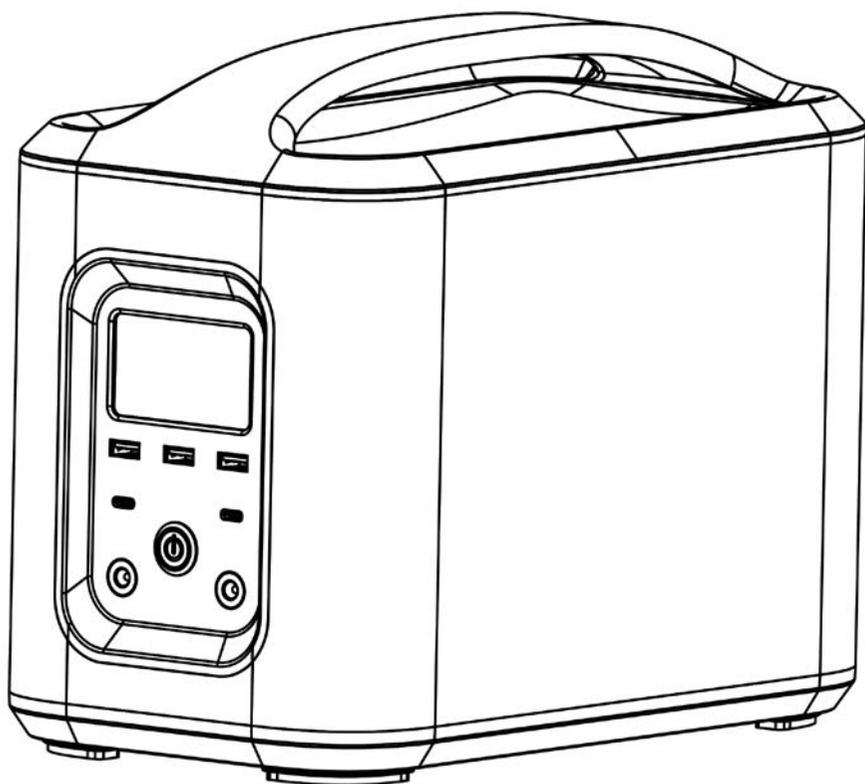
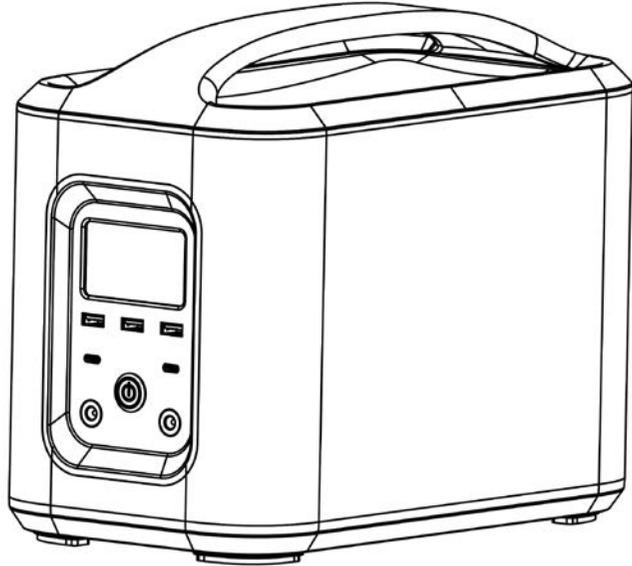


## USER MANUAL

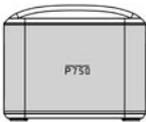
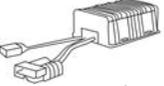
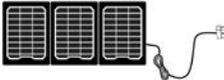
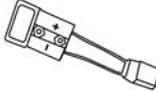
### P750 PORTABLE POWER SUPPLY



## P750 Portable Power Supply



### Included

 P750 x1	 Charger x1	 Instruction Manual x1	 TYPE C Data Transfer Cable x1
 (Optional) 15A Anderson DC-DC Charger x1	 (Optional) Solar Panel x1	 Cig Plug Car Charge Adapter x1	 Anderson Plug Adapter x1

- After opening the P750 packaging, check that all accessories are included as listed on page 2 (noting the solar panel and 15A Anderson DC-DC charger will only be present if purchased as additional options). If any parts are missing or damaged, report the missing or damaged items directly to AMPTRON®.
- Do not use this product until you have read this instruction manual in full.
- This manual is subject to change without notice due to updates and upgrades for various current loads.

### Contents

Product description .....	2
Product structure diagram .....	4
LED screen guide .....	5
Product specifications .....	7
Charging methods .....	8
How to use solar panel to charge .....	8
How to use the mains supply to charge .....	8
How to use the car to charge .....	9
Charging time .....	9
Instructions .....	10
How to use P750 to provide AC power .....	10
How to use P750 to provide DC power .....	10
Estimate run times .....	11
BMS management system (code display) .....	12
Precautions .....	13
Fault resolution .....	14
After-sales service .....	15

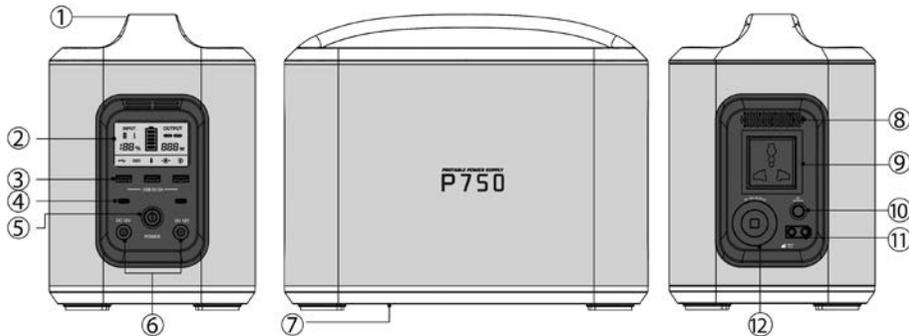
## Product Description

The Amtron® P750 is an extremely compact yet safe and powerful Lithium portable power solution. It stores 750Wh of energy, which provides the equivalent usable energy of about a 12V 100Ah AGM battery. With its convenient carrying handle the P750 provides a convenient portable energy solution for activities like camping, outdoor photography, mobile workstations, charging of batteries, a mobile option to power equipment and much more.

The P750 can also be used as a dual battery system alternative, with its capability of being charged from multiple charge sources including mains charging, solar, and DC-DC charging through either the Cig plug adapter or compatible 15A Anderson DC-DC charger (\*\*\*) sold separately).

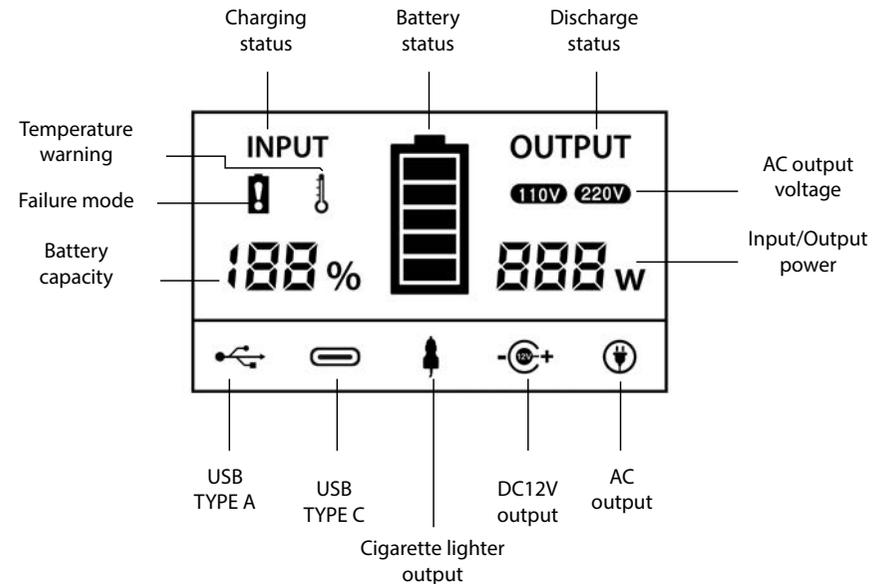
The P750 has a rich set of output interfaces. It provides an AC output port powered by a 300W pure sine wave inverter, 2 x USB TYPE-A and 3 x USB TYPE-C ports, and a 12V Cig plug.

## Product Structure Diagram



- |                           |                        |                          |
|---------------------------|------------------------|--------------------------|
| 1. Handle                 | 5. Master Power Switch | 9. AC Output Port        |
| 2. LED Screen             | 6. 12V DC Output Port  | 10. AC Output Switch     |
| 3. USB TYPE A Output Port | 7. Label               | 11. Charging Port        |
| 4. USB TYPE C Output Port | 8. Vents               | 12. Cigar Lighter Output |

## LED Screen Guide



### Input

**INPUT** When a charge source is connected this icon will show up. Input sources include mains, solar, car cig plug and the DC-DC adapter chargers.

**Battery** Battery remaining capacity icon  
 Full grid = Battery full  
 Space = Battery low  
 Raster Flow = Charge in progress

100% Battery remaining capacity SOC data display

When the temperature is becoming too high or too low this indicator will flicker. It will stay lit when the temperature has reached a protection limit.

### Fault Warning

When an error occurs, disconnect the charging device and load, then press and hold the power switch, and release power switch when the display flashes to reset the unit.

## LED Screen Guide Cont.

### Output

When P750 is on and functionally normally it will display the following icons:

**OUTPUT** When load is connected to P750.  
On startup, the P750 will run a test sequence to check that the output interfaces are functioning safely. The following icons will light up when the test of its output circuit is successful:

-  USB TYPE A Output
-  USB TYPE C Output
-  Cigarette Lighter Output
-  12V DC Output
-  AC Output
-  110V 110V output, indicating the current device AC output voltage is 110V
-  220V 220V output, indicating the current device AC output voltage is 220V

### • ALARM FUNCTION

No.	Alarm	Icon	Display alarm	Reason
1	3 seconds apart		This icon remains blinking until the battery state of charge reaches 20%	Battery power less than 10%
2	Constantly on		This icon remains blinking until the fault is released	Charge fault
				DC output fault
			AC output fault	
3	2 seconds apart		This icon flashes when the alarm occurs and is remains on while under protection	Temperature is too high or too low

## Specifications

Model	P750
Capacity	750Wh
Solar panel charging	16.8V Current: <30A
Mains supply charging	16.8V Current: <4A
Car charging	16.8V Current: <30A (Cig plug adapter: 3A)
AC output *1	Maximum continuous output power: 300W
	Output waveform: pure sine wave Output voltage: AC 220V ±10% Output frequency:50Hz AC 110V ±10% Output frequency: 60Hz
Cigarette lighter output*1	Output voltage range: 11.2V ~ 16.8V, Output current range: 0A ~ 10A
DC12V output*2	Output voltage: DC12V ± 5%
	Output maximum current (IMAX): 2A
USB TYPE A output*3	Output voltage: DC5V ± 5%
	Output maximum current (IMAX): 2A
USB TYPE C output*2	3.6V ~ 12V. Maximum output current 3A
Overheating protection	>65°C
Cooling method	Force Air Cooling
Protection type	Over current protection, under voltage protection, over voltage protection, overload protection, overheat protection, short circuit protection
Size	L300: Width170mm - Height 233mm
N.W.	8kg
Operating temperature range	-10°C to -55°C
Storage temperature range	0°C to -55°C
Enclosure rating	Working state: IP30

\* All technical features are tested at 25 °C

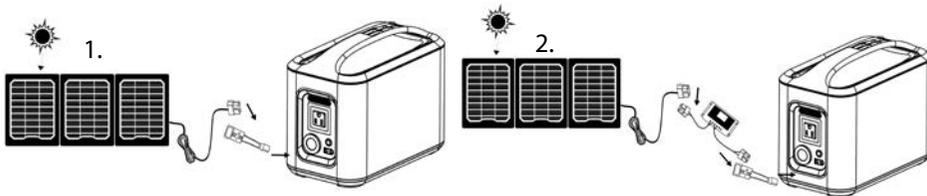
To charge the P750, a PV charge controller with an output of around 16.8V can be used. Alternatively, a compatible solar panel purchased from AMPTRON® can be connected directly.

## Charging methods

How to use a solar panel to charge?

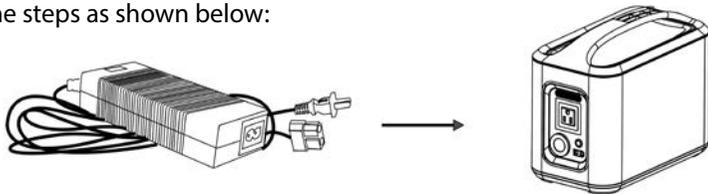
1. Using a compatible solar panel purchased from AMPTRON® (optional accessory), unfold the solar panel and face it towards the sun. Then connect the Anderson plug adapter cable to the input port on the P750, and the solar panel to the Anderson plug adapter.
2. Using a solar panel purchased from a third party, a solar charge controller with an output of about 16.8V should be connected. Alternatively, contact Amptron to check if your solar panel is compatible to be connected directly without a charge controller, or Amptron can provide you with a compatible solar charge controller. The maximum supported solar power is 500W. Place the solar panel and face it towards the sun, then connect the solar charge controller to your solar panel as well as the one side of the Anderson plug adapter, and connect the other end of the adapter to the input port on the P750. \* Please pay attention to the +/- poles.

**Note:** It is recommended to remove the solar panel or turn off the solar input once the battery is fully charged.



How to use the mains supply to charge?

Follow the steps as shown below:

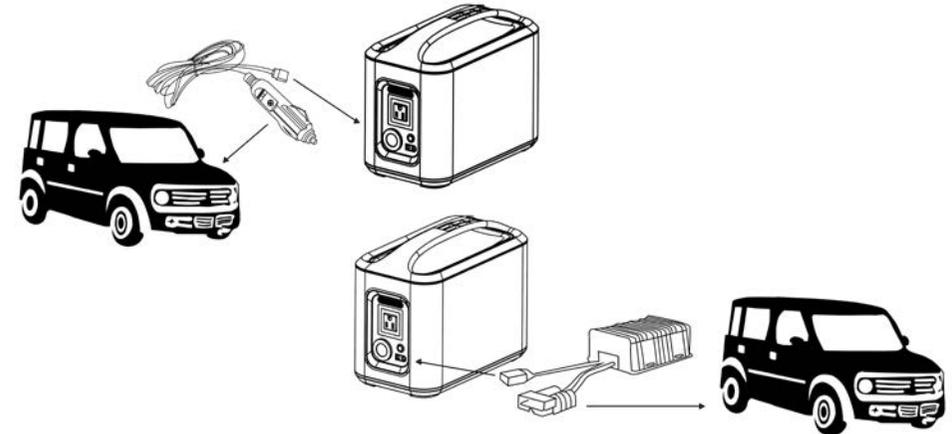


1. Plug the one end of the adapter into the charging port on the P750.
2. Plug the other end of the adapter plug into the mains supply socket to start charging.
3. It is recommended to remove the charging cable after the battery is fully charged.

**Do not** use a 3rd party adapter to charge this product.

How to use a motor vehicle to charge?

Follow the steps as shown below:



1. Using the car cig charging adapter, plug one end of the cable into the charging port on the P750. Plug the other end of the car cig charging cable into the car cigarette lighter socket, then run the vehicle to start charging.
2. Using the optional 15A Anderson plug DC-DC charger, plug the one end of the cable into the charging port on the P750. Plug the Anderson end of the cable into an Anderson plug in the vehicle, then run the vehicle to start charging.

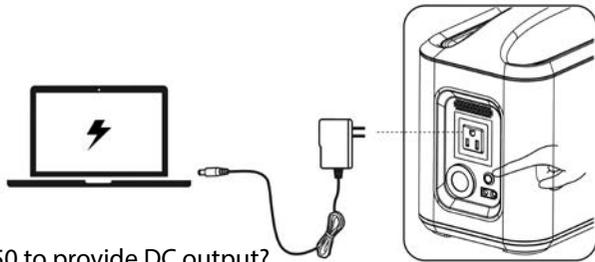
**Note:** It is recommended to install a voltage sensitive relay (VSR) to prevent the Anderson plug DC-DC adapter from draining the starter battery.

Estimated Charging Times	
Charging method	Estimated charging times
Mains supply charging (67W)	11 Hours
Car charging (50W)	15 Hours
60W solar panel	12-20 Hours
100W solar panel	7-13 Hours
500W solar panel	1.5-3 Hours
15A Anderson DC-DC charger (250W)	3 Hours

## Instructions

How to use P750 to provide AC output?

- Turn the P750 power switch on.
- Connect the AC load device into the 230V AC output interface. (The power load must not exceed 300W).
- Click the AC output switch to turn on the AC output. Electrical equipment connected to P750 can then be used as normal.
- Click the AC output switch again to turn the AC power off. It is recommended to keep the AC output power switched off when not in use, since there a small amount of power will be consumed while it is left on.
- Disconnect after use and turn off the main switch.

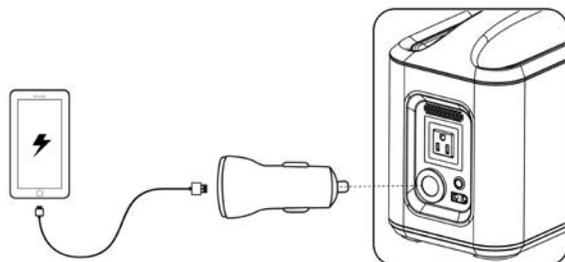


How to use P750 to provide DC output?

- Turn the P750 power switch on.
- Connect the DC load device to the corresponding DC output socket. (Please refer to the specifications table for the maximum loads allowed on each socket).
- Disconnect after use and turn the main power switch off.  
You can use both AC and DC at the same time, but the load should not exceed the upper output limits.

Cigar lighter output

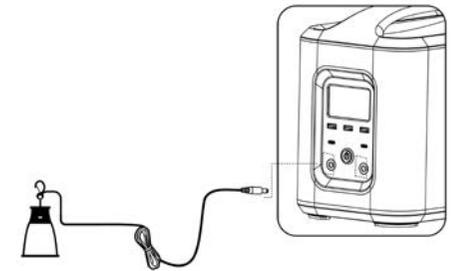
- Connect a cigarette lighter cable from the P750 to your device.
- The OUTPUT icon on the right side of the display will illuminate.



DC 12V output

The device has two DC 12V pin outputs.

Connect the DC 12V pin connector, such as an LED light, to one of the two outputs. Both DC outputs are the same. Both outputs can be used at the same time to provide additional power.

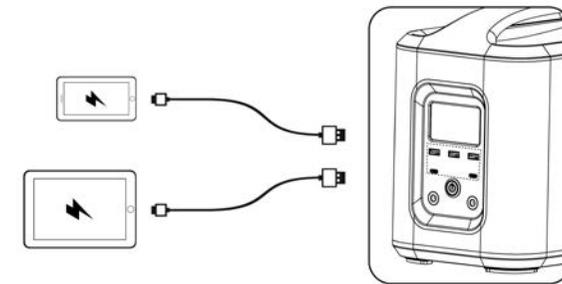


The OUTPUT icon on the right side of the display will illuminate.

USB 5V output

Connect one end of the USB cable to the USB output connector and the other end to the corresponding phone or digital device for charging. The P750 has three independent USB TYPE A outputs, each with an output current of 2A, plus 2 independent USB TYPE C outputs with 3.6V ~ 20V voltage, a maximum output current of 3A.

The OUTPUT icon on the right side of the display will illuminate.



## Estimated run times

<p>12V 3W lighting 230 hours +</p>	<p>UAV charge 10 times +</p>	<p>PSP console charge 90 times +</p>	<p>Digital camera charge 160 times +</p>	<p>Smart phone charge 70 times +</p>
<p>Tablet PC charge 17 times +</p>	<p>Laptop charge 8 times +</p>	<p>60W fan 20 hours +</p>	<p>TV 70 hours +</p>	<p>Mini Bar 15 hours +</p>

### BMS protection system (error code display)

Alarm Name	Code	Condition	Treatment Measures
Cell low voltage protection	E02	1. Cell lowest voltage <3050mV, LOC=0 2. Cell lowest voltage <2910mV	Disconnect load
Charge overcurrent protection	E03	Charge current >30A	Disconnect charger
Discharge overcurrent protection	E04	Discharge current >35A	Disconnect load
Short circuit protection	E05	Output side short circuit	Disconnect load, restart
Cell charge high temperature	E06	Cell charge temp. >62°C	Stop charging
Cell discharge high temperature	E07	Cell discharge temp. >62°C	Stop discharging
Cell charge low temperature	E08	Cell charge temp. <-15°C	Stop charging
Cell discharge low temperature	E09	Cell discharge temp. <-20°C	Stop discharging
MOS over temperature protection	E10	MOS temperature >110°C	Stop charge or discharge
Environment over temperature protection	E11	Environment temp. <-20°C or >65°C	Stop charge or discharge
Discharge FET failure	E12	Still output after discharge protection	Reset or return factory
Charge FET failure	E13	Still input after charge protection	Reset or return factory
Cell damage	E14	Cell voltage <100mV	Reset or return factory
NTC failure	E15	NTC not connected	Reset or return factory
Voltage collection failure	E16	Voltage collection not connected	Reset or return factory
The new alarm screen flashes 5 times	E17	New alarm appears	Reset or return factory

### Precautions

Read the following carefully before using this product. Improper operation of this product may damage the P750, and the devices connected. Always check the power and voltage input of any device prior to charging with the P750.

- Make sure you fully charge the P750 before using for the first time.
- Do not connect a DC charging source via the cigarette outlet to charge the P750.
- Charge using ONLY the charger that comes with the P750.
- During charging, never touch the metal inside the output socket.
- Do not connect the P750 AC output to any AC mains connection.
- Never immerse the P750 in water. When not in use, kept in a cool and dry environment.
- Never place a P750 near a fire, heater or in a high temperature environment when in use or stored.
- Do not knock or throw the P750.
- Do not use the P750 in a strong electrostatic or strong magnetic field. This will damage the P750 safety protection device.
- Do not open the product or remove parts from the P750.
- Due to the large output power of the P750, when connecting a device, a slight spark may occur. Therefore, do not use the P750 in a flammable or explosive gas environment.
- The P750 AC output is a standard 220V sine wave voltage. This can be potentially dangerous, and/or fatal if used incorrectly. Treat with caution to prevent electric shock when using.
- If the P750 is not going to be used for a long period of time, turn the power switch off. It is recommended to charge the P750 every 3 months to prevent aging of the internal battery.

## Fault Resolution

No.	Fault Status	Emergent Reasons	Cause Analysis / Solution
1	Cannot boot	Under voltage protection	Charge
		Load exception protection	Disconnect the load and charge
		Product damage	Repair
2	Charger not charging	Charge over current protection	Use a charger that complies with product specifications
		The charger is damaged	Replace the charger
		Charger is not working properly	Charger power supply error or connection abnormality
3	Solar panels cannot charge	Charge over current protection	Using solar panels that meet product specifications
		The charge current is too low	Insufficient sunlight
		Solar panels damaged	Replacement of solar panels
		Solar panel connection damaged	Replace or repair wire harness
4	No DC output	Battery under voltage protection	Charge
		Discharge over current protection	Equipment power draw is too high
		Over temperature protection	Check that the cooling fan is operational and unobstructed. Relocate to a cooler environment.
		Harness quality is poor, harness voltage drop.	Use better quality wiring harness
		Product damage	Repair
5	No AC output	Battery under voltage protection	Charge
		Discharge over current protection	Equipment power draw is too high
		Over temperature protection	Check that the cooling fan is operational and unobstructed. Relocate to a cooler environment.
		Product damage	Repair
6	Icon constantly On	Load exception	Disconnect the load
		Corresponding hardware failure	To replace the corresponding hardware
		The display is damaged	To replace the corresponding hardware
7	Icon Exception Off	Load exception	Disconnect the load
		Corresponding hardware failure	To replace the corresponding hardware
		The display is damaged	Repair

No.	Fault Status	Emergent Reasons	Cause Analysis / Solution
8	Display does not light up	The display is damaged	Repair

**Note:** If the above table does resolve the problem, please contact us.

### Environmental Conditions

- The product should only be used in a dry, clean and ventilated environment.
- Avoid exposure to direct sunlight, rain, moisture, dust, acid mist environments.
- Never use the P750 in a flammable or explosive gas environment due to the possibility of sparks!
- Ensure ambient temperature is in the range of -10°C to 55°C.
- Ensure air humidity is no more than 80% (25°C ± 5 °C).

### After-Sales Service

- **Warranty Cover:**  
Your P750 Portable Power Pack comes with a 2-year warranty, which starts from the date of purchase. If you lose your receipt, the 2-year warranty will be based on the battery code. Warranty covers failure due to defects in material or workmanship. Subject to any issues stated below AMPTRON® will repair or replace the P750 portable power pack and/or parts of the battery if components in question are defective in materials or workmanship.
- **Warranty Procedure:**  
The defective Portable Power Pack must be returned to our lab to determine the cause of the failure and if it is repairable. If it was damage caused by a manufacturers defect, it will be repaired or replaced at no cost to you.
- **Not Covered By Warranty:**  
Warranty will not honor defects caused by abuse/neglect or from items outside the manufacturers control. Please visit our website to see the full warranty breakdown: [www.amptron.com.au/warranty---p750-power-pack.html](http://www.amptron.com.au/warranty---p750-power-pack.html)
- **Disclaimer:**  
Customers must adhere to all AMPTRON® documentations and guidelines. The manufacture is not responsible for any expenses related to installation or removal, electrical system tests, battery charging, loss of time or other expenses which should be considered incidental damages, including all shipping charges after the first 30 days of warranty.

No returns or exchanges accepted. Our zero-return policy is effective at the time of purchase. As always, our commitment to excellent customer service is our top priority. Please contact us if you have further questions about our warranty and return policy.

**PLEASE NOTE**

Customers are responsible for all shipping fee's following the first 30 days of purchases.

