IRS Series

Infinity®

1RS/VB

Each product of the 1RS Series bears an impressive heritage, utilizing the direct technology previously available only in the $ 50,0001RS system. Since the very first Infinity Reference Standard loudspeaker, introduced six years ago, every 1RS speaker then and since has been lauded as “State of the Art“ by the international audiophile community And every other loudspeaker built by Infinity has derived its technology from the most current flagship 1RS speaker system.

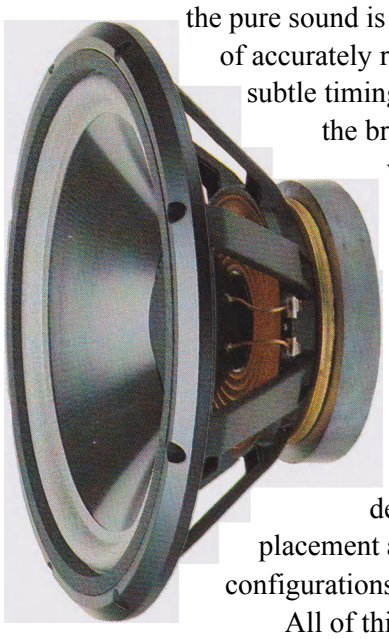
Obviously, loudspeakers in the price range of the 1RS Series are not a casual purchase, If you count yourself in the very serious listener category and contemplate the acquisition of a truly exceptional speaker system, you may wish to know what makes the new 1RS Series speakers so very special.

Breaking past technological barriers

Theoretically, the ideal speaker would have a single diaphragm that could reproduce all frequencies from wall-shaking bass to glass-shattering treble. But no single diaphragm can simultaneously be large enough to move the massive amounts of air needed for heavy low-end reproduction and at the same time be both small and light enough to achieve extended high frequency response with proper dispersion.

Infinity’s answer lay in designing loudspeakers with multiple drivers—each operating in its own narrow, optimum frequency range—to cover the entire audio spectrum seamlessly and effortlessly.

But beyond just accurately reproducing the pure sound is the challenge of accurately re-creating the subtle timing cues that tell the brain exactly where each musical instrument is positioned in space. A challenge met by Infinity with new approaches to crossover design, driver placement and cabinet configurations.



All of this, though. requires new and unconventional dedicated drivers, highly exotic crossovers and non-diffracting enclosures not found in conventional three-, four-, and five-way speaker systems.

And, of course, it requires the commitment to achieve near-theoretical perfection regardless of cost.

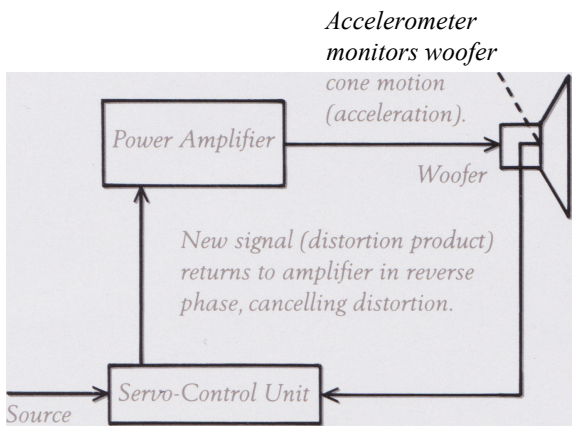
In that way, without techno-gimmickry, we can build speakers which produce wave fronts that are coherent in space and time; that totally disappear before your ears.

Polypropylene/Graphite—the ultimate composite material for the ultimate woofers

To handle bass frequencies from 70Hz all the way down to 15Hz, we created a new woofer utilizing patented cones of injection-molded polypropylene and graphite fiber. Polypropylene, first used in speaker application by Infinity in 1977, is a highly durable polymer which produces superb tonal detail and exhibits excellent self damping properties. Radially aligned graphite fibers (injected at high temperature and pressure during the injection-molding process) add crucial rigidity to the cone, ensuring true pistonic motion at any excursion. This composite cone has the highest stiffness-to-mass ratio of any in the industry, resulting in less bass coloration and faster transient response.

The science of motional feedback

Regardless what cone material is used, there are always some linear and non-linear distortions in the bass region. Linear distortion is primarily caused by the effects of inertia.



Signal Servo-Control unit compares woofer acceleration with original source signal.

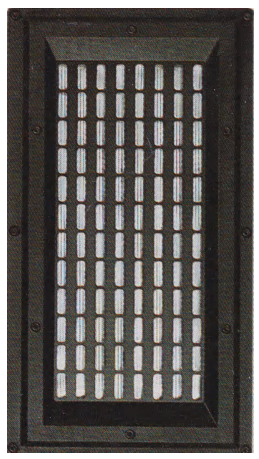
1RS Servo-Control System

The cone, having mass, does not want to move instantaneously with the demands of the signal. Non-linear distortion is caused by the cones suspension elements constraining movement at the ends of excursion, along with the lack of magnetic linearity over the whole excursion range. Both linear and non-linear distortions give rise to non-musical sounds that aren’t in the input signal.

To overcome these distortions, we employ an electronic servo-control system, a technique pioneered by Infinity in the sixties and improved over the last twenty years. This servo-system monitors woofer cone motion (its acceleration) by an accelerometer mounted on the woofer’s voice coil. The amplified accelerometer output is compared to the input signal by means of a device known as a differential servo-amplifier. This amplifier generates a signal representing the difference (the bass distortion) between the electrical input signal and the woofer’s acoustic output, and sends it back to the woofer’s power amplifier in reverse phase so as to cancel the woofer’s distortion.

An additional outcome of Infinity’s servo-control over the woofers is bass response extending down to an unprecedented 15Hz, and with such linearity, the sound reproduced in that region is exactly analogous to the original musical waveform.

The L-EMIM—planar accuracy captures the fundamentals

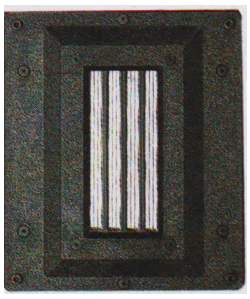


The frequencies from 70Hz to 800Hz are musically the most critical. It is here that 50% of the total musical power of an orchestra resides—the region containing all of the fundamentals which give instruments their basic sounds. To accurately capture this band of frequencies, we created a new driver, the L-EMIM (Large Electromagnetic Induction Midrange). This planar driver is driven by specially designed magnet assemblies and has a diaphragm with an area as large as a 12“ woofer. Like our other planar drivers, the

ETAGA

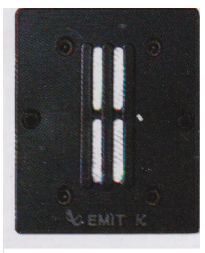
new L-EMIM utilizes push-pull magnetic drive which pulls the diaphragm from one side and simultaneously repels or pushes the diaphragm from the other, providing excellent transient response and cancelling distortion. The resulting driver takes the speed and resolution of our legendary EMIT and EMIM electromagnetic drivers deep into the lower midrange region.

An improved EMIM for unsurpassed upper midrange



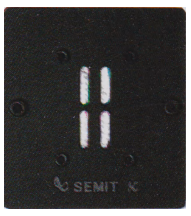
A redesigned EMIM (Electromagnetic Induction Midrange) is used to reproduce frequencies in its optimal range from 600Hz to 4kHz. Newly available high gauss neodymium magnets (the strongest magnetic material available) provide increased efficiency and greater linearity, while an ultra-low-mass kapton diaphragm (so thin, the "voice coil" must be photo-etched onto it) affords flawless transient response and detail for a seamless transition to the EMIT tweeter.

Getting more accurate highs with a faster EMIT



At 4kHz our newest generation EMIT (Electromagnetic Induction Tweeter) takes over. In this range are contained most of the harmonic overtones which give instruments their individual character and immediacy. A super-light kapton diaphragm allows this driver to have a virtually flat frequency response to 4 5kHz. To assure the lowest distortion and highest performance, we only use it for one octave—in the optimum portion of its frequency range. As with the EMIM, rare earth neodymium magnets are used to increase efficiency.

Breakthrough performance in the top octave and beyond—the new SEMIT



To improve high frequency dispersion, the EMIT is crossed over to a new driver we call the SEMIT (Super EMIT), a wide-dispersion tweeter with a smaller aperture than the conventional EMIT. The SEMIT employs the same type of construction as the EMIT, but performance is optimized for top octave and ultrasonic dispersion and frequency response. The use of a driver extending out to 45kHz may seem excessive, but research indicates that overtones in that region can affect the overtones we hear. Just as important, it guarantees effortless transient response and low distortion in the upper ranges of human audibility, a range that lesser tweeters must often strain to reach.

Benchmark engineering applied to the details

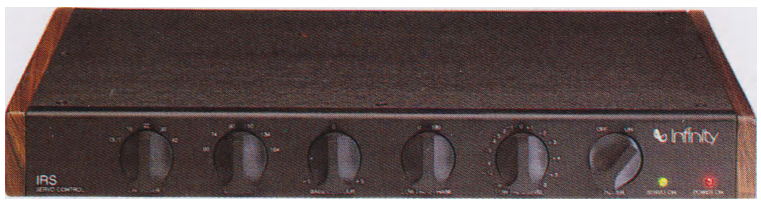
Drivers alone do not a great speaker make. Total system design and integration are vitally important in eliciting the full performance potential of any driver.

Accordingly all 1RS Series speakers were designed with the most thorough attention to detail. All 1RS Series speakers utilize very solidly braced non-diffractive cabinetry and come with non-diffractive removable grilles. Enclosed bass

MMA&

modules containing the woofers are heavily damped and non-resonant, and the open-frame dipolar sections will not diffract or resonate audibly at any playback level.

Our computer-optimized passive crossovers utilize only optimal-Q chokes and



premium grade polypropylene capacitors, resistors and wire. All connections are hardwired; there are no circuit boards. (Our cost in crossover components actually exceeds the retail price of many fully-assembled loudspeakers.) The electronic servo-control unit and passive crossovers included with the 1RS ***V,*** Beta, Gamma and Delta are designed and manufactured to the specifications of the finest component electronics.

The new 1RS Series is the culmination of our twenty years of intensive research and engineering, and thousands upon thousands of hours of listening through our library of mastertapes and reference recordings. We believe that the 1RS Series represents the highest standard of reproduction currently possible, and that these speaker systems form the logical completion of a signal chain made up of the finest music sources and amplifiers available today.

1RS V

The tour de force of loudspeaker technology

The 1RS V is by any measure the ultimate loudspeaker; a special order, hand-built $50,000 ***7Vi*** foot colossus combining unexcelled dynamic capabilities with the resolution to extract the subtlest shading and nuance from an audiophile recording. Indeed, the 1RS V serves as an instrument for the purest enjoyment of music in the home as well as a tool for evaluating other audio components.

The 1RS V is a true Une source array. It is a four piece system (two woofer modules and two midrange/ tweeter modules). Each woofer module is equipped with six 12” polypropylene/ graphite fiber woofers and contains its own dedicated power amplifier delivering 2,000 watts of power. Each midrange/tweeter module utilizes 12 EMIM and 36 EMIT drivers. The four piece system configuration is an Infinity hallmark, allowing the user to place each module in the room independently for optimum bass reproduction and sound staging. The system is completed by an active crossover and electronic servo-control system for the woofers.

An 1RS servo-control unit is included with the 1RS V, Beta and Gamma speakers, and is optional with the 1RS Delta.

Cabinets are totally hand-assembled and finished in the highest grade rosewood. Planar diffraction wings are sand-filled for total elimination of panel resonances.

The 1RS V is a speaker system that was designed expressly as the ultimate reference tool. As such, the 1RS V is like a sonic window which allows one to precisely “see” what each individual component in the reproduction chain is contributing to the sound. Therefore, the 1RS V demands only the best associated electronic components, interconnecting cables, speaker wire and source material.

Like its predecessors, at $50,000, the 1RS V is a speaker not really made for the commercial market; it is meant for our own reference. But for those who have the means'—' and the concomitant love of music, it is a prize worth far more than its price.

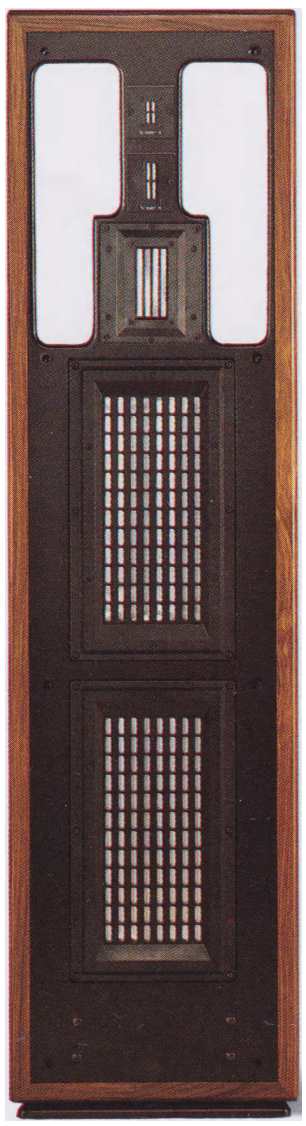
1RS BETA

Conceived to be the finest production loudspeaker in the world

No less a staggering achievement than the 1RS y the 1RS Beta is without equal among other production speakers at any price.

Utilizing four 12” polypropylene/ graphite woofers in each of two woofer modules; plus two L-EMIMs, one EMIM, one EMIT and one SEMIT in each of its two midrange/ tweeter modules, its sonic capabilities are prodigious. It will produce the full dynamics of a symphony orchestra with such palpable realism, it is only betrayed when you open your eyes.

1RS BETA



DELTA.

Bass extends down to 15Hz with extraordinary accuracy, thanks to its accompanying electronic servo-control unit, while high frequency exten-
sion exceeds 4 5kHz. This loudspeaker is the
chnological equal to the finest audio source
Waterial.

The 1RS Beta is configured as a point source, and is a planar dipole down to 70Hz. Properly installed, it provides a startling three-dimensional soundstage with breadth, depth, ^^d height.

The Beta must be bi-amplified, using high quality component amplifiers with generous current capabilities. A low level crossover is included in the servo-control module—active for the bass module, and passive for the high frequencies to preserve signal purity.

Sumptuous Santos pau ferro (first cousin to Brazilian Rosewood) hardwood cabinetry is standard for the Beta, and non-diffractive grilles are provided. Finish as well as sound quality are unsurpassed among the world's premium loudspeakers.

1RS GAMMA

For those whose love of music is limited only b^ room size

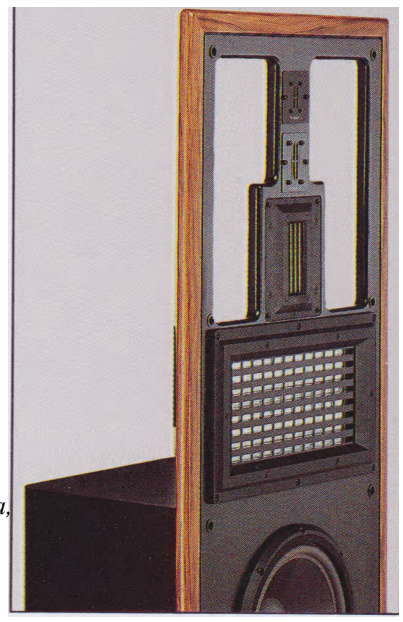
- The 1RS Gamma provides similar detail resolution and articulation to that of the Beta, but in a single cabinet per-side design. Each Gamma module features two 12" polypropylene/graphite fiber woofers, plus one L-EMIM,
1IM, EMIT and SEMIT. The Gamma utilizes
^He same accelerometer type electronic servo-system as the Beta and requires two high quality, high current amplifiers. Nominal impedance is 4 ohms for both inputs. Like the Beta, the Gamma is dipolar down to 70Hz and has frequency response from 15Hz to 45kHz.

Cabinetry features non-diffractive moldings, and a non-diffractive removable grille is provided. The Gamma is finished in very high grade Santos pau ferro hardwood and its compact dimensions will permit successful installation in a wide variety of listening environments.

1RS DELTA

The reference standard speaker for the single-amplifier system

The 1RS Delta differs only slightly from the 1RS Gamma in that it utilizes a passive LC tuned crossover. This allows the owner with only one amplifier in his system to enjoy virtually the same unprecedented 1RS Series performance. Driver complement and finish are the same as the Gamma, as are all dimensions. Frequency response is equally extended in the treble, and is flat to 28Hz in the bass, the result of LC tuning in the passive crossover.



The unique visual signature of the 1RS Beta, Gamma and Delta is this non-diffractive midrange/tweeter housing. By suspending the EMIM, EMIT and SEMIT in space so that their signals can't reflect off the cabinets, each driver acts as a point source with only the pure, non-diffracted sound propagating directly into the room.

If a second amplifier is used, frequency division is accomplished passively by means of the speaker's internal crossover. The Delta may easily be upgraded to Gamma level by the addition of the 1RS servo-control unit with an attendant improvement in bass response and reduction in distortion derived from servo bass control.

The Delta is undoubtedly the most affordable of the world's great loudspeakers and will give you a level of sound reproduction surpassed only by the more expensive systems in the 1RS Series.

The 1RS y Beta, Gamma and Delta are available only at a limited number of Infinity dealers whose unique expertise and select high-grade components enable them to cater exclusively to an audiophile clientele. A visit to one of these dealer-specialists can open the door to your full and unending enjoyment of an Infinity Reference Standard speaker system. For the love of music.

1RS GAMMA/ 1RS DELTA

Turn down the lights, turn on your favorite music, and you'll probably still be listening in the morning

For two decades, Infinity has produced loudspeakers which have been lauded by audiophiles and audio critics alike as State of the Art. But never in our twenty years has a speaker series come this close to completely satisfying our own driving obsession: to reproduce the sound of music with absolute and flawless accuracy.

In the Infinity 1RS Series is embodied the sum of twenty years of research and proprietary invention, representing the present limits in the art and science of transducer design.

What has emerged are loudspeaker systems so sonically accurate they can follow a musical input with as much integrity as the best preamps and amplifiers. Indeed, we are quite convinced these are the most sonically precise loudspeakers we or anyone else has ever made.

The 1RS Series was designed for people who share our obsession with music. Those who truly feel price is secondary compared with the breathtaking experience of hearing ones favorite musical performances flawlessly re-created with all the depth, warmth, presence and staging fully intact.

1RS Series Specifications

	1RS V	BETA	GAMMA	DELTA
DRIVERS (per channel)				
WOOFERS	Six 12” Polypropylene/Graphite	Four 12” Polypropylene/Graphite	Two 12” Polypropylene/Graphite	Two 12” Polypropylene/Graphite
MID BASS	-	2 L-EMIMs	1 L-EMIM	1 L-EMIM
MIDRANGE	12 EMIMs	1 EMIM	1 EMIM	1 EMIM
TWEETERS	24 EMITs/front 12 EMITs/rear	1 EMIT/front 1 EMIT/rear	1 EMIT/front 1 EMIT/rear	1 EMIT/front 1 EMIT/rear
SUPER-TWEETERS	-	1 SEMIT	1 SEMIT	1 SEMIT
NOMINAL IMPEDENCE	4 Ohms	4 Ohms	4 Ohms	4 Ohms
FINISH	Brazilian Rosewood	Santos pau ferro	Santos pau ferro	Santos pau ferro
DIMENSIONS (WxDxH)	Woofer module: 20%” X 28%” X 90” (52.71 X 73.03 x 228.60cm) Mid/tweeter module: 47” x 17” x 90” (119.38 x 43.18 x 228.60cm) Base footprint: 38” x 12” (96.52 x 30.48cm)	Woofer module: \6W x 14 W' x 64%” (41.91 x 36.83 x 164.47cm) Mid/tweeter module: 17” x 1 ” x 64%” (43.18 x 2.54 x 164.47cm) Base footprint: 18” x 17” (45.72 x 43.18cm)	22” x 14” x 63” (55.88 x 35.56 x 160.02cm) Base footprint: 22” x 14” (55.88 x 35.56cm)	22” x 14” x 63” (55.88 x 35.56 x 160.02cm) Base footprint: 22” x 14” (55.88 x 35.56cm)
WEIGHT	1500 lbs (681.82kg)	Woofer module: 140 lbs (63.64kg) Mid/tweeter module: 75 lbs (34.09kg)	140 lbs (63.64kg)	140 lbs (63.64kg)
SPECIAL FEATURES	Monster Cable ARC wire Solen caps Wonder caps	Monster Cable ARC wire Solen caps Wonder caps	Monster Cable ARC wire Solen caps Wonder caps	Monster Cable ARC wire Solen caps Wonder caps
FREQUENCY RESPONSE	15Hz to 45kHz ±2 dB	15Hz to 45kHz ±2 dB	15Hz to 45kHz ±2 dB	28Hz to 45kHz ± 2 dB
CROSSOVER FREQUENCIES	7 0Hz (variable), 4500Hz	100Hz, 750Hz, 4500Hz, 10kHz	130Hz,750Hz, 4500Hz, 10kHz	130Hz,750Hz, 4500Hz, 10kHz
PASSIVE CROSSOVER CONTROLS	Tweeter level Upper midrange level	Super tweeter level Tweeter level Upper midrange level	Super tweeter level Tweeter level Upper midrange level Lower midrange level	Super tweeter level Tweeter level Upper midrange level Lower midrange level
ELECTRONIC CROSSOVER CONTROLS	Low cut defeat Low pass cut-off Low pass contour Low cut Low frequency level Low frequency phase	High pass filter Low pass filter Bass contour Low frequency phase Low frequency level	High pass filter Low pass filter Bass contour Low frequency phase Low frequency level	c
MID/TWEETER AMPLIFIER REQUIREMENTS	100-500 watts/ch RMS	75-300 watts/ch RMS	75-300 watts/ch RMS	\C, >75-300 watts/ch RMS
BASS AMPLIFIER REQUIREMENTS	2 kilowatts/ch RMS (included)	150-500 watts/ch RMS	100-300 watts/ch RMS	

Because Infinity constantly strives to improve existing products, specifications are subject to change without notice. Infinity Reference Standard Series Speakers carry a 5-year transferable Parts and Labor Limited Warranty. For details, see the complete Warranty packed with each speaker, or consult your Infinity dealer.

Infinity®

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


LoudandProud
HIFIGOTEBORG.se
WANT TO RELAX TO BEAUTIFUL MUSIC
WELCOME
WE HAVE GOOD HIFI AT YOUR SERVICE
PLEASE WAIT HERE & A MEMBER OF OUR TEAM WILL BE WITH YOU SHORTLY.
Or press finger HERE
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