

Portable Industrial Rechargeable Power Station **IP- 3556**



Warning:
Please read this manual
before using this product!

Operation Manual

Attention

Dear users, thank you very much for choosing our mobile power station. It is our honor to provide you with high-quality equipment and service. Under the call of the era of developing new energy, after years of efforts, the company's independent research and development, the mobile power station using new energy has been officially put into the market. The company's new energy mobile power station is portable, safe, efficient and pollution-free, which can greatly reduce labor intensity. It is the most practical tool and equipment for mobile construction, and is also the preferred product for outdoor emergency power station with big power.






Warning:

Please read this manual carefully before use! Improper use may cause serious danger and equipment damage! Battery short-circuit or damage will cause an explosion, fire and other safety accidents! The user will be responsible for all consequences caused by any improper use and neglecting the important warnings. Our company will not take any responsibility

Attention

| | |
|---|---------------------|
| <p>When using the device, you must wear the protective equipment required by the standard! Pay attention to safety!</p> | |
| <p>Avoids safety accidents caused by equipment falling from high places. Avoid strong shaking and bumping of the equipment.</p> | |
| <p>When using multi-outlet sockets to use other electrical equipment! • Ensure that the two connected power cords are not less than 2.5 mm²; • Ensure that the connected power cords and sockets are not damaged and make sure that the connected power cords and sockets are dry;</p> | |
| <p>This equipment is suitable to work in temperature -20~45°C; The charger is suitable to work in temperature 0~40°C; Do not charge the battery below 0°C;</p> | <p>-20°C ~ 45°C</p> |

|  Attention | |
|--|--|
| <p>It is strictly prohibited to use other batter packs made by other manufacturers to power our power station!</p> | <p>It is strictly prohibited to use other chargers to charge our battery packs!</p> |
| <p>It is strictly to use our chargers to charge other battery products made by other manufacurers!</p> | <p>It is strictly to modify and disassemble the chargers and battery packs manufactured by our company !</p> |
| <p>Charger indoor use only, There should be protections when outdoor use!</p> |  |
| <p>Malfunctions-when you have difficulties, please seek help from professionals.</p> <ul style="list-style-type: none"> • If you have difficulties during installation and operation, please check the relevant contents of this manual accordingly; • If you still cannot fully understand after reading it, or if the problem cannot be solved according to the guidelines of this manual, you should immediately contact your supplier or manufacturer's service center and seek help from professionals. |  |

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User's guidance

This equipment is a portable mobile construction power station, which is suitable for outdoor lightweight construction and field rescue. It has built-in AC120V/240V inverter and large capacity battery module. It is light, portable and powerful. The rated power of the inverter is 3.5KW, and the peak power can reach 7KW / 2S, which can be comparable to the fuel oil generator below 5-8kw, with superior economic efficiency. This equipment has no noise, no emission, no vibration, and the current output is stable. It greatly reduces the labor intensity of users. It is a new generation of high-tech innovative products. It is especially suitable for power installation projects, railway maintenance, road and bridge maintenance, municipal environmental sanitation gardens, outdoor billboards installation, fire rescue, field rescue and other places that require high-power mobile power supplies.

Function Features

- 1.Design with foot wheel, light weight, easy to carry;
- 2.Battery compartment protection design, sun-proof;
- 3.3.5KW rated output power, can withstand the impact of twice of the rated power, suitable for AC120V/240V power supply equipment;
4. It can power our 48V cordless DC welding machine to weld 1.6-3.2mm electrodes with stable current and good welding results.
5. No noise, no emission, no vibration, is a safe and efficient high-power power supply equipment;
6. The equipment is economic and energy consumption is only one tenth of traditional petro-powered generator;
7. The device has complete safety protection functions about under voltage, short circuit, overcharge, over discharge, overload and overheating;
- 8.The equipment has built-in power monitoring and intelligent fan start-stop function.
9. The device has built-in output soft start circuit to reduce the impact current of electrical appliances and thus effectively protect the electrical appliances.

Power Station Use Instructions

1. Wear protective equipment at work, and pay attention to safety when working at high places to avoid falling from a high place to cause safety accident.
2. The working temperature of this equipment is $-20\sim 45^{\circ}\text{C}$, and the working temperature of the charger is $0\sim 40^{\circ}\text{C}$. It is strictly prohibited to charge the battery below 0°C . The charger is only suitable for indoor use, please pay attention to do protection for it when using it outdoor. Please use the charger from our factory. It is strictly prohibited to use other chargers to charge our battery. When using the equipment at a high temperature above 35°C , keep the battery above 60cm from the ground. Pay attention to shield it and keep it well ventilated. Prevent equipment and batteries from being exposed to the sun or rain.
3. Avoid falling from high places or strong impact during mobile transportation or storage.
4. Due to the different output power characteristics, in order to ensure the safety of battery use, this device cannot use AC120 V/240V output in the front panel and 48V output in the back panel at the same time.
5. The equipment should not be damp or immersed in water, and it is strictly forbidden to work in an environment with corrosive gas or full of metal dust.
6. The device is a new energy rechargeable mobile power station. The power supply battery module is a ternary lithium battery. The output voltage of the battery is DC48V. The inverter output AC120V/240V adopts isolation circuit. AC120V/240V is completely isolated from the power grid and the earth. If the user accidentally touches any one of the two wires at work, it will not cause electric shock hazard. However, when the user touches two wires at the same time, it will still cause electric shock hazard. When using it, you must wear the protective equipment required by the safety standard and pay attention to the use safety.
7. This equipment has a built-in inverter with AC120V240V pure sine wave output function. The rated power output is 3.5KW and can withstand the twice instantaneous impact of the rated power. It is suitable for different kinds of electric power tools, motors and other inductive loads, as well as various household appliances. When using construction tools and equipment, ensure that the total power of all equipments does exceed the rated output power of the equipment. As the instantaneous power of the motor and other inductive loads is 3-5 times of the rated power of the motor itself, it should be avoided to switch on and off the big power inductive load tools at the same time.
8. When users need to use multi- hole socket to expand the use of electrical equipments, the power line and socket connected to the equipment should be ensured that both of the connected two power lines are not less than 2.5 mm^2 , and ensure that the connecting lines and sockets are free from skin damage, and ensure that the connecting lines and sockets are dry. Pay attention to safety!

9. The AC120V/240V inverter of the equipment adopts overload automatic protection. When the power of the electric appliance exceeds the maximum output power of the equipment, the equipment will stop the output of AC120V/240V, and when the power of the electric appliance is lower than the maximum output power of the equipment, the equipment will automatically recover.

10. This equipment has a built-in fan for air cooling. The fan is intelligent control. When the temperature inside the equipment reaches a certain temperature, the fan will start automatically. When the equipment temperature drops to a certain temperature, the fan will stop automatically. When using the equipment, the left and right air outlets and air inlets of the equipment shall be unobstructed, so as to prevent metal stuff from entering the equipment through the air outlet and causing equipment damage.

11. This equipment is designed with undervoltage indicator on the front panel. When the battery voltage is lower than 40V, the under voltage indicator light will be on. Please connect the charger with the power station and charge it.

12. It is recommended to use our company's 48V DC welding machine, whose welding current can reach 150A and is suitable to use 1.6-3.2 mm J 422, 506, 507 electrodes to weld all kinds of low-carbon steel, high-carbon steel and other metal materials. At the same time, by the scratch arc welding torch for argon arc welding, our 48V DC welding machine can be used to weld stainless steel, copper and other metals, but not suitable for welding aluminum and aluminum alloy metals.

13. It is strictly forbidden to connect welding machines whose power is more than 2.5KW to AC120V/240V output port in the front panel of this power station. There is a DC 48V power supply port at the back panel of this power station. Our 48V DC welding machine can be connected to the 48V output port in the back panel of this power station to do manual welding job by using electrodes.

14. This power station can not be connected to another power station to create higher output power because it may cause damage and safety accidents. Please strictly use this power station according to the described functions and user guidelines.

Battery Use Instructions

1. The battery and charger should be kept away from water, fire, inflammable and explosive materials, avoid strong shaking, bumping and short circuits. The battery and charger should be protected from direct sunlight, pay attention to ventilation and heat dissipation;
2. Do not disassemble the battery and charger;
3. It is forbidden to use metal to directly connect anode and cathode short-circuit;
4. Please use the original battery charger to charge the power station in order to guarantee battery safety and battery life

Charger Use Instructions

1. The charger is only used indoors, please protect it when outdoor use!
2. When the user needs to charge, please firstly connect the charger output port to battery charging port and then connect charger AC input plug into the AC120V/240V socket. The charger will start charging and indicator light will flash or the light will be on.
3. After the battery is fully charged, the full-charged indicator light will be always on.
4. If the user needs to use the power station after battery is fully charged or not fully charged, please disconnect the AC power cord and charging connection cord at the two ends of charger, then the power station can be used.

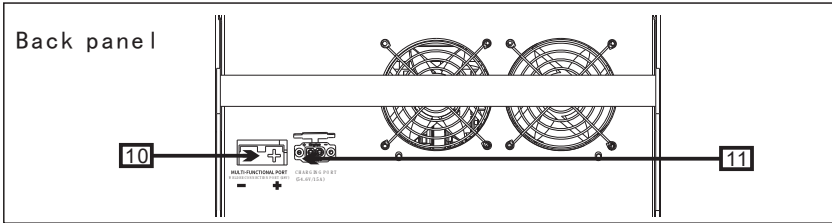
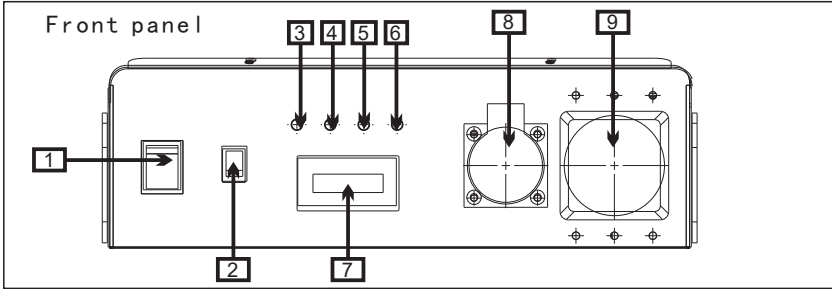
External Equipment Use

Equipment Use

1. When powering our 48V welding machine, please connect the power input port of 48V welding machine power into the power supply port at the back panel of power station and turn off the inverter 120V/240V output in the front panel of power station. Then user can do welding job by adjusting the welding current according to the diameter of the electrode.
2. When using the inverter function, make sure that the appliances are turned off and then insert the electrical plug of appliance into the AC120V/240V output socket in the front panel of power station. Then user can turn on the switch of appliances and start to use appliances. When powering and using the appliances by inverter function, please do not turn off the switch of the power station. User must turn off the appliances firstly and then turn off the power station.

Introduction to Front and Back panel

IP-3556



| | |
|----|---|
| 1 | Power switch |
| 2 | AC120V/240V function switching |
| 3 | Over heat light |
| 4 | Low battery light |
| 5 | Over load light |
| 6 | Short circuit light |
| 7 | Battery meter |
| 8 | AC 120V output socket 30A |
| 9 | AC 240V output socket 15A |
| 10 | Multi-purpose port(48V welding machine connection port) |
| 11 | Charging port |

Technical data

| | | IP-3556 |
|------------------------------|-----------------------------------|----------------------|
| External 48V welding machine | Input voltage | DC40 ~ 54.6V |
| | Input current | 80A(MAX) |
| | Output voltage of welding machine | 20.4V -26V |
| | Output current of welding machine | 10A -150A |
| | Electrodes diameter | Φ 1.6 -Φ 3.2 |
| Inverter (power station) | Input voltage | DC40 ~ 54.6V |
| | Input current | 80A(MAX) |
| | Output voltage | AC120V/240V |
| | Rated output power | 3.5KW |
| | Frequency | 60HZ |
| | Max. output power | 7KW(2s) |
| Battery | Output voltage | DC40 ~ 54.6V |
| | Charging current | 15A(MAX) |
| | Rated capacity | 5627WH |
| Charger | Input voltage | AC100V-240V(50-60HZ) |
| | Output voltage | DC40 -54.6V |
| | Output current | 15A(MAX) |

Battery Runtime Table of Different Appliances

| Appliances | Power | Load Rate | Battery Runtime |
|-------------------|-------|-----------|-----------------------------------|
| | | | 48V/5627WH |
| Air conditioner | 1HP | 50% | 15.3h |
| Refrigerator | 100W | 15% | 384h |
| Induction cooker | 2000W | 50% | 5.7h |
| Electric breaker | 1500W | 30% | 12.9h |
| Electric hammer | 680W | 30% | 3566 holes (with Φ 14 drill) |
| 350mm cut-off saw | 2200W | 30% | 8.6h |
| Air compressor | 750W | 50% | 15.3h |
| Welding machine | 3700W | 15% | 10.5h |
| Angle grinder | 550W | 30% | 34.8h |
| Electric drill | 370W | 30% | 51.8h |
| LED light | 100W | 100% | 57.6h |

*The above data is calculated based on the ideal condition, for your reference only!

Equipment Storage

Storage requirements

1. Power station, battery and charger should be placed in a cool and dry environment after use. If the device, battery and charger are not used for a long time, put the device, battery and charger back to their original packaging and store them in a dry environment.
2. When the battery is not in use, the best storage temperature is $25\pm 5^{\circ}\text{C}$, and it can also be placed in a cool and dry environment.
3. After the battery is used, it should be charged in time. It can't be stored for a long time if the battery is not fully charged. If the battery is not used for more than 3 months, the battery needs to be fully charged. If the battery is not used for 6 months, it is better to do one battery charging and discharging cycle. Regularly charging and discharging the battery can ensure the activity of the battery and prolong the life of the battery.

Equipment Maintenance

Welding problems and solutions

The phenomena listed here may be related to the accessories you are using, welding materials, environmental factors, and power supply conditions. Please try to improve the environment to avoid such situations.

A. It is difficult to start an arc, and it is easy to break the arc:

- 1 Make sure that the quality of the electrode you are using is good, and the electrode with poor quality may not meet the requirements for high-quality welding;
- 2 Electrodes that have not been processed by drying treatment are also not easy to start arc, and will bring arc instability, increase welding defects, and deteriorate welding quality.
- 3 A longer cable will cause the output voltage to drop too much. It is recommended that you shorten the cable length as much as possible.

B. The output current cannot reach the rated value:

- 1 The deviation of the battery voltage from the rated value will make the output current value become inconsistent with the set value; when the battery voltage is lower than the rated value, the maximum output current of the welding machine may also be lower than the rated value.

C. The current cannot stay stable during the use of the welding machine. This situation may be related to the following factors:

- 1 The battery voltage changes
- 2 The welding output cable is entangled

D. Too much splash:

- 1 The current may possibly be adjusted too large, and the diameter of the electrode is too small;
- 2 The positive and the negative of welding machine output parts is connected reversedly. Under the normal process, a positive polarity welding is used, that is, the electrode is connected to the negative polarity and the workpiece is connected to the positive. Please interchange the positive and negative polarity.

Equipment Maintenance

1. The inverter(power station) has no AC 220V output:

A: Inverter overload protection: Whether the power of the electrical appliances exceeds the rated power of the inverter(power station); When the electrical appliances are inductive load with big power motors, their starting power is greater than the instantaneous output power of the inverter(power station).

B: Whether the battery voltage is too low:Please check the battery level indicator light and check the inverter abnormal indicator light is on or not;

C: Inverter overheating protection:Please check whether the fan inside of the inverter(power station) works or not;Please check whether the air inlet and outlet of the power station are blocked or not.

2.The voltage of the electrical appliances connected to the power station(that is, the voltage of the appliances powered by this power station) is too low: Please check whether the AC120V/240V output socket and the electrical plug of appliances are connected too loosely or have poor connection;Please check whether the wire diameter of the expanded patch board used for connecting more appliances is too thin, resulting in an excessive voltage drop;

Charger problems and solutions

1. The charger indicator light flashes or keeps on, and cannot enter the charging state:

A: Please check if the charger's charging output port and the battery charging port are connected too loosely or have poor connection;

B: Please check if the internal wires of the charger's charging output cord are aging or broken;

2. The charger indicator light is not on:

A: Please check if the charger AC input port and socket is connected too loosely or has poor connection;

b: Please check if the internal wires of the charger AC input cord are aging or broken;

