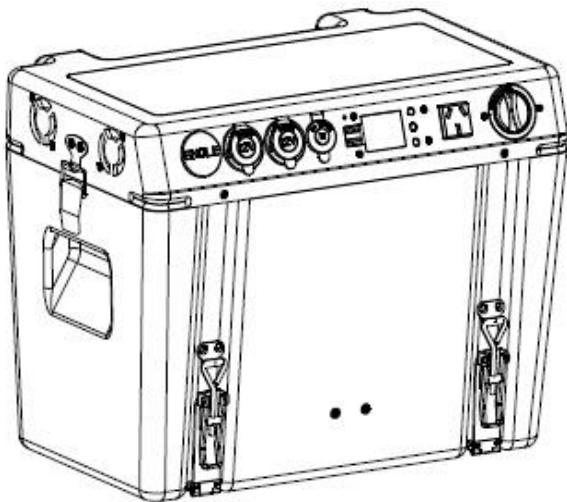




www.antenergy.com.au



The World's Most Innovative Battery box

Powered by ANTENERGY

Models : ANTPAK DC-20

ANTPAK BP-800

ANTPAK BP-300

Instruction manual

Please read this manual thoroughly before operating this product.

Content

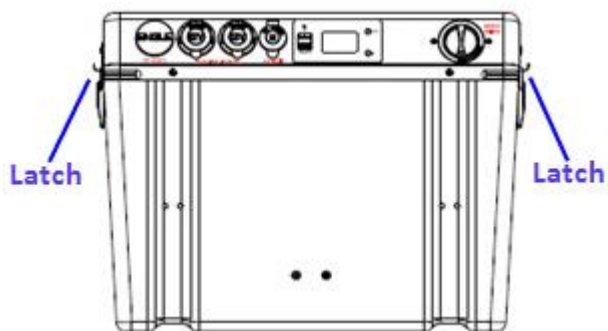
	Page
Content.....	2
Warnings.....	3
Get to know your gear.....	4
Accessories.....	6
Getting Started.....	7
Main Data Screen Overview.....	9
Getting Charged.....	10
Technical Specs of DBMP.....	13
Jump start a car.....	14
Mounting Bracket Installation.....	15
Power of load.....	16
Technical Information.....	17
Frequently Asked Questions.....	18

Warnings

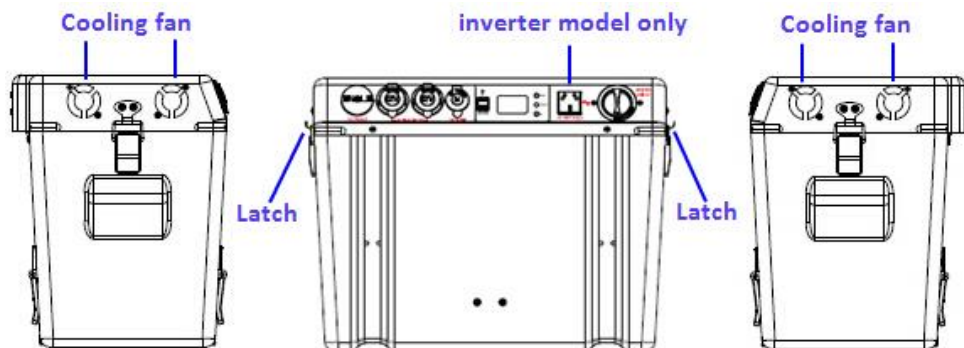
1. Please read this manual carefully before use.
2. The external AC power supply and AC charger is for indoor use only. Never use the 240V AC socket outdoors if it is raining.
3. Do not block air vents on the side of the unit (ANTPAK BP-800 / ANTPAK BP-300).
4. Forbid to use incongruent parts or applications.
5. Do not attempt to disassemble the ANTPAK battery box as this may result in electric shock, fire or explosion. Any attempt to disassemble the unit, make unapproved repairs or modifications will void warranty and the user's authority to operate the ANTPAK battery box.
6. Ensure the battery box avoids contact with water
7. Please away from fire and high-temp while using.
- 8. For the first time user, please do assemble according to oddments 1, pay attention to the battery positive and negative, don't reverse connect.**
9. It is recommended to always charge the battery fully per month when long time no use. Continuously discharging the battery down to 0% may reduce its serviceable life.
10. Save power at raining or cloudy days, it is recommended to always leave at least 20% capacity unused.

Get to know your gear

Models:

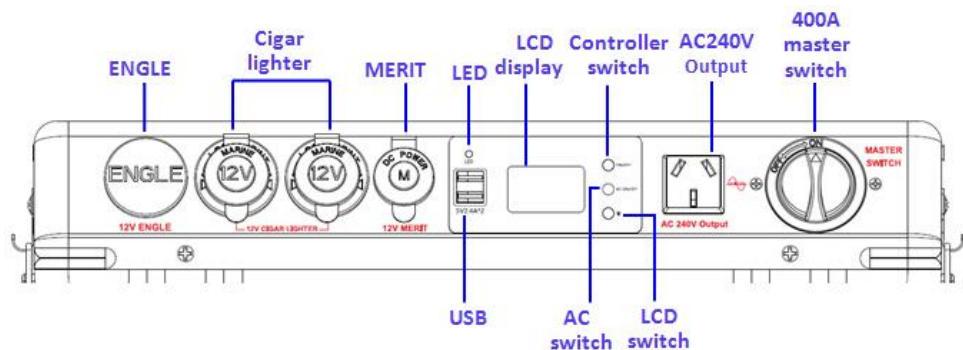


(ANTPAK DC-20)

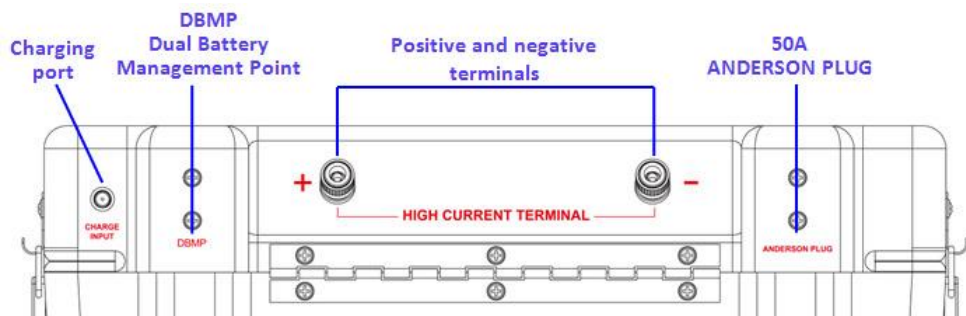


(ANTPAK BP-800 / ANTPAK BP-300)

Front panel:

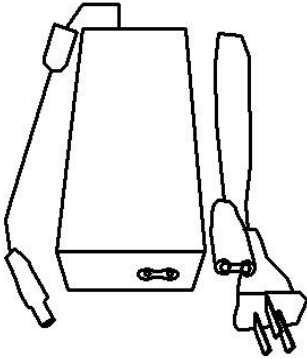


Rear panel:



Accessories

External AC Power 19V5ASupply (included)

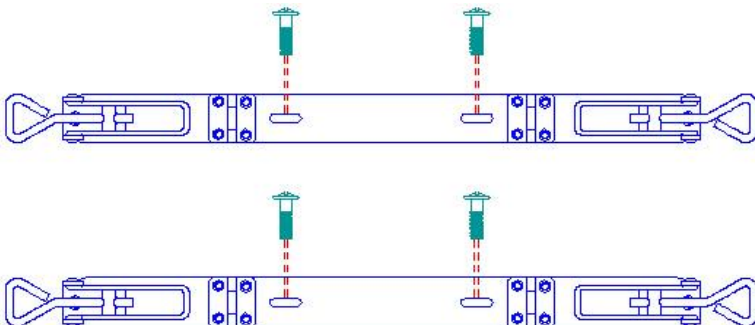


PS: External AC power supply will be matched according to shipping destination

Car cigarette lighter charging lead (included)



Mounting Brackets (included)



Getting Started

Connecting the Battery

Step 1: Release the side latches and open the battery box lid

Step 2: Place a 12 volt lead acid battery (not supplied) into the base of the ANTPAK and secure it with the Velcro belt

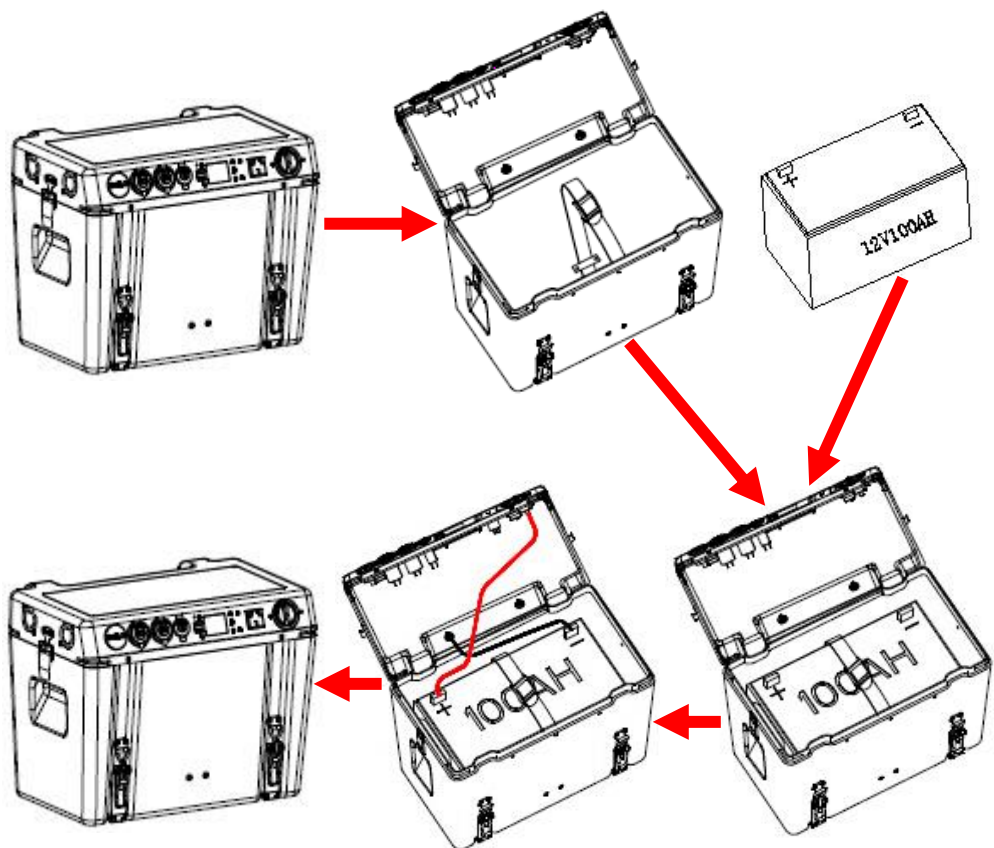
Step 3: Connect the red cable to the positive battery terminal. Then connect the black cable to the negative terminal. Make sure the nuts on the battery terminals are firmly fastened. Please refer to below assemble diagram

Step 4: Close the lid and fasten the latches.

Step 5: Turn "400A main switch" on

Step 6: Turn "Control Panel Switch" on, LED indicates green after seconds

Step 7: Turn "AC switch" one and AC 240V is ready to use.(BP-800 & BP-300 models only)



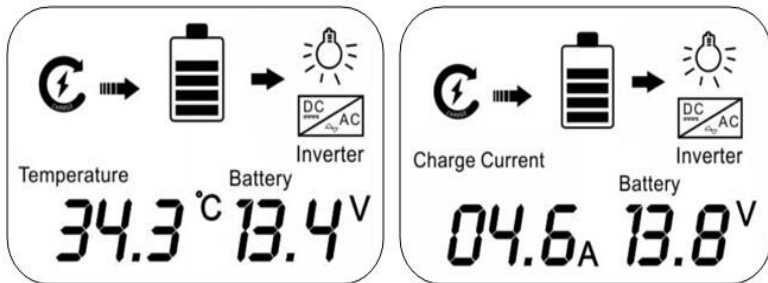
Remark: Please turn off the 400A main switch before assemble.

Main Data Screen Overview

The ANTPAK's informative LCD screen displays all the relevant information regarding charging process.

- You can press LED switch button to turn ON/OFF LED display
- Battery Level Icon
- Battery box internal temperature or charging current (during charging process)
- Battery Voltage
- Inverter ON/OFF (BP-800 and BP300 only)

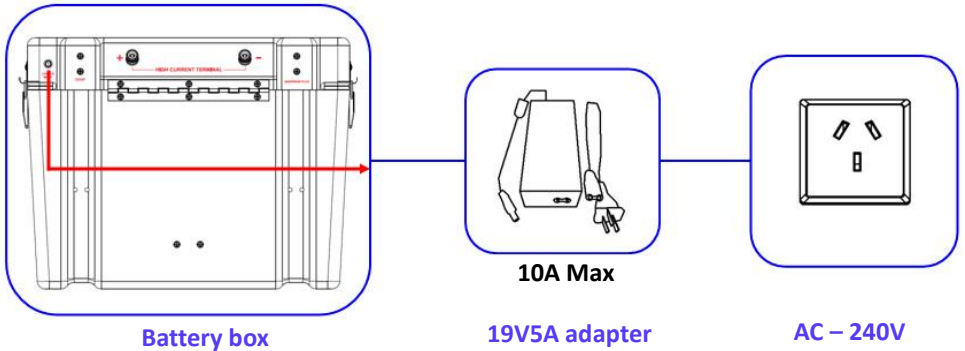
** If no loads on battery box, please turn off the main switch during charging process to charge batter faster.



Getting Charged

Charging the Battery using DC 19V5A (12V 7Amp Charging Current)adapter (supplied):

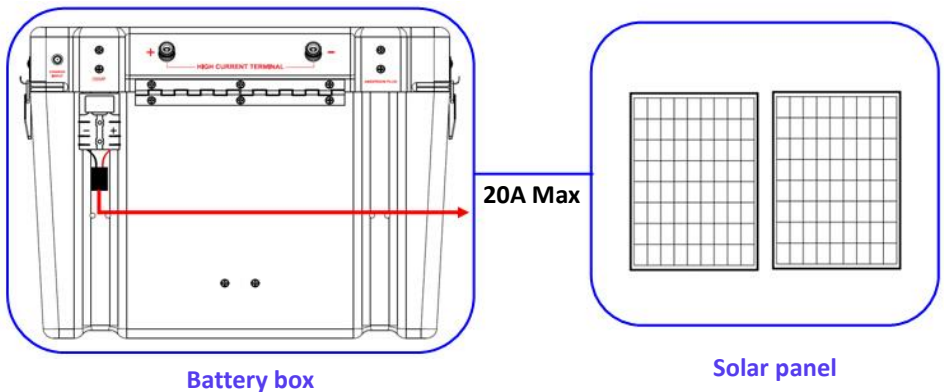
Connecting 19V5A battery adapter's wire correctly via the battery box "CHARGE INPUT", please check the wire is plugged in stable, then connect the other side to AC -240V.



Caution: Max current for charging port is 10A.

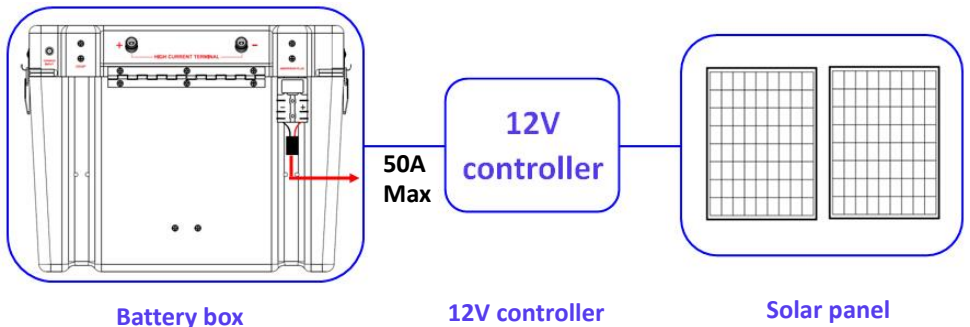
Charging the Battery using 18V solar panel without regulator(not supplied)

◆ Charging the battery via 'DBMP' (Dual Battery Management Point) directly without regulator. To do this, connecting 18V solar panel to system's 'DBMP' Anderson plug.



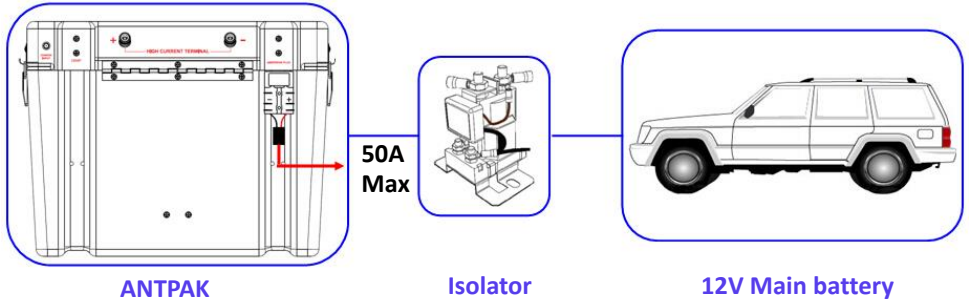
Charging the Battery using 18V solar panel with regulator(not supplied)

◆ Connecting 18V solar panel through 12V solar regulator (not supplied), then plug in “50A ANDERSON PLUG”.

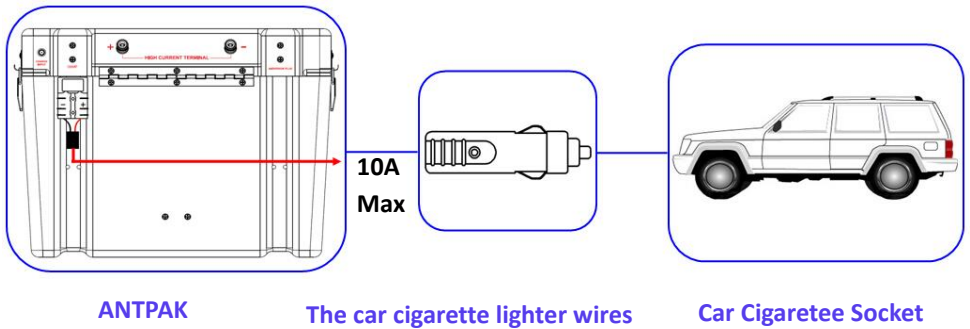


Place the solar panel to somewhere fully sunlight and set face to the sun, better to adjust the position to follow the sun's move; efficient time for solar panel starts from 10AM to 3PM, it need to be 30~45 degree from the sun to the underground of the solar panel, clouds impact the power generation someway, but it could be ok with strong sunlight and rain, the more sunlight the more power generated, also could set stable outdoors and face to the sun.

Car charger with isolator (not supplied)



Car charger of the car cigar lighter lead (supplied)



CAUTION – In some vehicles the 12V accessory socket may still provide power even if the ignition is turned off. In this case continued and un-monitored use of the ANTPAK in DC mode may result in a flat vehicle starter battery

Technical Specs of DBMP

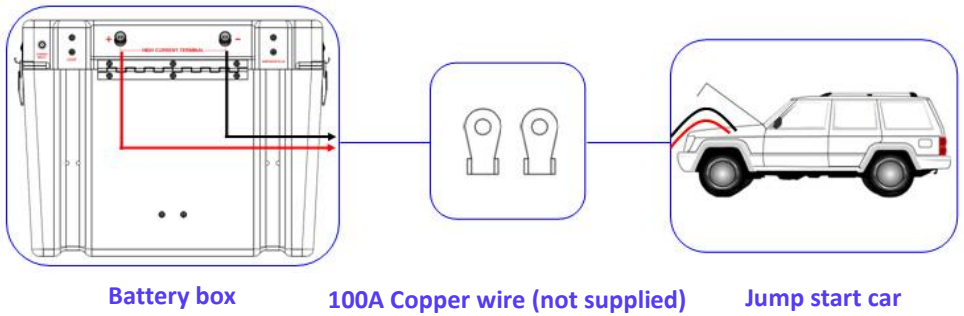
◆ DBMP Specifications:

Input Voltage	12V
Charging System Suitable for	10 Amps
Cut In Voltage	13.2 VDC
Cut Out Voltage	12.8 VDC

◆ DPMP Features:

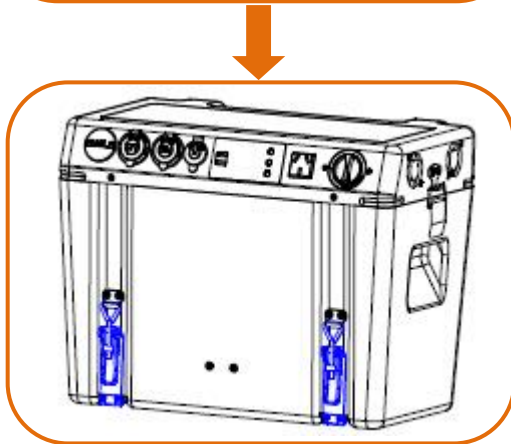
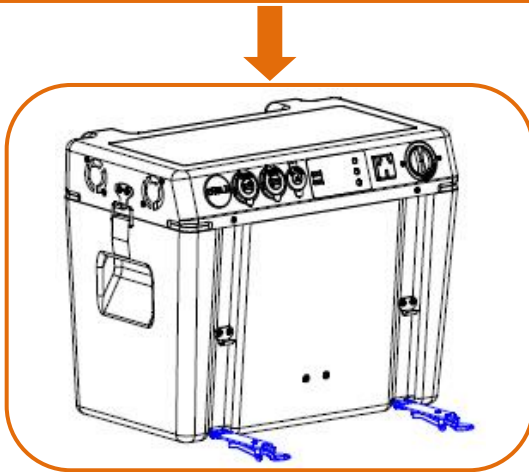
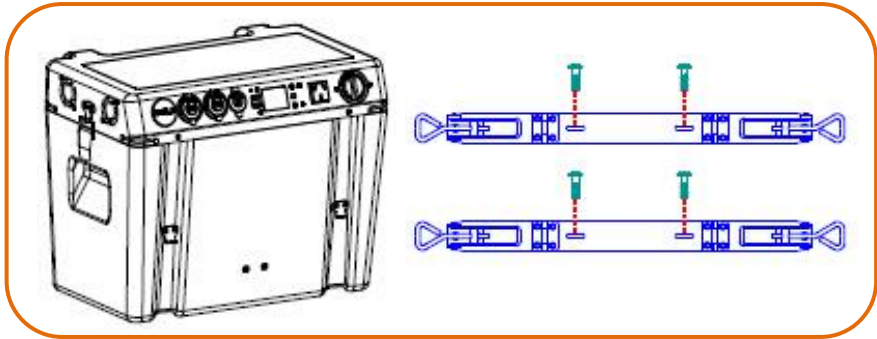
- The ANTPAK DPMP is a 12 Volts 10 Amp in-vehicle DC to DC charger designed for keep your auxiliary battery charged whilst driving or with portable solar panels when you are parked.
- The system charges your auxiliary battery to their optimum levels, using multi-stage DC DC charging.
- The ANTPAK DPMP also features a DC to DC solar regulator, allowing you to deliver the maximum amount of power from your solar panels to your auxiliary battery.
- With multiple levels of fault protection. The smart charger will act as a dual battery isolator, should the voltage get too low, the start battery will be protected.
- Charges AGM, Gel, Calcium content, VRLA and Standard Lead Acid batteries
- The smart charger will act as a dual battery isolator, should the voltage get too low, the start battery will be protected.

Jump start a car



CAUTION: Please connect the positive and negative terminals correctly, otherwise will damage the system.

Mounting Bracket Installation (Supplied)



Power of loads

AC loads (ANTPAK BP-800/ ANTPAK BP-300 only)

ANTPAK BP-800: The AC socket is powered by pure sine wave maximum output of 800W, if inverter temperature exceeds 60°C—65°C, the inverter is protected by Over-Temp Protection function.

ANTPAK BP-300: The AC socket is powered by pure sine wave maximum output of 300W, if inverter temperature exceeds 60°C—65°C, the inverter is protected by Over-Temp Protection function.

Caution: The inverter will start to sound a warning alarm once the battery voltage is getting low and reaches 11V. At this stage the inverter should be switched off or the device disconnected. In this stage, inverter is in auto self-protection mode, and no output. To restart inverter, please turn ON/OFF AC switch from main screen. This inverter can be used outdoors but not in wet weather

DC loads

Loads	Power
USB*2PCS	Maximum load/Socket 5V/2.5A
Engel	Maximum load/Socket 10A
DC power*2PCS	Maximum load/Socket 12V/20A
Cigar lighter *2PCS	
50A Anderson plug*1PC	Maximum load 50A/500W

Operation: ①To use the USB: Turn on 400A Main Switch then turn ON/OFF from main screen, once LED indicates green, USB is ready to use.

②To use the Cigar lighter、DC Power、50A Anderson plug: Turn on 400A Main Switch, sockets are ready to use.

CAUTION: battery box's DC loads can't exceed above voltage and current, otherwise the battery box auto self-protect and stop all loads output.

Technical Information

Model name		ANTPAK DC-20	ANTPAK BP-800	ANTPAK BP-300
Maximum Solar panel Capacity		≤300W solar panel with 18V(carrying idler 21.5V)		
Pure sine inverter		Nil	DC12V-AC240V, 800W	DC12V-AC240V, 300W
Output voltage	DC output	12V power*2PCS, max output current: 20A; 12V cigar lighter*2PCS, max output current: 20A; (12V power*2PCS+12V lighter*2PCS, 4PCS total max current is 20A); USB 5V*2PCS, max output current: 2.5A; 50A Anderson plug*1PC,max output current: 12V/50A		
	AC output	Nil	AC240V*1PC, max output power: 800W;	AC240V*1PC, max output power: 300W;
Internal battery		60AH-MAX130AH, lead acid battery		
Charge time		Depends on the charge method		
Discharge time		Depends on the power of loads		
Rated charging current	10AMAX	Rated discharge current	20A	
System voltage	12V	Wastage of carrying idler	<50mA	
Over-voltage protect	14.4V	Charging voltage	15V	
Voltage of under voltage	10.5V	Over discharge voltage	10.5V	
Temperature	-10°Cto+63°C			
Over-load 、 short protect	10ms respond			
protection circuit:	Over-load、 short protect		Burn fuse	
Warranty	12 Months			

***battery box specs according to actual model.

Frequently Asked Questions

What batteries can be used?

The ANTPAK can charge most types of rechargeable 12V lead-acid type battery from 60Ahr capacity up to 140Ahr. There are four main types of 12V lead acid battery - conventional wet lead-acid battery, calcium, AGM and gel. The ANTPAK can charge both cold cranking type car batteries and deep cycle batteries.

How do I charge?

Please refer to content 'Getting Charged' on page 9.

Is it waterproof?

No, care should be taken to shield it from direct sunlight and the elements.

How do I know if the battery is fully charged?

The Battery Level Icon is solid and not flashing, battery will be fully charged.

If AC adaptor gets hot when charging, is that normal?

Yes, it is okay, It can reach 70°C

Can I leave the ANTPAK continually plugged in?

Yes, the ANTPAK will keep on float cycle. Usage is plug-and-play. The built-in battery management system prevents over-charging and over-discharging of batteries. The USB output will only supply the amount of power needed.