

If the quality of ADS speakers had to be traced to a single source, it would be the precision engineering applied to the evolved concept of the acoustic suspension speaker. Not many companies design and produce their own drivers and crossovers the way we do. And that's where quality begins.

The Tweeter.

One great component the ADS 500 shares with our studio speakers is the unsurpassed 1" diameter soft-dome tweeter. It gives the 500 its unprecedented open clarity, super-wide dispersion, and silky smooth high-frequency response.

We don't know of another tweeter that works so accurately and efficiently as our 1" unit. That's because a magnetic flux of 360,000 nW controls a dome weighing a mere 0.2 grams, including the voice coil. By giving our tissue dome its own sealed acoustic chamber and by damping resonances with a unique sticky fluid, we have eliminated distorting break-up and coloration so common to paper cone, plastic, or metal dome tweeters.

Our tweeter is able to handle transients and musical details so faithfully that it's truly an ear-opening experience. And, in spite of its light weight, this dome can tolerate substantial amounts of power. The metal voice coil stays cool in the very narrow magnet gap by radiating excess heat into a massive 1.2 lb. magnet.

The Woofer.

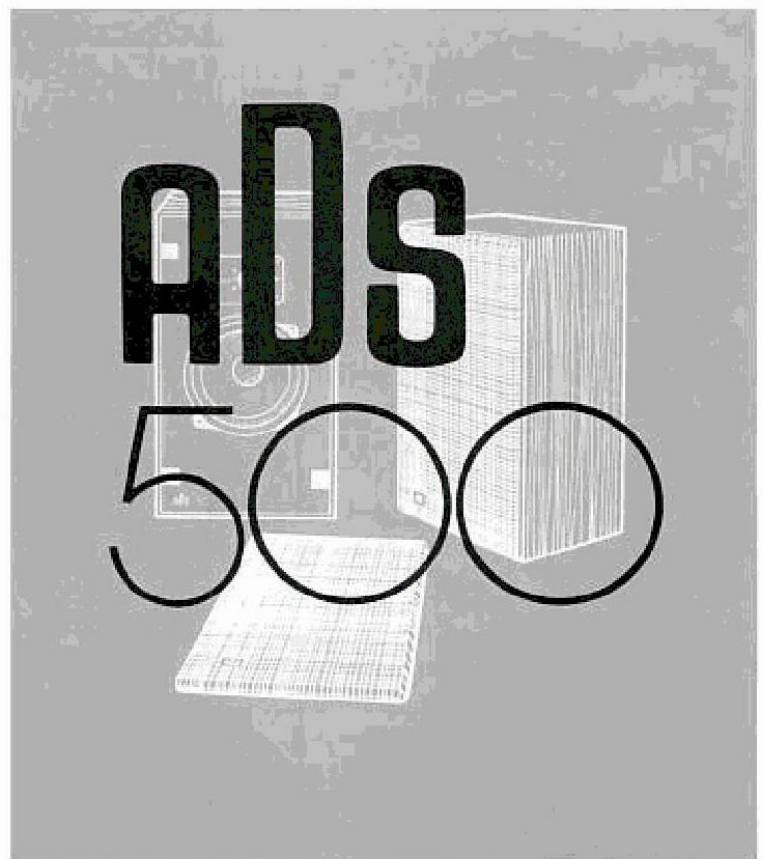
Truly good two-way systems are difficult to design, because the woofer and tweeter have to cover a wide range of frequencies. The ADS 500 is a truly good two-way system.

The woofer of the ADS 500 covers a large portion of the midrange: up to 1,500 Hz. Because the human ear is extremely sensitive to distortion and coloration at these frequencies, we developed an unique woofer cone material that's stiff to move air for good bass, yet is soft and self-damping at high frequencies to prevent break-up and coloration. Also, this material is light enough to handle musical transients quickly and cleanly. The woofer cone is then set into a soft suspension for efficient and accurate motion.

We don't think you should require a super amplifier to drive this speaker to high levels, so we built the needed magnetic strength into our drivers. Even a fairly low power receiver provides concert hall sound pressure in a typical livingroom with a pair of ADS 500's.

The Crossover.

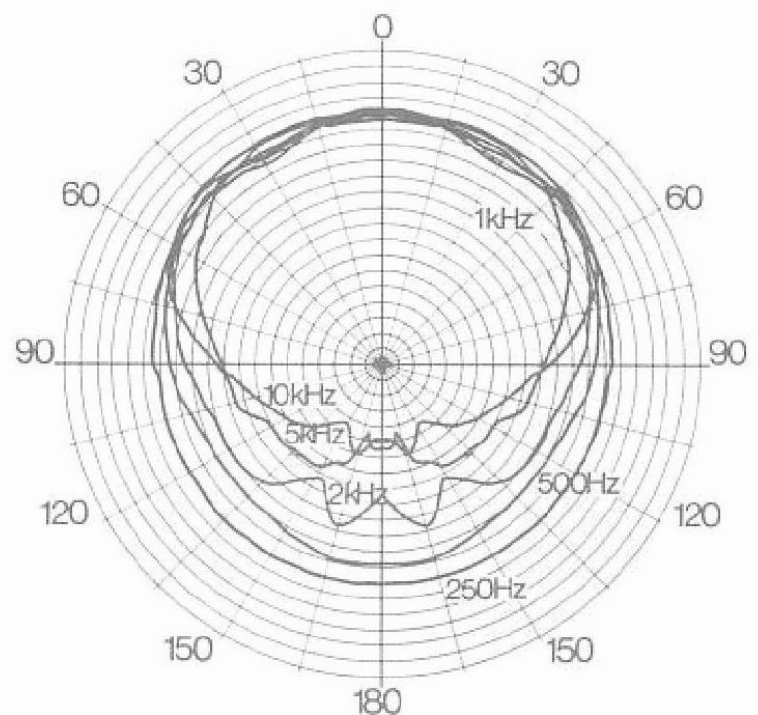
We are, indeed, proud of our drivers. But, they can only achieve their optimum performance with the right crossover. That's why we use heavy gauge, open air, copper coils for perfect dynamic linearity and minimum power losses. And, that's why we have selected computer-grade metal-film capacitors for long-term stability and consistently excellent frequency response.



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Archiv Michael Otto



ADS 8" WOOFER



ADS 500 DISPERSION AT VARIOUS FREQUENCIES



ASSEMBLY OF ADS 1" SOFTDOME TWEETERS.

The System.

The elements in a speaker can function as a system only if the utmost care is taken in combining the individual components and dimensioning the cabinet to match the critical woofer parameters. The 500 drivers perform superbly in their modest size cabinet, with better results than many manufacturers achieve in enclosures several times its size.

You'll be amazed at the clean, accurate bass that comes from our 8" driver; and low frequency bass doesn't mean large woofers! Smaller woofers provide better dispersion in the midrange, and they excel in the musically important transient response. As a result, our smaller woofers provide open, better-than-transparent reproduction, extended to bass.

The ADS 500 reproduces the input signal as faithfully as possible, offering smooth full-range frequency response from a low organ tone to well beyond audibility, while providing superb dispersion and unsurpassed transient response.

ADS 500 Specifications.

DRIVER COMPLEMENT

One soft-dome tweeter, 1" diameter, with single-layer, high-temperature metal voice coil
 Magnetic flux density: 1.5 Teslas
 Magnetic flux: 360,000 nW
 Operating frequency range: 1,500-25,000 Hz
 One high-compliance woofer, 8" diameter, with high-temperature metal voice coil
 Magnetic flux density: 0.95 Teslas
 Magnetic flux: 600,000 nW
 Resonant frequency: 20 Hz (free air)
 Operating frequency range: 25-1,500 Hz

SPEAKER SYSTEM

Frequency response: 45-20,000 Hz (± 3 dB)
 Impedance: 4 Ohms (nominal)
 Efficiency: 91 dB (at 1 Watt RMS input at 1 meter)
 Power rating: 40W (RMS)
 Recommended amplifier power: 15W RMS min.,
 60W RMS max.

Crossover: frequency - 1,500 Hz
 slope - 12 dB/octave

Weight: 25 lbs. net (11.4 kp)
 Size: 20" (H) x 11-1/2" (W) x 9-3/4" (D)
 Cabinet finish: Select natural walnut
 Grill: Removable black cloth



ADS 500

ADS THREE YEAR LIMITED WARRANTY

Analog & Digital Systems, Inc. ("ADS") warrants to the first consumer purchaser of a new, undamaged ADS loudspeaker, that the loudspeaker will, under normal and reasonable use, be free from defects in material and workmanship for a period of three (3) years from the date of purchase. ADS shall, during such period, repair (or at ADS' sole option replace) the defective product or part without cost to purchaser other than one way freight charges.

This warranty is the sole and exclusive express warranty given with respect to ADS loudspeakers for home use and does not include any ADS products for mobile and automotive application and all other express warranties are hereby excluded. NEITHER ADS NOR THE LICENSED ADS DEALER WHO SELLS THE LOUDSPEAKER IS RESPONSIBLE FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO A PERIOD OF SIX (6) MONTHS FROM THE DATE OF PURCHASE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

The ADS warranty does not extend to any defect, malfunction, or failure caused by misuse, abuse, faulty hookup, defective associated equipment, or the use of the loudspeaker with equipment for which it was not intended.

This warranty is valid only for an ADS speaker purchased in the U.S. and when the ADS loudspeaker is returned to a licensed ADS dealer or directly to ADS at the address shown below, freight prepaid, together with proof of date of purchase. For the name and address of the nearest licensed ADS dealer, simply contact ADS or consult the classified section (Yellow Pages) of your local telephone directory.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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