

CLEO 3.6

User Manual

OFF - GRID POWER STATION



Please visit our website www.srportables.com to register your product

User Manual

CLEO 3.6

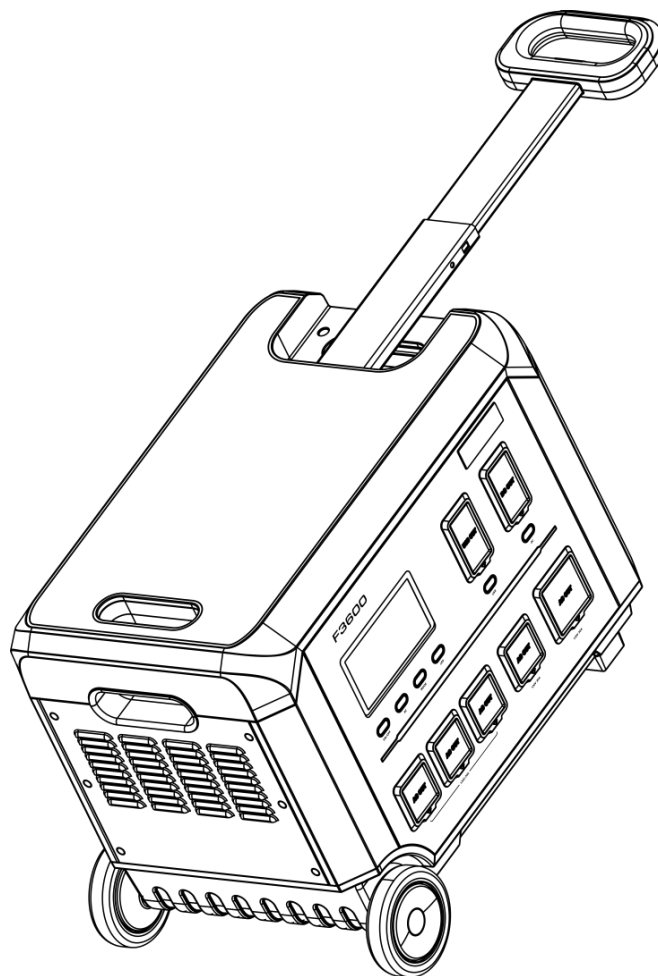


FIGURE 1: Device Overview

⚠ Charging instructions

Before using your new Power Station CLEO 3.6 Series, plug it into a suitable power outlet until it is fully charged. Then you can start your exciting journey with it.

⚠WARNING

Please read the following instructions before use. Improper use may result in fire, property damage or personal injury or death. DO NOT use the product with incompatible components or alter the product in any way.

⚠WARNING

Improper use may result in fire, property damage, or personal injury. Make sure to use the product according to the following safety rules and guidelines.

⚠WARNING

Do not expose the product to any liquid or submerge in water. If the battery comes into contact with water, it may cause chemical decomposition of the battery which may cause the battery to catch fire or explode.

■ SAFETY INSTRUCTIONS

Read the following instructions to ensure safe usage:

<p>⚠DANGER Non-compliance may very likely lead to serious injury*or death.</p> <ul style="list-style-type: none"> • DO NOT disassemble, repair or modify the unit or the battery. • DO NOT place the unit close to or in a fire or expose it to heat. Keep out of direct sunlight. • DO NOT charge, use or store the unit in a bathroom or in an area exposed to rain or moisture. Only use the output socket to power external devices. • Never connect the output to mains power under any circumstances. • DO NOT touch the unit or the plug-in sockets if your hands are wet. • DO NOT connect any metallic objects to the AC input or output. • DO NOT dispose of the unit together with household waste. • DO NOT use any incompatible power cords. • DO NOT operate the unit above the specified input voltage. • DO NOT use the unit if it is not functioning correct. • DO NOT move the unit if it is recharging or in use. 	<p>⚠WARNING Non-compliance may lead to serious injury** or death.</p> <ul style="list-style-type: none"> • Use and store the unit only in a clean and dry environment. Do not use and store it in dusty and wet environments. • Check the unit prior to every use. Do not use the unit if it is damaged or broken. • DO not use the unit if the power cord is damaged or broken. • DO NOT let children use the power supply unit. Keep this product away from pets. • DO NOT use or store the unit in an area or environment with high temperature. • Should fluid from inside of the unit come in contact with your skin or clothing, wash the affected areas with tap water. • In a storm, unplug the power cord from the socket. • DO NOT charge the device through a power system other than the rated voltage. • DO NOT place the unit on its side or upside down while in use or storage. • DO NOT use accessories for other usage. 	<p>⚠CAUTION Non-compliance may lead to injuries and/or property damage**</p> <ul style="list-style-type: none"> • If rust, peculiar odors, overheating or other abnormal circumstances are observed, stop using the unit immediately and contact the dealer or our customer service center. • The unit complies with all legal requirements for transport of dangerous goods. • Make sure that the unit is properly secured when transporting it in a motor vehicle. • Only charge, use and store the unit within an ambient temperature of 0 to 40°C (32 ~104°F). • Switch the unit off immediately if it has accidentally fallen, was dropped or was exposed to vibrations. • Once the unit is fully charged, unplug the AC charging cable. We are not liable for any damage caused by using different brand charging cables or third-party equipment. • Use of different cables will void the products warranty and may cause damage or serious bodily injury.
--	--	---

Carefully read the instructions for the electric devices that you intend to connect to your power station.

Product Maintenance:

1. Battery life may be reduced or become nonfunctional if not properly maintained.
2. Fully charge and discharge at least every 3 months to ensure optimal battery life.
3. Do not store battery with less than 50% charge.

CONTENTS

■ PRODUCT INTRODUCTION.....	6
■ PRODUCT FUNCTION DESCRIPTION.....	6
■ BUTTON INDICATOR.....	7
■ LCD DISPLAY	8
■ LIST OF FAULT CODES.....	10
■ FULL PARALLEL INTEGRATION	11
■ INTELLIGENT POWER COMBINING FUNCTION DESCRIPTION	11
■ CHARGING FUNCTION DESCRIPTION	13
■ TECHNICAL SPECIFICATIONS	15
■ LOAD CAPACITY.....	16
■ PACKING LIST.....	16
■ OPERATING INSTRUCTIONS	17
■ TRANSPORT INSTRUCTIONS FOR DANGEROUS GOODS.....	19
■ TROUBLE SHOOTING	19
■ PRODUCT MAINTENANCE	19
■ WARRANTY	21

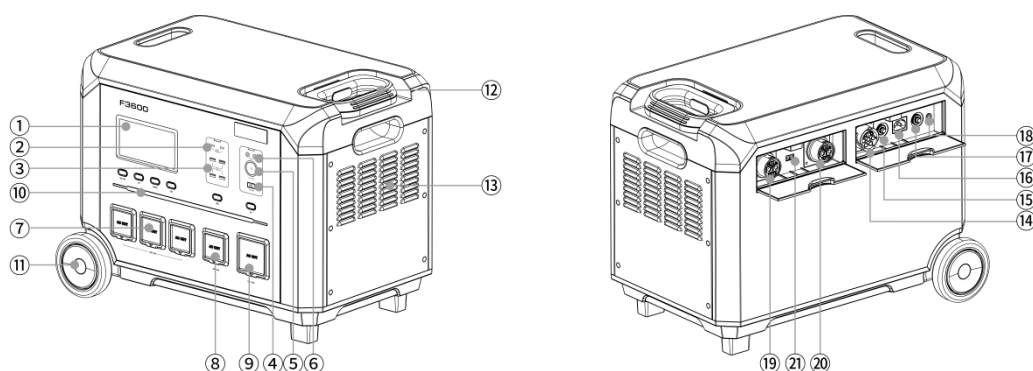
■ PRODUCT INTRODUCTION

The CLEO 3.6 Series with high capacity and safe battery pack is very convenient for emergency off-grid power demand especially during sudden power failures, natural disasters or extreme weather events like snowstorm or hurricane, outdoor recreation and tourism, RV power supply, etc. The units generate high power output up to 3600W, are fast charging, and have an inbuilt high capacity and long cycle life battery. The units can support up to four (1-4) Cleo-X intelligent battery packs that can be connected externally to the unit for larger battery capacity.

Units with parallel function

⚠ We also offer the Cleo 3.6 with a dual parallel output of 7200W Max, which can support 1-4 CLEO-X intelligent battery packs and comes with intelligent interface and intelligent parallel cable connection, to achieve output power doubling.

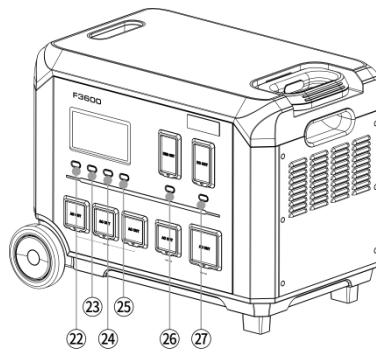
■ PRODUCT FUNCTION DESCRIPTION



- ① LCD Screen Display
- ② USB-C Output × 2
- ③ USB-A Output × 4
- ④ RV Output
- ⑤ Cigarette Lighter Socket Output
- ⑥ DC Output × 2
- ⑦ AC Output 20A × 3
- ⑧ AC Output 30A
- ⑨ AC Output 30A
- ⑩ Ambient light
- ⑪ Wheels

- ⑫ Pull rod
- ⑬ Air Intake Vent with Cooling Fan
- ⑭ Super Interface
- ⑮ EV OLP Reset
- ⑯ AC Input
- ⑰ AC OLP Reset
- ⑱ Ground
- ⑲ Extra Battery Port 1
- ⑳ Extra Battery Port 2
- ㉑ PV/DC Input

■ BUTTON INDICATOR



Button ②② Power ON/OFF

Press button ②② to turn on or turn off the unit.

Button ②③ AC Output

Before pressing button ②③ to turn on the unit, please make sure the "Power ON/OFF" button is ON first. To stop Output, press ②③ again.

Button ②④ MODE

The default fast charging mode is switched on, and the power will switch to slow charging power mode by pressing this button. The slow charge is charged at one quarter of the maximum allowable power.

Button ②⑤ Ambient light

Control the switch of the ambient light, and the ambient light is on by default when the machine is switched on.

Button ②⑥ USB Output

Before pressing button ②⑥ to turn on, please make sure the "Power ON/OFF" is ON first.

To stop Output, press ②⑥ again.

Button ②⑦ DC Output

Before pressing button ②⑦ to turn on, please make sure the "Power ON/OFF" is ON first.

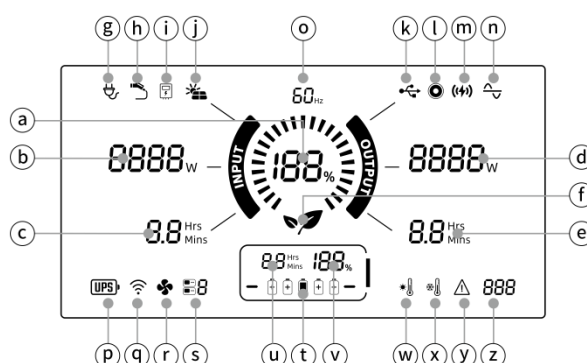
To stop Output, press ②⑦ again.

Button ⑮ EV OLP Reset

EV input overload protection reset button, EV input overload protection after turning off the input, press recovery.

Button ⑰ AC OLP Reset

AC input overload protection reset button. After AC input overload protection, turn off the input and press recovery.

■ LCD DISPLAY

①	Battery Level Indicator:	Displays the current battery level in the form of an energy circle + percentage. The main switch is turned on and the battery quantity is displayed. During the charging process, the energy circle is displayed dynamically. △Note: The LCD Screen will enter Sleep Mode after the 3mins of inactivity and will wake up when inputting a charging cord or when any button is pressed.
②	Input Power:	When charging, the display displays "INPUT" and charging power.
③	Input Time:	When charging, the display shows full remaining time.
④	Output Power:	Displays the total used power of DC output, USB-A, USB-C, and AC output. △Note that this value can be adjusted multiple times as the energy consumption of the connected device changes. This is evident when the port is initially activated using a connected device.
⑤	Output Time:	In the output state, the screen displays the remaining output time.
⑥	Quick Charge Switching:	When the AC charging mode is used, the label is displayed when the charging mode is switched to slow charge.
⑦	AC Input:	When the AC charging cable is inserted, this label is displayed on the LCD.
⑧	EV Input:	When the EV charging cable is inserted, this label is displayed on the LCD.
⑨	Distribution box Input:	When the Distribution box input, this label is displayed on the LCD.
⑩	PV Input:	When the DC/PV charging cable is inserted, this label is displayed on the LCD.
⑪	USB Output:	When the USB output is turned on, the icon lights up and shows the total power used by the DC output, the current remaining time and frequency.

①	DC Output:	When the Cigarette Lighter Socket Output is turned on, the icon lights up and shows the total power used by the DC output, the current remaining time and frequency.
③	Wireless Charge:	(Not available yet) When the wireless charge output, this label is displayed on the LCD.
④	AC Outputs:	After the AC output switch is turned on, the icon lights up and displays the total AC output power, current remaining time, and current frequency.
⑤	AC Output Frequency:	When the AC switch is turned on, the display displays "OUTPUT" and the icon.
⑥	UPS Mode:	When the device is in the AC charging state and the AC output is turned on, the UPS mode automatically starts, and this label is displayed on the LCD.
⑨	IoT capabilities	When the IoT network is normal, the icon is always on, and the icon flashes when the IoT network is not connected. (not included)
⑪	Fan Start Cooling Status:	When the fan is running, this label is displayed on the LCD.
⑫	AC Parallel State:	When the AC output is synchronized, this identifier is displayed on the LCD.
⑬	Smart parallel battery pack access status	For each connected smart battery pack, light up a battery pack icon. The arrow on the left of the battery pack icon indicates the charging status. The arrow on the right of the battery pack icon indicates the discharge status.
⑭	Intelligent parallel battery pack power status time	When a smart parallel battery pack is connected, the remaining time of electricity consumption is displayed. The remaining full time is displayed in the charging state, and the remaining working time is displayed in the discharge state.
⑮	Intelligent parallel battery pack power information	When a smart parallel battery pack is connected, the battery information is displayed.
⑰	High Temperature Alarm:	When the inverter or battery pack temperature is too high, this label is displayed on the LCD.
⑱	Low Temperature Alarm:	When the temperature of the inverter or battery pack is too low, this label is displayed on the LCD.
⑲	Output overload alarm	If the AC or DC output is overloaded, the system automatically turns off the output, blinks for 10S, and then turns off.
⑳	Fault code	When the product fails or warns, the corresponding fault code is displayed.

■ LIST OF FAULT CODES

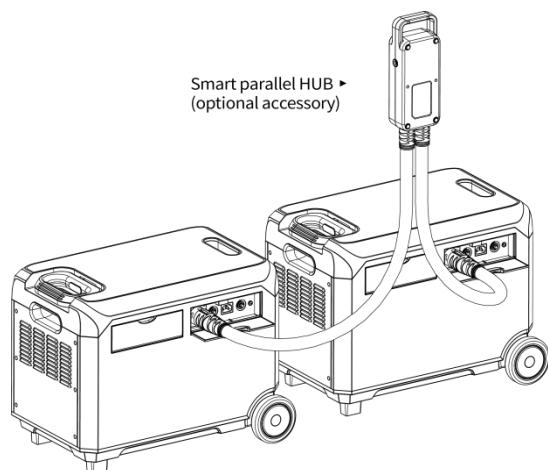
Fault code	Significance	solutions
E01	Battery over voltage	Please disconnect the charging cable and stop charging
E02	Battery under voltage	Please disconnect the output and charge the device
E03	Inverter overheating	Please disconnect the output and wait 1-2 hours before operation
E04	Abnormal input voltage	Please disconnect the charging cable
E05	Abnormal grid frequency	Please disconnect the charging cable
E06	Output voltage anomaly	Please contact customer service center
E07	Output short circuit	Please disconnect the output and check the electrical equipment
E08	Output overload	Please disconnect output
E09	Inverter failure	Please contact customer service center
E16	Charge overload	Please disconnect the output load

⚠ When the DC load is abnormal, the system will automatically turn off the output and will not show the fault code. Please disconnect the output and check the electrical equipment then try again.

When the USB load is abnormal, the corresponding output power will be zero and the system will not show the fault code. Please disconnect the outputs and check the electrical equipment, then try again.

■ FULL PARALLEL INTEGRATION (ONLY FOR UNITS WITH PARALLEL FUNCTION)

The Smart parallel HUB (optional accessory) doubles the capacity and power of the CLEO 3.6 host. Plug and play technology allows you to easily connect two CLEO 3.6 hosts together.



Step 1: The super interface connecting two hosts using the Smart parallel HUB.

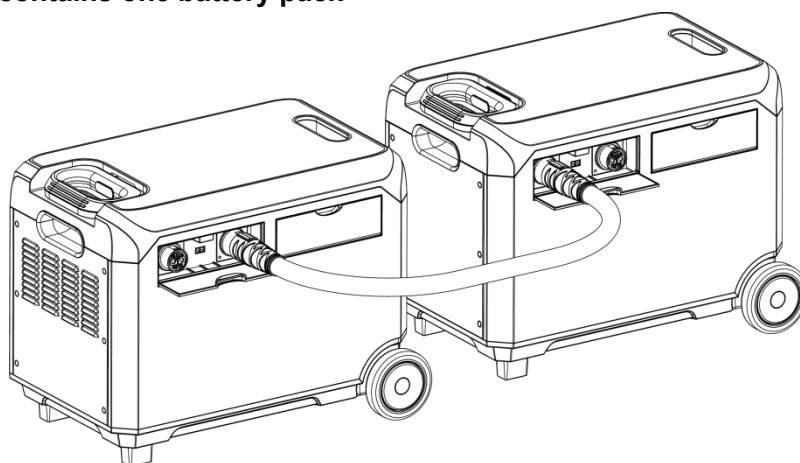
Step 2: Output AC power through the Smart parallel HUB port.

△Requires second CLEO 3.6's sold separately.

■ INTELLIGENT POWER COMBINING FUNCTION DESCRIPTION

One CLEO 3.6 host can support up to four (4) additional Cleo-X battery packs. 1-4 CLEO-X intelligent parallel battery packs are connected through the intelligent parallel interface and intelligent parallel cable of the body to achieve additional battery capacity. After the CLEO 3.6 and CLEO-X are properly connected, the automatic charging and discharging is complete.

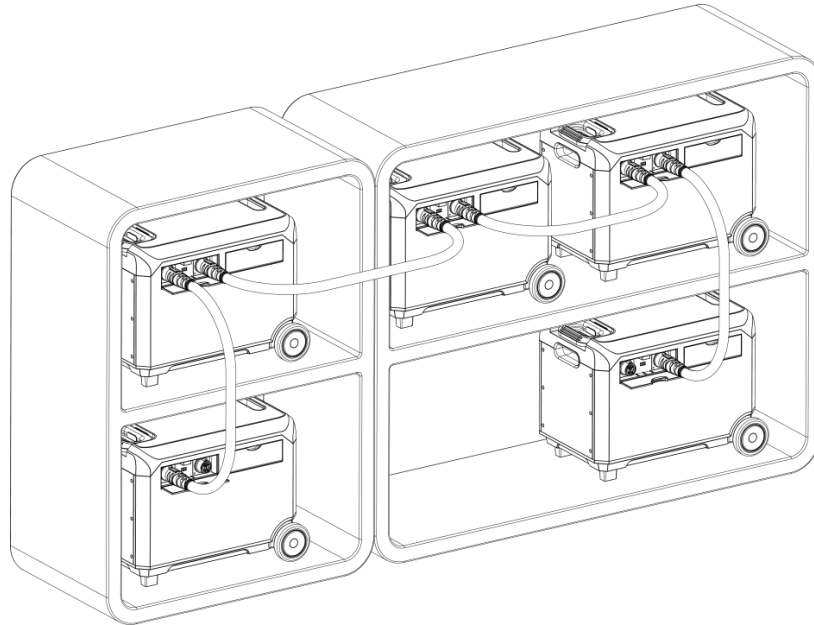
Each host contains one battery pack



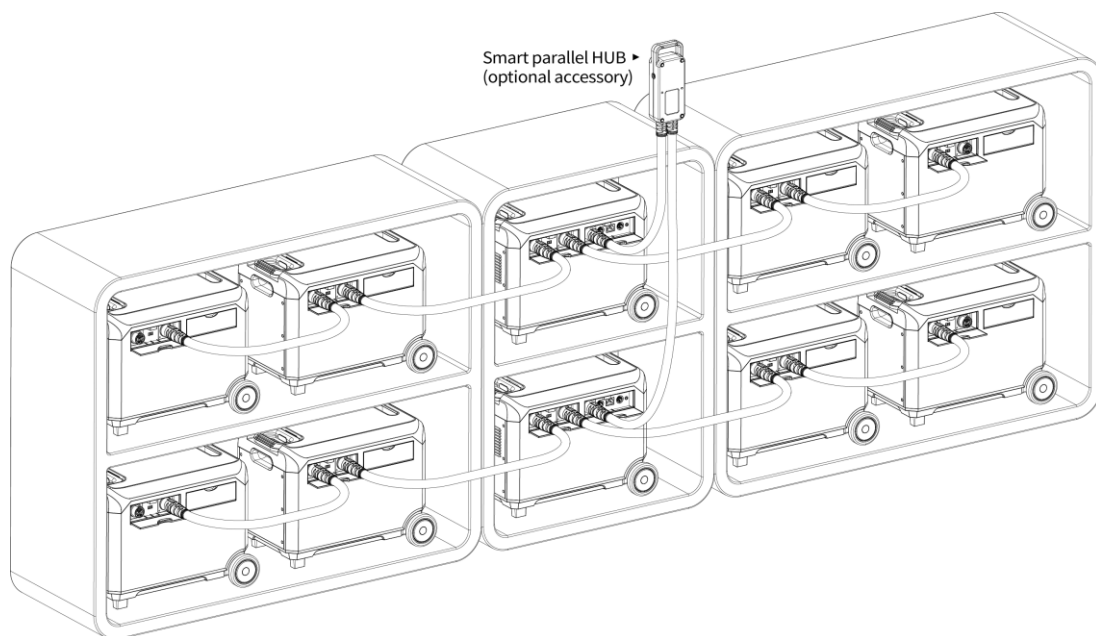
Step 1: The CLEO-X parallel battery pack is connected to the CLEO 3.6 host through intelligent wiring.

Step 2: Turn on the CLEO 3.6 host power switch; The CLEO 3.6 host is expanded.

Each host contains four battery packs



Two hosts with eight battery packs



Charging sequence, first charge the host, after the host is fully charged, and then charge the intelligent battery pack.

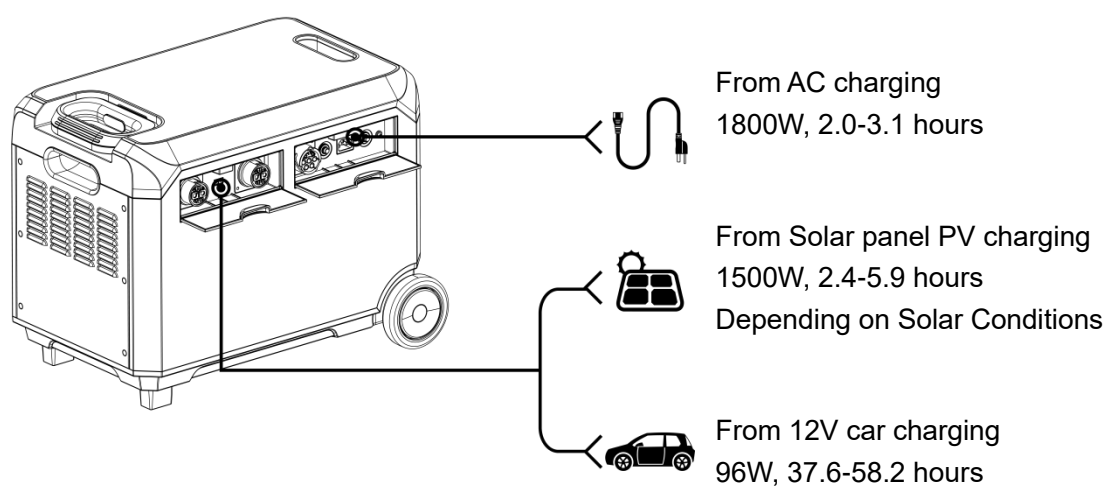
Discharge sequence: discharge from the intelligent parallel battery pack first, and then discharge from the host.

- △Requires second CLEO 3.6's sold separately. Requires CLEO-X's sold separately.
- △Storage racks need to be purchased separately, product placement is for reference only.
- △The connection cable is a dedicated intelligent parallel connection cable.

■ CHARGING FUNCTION DESCRIPTION

Charging Description

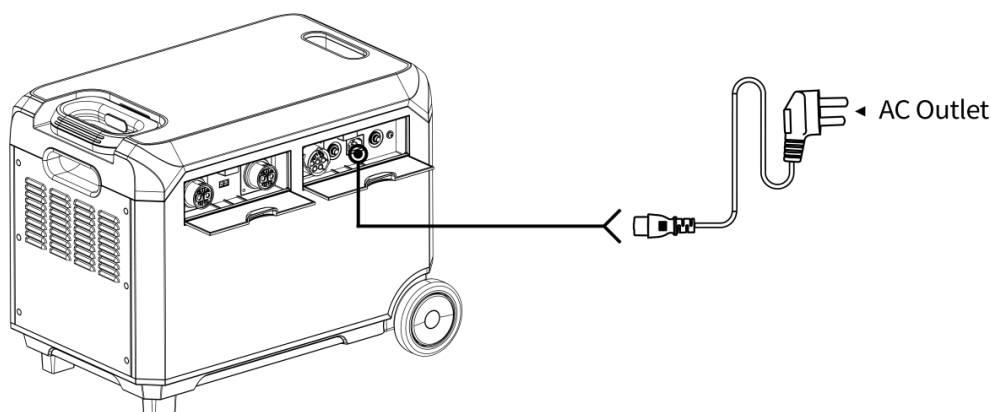
When charging, the LCD screen will be lit up and the display will provide real-time data of battery charging status. It is recommended to fully charge the device every 3 months to maintain the life of the device.



△Reminder: If the battery has low power, please charge it before use.

AC charging

Use the AC charging cable provided with the unit to charge the device. It takes 2-3 hours to charge the battery to full capacity. When the LCD shows that the battery is fully charged the input power will turn off automatically.

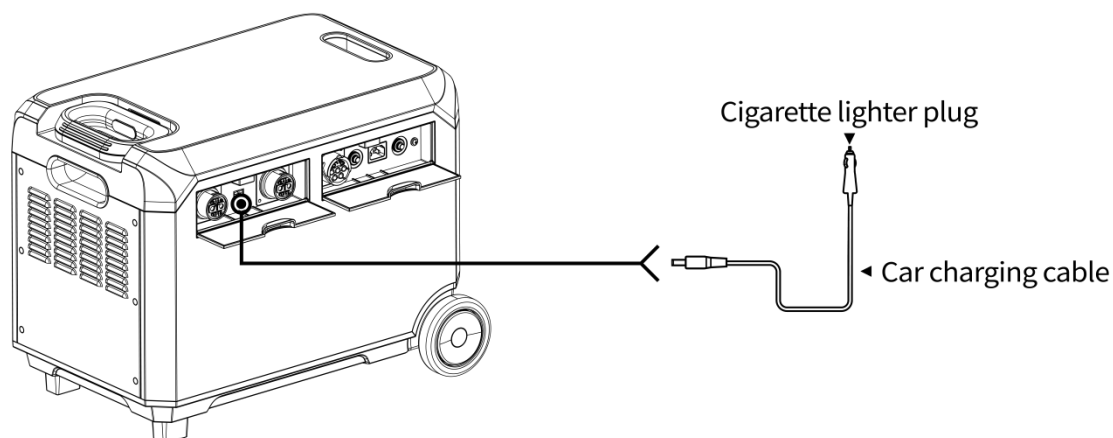


△When the device is charging, if the AC input current is more than 10A, the device

will be overloaded and a fault code "E16" will be showed on the LCD. The output will be shut off after 10 seconds. Please disconnect the output load then press the AC switch once to clear the error code.

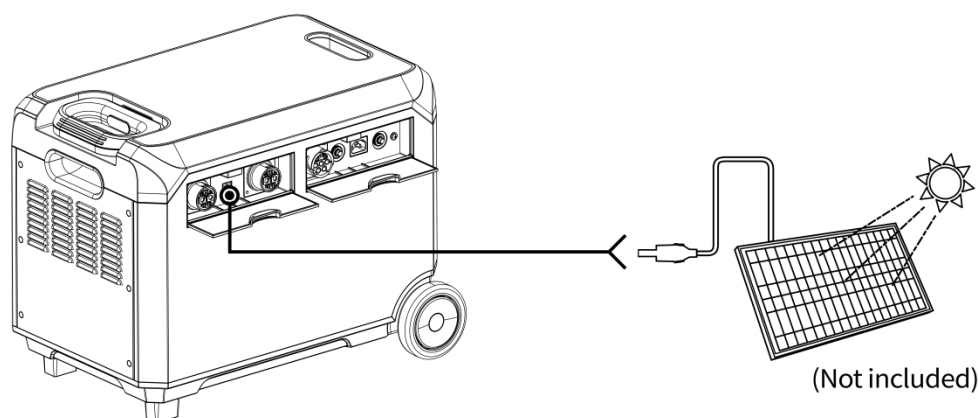
12V car charging

Use the car charging cable provided to charge. It takes 37-58 hours to fully charge the unit.



Solar PV charging

Supports 120W/200W/300W/400W/600W/800W solar panel charging. The charging time is determined by the panel efficiency and sunlight intensity. Please place as many solar panels in direct sunlight as possible.



⚠ The total open circuit voltage of solar modules after series-parallel connection should not exceed the specified voltage!

⚠ Maximum support 1500W solar panel, joint charging power with AC maximum 1800W, support MPPT. If identified as non-MPPT, limit current 8A.










■ TECHNICAL SPECIFICATIONS

General parameters	
Battery Type	Lithium Iron Phosphate
Rated Capacity	51.2V, 245Ah @12.5V/3072Wh (up to 80% at 4000 life
Net Weight	≈46kg
Product Size	563 mm*372 mm*423 mm
Operating Temp	14 to 104°F (-10 to 40°C)
Charging Temp	32 to 104°F (0 to 40°C)
Storage Temp	-4 to 113°F (-20 to 45°C)

Input	
AC Input Voltage	200V-260V~7.5A, 50Hz
AC Input Power	AC 1800W
PV Input	DC 12V-150V=25A, 1500W Max
Car Charging	DC 12V/24V, 192W Max
Extra Battery	1-4 extensions

Output	
AC Output Voltage*5	240V~50Hz
Rated Output Power	3600W
Parallel Connected AC Output	7200W (only for units with parallel function)
Output Waveform	Pure Sine Wave
UPS Switching Time	10ms
RV Output	12V=30A
Cigarette Lighter Socket Output	12V=10A
DC Output*2	12V=3A (Each)
USB-A Output*4	5V=3A, 9V=2A, 12V=1.5A, 18W Max
USB-C Output*2	5V/9V/12V/15V/20V=3A, 20V=5A, 100W Max

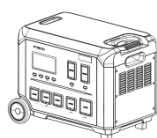
■ LOAD CAPACITY

				
Smartphone (20Wh) 130 Recharges	Drone model (90Wh) 29 Recharges	Auto-CPAP (60W) 43.5 Hours	Blender (350W) 7.5 Hours	Impact Drill (750W) 3.5 Hours
				+MORE
Coffee Maker (1000W) 2.6 Hours	Microwave (1200W) 2.2 Hours	Electric Grill (1650W) 1.6 Hours	A/C (8000BTU) 1.1 Hours	

⚠ Data reference conversion efficiency is 85%, due to the environment and use method will fluctuate, the data is for reference only.

■ PACKING LIST

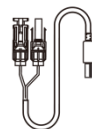
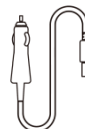
Host unit / User manual / AC charging cable / MC4 to Anderson cable (optional accessory) / Car Anderson cable (optional accessory) / Smart parallel HUB (optional accessory).



Host unit



User Manual

AC charging
cableMC4-Anderson
connector cable
(optional accessory)12V Car
Anderson cable
(optional accessory)Smart parallel
HUB
(optional accessory)

■ OPERATING INSTRUCTIONS

Power output

Press the output switch to select the desired output/outlet type and press the corresponding button to activate the port. When activated, the LCD display will turn on and provide detailed information about the charging output. When no output is activated, the LCD screen will automatically turn off.

Overload condition

When all outputs are short-circuited, the device automatically turns off the output power. The code "E07" will be displayed on the LCD screen.

When all outputs are overloaded, the device will automatically cut off the output power. The code "E08" will be displayed on the LCD screen.

Discharging

Press the "Power on/off" button for 2 seconds to turn on the device. Press the "Power on/off" button for 2 seconds to turn off the device. The device uses an advanced battery management system that allows it to charge the connected device through AC or DC output or USB output.

How to switch frequency?

The device can intelligently identify the frequency of voltage when charging, and can automatically set the frequency, so please charge before using. After plugging in the charging cable, the display will show the frequency of current grid voltage if it displays "50", it is 50Hz, if it displays "60", it is 60Hz.

You can also manually set and change the voltage frequency. Before using the power station, please confirm the voltage frequency of your electrical equipment, 50 Hz or 60 Hz. Then press the "Power on/off" button for 2 seconds to turn on the device. If "50" is displayed on the LCD, it means that the operating frequency of the power station is 50 Hz. If "60" is displayed on the LCD screen, it means 60 Hz.

If the frequency displayed on the LCD display does not match the frequency of the local power grid, you must change the frequency.

Step 1: press the button 'Power on/off' for 2 seconds to power off (the LCD display screen will turn off). Step 2: keep pressing the button 'AC on /off' with your right finger first and then press the button 'Power on/off' for 1 second with your left finger, then release both fingers off the buttons. You will then be able to change the frequency.

Cooling fan

The equipment is designed with internal cooling fans to ensure that the product runs within the proper temperature range. When the device experiences a high output load, it will automatically turn on the fan. During discharge and charging, the fan may run intermittently to keep the internal temperature within the operating range. When the AC circuit is activated, the fan is likely to start to ensure normal operation.

Power saving sleep mode

- ① No charging (AC input + PV), no discharging (DC + USB + AC). When the charging is not connected and only the main switch is turned on: sleep mode after 5 minutes.
- ② Any charging is connected (regardless of whether there is power), and it does not enter sleep mode.
- ③ Without any charging input, USB <5W, DC <5W, AC <25W, three conditions are met at the same time, then the unit will enter sleep mode after a delay of 8 hours.
- ④ The self-consumption of whole machine is less than 5mA after shutting down all switches the unit will enter sleep mode;

Equipment cleaning

Please make sure that the device is disconnected from all input power and output devices. Wipe with a clean, dry, non-soft cotton cloth. Remove all any foreign objects, dirt or other obstructions from the vents on both sides. While cleaning foreign objects in the side vents, do not allow debris, dirt or other blockage to enter the equipment.

Do not use corrosive cleaners or solvents.

Do not use compressed air to clean the side cooling vents, as it will cause foreign particles to enter the interior and cause a short circuit.

⚠Note: To avoid the risk of electric shock, do not use metal objects to clean the ports.









Storage

If the unit will be stored longer than 1 month, please charge it to 50% capacity and keep it indoors, at normal temperature, and the maximum storage time shall not exceed 6 months. Please keep it away from direct sunlight.

Excessive temperature will lead to reduced service life, overheating and fire. Extremely cold conditions below the specified storage range can also impair the performance and service life of the equipment. Please keep away from corrosive chemicals and gases.

After taking it out of storage, perform a visual inspection to ensure that the appearance of the equipment and all accessories are qualified. Check the vents on the intake and exhaust sides to make sure they are free of foreign objects.

■ TRANSPORT INSTRUCTIONS FOR DANGEROUS GOODS

	Not permitted on aircraft		Avoid dropping
	To preserve the battery lifespans, please use and recharge at least once every 3 months		Do not disassemble
	Use an original or certified charger or cable		It's not waterproof, do not expose to liquids
	Avoid extreme temperature		Please dispose of batteries and electronic goods in accordance with local regulations

△The CLEO 3.6 Series power station meets all legal requirements for the transportation of dangerous goods. The capacity of the lithium battery pack exceeds 100Wh. According to international standards, if the power station is transported by air, it must be transported in accordance with IATA standard packaging. The instructions and labeling requirements of the International Air Transport Association and related declarations must be completed.

■ TROUBLE SHOOTING

The device does not discharge

- ① Check whether the connecting wire has been inserted in right place;
- ② Check whether the total output power exceeds the rated output power;
- ③ Check whether the temperature of the equipment exceeds the operating temperature range.

The device is not charging

- ① Confirm that the AC socket on the wall and the AC charging cable are fully inserted into the AC input terminal;
- ② The device cannot be charged immediately after it is discharged. Please put it aside for an hour and try again, because it may enter the over-temperature protection mode.

■ PRODUCT MAINTENANCE

Maintenance

Check as needed. If the CLEO 3.6 Series power station is not being used regularly, please charge and discharge it every 3 months under normal temperature to keep the service life. Regularly check all ports and wall chargers for any debris, dirt, damage, and corrosion.

Do not disassemble the device privately.

Do not cover the equipment with towels, clothes or other items. Regularly observe the side vents for dust and foreign matter and clean them according to the cleaning

procedures specified in the manual.

Disposal/recycling

Do not put the device and its accessories in the trash can. Items must be properly handled in accordance with local laws and regulations. For additional information, please see www.epa.gov.

Affirm

Copyrighted equipment. We all rights reserved. All trademarks cited here are the property of their respective owners. The information contained in this agreement is subject to change without notice.

■ WARRANTY

We assure the original purchaser that our products are free of defects in workmanship and materials during the applicable warranty period determined in the "Warranty Period" section below, but the exclusions set below is excluded.

This warranty statement sets total and exclusive obligations of us. We will not assume, nor authorize any person to assume for us any other liability related to the sale of our products.

Warranty time

Refer to your region country agreement, the warranty period is calculated by the original consumer purchaser from the date of purchase. In order to determine the start date of the warranty period, a sales receipt from the first consumer purchase or other reasonable documentary proof is required.

Repair Processing

We will repair or replace any products that cannot be operated due to defects in workmanship or materials within the applicable warranty period. If a valid claim is filed within the applicable period, we can choose:

(1) Replacement product.

(2) It can be exchanged with products of equal value. The replacement product bears the remaining warranty period of the original product or replaces it (90) days from the date of warranty, whichever is greater. The customer is responsible for the shipping cost of the return.

Exclusions

The warranty of CLEO 3.6 Series does not apply to 1) any product that is modified, misused, abused, damaged by accident, or used for anything other than normal consumer use as authorized in current product literature or 2) any product purchased through an online auction house. The warranty of CLEO 3.6 Series does not apply to the battery cell unless the battery cell is fully charged by you within seven days after your purchase of the product and at least every 3 months thereafter.

After-sales service

For after-sales maintenance service, please contact our customer service.

