

BP-450 Introduction



BP-450 D.C. Rechargeable Power Source



BP-450 is a new generation Digital DC Power Source. It can output 150V, 300V and 450V voltage.

Functions

- Fully sealed Aluminum Alloy Shell
- Over-current protection and over discharge protection
- Built-in 50V / 23AH lithium battery module
- Built-in / external input power supply free to switch
- Displaying work status intelligently
- Control Panel is replaceable
- Portable

Technical Specifications

- ◆ **Max output voltage:** 450V
- ◆ **Max output current :** 1A
- ◆ **Charging voltage :** 110V~ 240V AC
- ◆ **Output mode:** DC output
- ◆ **Operating Temp:** 0 °C/+55°C
- ◆ **Storage Temp:** -30°C/+60°C
- ◆ **Weight:** 12.2Kg
- ◆ **Dimension:** 265*200*295mm
- ◆ **Material of Shell:** Aluminum Alloy
- ◆ **Fuse Size:** 5*20mm
- ◆ **Type:** Lead-acid batteries



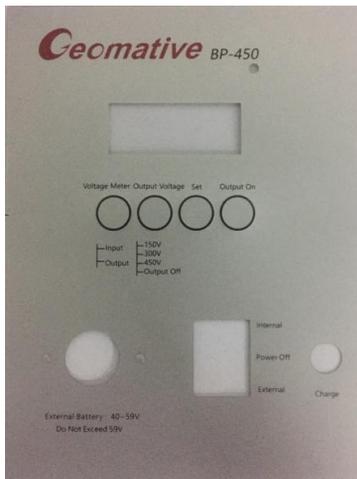
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Left side panel

Power switch:

The built-in / external input options used to control the power supply are only powered when the switch is selected up / down.



Right side panel



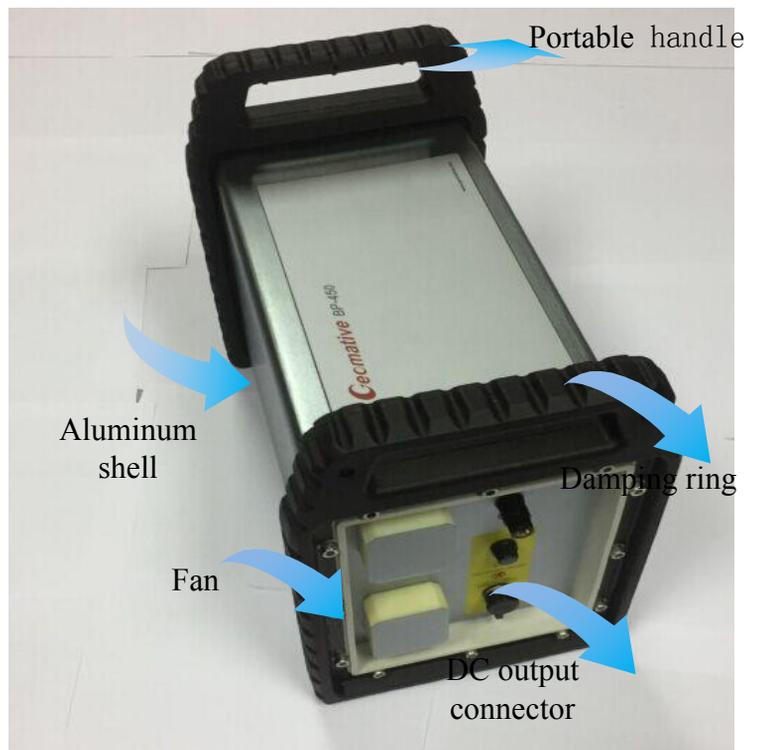
Accessories

Each BP-450 is equipped with 10 fuses

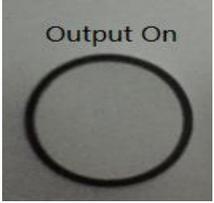
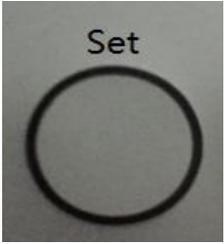
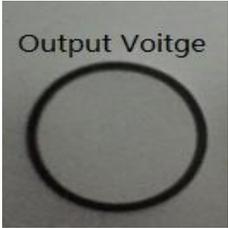
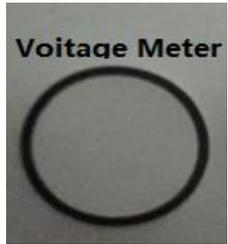


Each BP-450 with a charger

Charger LED indicator



control panel

Key	Function	Display
	Output on	BP450 boot default output 450V. The power LED shows the current voltage
	confirm the output voltage or the shutdown	After confirming the selection, the LED display shows the actual delivery voltage
	Used to select the output voltage or shutdown	There are 150V, 300V, 450V, OFF options to choose from, in a circular way
	check the voltage of the input battery pack and display the voltage of the output	Press once to display the input voltage Press twice to display the current output voltage.

Instructions

Connected with the electrical equipment (to GD-10 as an example to illustrate)

Use cable to connect and BP-450 output interface and the device power input interface, make sure positive pole connected to the cathode, the negative then negative.

Warning: Make sure that the BP-450 does not have an output voltage, it is best to connect the power cord before BP450 is powered on or accidentally shock the operator.

Be sure to connect the BP-450 and GD-10 connectors correctly, or you will be able to damage your device.



Put the power switch

Put down or up to choose the internal or external battery, then the LED is on and The LED indicator flashes green.

Output On

Press the Output On button to start the BP-450 high Voltage.

Then LED display shows the actual output voltage of about 450V.

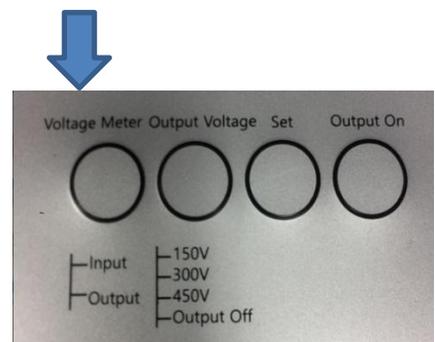
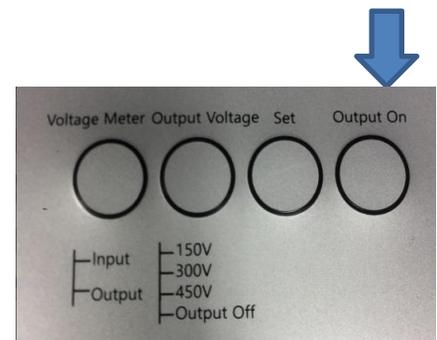
Warning: once press the Output On button ,the default high output voltage is dangerous 450V, please ensure that safe!

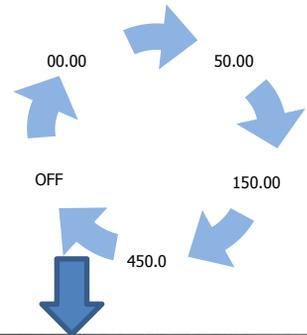
Voltage Meter

Press the "Voltage Meter" button once LED displays the battery voltage.

Press the "Voltage Meter" button twice LED displays the value of the output voltage.

Note: The default is the output voltage display mode. Check the input battery voltage , if the battery Voltage belows 44V, the LED will show "UL" ,the battery need to be charged.





Select the output voltage

According to the test needs, press the "output voltage" key to select a different output voltage, a total of four kinds of gear, defined as follows:

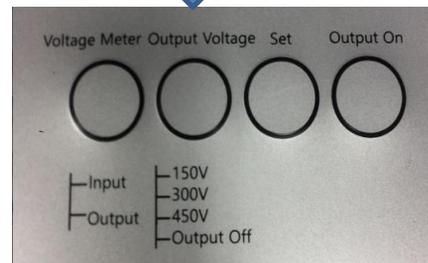
150 - the output voltage is about 150V,

300 - the output voltage is about 300V,

450 - the output voltage is about 450V,

OFF - Turn off BP-450 (no power supply).

Note: continuous operation "output voltage" to switch, LED screen will cycle display the output voltage value.



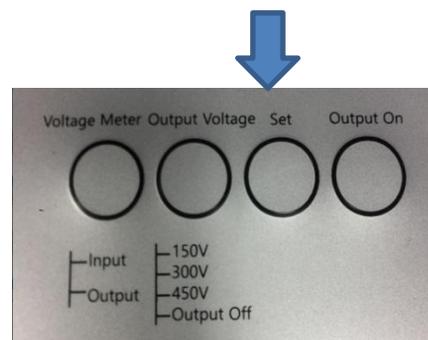
Set the output voltage

Select the supply voltage, press the "set" button to confirm the operation.

After confirming, the LED screen displays the actual output voltage.

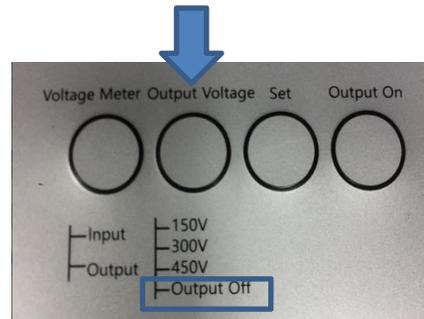
Note: If the output voltage before the confirmation is higher than the voltage after confirmation, then the LED voltage display will have a slow voltage drop process, which is the normal phenomenon of internal capacitor discharge, will stabilize after a few seconds.

WARNING: When confirming the output voltage, make sure that you do not touch the output interface!



After the power is over, turn off the BP-450

1. In the BP450 power supply scenario, before the BP450 is turned off, in order to prevent the switch from switching, the load should be stopped first;
2. Press the "Output Voltage" button continuously until the OFF option appears;
3. Press the "Set" button to confirm the shutdown of the BP-450.



Disconnect

Disconnects from other devices

WARNING: When disconnecting the BP-450 from the electrical equipment, make sure that the BP-450 is turned off.

The battery voltage is low

When the LED screen prompts "UL → Voltage", it means that the voltage is too low, need to charge the BP-450 then can be used.

In the field operation, when the voltage is too low (<42V) ,it should be quickly charged.

If the temperature is low (<0 °C) in the case of use, the actual battery power will be less than the normal power.

Note:

If you continue to use the BP-450 in low voltage, the output voltage may be unstable and the value of R0 may be inaccuracy .

The temperature inside the BP-450 is too high

When the LED screen prompts "HC", it means that the internal temperature is too high, the machine will close the BP450 output automatically to prevent further increase of the temperature.

Note:

Do not plug the air inlet and air outlet of fan !

Clean dustproof net of air inlet regularly!

Check the fan the fanproof can work normally, if the fan cannot work ,it must be replaced with a new one.



Charge, Maintenance

First turn off the BP-450, the charger charging port connected to the left side of the panel charging socket, charger AC plug connected 220VAC or 110VAC.

Note: Connect the charging port and the red dot of the socket, and then push the plug to connect.

Charging takes 5 to 6 hours, after charging the charger LED turns green. Charging is completed, the charger interface from the lock ring back pull, and then disconnect.

If you do not use the battery for a long time, need to charge and discharge every three months to ensure that battery performance is not affected.

Keep the battery at room temperature and dry.



External power supply

If the internal battery can not be powered normally, can supply BP-450 with external 48V battery, the battery capacity must be greater than 10AH.

WARNING: The external battery cannot exceed 59V . If you use BP450 in case of high voltage, there will be a risk of damage to the power supply!

Connect the red line to the positive of battery, and connect the black line to the negative of battery. Do not connect positive and negative reversely!

Troubleshooting

1. If the LED prompts the value of output voltage but the output connector has no voltage. Check whether the fuse on the left panel is turned on. If it can not be turned on, replace it.
2. If you still can not supply power, please contact our company after-sales staff for processing.

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