WATER *UltraSeal* RESISTANT
PORTABLE
POWER
STATION

ARK PRO

U2400-EU

Arkpax

Arkpax | *UltraSeal*
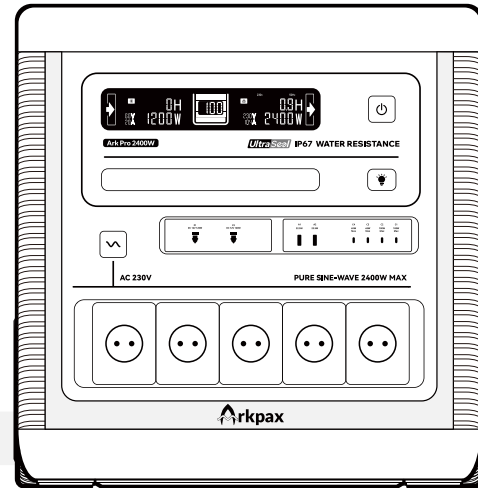
USER
MANUAL

WHAT'S IN THE BOX

01

Ark Pro 2400W

02

Solar Connector to XT60

03

AC
Cable
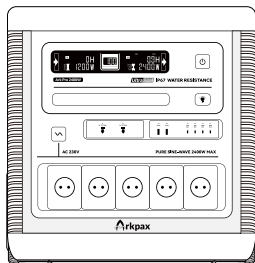
04

Hulk Belt
Handle
(x2)

05
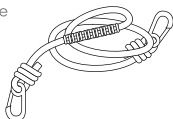
M5 Matric L Shape Hexagon
Allen Wrench

06

Accessories
Pouch

07

User
Manual

08

How to
Connect
Multiple Solar
Panels
Instruction
Manual
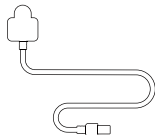
Unboxing Notes

01 This manual contains instructions in English and Japanese. For instructions in German, French, Spanish, Italian, or Korean, please visit our website at https://arkpax.com/pages/user-manual and download the PDF version of the manual or scan QR code on the left.
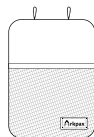
02 Ensure that you have received the correct model and accessories, and fully charge it by plugging it into a suitable power outlet.

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	U2400-EU	Net weight	Approx. 38kg/83.6lb
Dimensions	Approx. 420×390×435mm	Power	2400W Max.
Battery Capacity	2304Wh (51.2V⎓, 45Ah)		

02 Output

AC output(×5)	Pure sine wave, 2400W total output peak 4800W/0.3s, 230V~50Hz	USB-C1	100W Max./65W Max. (CAR1+CAR2)
Car port output (×2)	12V⎓10A, 120W Max	USB-C2	100W Max./65W Max. (CAR1+CAR2)/36W Max. (CAR1+CAR2)
USB-A output (×2)	22.5W Max.	USB-C3~C4	65W Max./36W Max. (CAR1+CAR2)
USB-C1~C2	PD3.0~5/9/12/15/ 20V⎓, 5A Max.	DC output	Total 460W Max.
USB-C3~C4	PD3.0~5/9/12/15/ 20V⎓, 3.25A Max.	Extra Battery Connector	40-57.6V⎓, 85A Max.
Light	6000~6500K 1.2W Max.		

03 Input

DC input	12~75V⎓, 20A Max. 1200W Max. with MPPT	AC input	230V~50Hz, 1800W Max.

04 Operating temperature

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

05 Cell specifications

Cell Type	LFP (Lithium Iron Phosphate)	Protection	Over discharge protection
Cycle Life	3000 cycles to 80% + capacity		Over charge protection
Protection	IP67 water resistance		Overload protection
	High temperature protection		Short circuit protection
	Low temperature protection		Over current protection

SAFETY GUIDE   Warning

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.

02 However, we do not recommend prolonged or frequent water immersion as it may affect the actual the lifespan of the product.

03 If the product is used at the beach or exposed to sea water, we advise users to clean it with either a neutral cleaning agent or clean water.

04 Always supervise children when they are using the product, especially younger children who may not understand the risks involved.

05 It is prohibited to expose the power station to heat sources, such as fire or a heating furnace, or not follow operation temperature instructions.

06 Strictly follow the recommended operaing 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 alto-gether.

07 It is prohibited to disassemble or damage the power station in any way, as this may cause water intrusion, fire, explosion, electric shock, or other unpredictable risks.

08 Do not use unauthenticated accessories, which may cause electric shock or other unpredictable risks.

09 It is prohibited to use damaged cables or plugs with the power station to avoid electric shock or other unpredictable risks.

10 Unplug the power supply when the power station is not in use.

11 Store the power station properly and keep it out of reach of children and pets.

12 We suggest fully charging the power station before long-term storage to ensure you have enough power for emergency use.

13 We suggest fully charging the power station every 6 months.

14 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.

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.
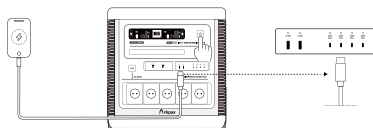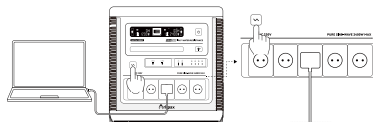

02 AC discharge

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

The power station has a default power-saving mode for AC output. If there is no load or the load is below 30W, it will automatically power off after 12 hours to conserve battery.

To activate continuous AC output for low-consumption appliances or devices with a power-saving mode, double-click the AC button. The button light will flash at 1-second intervals. Double-click the button again or turn off the device to exit.


03 AC discharge (TT-30R)

Please note that US & JP version of the Ark Pro is equipped with a TT-30R AC outlet (20A). This specific outlet allows the Ark Pro to power most appliances in your boat or RV. 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.
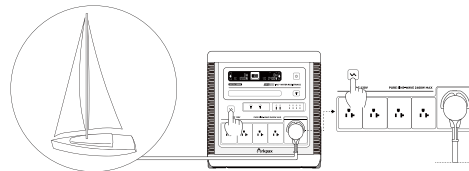
04 Bypass mode (UPS) ⩽10ms

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 2000W. Additionally, during a power outage, the power station will automatically switch over to battery power within 10ms.
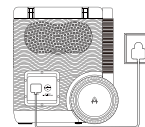
Please test and confirm the compatibility before using the product.
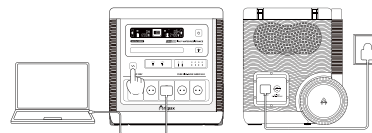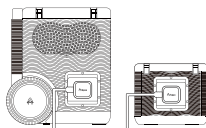

Recharge

05 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.

06 Connect Extra Battery (s)

To connect Extra battery (s) to the Ark Pro, power off the Ark Pro system by long press the power button. Open the left side door and locate the Extra Battery Cable. Connect one end of the cable to the Ark Pro and the other end to the Extra Battery 2300Wh (sold separately). Ensure a secure connection. You can connect up to 10 Extra Battery Packs (Up to 25kWh).


07 Solar panel (sold separately)

The power station supports up to 1200W Max. panels. Plug-in the solar panel (XT60) to M19 Connector, then plug-in to solar input port (M19) to charge. To connect more than one panel, Please contact your local reseller for Arkpax solar panels with XT60 serial and/or parallel adapter, or use solar connector 1 to 3 XT60 cable. Check in How to connect Multiple Solar panels instruction manual.
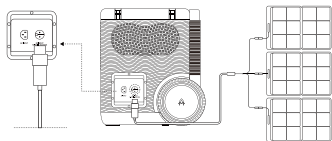
08 Car adapter (sold separately)

To charge the power station using a car adapter. Plug-in the Car adapter (XT60) to M19 Connector, then plug-in to solar input port (M19) to charge. Please contact your local reseller for compatible products. The power station supports adapters up to 8A Max.
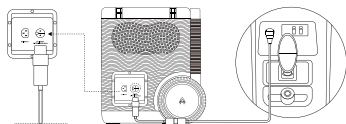

WARNING
It is crucial to shut down the Ark Pro system before connecting any Extra Battery. Improper connection can result in damage and will not be covered under warranty. Please exercise caution and follow the recommended procedures for safe and appropriate battery connection.

09 Hulk Belt Handle

We have invented a detectable handle, which provides a special way to carry your Ark Pro 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 Pro around, you can detach all handles to make it look great in your home.
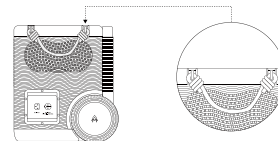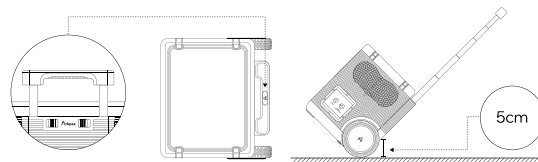

10 Cable Storage cover

The Ark Pro has a cable storage compartment located below the telescopic handle. Side both locks to release and slide open the cover. You can store your cables inside the accessories pouch and hang on the hooks. Close the cover by sliding it back into place and ensure it is securely locked. This feature helps keep your cables organized and easily accessible.
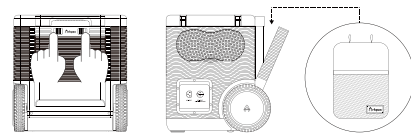
11 Telescopic Handle

The Ark Pro features a telescopic handle for easy portability. To extend the handle, locate the release button on top of the unit, press it, and pull the handle gently to the maximum length. Make sure the handle is securely locked before moving the power station. To retract the handle, press the release button to unlock it, and carefully push the handle down until fully retracted. Use caution when extending or retracting the handle to prevent injuries.


5cm

12 Detach Telescopic handle and wheels

To minimize the footprint of the Ark Pro while using it as a power backup, you can detach several components. First, remove the cable storage cover. Then, use the provided M5 Metric L Shape Hexagon Allen Wrench to unscrew and detach the telescopic handle.

Next, address the wheels. The wheel cover is secured with a clip, so you'll need to use a flat-head screwdriver to pry it off. Afterward, use a hex wrench to unscrew the nut. Detach one side of the wheel, and then slide out the other wheel along with the axle.

Remember to keep all the detached parts in a secure place for storage. This will ensure you can easily reassemble the Ark Pro when needed.

When positioning the device, place the Ark Pro close to a wall. Be sure to maintain at least 10cm of space on both sides to allow for proper ventilation and easy access to the cables.

By following these steps, you can optimize the Ark Pro's footprint for power backup purposes, while still preserving the necessary space around the unit and safely storing all the removed components.
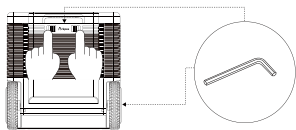
13 Light

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.
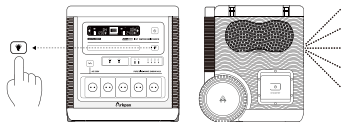
14 Display

To turn on the display, press the power button. To turn it off, press the power button again. When the power station is not in use, the display will automatically turn off after approx. 3 minutes of inactivity.
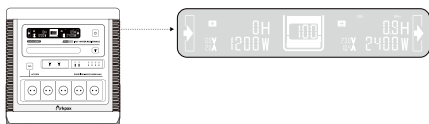
Buzzer 15

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 16

We recommend drying the Ark Pro 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.

17 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.

18 Water immersion warning

Type-C (C1-C4) water immersion

USB-A water immersion

Car port water immersion

AC water immersion

Water Immersion Alert for the Entire Machine

Extra Battery connector water immersion

*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 grage high-quality LiFePo4 (lithium iron phosphate) battery.

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

The power station's AC output port has a continuous power of 2400W, peak at 4800W 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 water resistance fan runs at ≤40db 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 Pro 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 charging power if output is fully loaded. Additionally, in the event of a power outage, the Ark Pro power station has a UPS function that will automatically switch over to battery power within 10ms.

08 What is the water resistance of Ark Pro?

Ark Pro 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 Pro 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 droplet 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 does not light 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 droplet 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 Pro 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 Pro.
	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.
	Power is on, display have "USBC" warning sign, USB-C have no output	Unplug any USB-C cables, wait 1 mins then plug in again.
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.

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.

CERTIFICATION

UN38.3, CE-LVD, CE-EMC, REACH, RoHS, WEEE, IP67

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