

The Infinity Reference Standard

© beim Hersteller  
Archiv Michael Otto

The Infinity Reference Standard™  
is lovingly dedicated to the late  
Dr. Amnon Fuhrer, a friend, an inspiration  
and the ultimate audiophile.

Amnon's infinite energy, his  
devotion to music and his  
extraordinary perception have kept us  
on track since the very beginning.

© beim Hersteller  
Archiv Michael Otto

The Infinity Reference Standard

© beim Hersteller  
Archiv Michael Otto



The Infinity Reference Standard is the highest achievement of a company dedicated to exploring the frontiers of speaker technology.

It is in every respect a no-compromise system.

Traditional speaker-making has historically represented a compromise of design parameters (a "trade-off" of power-handling ability, efficiency, frequency response, dispersion, cabinet size, cost and other factors) in order to achieve a "practical" end product.

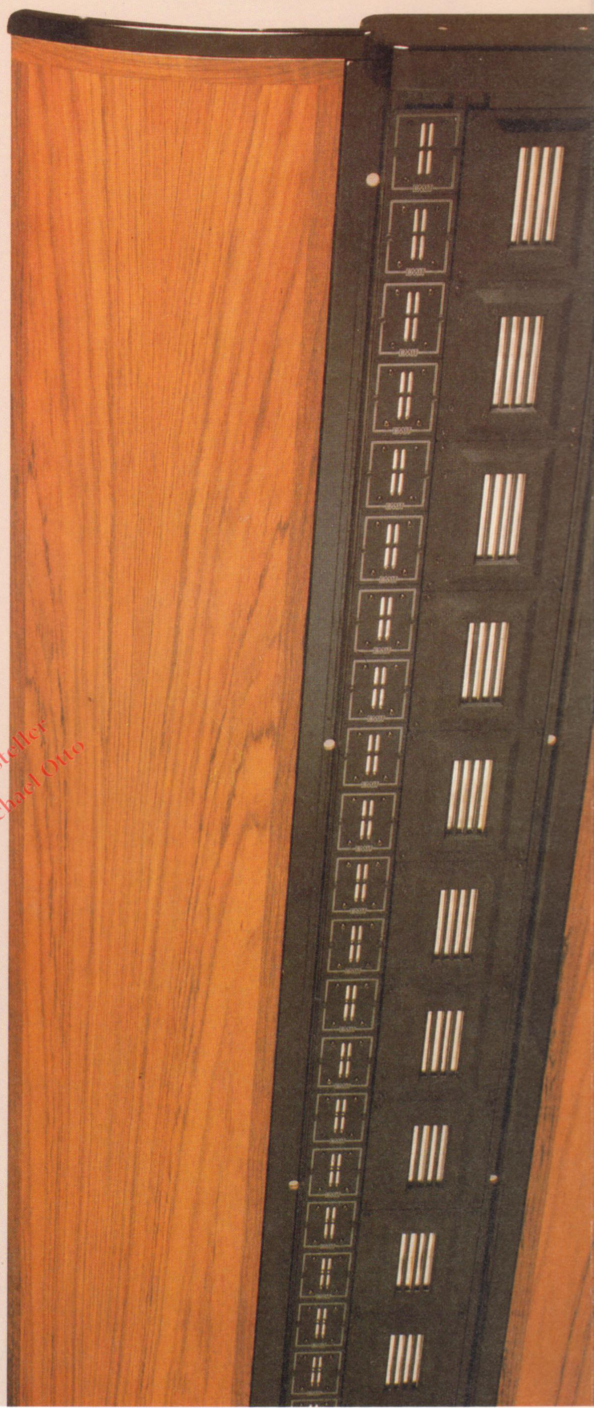
No such considerations have compromised the Infinity Reference Standard.

The sole design objective was to achieve the world's highest level of musical accuracy, and to develop the new technology needed to attain that objective.

Years of patient experiment and innovation were lavished upon the IRS.

The result is formidable. In size. In cost. And in its ability to reproduce the most delicate nuances of musical performance, as well as the massive dynamics of the full symphony orchestra and chorus.

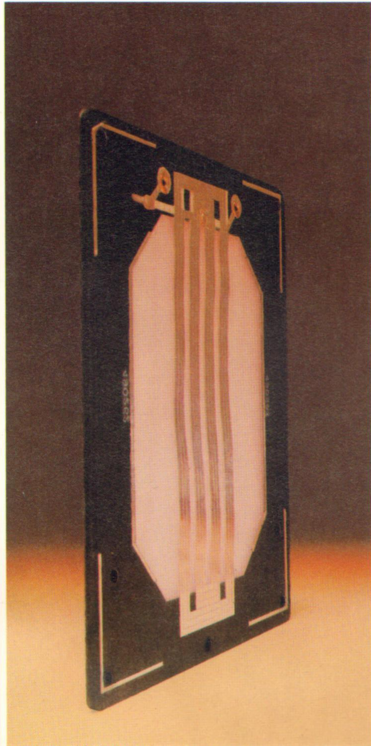
It is the belief of Infinity scientists, musicians and engineers that, with the Infinity Reference Standard, the musical distance between the live performance and its reproduced illusion is significantly reduced.

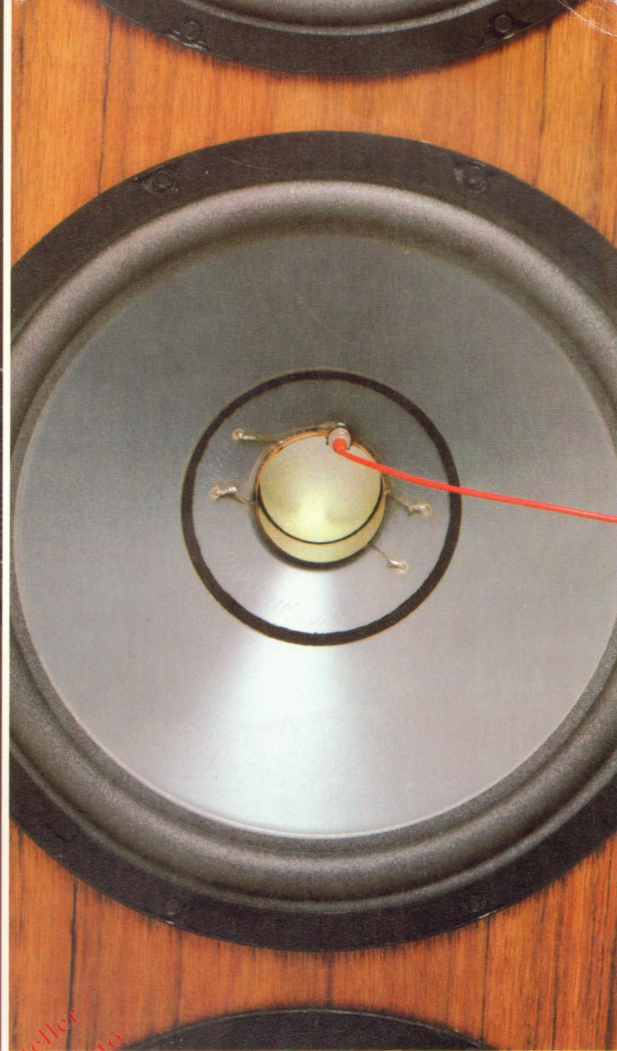
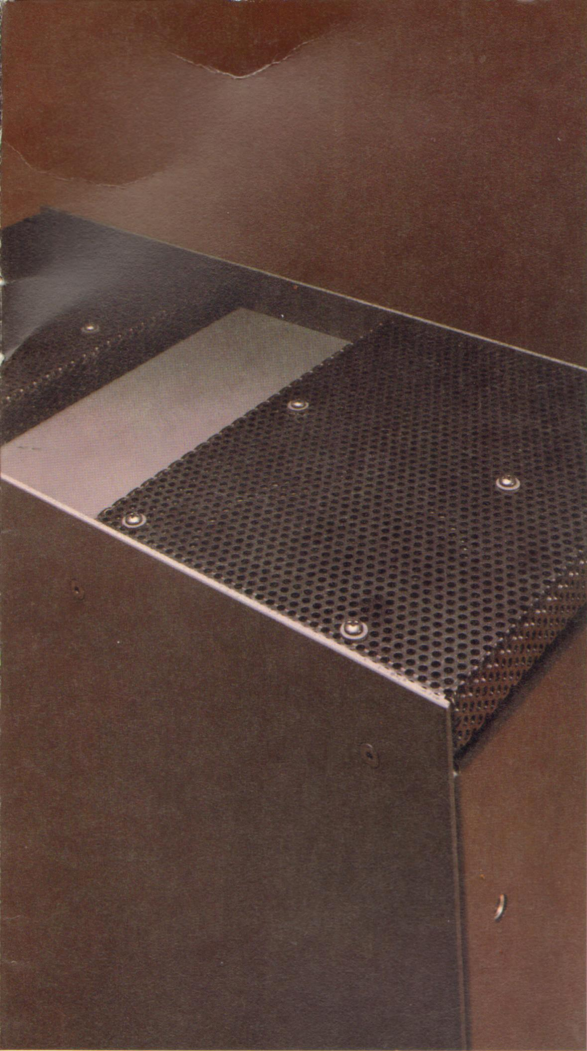


© beim Hersteller  
Archiv Michael Owo



The Infinity Reference Standard





Each of the four Infinity Reference Standard modules is seven feet six inches tall.

Each woofer module has six 12" polypropylene woofers and is driven by its own servo amplifier. The servo amplifier, rated at 1.5 kilowatts per channel, was specially designed by Infinity as a part of the woofer system. Constructed of military-grade components, the servo amplifiers can run day and night at full power levels.

The mechanical signal from the accelerometer is then electronically compared with the original input, and the difference (or the error signal) is then instantaneously fed back to the woofers. Thus, despite their inherent mechanical distortions, the woofers are constrained to obey the corrected servo signal, their output (acoustic response) conforming almost perfectly to the input signal.

Each midrange-tweeter module consists of 36 EMIT™ electromagnetic induction tweeters in a dipole configuration (24 front-facing and 12 rear-facing, reverse-phased) and 12 EMIM™ electromagnetic induction midrange drivers. These modules can be driven by any high quality stereo amplifier.

Infinity's EMIT/EMIM technology employs a lightweight film diaphragm, upon which a metallic "voice-coil" is etched. Magnets of rare-earth samarium-cobalt—the most powerful magnetic substance known—energize the voice-coil.

Cabinetry is of beautifully grained Indian rosewood solids and veneers.

The midrange module wings are curved in a shape precisely calculated to minimize diffraction; hollow and sand-filled to dampen vibration. Extending the art of cabinetmaking, these mathematically precise wings are custom built by a shipbuilder.

Is the extravagant concept of the IRS simply a matter of Infinity overkill?

We think not.

We believe the optimal music system should be idling while performing at full power; nothing should sound strained or harsh. Live music itself (with the possible exception of rock) never sounds strained or harsh.

The virtuoso musician projects ease of performance; there is always the sense of ability and power in reserve. The virtuoso music reproducing system therefore should handle the most complex and demanding musical passages with no apparent effort.

The Infinity Reference Standard has this elusive quality of ease. Its reserve capability is staggering. With virtually unlimited dynamic range at one's disposal, it reproduces the full musical spectrum with ease; it exhibits an overall imaging veracity and a sense of spatial dimension never before achieved.

And it anticipates the demands of tomorrow's advanced recording and electronic technologies—whether analogue or digital.

Because music is a cherished personal experience for us at Infinity, and because we are profoundly disturbed by the anomalies of reproduced music, we have created the Infinity Reference Standard.

For all who share our passion, and for all whose training, temperament and fortune demands ownership of the finest—we are pleased to present the Infinity Reference Standard.

## Specifications

### System:

Four separate modules, including two amplifiers.

### Woofers Modules:

Two. Each is seven feet six inches tall with 18 inch square/radius corners. Each side has six 12" polypropylene-cone drivers enclosed in the feedback loop of a servo amplifier.

### Woofers Amplifiers:

Two, mono. Each rated at 1.5 kilowatts. The woofer servo system is achieved by use of a military-grade accelerometer. Approximately 20 db of feedback is utilized around the woofer system.

### Midrange/Tweeter Modules:

Two. Each is seven feet six inches tall, 40 inches wide, 1 inch thick; of laminated hardwoods and veneers with curved wing sections. Each wing section is hollow and sand-filled. Each contains 12 dipole Electromagnetic Induction Midrange drivers (EMIM) and 36 Electromagnetic Induction Tweeters (EMIT) in a dipole line-source array (24 front-facing and 12 rear-facing).

### Frequency Response:

16 Hz to 40 kHz  $\pm$  2db.

### Crossover of Woofer/Midrange:

70 Hz (Nominal) crossover variable from 60 Hz to 120 Hz at main control unit. High-pass filter, passive and selectable for the input impedance of a midrange/high frequency amplifier.

### Crossover of Midrange/Tweeter:

5000 Hz (tweeter level control).

### Midrange/Tweeter Amplifier Requirement:

A high quality stereo amplifier with a maximum of 500 watts/channel and a minimum of 100 watts/channel.

### System Weight:

1200 lbs. (Approximately).

### Control Amplifier:

Contour controls; bass variable low pass filters; Low pass variable damping; Woofer level controls; Selectable input impedance control for midrange/tweeter amplifier; Woofer phase switch; Servo bass on/off circuit.

### Special Features:

All midrange and woofer wirings use "Monster Cable"; All cabinetry is of selected Indian Rosewood, oiled and "Grand piano" finished; All cabinetry bases have black lacquer and "Grand piano" finish; Passive crossover uses highest grade polypropylene capacitors; System includes 100 feet of cable for hookup of midrange/tweeter sections to midrange/tweeter amplifier.

Price includes factory assistance on setup, and adjustment to acoustic environment. Price and specifications are subject to change without notice.

Infinity wishes to acknowledge the generous assistance of QMI, Inc. and Monolithic Sound, Inc., in the engineering and production of the servo bass amplifier.



LISTENING ROOM  
Home of Mr. and Mrs. Arnold Nudell,  
Bell Canyon, California

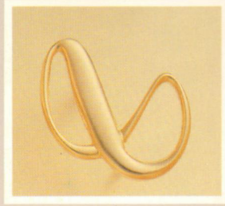


© beim Hersteller  
Archiv Michael Otto



THE STATE OF THE ART  
Edison Home Phonograph. Circa 1898  
Infinity Reference Standard. Circa 1980

© Peter Ostersteller  
Archiv für die Musik Otto



© beim Hersteller  
Archiv Michael Otto

Infinity™

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

7930 Deering Avenue, Canoga Park, California 91304  
(213) 883-4800 • TWX (910) 494-4919.

©1980 by Infinity Systems, Inc. Printed in U.S.A.  
Design: Orenstein & Associates, Inc., Sherman Oaks, California