

The Measure of Sound...

A delicate, sustained vibrato. A deep, authoritative bass note . . . the precision of the Concert "A". We manufacture high-fidelity loudspeakers that preserve the integrity of the music you enjoy.

Apogee Acoustics, Inc. emphasizes the fine art of high-fidelity. How the discerning music lover hears and enjoys sound is important to us. In order to accurately reproduce the music you like under whatever conditions you like to play it, you must depend upon a superior loudspeaker.

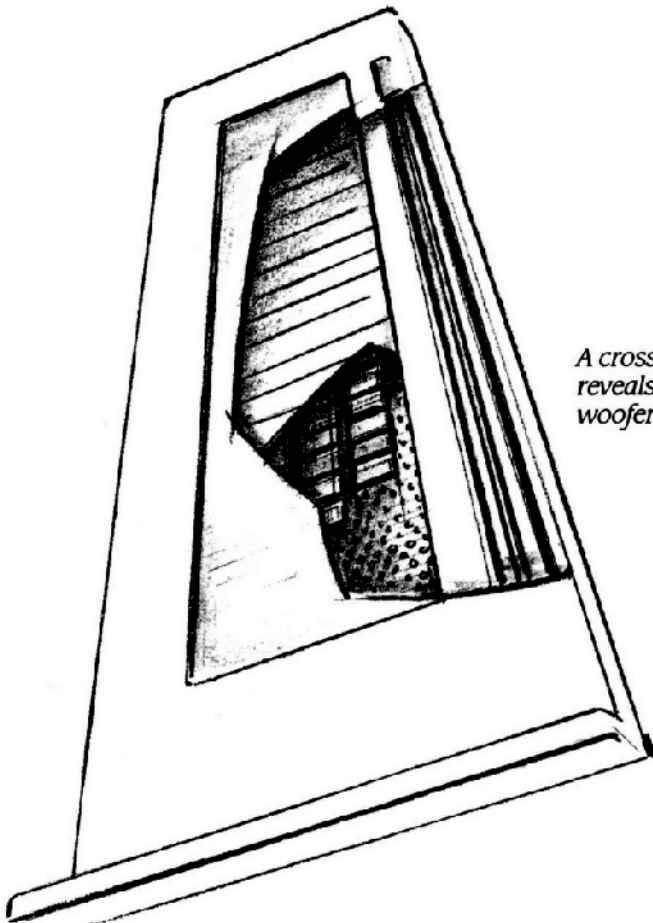
Our philosophy is that high-quality sound is the result of nothing less than an absolute dedication to the most inno-

vative designs, meticulous specifications, and superb assembly. We are proud to say that Apogee full-range ribbon loudspeakers have earned international acclaim.

When we founded Apogee Acoustics, Inc., we started with a commitment to sonic excellence, and with an equally exacting dedication to quality in product design and craftsmanship in manufacture. The architecturally designed units are hand built and finely finished to complement the listening room.

Each year, a major portion of the company's earnings are earmarked for research and development. We are committed to defining the state-of-the-art in high-fidelity loudspeaker design. When you own an Apogee loudspeaker, you own a product as technically advanced as can be manufactured.

We have developed five loudspeaker models: the Full-Range, the Scintilla, the Duetta Series II, the Caliper and the Diva. Whether you are choosing your first component system or planning to upgrade, we invite you to listen to music with Apogee.



A cross-section of the Duetta Series II reveals the array of magnets behind the woofer ribbon.

Overleaf shows a closeup of an Apogee woofer ribbon.

Ribbon Technology

Ribbon technology has been used in loudspeaker design since the ribbon tweeter was patented in Germany in the early 1900's. It was not until 1981, however, with Apogee's Full-Range loudspeaker, that a bona fide ribbon woofer was created. Integrating the woofer, midrange and tweeter elements into a single loudspeaker, Apogee became the world's first and is still the only manufacturer to offer a full-range ribbon system, capable of projecting a sound stage of incredible precision and presence.

Apogee loudspeakers are designed to handle extreme peaks of music in the low, mid and high bands of the audio spectrum. They are the only loudspeakers that successfully deliver bass energy as transparent as the rest of the audio band. This feature is the result of a refined dipole transducer design.

Our transducers provide high resolution and brilliant dynamic response. Our full-range ribbon loudspeakers have the ability to reproduce musical transients at all listening levels, without distortion. The loudspeakers have an instantaneous rise time, translating the electrical signals from the amplifier into musical sound within microseconds.

A hallmark of an Apogee loudspeaker is the deep, rich bass—transparent, with no overhang. The midrange is clear and resolute. Subtle sounds in the treble band

are accurately produced. The driver-to-driver transition is seamless, and the music sounds natural, free of distortion.

How does the ribbon work?

A tissue-thin foil ribbon is suspended in a magnetic field. This ribbon conducts a "current sheet" that varies with the magnitude and frequency of the music to be reproduced. In essence, the magnetic field and current in the ribbon interact to produce a uniform force resulting in musical output.

The unique way in which the ribbons are suspended and the geometric structure surrounding the ribbons contribute to the remarkable response time and the quality and precision of sound replication in an Apogee loudspeaker. Our transducers are specifically calibrated to perform smoothly and uniformly within a frequency range that covers the sound spectrum generated by musical instruments or heard by the human ear.

Apogee full-range ribbon loudspeaker systems feature an outstanding three-dimensional sound stage with exceptionally fine acoustical detail, articulate frequency response and a rise time that parallels the fastest amplifiers. The clarity, speed and power with which these loudspeakers deliver the music provide amazingly precise imaging and create a unique musical experience.

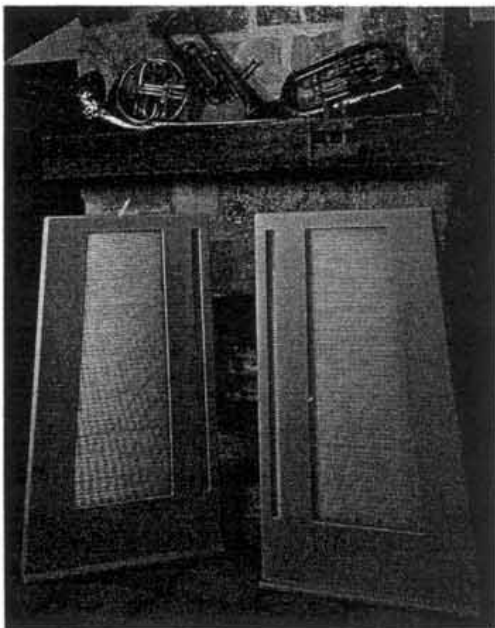
Apogee loudspeakers will easily accommodate low notes from such demanding sources as compact discs, "audiophile" recordings and master tapes. Our transducers reach deeply into the bass to obtain realistic, low-frequency definition. Apogee's full-range ribbon loudspeaker systems handle instruments difficult to reproduce such as the piano, the organ and the human voice.

Apogee's transducers do not lose their shape or deteriorate over time. This insures precise reproduction of sound and uncompromising performance for many years.

... I've used the Scintillas as my sole speaker system since they arrived ... and quickly learned that (they) were giving me more music than I'd ever heard before ... new-found low level information is but one of the revelations ... the way the Scintillas deal with voice ... I've never heard any speaker deal with this touchiest of instruments with such total command.

The Scintillas are, for me, unrivalled for speed and transient recovery, the attack on fast passages leaving the listener somewhat breathless. They are devoid of any colorations related to their physical structures ... so that they 'disappear', leaving only you and the music.

Ken Kessler
Hi-Fi News
& *Record Review*
September 1985



Comparatively smaller and lighter than our other models, the Caliper achieves uncanny vertical imaging.



—APOGEE—ACOUSTICS, INC.



Was het "podium" eerder bouwkundig "correct", nu was het tot leven gekomen met echte instrumenten en stemmen.

Neil Whiteley-Bolton

Ein Traum wurde wahr... Für die Herstellung eines solch revolutionären Lautsprechers waren erst einmal völlig neue Werkzeuge und Maschinen zu beschaffen. So gut wie nichts gab es fertig zu kaufen.

... se in futuro comparirà all'orizzonte un trasduttore in grado di superare, esso non potrà che essere un nuovo prodotto di casa Apogee.

The Apogee Scintilla is the Ferrari Testarossa of loudspeakers: I'm sure that one day I shall own both!

John Atkinson

Loudspeaker

The Scintilla is a rugged, beautifully engineered speaker . . . generating a highly detailed, wide sound field with great depth.

. . . the Scintilla delivers the feeling of great, deep bass power, an energy that couples to and moves the listening room. Organ and synthesizer music play with remarkable definition and no audible distortion, while possessing great solidity and mass. Bass-drum beats have natural timbre and great speed.

. . . highs are extended, clean, and effortless. Ambience cues and reverberation effects of recording studios and concert halls can easily be discerned.

Laurence L. Greenhill
and Hy Kachalsky
Audio, Vol. 69 No. 12
December 1985

Apogee loudspeakers are handcrafted. Each model is individually assembled according to exacting specifications. The metal used for the transducer elements is selected to achieve maximum strength and resilience. Component boards are made in our factory under a controlled environment.

The innovative ribbon speaker system includes a patented woofer assembly. The woofer ribbon is positioned directly in front of an array of carefully aligned magnets.

Extremely low-mass midrange and tweeter elements are suspended between the top and bottom of the frame. Magnets flank both sides of these elements. To minimize distortion, each Apogee loudspeaker is provided with a means for centering the transducer ribbons within their supporting framework.

Great care is taken in the finishing process. The transducer elements are wrapped with a protective fabric considered the most acoustically transparent in the industry. This grillcloth has been selected following numerous listening tests to insure that the transparency in Apogee's full-range ribbon loudspeaker system is maintained.

The case is finely finished to achieve an attractive textural quality. Each unit is custom packaged at the factory for safe shipment. A clear and concise operating manual is included with each model.

The design of the loudspeakers complements your living space. Models are available in gray, taupe or anthracite.

Full-Range

Our largest loudspeaker, the flagship of our line, has a virtually resonant-free structural steel framework that features a trapezoidal one thousand square inch woofer panel, and narrow tweeter and midrange ribbons.

This transducer exhibits such extreme clarity and low distortion that it is used as a measuring and listening device by amplifier manufacturers and recording studios worldwide.

The Full-Range includes its own dedicated active crossover.

Full-Range (continued)

Three element system

Tweeter, midrange and woofer ribbons

Frequency response

Below 25 Hz to over 25 KHz

Crossover

Dedicated active crossover with seamless 6 dB per octave slope

Amplification

Bi-amplified or tri-amplified

Sound level

115 dB spl @ 4 meters
"C" scale weighting
bi-amplified 100 watt amplifier

Nominal impedance

4 Ohms

Dimensions

80½" x 35" x 4"

Weight

300 pounds per loudspeaker

Warranty

5 year limited

Scintilla

This midsize, three-way, full-range ribbon loudspeaker provides phenomenal bass energy and has a patented, coalescent midrange tweeter. It is Apogee's only loudspeaker with a nominal impedance of 1 Ohm.

Three element system

Coalescent tweeter, coalescent midrange, and woofer ribbons

Frequency response

Below 30 Hz to over 25 KHz

Crossover

Seamless 6 dB per octave slope, internal passive crossover. A dedicated active crossover is optional

Amplification

Mono or bi-amplified

Sound level

110 dB spl @ 4 meters*

Nominal impedance

1 Ohm

Dimensions

57" x 30" x 3½"

Weight

140 pounds per loudspeaker

Warranty

3 year limited



Centerfold shows the Duetta Series II, Full-Range, Caliper (left and right speakers), and the Scintilla.

*"C" scale weighting
100 watt amplifier

Specifications

Duetta Series II

A special feature of this model is the narrow, canted midrange/tweeter, which facilitates unparalleled horizontal dispersion and real-life vertical imaging.

Two element system

Midrange/tweeter and woofer ribbons

Frequency response

Below 30 Hz to 20 KHz

Crossover

Seamless 6 dB per octave slope, internal passive crossover. A dedicated active crossover is optional

Amplification

Mono or biamped

Sound level

106 dB spl @ 4 meters*

Nominal impedance

4 Ohms

Dimensions

58" x 26" x 3"

Weight

95 pounds per loudspeaker

Warranty

2 year limited

Caliper

Comparatively smaller and lighter than our other models, the Caliper achieves uncanny vertical imaging. While specifically designed to fit spatially limited listening environments, it will also perform well in a larger room. Classified as a midsize, two-way loudspeaker, this model has a canted, narrow midrange/tweeter.

Two element system

Midrange/tweeter and woofer ribbons

Frequency response

30 Hz to 20 KHz

Crossover

Seamless 6 dB per octave slope, internal passive crossover

Amplification

100 watt amplifier

Sound level

105 dB peak @ 4 meters*

Nominal impedance

3 Ohms

Dimensions

48" x 24" x 2"

Weight

70 pounds per loudspeaker

Warranty

2 year limited

Diva

With the Diva, Apogee premieres a full-size loudspeaker that delivers exceptional sound pressure levels using a single 100 watt amplifier. A step-adjustable external passive crossover is provided for ultimate control. The culmination of many years of research in full-range ribbon technology, the Diva will redefine the state-of-the-art.

Three element system

Tweeter, midrange and woofer ribbons

Frequency response

Below 25 Hz to over 25 KHz

Crossover

Step-adjustable seamless 6 dB per octave slope, external passive crossover. A dedicated active crossover is optional

Amplification

100 watt amplifier

Sound level

115 dB spl @ 4 meters*

Nominal impedance

3 Ohms

Dimensions

73" x 31" x 3"

Weight

150 pounds per loudspeaker

Warranty

3 year limited

Crossover

The Apogee Acoustics, Inc. external active crossover is designed to provide the electrical separation of woofer and midrange/tweeter signals for biamped or triamped systems. This crossover permits adjustment of the level of the woofer relative to the midrange in the biamped mode, and adjusts the woofer, midrange and tweeter separately in the triamped mode. This is accomplished at the signal level between the preamplifier and the power amplifier to provide the most coherent and musically accurate results.

A dedicated active crossover is used for the Full-Range, and separately designed active crossover networks are optional for the Scintilla and the Duetta Series II.

... my wife's reaction to the Duetta II may be worth a thousand of my words ... "They are the first speakers I've ever heard that remove the veil from the music that always tells you that you are listening to a hi-fi system."

The exceptional, state-of-the-art transparency that emerges in the mid and upper bass is sustained into the critical upper bass/lower midrange transition area. As a result, you may hear more from your records and CDs than you have ever heard before.

... the Apogee Duetta IIs, more than any other speaker, remove an entire layer of coloration from the sound. They are at least a truly excellent speaker system; I strongly suspect that more extended listening will reveal they are the new state of the art.

Anthony H. Cordesman
Stereophile, Vol. 9 No. 7
November 1986

With a compatible amplifier, the magic the Calipers weave on voice, their holographic, unforced imagery, and the uncolored upper midrange and treble, add up to no problems with passing the goosebump test.

John Atkinson
Stereophile, Vol. 9 No. 7
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