Infinity

REFERENCE SERIES
Reference Series
The Next Generation

In an era when pride in quality craftsmanship, independent creative thinking and conscientious attention to detail seem to be rapidly vanishing from almost every field of consumer goods, Infinity continues to lavish our unique blend of tender loving care and cutting edge engineering on every loudspeaker that bears the Infinity logo.

Most recently, we turned our attention to the popular Reference Series with an eye toward further elevating the already exceptional level of performance of this fine range of loudspeakers.

The result is Reference Series II • The Next Generation, quite simply one of the finest loudspeaker lines ever introduced.

The second generation Reference Series loudspeakers represent substantial improvements in key areas such as efficiency, power handling and in both the quantity and quality of deep bass. One of the major contributing factors to this giant step forward is the introduction of drivers which incorporate proprietary APG lightweight cone technology, allowing them to respond to musical waveforms with amazing accuracy.

With higher efficiency, increased power handling and enhanced low frequency output, the new Reference Series is ready to take on any sonic challenge, from chamber melodies to operatic climaxes, from cheerful Aladdin to fearful Jurassic Park.

Whatever your tastes and budget, your nearest authorized Infinity dealer has a Reference Series loudspeaker to suit your needs with all the impact, realism and musical integrity you have come to expect from Infinity.

The new Infinity Reference Series introduces design refinements that make possible new levels of linear frequency response, high efficiency and low frequency impact in a range of innovative domestic loudspeakers equally suited to music reproduction, home theater and surround sound.

The Second Generation Reference Series incorporates:

- Space-age APG driver technology with carbon and Kevlar fibers.
- Super-light cones for improved sensitivity.
- Low insertion loss crossovers for improved transient response.
- Increased internal volume for extended deep bass response.
- Rear-mounted port for undistorted bass response.
- Crossover optimized for uniform phase response both on and off axis.
- Internal bracing for reduced resonance.
- Strategically placed internal damping to eliminate standing waves.
- Sloped cabinet for reduced diffraction.
- Redesigned grille for optimum vertical and horizontal dispersion.
- Spikes for decoupling of floor-standing models.
- Finest furniture craftsmanship.
- Sleeker, slimmer enclosure design.
APG cone technology
Without a doubt the most revolutionary innovation in the Reference Series is the implementation of a specially formulated graphite coated APG (acrylic polymer graphite) cone which combines the excellent internal damping of acrylic polymer with the stiffness of graphite.

Extensive subjective and objective testing confirms that APG represents a major breakthrough in cone materials technology with stunning performance in terms of low distortion, linear frequency response, spacious sound and overall musicality.

The exclusive APG process aligns carbon and Kevlar fibers precisely along the polymer matrix, allowing total control over the contour and weight of the cone, while making it possible to create a lightweight cone with varying thickness, for greater dispersion of sound.

Carbon and Kevlar fibers are embedded in an APG matrix in carefully controlled proportions. Following oven heating, the compound forms an extremely rigid, ultra-lightweight and super-strong composite cone material with maximum internal damping which offers a significant reduction in distortion caused by colorations, vibration and break-up modes.

The sonic benefits of the fast transient response and high sensitivity of the new Carbon and Kevlar fibers embedded in a polymer matrix forms a rigid, low mass, super-strong driver cone.
lightweight driver cones are readily apparent in the astonishing openness, lucidity and harmonic fidelity of the Reference Series loudspeakers. Their crisp, detailed sound is the result of innovative materials and driver technology unrivaled in contemporary loudspeaker engineering.

**High sensitivity**

Since APG cones are 30% lighter than paper cones of equal stiffness, Infinity engineers could design the new Reference Series with higher efficiency, without employing heavier, more costly magnetic structures. The high sensitivity of the Reference Series loudspeakers, with highly efficient magnetic systems, super-light cones and low insertion loss crossovers, means far less work for your amplifier. Since amplifier distortion increases with higher power output, reducing power demands also yields a significant reduction in distortion.

An increase of 3dB in sensitivity reduces by 50% the power required from your amplifier to achieve the same sound pressure level.

**Sophisticated crossover**

The new Infinity Reference Series' low insertion loss crossover networks employ select-grade components in a crossover configuration designed to preserve signal integrity and efficiency. Crossover design assisted by state of the art computer technology and controlled by extensive listening tests ensures optimum linearity combined with lowest distortion and the finest sonic quality.

Since lightweight cones respond more rapidly and linearly to transients, the rigid, high-tech cone materials employed in the high efficiency Reference Series dynamic drivers offer enhanced transparency, improved resolution of low level detail and of the ambience cues which create a wide and deep soundstage.

The high efficiency of the crossovers permits the use of Reference Series speakers in high power applications, including demanding home theater systems.

**Enclosure design**

In the new Reference Series loudspeakers radical steps have been taken to eliminate the "boxiness" normally associated with conventional cabinet construction.

The midrange drivers are installed in separate air-tight compartments filled with special damping material to provide smooth, linear reproduction of the crucial midband.

The Reference Series speakers in Chatsworth Oak or Black Ash vinyl are finished to the highest standards of furniture craftsmanship and their sleek contemporary "Tower" look will match most interiors.

Internal bracing and damping reduce the deleterious effects of resonances and standing waves. Front baffle diffraction phenomena, which typically introduce smearing in the time domain, are reduced through the implementation of an optimized grille shape and through tapering of cabinet top and sides. Rear-mounted bass reflex ports minimize noise, while providing extended, punchy bass.

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Chatsworth Oak finish.

Integral spikes provide effective decoupling of all floor-standing models for tighter bass and enhanced midrange clarity.
**Reference 11i**
The compact two-way Reference 1i confirms our commitment to reveal every nuance of music and to redefine the audio standard at every price point. It incorporates a 130mm woofer with a graphite coated lightweight cone, a heat-resistant voice coil for high power handling and a large magnet rigidly fastened to the frame for vibrationless performance.
The polymer dome tweeter is driven by a 10mm, formless voice coil. A phase plug above the dome produces linear response extending well beyond 20kHz with superb dispersion characteristics.
The Reference 1i virtually instantaneously converts complex musical waveforms to clean, clear, transparent sound.

**Reference 11i**
Exotic technology is rare in this price range, but is present in abundance in the two-way Reference 11i bookshelf speaker, which has a horn loaded 14mm polymer dome tweeter with the ferrofluid voice coil wound directly onto the diaphragm for improved electrical to mechanical transfer of energy, resulting in increased efficiency.
The 170mm woofer employs a graphite coated APG cone with carbon and Kevlar fibers. With lightweight moving parts, the Reference 11i offers superior high frequency response, excellent transient response and high efficiency. The superb musical qualities of the Reference 11i are the result of Infinity's willingness to use radical new technology in the service of music.

**Reference 21i**
The Reference 21i shares the 25mm soft dome tweeter with all the more costly models in the Reference Series. The unique catenary dome profile minimizes dome break-up at all frequencies for flat frequency response extending beyond 23kHz combined with exceptionally low distortion.
This driver offers an airy, open high frequency range which integrates perfectly with the 210mm woofer with APG cone which is port-loaded for additional punch in the bass region.
The bookshelf size of the Reference 21i does not in any way compromise its ability to deliver a full-bodied, dynamic rendering of the music of your choice.

**Reference 31i**
The floor-standing Reference Series utilizes spikes for optimum decoupling from the floor, resulting in tighter bass and more detailed midrange. Based on the same 210mm woofer and 25mm tweeter as the Reference 21i, the Reference 31i exploits its larger cabinet volume to achieve higher levels of bass at still lower frequencies for an even more natural sounding, more solid deep bass foundation.

The Reference 31i handles low level micro-dynamics and the most explosive passages with consummate ease.

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### MODEL

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Reference 1i</th>
<th>Reference 11i</th>
<th>Reference 21i</th>
<th>Reference 31i</th>
</tr>
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<tbody>
<tr>
<td>FREQ. RESP.</td>
<td>65 Hz - 20 kHz</td>
<td>50 Hz - 25 kHz</td>
<td>45 Hz - 25 kHz</td>
<td>41 Hz - 25 kHz</td>
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<tr>
<td>CROSSOVER</td>
<td>3.5 kHz</td>
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<tr>
<td>SENSITIVITY</td>
<td>2.83V @ 1m</td>
<td>90 dB</td>
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<td>NOM. IMP.</td>
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<td>6 ohms</td>
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<tr>
<td>POWER HANDLING</td>
<td>10-50 watts</td>
<td>10-75 watts</td>
<td>15-100 watts</td>
<td>15-100 watts</td>
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<td>DRIVERS</td>
<td>10 mm</td>
<td>14 mm</td>
<td>25 mm</td>
<td>25 mm</td>
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<tr>
<td>MICROPHONE</td>
<td>130 mm</td>
<td>170 mm</td>
<td>210 mm</td>
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<tr>
<td>VINYL CABINET FINISH</td>
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<td>Chatsworth Oak/ Black Ash</td>
<td>Chatsworth Oak/ Black Ash</td>
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<tr>
<td>DIMENSIONS (HxWxD)</td>
<td>344x198x200 mm</td>
<td>390x226x246 mm</td>
<td>470x274x276 mm</td>
<td>840x274x246 mm</td>
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</table>

Note: Include spiked feet.
**Reference 4i**
The three-way bookshelf model in the Reference Series offers gold-plated five-way binding posts and incorporates APG cone technology in all three drivers. The 210mm woofer and 130mm midrange utilize graphite-coated APG cones for lower moving mass and the 25mm tweeter's textile dome is APG-coated.
The tweeter's catenary profile provides maximum stiffness at the tip of the dome for nearly perfect pistonic motion with no out-of-phase break-up at the tip.
With three drivers, including the ferrofluid cooled tweeter, the Reference 4i is capable of enhanced power handling for higher maximum sound pressure levels at no compromise in sound quality.

**Reference 5i**
The Reference Series floor-standing three-way system employs the same driver components and technology as the Reference 4i, but in a larger enclosure with increased internal volume for deeper, punchier bass. The extended low frequency response and higher levels of clean, solid bass from the Reference 5i add a more realistic physical dimension to your listening enjoyment, regardless of musical style.
The carefully sculpted tweeter faceplate provides exceptional linearity across the driver's operating range combined with ideal vertical and horizontal dispersion, while the 130mm midrange unit, installed in its own air-tight compartment, delivers resonant-free spacious sound in this critical frequency range.

**Note:** Include spiked feet.

**Reference 6i**
The top of the line Reference tower includes spikes for effective decoupling from the floor and gold-plated terminals for long-term purity of signal transmission. The Reference 6i adds a second 210mm APG woofer to the driver complement found in the Reference 5i, further extending low frequency response and power handling with two woofer voice coils to share the workload. The 25mm APG-coated dome tweeter minimizes break-up of the radiating surface across its operating range for smoother, more natural high frequency response with very low distortion. The mechanically isolated 25mm unit reproduces the midrange with outstanding clarity and definition.
The Reference 6i brings music to life with a new fullness and richness.

**Note:** Include spiked feet.

**Reference 100i**
With its elegant low profile styling, the Reference 100i may be used in conjunction with any model in the Series, or with any high performance loudspeakers. The Reference 100i home theater center channel loudspeaker incorporates a special configuration of shielded drivers with a central 14mm tweeter flanked by a 130mm woofer on each side. The Reference 100i may be placed above or below the monitor for optimum surround sound performance. The Reference 100i is specifically created for exceptional dialog clarity with high sensitivity and high power handling to meet the rigorous demands of modern movie soundtracks.

<table>
<thead>
<tr>
<th>Reference 4i</th>
<th>Reference 5i</th>
<th>Reference 6i</th>
<th>Reference 100i Center channel</th>
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<tbody>
<tr>
<td>40 Hz - 25 kHz</td>
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<td>35 Hz - 25 kHz</td>
<td>70 Hz - 25 kHz</td>
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<td>35-200 watts</td>
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</tr>
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<tr>
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<td>210 mm</td>
<td>2 x 210 mm</td>
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</tr>
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<td>Chatsworth Oak/ Black Ash</td>
<td>Chatsworth Oak/ Black Ash</td>
<td>Chatsworth Oak/ Black Ash</td>
<td>Chatsworth Oak/ Black Ash</td>
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<tr>
<td>600x274x276 mm</td>
<td>890x274x275 mm</td>
<td>1070x274x310 mm</td>
<td>198x480x204 mm</td>
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