ALLWEI

ALLWEI Portable Power Station User Manual

Model: SGR-PPS500-4

INTRODUCTION

Thank you for choosing the ALLWEI Portable Power Station. This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your device. Please read this manual thoroughly before use and retain it for future reference.

The ALLWEI Portable Power Station is a versatile and reliable power source designed for various applications, including outdoor activities, emergency backup, and mobile work. With its compact size and multiple output options, it ensures you have power wherever you need it.

Figure 1: The ALLWEI Portable Power Station is designed to be lightweight and easy to carry, making it ideal for on-the-go power needs.

Figure 2: The power station is suitable for a wide range of versatile activities and emergency situations.

PACKAGE CONTENTS

Upon opening the package, please verify that all the following items are included and in good condition:

- 1 x ALLWEI 500W 461Wh Portable Power Station
- 1 x AC Power Adapter
- 1 x AC Power US Cord
- 1 x Car Cigarette Cable
- 1 x User Manual (this document)

Your browser does not support the video tag.

Video 1: This video demonstrates the unboxing process and shows the contents included in the ALLWEI 500W Solar Generator package.

PRODUCT OVERVIEW

Familiarize yourself with the various parts and controls of your ALLWEI Portable Power Station:

Figure 3: Front view of the ALLWEI Portable Power Station.

Figure 4: Labeled diagram of the ALLWEI Portable Power Station's ports and controls.

LCD Screen: Displays battery level, input/output wattage, and active ports.

AC Button: Activates/deactivates the 110V AC outlets.

USB Button: Activates/deactivates the USB-C and USB-A ports.

DC1 Button: Activates/deactivates the 12V/3A DC output ports.

DC2 Button: Activates/deactivates the 12V/10A cigarette lighter port.

LED Light & SOS: Provides illumination and emergency signaling.

5521MM Input Port: Used for charging the power station via various methods.

Your browser does not support the video tag.

Video 2: This video provides a detailed overview of the ALLWEI 500W Power Station's specifications and features, including its various ports and functions.

CHARGING THE POWER STATION

Your ALLWEI Portable Power Station can be recharged using four different methods:

1. **AC Wall Outlet:** Connect the provided AC power adapter and cord to the 5521MM input port and a standard wall outlet. Charging time is approximately 5.5-6.5 hours.

2. **Car Socket:** Use the included car cigarette cable to charge from your vehicle's 12V or 24V car socket. Charging time is approximately 4.5-5.5 hours (24V) or 5-6 hours (12V).

3. **Solar Panel:** Connect a 100W solar panel (sold separately) to the 5521MM input port. Charging time is approximately 6-7 hours in full sunlight. The built-in MPPT controller optimizes solar charging efficiency.

4. **Generator:** The power station can also be charged from a compatible generator within the 12V-24V range.

Figure 5: Illustration of the four charging methods for the power station.

OPERATING THE POWER STATION

To use the various output functions of your power station, follow these instructions:

1. Powering AC Devices

Press the **AC Button** to activate the two 110V AC outlets. The LCD screen will indicate that AC output is active. Plug your devices into the AC outlets. Press the AC Button again to turn off the AC output when not in use.

2. Using USB Ports

Press the **USB Button** to activate the USB-C (PD 60W) and USB-A (QC3.0) ports. Connect your USB-compatible devices for charging. Press the USB Button again to turn off the USB outputs.

3. Utilizing DC Outputs

For the 12V/3A DC ports, press the**DC1 Button**. For the 12V/10A cigarette lighter port, press the**DC2 Button**. Connect your 12V DC devices. Press the respective DC button again to turn off the DC outputs.

4. LED Light and SOS Mode

Press the **LED Button** on the side of the unit to cycle through the three brightness levels (low, medium, high). Press the button twice in quick succession to activate the SOS flash mode for emergencies. Press it one more time to turn off the light.

POWER CAPACITY FOR MOST DEVICES
461Wh Capacity & 500 Watt Output

Phone (10W) **41 Hrs**	Lamp (10W) **41 Hrs**	Drone (40W) **10 Hrs**	Laptop(42W) **9.8 Hrs**	Projector (100W) **4 Hrs**
Fan (50W) **8 Hrs**	Mini Fridge (45W) **9 Hrs**	CPAP(40W) **10 Hrs**	TV(70W) **5.9 Hrs**	Hand Drill (60W) **6.9 Hrs**

Figure 6: The power station can power a wide range of common devices for extended periods.

Figure 7: The integrated LED light provides adjustable illumination and an SOS mode for emergencies.

SAFETY INFORMATION

Please observe the following safety precautions to ensure safe operation and prolong the lifespan of your power station:

- Do not disassemble, repair, or modify the unit.
- Do not expose the unit to fire or extreme temperatures.
- Avoid contact with water or other liquids. Do not operate in wet conditions.
- Keep out of reach of children and pets.
- Ensure proper ventilation during use and charging to prevent overheating.
- Do not block the ventilation openings. The unit features dual cooling fans to maintain optimal temperature.
- Store the unit in a cool, dry place away from direct sunlight.
- The built-in Battery Management System (BMS) and MPPT controller provide protection against short-circuit, over-current, low-voltage, over-load, over-voltage, and over-heating. If an error occurs, an icon will flash on the LCD

screen.

Figure 8: The integrated BMS and MPPT controller provide comprehensive safety features.

SPECIFICATIONS

Feature	Detail
Model Name	SGR-PPS500-4
Wattage	500 watts (Peak 1000W)
Capacity	461Wh / 124800mAh
Fuel Type	Electric

Feature	Detail
Power Source	Battery Powered, Solar Powered
Item Weight	11 Pounds
Voltage (AC Output)	110 Volts (AC)
Product Dimensions	11.4"L x 6.4"W x 9.2"H
Material	PC+ABS
Special Features	Portable, Overload Protection, Short Circuit Protection, Lightweight, USB Port, Dual Cooling Fan, 3-level LED light, SOS mode, BMS, MPPT controller
AC Output	2 x 110V/500W (Peak 1000W)
USB-C Output	1 x PD 60W
USB-A Output	2 x QC3.0 ports
DC Output	3 x 12V/3A ports, 1 x 12V/10A Cigarette Lighter port
Input Port	1 x 110V 60Hz DC 5521mm (12V-24V)
Recharge Ways	AC Wall Outlet, Car Socket, Solar Panel, Generator

TROUBLESHOOTING

If you encounter issues with your ALLWEI Portable Power Station, please refer to the following common troubleshooting steps:

- **Unit Not Turning On:** Ensure the battery is charged. If the battery is depleted, connect it to a power source.
- **No Output from Ports:** Verify that the specific output button (AC, USB, DC1, DC2) for the desired port is activated. Check if the device you are trying to power is within the power station's wattage limits.
- **Charging Issues:** Confirm that the charging cable is securely connected to both the power station and the power source. Ensure the power source is active. For solar charging, ensure the solar panel is in direct sunlight and properly oriented.
- **Overload Protection:** If the power station shuts down or an overload icon flashes, disconnect the device causing the overload. Reduce the load and restart the power station.
- **Overheating:** If the unit feels excessively hot, ensure the ventilation fans are not blocked and the unit is in a well-ventilated area. Allow it to cool down before resuming use.

For persistent issues not covered here, please contact ALLWEI customer support.

MAINTENANCE AND STORAGE

Proper maintenance and storage will help extend the life of your power station:

- **Cleaning:** Use a dry, soft cloth to wipe the exterior of the unit. Do not use abrasive cleaners or solvents.
- **Storage:** Store the power station in a cool, dry, and well-ventilated area, away from direct sunlight and corrosive materials.
- **Battery Maintenance:** For optimal battery health, fully charge the unit every 3-6 months, even if not in use. Avoid storing the unit with a completely depleted battery.
- **Temperature:** Avoid exposing the unit to extreme temperatures (below 0°C/32°F or above 40°C/104°F) for prolonged periods.

WARRANTY AND SUPPORT

ALLWEI is committed to providing high-quality products and customer satisfaction. This product comes with a 5-year service commitment, ensuring long-lasting performance and support.
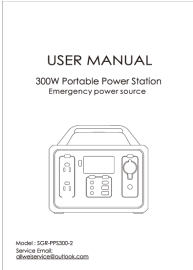
For any questions, technical assistance, or warranty claims, please contact ALLWEI customer support through the official channels provided at the point of purchase or on the ALLWEI website.

Related Documents -

	[ALLWEI 500W Portable Power Station User Manual](#) Comprehensive user manual for the ALLWEI 500W Portable Power Station (Model: SGR-PPS500-4), covering setup, operation, safety precautions, troubleshooting, and technical specifications for emergency power, outdoor activities, and home backup.
	[ALLWEI 300W Portable Power Station User Manual](#) Comprehensive user manual for the ALLWEI 300W Portable Power Station (280Wh). Learn about its features, product parameters, package contents, charging methods, operation, fan functionality, FAQs, and warranty information. This guide covers setup, usage for indoor and outdoor activities, and emergency backup power.
	[ALLWEI 300W Portable Power Station User Manual](#) Comprehensive user manual for the ALLWEI 300W Portable Power Station (SGR-PPS300-2), detailing its features, specifications, usage, charging methods, FAQs, and warranty information for reliable backup power.
	[ALLWEI 1200W Portable Power Station Specifications and Features](#) Explore the detailed specifications of the ALLWEI 1200W Portable Power Station, including battery info, ports, recharge times, and general features. Learn about its capacity, cell chemistry, lifecycles, and safety protections. Discover the various output ports like AC, USB-A, USB-C, and DC ports. Find information on recharge times with different adapters and solar panels. The document also details the product's dimensions, operating and storage temperatures, warranty, and included accessories.

[ALLWEI SGR-PPS300-2 300W Portable Power Station User Manual](#)
User manual for the ALLWEI SGR-PPS300-2 300W Portable Power Station. Features 280Wh (78000mAh) capacity, 600W peak output, pure sine wave AC, PD 60W Type-C, USB, and 12V DC outputs. Ideal for camping, travel, emergency backup (CPAP), and outdoor use with solar charging capabilities.

[ALLWEI 300W Portable Power Station SGR-PPS300-2 User Manual | Emergency Power Guide](#)
Comprehensive user manual for the ALLWEI 300W Portable Power Station (Model SGR-PPS300-2). Learn about its 280Wh capacity, 300W continuous power, pure sine wave AC output, PD60W Type-C, and multiple charging options including solar. Ideal for camping, travel, and emergency home backup.