

Statement 450

Monoblock Power Amplifier

Conceived as a cost-no-object tour de force, even we were unprepared for the astounding leap in sound quality that comes from these two-chassis monoblocks. The sheer quantity of detail, drive, space and emotion revealed in familiar recordings is nothing short of shocking. It is the result of VAC's "first principles" creativity and insights, which conceived a unique three-dimensional architecture for both the electrical and mechanical designs, aided by VAC's Very High Speed Parallel (VHSP) technique. These finely crafted 450-watt instruments are nothing less than the redefinition of world-class.

Features

Mechanical Design:

The overall architecture of the amplifier chassis minimizes the presentation of external vibration. The internal parts are the finest kind, specifically chosen for sound and reliability. We start with 0.25" aircraft aluminum for a rigid basis, and tailor the mounting points and couplings for the desired result. Custom machined feet provide a slight, controlled decoupling of the power supply from the external environment, while the audio chassis connects via a tripod of custom designed stainless steel cups and balls, controlling of the flow of vertical energy inputs and dissipating lateral energy inputs. The chassis is finished in a metallic base coat/clear coat finish. The sculptured faceplates must have been made from a solid block of aluminum — they are 3/8 inch thick with the edges chamfered to about 1/4 inch. Finished in silky gold-speckled black, the faceplates are an almost artistic likeness of the VAC's sound quality. To guarantee quality, all chassis parts and lacquering are done in-house.

Electrical Design:

The hand-wiring approach presented in the Statement 450 far exceeds conventional hand wiring and previous three dimensional techniques. Careful architecture and orientation of parts in 3D allows passive control of radiated fields to an unprecedented degree for an audio amplifier. Special consideration of the ways in which they interact with the chassis, sensitive circuit points, and each other increases purity and resolution. Between the two chassis, 105 lbs. of custom magnetic transformers contribute to the corresponding optimal mass loading. The Statement 450 features a direct-coupled input and driver circuit, extremely fast and vivid sound is achieved from both single-ended and balanced sources

VAC's Very High Speed Parallel (VHSP) :

This technique uses fast, lithe devices in an analogue parallel processing configuration that allows the speed and control required to preserve delicacy and natural sound.



Download individual images from the VAC Media Room.

The Very Low Impedance Driver (VLID) :

This circuit gains much greater control over the transfer function achieved in the output stage, improving linearity and increasing headroom. There is palpably more control, greater subjective power per watt, and increased detail.

Power Supply:

The external power supply also uses custom transformers, wound in the USA; there are no lightweight off-the-shelf magnetics here. The three massive transformers, which power seven separate basic supplies, are isolation mounted in a separate shielded segment of the power supply chassis and potted in place with a special material to ensure low mechanical noise and vibration.



Valve Amplification Company

1911 East Avenue North
Sarasota, FL 34234
Telephone (941) 952 9695
Fax (941) 952 9691
vac-amps.com

Specifications

**Specifications subject to change without notice.*

STATEMENT 450	
WATTAGE	450
GAIN	39 dB, SE 33 dB, balanced
FREQUENCY RESPONSE	4 Hz to 75 kHz
POWER BANDWIDTH	20 Hz to 70 kHz
INPUTS	Single-ended input via RCA jack, non-inverting Balanced input via XLR jack, non-inverting relative to pin 2 ("pin 2 hot", traditional EIA/RCA broadcast/recording standard); amp is fully balanced in this mode
OUTPUTS	Connections to precisely match loudspeaker loads of 2, 4, and 8 ohms
TUBES	8x KT88 5x 6SN7
RESIDUAL NOISE	Typically 700 microvolts at the speaker terminals
VOLTAGE	May be factory-configured for operation at 100, 120, 220, or 230/240 volts
POWER CORD	Detachable power cord, standard IEC power receptacle
12-VOLT TRIGGER	included
ILLUMINATION	Illuminated logo may be switched off
FINISH	Hand-rubbed gold-flake gloss black lacquer with chrome knobs standard. Hand-rubbed metallic gloss silver lacquer with chrome knobs special order with additional cost.
WARRANTY	Two years parts and labor, excluding tubes (USA). See manual for full details.
DIMENSIONS (H X W X D)	Audio chassis (not including connectors): 9.75 x 17.8 x 18.25 in. (24.8 x 45.2 x 46.4 cm.) Power supply (not including connectors): 5.5 x 17.8 x 18.25 in. (14 x 45.2 x 46.4 cm.)
SHIPPING WEIGHT	Audio chassis: 128 lbs. (58.2 kg.) Power supply: 80 lbs. (36.4 kg.)



Download individual images
from the VAC Media Room.



Valve Amplification Company

1911 East Avenue North
Sarasota, FL 34234
Telephone (941) 952 9695
Fax (941) 952 9691
vac-amps.com