



The Power of WAI

Portable Power Supply

PPS-400 Portable Power Supply Quick Start Manual



Manuel de démarrage rapide

Kurzanleitung

Manual de inicio rápido

Guida rapida

Instrukcja szybkiego
uruchomienia

Краткое руководство по

Discover more at
www.waiglobal.com



WAI, A USA COMPANY





WARNING: To reduce the risk of injury or damage to electrical devices, read the instructions prior to using the charger.



ELECTRIC SHOCK RISK: Do not open, modify or dismantle the charger unit. There are no serviceable parts inside.



CLEANING: Never use solvents or other harsh chemicals to clean the charger unit. Use a cloth dampened with water to wipe down the unit, never immerse in water or let water get inside the unit.



OUTSIDE USE: Do not expose the charger unit to rain or wet conditions, it is not waterproof. Water entering the unit will increase the risk of electric shock.



LI-ION

PROTECTING THE ENVIRONMENT: This charger unit contains a Lithium-ion battery and other materials that can be recovered or recycled. Please recycle according to local provisions, do not place in household waste.



Product Description



The Power of WAI



The **WAI PPS-400 Portable Power Supply** is housed in a lightweight aluminium alloy shell giving it a stylish appearance. The unit is powered by a lithium battery, with its advanced manufacturing technology it can output both AC and DC currents enabling it to charge a wide range of electronic products. The WAI PPS-400 can be used as both a UPS (Uninterruptible Power Supply) and an outdoor emergency backup power supply.

Its lithium battery has a total capacity of 426.24WH/115200mAh, providing a steady stream of power for the load. It's 220V(110V) AC and 12V/5V DC outputs with LED torch light and capacity display make it suitable for a variety of different equipment such as drones, mobile phones, tablet computers, laptops, desktop computers, photographic equipment, electric scooters, electric bikes etc. Offers great convenience for use at home, for travel, outdoor work, camping, caravanning, boating and leisure.

In the Box:

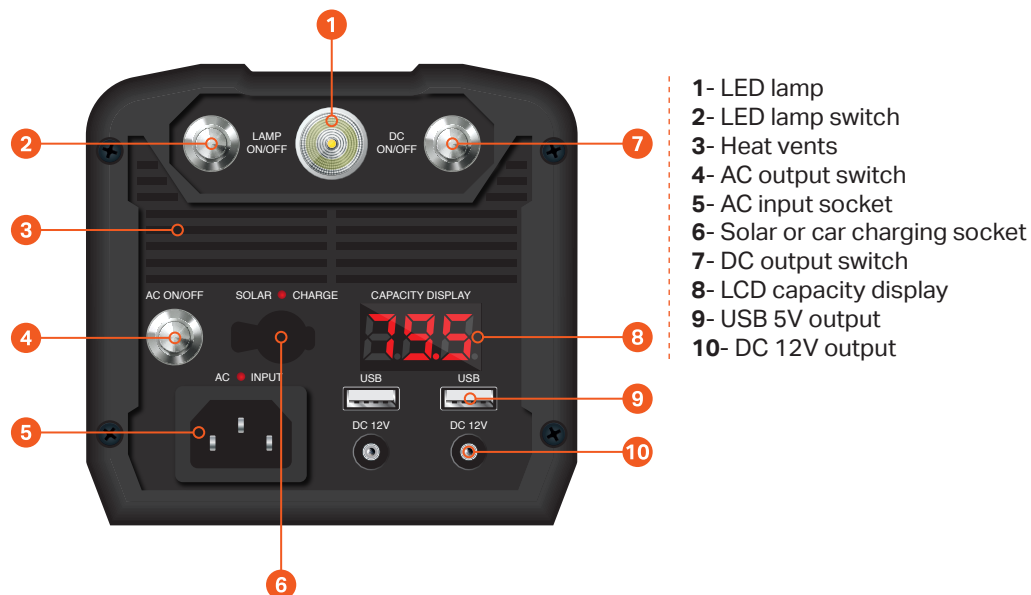
- 1x WAI PPS-400 Portable Power Supply
- 1x AC Power Cable
- 1x In-Car Charge Cable
- 1x DC Adaptor Cable
- 1x Instructions

Optional Extras:

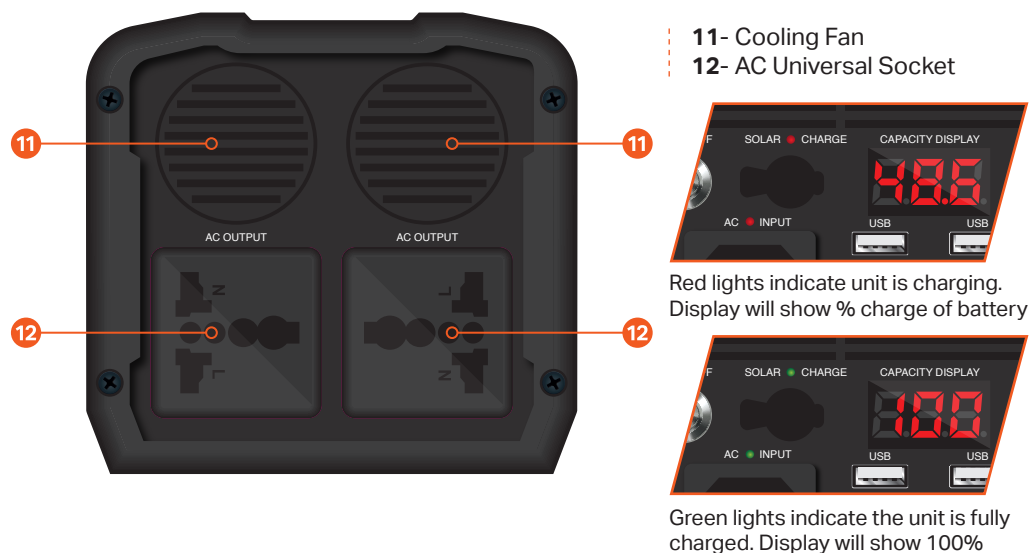
- 12v 40W Solar Panel
- Solar Panel Charging Cable



Front Panel Controls



Rear Panel



Operating Instructions

- To use the LED lamp **1** press the ON/OFF button **2**
- To use the DC output function, press the DC ON/OFF button **7**, this will enable you to use DC 12V **10** and 5V USB **9** sockets (When not in use, turn off the button so as not to drain the lithium battery)
- To use the AC output function, press the AC ON/OFF button **4**, this will enable you to use AC sockets on the rear of the unit (When not in use, turn off the button so as not to drain the lithium battery)
- When using the AC output, make sure the AC LED indicator light on the panel is green, then insert the electrical appliance into the AC output port. DO NOT use if the LED indicator light on the panel is red.
- The LCD display screen **8** shows the remaining power of the Portable Power Supply (Remaining power is shown as a percentage, 0-100%)
- When the power of the unit is insufficient you will hear an alarm prompt
- Connect the unit to a power supply via the AC Input **5** or Solar Charge **6** to continue use. Whilst charging the unit, the charging indicator light on the end panel will be red and change to green when it is 100% full
- When using solar power to charge the unit, the voltage should not exceed 18V, more than this will damage the unit. When the solar panel is connected to charge the unit the indicator light on the panel should be bright, if it's not bright check the connection or adjust the solar panel to face the sun at an angle of 30 degrees
- When using a car-mounted cigarette lighter to charge the unit the charging indicator light on the end panel will be red and change to green when it is 100% full. This product only supports charging on a 12V car battery
- To use the UPS function, first insert the input AC cable into the AC input socket, then plug the AC cable into the mains electricity socket, the input indicator on the panel will light green indicating that it can be used. When the AC button is pushed on, the AC ON/OFF indicator light is green, and then the electrical appliance can be plugged into an AC output socket **12**
- If the power of an electrical appliance exceeds the power that the unit itself can carry, the unit enters a protective mode, disconnects the load and restarts the unit
- If the unit is used in extreme weather temperatures it may overheat during use, overload protection may activate. If it does put the machine in a cool place to cool down before continuing to use

Technical Specification

Battery Capacity	426.24Wh 115200mAh
Output Power	Rated 400W, Max 430W Overload Protection
Input Voltage	AC 110V~220V 50/60Hz
Output Voltage	220V 50Hz or 110V 60Hz 2 versions
DC Output	Two channels 12V (9-12.6V) output total current 10A (no overload and short circuit protection function), two 5V 3A USB output (with short circuit overload protection function)
LED Lamp	1W
Solar Charging	Standard 12V, allowed charge power 70W (More than 70W solar panels can only be filled with 70W)
Car Charging	Using a solar charging port, allowing a voltage of 12V and a charge power of 70W
Output	AC pure sine wave
UPS Blackout Reaction Time	Within 10 ms
AC Overload	No output after overload, disconnect load, restart recovery
AC Short Circuit	No AC output short circuit, short circuit will damage the unit
Lithium Battery	Cycle life of more than 800 times
Weight	Net Weight:3.3kg Gross Weight: 3.8kg
Size	12.2cm(W) x 13.0cm(H) x 29.3cm(L)
Colour	Silver body black end panels

WAI PPS-400 Parameters

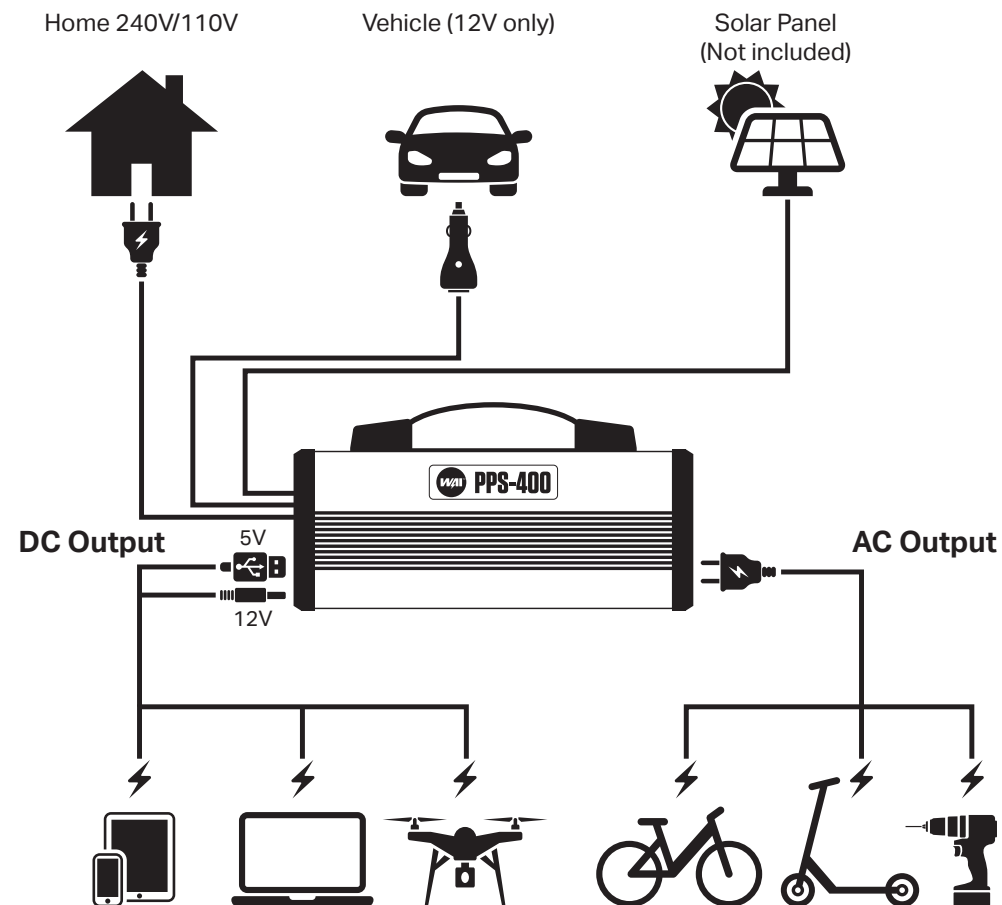
Input voltage	Supports AC wide voltage, wide frequency input
Input fuse	220V/3A ,110V/5A
Switching time mains to inverter	Within 10ms
Inverter AC output voltage	<ul style="list-style-type: none"> • No-load 220V output voltage between 220-226V • No-load 110V output voltage between 110-116V"
Inverter AC output frequency	220V/50HZ and 110V/60HZ (Two frequencies)
Inverter AC ripple voltage	Less than 700 mv
Inverter AC output waveform	AC pure sine wave
Inverter AC rated power	<ul style="list-style-type: none"> • 220V rated power 400W,430 W overload protection • 110 V rated power 400W,430W overload protection
Discharge efficiency standards	<ul style="list-style-type: none"> • When battery voltage is above 16V, the efficiency is 95% • When battery voltage is above 14V, the efficiency is 96% • Efficiency is 80% when the voltage is below 12V • Average efficiency 86%
Battery power	<ul style="list-style-type: none"> • When the battery voltage is higher than 18V, overload protection, no external output • When the battery voltage is below 13V, under voltage protection, no external output • When the voltage is below 13.8 V the buzzer alarms • When battery voltage is below 12V unit automatically shuts down • When the voltage returns to 14.4V unit restarts
Solar charging	<ul style="list-style-type: none"> • Circuit design for boost constant current to battery charge, PWM mode • The solar input voltage range is 6-18V • Boost constant current after re-large the power allowed to charge into the battery does not exceed 70W • Solar panels can only be filled with 70W of power

WAI PPS-400 Parameters (Cont.)

In-Car charging	<ul style="list-style-type: none"> • In-Car charging is only for small 12V batteries • 24V batteries are not suitable and will damage devices
Charging time	<ul style="list-style-type: none"> • Charge current of 4.6A can charge the battery to more than 90% in 7 hours • It can be used when the electricity quantity is shown to be 100%. • When fully charged indicator lights turn green within 11 hours
Working temp and protective temp	When the internal temperature reaches 50-55 degrees the charger will automatically activate the cooling fans; if the chargers temperature reaches 85-90 degrees, the charger automatically shuts down and stops AC output
12V output	<ul style="list-style-type: none"> • 12V output is stable between 12V and 12.6V • Two 12V output ports share a steady voltage module • The total output current is 10A • Overload protection and short circuit protection function
USB 5V output	<ul style="list-style-type: none"> • 5V output is stable between 5V and 5.2V • Two 5V output ports share a steady voltage module • The total output current is 3A • Overload protection and short circuit protection function
Power consumption	<ul style="list-style-type: none"> • Average internal DC power consumption is 0.5W • Average internal AC power consumption is within 5W
LED Light Indicators	<ul style="list-style-type: none"> • AC indicator green light 'Normal', red light 'Fault' • AC charging indicator light red when charging, green when fully charged • Solar charging indicator light red when charging, green when fully charged
Capacity Display	<ul style="list-style-type: none"> • Battery power level 0-100% • When the battery power is displayed at 100%, the battery capacity is more than 90%
Light function	The LED light has a power of 1W

Charging Modes PPS-400

Input





















































 **The Power of WAI**



Can be used to charge/power anything with a battery.



Phone / Tablet



Laptop



Electric Bike



Scooter



Drone



Leisure



Power Tool