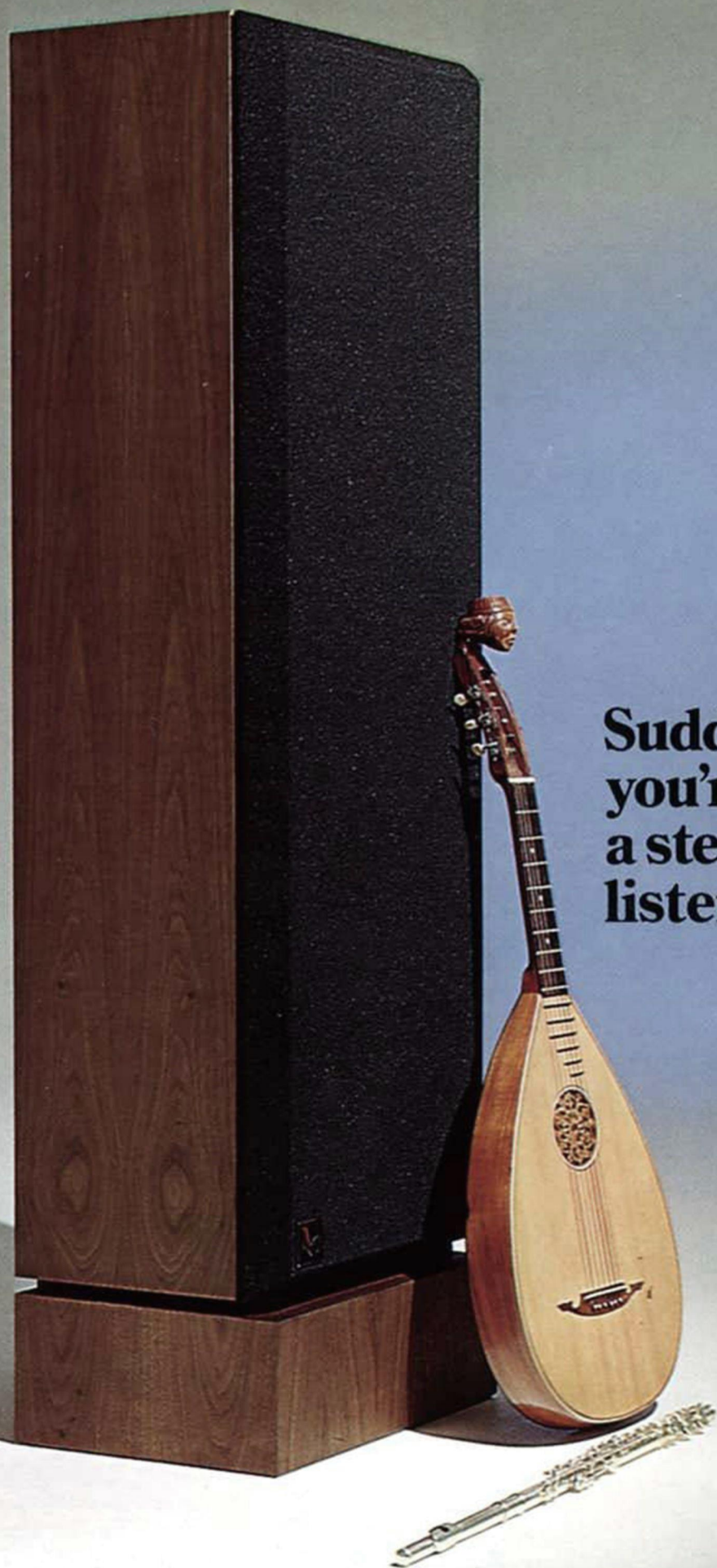


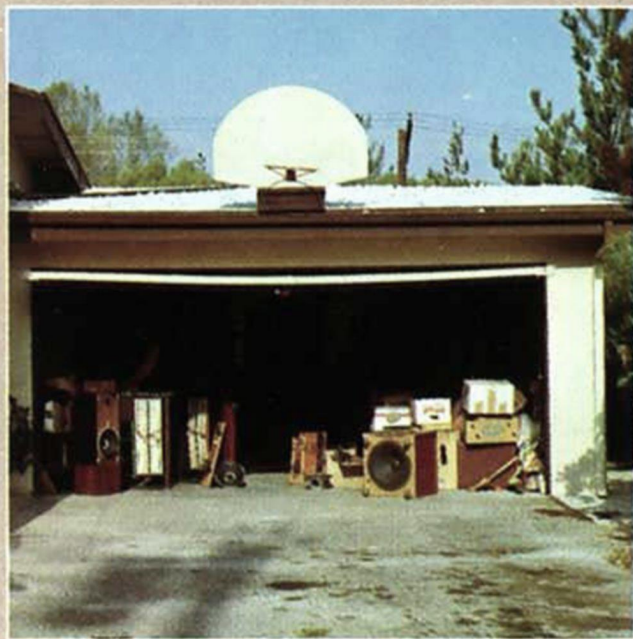
The audio products of Infinity Systems, Inc.



**Suddenly you realize
you're not hearing
a stereo system—you're
listening to the performers.**

“...making everything else sound most unsatisfactory by comparison.”

—*Consumers Digest* reviewing our first product.



In the beginning: a two-car garage (converted into a four-speaker garage) in Woodland Hills, California.

What is Infinity?

Infinity is a young company that already has made major contributions to the science of electroacoustics and the art of music-reproduction.

You note that we do not view acoustical science and musical art as synonymous. Far from it. While the performance specifications of Infinity products are uniformly outstanding, they by no means tell the whole story.

We believe that audio products are designed for listening, and that their ultimate test is your musical satisfaction.

Another standard worth mentioning:

We at Infinity reject the popular cult of distortion. Let other speaker manufacturers, for instance, boost bass frequencies to emphasize “the beat,” or arbitrarily exaggerate certain high frequencies to produce a “sizzling” top end. We won’t.

Absolute fidelity to music *as it is played*—that is our philosophy and our commitment. Absolute musical accuracy throughout the entire frequency range. And, for that matter, throughout the entire music-reproduction system, from disc or

tape to speakers or headphone.

That commitment reflects the background of the founders of the company: technically, as mathematicians and physicists who had been engaged for years in sophisticated design projects for the American space-exploration program; emotionally, as music-lovers.

The musician in our personalities provided the passion to improve upon all previous approaches to “high fidelity.”

The physicist pointed to theoretical solutions, several of which were to come from space technology.

And the engineering side of our experience had trained us in the art of converting theories into reality.

First product: the speaker system that wasn’t made to sell.

Years of designing and building and redesigning and rebuilding, in a garage at first, were devoted to creation of a speaker system that would use the best of known audio technology *plus* every useful innovation, no matter how unexpected

or "far out." Cost was not to be a consideration; neither was sales potential. This was to satisfy us.

Finally it did indeed satisfy us. So Infinity Systems was incorporated in California, U.S.A., and the Servo Statik I speaker system was unveiled.

The response, initially from audio magazines' product reviewers, bordered on ecstasy.

"This speaker setup is the most magnificent it's been our pleasure to audition," *Consumers Digest* told its readers.

Stereophile said the perfect word was "Stupendous."

And *Hi-Fi Newsletter* predicted, quite correctly, "Meticulous and

demanding ears... will surrender to the Renaissance in music realism offered by the Servo Statik I!"

Music to our ears. Confirmation of our conviction. Realism and accuracy did indeed have a waiting audience. Even at a 1960's price of more than \$2000 for the system.

What do you get from Infinity today for your money and all our dedication?

The first eight years of technical and musical achievement by Infinity Systems, Inc., since its formation and the introduction of its

first product, have been marked by the creation of:

Our current state-of-the-art products;

- Quantum Line Source
- Black Widow™ Tone Arm
- ES-1 Electrostatic Headphone System
- DSP Switching Amplifier™ and its companion
- High-Resolution Preamplifier, as well as:

Our other quality speakers, each incorporating as much advanced Infinity technology as possible at its price;

- Quantum 2
- Monitor Jr.
- Quantum 3
- 1001 A
- Quantum 4
- POS II
- Column II

Eight years later, a somewhat larger establishment in nearby Canoga Park, California.



What benefits do all those Infinity audio products deliver in common?

Accuracy. Astonishingly life-like clarity and separation of recorded instruments and voices, retaining their individual "colors." And more:

The ability to reproduce faithfully *both the full impact* of the symphony orchestra's most powerful, passionate passage or the rock ensemble's driving bass line *and all the delicacy* of a soloist's subtlest nuance. And more:

A dimensionality—depth and true stereo imaging—that no other manufacturer's components have yet achieved.

You buy components to listen to music, not to boxes of equipment.

Infinity resolves to remain not a speaker company but a music company.

Though each Infinity instrument is a handsome example of workmanship, our primary emphasis is not on cabinetry.

And though we apply discoveries from our state-of-the-art products to the lower-priced models

that follow them, the emphasis at Infinity is not on economy.

The emphasis is on music.

Infinity introduced the third era of amplification.

First there was amplification by means of vacuum tubes.

Then came the solid-state transistor.

Infinity is the company that introduced the third era: Class D amplification.

Class D amplification uses the transistor not to amplify, but as a switch. In the Infinity amplifier, transistors switch the signal on and off a half-million times a second.

The Digital Signal Processing (DSP) switching amp is as different from earlier kinds of amplifiers as the transistor is different from the vacuum tube. It performs more like a computer.

Its digital-chip "brain center" is a plug-in module barely 6 centimeters square. It contains all the signal-processing and performance-control logic circuits.

This microminiaturized module is named, for its fathers at Infinity, the Ulrick-Henderson DSP Hybrid.

Infinity's DSP Switching Amplifier™ represents the world's first consumer application of principles previously used only in exotic aerospace technology.

The Infinity-Watkins Dual-Drive Woofer. What comes out of it is a new bass experience.

Everybody knew for years it was not possible to get good transient response, acceptable efficiency, enough power, *and* smooth extended bass range out of any enclosure of reasonable size.

So every speaker system represented a serious compromise of one or more of those desirable characteristics.

Then William Watkins invented the dual-voice-coil woofer. Down in the frequency region where a speaker's fundamental resonance had always caused impedance to rise and response to fall, the second voice coil takes over and neatly bypasses those formerly inevitable problems. And in our Quantum Line Source this woofer performs so

smoothly that it produces the response curve charted at the right.

Now extended bass response and accurate transient performance can co-exist beautifully. Listen.

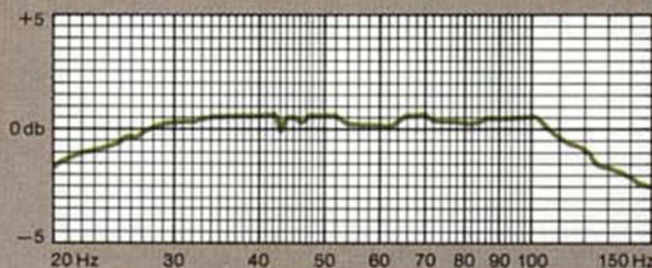
Listen to the speakers in our Quantum Series. Each of them produces finer bass response than was ever possible before from any speaker of its size.

Listen to our Quantum Line Source. It delivers finer bass



response than was ever possible before from *any* speaker.

The ingenious driver that can reproduce the entire bass range with both power and clarity is called the Infinity-Watkins Dual-Drive Woofer.* It is one of the significant audio advances that set the Quantum Series and Infinity apart from even the best efforts of other speaker manufacturers.



Frequency response of QLS woofer system, measured near-field including microphone loss. Rolloff above 100 Hz due to crossover.

A superlative new kind of high-frequency reproducer: EMIT.™

The electrostatic tweeter was for years, and until recently, the finest kind of high-frequency driver known.

But temperamental.

Electrostatics have extremely low-mass diaphragms. And those diaphragms are driven uniformly overall, rather than locally as cones and domes are driven. So electrostatics are highly responsive to transients in the music; distortion is minor; and frequency response is excellent.

But they tend to beam their output narrowly. They present a capacitive load that is hard for an amplifier to drive. And they are subject to voltage breakdown.

*Manufactured by Infinity Systems, Inc., under license from Watkins Engineering.

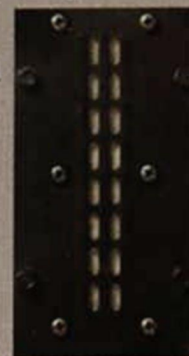
As we worked for years developing the world's finest electrostatics for our Servo Statik speaker system, we were very much aware of their problems. And we explored the possibility of creating electrostatics' magnetic counterparts with none of those problems. If only there were a magnet of the required strength.

We finally found our magnet, made with the rare-earth material called Samarium Cobalt, several times more powerful than the finest alnico magnet.

And then we found we could make a tweeter that was not only easier to control than the electrostatic, but also easier to listen to. With admirable range and realism *plus* nearly perfect horizontal dispersion and high acoustic output capabilities.

This new breed is named EMIT—Electromagnetic Induction Tweeter.

Multiples of the EMIT are used in our Quantum Line Source and other speakers in the Quantum Series. And in no other speakers in the world.



It stands at the forefront of speaker technology. And it stands alone.

Quantum Line Source

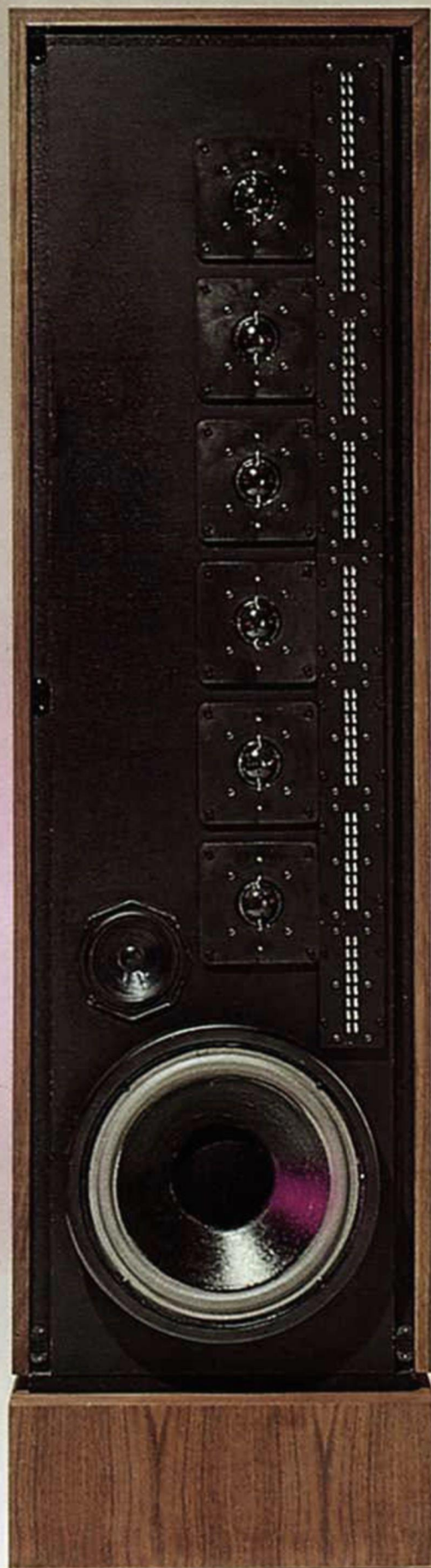
From top to bottom, from highs to lows, the Quantum Line Source represents a radical departure in speaker design—an important new direction for Infinity and for the industry.

Its line source tweeters.

The Samarium Cobalt EMIT (Electromagnetic Induction Tweeter—see the previous page) is utilized in a multiple configuration 125 centimeters high forming a true line source; producing a deep fan-shaped wavefront of high-frequency energy; and resulting in excellent horizontal dispersion to all points where listeners might reasonably sit or stand to listen.

Another line source, in the mid-range, is made up of six high-definition ventilated 3.8-centimeter dome drivers. This unusually treated grouping has been designed with careful attention to phase and acceleration capability.

The phase-coherent midbass coupler, which is transmission-line loaded, handles the frequency range



Quantum Line Source

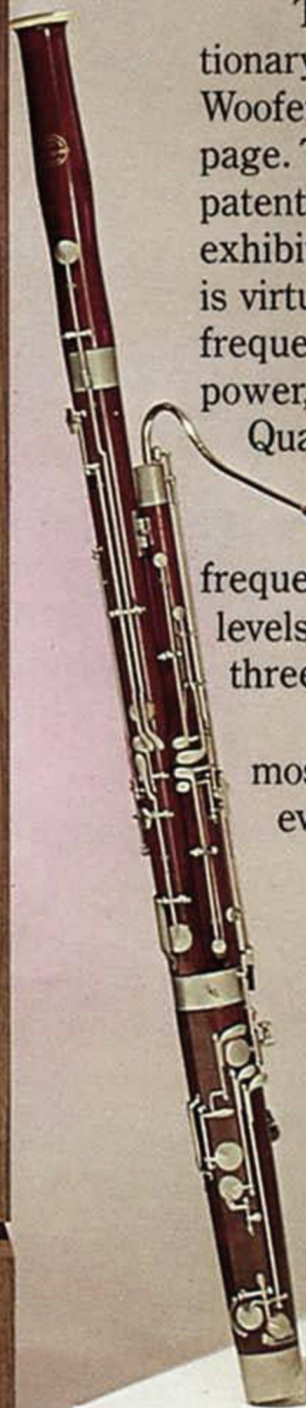
in which half of all musical fundamentals lie (200 to 600 Hz), and we have provided a driver that can speak with absolute authority there.

Its dual-voice-coil woofer.

The bass driver is the revolutionary Infinity-Watkins Dual-Drive Woofer described on the preceding page. This brilliantly conceived, patented woofer with two voice coils exhibits an impedance curve that is virtually flat. It reproduces bass frequencies with unmatched accuracy, power, and lifelike presence—in the Quantum Line Source, to 18 Hz.

The Quantum Line Source, has, in fact, “opened up” *all* frequencies to previously unheard-of levels of power, cleanliness, and three-dimensional depth.

This is very probably the most musically accurate speaker ever made.



Quantum 2

Your ears may not know the difference between this superb speaker and its progenitor, the Quantum Line Source—until you hear the price.

In the Quantum Line Source, the range of the Infinity-Watkins Dual-Drive Woofer extends down to 18 Hz. Here in the closest competitor, the Quantum 2, it reaches 24 Hz—but you get an extra 2 dB of efficiency.

Our Quantum Line Source stacks its Electromagnetic Induction Tweeters (EMITs) eight high. The more compact Quantum 2 uses the same tweeters, but not quite so lavishly.

Same high-definition 3.8-centimeter dome midrange driver; same transmission-line midbass coupler; same scrupulous attention to phasing and crossover technology.

Hear Quantum 2. Its resemblance to the Infinity Quantum Line Source is striking. Except around the price tag.

Quantum 3

What made a company stop production of the best-selling speaker in its price class?

The astounding sound of Quantum 3.

We know. The company was Infinity. And the speaker we decided to phase out was our own critically praised, hugely successful Monitor IIa.

Why? Because the same Dual-Drive Woofer, the same EMIT, and other electroacoustic advances in our Quantum Line Source are used in this compact Quantum 3 as well.

And the technology that goes into our Quantum Series—and the musical revelations that come out—



Quantum 3

Quantum 2

really do stamp "Obsolete" across every previous speaker system, including our own.

For proof, just listen and discover that a pair of Quantum 3 speakers let you hear every instrument not only in its own voice, but

in its own *position* front to back, as well as left to right.

Quantum 3 may well be the third-best speaker in the world. For overall value, perhaps you'll rank it somewhat higher.

Quantum 4

We thought it was impossible to bring our Quantum Series technology down to this size and price, intact.

We proudly announce we were wrong.

As used in the Quantum 4, the Infinity-Watkins Dual Drive Woofer fluently translates every signal between 35 and 600 Hz. With its combination of power and clarity — with its preservation of characteristic timbres — the bass output is remarkably close to the original.

As in the larger Quantum Series models, Quantum 4's EMIT upper range remains smooth all the way to 32,000 Hz.

The sound of this speaker testifies eloquently that with Infinity, buyers who must compromise on the cost of elements of their music systems need not make dispiriting sacrifices on quality.

The Quantum 4 seems certain to set a new industry standard for compact three-way speakers.



Quantum 4

Specifications

	Quantum Line Source	Quantum 2	Quantum 3	Quantum 4
<i>Frequency response</i>	18 through 32,000 Hz ± 2 dB	24 through 32,000 Hz ± 3 dB	28 through 32,000 Hz ± 3 dB	35 through 32,000 Hz ± 3 dB
<i>Minimum & maximum recommended amplifier power per channel, RMS</i>	100 watts to 500 watts (can be bi-amped)	60 watts to 350 watts	60 watts to 250 watts	50 watts to 250 watts
<i>Drivers:</i>				
<i>Bass</i>	30 cm Infinity-Watkins Dual-Drive Woofer	30 cm Infinity-Watkins Dual-Drive Woofer	30 cm Infinity-Watkins Dual-Drive Woofer	30 cm Infinity-Watkins Dual-Drive Woofer
<i>Midbass</i>	10 cm coupler	10 cm coupler	10 cm coupler	—
<i>Midrange</i>	Six 3.8 cm ventilated domes	Two 3.8 cm ventilated domes	One 3.8 cm ventilated dome	One 3.8 cm dome
<i>Tweeters</i>	Eight EMIT in front, one rear	Three EMIT	Two EMIT	One EMIT
<i>Crossover frequencies, Hz</i>	200; 600; 4,000	200; 600; 4,000	200; 600; 4,000	600 and 4,000
<i>Dimensions</i>				
<i>(approximate)</i>				
<i>including grille</i>				
<i>Inches</i>	66 x 18 wide x 15	49 x 18 wide x 13	40 x 18 wide x 13	36 x 15 wide x 12
<i>Cm</i>	168 x 46 x 38	124 x 46 x 33	102 x 46 x 33	91 x 38 x 30
<i>Weight, packed</i>				
<i>(approximate)</i>				
<i>Lbs</i>	190	138	110	90
<i>Kg</i>	86	60	50	41
<i>Level controls</i>	Midbass, midrange, tweeters	Midbass, midrange, tweeters	Midbass, midrange, tweeters	Midrange, tweeters

Nominal impedance 4 ohms.

Horizontal dispersion -2 dB 60° left & right (20 kHz).

Cabinet of walnut veneer over particle board.

Removable cloth grille on frame.

Warranty: Five years, parts and labor. Transferable.

(See complete warranty statement.)

Column II

A high-efficiency speaker incorporating new developments in driver technology is Infinity's Column II.

- To add spaciousness, one of its two piezo-electric tweeters faces the rear. These specially developed,

remarkably clean-sounding tweeters, unlike other piezo-electric devices, use no horns, but act as direct radiators.

- To prevent interference from the woofers, a new 10-centimeter midrange driver is sealed in its own sub-enclosure.

- To provide excellent transient response in the midbass range, a 25-centimeter woofer utilizes an unusual low-mass radiating element.

- To couple bass output to the room, a 25-centimeter sub-woofer faces downward, near the floor.

Radiating area of the two woofers, configured in what audio engineers call "a dual-driver staggered-resonance system," is 60% greater than that of a single larger (30-centimeter) woofer.

Column II can deliver plenty of bass and plenty of power, without the roughness and midrange peaks typical of many high-efficiency speakers.

Frequency response:

35 through 20,000 Hz \pm 3.5 dB.

Minimum & maximum recommended amplifier power per channel, RMS:

15 watts to 250 watts.

Crossover frequencies:

750 and 5,000 Hz.

Nominal impedance: 8 ohms.

Styling:

Hand-rubbed oiled walnut veneer over particle board. Removable black cloth grille. Smoked-glass top.

Dimensions (approximate):

41 inches x 14 wide x 12½

104 cm x 36 wide x 32.

Weight, packed (approximate):

85 lbs. 39 kg.

Warranty:

Five years, parts and labor. Transferable. (See complete warranty statement.)



Column II

"This is a speaker we could live with forever."

—*Stereo* review of Monitor Jr.

Monitor Jr.

Step into Infinity's little concert hall. Listen to a pair of Monitor Jr. speakers—six drivers in all. They are all so precisely accurate, and such careful attention has been paid to critical phasing, that you hear the natural, undistorted depth and ambience of an acoustically perfect hall.

Monitor Jr. exemplifies Infinity's philosophy (and knack) of taking principles discovered during development of higher-priced instruments and incorporating them into smaller and less expensive designs. Discoveries from our earlier, extremely costly Servo Statik IA help give Monitor Jr. its concert-hall dimensionality—true stereo imaging that lets you "place" each instrument—not just left to right, but front to back as well.

"Musical experience so immediate that it lets you forget about speakers altogether," exclaimed *Opera News*.

So step right in. Sit down, fifth row center. And listen *through* Monitor Jr. to the sound of the live concert itself.

Frequency response:

32 through 22,000 Hz \pm 3.5 dB.

Minimum & maximum recommended amplifier power per channel, RMS:

25 watts to 200 watts.

Crossover frequencies: 600 and 5,000 Hz.

Nominal impedance: 8 ohms.

Styling:

Hand-rubbed oiled walnut veneer over particle board. Black cloth grille on frame snaps on and off.

Dimensions (approximate):

25 inches x 14½ wide x 12.

63 cm x 37 wide x 30.

Optional matching pedestal:

Raises enclosure 15 cm.

Weight, packed (approximate):

65 lbs. 30 kg. Including pedestal.

Warranty:

Five years, parts and labor. Transferable. (See complete warranty statement.)



Monitor Jr.

“A sense of excitement not often experienced in this price range.”

—High Fidelity review of model 1001.

Infinity's reasonably priced two-way speakers.

They don't sound like reasonably priced two-way speakers. They sound like Infinity speakers. That is to say, like the music itself.

One reason is the special treatment we give our woofers. We have developed ways of damping the cones to produce five times the stiffness-to-mass ratio of some other woofers. Thus we have eliminated

a variety of distortions, circumferential modes, and resonances that otherwise could blur the bass and muddy the midbass.

Infinity woofers reproduce music articulately and accurately, without a distorted bass peak, and with crisp, cleanly defined transients throughout the bass and midbass range.

1001A

“A transparent quality... clean, solid bass that would put many larger systems to shame.” That is what *Audio* got out of our original model 1001.

Then we improved it. A lot. Into the 1001A we have put ingredients unusual in its price category: an extra cone tweeter in the rear for added ‘spaciousness’ of sound; a specially treated 30-centimeter woofer; a carefully conceived crossover; our love of music; and the kind of technological know-how we picked up in the creation of speaker systems costing a dozen times as much as this.

Frequency response:
33 through 21,000 Hz \pm 4.5 dB.
Minimum & maximum recommended amplifier power per channel, RMS:
20 watts to 200 watts.
Crossover frequency: 1,300 Hz.
Nominal Impedance: 8 ohms.
Styling:
Walnut veneer over particle board.
Black cloth grille.
Dimensions (approximate):
25 inches x 14½ wide x 12.
63 cm x 37 wide x 30.
Weight packed (approximate):
45 lbs. 20 kg.
Warranty:
Five years, parts and labor. Transferable. (See complete warranty statement.)

POS II

The lowest-priced member of the distinguished Infinity speaker line ranks high in value. And efficiency. As little as 15 watts per channel RMS can fill your room with excitingly realistic sound.

(Infinity sound with a modest amplifier!)

The cone of the 25-centimeter woofer has been specially treated. The 5-centimeter tweeter has a level control. A special electrical network provides a smoother, flatter high



frequency response. Technology by Infinity blends them all.

The result is true value in true, accurate Infinity music-reproduction.

Frequency response:

43 through 19,000 Hz \pm 3.5 dB.

Minimum & maximum recommended amplifier power per channel, RMS:

15 watts to 100 watts.

Crossover frequency: 1,600 Hz.

Nominal impedance: 8 ohms.

Styling:

Walnut veneer over particle board.

Black cloth grille.

Dimensions (approximate):

24 inches x 13 wide x 12.

61 cm x 34 wide x 30.

Weight, packed (approximate):

40 lbs. 18 kg.

Warranty:

Five years, parts and labor. Transferable. (See complete warranty statement.)

ES-1 Electrostatic Headphone System

The most accurate headphones ever created. That was the goal.

Result? "Quite simply, a new standard in sound reproduction," says *Stereophile*.

Compared to the best headphones available before, Infinity offers "unquestionably better definition and detail throughout the entire audio range," the magazine reports.

Their conclusion: "We hate to see equipment getting higher and higher priced [but] sound like this is indubitably worth the money."

Our ES-I Headphone System employs an altogether new low-mass diaphragm material called Polyurethin.TM

It follows dynamic changes much faster and more precisely than the polyester other electrostatics use.

The system consists of one headphone set and the walnut-enclosed adaptor containing power supply and matching transformers. Front-panel output connectors accommodate two headsets; an optional second set is available.

The ES-I headphone is open-backed. You experience a spacious, open quality. The music seems to be spread more naturally

all around you.

Your private listening experience with Infinity Electrostatic Headphones will be gratifyingly comfortable, supremely accurate, and totally musical.

Frequency response:

20 through 25,000 Hz \pm 2 dB.

Total harmonic distortion:

Less than 0.3% at 100 dB SPL.

Sensitivity:

98 dB SPL at input of 2 volts at 1,000 Hz.

Maximum output:

118 dB SPL at 1,000 Hz.

Source impedance: 4 to 16 ohms.

External power requirement:

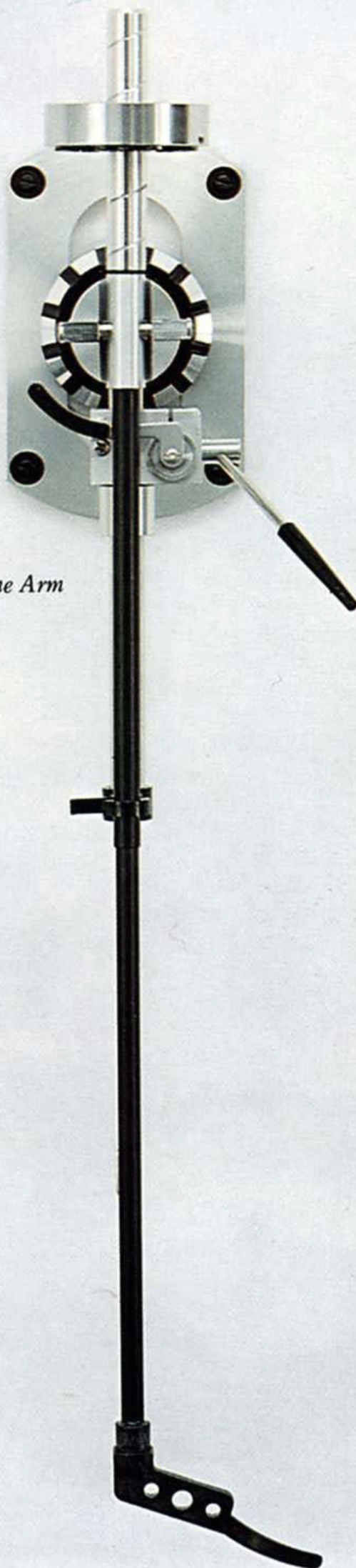
117 or 220 volts AC,
50 to 60 cycles, .01 watts.

Adaptor size:

3 inches x 5 1/4 wide x 7 1/4.
8 cm x 14 wide x 18.



ES-1 Headphones



Black Widow Tone Arm

Black Widow™ Tone Arm

Infinity introduces the closest approach to the theoretically ideal record-playing system, which would be simply a cartridge suspended from an infinitely rigid *nothing*.

The Black Widow Tone Arm is an exceptionally rigid, extremely low-mass, ingeniously engineered *next-to-nothing*.

Records aren't perfectly flat or perfectly centered. So vertical and horizontal forces acting on the combined mass of an ordinary tone arm and its head shell and its heavy counterweight can cause mistracking and distortion.

As the stylus moves, trying to remain in proper position in the record groove, that inertial mass first resists, and an instant later over-reacts, degrading the crosstalk and spoiling the accuracy of the stereo image.

But the design of this Infinity arm and its counterbalance reduces inertial stubbornness and eliminates excess weight, and replaces them with responsiveness.

(As one way of achieving very low mass, the conventional head shell has been eliminated altogether.)

Now the entire tone arm may follow — up and down, back and forth, precisely — wherever the imprecise record's groove leads.

Few other tone arms approach the price of the Black Widow by Infinity.

Not one enables a modern high-compliance cartridge to operate to such musical advantage.

Effective mass of arm: 3 gm.

Cartridge weights accommodated:
4 to 8.5 gm.

Stylus force adjustment:

Calibrated in half-gram steps.

Inside force cancellation (anti-skating):

Calibrated fine spring adjustment.

Cueing device: Oil-damped.

Bearing friction at stylus point:

Vertical bearing (knife edge) 0.005 gm.

Lateral (fine miniature ball bearing)
.01 gm.

**Infinity strives always to
update and improve existing products,
as well as to create new ones.
So the specifications in this
Infinity publication and others are
subject to change without notice.**



We get you back to what it's all about. Music.

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