



Owner's Manual

B2 DPS100A

DEMO POWER SUPPLY 10V-16V



FEATURES

Uses AC power to power equipment that requires 10~16V DC power.

Converts standard 220~240V AC household power to an adjustable 10~16V DC power, and supplies up to 100 amps of continuous power.

Note: A normal vehicle's electrical system provides around 13.8 Volts when the engine is running.

Is a versatile piece of equipment that can be used in several applications such as retail audio displays, show cars, and test benches.

Features include:

- Adjustable regulated output voltage 10~16V
- Up to 100 amp output current
- Cooling fans
- Thermal overload shut off protection
- Current overload shut off protection
- Combo output connectors act as both binding posts and banana plug terminals
- Pulse charging to inhibit battery sulfation



IMPORTANT SAFETY INSTRUCTIONS

This manual contains important safety and operating instructions. To reduce the risk of fire, electric shock, and injury to person or equipment; carefully read the following before you use the power supply. Please read all cautionary markings on the product that you will connect to the power supply.

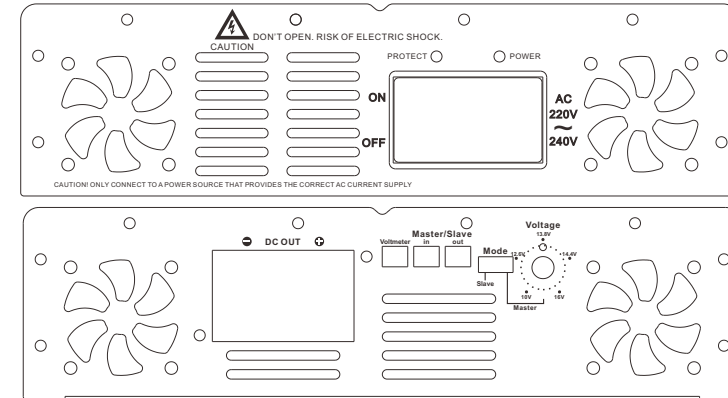
WARNINGS:

- This product is not recommended for outdoor use.
- Do not expose the power supply to excessive moisture.
- This product is not intended to be used as a stand alone battery charger. It is designed for the purpose of providing supplemental power when a DC power generator isn't available.
- Do not connect the a battery that is deeply discharged. The initial high level of current draw will force the power supply into current limit mode for prolonged periods. This type of use is harmful to the power supply.
- When used as a supplemental power supply will not damage connected batteries. When a connected battery reaches a fully charged state will decrease its output current to a safe level by degree.
- Should not be left connected to batteries for extended unattended periods of time. This could result in damage to the connected batteries.
- Make sure the power supply is securely mounted to avoid injury or damage to the unit.
- The power supply should be operated only from a standard AC outlet that provides 220V AC/50Hz, as indicated on the label.
- Do not overload AC power outlets to avoid danger of electric shock and fire. A minimum current of 20A will be required.
- Avoid using extension cords.
- The power plug is polarized for safety. Do not defeat the ground feature.
- Do not block or cover the power supply's cooling fan openings to avoid overheating.
- Unplug the power supply during lightning storms to avoid power surge damage.
- If your unit should require service or new parts contact the manufacturer. Do not attempt to service the unit.

CONNECTIONS

CAUTION: Make all connections before you connect the power supply to AC Power.

1. Turn off the device requiring power.
2. Set the Power Switch to off.



3. Set the correct output voltage for the device being connected.
4. Turn the sleeves of the red and black binding output posts counterclockwise to expose the wire hole.
5. Insert the device's positive wire into the red binding post wire hole, then tighten the binding post sleeve to secure the wire in place.
6. Insert the device's negative wire into the black binding post wire hole, then tighten the binding post sleeve to secure the wire in place.
7. If you are using a banana plug style connector, simply insert the plugs into the corresponding positive and negative terminal jacks.
To avoid risk of damage to both the power supply and the connected device:
 - Verify and follow the correct polarity when connecting the power supply to the device
 - Do not let the ends of the positive and negative wires touch each other
 - The binding post wire holes can accommodate up to 14 gauge wire
8. Connect the AC cord to a standard 220~240V AC outlet.
9. High voltage protection: When the output voltage exceed 17V DC, the power supply turn into protection, giving no output. The blue and red LED light on when.
10. Temperature controlled fans: The Power supply will give out different amount of heat when use in different level. The fans run at speeds accordingly to regulate temperature. The fans stay off when the surface temperature of the unit remain below 50°C. When the controlled circuit sense a temperature above 50°C, the fans start to turn at high speed to bring out hot air. When the surface temperature exceed 75°C, the thermal protection trigger, the fans will stop running, and the blue and red indicator will be lit. The DPS100 A will come out of protect mode once the heatsink surface temperature has dropped to 68°C.
11. Power supply linkable function:
 - A. the cable of connection
 - B. the master and slave switchThe output voltage of all linked power supply is universally controlled by the master unit.

OPERATION

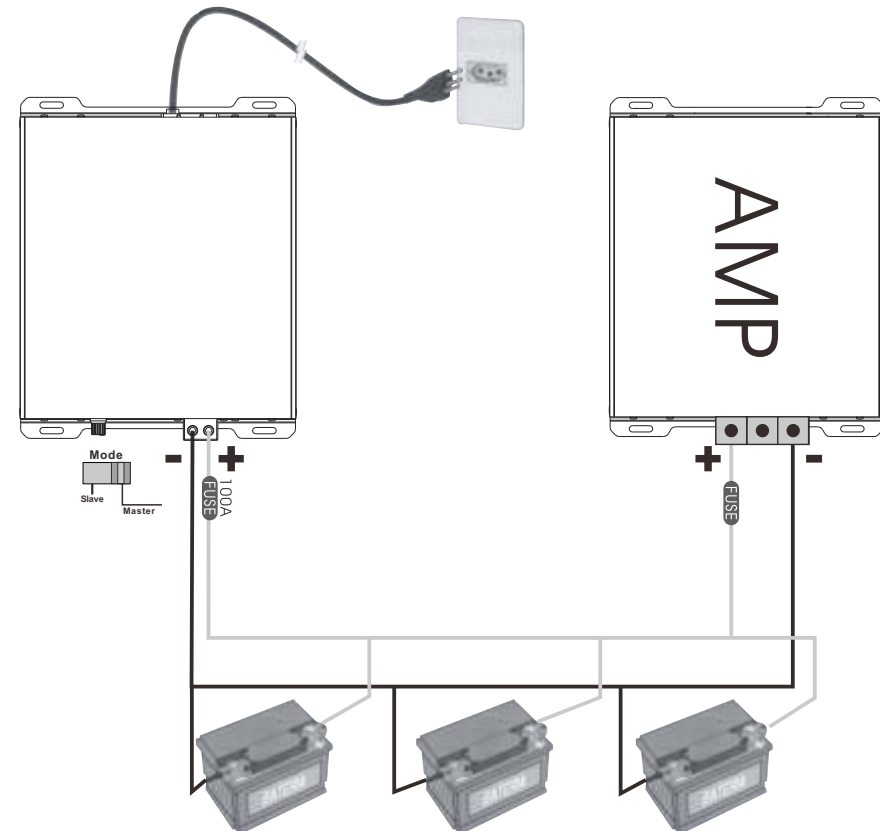
To use the after you have correctly connected a device to it, flip the power switch to the on position. The blue LED should illuminate indicating the unit is on.

If the blue LED does not illuminate check all connections. If all connections are good turn the unit off and confirm the wall AC outlet has power. If the outlet has power disconnect the power supply from the device then turn the power supply on again. If the power supply now operates normally verify the connected device does not require more than 100 amps of current which will cause the to go into protection.

Your power supply might cause TV or FM radio interference. To determine whether your power supply is causing interference, simply turn off your power supply. If the interference goes away, your power supply is causing it. Try moving your power supply away from the affected source.

Example: Using a single with multiple batteries

Fuse all connected devices as recommended by the manufacturer.



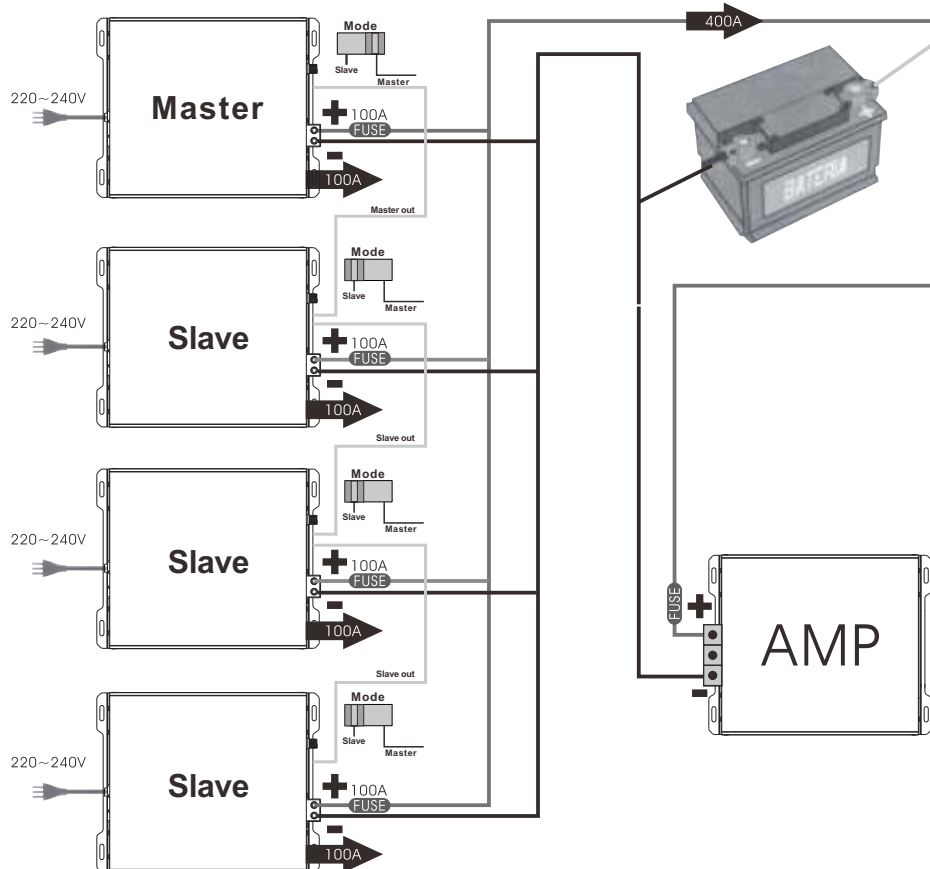
Notes:

1. In single unit application, master mode should be selected. In situation when slaved is wrongly selected, the output will give 17V DC, which will trigger high voltage protection. When this happens, slide the switch to master and restart the unit.
2. In multiple unit application, make sure all power supplies are properly linked by connecting cable. In order to work, there must be one unit selected as master output controlled unit.
3. Only the unit with Master selected is able to control the output.

Example: Using multiple parallel with multiple batteries

Fuse all connected devices as recommended by the manufacturer.

Up to four can be connected in parallel. When using in parallel configuration, adjust all connected units to the same output voltage. The maximum available current will be determined by the sum of the rated capacity of each in the circuit. In the example below the four parallel units will supply about 400A of current.



WARNING: Do not overload AC power outlets to avoid danger of electric shock and fire. A minimum current of 20A per will be required. Avoid connecting multiple power supplies to a single AC outlet using power strips.

SPECIFICATIONS

AC 220V-240V

Input Voltage	220V Ac±10%
Input Frequency.....	50Hz
Adjustable Output	10V-16V DC±0.5Volts
Output Current.....	100 Amps DC Continuous(Maximum)
Line Regulation	Less Than ±5%
Load Regulation	Less Than ±5%
Efficiency	More Than 85%
Overload Protection.....	FUSE 10A/250V(Input Voltage:220V)
Output Ripple.....	150 mV RMS
Design.....	Switching Type
Protection Temperature.....	75°C
Cooling Fan.....	(40*40*10MM)
Input Cable.....	UL 14 AWG
Power Switch.....	15A/250V AC
Dimensions (WHD).....	262.4x67x240mm

Specifications are typical; Individual units might vary. Specifications are subject to change and Improvement without notice.