

CLARKE®

POWER



600W PORTABLE POWER STATION

MODEL NO: PPS600

PART NO: 8877140

OPERATING & MAINTENANCE INSTRUCTIONS

UK
CA | CE



ORIGINAL INSTRUCTIONS

DL0924

INTRODUCTION

Thank you for purchasing this CLARKE Portable Power Station. Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service. Please keep these instructions in a safe place for future reference.

ENVIRONMENTAL RECYCLING POLICY



Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste but in accordance with the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

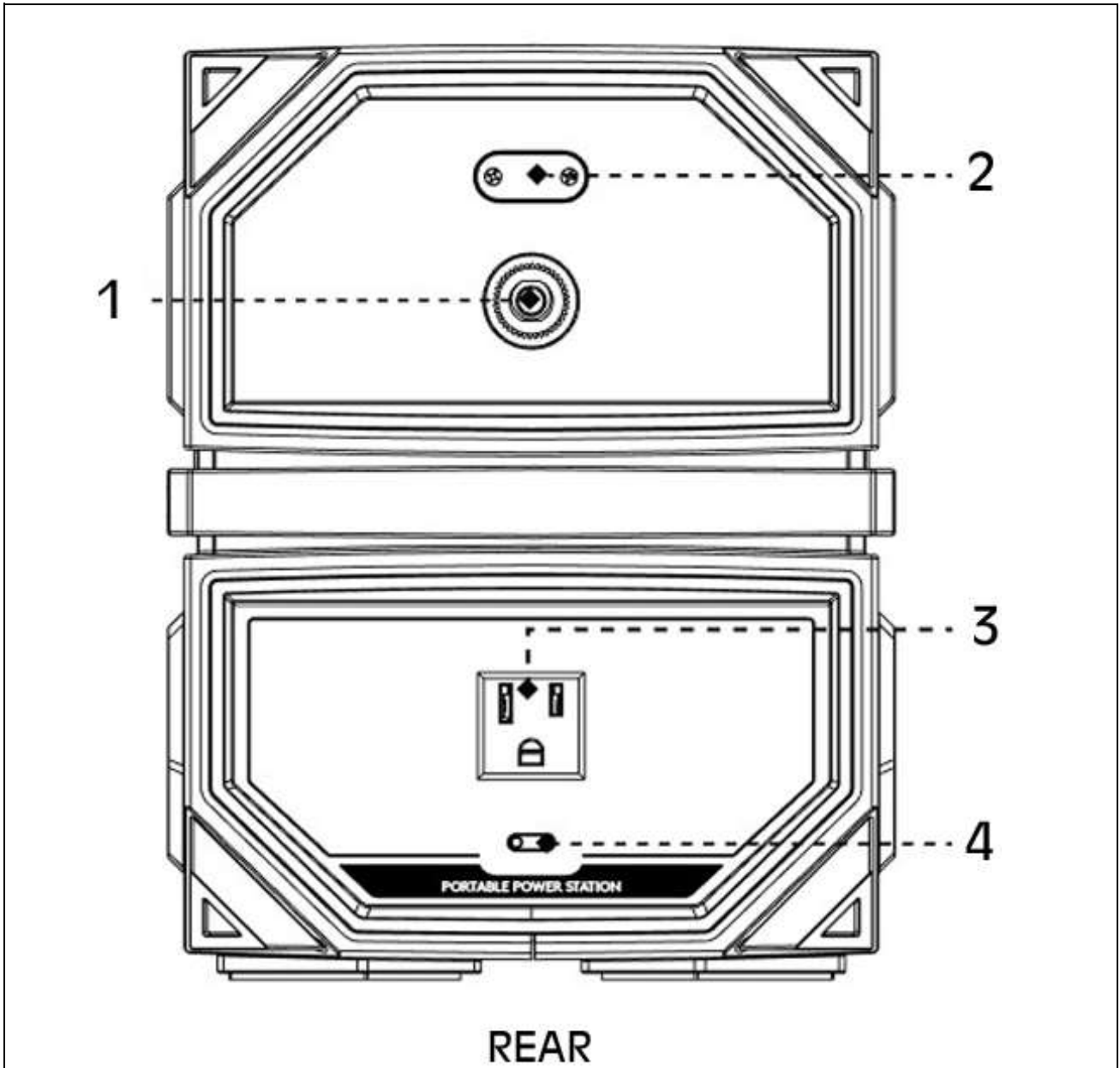
SAFETY SYMBOLS SHOWN ON THE PRODUCT

	Read the instruction manual		DO NOT incinerate
	Warning: Battery Charging		Harmful to aquatic life
	Warning: Risk of electrical shock		Protect from rain/ water
	Keep out of reach of children		

GENERAL SAFETY

1. **DO NOT** use this power station near heat sources such as fire or stoves.
2. **AVOID** contact with any liquid. **DO NOT** immerse the power station in water or get it wet. **DO NOT** use the power station in the rain or wet conditions.
3. **DO NOT** use the power station in environments with strong static electricity and/or magnetic fields.
4. **DO NOT** disassemble the power station in any way or pierce the outer shell with sharp objects.
5. **DO NOT** use any unofficial components or accessories. For replacement of any part or accessory, contact your CLARKE Parts & Service department listed at the bottom of this page.
6. When using the power station, strictly abide by the ambient temperature specified in this manual. If the temperature is too high or too low, the product will not work properly.
7. **DO NOT** place any heavy object on top of the power station.
8. During use, **DO NOT** forcibly block the fan operation or place the product in a non-ventilated or dusty environment.
9. **AVOID** shock, dropping or severe vibration when using the power station. In case of severe external shock, immediately turn off the power and stop using the product until checked by an expert.
10. Place the power station on a flat surface to prevent damage from tipping over.
11. If the power station is seriously damaged in anyway, turn it off immediately, place the power station in an open area away from flammable objects and people. If need be, dispose of it in accordance with the WEEE regulations.
12. Keep the power station out of the reach of children and pets.

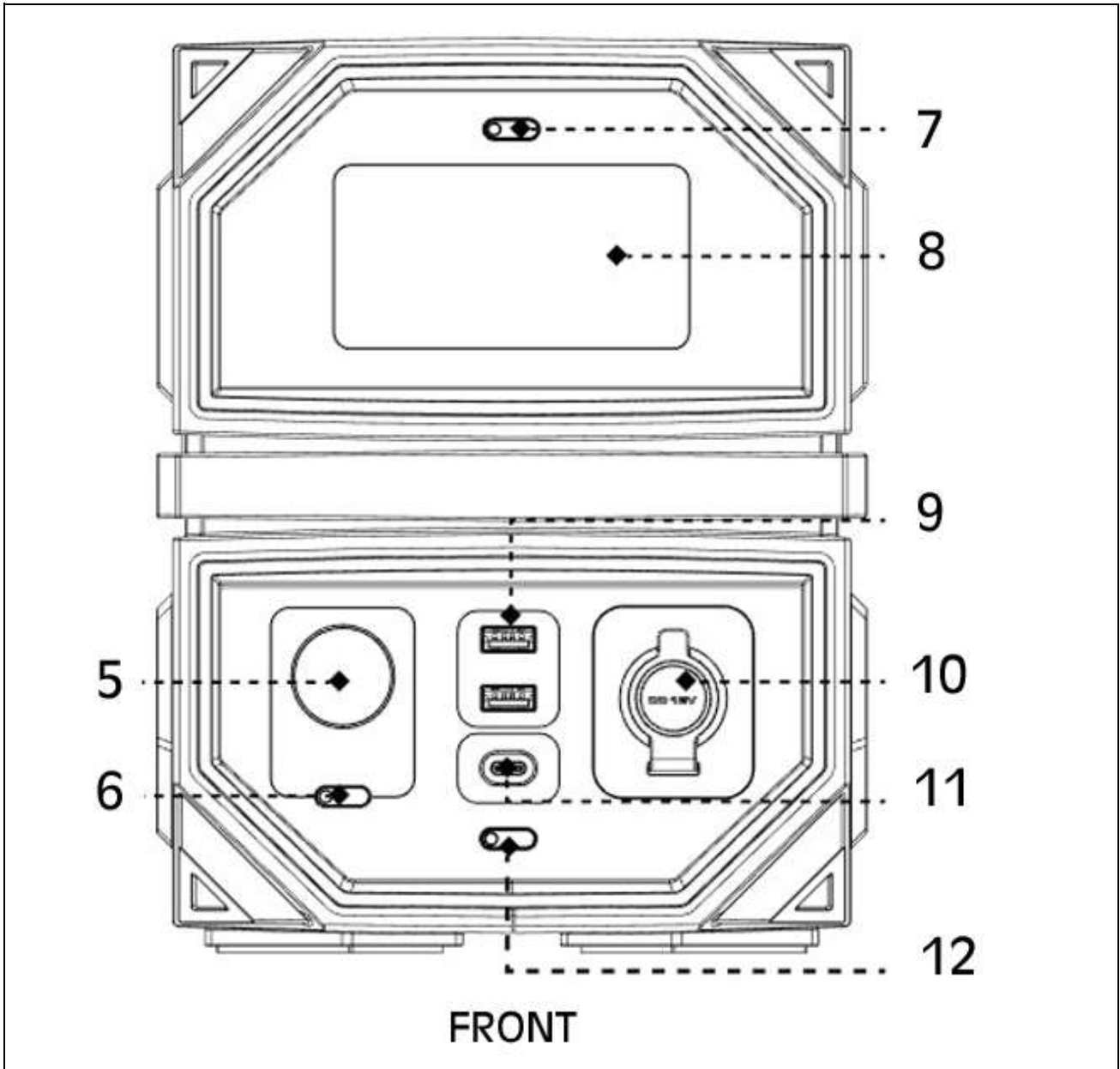
OVERVIEW - REAR



REAR

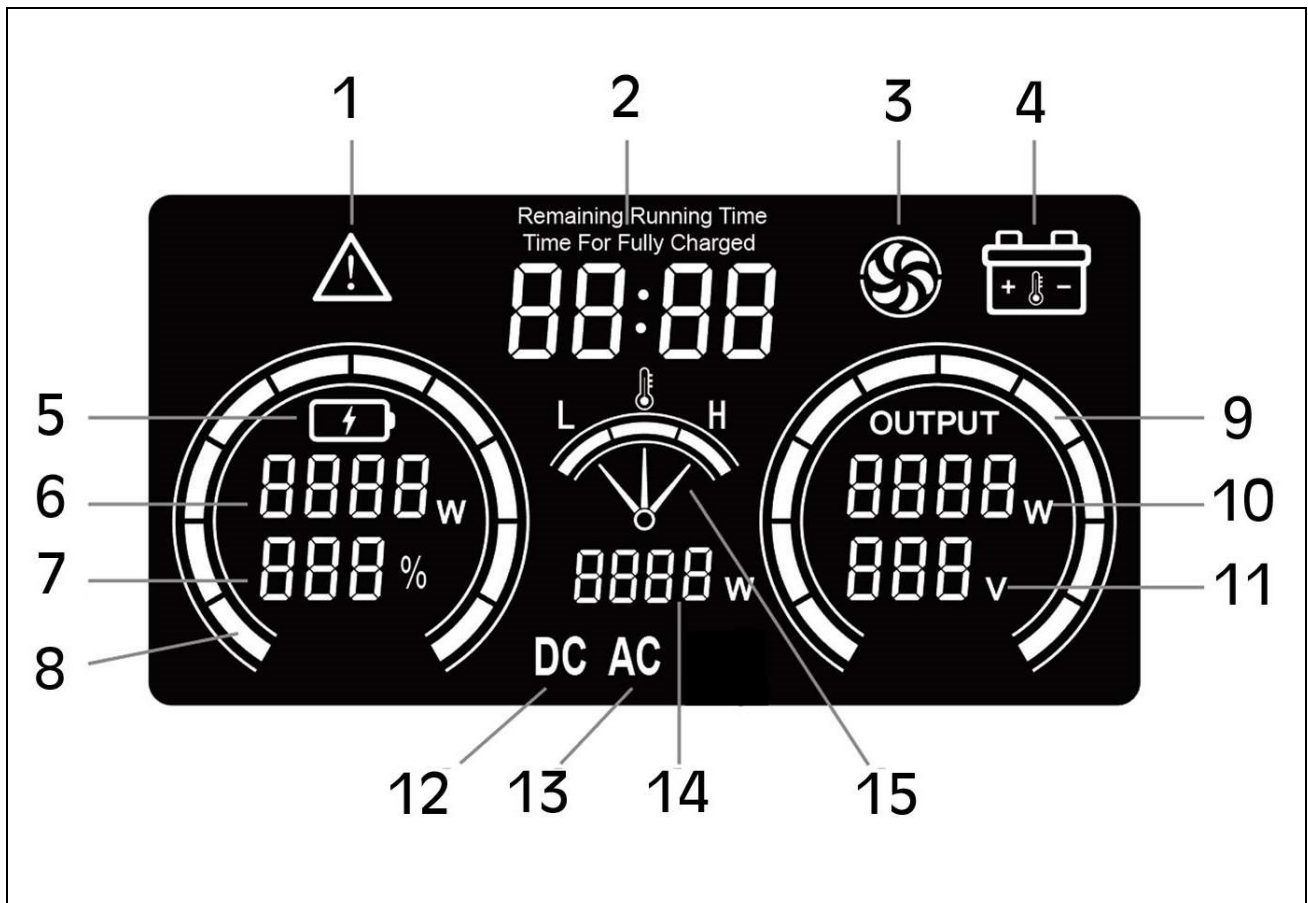
NO	DESCRIPTION	NO	DESCRIPTION
1	DC Input Charging Port	3	AC 230V Output Socket
2	Battery Rescue Charging Port	4	AC Output Socket ON/OFF Switch

OVERVIEW - FRONT




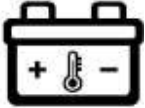



NO	DESCRIPTION	NO	DESCRIPTION
5	LED Light	9	2 x USB-A (DC 5V/3.1A) Socket
6	LED Light ON/OFF Switch	10	DC 12V Car Type Socket
7	LCD Screen ON/OFF Switch	11	DC USB Type C (PD 60W) Socket
8	LCD Screen	12	DC Output Sockets ON/OFF Switch

LCD DISPLAY OVERVIEW

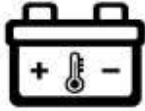


NO	DESCRIPTION	NO	DESCRIPTION
1	Power Station Failure - Overheat, Overload, Short Circuit	9	Load Status Display
2	Battery Run Time/Time to Full Charge Battery	10	Load Power
3	Fan	11	AC Output Voltage
4	Battery High and Low Temperature Fault	12	DC Output
5	Charge Icon	13	AC Output
6	Charge Power	14	Inverter Power
7	Battery Power	15	Temperature Fault - Low/Normal/High
8	Battery Level Display		

LCD DISPLAY DESCRIPTIONS

Icon No.	Icon	Fault Description and Handling Methods
1		Inverter Fault Icon. Displayed when fault occurs (including: short circuit, overload, under voltage, over voltage, over temperature etc.) When under voltage occurs, there will be an alarm (10 seconds), the AC icon (13) in the display will flash and the green light of the AC switch will flash.
4		Battery Failure Icon.
15		Normal Temperature. The pointer will be in the middle.
1 & 15		Low Temperature Fault. Icons 1 & 15 will appear simultaneously. The pointer will be to the left (Low).
1 & 15		High Temperature Fault. Icons 1 & 15 will appear simultaneously. The pointer will be to the right (High).

1, 4 & 15
(Low)



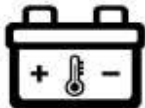
Battery Discharge Failure in Low Temperature Environment.

- When the battery is protected against low temperature level I and the icons 1, 4 & 15 (Low) are displayed at the same time.
- When the battery is protected against low temperature level II, LCD display is off, and the red light of the AC switch flashes.
- Recovery temperature after discharge low temperature protection: $-10^{\circ}\text{C} \pm 3^{\circ}\text{C}$

Battery Charging Failure in Low Temperature Environment.

- When the battery is under low temperature protection, the icons 1, 4 & 15 (Low) are displayed at the same time and icon 15 (Low) is flashing.
- Recovery temperature after charging low temperature protection: $0^{\circ}\text{C} \pm 3^{\circ}\text{C}$

1, 4 & 15
(High)








Battery Discharge Failure in High Temperature Environment.

- When the battery is protected against high temperature level I, and the icons 1, 4 & 15 (Low) are displayed at the same time.
- When the battery is protected against high temperature level II, LCD display is off, and the red light of the AC switch flashes.
- After the battery cools down it resumes normal operation.

Battery Charging Failure in Low Temperature Environment.

- When the battery is under low temperature protection, the icons 1, 4 & 15 (High) are displayed at the same time, and icon 15 (High) is flashing.
- After the battery cools down it resumes normal operation.

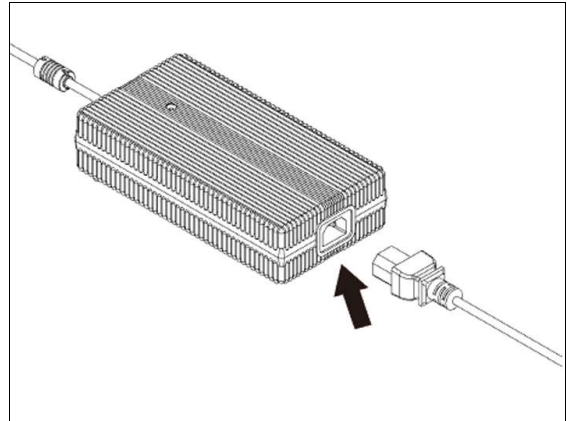
2		Time for Fully Charged. Battery running time.
3		Fan Icon. Appears when the fan is working.
5, 6, 7 & 8		<p>Icon 5: Battery Charging Icon. Appears when charging</p> <p>Icon 6: Battery Charging Power. Appears when charging.</p> <p>Icon 7: Battery Percentage.</p> <p>Icon 8: Battery Power Display. When charging, the bar corresponding to the battery will flash; if the battery shows 0%, the Icon 8 will flash. Each section corresponds to approximately 10%.</p>
9, 10 & 11		<p>Icon 9: Display of Total Load Power. Each section corresponds to approximately 10%.</p> <p>Icon 10: Total Load Power. Sum of all loads, including AC, USB-A, Type-C, DC & LED Light.</p> <p>Icon 11: AC Output Voltage.</p>
12, 13 & 14		<p>Icon 12: DC Icon. Appears when the DC switch is turned ON, flashes when overloaded or short circuited.</p> <p>Icon 13: AC Icon. Appears when the AC switch is turned ON, and flashes any fault occurred including short circuit, overload, under voltage, over voltage & over temperature.</p> <p>Icon 14: Power Station Specifications. Inverter power</p>

CHARGING THE DEVICE

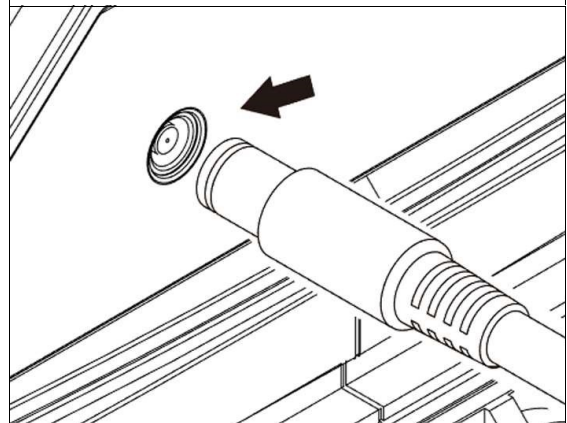
The battery power of the power station will be consumed during use. You can choose the following methods to charge the power station.

CHARGING BY ADAPTER

1. Connect the AC plug cable to the adapter.

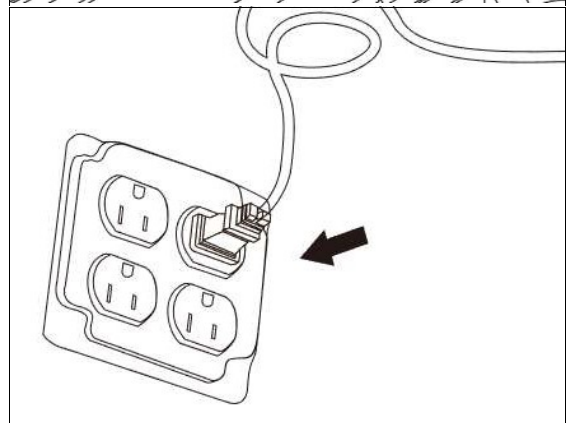


2. Insert the DC plug of the adapter into the charging port on the rear of the device.



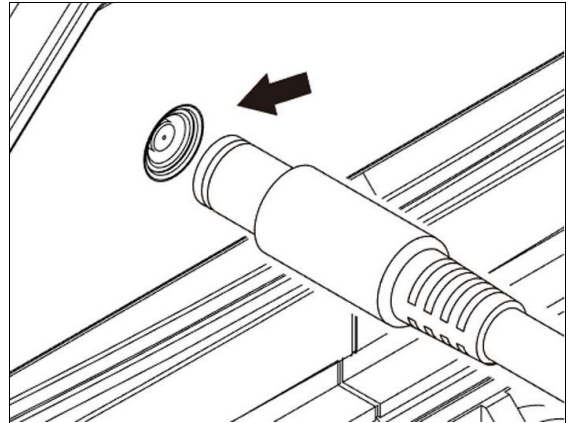
3. Insert the AC plug into a mains outlet socket.

NOTE: Always operate this procedure in the above order. when fully charged or need to stop charging, you must first unplug the AC plug from the mains outlet socket, then pull out the DC plug, and finally store the adapter and plug cord.



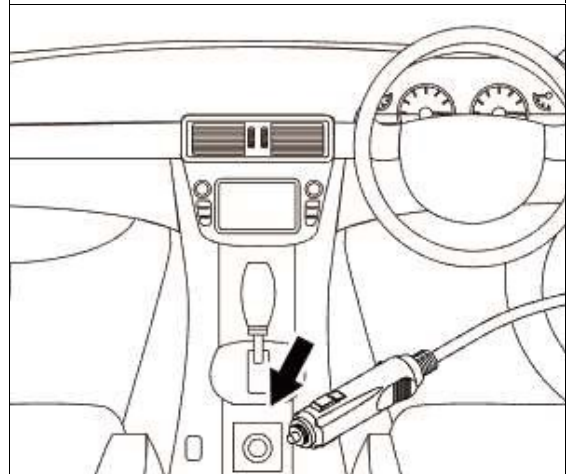
CHARGING BY 12V DC OUTLET

1. Insert the DC plug of the adapter into the charging port on the rear of the device.



2. Insert the 12V DC plug into the 12V DC outlet socket in a vehicle or generator.

NOTE: Always operate this procedure in the above order. when fully charged or need to stop charging, you must first unplug the 12V DC plug from the vehicle or generator socket, then pull out the DC plug, and finally store the adapter and plug cable.

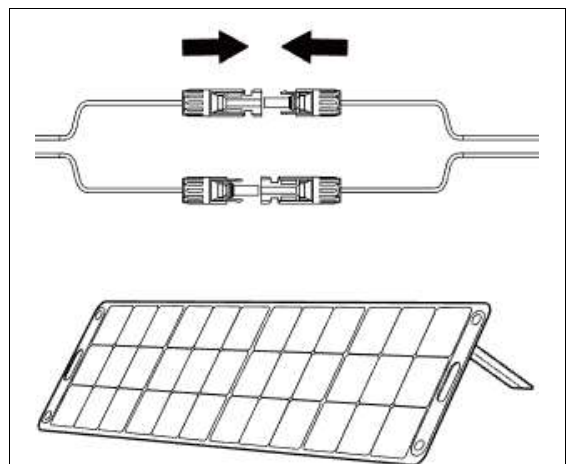


CHARGING BY SOLAR PANEL

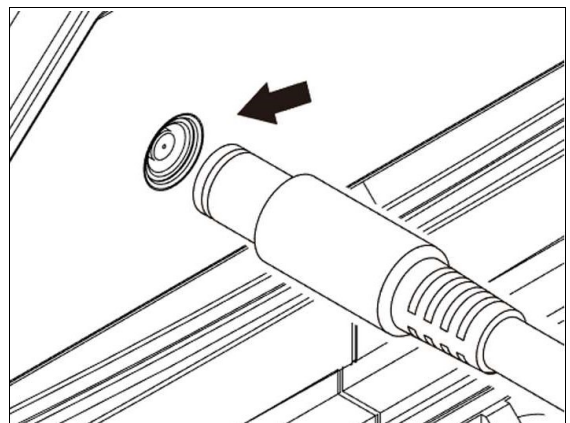
1. Connect the solar panel charging cable to the solar panel.

NOTE: CLARKE solar panels are sold separately, as follows:

- SFP1 (6487078); Foldable Solar Panel 100W
- SFP2 (6487079); Foldable Solar Panel 200W



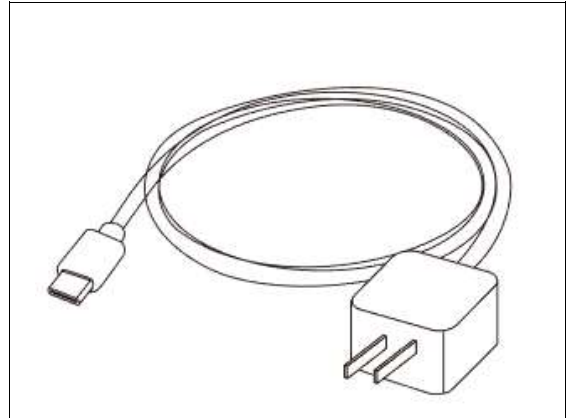
2. Insert the DC plug into the charging port of the power station.



CHARGING BY THE BATTERY RESCUE PORT

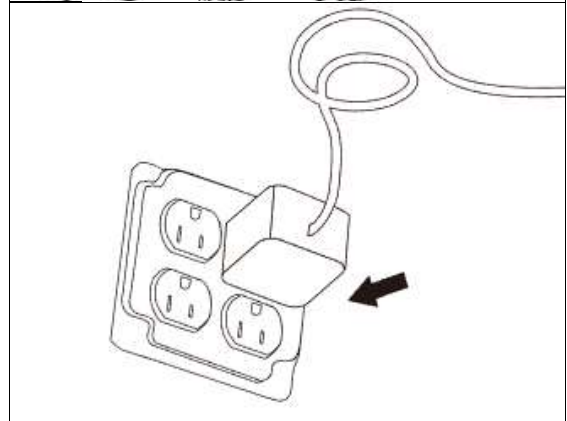
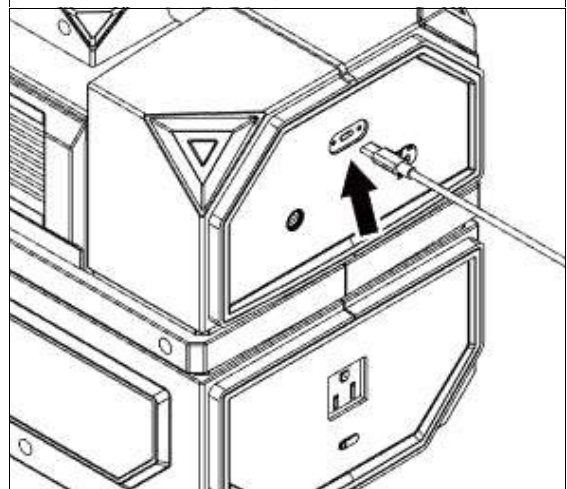
This method should only be used if the battery is seriously low and cannot be charged by normal methods.

1. You will need a USB Type C charging cable and plug (not supplied).
2. Unscrew the cover of the battery rescue port which is located on the rear of the power station.
3. Insert the USB Type C charging cable into the battery rescue port.



4. Plug the USB Type C cable and plug into a mains power supply.

NOTE: This method takes a long time (approx. 10 Hours). Once the LCD display lights up, change to another charging method.

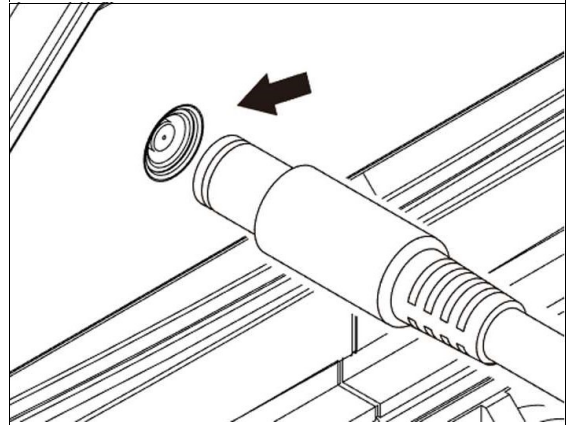


CHARGING BY BATTERY

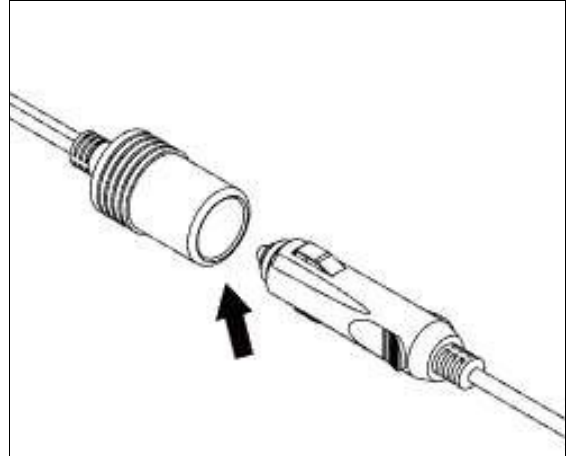
1. If charging through a separate battery, the user needs a battery clip adapter cable, as shown (not supplied).



2. Insert the DC plug of the adapter into the charging port on the rear of the device.

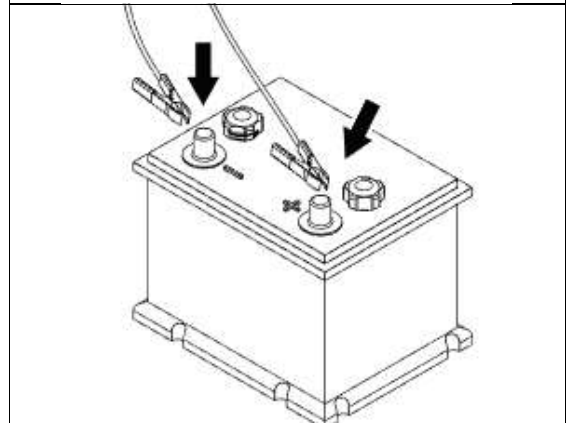


3. Insert the 12V DC adapter into the battery clip adapter, as shown.



4. Clamp the battery clip adapter onto the battery, making sure the red (+) clamp is attached to the positive battery terminal and the black (-) clamp is attached to the negative battery terminal.

NOTE: Make sure the battery holds enough power to charge the power station.

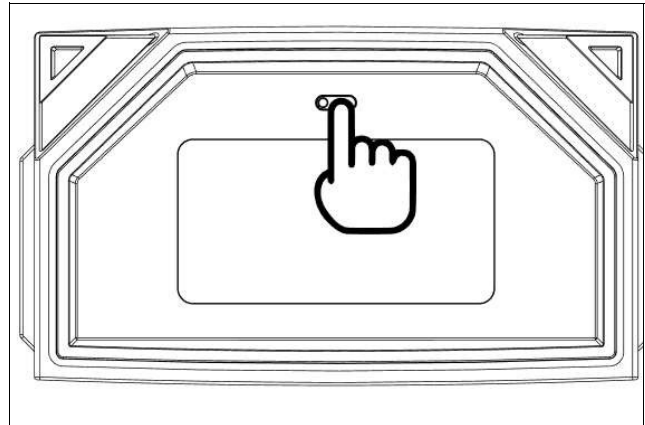


OPERATION

LCD DISPLAY ON/OFF

Short press the LCD switch to turn ON/OFF the LCD screen (ON: the green indicator light on the button will be on, OFF: the indicator light will be off).

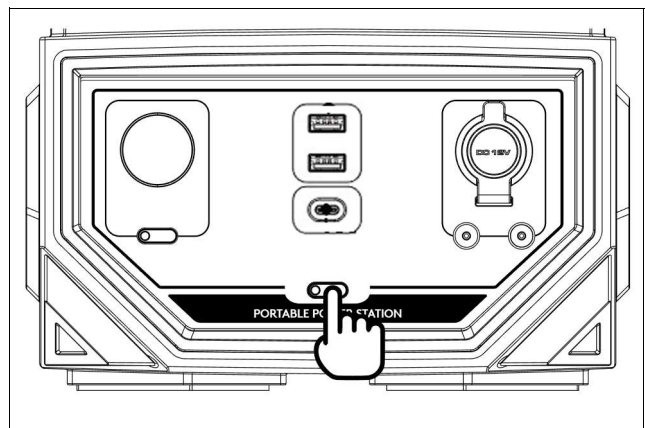
Turn on any switch of DC, AC and the light, the LCD screen will also light up. After the LCD screen is turned on, it will automatically turn off if there is no operation for 5 minutes.



DC OUTPUT ON/OFF

Short press the DC switch to turn ON/OFF all DC output sockets (ON: the green indicator light on the button will be on, OFF: the indicator light will be off), these include both USB-A, Type-C & 12V DC sockets.

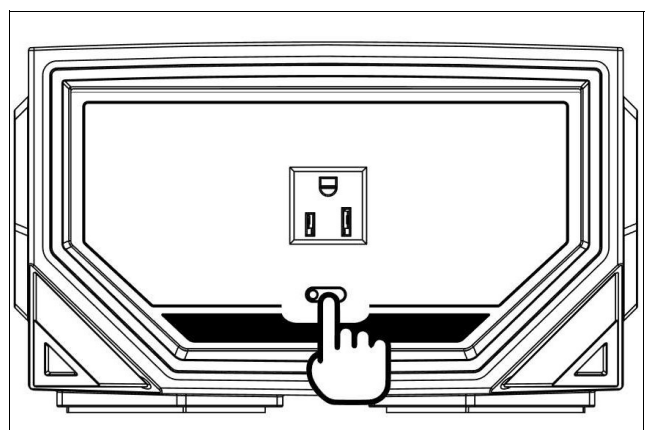
Turn off the DC switch when not in use to save power.



AC OUTLET ON/OFF

Short press the AC switch to turn ON/OFF the AC output socket (ON: the green indicator light on the button will be on, OFF: the indicator light will be off).

Turn off the AC switch when not in use to save power.

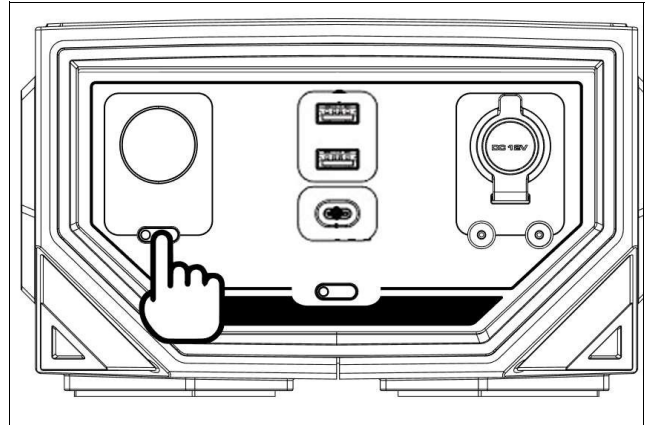


LED LIGHT

Short press the LED switch for the 3 different settings of the light as follows:

- 1 Press: Low Light
- 2 Presses: High Light
- 3 Presses: Flashing SOS mode
- 4 Presses: Off

NOTE: After the light has been on for over 1 minute in any setting, the light will turn off when the switch is next pressed.



STORAGE & MAINTENANCE

1. Use and store the power station at an ambient temperature of 10°C to 30°C, away from water, heat and other metal objects.
2. For safety reasons, **DO NOT** store the product in an ambient temperature above 45°C or below -10°C for extended periods of time.
3. For long term storage, discharge the battery to approximately 30% and recharge to 30% every three months.
4. If the remaining power is less than 1% after you have finished using the power station, recharge to 30%. If the power station is left idle for an extended period of time with a critically low battery, it may damage the cells and shorten the life of the product.
5. If the power station has been idle for a long period of time, the battery power is seriously insufficient and cannot be charged normally. In this case, charge through the battery rescue charging port until the LCD screen lights up, then it can be charged in a normal way.

NOTE: The maximum charging current for the Battery Rescue Charging Port is 5V DC / 2A.

TROUBLESHOOTING

FAULT	SOLUTION
Battery high temperature protection	Put the power station in a cool and ventilated place so it can be restored after the temperature is lowered. NOTE: DO NOT directly cool the power station by freezing, as this may damage it.
Battery low temperature protection	Put the device in a warm environment so it can be restored after the temperature rises. NOTE: DO NOT put the power station in an oven, dryer or directly heat the device by other means, as this may damage it.
DC can not charge (12V DC & Solar Panel)	Check if the charging voltage meets the device requirements: DC charging requirements: 11 - 30V DC
	Check if the indicator light of the power adapter is on, if not check: <ol style="list-style-type: none"> 1. If the adapter is correctly connected. 2. Whether the AC socket and supply is working normally.
	Battery high or low temperature protection has activated. See LCD Display Descriptions or Storage & Maintenance for more information.
No AC output	Check whether the AC switch is on (green light showing)
	Check whether the loaded device is connected to the AC output correctly.
	The equipment is overloaded or short-circuit protected. After reducing the load or eliminating the fault, it can be restored after restarting.
	Battery under voltage protection. The power station needs to be charged before use; AC switch should be turned off and the turned back on.

FAULT	SOLUTION
No output from 12V DC, DC ports, USB & Type C connection ports	Check whether the DC switch is on (green light showing).
	Check whether the green indicator light on the switch is flashing, if it is flashing it may be: <ol style="list-style-type: none"> 1. Overload Recovery: reduce the load to within the rated range. 2. DC Short Circuit Recovery: Check the load equipment and eliminate the short circuit. 3. Module Over Temperature Recovery: Suspend use and resume after cooling.
	Battery under voltage protection. Needs to be charged before use.
	Battery high or low temperature protection has activated. See LCD Display Descriptions or Storage & Maintenance for more information.
LED light does not light up	Check whether the Light switch is on (green light showing).
	Battery under voltage protection. Needs to be charged before use.
	Battery high or low temperature protection has activated. See LCD Display Descriptions or Storage & Maintenance for more information.
LCD Display, no reaction	Battery high or low temperature protection has activated. See LCD Display Descriptions or Storage & Maintenance for more information.
	The battery power is seriously low, charge it through the battery rescue port until screen is lit, then fully charge it in a usual way.



If these remedies are unsuccessful, consult your CLARKE dealer.

SPECIFICATIONS

Item	Specification
Model	PPS600
Part Number	8877140
Weight	4kg
Size (L x W x H)	270 x 155 x 190mm
Battery Charging Time (from Flat)	6 Hours
Battery Life (Running Full Power)	Approx. 45 Minutes
Battery Cycles/Lifetime	500 Cycles to 80%
Operating Temperature	5 - 40°C / Charging Ideal 25°C
Max./Peak Output Wattage @ 230V	600W
Continuous Output Wattage @ 230V	300W
Input Charging Voltages	11 - 30V
AC Outlet Output Current (230V ~ 50Hz)	1.3A Measured
DC Outlet Output Current (5V)	3.1A - PD 60W
DC Outlet Output Current (12V)	10A Max.
Battery Pack Electric Charge Value	12.5Ah
Battery Pack Watt Hours	315Wh
AC Adapter Charging Lead Fuse Rating	3A
Working Light	LED, 3.5V, 2W
Ingress Protection Rating (IP)	IPX0

Please note that the details and specifications contained herein, are correct at the time of going to print. However, CLARKE International reserve the right to change specifications at any time without prior notice.

DECLARATIONS OF CONFORMITY

Hemmill Street, Epping, Essex CM16 4LG
DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following legislation:


- The Batteries and Accumulators (Placing on the Market) Regulations 2008*
- The Electromagnetic Compatibility Regulations 2016*
- The Electrical Equipment (Safety) Regulations 2016*
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012*

The following standards have been applied to the product(s):

EN 61000-3-3:2013+A1:2019+A2:2021, IEC 62321-4:2013+AMD1:2017 CSV, EN/IEC 61000-3-2:2019+A1:2021, EN 55032:2015+A11:2020+A1:2020, EN/IEC 62368-1:2020+A11:2020, IEC 62321-5:2013, IEC 62321-7-1:2015, EN 61000-3-3:2013+A1:2019, EN 62368-1:2014+A11:2017, EN 55035:2017+A11:2020, IEC 62321-7-2:2017, IEC 62321-1:2013, IEC 62321-2:2013, IEC 62321-3-1:2013, IEC 62321-6:2015, IEC 62321-8:2017, ISO 17075:2017, IEC 62321-2:2021, EN/IEC 60320-1:2021



The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

The UKCA mark was first applied in: 2024

Product Description:	Power Bank
Model Number(s):	PPS600
Serial/Batch Number:	Refer to product/packaging label
Date of Issue:	10/09/2024
Signed:	

J.A. Clarke
Director

PPS600 UKCA Clarke DOC 091024 Page 1 of 1

Fitzwilliam Hall, Fitzwilliam Place, Dublin 2
DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following legislation:


- 2006/66/EC Battery Directive*
- 2014/30/EU Electromagnetic Compatibility Directive*
- 2014/35/EU Low Voltage Directive*
- 2011/65/EU Restriction of Hazardous Substances (RoHS) Directive*

The following standards have been applied to the product(s):

EN 61000-3-3:2013+A1:2019+A2:2021, IEC 62321-4:2013+AMD1:2017 CSV, EN/IEC 61000-3-2:2019+A1:2021, EN 55032:2015+A11:2020+A1:2020, EN/IEC 62368-1:2020+A11:2020, IEC 62321-5:2013, IEC 62321-7-1:2015, EN 61000-3-3:2013+A1:2019, EN 62368-1:2014+A11:2017, EN 55035:2017+A11:2020, IEC 62321-7-2:2017, IEC 62321-1:2013, IEC 62321-2:2013, IEC 62321-3-1:2013, IEC 62321-6:2015, IEC 62321-8:2017, ISO 17075:2017, IEC 62321-2:2021, EN/IEC 60320-1:2021

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2024

Product Description:	Power Bank
Model Number(s):	PPS600
Serial/Batch Number:	Refer to product/packaging label
Date of Issue:	10/09/2024
Signed:	

J.A. Clarke
Director

PPS600 CE Clarke DOC 091024 Page 1 of 1

A SELECTION FROM THE VAST RANGE OF

Clarke®

QUALITY PRODUCTS



AIR COMPRESSORS
From DIY to industrial, Plus air tools,
spray guns and accessories.

GENERATORS
Prime duty or emergency standby
for business, home and leisure.

POWER WASHERS
Hot and cold, electric and engine
driven - we have what you need

WELDERS
Mig, Arc, Tig and Spot.
From DIY to auto/industrial.

METALWORKING
Drills, grinders and saws for DIY
and professional use.

WOODWORKING
Saws, sanders, lathes, mortisers
and dust extraction.

HYDRAULICS
Cranes, body repair kits,
transmission jacks for all types of
workshop use.

WATER PUMPS
Submersible, electric and engine driven
for DIY, agriculture and industry.

POWER TOOLS
Angle grinders, cordless drill sets,
saws and sanders.

STARTERS/CHARGERS
All sizes for car and commercial use.

**PARTS & SERVICE:
0208 988 7400**

Parts Enquiries
Parts@clarkeinternational.com

Servicing & Technical Enquiries
Service@clarkeinternational.com

SALES: UK 01992 565333 or Export 00 44 (0)1992 565335

Clarke® INTERNATIONAL Hemnall Street, Epping, Essex CM16 4LG
www.clarkeinternational.com