



APS-100
APS-100X

Autosound Series Power Supply Owners Manual

Please read through this manual to familiarize yourself with your new power supply. Should your PowerBass AutoSound power supply ever require service, you will need to have the original dated receipt.



Thank you and Congratulations

Thank you for your decision to purchase a PowerBass USA Autosound power supply! Our Autosound power supplies are the result of extensive engineering, testing, and bullet proof construction.



APS-100 Power Supply

It is important that you closely follow the wiring instructions contained in this Owners Manual so that you get the most from your PowerBass AutoSound power supply.

Δ Caution Δ

High powered audio systems in a vehicle are capable of generating higher than "Live Concert" levels of sound pressure. Continued exposure to excessively high volume sound levels will cause hearing loss or damage. Also, operation of a motor vehicle while listening to audio equipment at high volume levels may impair your ability to hear external sounds such as horns, warning signals, or emergency vehicles—thus creating a potential traffic hazard. In the interest of safety, PowerBass USA highly recommends listening at lower volume levels when driving.

TECHNICAL FEATURES

The APS-100 uses AC power to power equipment that requires 10~16V DC power.

The APS-100 converts standard 110~130V AC household power to an adjustable 10~16V DC power, and supplies up to 100 amps of continuous power.

The APS-100X converts standard 220~240V AC household power to an adjustable 10~16V DC power, and supplies up to 100 amps of continuous power.

The APS-100 is a versatile piece of equipment that can be used in several applications such as retail audio displays, show cars, and test benches.

- 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
- Remote mount LCD Voltage Display
- Link up to 4 units for up to 400 amps of current



IMPORTANT SAFETY INSTRUCTIONS

This manual contains important safety and operating instructions for the APS-100. 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 both the APS-100 and on the product that you will connect to the power supply.

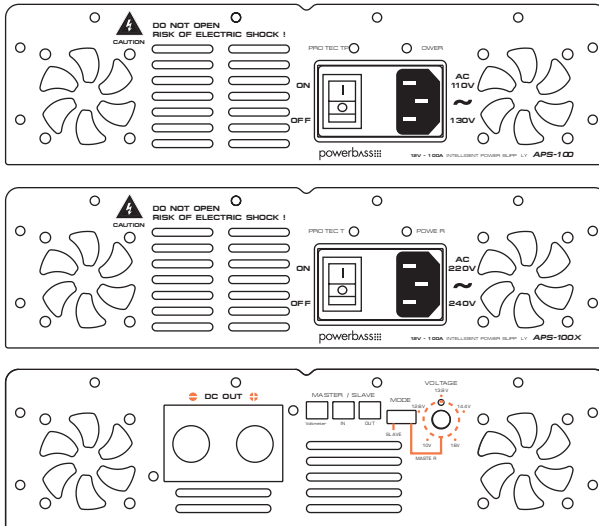
WARNINGS

- 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 APS-100 to 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, the APS-100 will not damage connected batteries. When a connected battery reaches a fully charged state, the APS-100 will decrease its output current to a safe level by degree.
- 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 120V AC/60Hz (220V AC/50Hz APS-100x), 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 APS-100 Power Switch to off.



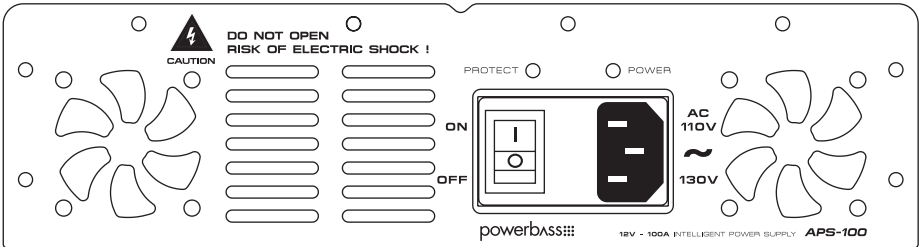
3. Set the APS-100 correct output voltage for the device being connected.
4. Turn the sleeves of the + and - binding output posts counterclockwise to expose the wire hole.
5. Insert the device's positive wire into the + binding post wire hole, then tighten the binding post sleeve to secure the wire in place.
6. Insert the device's negative wire into the - 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 0 gauge wire
8. Connect the APS-100 AC cord to a standard 110~130V AC (220~240V AC APS-100X) outlet.
9. Connect the supplied LED voltage display panel to the port labeled Volt Meter.
10. Master and Slave ports are only used when connecting multiple power supplies together. See page 8 for more details.

OPERATION

To use the APS-100 after you have correctly connected a device to it, flip the power switch to the on position. The LED should illuminate indicating the unit is on.

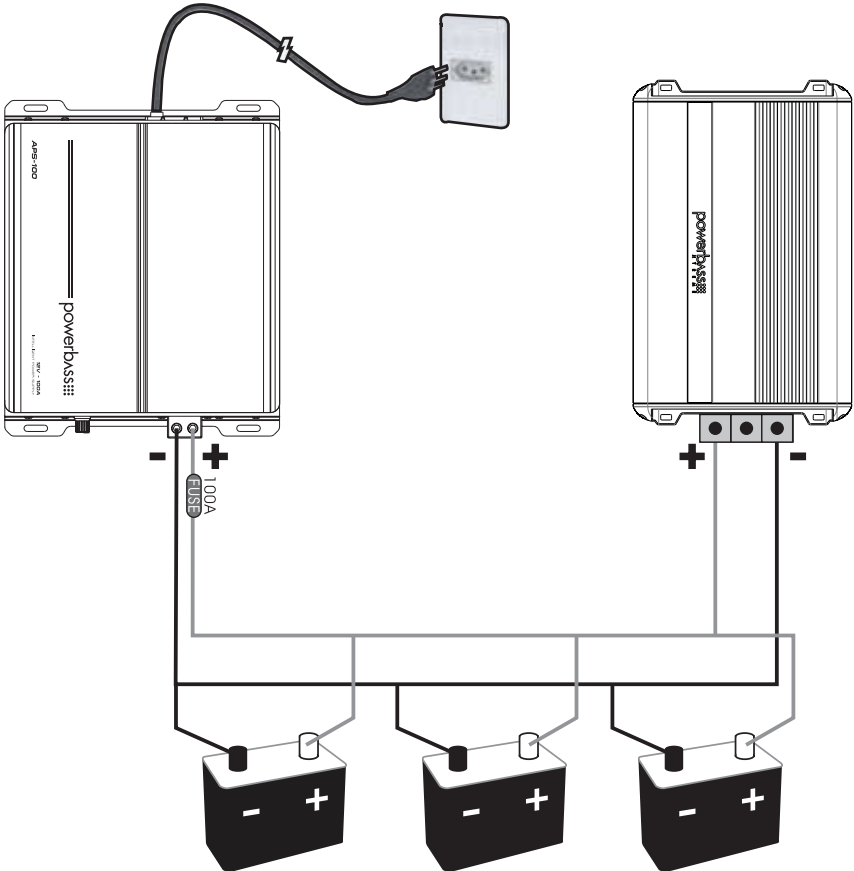
If the LED does not illuminate check all connections. If all connections are good turn the unit off and confirm the wall AC outlet has power. If the outlet has power disconnect the power supply from the device then turn the power supply on again. If the power supply now operates normally verify the connected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



WIRING EXAMPLE - SINGLE APS-100, MULTIPLE BATTERIES

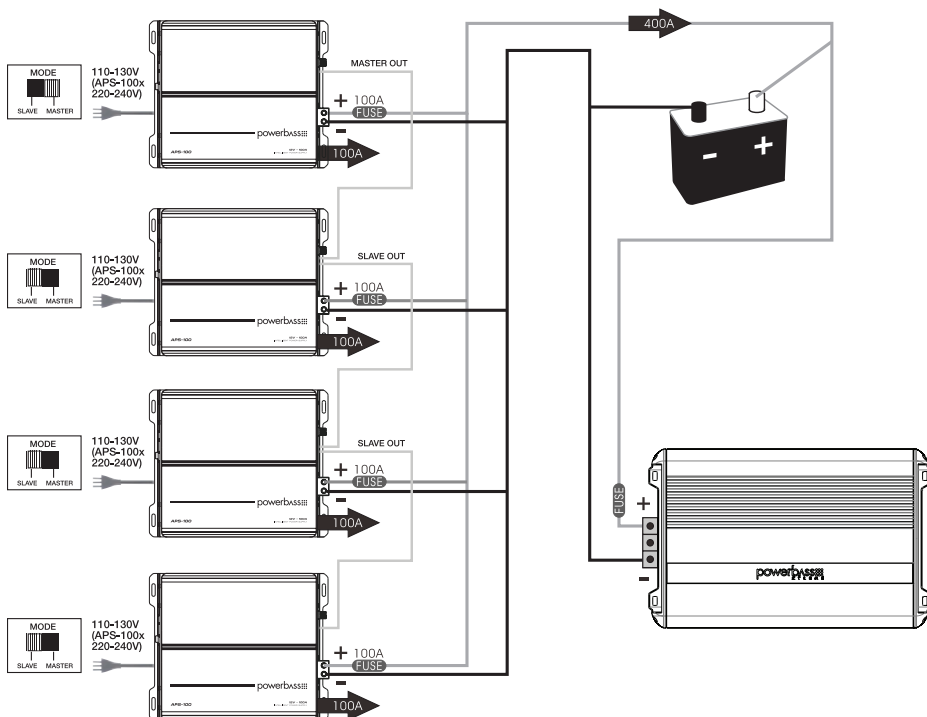
Fuse all connected devices as recommended by the manufacturer.



WIRING EXAMPLE - MULTIPLE APS-100 in PARALLEL MULTIPLE BATTERIES

Up to four APS-100 can be connected in parallel. The maximum available current will be determined by the sum of the rated capacity of each APS-100 in the circuit. In the example below the four parallel units of APS-100 will supply about 400A of current.

NOTE: Voltage adjustment is controlled only by the master power supply in this configuration.



WARNING: Do not overload AC power outlets to avoid danger of electric shock and fire. A minimum current of 20A per APS-100 will be required. Avoid connecting multiple power supplies to a single AC outlet using power strips.

APS-100 SPECIFICATIONS

AC 110V-130V

Input Voltage: 120V AC \pm 10%

Input Frequency: 60Hz

Adjustable Output: 10V-16V DC \pm 0.5Volts

Output Current: 100 Amps DC Continuous (Maximum)

Line Regulation: Less Than \pm 5%

Load Regulation: Less Than \pm 5%

Efficiency: More Than 85%

Overload Protection: FUSE 20A / 250V (Input Voltage:120V)

Output Ripple: 150 mV RMS

Design: Switching Type

Protection Temperature: 75°C

Cooling Fan: 4PCS (40 x 40 x 10mm)

Input Cable: SVT 14 AWG - 0 AWG

Power Switch: 15A / 250V AC

Dimensions (WHD): 262.4 x 67 x 240mm

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

APS-100x SPECIFICATIONS

AC 220V-240V

Input Voltage: 220V AC \pm 10%

Input Frequency: 50Hz

Adjustable Output: 10V-16V DC \pm 0.5Volts

Output Current: 100 Amps DC Continuous(Maximum)

Line Regulation: Less Than \pm 5%

Load Regulation: Less Than \pm 5%

Efficiency: More Than 85%

Overload Protection: FUSE 10A/250V (Input Voltage: 220V)

Output Ripple: 150mV RMS

Design: Switching Type

Protection Temperature: 75°C

Cooling Fan: 4PCS (40 x 40 x 10mm)

Input Cable: UL 14 AWG - 0 AWG

Power Switch: 10A / 250V AC

Dimensions (WHD): 262.4 x 67 x 240mm

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

POWERBASS AUTOSOUND LIMITED WARRANTY POLICY

PowerBass USA, Inc. offers limited warranty on PowerBass products under normal use on the following terms:

PowerBass Autosound Power Supplies are to be free of defects in material and workmanship for a period of one (1) year.

This warranty applies only to PowerBass products sold to consumers by Authorized PowerBass Dealers in the United States of America. Products purchased by consumers from a PowerBass dealer in another country are covered only by that country's Distributor and not by PowerBass USA.

This warranty covers only the original purchaser of PowerBass product. In order to receive service, the purchaser must provide PowerBass with the receipt stating the consumer name, dealer, product and date of purchase.

Products found to be defective during the warranty period will be repaired or replaced (with a product deemed to be equivalent) at PowerBass's discretion and will not be liable for incidental or consequential damages. PowerBass will not warranty this product under the following situations:

- **Amplifiers received with apparent rust or corrosion**
- **Any evidence of liquid damage or exposure to excessive heat**
- **Attempted repairs or alterations of any nature**
- **Product that has not been installed according to this owners manual**

Any implied warranties including warranties of fitness for use and merchantability are limited in duration to the period of the express warranty set forth above. Some states do not allow limitations on the length of an implied warranty, so this limitation may not apply. No person is authorized to assume for PowerBass any other liability in connection with the sale of this product.

Please call (909) 923-3868 for PowerBass Customer Service. You must obtain an RA# (Return Authorization Number) to return any product to PowerBass. **The RA number must be prominently marked on the outside of the shipping carton or the delivery will be refused.** Please pack your return carefully; we are not responsible for items damaged in shipping. Return the defective product along with a copy of the original dated retail sales receipt, plus \$12.00 for handling and diagnostic evaluation to:

**PowerBass USA, Inc., Attn: Returns (RA# _____)
2133 S. Green Privado Ontario, CA 91761**

Residents of HI, AK and US territories will be charged for return shipping. All inquires regarding service and warranty should be sent to the above address.

Removed or altered serial numbers will void this warranty



PowerBass Autosound – A division of PowerBass USA, Inc.

2133 S. Green Privado – Ontario, CA 917161

Tel. (909) 923-3868 – Fax (909) 923-8048

www.powerbassusa.com