



User Manual



Mobile Power Source

MPS3K-4500Wh (120VAC)

Dear Customer,

Thank you very much for purchasing the Hysolis MPS3K-4500Wh unit! We designed this product to help grant you energy independence. We have the utmost confidence in this product's performance and quality. Please feel free to contact us at Hysolis.net if you have any questions. Enjoy using your Hysolis MPS3K-4500, and may it positively affect your future endeavors!

Sincerely,
The Hysolis Team



IMPORTANT

Before use, charge your battery to 100%. This will ensure a healthy, long-lasting battery.

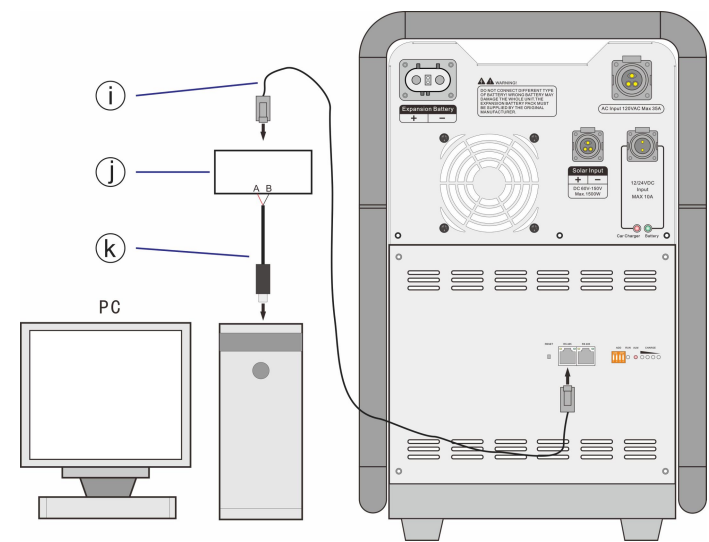
Every time you turn on the unit, it needs to initialize. Wait 5 seconds before pressing other buttons.

This product generates high voltages! Improper use can cause injury or death. Exercise caution when using the unit. Do not let it get wet or dirty. Allow for proper ventilation. Avoid temperature extremes. Inspect the unit upon receiving. Follow proper wiring procedures.

Disassembling or modifying the product will void the warranty.

Read the manual carefully before using the product.

2) Connection between the PC and BMS through the RS485.



- ① Ethernet Cable with RJ45 connector.
- ② RJ45 to RS485
- ③ RS485 to USB

Note:
The above accessories are not included in the product package. It's for dealer use only.

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1. Product features

- Three programmable working modes prioritize different energy needs:
 1. Grid Power First (a.k.a. “Pass-Through AC Power”)
 2. Energy Saving (Inverter stays OFF unless load is detected)
 3. Battery Power First (Solar charges the battery but grid AC Power is only used if battery is almost empty).
- Dual-CPU Intelligent Control Technology manages energy input/output.
- Smart Fan Control keeps the unit cool, safe, and reliable.
- Low-frequency pure sine wave output is clean and reliable for any load.
- Wide input voltage range and consistent voltage output.
- LCD display shows real-time running statuses at-a-glance.
- Battery over-voltage and low-voltage protection, overload protection, short circuit protection, over-temperature and under-temperature protection.
- Intelligent MPPT solar controller features over-charge & over-discharge protection, current limiting charging, and multiple other safety protections.

2. Initial Inspection, Storage, Precautions

2.1 Initial Inspection

2.1.1 Ensure your box contains the following: MPS unit, AC Charging Cable, DC Car Charging Cable, Solar Charging Cable, User Manual.

2.1.2 Make sure the equipment was not damaged during transit. If there is any damage, DO NOT POWER ON. Report to product dealer and carrier.

2.2 Installation, storage, precautions

2.2.1 Installation should be performed by a qualified technician.

2.2.2 During transport, the unit may have warmed or cooled outside of its working temperature range. Moisture may have condensed on the unit. Ensure it is dry and within the proper temperature range (see Section 8) before using.

2.2.3 Do not use in a wet or dusty environment. Do not use near anything flammable or explosive. Do not cover or block the vents. Maintain 10cm of clear space around the unit in order to have good heat dissipation.

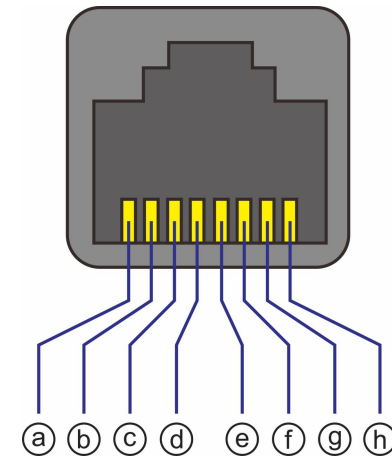
2.2.4 Before storage or other long periods of inactivity, turn off all breaker switches.

Instructions for LED indicator flash

Flash Code	Duration time for ON	Duration time for OFF
Flash 1	0.25 S	3.75 S
Flash 2	0.5 S	0.5 S
Flash 3	0.5 S	1.5 S

13. RJ45 Communication port Instructions

1) RJ45 Pins Instructions.



Guide

- ① RS485-B
- ② RS485-A
- ③ NC
- ④ CANH
- ⑤ CANL
- ⑥ GND
- ⑦ RS485-A
- ⑧ RS485-B

11.BMS Reset

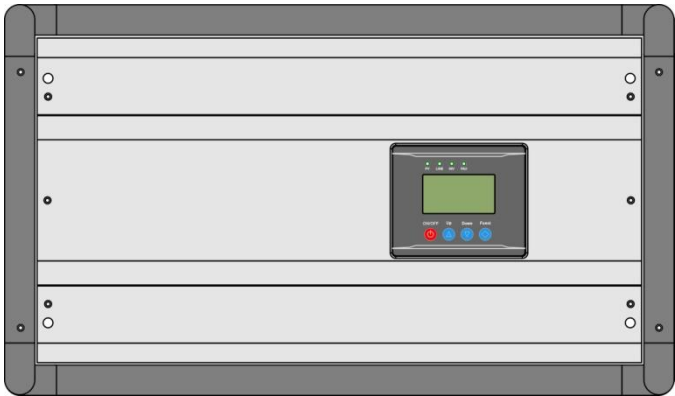
To reset the BMS, press and hold “Reset” button for about 7 seconds, release it when all the LED lights on. The BMS has been reset successfully.

12. BMS Indicator Instructions

Status	<div><div>◆</div> Normal</div> <div><div>◆</div> Alarm</div> <div><div>◆</div> Protected</div>	RUN	ALM	Battery Level Indicator				Instructions
		<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	
Disconnected	Dormant	OFF	OFF	OFF	OFF	OFF	OFF	No Output
Standby	Normal	Flash1	OFF	Lights up according to the battery level.				Standby mode
	Alarm	Flash1	Flash3					Battery Low
Charging	Normal	ON	OFF	Lights up according to the battery level.(Flash2 for highest level)				ALM flash3 except for over-charging alarm.
	Alarm	ON	Flash3					
	Over-current	OFF	ON	OFF	OFF	OFF	OFF	Stop charging
Discharging	Normal	Flash3	OFF	Lights up according to the battery level.				
	Alarm	Flash3	Flash3					
	Protected (Low-voltage)	OFF	Flash3	OFF	OFF	OFF	OFF	Stop dis-charging
	Protected (Over-current, Short-circuit)	OFF	ON	OFF	OFF	OFF	OFF	Stop dis-charging
Temperature	Protected (Over-temp.)	OFF	ON	OFF	OFF	OFF	OFF	Stop charging & discharging
Failure	Bat cell failure NTC failure Voltage senser failure Current senser failure MOS failure Charger>76V failure	OFF	ON	OFF	OFF	OFF	OFF	Stop charging & discharging

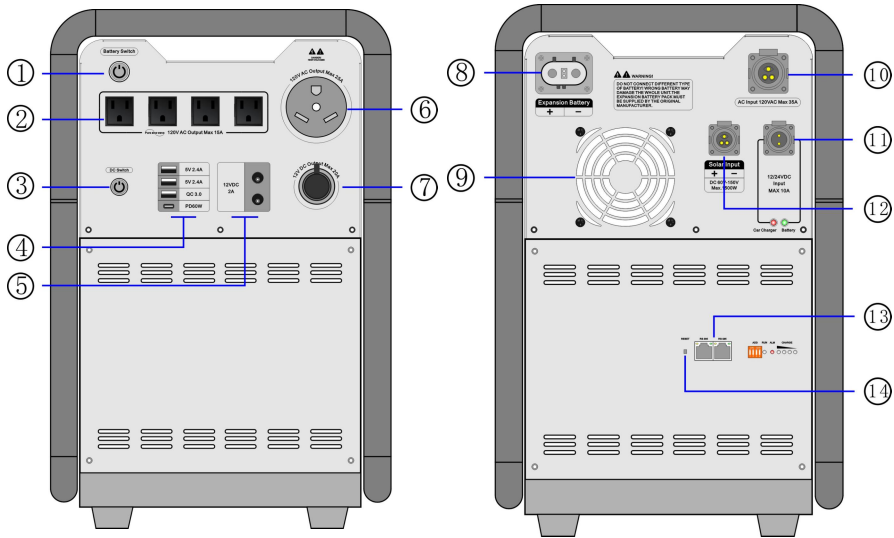
3. Unit diagram, operation instructions

3.1 Top



Pic 3-1

3.2 Front and Back



Pic 3-2a

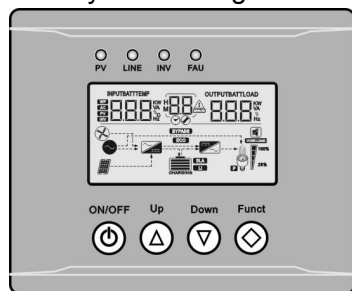
Pic 3-2b

Guide

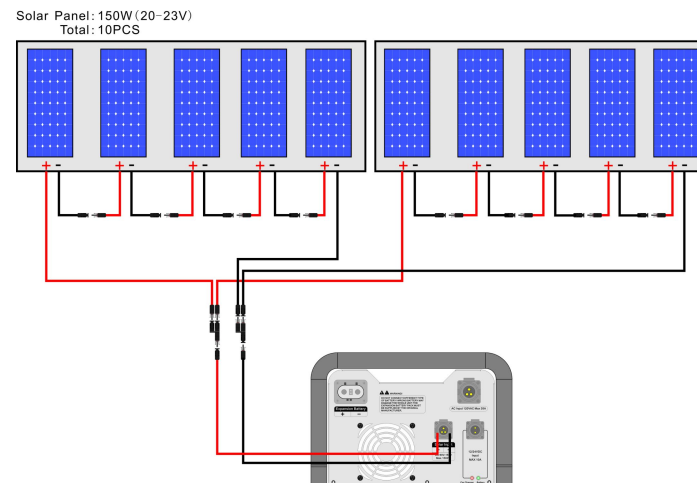
- ① ON/OFF Battery Switch
- ② 120V AC 15A Outlets (NEMA 5-15R)
- ③ DC Output Switch
- ④ 5VDC Output (USB/Type-C sockets)
- ⑤ 12VDC 2A outlets
- ⑥ 120V AC 25A outlet (NEMA TT-30R)
- ⑦ 12VDC 20A outlet
- ⑧ Expansion battery connector
- ⑨ Cooling fan
- ⑩ 120V AC Input connector (AC charger port)
- ⑪ 12VDC Input connector (Car charger port)
- ⑫ Solar Input connector (Solar Charger port)
- ⑬ BMS communication port (RS485)
- ⑭ BMS Reset Button

3.3 Front panel instructions

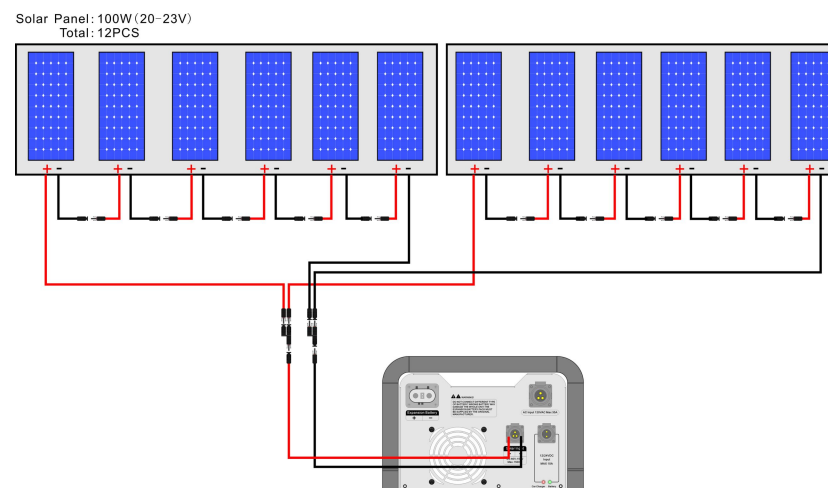
3.3.1 The LCD display shows the real-time statuses of the unit, such as: Input / output voltages, AC current frequency, current working mode, inverter mode, battery level, charging current, and fault indicators. The buttons control the unit and allow you to change a variety of settings.



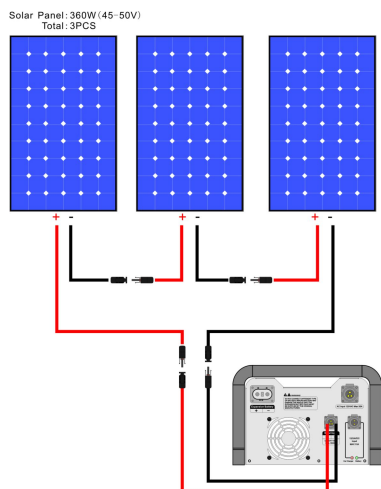
Pic 3-3



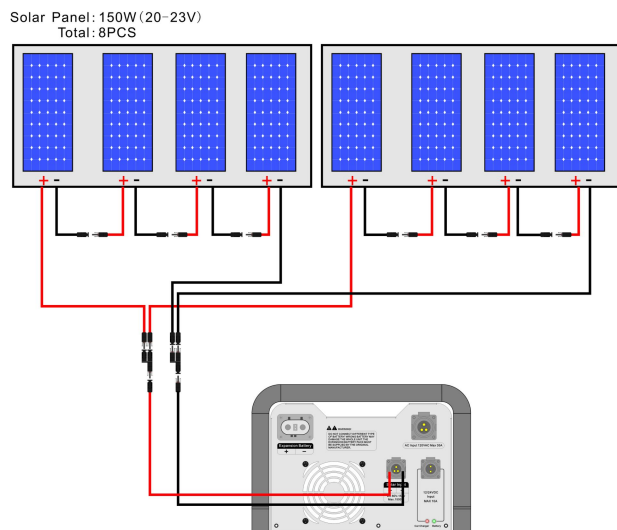
8) 100-120W ($V_{oc}=20V \sim 23V$) x 12 PCS (6 PCS in Series for each string, 2 strings in parallel)



- 6) 300-450W(Voc=45V~50V) x 3 PCS (3 PCS in series for each string)
Wiring Diagram:



- 7) 150-200W(Voc=20V~23V)x 8 or 10 PCS (4 or 5 PCS in Series for each string, 2 strings in parallel)
Wiring Diagram:



3.3.2 Button Descriptions

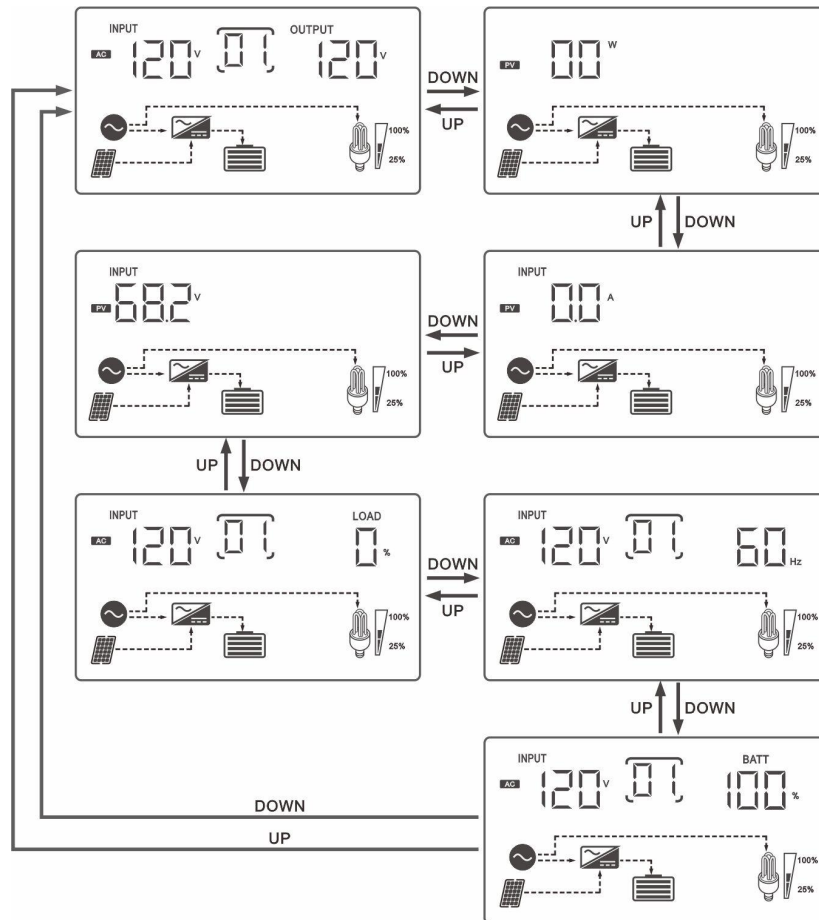
Button		Description
	Power ON/ OFF	Long press for 2s to turn ON/OFF.
	Page up / Increase	In the “Status” screens, press to scroll up through the unit statuses. In the “Function” menu, press to increase values.
	Scroll down / Decrease	In the “Status” screens, press to scroll down through the unit statuses. In the “Function” menu, press to decrease values.
	Function	Long press for 5s to enter the Function menu. In the Function menu, short press to confirm the blinking parameter.

3.3.3 LED Lights Status Description

LED Lights			Description
PV	Green	ON	Solar charging.
		OFF	Solar disconnected or charging stopped.
LINE	Green	ON	The AC input is connected and is bypassing the battery to power AC output.
		OFF	The AC input is disconnected or the inverter is providing AC output; i.e. no AC pass-through.
INV	Yellow	ON	The inverter is providing AC output.
		OFF	The inverter is not providing AC output.
FAU	Red	ON	AC output overload or Inverter fault.
		OFF	The unit is working normally.
Car Charger	Red	ON	Car Charger is connected.
		OFF	Car Charger is disconnected.
Battery	Green	ON	Charging.
		Flash	Floating Charge. Battery is fully charged.

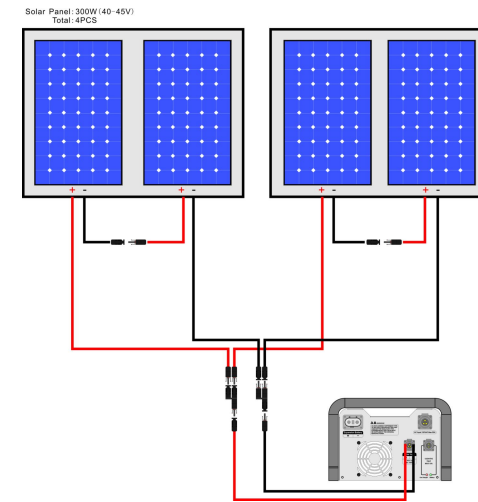
3.3.4 LCD display

3.3.4.1 View the unit statuses: The “Home” or “Default” screens are the Status screens. A Status screen first appears when you turn on the unit. Press DOWN or UP to scroll through the seven different Status screens. They display: AC Input/Output Voltage, PV Wattage, PV Voltage, PV Amperage, Inverter Load %, Inverter frequency, and Battery Level. Each page also visually indicates whether or not PV charging, AC charging, and Energy Outputs are currently active.



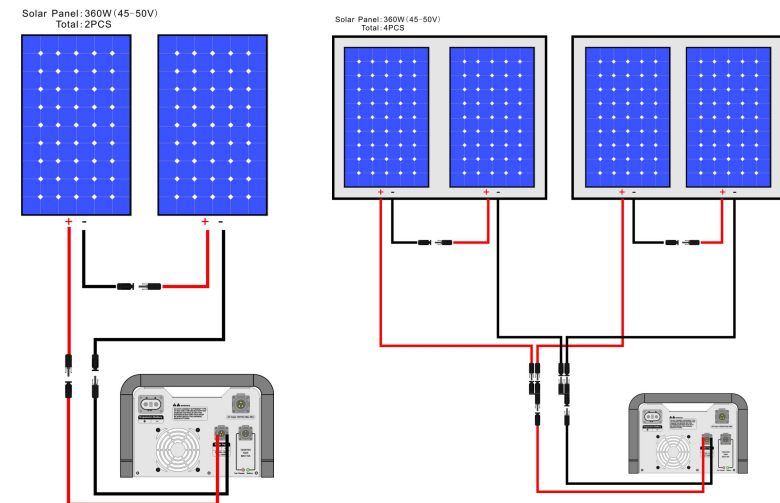
4) 300-380W($V_{oc}=40V \sim 45V$) x 4 PCS (2 PCS in series for each string, 2 strings in parallel.)

Wiring Diagram:

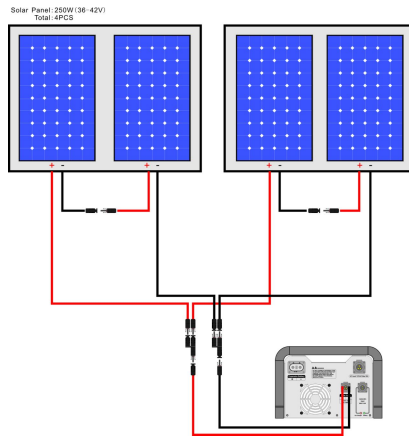


5) 300-380W($V_{oc}=45V \sim 50V$) x 2 or 4 PCS (2 PCS in series for each string, all strings in parallel.)

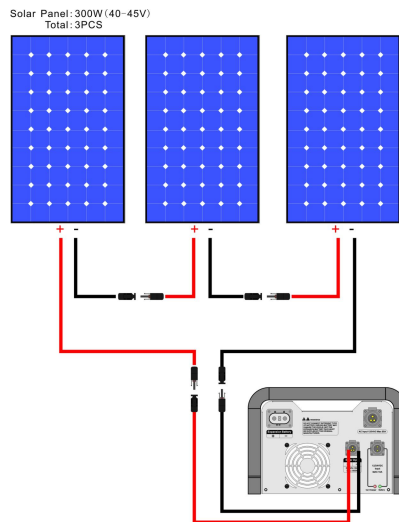
Wiring Diagram:



Wiring Diagram:

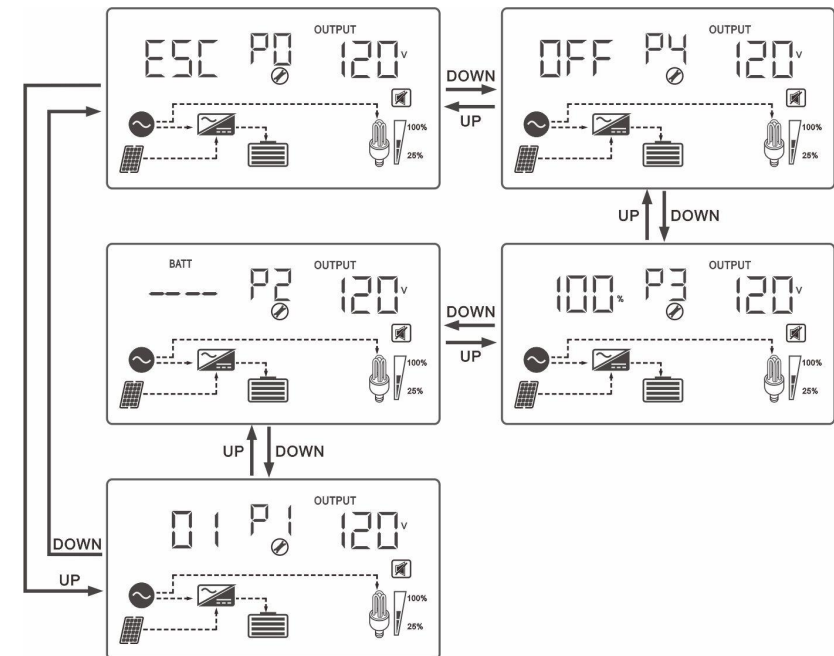


Wiring Diagram:



3.3.4.2 Function menu: From any Status screen, long press the Funct button for 5 seconds to enter the Function menu. Press DOWN or UP to scroll through the different parameters P0-P4. Then, after reaching the desired parameter P0-P4, short press Funct to highlight that parameter's setting (the setting will be blinking). Then press DOWN or UP to change the setting. After achieving the desired setting, press Funct so that the parameter P0-P4 is blinking, press DOWN or UP until "P0" is blinking, and then short press Funct to save the setting and exit the Function menu (you can change multiple parameter settings before exiting). The functions of P0-P4 are as follows:

Main Menu	Functions
P4	Buzzer mode
P3	Inverter charging current
P2	N/A (This parameter is intentionally left blank)
P1	Inverter operating mode
P0	Save & Exit

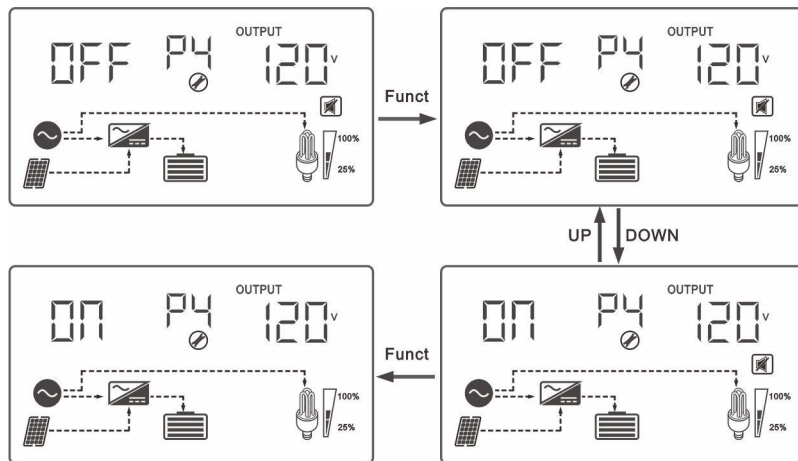


3.3.5 Parameter Settings

3.3.5.1 AC Input Alarm setting

From any Status screen, long press the Funct button for 5 seconds to enter the Function menu. Press DOWN or UP until the Beeper noise parameter “P4” is blinking. Press the Funct button to highlight the setting (“OFF” or “ON” will be blinking). Turn On/Off the Alarm noise using the DOWN or UP button. Press the Funct button so that “P4” is blinking, press DOWN or UP until “P0” is blinking, and then press the Funct button to save and exit.

Explanation: When this setting is ON, an alarm sounds every 15-seconds if the inverter is running without AC input connected. When this setting is OFF, this particular alarm is disabled. All other operational/fault alarms remain enabled in either setting.



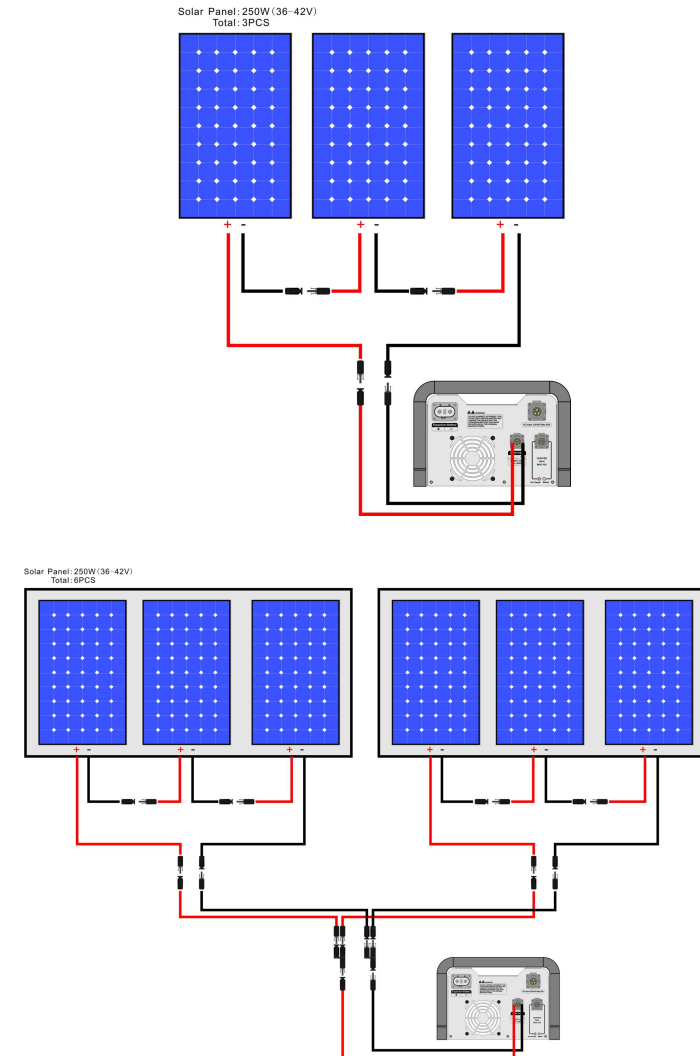
10. Reference Solar Array Wiring Diagrams

Total Solar Voltage Range: 60V~150V

Total Maximum Solar Power: 1,500 watts.

1) 230-250W(Voc=36V~42V) x 3 or 6 PCS (3 PCS in series for each string, all strings in parallel.)

Wiring Diagram:

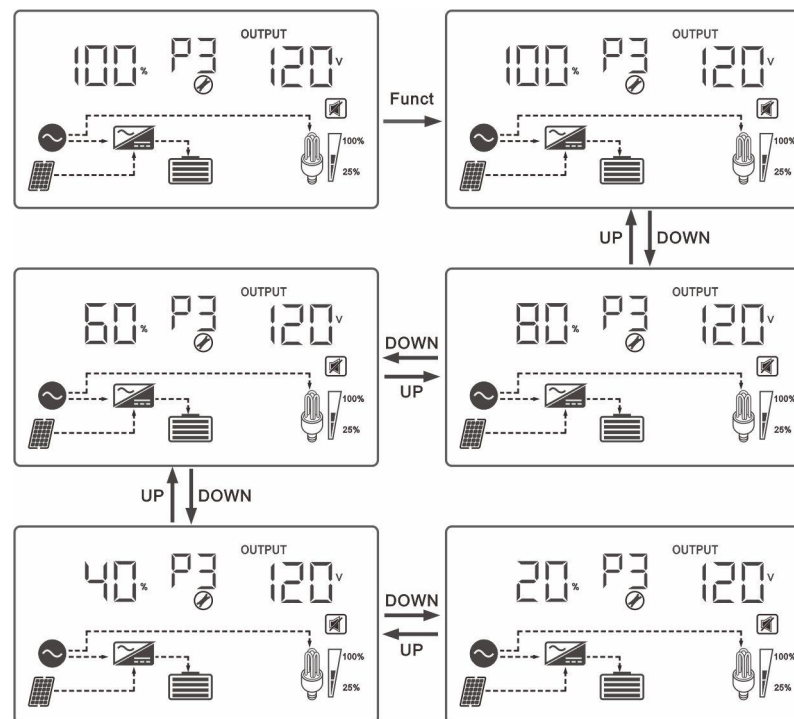


9. Accessories

3ft. AC Input Cord x1	3ft Solar Input Cord x1 & Connectors
	
16 ft. Car Charger (12VDC) x1	User Manual
	

3.3.5.2 Inverter AC charging current setting

From any Status screen, long press the Funct button for 5 seconds to enter the Function menu. Press DOWN/UP until the Inverter charging current parameter “P3” is blinking. Press the Funct button to highlight the setting (the % value will be blinking). Press DOWN or UP to change the AC charging current of the unit (100%, 80%, 60%, 40%, or 20% of maximum capacity). Press the Funct button so that “P3” is blinking, press DOWN or UP until “P0” is blinking, and then press the Funct button to save and exit.



3.3.5.3 Error codes and solutions

Error code	Problem	Solution
E01	MOSFETS board over-current	Turn unit OFF and ON. If problem persists, contact support.
E02	Output short circuit	Inspect loads for signs of short circuit (e.g. bare wires, contact damage, etc.). Remove loads.
E03	Output overload	View Inverter Load % via Status screen. Remove unnecessary loads.
E04	Internal Temperature above Limit	Check cooling fan operation. Remove any dust. Maintain 10cm free space around unit.
E05	Battery over-voltage	Check external battery connection, configuration, and voltage (see section 4.4).
E06	Battery under-voltage	Make sure battery is fully charged. If problem persists, battery must be replaced. Contact support.
E07	Reversed connecting cables between transformer and heatsink on power board	Cables must be reconnected. Contact support.
E08	Start Protection from low output voltage	Turn unit OFF and ON. If problem persists, contact support.

8. Technical data sheet

Model:		MPS3K-4500Wh
Rated AC Power		120VAC / 3,000 W Continuous (6,000 W Surge)
Battery Bank	Rated voltage	44.4VDC
	Battery capacity	4,500 Wh
	Battery Type	Lithium / Li(NiCoMn)O2
BMS & Inverter voltage settings	High voltage protection	62.1 VDC
	High voltage recovery	57.4 VDC
	Low voltage alarm	38.4 VDC
	Low voltage protection	37.2 VDC
	Floating charge voltage	50.4 VDC
AC Input	AC Input Voltage	85VAC-138VAC
	Frequency	60 Hz or 50Hz
Charge	AC charger	Default 1kW (0-1kW Adjustable)
	Solar Charger	48V/30A MPPT (Max 1,500 watts, MPPT voltage range 60VDC-150VDC)
	Car Charger	Max. 12VDCx10A or 24VDCx10A
AC Output	Voltage Range	120VAC \pm 5% (Inverter mode)
	Frequency	60Hz or 50Hz \pm 1% (Inverter mode)
	Output wave	Pure Sine Wave
	Transfer time	<10ms (Typical load)
	Efficiency	>85% (80% Resistive load)
DC Output	USB Ports	USB-3Ax1, USB-2Ax2, USB-C 60Wx1.
	12V Outlets	12VDC 20A x1
		12VDC 2A x 2
	Low-voltage protection	40.4V
	Low-voltage recovery	47.6V
Protections		Battery over-voltage and low-voltage protection, overload protection, short circuit protection, over-temperature protection, under-temperature protection
Operating ambient temperature		-20°C to +50°C
Storage ambient temperature		-25°C to +55°C
Product size: L * W * H (mm)		503 x 318 x 483
Package size: L * W * H (mm)		610 x 430 x 565
Net Weight / Gross Weight		55Kg / 63 Kg

Note: We reserve the right to modify this user manual without any notification.

7. Simple Fault Diagnostics and Troubleshooting

WARNING: There is high voltage inside the unit! Do not open for any reason. High voltage may cause serious injury or death!

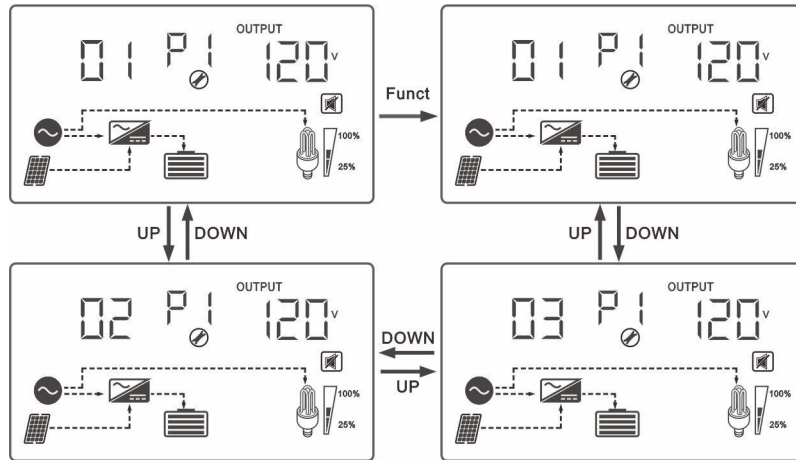
<u>Failure phenomenon</u>	<u>Possible reason</u>	<u>Solution</u>
The battery depletes more quickly than normal	The battery is not fully charged	Make sure that the battery is fully charged
	Outputs overloaded	Remove noncritical loads
	Aging battery, weak battery storage capability	Contact your customer service representative to obtain a battery replacement kit
Power on failure	The AC Input cable or the External Battery cable is poorly connected	Check and reconnect
Alarm sounds immediately after turning on unit	The battery is low	Make sure that the battery is fully charged
	Outputs overloaded	Remove of noncritical loads
Alarm sounds for 2 seconds, then silent for 1 second	The internal temperature is too high	Make sure the fans and cooling holes are not blocked by any objects or dust
The fan is spinning slowly	The fan automatically adjusts according to the temperature	The fan is operating correctly
The "PV" indicator does not light up when there is a sun-lit PV module	PV cable poorly connected	Check if the wiring of the PV array is correct and the contact is reliable

When you contact the service staff, please provide the following information:
Type of machine / date of issue / complete description of the problem (including the relevant indicator display status, battery configuration, wired connections, and other information).

3.3.5.4 Inverter working mode setting

From any Status screen, long press the Funct button for 5 seconds to enter the Function menu. Press DOWN or UP until the inverter working mode parameter "P1" is blinking. Press the Funct button to highlight the setting (the work mode number "01," "02," or "03" will be blinking). Choose the inverter work mode (01-02-03) using DOWN or UP buttons. Press the Funct button so that "P1" is blinking, press DOWN or UP until "P0" is blinking, and then press the Funct button to save and exit.

<u>#</u>	<u>Working mode</u>	<u>Description</u>
01	The grid priority mode (Default)	In working mode 01, the AC input directly powers the AC output (through a voltage stabilizer), bypassing the battery (a.k.a. "pass-through AC power"). When the grid's AC power is over-voltage, low-voltage, distorted waveform, or cut off, the unit will draw from the battery power supply. When the grid power returns to normal, the unit will re-enable pass-through AC power.
02	Energy-saving mode	In working mode 02, the inverter only turns on when the unit detects load power greater than 15% of the inverter's 3000W rated output. When it detects small or no, i.e. when the total load power is less than 15% of the inverter's rated power, the inverter will remain off. This ensures the lowest power consumption of the battery bank by keeping the inverter shut off. Under this mode, the unit measures load power every 15 seconds.
03	Battery priority mode	In working mode 03, the AC input does not charge the battery or power the loads. The unit utilizes solar or DC (car) power only; solar and DC charge the batteries and supply power to the loads through the inverter. When the battery meets the low-voltage protection point, i.e. when the battery is 90% empty, the unit will enable pass-through AC power if the grid power is available. When the battery is fully charged again, the unit will again only use solar or DC power.



4. Wiring

4.1 Recommended wire thickness

For DC and AC input / output connecting wire, the thickness of the wire is very important. It is recommended to have 1 mm² cross-sectional area of copper wire for every 5A of current.

$$\text{Area of wire} = \frac{\text{Power rating(W)}}{\text{Rated battery voltage(V)} \times 5\text{A/mm}^2}$$

For example, the appropriate wire cross-sectional area for a 5000W/48VDC load is calculated as follows:

$$\text{Area of wire} = \frac{5000\text{W}}{48\text{VDC} \times 5\text{A/mm}^2} \approx 20(\text{mm}^2)$$

Diameter can then be derived from $A = \pi \cdot r^2$

Consult a verified Wire Gauge and Current Limit table for guidelines. Failure to understand and adhere to these guidelines can result in wire and equipment damage and/or dangerously high temperatures.

6. Maintenance

6.1 The MPS-3K requires very little maintenance. The most important maintenance practice is to follow basic rules of battery charging. This will ensure good battery health.

6.2 Under normal operating conditions, the battery will work well for 6-8 years or longer. If operating conditions are subpar, the battery may need to be replaced earlier than 6-8 years. Battery replacement MUST be carried out by qualified personnel. Individual batteries within the battery pack must not be individually replaced. The entire battery pack must be replaced according to the battery supplier's instructions.

6.3 When in storage or during periods of inactivity, the battery should be kept at 50% charge. At least once every 4-6 months, the battery should be fully charged to 100% capacity and then fully depleted to 10% capacity. In a high temperature region (>100 degrees F or >38 degrees C), this charge/depletion operation should be done every 2 months.

6.4 Before replacing the battery, turn off the device, disconnect it from any power sources, and switch off the battery. Remove any metal from your body (rings, watches, etc.). Use only tools with insulated handles. Do not put any tools or other metal objects on the battery pack.

6.5 When connecting the battery cable, it is normal for small sparks to appear. These sparks are harmless. Do not shorten any battery connections or reverse positive/negative polarity.

5.5 Audio Alarms

<u>Equipment running normally</u>	"AC Input Alarm" <u>OFF</u>	The lack of AC Input does not sound an alarm.
	"AC Input Alarm" <u>ON</u>	When the inverter is on, an alarm sounds 4 times every 15 seconds if no AC input is detected.
<u>Battery high-voltage alarm</u>	Alarm beeps 4 times per second	
<u>Battery low voltage alarm</u>	Alarm beeps 2 times per second	
<u>Over-temperature alarm</u>	Alarm beeps for 2 seconds, then pauses for 1 second	

5.6 Connecting an Electric Generator:

When connecting an electric generator, make sure to follow these guidelines:

5.6.1 Make sure the generator output voltage is within the MPS unit's AC input range (see Section 8). To connect the generator, first turn off the AC Input and Output breakers. Wire the generator's output to the MPS unit's AC input terminals according to the instructions (see Section 4.5). Start the generator and make sure it is running stably. Make sure there are no loads connected to the MPS unit's AC or DC outputs. Finally, start up the MPS unit.

5.6.2 After the MPS unit is started, connect loads one-by-one to the MPS.

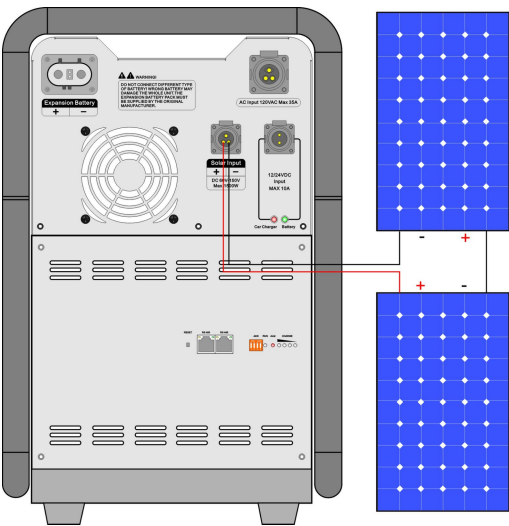
5.6.3 We suggest the electric generator's power output capacity be 2-3 times that of the MPS (i.e. 6000 – 9000 watts).

4.2 System working diagram

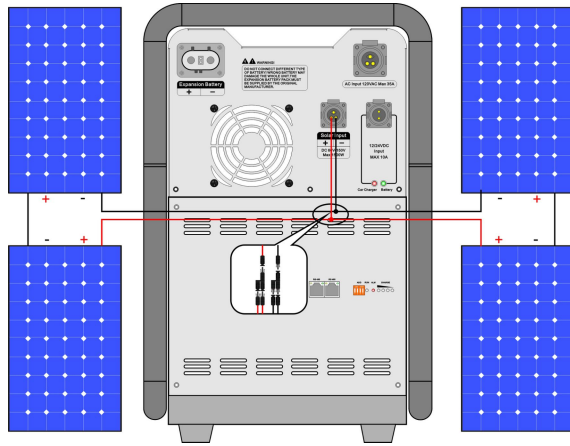


4.3 Instructions for connecting Solar Power

Use the correct size of extension PV cable (4mm² or bigger). Make sure the solar power voltage and wattage are within the allowed ranges (60VDC-150VDC, Max. 1,500W). Plug solar charger cord into the "Solar input connector" ⑫ (see section 3). Make sure the positive (+) and negative (-) cables are wired correctly; incorrect wiring may damage the unit.



Pic 4-3a



Pic 4-3b

4.4 Instructions for connecting Expansion Battery

VERY IMPORTANT: All the paralleled battery packs must be exact same spec. Wrong battery may damage the whole system.

4.4.1 Follow the belowing steps to connect the expansion battery to MPS3K unit.

To Connect to MPS3K:

- ① Make sure the battery level of EXB-4500 and MPS3K-4500 are same. **(Do NOT connect if the voltage difference more than 3V.)**
- ② Power OFF the MPS3K-4500, switch OFF the battery.
- ③ Coding the battery pack. (Refer to 4.4-2)
- ④ Plug in the communication cable.(Refer to the Pic 4.4-1)
- ⑤ Plug int the battery power cable. (Refer to the Pic 4.4-1)
- ⑥ Switch the battery ON for both the MPS3K and EXB-4500.
- ⑦ Power ON the MPS3K-4500 unit (Refer to section 5).

Note: It's not recommended to reconnect the expansion battery frequently. Keep both the battery switch ON when the expansion battery is connected to MPS3K to maintain the same battery level.

5.3 Shutdown

To properly shutdown: Turn off all loads. Long press the "ON/OFF" button for 2 seconds, releasing after the internal relay action produces an audible "click." The AC output will turn off and the LCD screen will turn off. Press the "DC Switch" to turn off the DC outputs. For long time inactivity, press the Battery Switch (①) to disconnect the battery unless the solar is connected for maintain charging.

BREAKER PRECAUTION: Switch on the Battery BEFORE connecting Solar. Switch off the Battery AFTER disconnecting the Solar.

Caution: If the unit will be unused for a long time and neither solar power nor an AC charger will be connected, please switch off the battery to avoid the battery deeply discharging.

5.4 Battery protection

While AC output is turned on, protective actions are executed if certain battery voltages are measured.

Inverter protection voltage parameters			
<u>Overvoltage protection</u>	<u>Overvoltage recovery</u>	<u>Low-voltage alarm</u>	<u>Low-voltage protection</u>
62.1 V	57.4 V	38.4 V	37.2 V
Action: AC output is disconnected	Action: AC output is restored	Action: AC output maintained, but alarm beeps until voltage is recovered	Action: Battery output is disconnected and loads are transferred to grid power (if available)

5. Power ON / OFF

Note: Make sure voltages and polarities of external battery and solar panels are correct (see section 8) if applicable.

5.1 Inverter Power ON

5.1 Power On steps

Press on the Battery Switch (①), then long press the "ON / OFF" button on the screen panel for 2 seconds; release it after the beeper sound. The "INV" indicator light will turn on, indicating that the inverter has started.

5.2.1 AC Input

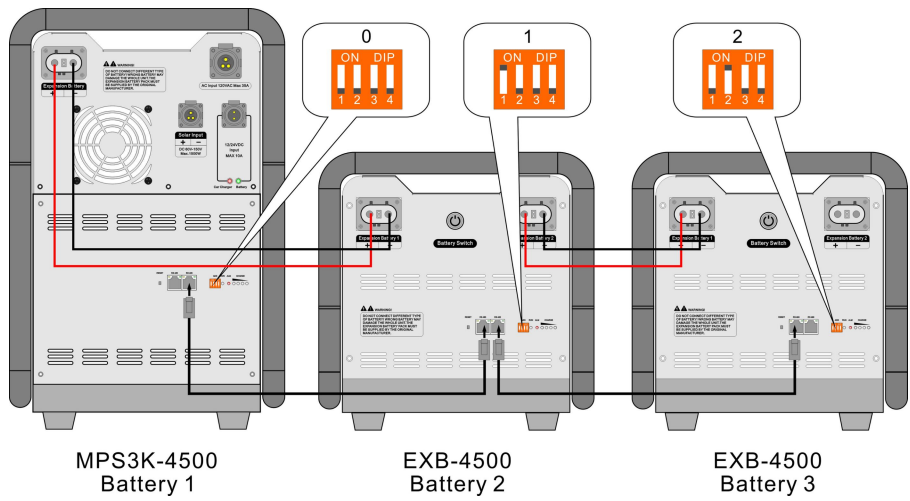
Plug the AC input cord into the AC charger port (⑩), plug the other end into a working power outlet. The AC input voltage will be shown on the screen. If the MPS3K is under the working mode [01], the "LINE" indicator light will turn on, indicating the AC Input power is passing through to the AC Output.

5.2.2 Solar Charge Controller

Make sure the solar power voltage and wattage are within the allowed ranges (see section 8). Plug the solar panels via cables to the Solar charger port (⑩) . When the solar panels are exposed to sunlight, the "PV" indicator light will turn on, indicating that the solar power is charging the batteries through the MPPT solar charge controller.

5.2.3 Car Charger

Plug the car charger cord into to the car charger port (⑪) , plug the other end into the car cigarette lighter socket. The car charger indicator light will turn on.



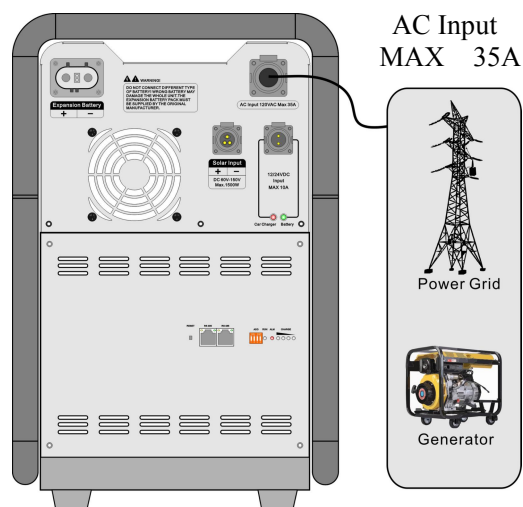
4.4.2 Battery packs communicating address coding.

- (1) Set the address for "0" if the MPS3K unit without expansion battery pack.
- (2) Coding the battery packs address before connecting them. The first battery pack address for "1", the second battery pack address for "2", the third battery pack address for "3" and so on.
- (3) Address coding instructions. (Refer the Pic 4.4-2)

Address Coding	0		4		8		12	
	1		5		9		13	
	2		6		10		14	
	3		7		11		15	

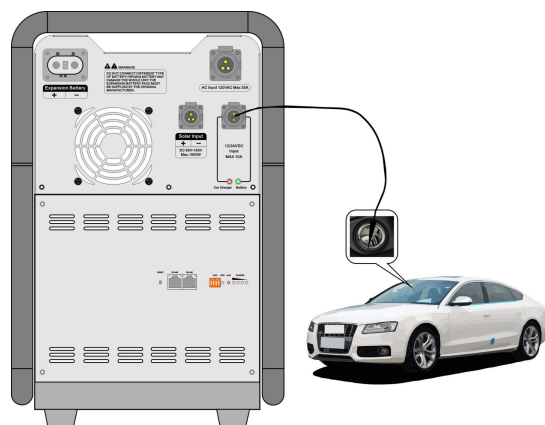
4.5 Instructions for AC input

Use the correct size of AC power cable (4mm² or bigger for 35A), make sure the AC power voltage is in the allowed range (85VAC-138VAC). Plug AC power cord into the “AC input connector” ⑩.



4.6 Instructions for 12VDC input

You may charge the unit with a vehicle cigarette lighter when the engine is running. Plug the car charger into “12VDC Input” ⑪.



Pic 4-6

4.7 Outputs

4.7.1 AC outputs

120VAC loads are connected to the “AC Output” ② outlets on the front panel. The total continuous power of all combined AC loads should be no more than the inverter's rated continuous power of 3,000 watts. Brief surges up to 6,000 watts are acceptable. For a single outlet (NEMA 5-15R ②), the maximum continuous amperage is 15A. For the TT-30R outlet ⑥, the max output amperage is 25A.

4.7.2 DC outputs

5VDC loads are connected to the “5VDC Output” (USB sockets) ④ on the front panel. USB2.0 is rated for 2.4A, USB3.0 is rated for 3A, Type-C is rated for 12A.

12VDC loads are connected to the “12VDC Output” ⑤/⑦ on the front panel. The cigarette lighter socket is rated for 12V20A. the 5mm socket is rated for 12V2A each.

Make sure the positive (+) and negative (-) cables of your DC loads are wired correctly before plugging in. DC output short circuit may damage the unit.

