

ADC

**AUDIO DYNAMICS
CORPORATION**

Model 303A LOUDSPEAKER SYSTEM

The BRENTWOOD

Winner of one of the most impressive ratings of the year, the ADC 303A bookshelf speaker system of air suspension design has proved, among serious listeners of good music, to be the outstanding choice of speakers in the just-under \$100 category. Contributing significantly to its remarkably live and open sound is a special high flux dome tweeter with extremely wide dispersion. Designed and manufactured to exacting standards by ADC, this is the same tweeter used in ADC's much more costly systems. It provides unusually clean sound, all the way out to 20,000 Hz, with minimum distortion. Versatile in room placement, the ADC 303A can be used horizontally or vertically on bookshelf, floor or corners. Available as shown with dark grille or, optionally with light grille, the ADC 303A is attractively styled to complement most any room decor. Its power requirements easily match the capabilities of the most up-to-date solid state and tube amplifiers, making possible an excellent sounding system at modest cost. The ADC 303A carries a full 5 year warranty.

The ADC 303A has been widely acclaimed in audio technical reports by high fidelity authorities. For example, here's what Julian Hirsch of Hirsch-Houck Laboratories had to say in Hi Fi/Stereo Review.

"After the lab measurements had been made, and I had a chance to analyze the data, I began to appreciate how unusual this speaker system really is."

"For one thing, my tests confirmed the manufacturer's claimed frequency response of 35 to 20,000 cps \pm 3 db measured in an average listening room."

"... the Brentwood has a true, effective response down to at least 33 cps, with lower distortion than I have measured on many larger and more costly speaker systems, under similar conditions."

"The system's resonance is 48 cps, and ADC states that it delivers true bass response to at least 38 cps. This it certainly does, with ease. The Model 303A is a very successful application of the acoustic-suspension principle, achieved without excessive loss of efficiency."

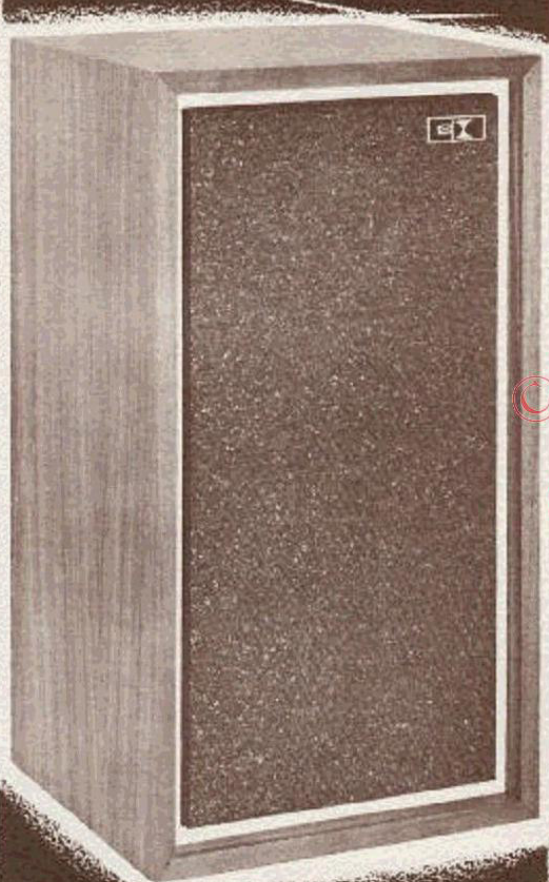
"As for sound, the ADC 303A is very live and open. It has presence, but without the peaked unnatural response usually associated with that term."

"... this speaker brings music right into your listening room... as contrasted to some in which the sound never seems to get out of the speaker enclosure."

SPECIFICATIONS

Type	Bookshelf or free-standing totally enclosed two-way system.
Cabinet	Oiled Walnut. Available with dark grille as illustrated or with optional light grille.
Dimensions	22 $\frac{3}{4}$ " x 13" x 11 $\frac{3}{4}$ ".
Frequency Response	35 to 20,000 Hz. \pm 3 db. Measured in average listening room.
Speakers	Special 8" linear-travel piston cone woofer with optimum damping and high compliance. Hi-Flux Mylar dome tweeter with wide dispersion.
Nominal Impedance	8 ohms.
Power Requirements	6 watts minimum to 60 watts maximum.
Construction	$\frac{3}{4}$ " and 1" solid stock.
Shipping Weight	34 $\frac{1}{4}$ lbs.
Price	\$95.00.

"By all means listen to this \$95 speaker... This is not 'just another box'." *HiFi/Stereo Review*



TECHNICAL NOTES

ADC's special and now famous mylar dome tweeter incorporated in the ADC 303A speaker system, reproduces widely dispersed and smooth sound with minimum distortion.

This tweeter, of truly advanced design, utilizes an exceptionally strong high flux magnet, driving a 1½" voice coil and 1½" mylar dome. The dome shape of the radiating surface insures exceptionally wide dispersion. Response is to 20,000 Hz. and beyond. Designed and manufactured to exacting standards by ADC, this is the same tweeter that is used in ADC's more costly systems.

In addition to ADC's unique tweeter, special attention has also been devoted to the design of the ADC 303A's 8" high compliance linear travel woofer. We have designed this special woofer to achieve a critical matching of cone mass to magnet strength. This accomplishes the proper ratio between the two, resulting in optimum efficiency and overall clean response.

The paper cone used in most conventional low frequency drivers (woofers), tends to "break-up" and go into random resonant vibrations at mid and high frequencies. This effect not only makes a smooth frequency response difficult to achieve but also introduces a considerable amount of distortion in that very part of the audio band at which the ear is most sensitive.

A considerable improvement in response can be achieved by the use of a passive inductance-capacitance

network to roll off the mid and high frequency response of the woofer. Although this effectively prevents the majority of the signal from reaching the woofer at these frequencies, it does not prevent the woofer cone generating and radiating high frequency distortion components as it responds to the bass notes it is required to reproduce.

In addition to this, the cross-over network introduces distortion of its own into the system. It produces phase shift at the cross-over point as well as inhibiting good transient response.

ADC overcomes this problem by scientifically controlling an effect which is present to some degree in all paper cones.

As frequency is increased, the cone ceases to vibrate as a whole. The total radiating area of the cone decreases as frequency increases, while the rest of the cone either remains stationary or vibrates in a random fashion (breakup).

The ADC cone is treated in such a manner that these random vibrations are damped out while the area intended for higher frequencies is allowed to respond freely and linearly.

The result is a considerable reduction in distortion, plus a remarkably smooth response free of phase shift. Need for capacitors and inductors to roll off the response are obviated, leaving only a simple low frequency blocking capacitor necessary to prevent bass frequencies from reaching the tweeter.

Other Quality Features of the ADC Model 303A

- Velvet smooth frequency response throughout full range.
- By far the lowest system resonance in its price class.
- Clean, true, tight bass response without boom or breakup to at least 10 cycles below system resonance.
- High ratio of magnet weight to moving mass.
- Full terminal plate found only in much more expensive speaker systems.
- Includes switching arrangements for mid-range and treble level adjustments.
- Finished in oiled walnut. Cabinet complete ¾" construction all around and 1" baffle.
- Non-ported, sealed unit making the system fully loaded by the cabinet itself.
- Both baffle and back of unit solid core stock. No air cavities.
- Enclosure completely filled with resonance-lowering acoustic material.
- Mid-range and treble controls.
- Attractive, expensive, acoustically correct grille cloth.
- Quality controlled engineering and production.
- Backed by famous ADC warranty. 5 full years.
- Only \$95.