





Portable Powerpack 800 Portable Powerpack 800i



Owner's Manual

			
EU	AU	UK	US

For safe and optimum performance, the Portable Powerpack unit must be used properly. Carefully read and follow all instructions and guidelines in this manual and give special attention to the **CAUTION** and **WARNING** statements.

PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE

Note: Because unit contains a non-spillable sealed lead acid battery, upon purchasing, **immediately** charge unit for more than 48 hours using the supplied AC Charger. To guarantee maximum device performance and life span, it is recommended to charge the unit after *each* use and once every *90 days*.

Disclaimer

While every precaution has been taken to ensure the accuracy of the contents of this guide, **KISAE Technology** assumes no responsibility for errors or omissions. Note as well that specifications and product functionality may change without notice.

Important

Please be sure to read and save the entire manual before using your **KISAE Portable Powerpack**. Misuse may result in damage to the unit and/or cause harm or serious injury. Read manual before using the unit and save the manual for future reference.

Product Number (KISAE Portable Powerpack)

PP 800	Portable Powerpack 800 (with NEMA 5-15 socket)
PP 800i-EU	Portable Powerpack 800i (with European socket)
PP 800i-UK	Portable Powerpack 800i (with UK socket)
PP 800i-AU	Portable Powerpack 800i (with Australia socket)

Document Part Number

MU PP800 Rev 1.0

Service Contact Information

Email: info@kisaetechnology.com
Phone : 1-877-897-5778
Web : www.kisaetechnology.com

Table of Contents

1.	INTRODUCTION.....	4
2.	PRODUCT DESCRIPTION	5
3.	FEATURES	5
4.	OPERATION	6
5.	TROUBLESHOOTING	9
6.	SPECIFICATIONS	10
7.	WARRANTY.....	11

1. INTRODUCTION

Thank you for purchasing the **KISAE Portable Powerpack unit**. With our state-of-the-art, easy-to-use design, this product will offer you reliable service for providing a rechargeable power source for your home, cabin, or campsite. With its highly technical design and comprehensive features, the **Portable Powerpack unit** will provide you with a simple yet effective system during power outages, and a reliable source of AC power everywhere you need it.

NOTE: Upon purchasing, immediately charge unit more than 48 hours using the supplied AC Charger. To guarantee maximum device performance and life span, it is recommended to continuously connect the unit with the AC Charger or else to charge the unit after *each* use and once every *90 days*.

IMPORTANT SAFETY INFORMATION

This manual contains important safety information for unit. Each time, before using the unit, READ ALL instructions and cautionary markings on or provided with the system and all appropriate sections of this guide. Powerpack contains no user-serviceable parts. See Warranty section for how to handle product issues.

WARNING: Fire and/or Chemical Burn Hazard

- Do not cover or obstruct any air vent openings and/or install in a zero-clearance compartment.
- Do not use the unit if the unit is visibly leaking some type of liquid. It is possible that the internal battery has been damaged and battery acid may have spilled.

WARNING: Failure to follow these instructions can result in Death or Series Injury

- When working with electrical equipment with lead acid batteries, have someone nearby in case of an emergency.
- Wear eye protection and gloves.
- Avoid touching your eyes while using this unit.
- Keep fresh water and soap on hand in the event battery acid comes in contact with eyes. If this occurs, cleanse right away with soap and water for a minimum of 15 minutes and seek medical attention.
- Batteries produce explosive gases. **DO NOT** smoke or have an open spark or fire near the system.
- Keep unit away from moist or damp areas.
- Avoid dropping any metal tool or object on the battery. Doing so could create a spark or short circuit which goes through the battery or another electrical tool that may create an explosion.

WARNING: Shock Hazard. Keep away from children!

- Avoid moisture. Never expose unit to water.
- Unit provides high voltage AC from inverter, treat the output sockets the same as regular wall AC sockets at home.

WARNING: Explosion hazard!

- DO NOT use the unit in the vicinity of flammable fumes or gases (such as propane tanks or large engines).
- AVOID covering the ventilation openings.
- Always operate unit in an open area.
- Prolonged exposure to high heat or freezing temperatures will decrease the working life of the unit. Unit exposure to these elements may lead to cracking and decreased capacity of the internal battery.

CE EMC INFORMATION

This equipment has been tested and found to comply with the limits for the CE EMC standard. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

LIMITATIONS ON USE

Do not use in connection with life support systems or other medical equipment or devices.

BATTERY RECYCLING

The unit is designed to provide years of service. However, the internal battery is not designed to be user replaceable.



Because the internal battery installed inside the battery box contains lead, which can be hazardous if exposed to the environment, the battery box should be recycled or safely disposed of at your local recycling depot. Do not dispose of the battery box with common household waste. Please ask your local authorities about recycling services that are available in your area.

2. PRODUCT DESCRIPTION

The Portable Powerpack package includes the items listed below:

- Portable Powerpack
- DC to DC Cable
- Heavy Duty Jump Start Cable
- AC Charger
- Owner's manual



Picture show unit with US socket



Heavy Duty Jump Start Cable



DC to DC Cable



AC Charger

3. FEATURES

Warning: Failure to follow these instructions can damage the unit

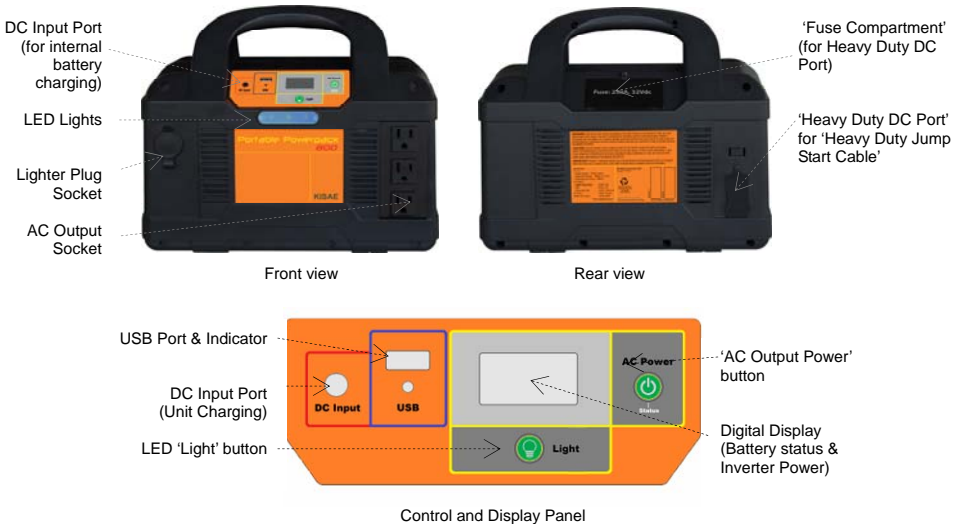
Before beginning your unit Installation, please consider the following:

- The unit should be used or stored in an indoor area away from direct sunlight, heat, moisture or

conductive contaminants.

- When placing the unit, allow a minimum of three inches of space around the unit for optimal ventilation.
- Charge battery immediately upon purchasing this product.
- To ensure optimum battery run time and life expectancy, leave Portable Powerpack continuously plugged into utility power with the AC Charger.

Understanding the unit features



4. OPERATION

Warning: Risk of Equipment Damage!

- Do not plug surge-protected power bars into the unit's AC outlets. The surge protected components on the surge-protected power bar may not work well with the modified sine wave output generated by the unit.
- Do not connect an AC power source such as utility power or a generator to the AC output socket.

Using the Inverter (AC load)

- Press and hold the 'AC Output Power' button for 2 seconds to turn ON the inverter. AC output power is now available at the AC Socket.
- With the inverter ON, the display shows the AC Output Power in (kW) and the battery capacity in (%). Please note that the numbers are for reference only and the numbers may vary depending on the type of load used and the lifetime of the battery.
- Press the 'AC Output Power' button again to turn OFF the inverter. The AC output power is turned OFF.

Note: Although the unit can provide high surge power of 1600W, some appliances may still trigger the unit's protection system. A higher power system like Home Solar Kit 1800 is required for those appliances.

Caution: Some loads like speed controllers found in some fans and AC chargers for some power tools may not like the modified sine wave generated by the inverter. Those appliances may not work or may be damaged if they are connected to the inverter. If you are unsure about powering any device with the inverter, contact the manufacturer of the appliances.

Using the USB Port

The USB Port on the system provides standard 5V 2.1A power to power up USB powered handheld devices. The USB Port will automatically turn ON when a USB cable is plugged into the port. Unplugging the USB cable will turn off the USB output.

Reminder: *Unplug the USB Cable from the unit when the USB port is not in use.*

Using the 12V Lighter Plug Socket

The 12V Lighter Plug Socket on the unit provides standard 12VDC maximum 15A current to power up 12V appliances. This port is protected by an auto-reset fuse. When the internal fuse is tripped, unplug the load from the port and wait for 5 minutes to allow the auto-rest fuse to recover. This port can also be used to charge the internal battery by using the provided DC to DC cable and connect it to the vehicle's 12V lighter plug socket.

Using the LED Light

Press 'Light' button once to turn on the LED Light. Press again to turn the LED Light off.

Checking the Battery Status

When the inverter is OFF, Pressing the 'AC Output Power' button once will show the estimated battery capacity (in %) on the display. The capacity shown on display is for reference use only. The numbers may vary depending on the lifetime of the battery.

Charging the unit

Important: *Please recharge the unit after each use.*

Using the provided AC Charger:

- Plug the provided AC Charger to any AC Source.
- Connect the DC Plug from the AC Charger to the 'DC Input Port' of the unit. The charging process will start automatically. The unit will be fully charge in about 15 hours.
- During the charging process with inverter OFF, the display shows battery capacity (in %) and will show 'FUL' when it is fully charged.

Note: The Inverter can still be turned ON during the charging process. During this mode, the display will repeatedly show 'Chg' and battery capacity - in% (indicating battery charging is in progress) and then AC output power in kW (indicating inverter is power ON).

Using the provided DC to DC Cable through the 12V Lighter Plug Socket in Vehicles:

Warning: Risk of explosion, fire or burns. *The unit can only be charge through the lighter plug on a 12V vehicle system only. Charge through a 24V vehicle system will damage the unit and the internal battery of the unit may explode and catch fire.*

Note: Charging the unit through the unit's 'Lighter Plug Socket' will not have any indicator ('Chg' or battery capacity) shown on the Digital Display.

- Please verify the Lighter Plug system in your vehicles is a 12V system.
- Connect one end of the DC to DC cable to the Lighter Plug Socket on the unit.
- Connect the other end of the cable to the vehicle's 12V Light Plug Socket.
- Start your engine and it will start charging the battery automatically.
- The battery will be fully charger in about 4 hours. The charger time depends on the

Reminder: *Please recharge the unit after each use and you can leave the AC Charger plugged into the unit continuously to keep the unit in fully charge condition.*

Jump Starting a Vehicle or Boat Engine

You can use the supplied 'Heavy Duty Jump Start Cable' to jump-start a vehicle or boat engine that has 12V starting battery.

Warning: Fire hazard. Never allow red and black clamps to touch each other or another common metal conductor. This could cause damage to the unit and/ or create a sparking / explosion hazard. Always disconnect the clamps from the unit and from the vehicle after use. Jump-start cable clamps' connection to the vehicle's battery terminals must be positive to positive (red clamp to battery "+") and negative to negative (black clamp to battery "-"). A reverse polarity connection (positive to negative) may cause damage to the unit, create a sparking/explosion hazard and/or damage the jump-start vehicle.

Warning: Risk of explosion, fire or burns. The battery terminals exposed at the 'Heavy Duty

'Jump Start Cable' port have enough energy present to cause a spark, creating an explosion hazard, or to cause burns if a metal object contacts both terminals.

The following jump-start procedure is provided for your reference:

- Turn OFF the vehicle or boat ignition and all accessories.
- Engage the park or emergency brake and place the transmission in park for an automatic or neutral for a manual vehicle.
- If jump-starting a boat engine, purge the engine compartment and bilge of all fumes
- Connect the 'Heavy Duty Jump Start Cable' to the 'Heavy Duty DC Port' located at the back of the unit.
- Position the unit on a flat, stable surface near the battery and away from all moving parts of the engine.
- Connect the red positive (+) clip of the cable to the positive (+) terminal of the engine battery.
- Connect the black negative (-) clip of the cable to the engine black, cylinder head, or other stationary heavy metal part of the motor, or to the negative (-) battery terminal.
- Before starting the engine, make sure the unit and the cables are clear of belts and fans. Do not crank the engine for more than 4 seconds.
- Start the engine.

Warning: Fire hazard. The jump-start feature is designed for short term operation (less than 4 seconds) only. Operating the jump-start feature for more than 4 seconds may cause damage to the unit or the clips. Allow the unit to cool down for at least 3 minutes after each jump-start.

- After jump-start, remove the red positive (+) clip and then the black negative (-) clip from the vehicle's battery terminal.
- Remove the cable from the Heavy Duty DC Port.

Important: Recharge the unit as soon as possible after each use.

Understanding the Warning/Fault Code

Error Code	Condition	Corrective Action
E01	System senses battery voltage is low and has shutdown the inverter.	Recharge battery immediately and restart unit.
E02	System senses battery voltage is high and has shutdown the inverter.	Check battery voltage or if any external high voltage DC source is connected to 'Lighter Plug' socket or the 'Heavy Duty DC port'.
E03	System AC output is overloaded or short circuited and has shutdown.	Check load connected to AC output. Reduce load and restart the unit.
E04	System senses high internal temperature on the inverter and has shutdown	Turn AC output power off. Wait for 15 minutes before restarting. Check if any object is blocking the ventilation of unit.
E05	System warns battery voltage is low and will shut down shortly	Recharge battery as soon as possible or system will shut down shortly.
E06	Not used	Check load connected to AC output. Reduce load.
E07	System warns of high internal temperature and will shut down shortly.	Reduce load. Check if any object is blocking the ventilation of unit.

Estimated Run time of AC Load

Following run times are estimates. Actual run times may vary.

Load	Estimated Consumption	Estimate Run time
Cordless Phone	5W	33 hrs
Home Alarm System	5W	33 hrs
Clock/Radio	8W	24 hrs
Table Lamp	40W	5 hrs
20" LCD TV	40W	5 hrs
Table Lamp	60W	3.5 hrs
Energy Saving Light (5x17W)	85W	2.0 hrs
Flooded Light	300W	22 min
Sump Pump (1/4 hp)	300W	22 min
½" Drill	700W	5 min

Tips: Maximize the runtime of your system

- Do not leave appliances ON when not in use because they will drain the internal battery
- For computer use, use laptop, or desktop computer with LCD monitor.
- Use small televisions instead of big screen TV's
- Use energy saving light bulbs or fluorescent lamp instead of incandescent or halogen light.
- Remove the USB cable from the USB Port when not in use. USB will automatically turn on when the cable is connected.

5. TROUBLESHOOTING

To trouble shoot the unit, please note the error code displayed on the main unit and review the "Understanding the Error Codes" in section 5.

Problem/Question	Symptom	Solution
Appliance connected to unit malfunctions or overheats	Products connected to unit do not accept modified sine-wave waveform	Products are not compatible with the modified sine wave output produced by the unit. See caution on "Using the inverter" on page 6.
Insufficient run-time	Battery is not fully charged	Charge battery by leaving the unit plugged to the utility for more than 48 hrs to fully charge the battery.
System has no AC Output	AC output power is off	Turn AC output power ON.
	Unit has shutdown due to various potential conditions	Check Error or Warning code
The engine being jump-started will not start or the battery clamps of the jump-start cable measure 0 V.	Battery is not fully charged.	Recharge the unit.
	The engine condition is poor.	Have the engine serviced.
	Heavy Duty Jump Start Cable is loose.	Check Heavy Duty Jump start cable connection.
	'Heavy Duty DC Port' protection fuse (250A) is blown.	Replace the fuse located inside the 'Fuse Compartment' with fuse of same type and rating.

6. SPECIFICATIONS

Note: Specifications are subject to change without notice.

Specification	Portable Powerpack PP800	Portable Powerpack PP800i -EU,-UK, -AU
<i>Inverter</i>		
Output Power	800W	800W
Output Current	6.7A	3.5A
Surge Power	1600W	
Output Voltage	120 VAC	230 VAC
Output Frequency	60 Hz	50 Hz
Output Waveform	Modified Sinewave	
Peak Efficiency	90%	
Standby Power (AC output power ON)	< 3W	
AC Output Socket	Three NEMA 5-15	Single AC Socket: -EU (Schuko CEE 7/4) -UK (British BS1363) -AU (NS/NZS 3112)
<i>USB Port</i>		
Rating	5V, 2.1A	
<i>DC Input Port</i>		
Charging Current	2A	
Charging Voltage	14.8 VDC maximum	
<i>Lighter Plug Socket</i>		
DC Voltage	12 VDC	
Current	15A Maximum	
Protection	15A (automatic reset)	
<i>Heavy Duty DC Port</i>		
DC Voltage	12 VDC	
Current	75A Continuous, 250A Surge	
Protection	250A fuse	
<i>Internal Battery</i>		
Battery Capacity	12V, 26Ah, Non-Spillable type	
Battery Type	Sealed Lead Acid	
<i>Safety and Environmental</i>		
Regulatory Approval	CE	
Operating Temperature	0°C to 40°C (32°F to 104°F)	
Storage Temperature	-20°C to 40°C (-4°F to 104°F)	
Relative Humidity	5-90% noncondensing	
Operating Altitude	Up to 9,843ft (3000 meters) above sea level	
<i>Weights and Dimensions</i>		
Weights	28.0 lbs (12.7 kg)	
Dimensions	12.7x7.6x10.3" 323 x 193 x 262 mm	
<i>AC Charger (for unit charging)</i>		
Rating	15V, 2A	

7. WARRANTY

One Year Limited Warranty

The limited warranty program is the only one that applies to this unit, and it sets forth all the responsibilities of KISAE. There is no other warranty, other than those described herein. Any implied warranty of merchantability of fitness for a particular purpose on this unit is limited in duration to the duration of this warranty.

This unit is warranted, to the original purchaser only, to be free of defects in materials and workmanship for one year from the date of purchase without additional charge. The warranty does not extend to subsequent purchasers or users.

Manufacturer will not be responsible for any amount of damage in excess of the retail purchase price of the unit under any circumstances. Incidental and consequential damages are specifically excluded from coverage under this warranty.

This unit is not intended for commercial use. This warranty does not apply to damage to units from misuse or incorrect installation/connection. Misuse includes wiring or connecting to improper polarity power sources.

RETURN/REPAIR POLICY:

If you are experiencing any problems with your unit, please contact our customer service department by e-mailing info@kisaetechnology.com or call at 1-877-897-5778 before returning product to retail store. After speaking to a customer service representative, if products are deemed non-working or malfunctioning, the product may be returned to the purchasing store within 30 days of original purchase. Any defective unit that is returned to manufacturer within 30 days of the date of purchase will be replaced free of charge.

If such a unit is returned more than 30 days but less than one year from the purchase date, manufacturer will repair the unit or, at its option, replace it, free of charge. If the unit is repaired, new or reconditioned replacement parts may be used, at manufacturer's option. A unit may be replaced with a new or reconditioned unit of the same or comparable design. The repaired or replaced unit will then be warranted under these terms for the remainder of the warranty period. The customer is responsible for the shipping charges on all returned items.

LIMITATIONS:

This warranty does not cover accessories, such as adapters and batteries, damage or defects resulting from normal wear and tear (including chips, scratches, abrasions, discoloration or fading due to usage or exposure to sunlight), accidents, damage during shipping to our service facility, alterations, unauthorized use or repair, neglect, misuse, abuse, failure to follow instructions for care and maintenance, fire and flood.

If your problem is not covered by his warranty, contact our Customer Service Department by e-mailing info@kisaetechnology.com or call at 1-877-897-5778 for general information if applicable.