

ADS

Power Plate 100

USA

POWER PLATE 100

THE ULTIMATE POWER PLANT FOR YOUR AUTOMOTIVE HI-FI SPEAKERS

When ADS introduced its Model 2001 — a high powered (160 Watts) amplified mini speaker system — in 1975, it made audio history. The 2001, the world's first genuine automotive Hi Fi, contained two major innovations: the first high quality miniature speaker ever manufactured, and the first Hi Fi power bi-amplifiers to utilize a digital switching power supply. It was a perfect match.

Today, through our leadership and experience in automotive audio, ADS proudly introduces the POWER PLATE 100. We believe it to be the first truly PERFECTED and SEPARATE automotive power amplifier designed for a broad range of applications with *any* high quality loudspeaker in a car.

Powerful and Clean.

Power Plate 100 can deliver 100 Watts continuously (50 Watts per channel) into real 4 Ohm loudspeaker loads. This is not a trivial statement, as many of today's amplifiers are designed to work with minimal distortion only when they drive load resistors in the laboratory. They often fail to deliver their rated power to a reactive speaker load. Since ADS designs and manufactures both speakers *and* amplifiers and fully understands their interaction, we have solved this problem. Also, Power

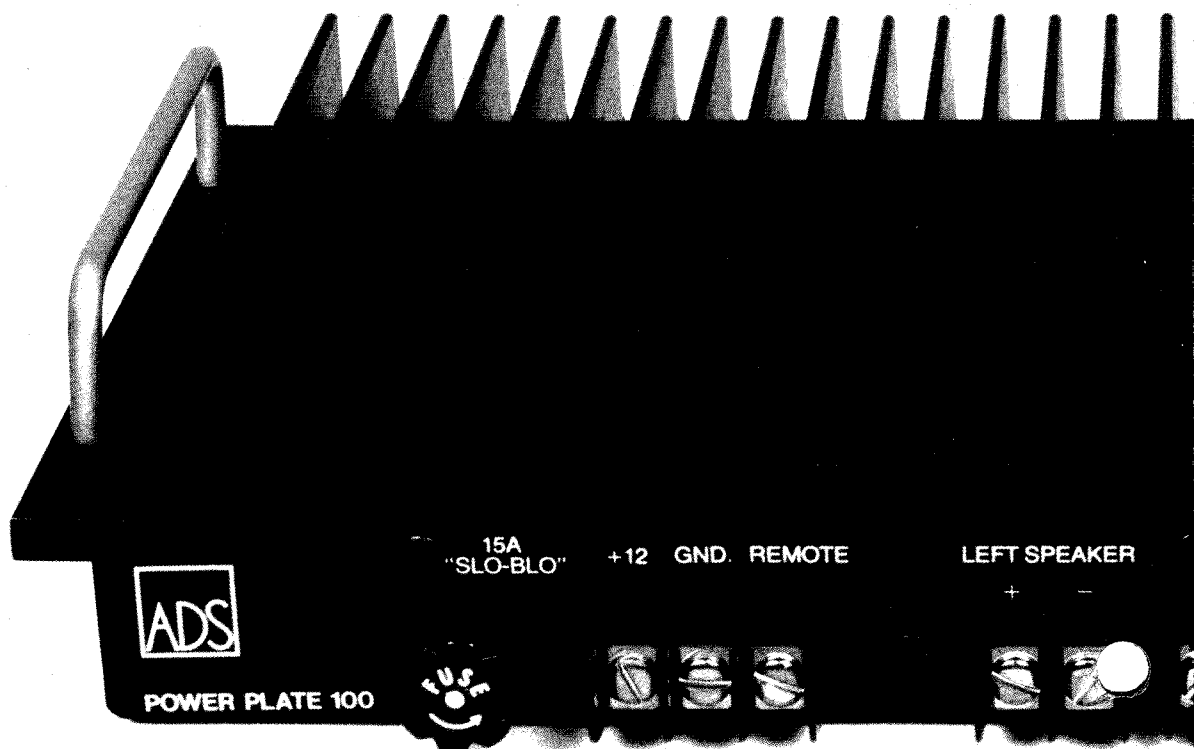
Plate 100, a class AB design, has no more than 0.08% total distortion at any power level and frequency. In fact, distortion and noise combined are typically less than 0.02% at most frequencies at full power output.

Reliable State of the Art.

Over 2400 cm² of heat sink area and high current semi-conductor devices make the Power Plate 100 operate safely under all load and temperature conditions in a car. The amplifier system is protected against reversed line voltage polarity, short circuit, overload, and overheat. It even has built-in speaker protection! It is powered by an efficient 250 Watt digital switching power supply which can be activated remotely by a low level trigger signal. Its amplifiers use complementary circuitry and all its protection circuits are designed to never interfere with the music.

Unique Slim line Design.

Its flat package is less than 2" thick. With this highly functional shape, the powerful amplifier fits into many locations in a car where others do not (under front and rear seats, under the rear deck, under the spare tire, etc.). When installed in the trunk against the fire wall, the slim Power Plate design does not reduce trunk space



appreciably. Power Plate's unique shape does more — the amplifier stays cool under all operating conditions because of its large heat sink area. On the inside, maximum serviceable space is available to the circuitry.

An Honest Performer.

It will deliver its 100 Watts continuously and meet the FTC and IHF home component standards for its claimed performance. It will deliver 100 Watts continuously with a realistic supply voltage of 13.5 Vdc as commonly available in cars and will still deliver 80 Watts (0.5 dB less) from a straight 12 Vdc line.

Easy to Interface.

The unit may be directly connected to the speaker outputs of most car radios. For highest performance, however, Power Plate 100 has a *built-in pre-amplifier*, allowing by-pass of the often inferior power-amp of car radios. It also can be interfaced directly to the new generation of high quality car tuner/pre-amplifier/cassette players. The Power Plate 100 pre-amp has a built-in gain control covering the range from 200 mV to 600 mV and a built-in turn-on noise suppressor which greatly reduces transient noise caused by many car radios.

Gets the Most from Your Speakers.

In automobiles, bass frequencies are harder to generate with loudspeakers than in large rooms. Power Plate 100 has a *built-in equalizer* that gets the most sound from your speakers. The three available contours are optimized for three different types of speakers —

Eq "flat" — This mode is ideal for infinite baffle (open or quasi open) speakers (such as the ADS 300i).

Slope 'A' — Optimizes larger mini's (such as the ADS 300C) and extends their bass response even further.

Slope 'B' — gets the best and safest overall performance from the smallest 'mini's' (such as the ADS 200C)

A Valuable Investment.

Considering its high power output into real loudspeakers, combined with bass equalization, multiple protection, and large heat sink area, the Power Plate 100 represents an excellent value. In addition, the integral preamplifier with its two sets of sensitivity ranges (high and low) and its practical shape makes the Power Plate 100 a logical choice. If you are looking for clean sound in your car at higher playing levels, the Power Plate 100 is a natural. It is an electrically and musically sound design, which optimizes the performance of your speakers.



Power Plate 100 — Specifications

POWER AMPLIFIER:

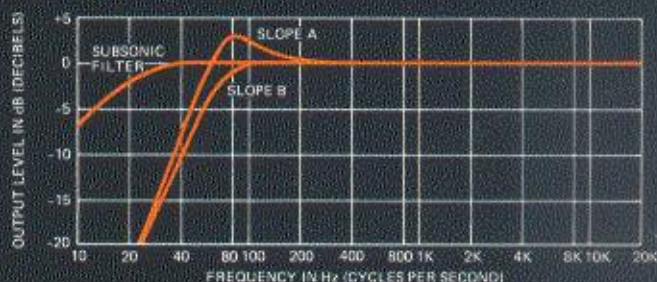
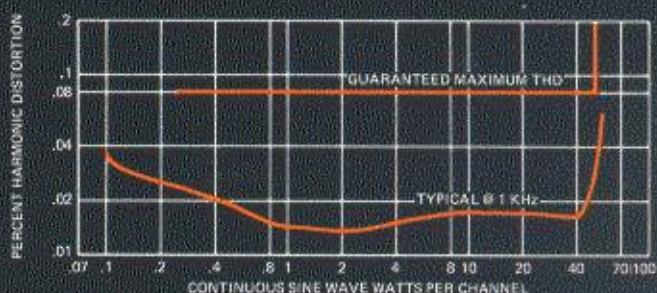
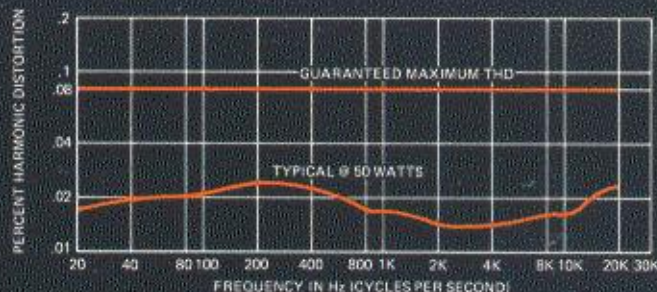
Continuous Power Output:	50 Watts per channel, min. RMS, both channels driven, into 4 Ohms, from 20 to 20,000 Hz with no more than 0.08% total harmonic distortion.
Dynamic Headroom:	1 dB
Output at Clipping, 1 KHz:	65 Watts
Harmonic Distortion:	0.08% rated, 0.02% typical
SMPTI Intermodulation Distortion:	Less than 0.08% rated output, less than 0.05% at 1 Watt output.
Power Bandwidth:	10 Hz to 28 KHz
Frequency Response:	30-20,000 Hz ± 0.5 dB
Signal/Noise Ratio:	90 dB or better, A-weighted, referenced to rated power.
Input Impedance:	Low Level — 50 K Ohms; High Level — 78 Ohms
Input Sensitivity:	Low Level — 0.2 — 0.6V RMS; High Level — 1 — 3V RMS
Damping Factor for 4 Ohm Load:	Greater than 50 at 1000 Hz and 50 Hz

SPECIAL FEATURES:

- Built-in equalizers (see bottom graph).
- Built-in subsonic filter.
- Built-in amplifier protection against: reversed line polarity, short circuit, overload and overheat.
- Speaker protection: built-in, electronic.
- Remote turn-on.
- Slim line design for easy mounting (1-15/16"H)

GENERAL:

Power Requirements:	13.5 Vdc, negative ground
Minimum current:	2 amps
Average current:	7 amps (playing music very loud)
Maximum current:	30 amps
Dimensions:	1-15/16" (H) x 12-1/4" (W) x 6-1/4" (D)
Weight:	Approx. 5.25 lbs.
Options:	Bolt on handles will extend height to 2-1/4"
Finish and Color:	Flat black satin finish



Who is ADS?

Analog & Digital Systems is an expanding young high technology American company with roots in European craftsmanship and esthetic sensitivity. We are dedicated to innovation and leadership (as in the famous miniature full-range ADS speakers for car and home), but not to technological novelty for its own sake. At ADS, advanced technology is always at the service of musicality, and is always firmly grounded in the sciences of physics, chemistry and acoustics.

Therefore, it is not by accident that ADS products consistently receive superb reviews and coveted awards. The Power Plate 100 is no exception: It was selected by a distinguished panel of judges as "one of the most innovative consumer electronics products of 1979" and displayed at the "Design and Engineering" exhibition of the annual Consumer Electronics Show in Chicago.

The Power Plate 100 is just another example of ADS' engineering excellence in pursuit of better music reproduction.



Where technology serves music

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