and not frayed or damaged.
- Store and operate the device within the recommended temperature and humidity range.
- If the device shows any signs of abnormal symptoms (e.g. unusual heat, smell, or noise), stop using it immediately and contact Customer Service.

- Do not open or disassemble the device under any circumstances. If your device needs to be serviced, contact Customer Service.
- Ensure the air vent is unobstructed during use to avoid overheating.

9 Regulatory Compliance

FCC COMPLIANCE STATEMENT

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RADIATION EXPOSURE STATEMENT

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm (7.9 in) between the radiator and your body.

INDUSTRY CANADA COMPLIANCE

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

END OF MANUAL