



Power XP SKA 2500 OPERATION MANUAL

LIMITED WARRANTY

This product is guaranteed to be free from manufacturing defects for a period of one year from the date of purchase to the original purchaser. For warranty service, contact Powerhouse Two Inc at service@powerhb.com.

The warranty does not cover damage to any equipment attached to the unit that fails, or any damage from improper use or abuse. Warranty coverage is limited to repair or replacement of the machine provided it meets the requirements set forth herein. We assume no responsibility for external device performance or lack thereof.

The company can provide paid battery replacement service once the unit reaches the end of its service life. Contact service@powerhb.com for information.



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For information call
407-654-5451 or visit
www.powerhb.com



Congratulations and thank you for your purchase of a Power XP SKA 2500 series Portable Power Station. This unit is designed to give you many years of reliable service, providing power where you need it, whenever you need it.

The SKA 2500 is a robust 2000-watt powerhouse. At its core are long lasting and safe Lithium Iron Phosphate power cells. (LiFePo4) Able to handle peak demands up to 4000 watts, the unit delivers 2515-watt hours of pure sine wave power and boasts a 6000-time charge cycle. Even after recharging the unit 6000 times, you will still get 80% of the rated capacity!

The case features industrial strength plastics, fire resistant to UL 94 standards, rated V-0 and high-grade aluminum that offers rigidity and excellent heat dissipation. The unit even features a breaker style safety switch that ensures safe operation and provides full system shutdown during storage drastically reducing self-discharge.

Please take some time to familiarize yourself with the safe operation of this powerful unit. Your time invested here will assure years of hassle-free performance.



TAKE A TOUR

Take a moment and locate the various inputs and outputs found on your unit and illustrated above.

TROUBLESHOOTING

ISSUE

Unit does not respond, no power.

SOLUTION

Turn on the Master Safety Switch. Check the charge state on the display screen. Charge if needed.

No AC or DC output.

Check the charge capacity, charge if too low. Check the power requirement of the device being used and verify it does not exceed the unit's capability. Confirm the voltage setting of the unit matches the device. Reset if needed.

Be sure the output sections blue LED is lit.

Check the wiring of your device. Eliminate any faulty wiring and restart the unit.

The unit will not charge

Confirm the charging voltage is consistent with the units' inputs. (48V AC charging, maximum 500 W solar) Check that the input plugs are connected securely.

Unit shuts down during use.

Check for excessive heat. If the unit is being used in a high ambient temperature environment, the unit will shut off. Cool the unit and resume normal operation.

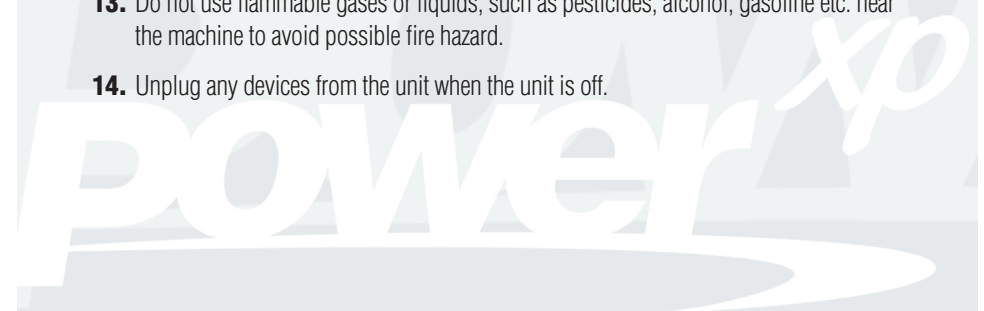
Technical Data

SKA 2500		
Battery	System Battery Voltage	38.4 V
	Battery Type	LiFePo4
	Cycle Life	6000 Cycles
	Capacity	65.5 Ah
AC Output	Continuous Output	2000 Watt
	Peak Output	4000 Watt
	Output Voltage	110V or 220V
	Frequency Range	50Hz/60Hz Switchable
	Watt Hour	2515 WH Pure Sine Wave
Input	Voltage	48 VDC
	Solar	18-80 VDC 500W max
Weight		68 lbs.
Temperature Range		-4°F to 104°F

IMPORTANT REMINDERS

The Power XP SKA 2500 Portable Power Station is a powerful electrical storage module. Improper usage risks electric shock or injury. Follow all directions when using these units.

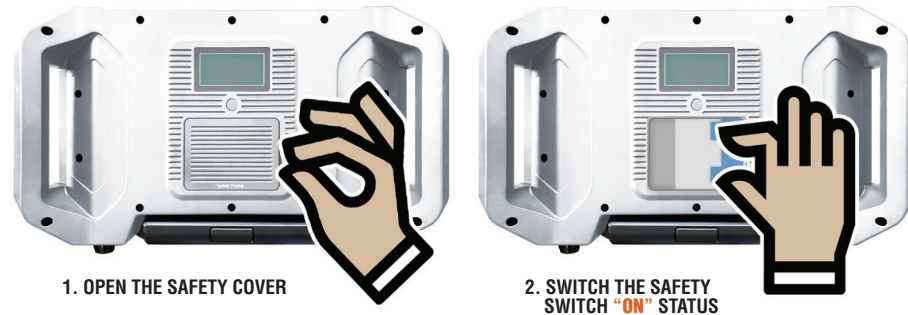
1. Please read and retain this instructional manual.
2. This device is for adult use only. Not for use by children. Adult supervision is required when children are present.
3. Do not insert any foreign objects into or attempt to open this device.
4. Use only recommended and compatible accessories with these units or risk personal injury, shock or fire.
5. Do not modify or tamper with the battery pack.
6. Do not use any frayed or broken cables with this unit.
7. Do not disassemble this unit. Contact Powerhouse Two if service is required. Opening the unit will void the warranty.
8. In the event of a malfunction, disconnect all cables from the unit.
9. Store and operate the unit in a clean, dry, temperature-controlled environment. Avoid high humidity and moisture
10. If the unit is to be stored for long periods of time, charge and discharge the unit every 6 months to ensure proper service life.
11. People who have implanted pacemakers should avoid direct contact with Battery Power Stations and chargers to avoid the unlikely event of signal disruption. Cell phones, power stations, and any electromagnetic devices should be kept a minimum of 6 inches away from a pacemaker.
12. If abused, it is possible that liquid could leak from the battery pack. Should this occur, do not touch. If it comes in contact with your skin, wash with soap and water. Seek medical attention if eye contact occurs.
13. Do not use flammable gases or liquids, such as pesticides, alcohol, gasoline etc. near the machine to avoid possible fire hazard.
14. Unplug any devices from the unit when the unit is off.



CHARGE UP

After unpacking your Power XP SKA 2500, it is time to activate the unit and fully charge it for your first use. The unit carries about 20% charge from the factory for safe shipping. You can check the device charge status anytime by pressing the Screen Display button. (#2 on the tour illustration)

Activation Steps:



1. OPEN THE SAFETY COVER

2. SWITCH THE SAFETY SWITCH "ON" STATUS

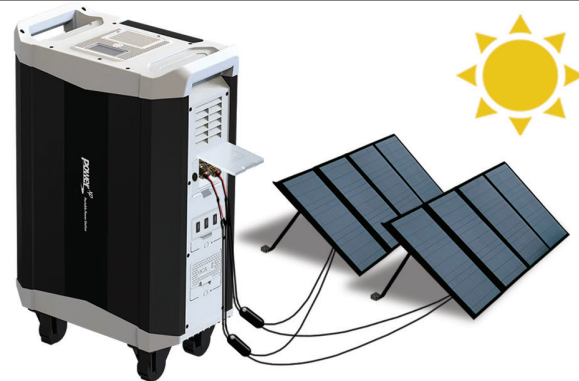
Now, unpack the 48V AC charger and plug the unit into the 4-pin charging port (#4 on the tour illustration) Plug the AC cord into the nearest wall outlet. It will take about 8- 10 hours to fully charge the unit. During the charging cycle, the screen will show you the percentage of charge in the internal system as well as the wattage coming into the unit. You will hear the internal cooling fan initiate and the charger indicator light will glow blue.

SOLAR CHARGING

You can also charge the Power XP SKA 2500 unit with the power of the sun! Using the supplied input cable (MC4 to Banana plug) you can connect solar panels. We recommend the Power XP Solar 4 panels available at www.power-xp.com, however all high-quality panels will do. The charging time will vary depending on the power of the solar panels. You can "daisy chain" multiple solar panels to combine their power up to 500 watts of input using the solar expansion cable set available at the webstore. A full complement of solar panels will reduce charging time to 6 hours.

Now that you are all charged up, you are ready to power whatever you need.

Charging Solar Panels



OPERATION INSTRUCTIONS

It is time to put the SKA 2500 to work. Here's how. First, make sure the Master Safety Switch is in the "On" position. Each section of outputs has their own On/Off button that turns on that areas function. Once pressed, the indicator light for the corresponding area will glow blue. Select the output you wish to use and press its activation button. When you are finished, press the activation button again to turn off that area. Remember to turn off each section to avoid unnecessary power drain.

DC 12V OUTPUT

The DC output section features three standard 5521 DC ports and one "Cigarette lighter" type accessory port that deliver 12 volts of power. You may use one or all these ports, and the unit will allow for drawing up to 10 amps or 120 watts.

USB OUTPUT

Each of the three USB "A" type ports deliver 5 volts and will allow for drawing up to 3 amps.

AC OUTPUT

The Power XP SKA 2500 can support both 110V 60Hz or 220V 50Hz. In North America, we operate the standard of 110V 60Hz. The unit is factory set to the 110V standard however we recommend you verify this. Simply turn on the AC section and the screen will display the current setting.

If you need to change the voltage and frequency, follow these simple steps. Click the AC section on, the blue light will come on. Press and hold the Screen Display button for 10 seconds. The blue LED AC indicator light will go out. Press the AC On/Off button again and the screen will display the new settings.

Once the AC section is on, the blue indicator light will shine blue. Now you are ready to access the three AC grounded plug ports and the 2515-watt hours of pure sine wave power. Remember this can handle peak surges up to 4000 watts! Your display screen will tell you both how much battery storage you have as well as how much you are using.

CHARGE WHILE YOU USE IT

The Power XP SKA 2500 unit allows you to be charging and discharging at the same time. Feel free to plug in your solar panels or charger while the unit is in use. When the input power is less than the output power, the unit will automatically enter low power mode. At this time the unit will beep, reminding you to remove the output.

SAFETY AND PROTECTION

The battery pack inside is one of the safest lithium chemistries in the world. In addition, the unit has "smart" electronics built right in. These circuits protect you and your unit from overcharging, over dis-charging, short circuits, overheating, over current and the integrated Battery Management System makes sure that each cell in the battery is charged fully and monitored 24/7. The unit is CE certified, carries RoHS and has been approved by the FCC.

COOLING SYSTEM

This sophisticated machine also features a built-in intelligent temperature control system which monitors and reduces the internal temperature, when necessary, with the cooling fan. It is completely normal for the unit to warm up when in use since a byproduct of battery draw is heat. (Remember your flashlight getting warm in your hand?) If the internal temperature reaches 113°F (45°C) The fan will automatically run, pulling outside air through the unit. Once temperature is reduced, the fan will shut itself off. Your unit knows how to take care of itself!

Note: When you turn on the AC section, the fan will initiate in anticipation of your power demands to pre-cool the interior.

POWER WHERE YOU NEED IT!

The trolley handle and casters make it simple to move the SKA 2500 to wherever your need is. Remember, the unit is heavy weighing 68 pounds, be sure to use caution if you need to lift. The unit has two sturdy handles, and we recommend that two people lift. The unit also has two locking casters, one on each side. Be sure to lock them down once the unit is positioned.

The unit can also be operated lying flat. There are four feet on the trolley handle side that allow for this. Flexibility is key in the SKA 2500 design.



Picture 1:
Vertical Placement



Picture 2:
Horizontal Placement



1. LED SCREEN
2. SCREEN DISPLAY ON/OFF
3. MASTER SAFETY SWITCH
4. 4 PIN DC CHARGING PORT
5. USB OUTPUT ON/OFF
6. DC 5521 OUTPUTS
7. DC OUTPUT ON/OFF
8. TROLLEY HANDLE
9. CASE HANDLE
10. COOLING FAN INTAKE
11. SOLAR PANEL INPUT
12. USB OUTPUTS
13. USB INDICATOR LIGHT
14. DC UTILITY OUTPUT
15. DC INDICATOR LIGHT
16. AC INDICATOR LIGHT
17. AC OUTPUTS
18. LOCKING CASTERS