

ADS New Products

1980

New Levels of Performance for the Digital Decade



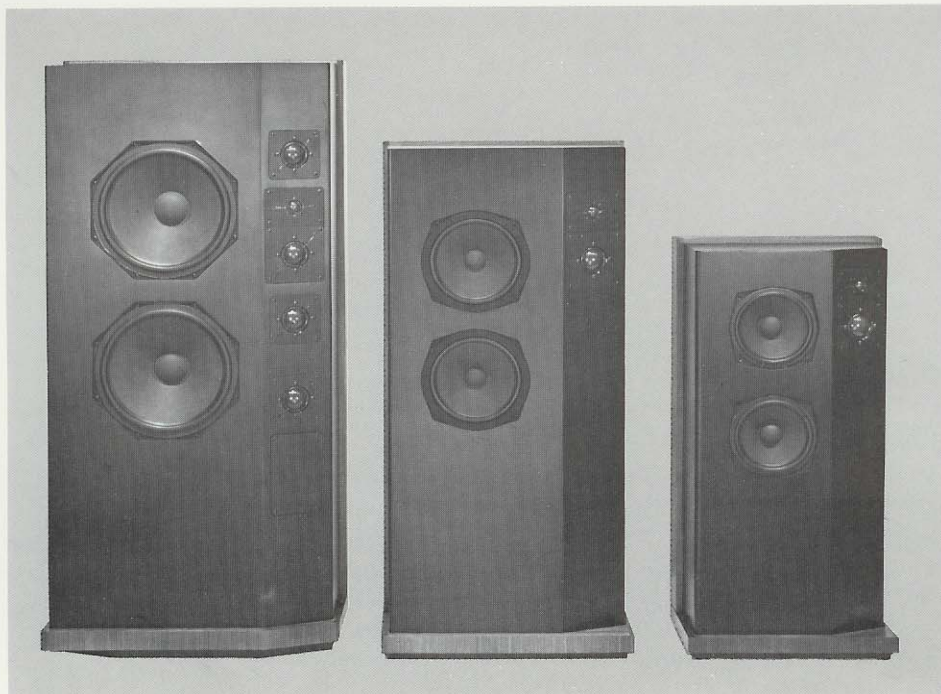
NEW PRODUCTS 1980

New Levels of Performance for the Digital Decade

Audio is undergoing a "digital revolution". The new technology touches virtually every step of the sound reproduction chain, from the original recording to all forms of signal processing. And it all stems from a single goal: to minimize signal degradation — to bring you that much closer to the real thing. If you have been following this revolution, you know that the latest generation of program sources demand the utmost of modern audio components. Quieter disc surfaces, greater musical detail, tremendous transients and overwhelming dynamic range render many fine components of the recent past obsolete.

ADS is uniquely capable of answering the digital challenge. As our corporate name implies, we have for years placed advanced analog and digital technology at the service of music. Long before "digital" became a "buzzword" of the audio industry, ADS was using digital switching power supplies in the now-famous ADS 2001 bi-amplified miniature loudspeakers, the world's first truly high-fidelity mobile speaker system. Specially engineered ADS monitor loudspeakers have been instrumental in the production of recently released digitally mastered discs. ADS' technology today extends to a complete line of loudspeakers, bi-amplification and modular systems, digital time delay systems, and automotive audio products. All ADS products are significantly ahead of their time and are ideally suited to the reproduction of modern state-of-the-art musical program. Meticulously engineered and superbly crafted, ADS products are sources of untiring enjoyment and investments of lasting value.

ADS Professional Monitors



The New ADS Professional Monitors - L2030, L1530, L1230

The ADS L2030 Professional Monitor

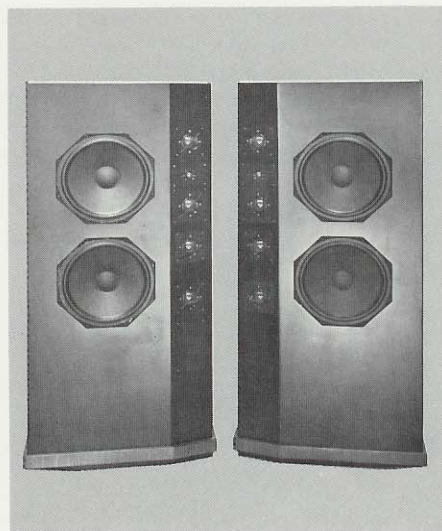
The largest of ADS' new floor-standing professional monitor speakers, the L2030 is a truly prodigious transducer. Never before has such exacting sonic accuracy been combined with incredibly deep bass response and astounding maximum sound pressure level capability. The L2030 qualifies as a superb studio monitor with its uncannily precise stereo imaging, extended frequency range, smooth and flat response, excellent transient performance, ultra-low distortion, and remarkable linearity. But it also combines high efficiency with unparalleled power-handling capability to provide the "true-to-life" wide dynamic range which eludes most other so-called reference monitor speaker systems.

Features

- Two 14-inch ADS *Stifflite* woofers in independent acoustic suspension chambers provide piston area equivalent to single 20-inch woofer; non-resonant tapered "honeycomb" cone construction for ultra-low sonic coloration and high force/mass ratio; highly controlled transient behavior

for tight, powerful bass; extra-long-excursion design for unmatched sheer air-moving capability; ADS' unique high-temperature voice coils ensure high power-handling capability.

- Four 2-inch ADS soft-dome acoustic suspension midrange drivers (one main driver with three auxiliary drivers which



ADS L2030 Professional Monitor

can be switched in by user for enhanced spatial characteristics and increased power-handling); coated with ADS' proprietary damping compound; individual air-suspension cavities for linearized dome excursion, acoustic isolation, and stable long-term performance; ADS' unique single-layer, high-temperature voice coil and precision narrow-gap magnet structure ensure efficient cooling for extended power-handling.

- Unique samarium cobalt 1-inch soft-dome acoustic suspension tweeter represents the world's first successful application of samarium cobalt magnet technology to a dome-type driver; it is the first samarium cobalt tweeter with high efficiency, uniform polar response, low distortion, and high power-handling capability; extremely high flux density (ensured by narrow-gap magnet structure) yields unheard-of efficiency and provides excellent damping for high transient accuracy and low distortion; independent air-suspension cavity for isolation, linearity and stability; ADS' single-layer, high-temperature voice coil in precision narrow-gap magnet structure for efficient cooling and high-power handling.

- Low distortion, optimally tuned cross-over network ensures seamless matching of drivers with minimal power loss and signal degradation; high quality network components for long-term reliability, stability, and performance consistency.

- Mirror-symmetrical matched pairs with specially angled front baffles for extremely open, three-dimensional stereo imaging.

- Single switch conversion to bi-amplification.

- Special rear compartment for ADS Power Plate 1000 One-Kilowatt Bi-Amplifier Module.

- Self-resetting tweeter and midrange circuit breakers.

- Special front control panel with tweeter/midrange level and configuration selectors.

Specifications

Frequency Response

22-20,000 Hz ± 3 dB; 18-28,000 Hz ± 5 dB

Impedance

6 Ohms nominal; 4 Ohms minimum

Efficiency

95 dB SPL with 2.8V RMS ("1 Watt") pink noise input measured at 1 meter in typical listening room (2000 ft³)

Driver Complement

One acoustic suspension soft-dome **tweeter**, 1" diameter, with samarium cobalt magnet, single-layer, high-temperature metal voice coil

magnetic flux density: 2.2 Teslas
(22,000 Gauss)

magnetic flux: 535,000 nanoWebers

Four acoustic suspension soft-dome **midrange** drivers, 2" diameter, with single-layer, high-temperature metal voice coils

Main midrange driver

magnetic flux density: 1.7 Teslas
(17,000 Gauss)

magnetic flux: 1,630,000 nanoWebers

Auxiliary midrange drivers (3)

magnetic flux density: 1.55 Teslas
(15,500 Gauss)

magnetic flux: 1,450,000 nanoWebers

Two long-excursion **woofers**, 14" diameter, with 2" high-temperature voice coils and tapered **StiffLite** cones

magnetic flux density: 0.85 Teslas
(8,500 Gauss)

magnetic flux: 1,200,000 nanoWebers

Crossover

Approx. 12 dB/octave at 450 Hz and 4,000 Hz

Power Rating

300 Watts nominal

1,200 Watts max. peak program

Recommended Amplifier Power

10 Watts minimum; 1,200 Watts maximum

Dimensions

58-5/8" (H) x 27-1/4" (W) x 13-1/8" (D)

Approximate Weight

190 lb./85 kg. net

Cabinet

Select natural walnut over extra-high-density particle board, solid walnut edge inserts

Baffle

Piano black finish with diffraction-corrected flush driver mounting

Grill

Black stretch cloth over custom wood frame (removable)

Estimated Retail Price

\$1,900 each

Availability

Winter, 1980/81

Available in mirror-symmetrical matched pairs only.

The ADS L1530 Professional Monitor

The L2030 may well be the "ultimate" reference loudspeaker system, but for the majority of advanced home and professional applications the ADS L1530 should be more than adequate. An extraordinary transducer by any standard, the L1530 features many of the same components and sonic characteristics of the larger L2030. It, too, has deep, tight bass and tremendous dynamic range. Superbly accurate throughout its extended range, the L1530 excels in every critical area of loudspeaker performance.



ADS L1530 Professional Monitor

Features

- Two 10-inch ADS **StiffLite** woofers in independent acoustic suspension chambers provide piston area equivalent to single 15-inch woofer; unique cone construction provides optimum mass/stiffness characteristics and high internal damping for high transient accuracy and low coloration; extra-long-excursion design ensures wide dynamic range and very low distortion at high sound pressure levels; ADS' unique high-temperature voice coils ensure exceptional power-handling capability.

- 2-inch ADS soft-dome acoustic suspension midrange driver features unusually high force/mass ratio for superb transient response; proprietary coating and isolated air-suspension cavity ensure extremely low midrange coloration, high linearity and long-term stability; ADS' unique single-layer, high-temperature voice coil and precision narrow-gap magnet structure ensure efficient cooling for high power-handling.

- Unique 1-inch soft-dome acoustic suspension tweeter is the world's first dome-type driver to use samarium cobalt magnet; unprecedented force/mass ratio for excellent damping, extended upper frequency range, and very low distortion; dome geometry ensures near-perfect hemispherical power radiation; ADS' advanced single-layer, high-temperature voice coil in precision narrow gap features efficient cooling for unusually high power-handling capability.

- Low distortion, optimally tuned crossover network ensures seamless matching of drivers with minimal power loss and signal degradation; high quality network components for long-term reliability, stability, and performance consistency.

- Mirror-symmetrical matched pairs with specially angled front baffles for extremely open, pinpoint-accurate stereo imaging.

- Single switch conversion to bi-amplification.

- Special rear compartment accepts ADS Power Plate 1000 One-Kilowatt Bi-Amplifier Module.

- User-accessible tweeter and midrange fuses.

- Rear panel tweeter level selector.

Specifications

Frequency Response

25-20,000 Hz ± 3 dB

18-28,000 Hz ± 5 dB

Impedance

6 Ohms nominal; 4 Ohms minimum

Efficiency

95 dB SPL with 2.8V RMS ("1 Watt") pink noise input measured at 1 meter in typical listening room (2000 ft³)

(L1530 Specifications con't)

Driver Complement

One acoustic suspension soft-dome **tweeter**, 1" diameter, with samarium cobalt magnet, single-layer, high-temperature metal voice coil

magnetic flux density: 2.2 Teslas
(22,000 Gauss)

magnetic flux: 535,000 nanoWebers

One acoustic suspension soft-dome **midrange** driver, 2" diameter, with single-layer, high-temperature metal voice coil

magnetic flux density: 1.7 Teslas
(17,000 Gauss)

magnetic flux: 1,700,000 nanoWebers

Two long-excursion **woofers**, 10" diameter, with 1.5" high-temperature voice coils and tapered **Stiffite** cones

magnetic flux density: 0.9 Teslas
(9,000 Gauss)

magnetic flux: 950,000 nanoWebers

Crossover

Approx. 12 dB/octave at 450 Hz and 4,000 Hz

Power Rating

150 Watts nominal

300 Watts max. peak program

Recommended Amplifier Power

10 Watts minimum

300 Watts maximum

Dimensions

50-5/8" (H) x 23-1/4" (W) x 12-1/8" (D)

Approximate Weight

115 lb./52 kg. net

Cabinet

Select natural walnut over extra-high-density particle board, solid walnut edge inserts

Baffle

Piano black finish with diffraction-corrected flush driver mounting

Grill

Black stretch cloth over custom wood frame (removable)

Suggested Retail Price

\$945.00 each

Availability

Fall, 1980

Available in mirror-symmetrical matched pairs only.

The ADS L1230 Professional Monitor

Although the smallest of ADS' floor-standing professional monitor speakers, the L1230 is an awesome performer with sonic qualities unmatched by other loudspeakers in its price range. The famed ADS dual-woofer system delivers extraordinarily deep bass considering the modest cabinet size. Above all, the L1230 is a superbly accurate transducer, worthy of "professional monitor" classification. As with its larger versions, the L1230 is characterized by smooth, wide frequency response, detailed yet neutral reproduction, pinpoint-accurate stereo imaging, high efficiency and wide dynamic range.



ADS L1230 Professional Monitor

Features

- Two 8-inch ADS **Stiffite** woofers in independent acoustic suspension chambers provide piston area equivalent to single 12-inch woofer; unique cone construction ensures optimum mass/stiffness characteristics for high efficiency and excellent transient response; cones are acoustically "dead" for minimal sonic coloration; long-excursion capability ensures maximum linearity and wide dynamic range with superb bass extension; ADS' unique high-temperature voice coil design enables woofers to handle high power levels.

- 2-inch ADS soft-dome acoustic suspension midrange driver is coated with proprietary damping compound for totally non-colored, non-resonant midrange reproduction; high force/mass ratio for fast transient response; independent air-suspension cavity behind dome provides acoustic isolation, high driver linearity and long-term stability; ADS' unique single-layer, high-temperature voice coil and precision narrow-gap magnet structure ensure efficient cooling and high power-handling.

- 3/4-inch ADS soft-dome acoustic suspension tweeter features unbelievably low moving mass combined with powerful, high-flux-density magnet assembly; extremely high force/mass ratio ensures superb transient performance, unrivalled high frequency extension, high efficiency, and low distortion; small-diameter diaphragm ensures extremely uniform hemispherical power radiation; ADS' precision single-layer, high-temperature voice coil in critically narrow gap ensures efficient cooling for high power-handling capability.

- Low distortion, optimally tuned crossover network ensures seamless matching of drivers with minimal power loss and signal degradation; high quality network components for long-term reliability, stability, and performance consistency.

- Mirror-symmetrical matched pairs with specially angled front baffles for "point-source" openness and three-dimensional stereo imaging.

- Single switch conversion to bi-amplification.

- User-accessible tweeter and midrange fuses.

- Rear panel tweeter level selector.

Specifications

Frequency Response

30-20,000 Hz ± 3 dB

20-28,000 Hz ± 5 dB

Impedance

6 Ohms nominal; 4 Ohms minimum

Efficiency

94 dB SPL with 2.8V RMS ("1 Watt") pink noise input measured at 1 meter in typical listening room (2000 ft³)

ADS Two-Kilowatt Stereo Bi-Amplification System

Driver Complement

One acoustic suspension soft-dome **tweeter**, 3/4" diameter, with single-layer, high-temperature metal voice coil
magnetic flux density: 1.8 Teslas (18,000 Gauss)
magnetic flux: 325,000 nanoWebers

One acoustic suspension soft-dome **midrange** driver, 2" diameter, with single-layer, high-temperature metal voice coil
magnetic flux density: 1.55 Teslas (15,500 Gauss)
magnetic flux: 1,400,000 nanoWebers

Two long-excursion **woofers**, 8" diameter, with 1" high-temperature voice coils and tapered **Stifflite** cones
magnetic flux density: 0.85 Teslas (8,500 Gauss)
magnetic flux: 500,000 nanoWebers

Crossover

Approx. 12 dB/octave at 550 Hz and 4,000 Hz

Power Rating

100 Watts nominal
200 Watts max. peak program

Recommended Amplifier Power

20 Watts minimum; 200 Watts maximum

Dimensions

40-5/8" (H) x 19-1/4" (W) x 9-5/8" (D)

Approximate Weight

87 lb./38 kg. net

Cabinet

Select natural walnut over extra-high-density particle board, solid walnut edge inserts

Baffle

Piano black finish with diffraction-corrected flush driver mounting

Grill

Black stretch cloth over custom wood frame (removable)

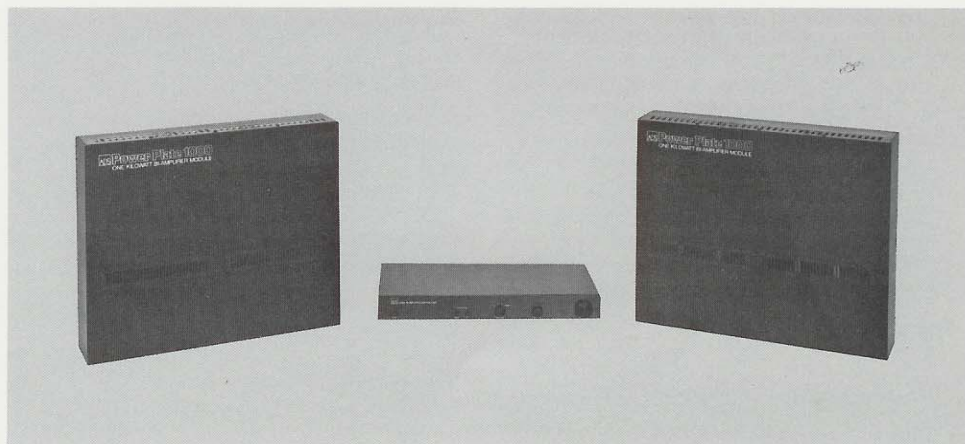
Suggested Retail Price

\$595.00 each

Availability

Late summer, 1980

Available in mirror-symmetrical matched pairs only.



The ADS B-2000 Stereo Bi-Amplification System

The ADS B-2000 is unquestionably the most sophisticated loudspeaker bi-amplification package ever offered to the audio consumer or professional. A three-piece system, it consists of two ADS P-1000 ("Power Plate 1000") One Kilowatt Bi-Amplifier Modules and the C-2000 Bi-Amplifier System Control. One Kilowatt per speaker — 500 Watts to each woofer system and 500 Watts to each midrange/tweeter section — or a total of Two Kilowatts for a stereo system may seem excessive. But ADS' experience in the development of bi-amplified monitoring systems for digital recording asserts the need for extremely high levels of **clean** amplifier power, combined with properly designed loudspeakers, if the full dynamic range of the original program is to be reproduced without compression or other distortion. The ADS Power Plate 1000 is designed to fit into special compartments provided on the rear of the new ADS L2030 and L1530 Professional Monitors. The Power Plate 1000 can, of course, be used with any other speaker suitable for high-power bi-amplification, such as the original ADS L910 and L910/II Studio Monitors. The C-2000 Bi-Amplifier System Control incorporates the ADS optoelectronic Dynamic Bass Extender and multiple crossover settings to accommodate many speaker systems. All electronic networks, from the crossover/control to the power amplifiers, are absolutely state-of-the-art. When combined with ADS Professional Monitors, the B-2000 system breathes new life into the well-known

advantages of bi-amplification. You have to hear this system to believe it.

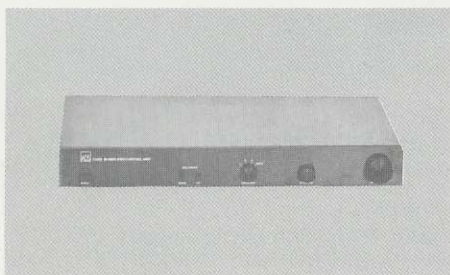
Features

Power Plate 1000 One-Kilowatt Bi-Amplifier Module:

- Dual-channel 2 x 500 Watt configuration designed specifically for bi-amplification.
- Superior "dynamic class A" biasing eliminates low-level crossover distortion without the high heat, bulk and cost normally associated with true class A design.
- Highly efficient Pulse Width Modulation (PWM) digital power supply and forced-air-cooled heatsinks set new standards for electrical efficiency and compactness; the one-Kilowatt amplifier is a neat, slim package weighing approximately 40 lbs. and drawing a maximum of 15 Amperes!
- Primary voltage regulation ensures full power output even under low-line-voltage conditions (down to 100 VAC).
- Ultra-quiet dual-squirrel-cage cooling fan ensures high heatsink efficiency and low operating temperatures for maximum reliability.
- State-of-the-art high-current output stage design for effortless handling of low-impedance reactive (speaker) loads.
- Proprietary "No-Clip" circuit adjusts amplifier gain above rated power to avoid "hard clipping"; system thus sounds more "musical", remains well-behaved, and protects drivers from costly damage on high-level transients; "No-Clip" circuitry also helps assure excellent overload recovery and maintains high amplifier stability.

- Remote powering feature permits amplifier to be plugged into any convenient AC outlet; system is turned on and off by digital trigger signal sent from C-2000 crossover/control unit through standard audio cables.

- Amplifier is fully protected against overload, accidental short circuits, and over-heating; DC offset sensor disconnects speaker before amplifier can pass potentially damaging large subsonic signals; any interruption in audio input connections disables amplifier for added operating safety.



The Bi-Amplifier System Control Unit

C-2000 Bi-Amplifier System Control:

- Takes audio signal from any high-quality stereo preamplifier or control amplifier.
- Sends digital trigger signal through audio connections to two Power Plate 1000s for one-button remote powering of entire bi-amplification system.
- Crossover selector provides four positions: three with fixed characteristics fine-tuned to specific ADS Professional Monitors; one programmable position enables system to be optimally adapted to virtually any speaker designed for bi-amplification. (Crossover characteristics are selected via eight micro-slide-switches located on rear panel.)
- Sophisticated opto-electronic Dynamic Bass Extender circuitry significantly improves deep bass response while protecting bass systems from excessive excursions on large low-frequency transients.

Specifications

P-1000 ("Power Plate 1000") One Kilowatt Bi-Amplifier Module

Power Output

2 x 500 Watts min. continuous sine wave at 4 ohms, both channels driven, 20-20,000 Hz, with less than 0.05% THD

Frequency Response

5-100,000 Hz $\pm$ 0.2 dB

Power Bandwidth

5-100,000 Hz

Signal/Noise Ratio

Better than 90 dB, A-weighted, ref. rated power

Distortion

Less than 0.05% THD and IMD across entire audio band

Sensitivity

2.0 Volt for rated output

Input Impedance

47K Ohms

Slew Rate

100 Volts per microsecond

Power Supply

Digital pulse-width-modulation with primary voltage regulation; approx. 25 kHz operating frequency

Power Requirement

117V AC @ 15 A max.

Dimensions

17" (H) x 20-1/4" (W) x 4" (D)

Approximate Weight

40 lb./18 kg.

C-2000 Bi-Amplifier System Control

Frequency Response/Crossover Characteristics

Dependent on Crossover Selector settings — optimized for specific ADS Professional Monitors with one programmable position to enable tailoring to other speaker systems

Distortion

Less than 0.005% THD and IMD

Signal/Noise Ratio

Better than 95 dB, A-weighted

Input Sensitivity/Impedance

250 mV/47K Ohms

Output Impedance

600 Ohms

Dynamic Bass Extender

Extension peaks selectable: 22 Hz or 37 Hz
Maximum boost: +6 dB

Dimensions

2" (H) x 17" (W) x 10" (D)

Approximate Weight

10 lb./4.5 kg.

Front Panel

Brushed, anodized satin black finish, rack mount adaptors optional

Suggested System Retail Price

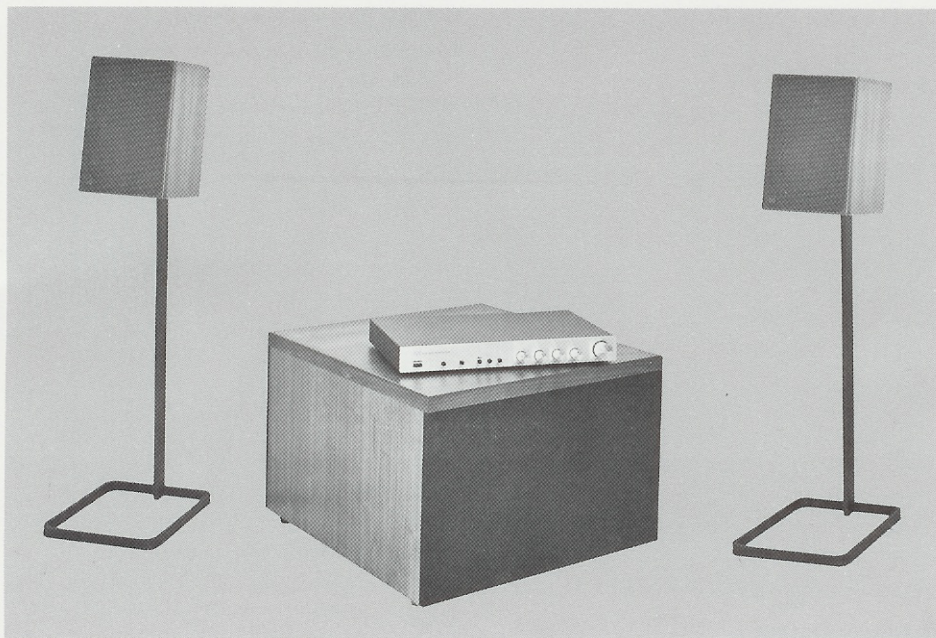
\$2,500.00

(Complete B-2000 Stereo Bi-Amplification System, includes two P-1000 Bi-Amplifier Modules and one C-2000 System Control)

Availability

Mid 1981

ADS Powered Subwoofer/Satellite System



The ADS SubSat System: PB-1500 Module, C-1500 Control, 2 ADS 400 Minispeakers on F400 Stands

The ADS SubSat 2300 Powered Bass/Satellite System

With the introduction of the world's first truly high-fidelity miniature loudspeaker in 1975, ADS proved that big sound could indeed be produced without "big boxes". A veritable minispeaker revolution ensued as a space-conscious world discovered the perfect way to enjoy superb audio reproduction without the inelegance of large cabinets. In recent times, add-on subwoofers have gained popularity as a method of greatly enhancing the tonal range of existing minispeakers. As an acknowledged leader in the race to deliver the most performance per cubic inch of cabinet volume, ADS has researched virtually every aspect of space-saving speaker systems. The latest product of this research is the amazing ADS SubSat 2300, a four-piece modular system which offers the utmost in space efficiency and sonic performance.

The SubSat 2300 system includes the following components:

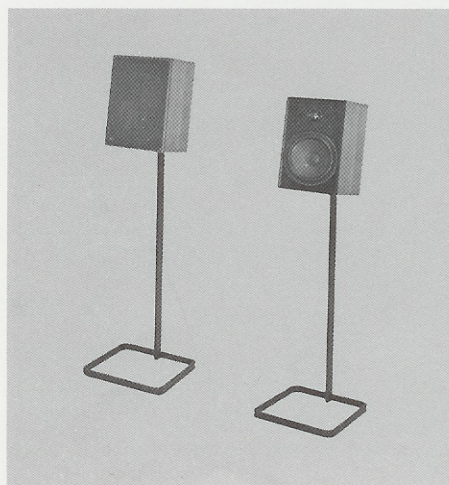
- a pair of new "larger" miniature loudspeakers, the ADS 400
- the ADS PB-1500 Powered Bass Module, a low-profile cabinet housing two 10-inch woofers in separate acoustic suspension chambers and two 100 W RMS power amplifiers
- the ADS C-1500 Bass System Control, a sophisticated crossover/equalization system with unusual control flexibility

The SubSat 2300 delivers a level of performance never before attainable in multi-piece systems. The bass extension, accuracy, detail, stereo imaging, and dynamic range of the ADS SubSat system put it in a class with state-of-the-art speaker systems of much greater bulk and, in many instances, cost.

Features

ADS 400 Miniature Loudspeaker:

- 1-inch ADS soft-dome acoustic suspension tweeter with single-layer, high-temperature metal voice coil features excellent transient response, wide dispersion, smooth and extended high-frequency range, and high power-handling capability.



ADS 400 Minispeakers on F400 Floor Stands

- 7-inch ADS *StiffLite* woofer features "honeycomb" tapered cone construction for optimum mass/stiffness ratio and low sonic coloration; long-excursion design enables the woofer to move large volumes of air linearly, while high force/mass ratio ensures efficiency, "quickness", and low distortion.

- Compact physical dimensions approximate point-source sound radiation for unmatched "openness" and convincing stereo image.

- Can be wall-mounted, placed on bookshelf, or used free-standing with optional F400 floor stands.

- Available in oak or walnut finish.

PB-1500 Powered Bass Module:

- Features two 10-inch ADS *StiffLite* woofers in separate acoustic suspension chambers; long-excursion design for wide dynamic range with high linearity and low distortion; tapered "honeycomb" cone construction achieves optimum mass/stiffness characteristics for high efficiency and unparalleled transient performance.

- Each woofer powered by separate built-in low-distortion 100W RMS amplifiers; direct coupling of amplifier outputs to woofers ensures high damping factor for unbelievably "tight" bass.

- Built-in circuitry protects woofers from excessive clipping, large subsonics and DC offsets; LED indicators signal program peaks and various protector functions.

- AC power controlled by trigger signal sent from C-1500 crossover/control unit through standard audio cables.

- Low-profile design and choice of oak or walnut finish enable system to blend gracefully into virtually any decor.

C-1500 Bass System Control:

- Can be connected between existing preamplifier and power amplifier or in tape monitor loop of receiver/integrated amplifier. (Existing amplifier powers satellite speakers, e.g. ADS 400.)



PB-1500 Bass Module, C-1500 System Control

- Unprecedented control flexibility through provision of four electronic crossover frequencies, variable high-pass damping factor (Q), independent sub-woofer (Bass Module) level control, and bass contour control (± 6 dB at 40 Hz).

- Sophisticated opto-electronic Dynamic Bass Extender circuitry extends deep bass response up to an additional 1/2-octave at normal listening levels while protecting Bass Module woofers from excessive excursion on large low-frequency transients.

- System defeat switch mutes Bass Module and feeds full-range signal to satellite speakers for instant comparison (with vs. without subwoofer).

- Master volume control and tape monitor circuit provided for maximum ease of use and added system flexibility.

Specifications

ADS 400 Miniature Loudspeaker System

Frequency Response

65-20,000 Hz ± 3 dB

Impedance

6 Ohms nominal; 4 Ohms minimum

Efficiency

93 dB SPL with 2.8V RMS (1" Watt") pink noise input measured at 1 meter in typical listening room (2000 ft³)

Driver Complement

One acoustic suspension soft-dome tweeter, 1" diameter, with single-layer, high-temperature metal voice coil

One high-compliance woofer, 7" diameter, with tapered *StiffLite* cone and 1" high-temperature metal voice coil

Crossover

12 dB/octave at 1,500 Hz

Power Rating

50 Watts nominal
75 Watts max. program peak

Recommended Amplifier Power

15 Watts minimum; 75 Watts maximum

Dimensions

11-3/4" (H) x 7-5/8" (W) x 6-7/8" (D)

Approximate Weight

9 lb./4 kg.

Cabinet

Select natural oak or walnut over extra-high-density particle board, solid oak or walnut edge inserts

Grill

Acoustically transparent, high-strength metal (removable)

PB-1500 Powered Bass Module

Frequency Response

Dependent on C-1500 settings:
-3 dB at 35 Hz without Dynamic Bass Extender
-3 dB at 25 Hz at maximum bass extension

Efficiency

94 dB SPL with 1 watt input at 1 meter in typical listening room (2000 ft³)

Maximum Output

114 dB SPL

Amplifier Power Rating

2 x 100 Watts min. continuous sine wave at 4 ohms, 20-200 Hz with less than 0.08% THD and IMD

Amplifier Signal/Noise Ratio

94 dB or better, A-weighted, ref. rated power

Input Sensitivity

0.5V for rated output

Damping Factor

Greater than 50 at 50 Hz with 4-Ohm load

Dimensions

16" (H) x 22-1/2" (W) x 23-1/2" (D)

Approximate Weight

90 lb./40 kg.

Cabinet

Select natural oak or walnut over extra-high-density particle board, solid oak or walnut edge inserts

Grill

Black stretch cloth over custom wood frame (removable)

C-1500 Bass System Control

Frequency Response

Dependent on control settings;
20-20,000 Hz ± 0.2 dB in "bypass" mode

Crossover Frequencies

72 Hz, 90 Hz, 115 Hz, 144 Hz

Crossover Slope

12 dB/octave

High-pass Damping Factor

"Q" continuously variable from 0.7 to 1.4

Dynamic Bass Extender

Extension peaks selectable: 25 Hz or 37 Hz
Maximum Boost: +6 dB

Distortion

Less than 0.005% THD and IMD

Signal/Noise Ratio

Better than 95 dB, A-weighted

Input Sensitivity/Impedance

100 mV/47K Ohms

Gain

High-pass: unity
Low-pass: variable, 16 dB max.

Output Impedance

600 Ohms

Dimensions

2" (H) x 17" (W) x 10" (D)

Approximate Weight

10 lb./4.5 kg.

Front Panel

Brushed, anodized satin black finish

Suggested Retail Prices for System

Entire SubSat 2300 System: \$1495.00
ADS 400 Miniature Loudspeaker System: \$179.50 each
PB-1500 Powered Bass Module with C-1500 Bass System Control: \$1195.00

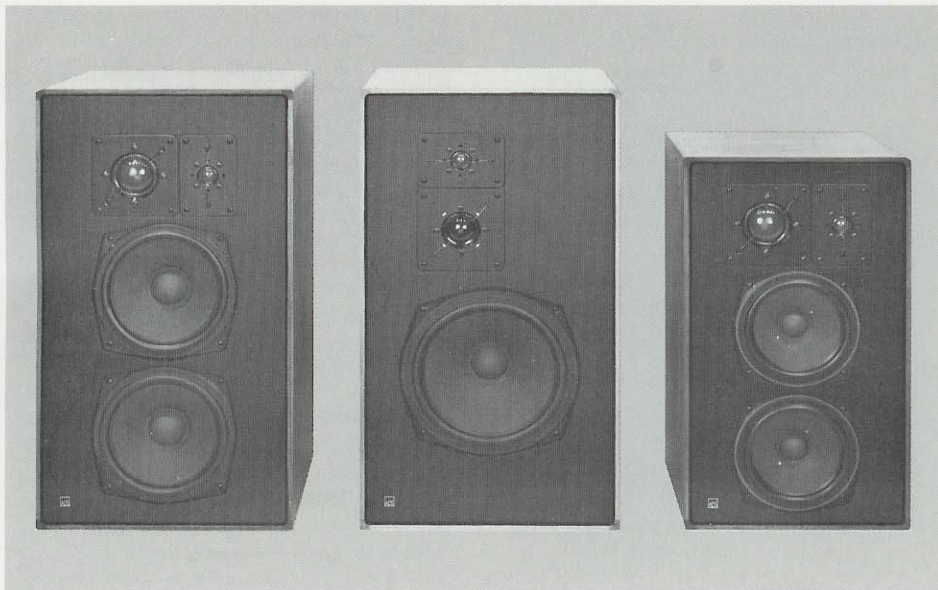
Optional Accessories

F400 Floor Stand for ADS 200/300/400 Minispeakers: \$35.00 each
Rack Mount Adaptors for C-1500 Bass System Control: price to be announced

Availability

Fall, 1980

ADS 3-Way Bookshelf Speaker Systems



The ADS 3-Way Loudspeaker Systems, L810, L730, L710

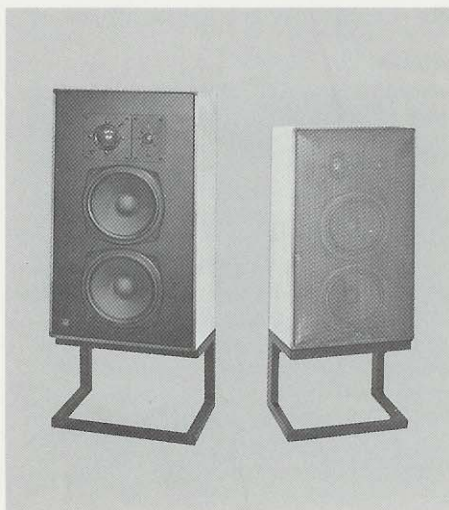
The ADS L810 and L710 3-Way Loudspeaker Systems

It is difficult to think of a popular speaker system that has endured as long as the ADS L810 and L710 have. It is also difficult to imagine that these two 3-way systems, already refined to the highest degree, can be further improved. But for 1980, the new ADS L810 and L710 boast several improvements from the inside out. Now in their third generation of refinement, the L810 and L710 continue to uphold the same standards of sonic performance which have made them two of the most popular bookshelf speaker systems ever produced.

Features

- Celebrated ADS dual-woofer/dual-chamber design with new ADS **Stiffite** woofers for improved bass efficiency and accuracy.
- The new 2-inch acoustic suspension soft-dome midrange driver has a stronger magnet assembly for greater linearity, improved efficiency and transient performance, and lower distortion.
- The 3/4-inch acoustic suspension soft-dome tweeter boasts the lowest moving mass among drivers of its type (including tweeters which employ esoteric materials, such as beryllium); excellent force/mass ratio assures lightning-fast transients, superb damping, and extremely low distortion; small diaphragm diameter ensures highly uniform dispersion and smooth, airy sound quality.

- A newly designed crossover network works in conjunction with the new woofers and midrange to deliver improved linearity, efficiency and less pronounced room-boundary effects.
- New cabinets feature radiused edges with solid walnut reinforcement inserts.
- New acoustically transparent grill lends a distinctive appearance while eliminating grill-frame structure for reduced diffraction and improved dispersion characteristics.
- New user-interface panel features heavy-duty binding-post connectors and readily accessible tweeter fuse with built-in spare.



L810, L710 Speakers on Optional Stands

Specifications - L810

Frequency Response

35-23,000 Hz ± 3 dB
20-30,000 Hz ± 5 dB

Impedance

6 Ohms nominal; 4 Ohms minimum

Efficiency

94 dB SPL with 2.8V RMS ("1 Watt") pink noise input measured at 1 meter in typical listening room (2000 ft³)

Driver Complement

- One acoustic suspension soft-dome **tweeter**, 3/4" diameter, with single-layer, high-temperature metal voice coil
magnetic flux density: 1.8 Teslas (18,000 Gauss)
magnetic flux: 325,000 nanoWebers
- One acoustic suspension soft-dome **midrange driver**, 2" diameter, with single-layer, high-temperature metal voice coil
magnetic flux density: 1.55 Teslas (15,500 Gauss)
magnetic flux: 1,350,000 nanoWebers
- Two long-excursion, high-compliance **woofers**, 8" diameter, with 1" high-temperature voice coils and tapered **Stiffite** cones
magnetic flux density: 0.85 Teslas (8,500 Gauss)
magnetic flux: 500,000 nanoWebers

Crossover

12 dB/octave at 550 Hz and 4,000 Hz

Power Rating

100 Watts nominal
200 Watts max. peak program

Recommended Amplifier Power

20 Watts minimum; 200 Watts maximum

Dimensions

25-1/2" (H) x 14-1/8" (W) x 11-3/4" (D)

Approximate Weight

46 lb./21 kg. net

Cabinet

Select natural walnut over extra-high-density particle board, solid walnut edge inserts

Baffle

Piano black finish with diffraction-corrected flush driver mounting

Grill

Acoustically transparent removable frameless grill in bronze finish

Suggested Retail Price \$425.00 each

Availability Summer, 1980

Optional Accessory

ADS F800 black metal base, \$33.00 each

STAX

#80

SRD

44

850
85
935
60
TAX
\$995

Specifications - L710

Frequency Response

40-23,000 Hz ± 3 dB
25-30,000 Hz ± 5 dB

Impedance

6 Ohms nominal; 4 Ohms minimum

Efficiency

93 dB SPL with 2.8V RMS ("1 Watt")
pink noise input measured at 1 meter in
typical listening room (2000 ft³)

Driver Complement

One acoustic suspension soft-dome
tweeter, 3/4-inch diameter, with single-
layer, high-temperature metal voice coil
magnetic flux density: 1.8 Teslas
18,000 Gauss)
magnetic flux: 325,000 nanoWebers

One acoustic suspension soft-dome
midrange driver, 2" diameter, with single-
layer, high-temperature metal voice coil
magnetic flux density: 1.55 Teslas
(15,500 Gauss)
magnetic flux: 1,450,000 nanoWebers

Two long-excursion, high-compliance
woofers, 7" diameter, with 1" high-temp-
erature voice coils and tapered **StiffLite**
cones

magnetic flux density: 0.85 Teslas
(8,500 Gauss)
magnetic flux: 500,000 nanoWebers

Crossover

12 dB/octave at 550 Hz and 4,000 Hz

Power Rating

75 Watts nominal
150 Watts max. peak program

Recommended Amplifier Power

15 Watts minimum; 150 Watts maximum

Dimensions

21-5/8" (H) x 12-1/4" (W) x 10-1/2" (D)

Approximate Weight

35 lb./16 kg. net

Cabinet

Select natural walnut over extra-high-
density particle board, solid walnut edge
inserts

Baffle

Piano black finish with diffraction-
corrected flush driver mounting

Grill

Acoustically transparent removable frame-
less grill in bronze finish

Suggested Retail Price \$325.00 each

Availability Summer, 1980

Optional Accessory

ADS F700 black metal base, \$32.00 each

The ADS L730 3-Way Loudspeaker System

Although similar to its predecessor, the
much acclaimed ADS L630, the L730
merits a new model designation because
of major component changes and per-
formance improvement. The all-new
L730 is, arguably, one of the most signi-
ficant advances in bookshelf speaker
design in recent history. It produces
surprisingly deep, tight bass for a speaker
of its size thanks to a new 10" ADS
StiffLite woofer. A new midrange driver
delivers uncanny accuracy in reproducing
critical human voice. It is unexcelled in
open, clean, and airy reproduction of
highs, attributes associated with the
state-of-the-art ADS 3/4-inch soft-dome
tweeter. A direct outgrowth of ADS'
research and development of monitor
speakers for digital recording sessions,
the L730 naturally provides excellent
stereo imaging and unusually wide dyna-
mic range.



The L730 on F800 Stands

Features

- New 10-inch ADS **StiffLite** woofer has tapered "honeycomb" cone construction for high internal damping, optimum mass/stiffness characteristics, and low total moving mass; bass is deep, yet tight and highly controlled; extra-long-excursion design and high-temperature voice coil ensures superb linearity, wide dynamic range, and high power-handling.

- New 1-1/2 inch ADS acoustic suspen-
sion soft-dome midrange driver takes
advantage of most recent materials tech-
nology and precision manufacturing
techniques; driver has unprecedented
low distortion, low coloration and wide
dynamic range.

- The proven ADS 3/4-inch acoustic sus-
pension soft-dome tweeter delivers un-
matched high-frequency performance;
smoothness, extension, and dispersion
are second to none; very high force/mass
ratio ensures excellent damping and
transient response, and contributes to
efficiency and low distortion; ADS'
unique single-layer, high-thermal-
conductivity metal voice coil ensures
high power-handling capability for wide
dynamic range.

- Precision crossover network seam-
lessly matches driver outputs with
minimal distortion and power loss;
highest quality network components
ensure stable, reliable performance over
years of use.

- Choice of oak or walnut cabinet with
radiused edges and solid oak/walnut edge
reinforcements.

- New acoustically transparent grill
lends distinctive appearance while elimi-
nating grill-frame structure for reduced dif-
fraction and improved dispersion.

- New user-interface panel features
heavy-duty binding-post connectors and
readily accessible tweeter fuse with built-
in spare.

Specifications

Frequency Response

30-23,000 Hz ± 3 dB

Impedance

6 Ohms nominal; 4 Ohms minimum

Efficiency

92 dB SPL with 2.8V RMS ("1 Watt")
pink noise input measured at 1 meter in
typical listening room (2000 ft³)

Driver Complement

One acoustic suspension soft-dome
tweeter, 3/4" diameter, with single-
layer, high-temperature metal voice coil
magnetic flux density: 1.8 Teslas
(18,000 Gauss)
magnetic flux: 325,000 nanoWebers

One acoustic suspension soft-dome
midrange driver, 1-1/2" diameter, with single-
layer, high-temperature metal voice coil
magnetic flux density: 1.5 Teslas
(15,000 Gauss)
magnetic flux: 1,000,000 nanoWebers

One long-excursion, high-compliance
woofer, 10" diameter, with 1-1/2" high-
temperature voice coil and tapered **StiffLite**
cone

magnetic flux density: 0.9 Teslas
(9,000 Gauss)
magnetic flux: 850,000 nanoWebers

ADS 2-Way Bookshelf Speaker Systems

Crossover

12 dB/octave at 650 Hz and 4,000 Hz

Power Rating

100 Watts nominal
175 Watts max. peak program

Recommended Amplifier Power

20 Watts minimum
200 Watts maximum

Dimensions

25-1/2" (H) x 14-1/8" (W) x 11-3/4" (D)

Approximate Weight

42 lb./19 kg. net

Cabinet

Select natural oak or walnut over extra-high-density particle board, solid oak or walnut edge inserts

Baffle

Piano black finish with diffraction-corrected flush driver mounting

Grill

Acoustically transparent removable frameless grill in complementary finish

Suggested Retail price

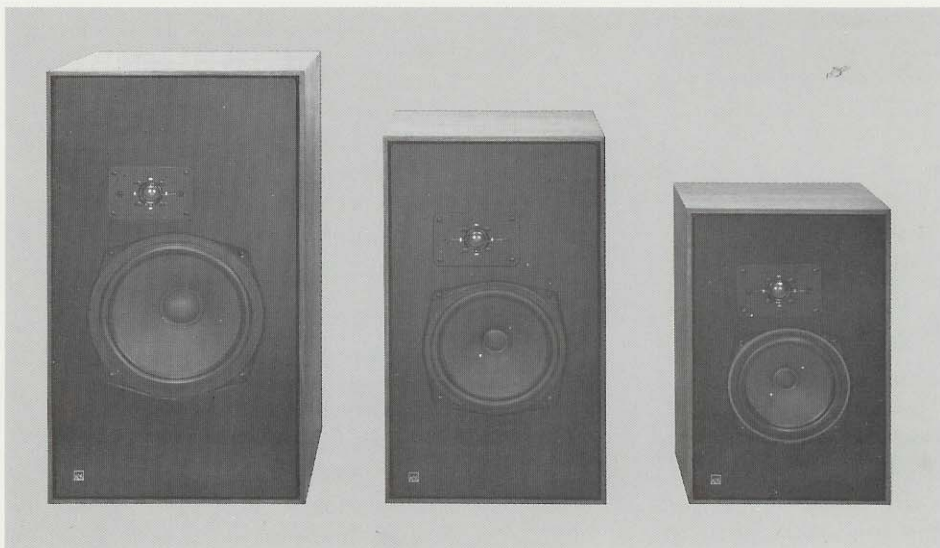
\$365.00 each

Availability

Summer, 1980

Optional Accessory

ADS F800 black metal base, \$33.00 each



The ADS 2-Way Loudspeaker Systems, L620, L520, L420

The ADS 2-Way Bookshelf Loudspeakers

Since their introduction in 1978, the ADS L620, L520 and L420 have become three of the most popular 2-way bookshelf loudspeakers in the country. Their amazing accuracy, efficiency and dynamic range made them natural choices for system buyers looking to get the most for their investment. These three outstanding systems have undergone improvement to produce three new 1980 versions which should make their popularity even more widespread. The improved L620, L520, and L420 are richer-looking, even more lavishly constructed, more efficient, and, incredibly enough, sonically more accurate than their predecessors. More than ever before, they are the clear choice for the budget-minded yet discriminating buyer.

Features

- Improved ADS *StiffLite* woofers have even lower moving mass for higher efficiency and unmatched transient response.
- New voice coils result in lowered impedance to take advantage of recent improvements in amplifier design. (Most solid-state amplifiers deliver greater power into lower-impedance loads, but until recently, very few designs could properly drive typically reactive, low-impedance speakers.)
- Crossover network features improved design and components for increased linearity, better power transfer characteristics, and more natural tonal balance.
- New cabinets are natural walnut over ultra-dense particle board.
- New grills are attractive, acoustically transparent, and free of obstructing grill-frame structures.
- New user-interface panel on rear of cabinet has heavy-duty speaker terminals and readily accessible tweeter fuse with built-in spare.



Specifications

L620

Frequency Response

30-20,000 Hz $\pm$ 3 dB
20-22,000 Hz $\pm$ 5 dB

Impedance

6 Ohms nominal; 4 Ohms minimum

Efficiency

92 dB SPL with 2.8V RMS ("1 Watt")
pink noise input measured at 1 meter in
typical listening room (2000 ft³)

Driver Complement

1" soft-dome tweeter
10" *Stifflite* woofer

Crossover

12 dB/octave at 1,500 Hz

Power Rating

75 Watts nominal
150 Watts max. peak program

Recommended Amplifier Power

15 Watts minimum
150 Watts maximum

Dimensions

25-1/2" (H) x 14-1/8" (W) x 11-3/4" (D)

Approximate Weight

40 lb./18 kg.

Cabinet

Select natural walnut over extra-high-
density particle board

Baffle

Piano black finish with diffraction-
corrected flush driver mounting

Grill

Acoustically transparent removable frame-
less grill in bronze finish

Suggested Retail Price

\$239.50 each

Availability

Summer, 1980

Optional Accessory

ADS F800 black metal base, \$33.00 each

L520

Frequency Response

35-20,000 Hz $\pm$ 3 dB
25-22,000 Hz $\pm$ 5 dB

Impedance

6 Ohms nominal; 4 Ohms minimum

Efficiency

92 dB SPL with 2.8V RMS ("1 Watt")
pink noise input measured at 1 meter in
typical listening room (2000 ft³)

Driver Complement

1" soft-dome tweeter
8" *Stifflite* woofer

Crossover

12 dB/octave at 1,500 Hz

Power Rating

50 Watts nominal
100 Watts max. peak program

Recommended Amplifier Power

15 Watts minimum
100 Watts maximum

Dimensions

21-5/8" (H) x 12-1/4" (W) x 10-1/2" (D)

Approximate Weight

30 lb./14 kg.

Cabinet

Select natural walnut over extra-high-
density particle board

Baffle

Piano black finish with diffraction-
corrected flush driver mounting

Grill

Acoustically transparent removable frame-
less grill in bronze finish

Suggested Retail Price

\$189.50 each

Availability

Summer, 1980

Optional Accessory

ADS F700 black metal base, \$32.00 each

L420

Frequency Response

48-20,000 Hz $\pm$ 3 dB
38-22,000 Hz $\pm$ 5 dB

Impedance

6 Ohms nominal; 4 Ohms minimum

Efficiency

92 dB SPL with 2.8V RMS ("1 Watt")
pink noise input measured at 1 meter in
typical listening room (2000 ft³)

Driver Complement

1" soft-dome tweeter
7" *Stifflite* woofer

Crossover

12 dB/octave at 1,500 Hz

Power Rating

50 Watts nominal
100 Watts max. peak program

Recommended Amplifier Power

15 Watts minimum
100 Watts maximum

Dimensions

17-1/2" (H) x 11-1/4" (W) x 7" (D)

Approximate Weight

16 lb./7 kg.

Cabinet

Select natural walnut over extra-high-
density particle board

Baffle

Piano black finish with diffraction-
corrected flush driver mounting

Grill

Acoustically transparent removable frame-
less grill in bronze finish

Suggested Retail Price

\$149.50 each (available in pairs only)

Availability

Summer, 1980

SPEAKERS

ELECTROSTATIC headphones

Phono CARTRIDGE



Where technology serves music

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