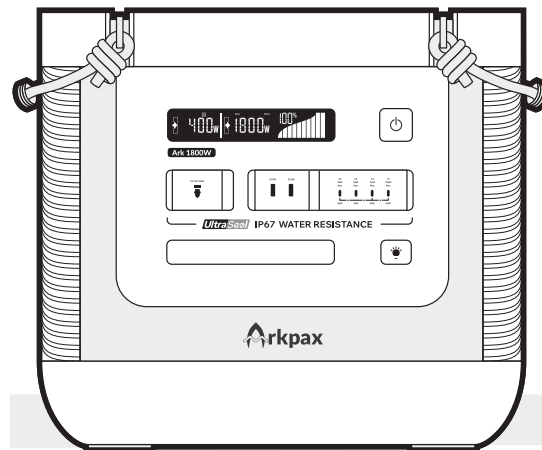


WATER ^{UltraSeal} RESISTANT

PORTABLE POWER STATION

ARK



TWS TECHNOLOGY LLC
1209 Orange St., Wilmington, DE 19801, USA

TWS Technology (Guangzhou)Ltd.
9 Nanyunsan Road, Science Park, Hi-Tech Industrial Development Zone, Guangzhou, 510663, PRC

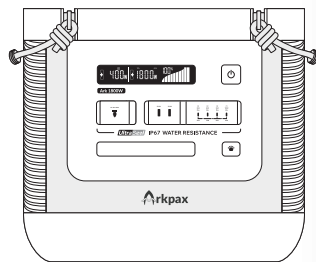


USER
MANUAL

WHAT'S IN THE BOX

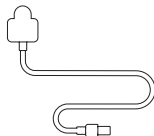
01

Ark



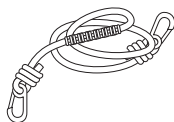
02

AC
Cable



03

Hulk Belt
Handle
(x2)



04

Accessories
Pouch



05

User
Manual



WATER RESISTANCE PORTABLE POWER STATION ARK

Unboxing Notes

01

This manual contains instructions in English, Japanese, and German. For instructions in French, Spanish, Italian, or Korean, please visit our website at www.arkpax.com and download the PDF version of the manual.

02

Ensure that you have received the correct model and accessories, and fully charge it by plugging it into a suitable power outlet.

03

Before using this product, please read this "User manual" carefully and use it correctly. If you have any issues, please contact us at info@arkpax.com for assistance.

DISCLAIMER

01

By beginning to use this product, you are deemed to have accepted and agreed to all the terms of this document. Improper use of this product can cause serious harm to yourself, others, product damage, and property damage. We strongly advise you to review this manual thoroughly and keep it in a safe place for future reference.

02

Our company is not responsible for any damage caused by fire, earthquake, acts by third parties, accidents, customer negligence, misuse, malfunction, or use under abnormal conditions. Our company shall not be held responsible for any damage caused by customers who do not use the product according to this manual. While we will comply with the law, our company has the final right to interpret this document and this product. Please note that we will not provide direct notifications in case of any updates, revisions, or termination.

SPECIFICATIONS

01	General Information	
Model	U1800-US	
Dimensions	Approx. 375 x 262 x 340mm	
Battery Capacity	1,500Wh (44.4V, 33.8Ah)	
Net weight	Approx. 22kg	
Power	1800W Max.	
AC Charging	Approx. 1.5hours to 80%	
	Approx. 2.5hours to full	
Certifications	IP67	
	FCC, UL, UN38.3, CEC, DOE, TSCA, CP65, IC	

02	Output	
AC outlets x4	Pure sine wave	
	1800W total output peak 3300W/0.1s	
USB-A x2	120 V~ 60 Hz	
	4.5/5V=, 22.5W Max., 9/12V=, 18W Max.	
USB-C x4	C1: 1 x 100W Max.	
	C2~C4: 3 x 36W Max.	
	If four ports are used simultaneously C1 is regulated to 65W total 173W	
Car outlets x1	12V= 10A 120W Max.	
Light	6000~6500K	

03	Input	
Solar Panel (XT60, sold seperately)	12~54V= 10A Max. , 400W Max. with MPPT	
Car outlet adapter (XT60, sold seperately)	12V= 10A Max. ,100W Max.	

04	Cell specifications	
Cell Type	NCM	
Cycle Life	1,000 cycles to 80% + capacity	
Protection	IP67 water resistance	
	High temperature protection	
	Low temperature protection	
	Over discharge protection	
	Over charge protection	
	Overload protection	
	Short circuit protection	
	Over current protection	

05	Operating temperature	
Operation temperature	14~104°F (-10~40°C)	
Solar charging temperature	32~104°F (0~40°C)	
AC charging temperature	32~104°F (0~40°C)	
Storage temperature	-4~113°F (-20~45°C)	

- 01 This product is able to withstand immersion in water up to 1 meter deep for 30 minutes without malfunctioning when it leaves the factory. However, we do not recommend prolonged or frequent water immersion as it may affect the actual lifespan of the product.
- 02 If the product is used at the beach or exposed to seawater, we advise users to clean it with either a neutral cleaning agent or clean water.
- 03 Always supervise children when they are using the product, especially younger children who may not understand the risks involved.
- 04 It is prohibited to expose the power station to heat sources, such as fire or a heating furnace, or not follow operation temperature instructions.
- 05 Strictly follow the recommended operating temperature when using the power station. Overly high temperatures may cause the battery to catch fire or even explode, while overly low temperatures will seriously degrade power station performance and may cause it to stop functioning altogether.
- 06 It is prohibited to disassemble or damage the power station in any way, as this may cause fire, explosion, electric shock, or other unpredictable risks.
- 07 Do not use unauthenticated accessories, which may cause electric shock or other unpredictable risks.
- 08 It is prohibited to use damaged cables or plugs with the power station to avoid electric shock or other unpredictable risks.
- 09 Unplug the power supply when the power station is not in use.
- 10 Store the power station properly and keep it out of reach of children and pets.
- 11 We suggest charging the power station to approx. 50% before long-term storage to ensure that you have enough power for emergency use.
- 12 We suggest charging the power station to approx. 50% every 6 months.
- 13 Make sure you are not storing the power station in low battery mode. Low battery storage for a long time may permanently damage the battery and render it unable to recharge.

Disposal

- 01 If possible, please discharge the power station completely before recycling. Do not dispose of it with normal garbage. You should follow your local government's guidance or laws for battery disposal.
- 02 If the power station is broken or malfunctioning and cannot be discharged, please contact your local professional battery recycling facility or company for instructions.

OPERATION

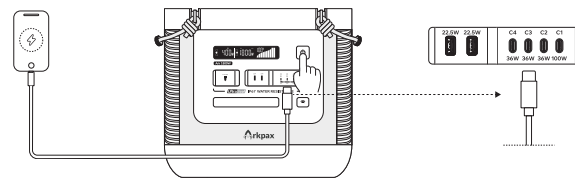
Discharge

01

DC discharge

Press the Power button to enter work mode. The indicator light around the button will turn on. Connect any compatible device to start discharging. Press the button again to stop discharging.

Double-click the Power button in work mode to activate continuous DC output. The button light will flash at 1-second intervals. Double-click the button again or turn off the device to exit.

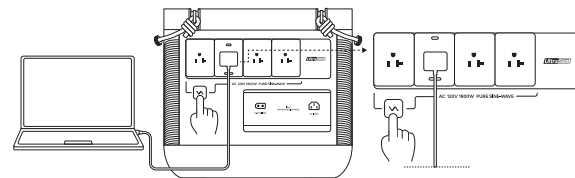


02

AC discharge

To start discharging using the AC ports, connect any compatible device and press the AC button. The indicator light around the button will turn on to indicate that the power station is discharging. Press the button again to stop discharging.

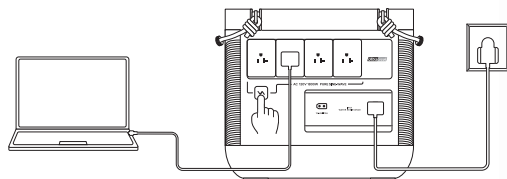
Double-click the AC button in work mode to activate continuous AC output. The button light will flash at 1-second intervals. Double-click the button again or turn off the device to exit.



Bypass mode(UPS) ≤ 20ms

As a basic UPS feature, when the power station is plugged into an AC wall socket to charge and the AC output is used simultaneously, the power station will enter bypass mode (UPS) and the output will be limited to a maximum of 1700W. Additionally, during a power outage, the power station will automatically switch over to battery power within 20ms.

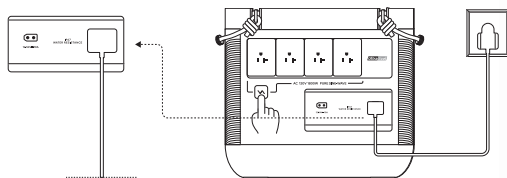
Please test and confirm the compatibility before using the product.



Recharge

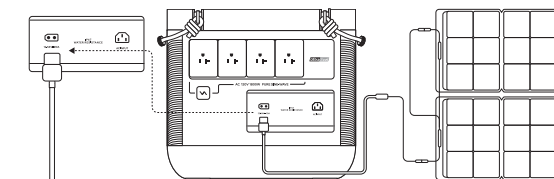
AC cable

To charge the power station using the AC cable, plug the cable into the input port, then plug it into a wall socket.



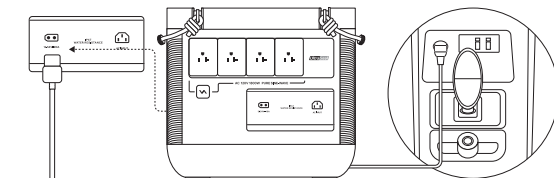
Solar panel (sold separately)

Please contact your local reseller for Arkpax solar panels with XT60 adapter. The power station support up to 400W MAX. panels. Plug-in the solar panel to input port to charge.



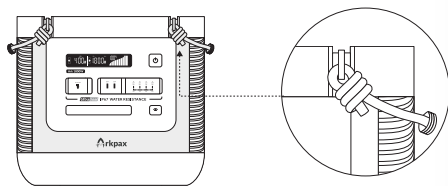
Car adapter(sold separately)

To charge the power station using a car adapter, please contact your local reseller for compatible products. The power station supports adapters up to 120W MAX. To charge, plug the car adapter into the input port.



Hulk Belt Handle

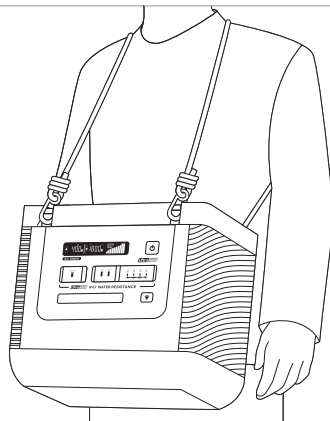
We have invented a detachable Hulk Belt Handle, which provides a special way to carry your Ark portable power station. There are several ways to attach the handle using the four anchor points. You can hook it onto the left and right sides, front and back, or even diagonally depending on your preference. When you don't need to carry the Ark around, you can detach all handles to make it look great in your home.



Hulk Belt Harness (sold separately)

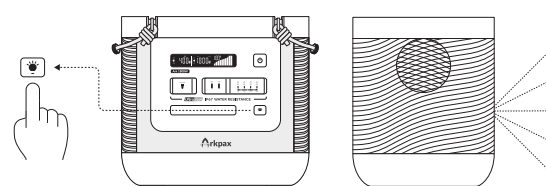
08

We have also designed the Hulk Belt Harness, which offers a unique way to carry your Ark portable power station. This Harness helps distribute the weight to your upper body, allowing you to carry it with your hands or even without them! First, hook one side of the machine onto the Harness, then let your hand go through the loop, and place the other two hooks above and below your arm to attach to the other side of the machine. You can adjust the belt length to fit your body.



Light

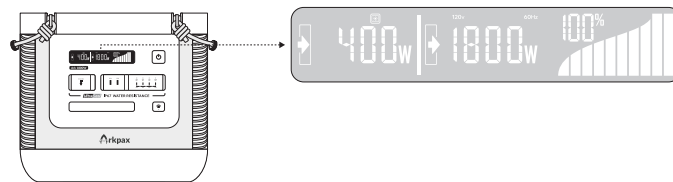
To turn the light on, press the Light button. To turn it off, press the button again. To enter SOS mode, long press the Light button for 2-3 seconds. Press the button again to turn off SOS mode. When the battery level displayed is at 0%, there will be no output available. However, the emergency lighting will still be able to function for approximately three hours in case of an emergency.



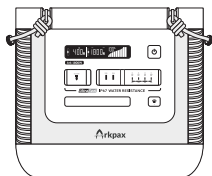
10

Display

When the power station is not in use, the display will automatically turn off after 3 minutes of inactivity. To turn the display back on, press the Display button.



Buzzer



Press both the Power and the light key for 1 second. Two beeps and dark screen means it's disabled. The buzzer only sounds during system abnormalities. To re-enable the buzzer, repeat the action. If the screen stays on, the buzzer is enabled.

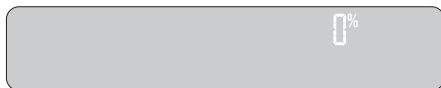
Wind-dry

11

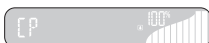
We recommend drying the Ark internally after washing it. For drying, briefly press both the Power and the light key and the buzzer sounds for 0.5 seconds. The fan runs at 100% for 2 hours, and the system key light flashes every 2 seconds. Repeat to exit.

Low battery protection

When the battery level displayed is at 0%, there is still a certain amount of power remaining to protect the battery cells and BMS system.



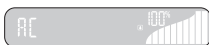
Water immersion warning



Car port water immersion



USB-A water immersion



AC water immersion

Type-C (C1-C4) water immersion
show as Type-C positionWhole machine water immersion
Animated signal

*If the port indicates a water ingress warning, please do not forcefully use the port. Wait until the port to drain and the alert disappears before resuming use.

FAQ

01 What type of battery is used in the power station?

The power station uses EV grade high-quality NCM lithium battery.

02 What devices can be driven by the power station's AC output?

The power station's AC output port has a continuous power of 1800W, peak at 3300W and can supply power to most consumer electrical products. However, it is recommended that you confirm the power of the electrical appliance before use. To ensure that the sum of the power of all load devices is less than the power station's rated power.

03 Why is there a humming sound when using the power station?

The power station is designed with an air-cooling system, and the built-in low-noise IP67 water resistance fan runs at $\leq 40\text{db}$ to aid in heat dissipation. It is normal to hear a faint noise when using it.

04 How to know how long the power station's power lasts?

The LCD displays the battery remain discharge time for devices with stable power usage.

05 Can the power station be brought on board a plane?

No. This product contains a lithium battery. According to the International Air Transport Standard Regulations, any products carrying lithium batteries over 100Wh cannot be brought on board a plane.

06 Is the actual output capacity the same as the nominal capacity?

There is a certain efficiency loss when charging and discharging the power station. The nominal capacity is the battery pack's rated capacity. As such, the actual output capacity is slightly lower than the nominal capacity.

07 Can I plug the Ark into an AC wall socket to charge the device and use the AC output simultaneously?

Yes, you can use the AC output while the power station is plugged into an AC wall socket to charge. However, please note that using both functions simultaneously may trigger the bypass discharge feature, which will limit the output power to a maximum of 1000W for safety purposes. Additionally, in the event of a power outage, the Ark power station has a UPS function that will automatically switch over to battery power within 20ms.

08 What is the water resistance of Ark?

Ark is designed to be splash, water, and dust resistant, and has an IP67 rating according to IEC standard 60529. While it can withstand immersion in water up to 1 meter for 30 minutes, its resistance to these elements is not permanent and may decrease over time. Attempting to charge a wet Ark is not recommended, and any liquid damage is not covered under warranty.

TROUBLESHOOTING

Problem	Troubleshooting	Solutions
Not charging	The AC cable is not connected correctly.	Check whether the AC cable and the power station are connected to wall socket correctly.
	The power station has been washed or has been submerge in water. Water drop-let icon lights up.	Remove the power station from wet area. Use a hair dryer to dry all ports. Turn on air-dry mode to speed up internal drying process.
	Power is on, display did not have warning sign(s), power input is 0.	The power station is not working. Please contact our after-sales service team.
No output	The connection cable between the device and power station is not connected.	Connect the device and the power station properly.
	The output port button is not lights up.	Press the power button and check the output indicator on display.
	The power station low battery level icon is showing.	Recharge the power station.
	The power station has been washed or has been submerge in water. Water drop-let icon lights up.	Remove the power station from wet area. Use a hair dryer to dry all ports. Turn on air-dry mode to speed up internal drying process.
	Power is on, display did not have warning sign(s), power output is 0.	The output port of the Ark has a load plug-in detection function. If the load cannot be recognized, please unplug and reconnect the load plug that is connected to the Ark.
	Power is on, display did not have warning sign(s), power output is 0.	The power station is not working. Please contact our after-sales service team.
Output interruption during usage	The rated power of the device or the power fluctuation is greater than the supported surge power.	Select our power stations with larger power.
	There are other problems.	The power station is not working. Please contact our after-sales service team.

CHEMICAL HAZARDS AND TOXIC SUBSTANCES

Lead Pb	0
Mercury Hg	0
Cadmium Cd	0
Chromium Cr VI	0
Polybrominated Biphenyls PBBs	0
Polybrominated Diphenyl Ether PBDE	0

0 means all listed chemical hazards and toxic substances are below the limit requirement specified in the 2002/95/EC (RoHS) standard

WARRANTY

Please store this User manual well for troubleshooting and fulfill your online registration.

- 01
Warranty period
Power station 24 months
*Accessories and pouch not included
- 02
Warranty not included
Any unauthorized repair, Unpredictable cause damage, human cause damage, water intrusion, accident, modification, and or not using the power station correctly according to this user manual. Exceed 24 months period.