



Owner's Manual For The
PowerBloc⁵
High Current
Five Channel Amplifier



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Thank you for selecting a Legacy Electronics product. This hand-crafted instrument will provide you with many years of listening enjoyment. Please take a few moments to read this brief manual to insure maximum benefit from your electronic system.

Limited Five Year Warranty

Legacy Audio extends to the original owner coverage of defects in materials and workmanship for a period of five years from date of purchase.

This warranty does not include a) damage in shipment, b) damage caused by accidental or intentional misuse or abuse, c) units not registered with Legacy Audio, d) damage resulting from unauthorized modifications or repairs. Liability is limited to the repair or replacement, at our option, of any defective component and shall not include damage due to short circuits, property and/or consequential damages which may result from the failure of this product.

Customer Record

Model No. _____

Serial No. _____

Date of Purchase ____ / ____ / ____

Owner _____

Street Address _____

City _____ State ____ Zip ____

Designer's Note from Bill Dudleston

- PowerBloc5 is a carefully engineered state-of-the-art amplifier. The modular design allows for great flexibility.
- Each of PowerBloc5's channels are separate discrete circuits. The only circuit they share is the main power supply.
- The use of AC and DC coupled inputs allows purity of signal. Purists will be glad to know that only the DC coupling has a DC blocking capacitor.
- The PowerBloc5 is the perfect home theater amplifier. Whether you use the PowerBloc5 for your 5.1 system or if you use the amplifier for surround channels in a 6.1 or 7.1 systems you'll appreciate its 200 watt per channel capacity.

The Legacy PowerBloc5 is designed with the same level of thoroughness usually reserved for the finest amplifier gain stages. Differential voltage gain throughout provides exceptional rejection of external noise and contributes to the inherent DC stability of the circuit. This allows direct coupling without servo circuitry. The unit also uses output followers operating without feedback.

The front end is designed to provide a slew rate of 50 V/ μ s. This combined with excellent high frequency design insures linear operation at high speed. The supply takes a very direct approach to high performance. A single top quality 1700 VA toroidal transformer and about 40,000 μ F of total capacitance with very low ESR and inductance is used.

The current stage is capable of producing peak currents in excess of 50 peak Amperes with a degree of linearity and speed which is not matched by other designs when producing only a fraction of this current. This is achieved by the implementation of several distinct circuit features.

The PowerBloc5 employs 5 modular amplifiers. Each channel uses 10 hand-matched individual bipolar output transistors with a combined power rating of 2000 watts and 75 Amperes per channel with a bandwidth of 10 MHz.

AC (or cap coupled) inputs along with DC inputs are provided. Cap coupling provides isolation from unwanted DC signals from source equipment such as some DACs and tube preamps. DC inputs allow passage of very low sub bass signals necessary for proper surround sound applications.

Rear Panel Connections

The PowerBloc5 has 3 types of connectors on the back panel, one IEC male power receptacle, 10 RCA style connectors, 5 1/8" City Lights connectors and 5 pair of 5 way binding posts..

A. RCA

There are 2 RCA's per channel. They are labeled "AC coupled" and "DC coupled". We recommend using the DC coupling to prevent DC offset voltages from damaging the unit. However, if you prefer to use the AC coupling and know that your preamplifier is AC you may achieve a small improvement in sound quality. *(If your unit is damaged due to DC offset voltage you may be responsible for some or all of the repair costs)*

B. City Lights

The City Lights connectors provide power for lights only on speakers featuring City Lights. These connectors provide 80 volts @ .25 ma of current. If you choose to add light please make certain that your devices will not draw more than this. (HINT: most LEDs will work with appropriate resistor.)

C. Binding Posts

The 5 way binding posts allow easy connection of your speakers. The preferred method of connection is using dual banana plugs. These may be purchased through various electronics retailers or directly from Legacy.



Powering Up

Power Cable

The supplied power cable will plug into a socket on the back terminal plate of the unit. The unit has a small white plate that indicates the voltage it is set to. If your unit's voltage does not match your home's voltage contact Legacy about setting the unit for proper voltage.

Power Switch

The power switch is on the front of the unit. Once the unit is powered up, 5 LEDs should light up, indicating the unit is ready for operation. Once the unit is turned off, it is not uncommon for the LEDs to remain lit for a short period while the power supply discharges.

Powering Up Sequence

Recommended power up sequence is source followed by preamp/processor, then your amplifier. Powering down should be done in reverse order.

Care

If you wish to clean your PowerBloc5, use a diluted ammonia based window cleaner. Do not use any abrasive cleaners or chemical solvents. Take care not to damage the aluminum faceplate, since aluminum is a medium hardness metal and can be scratched by the careless use of tools during the installation.

The PowerBloc5 may overheat and the finish may fade if exposed to direct sunlight or intense heat sources for prolonged periods.

Save your box and packing material; they may be necessary for moving or shipping the unit for servicing by the factory.

Specifications

Bandwidth: CD to -3dB @ 100kHz

Distortion: < .05% (actual type .025)

Gain: 26dB

Power Supply: 1.700VA toroidal transformer
40,000 μ F of capacitance

Noise: More than 100dB referenced to rated output.

Input Impedance: 50k Ohms unbalanced

Output Impedance: 0.08 ohms from 20Hz to 20kHz

Slew Rate: 50 Volts/microseconds

Rated Power:

250 Watts/channel, 20Hz to 20kHz., all channels driven into 8 ohms.

300 Watts/channel, 20Hz to 20kHz., all channels driven into 4 ohms.

Dimensions:

Faceplate: 17"W x 5 1/2" H

Chassis: 16 3/4"W x 6" H x 14" D

Weight: 58 pounds

Current Capability: 50 Amperes peak per channel