

The Infinity Prelude MTS Home-Theater Loudspeaker System

How Innovation and Solid Design Overcame a Reviewer's Prejudices

My son has a theory that if equipment looks really good, it sounds really good. My normal rebuttal is: “Bang” and “Olufson.” To me, these two words symbolize the fact that beautifully styled equipment sometimes rises to the very heights of sonic mediocrity. I had something of this reaction when I was sent the Infinity Prelude MTS loudspeaker system for review.

The units in this system include four identical aluminum towers, with four 5.25" woofers, a 3.5" midrange driver, and a single 1" tweeter (per column) covering 80Hz to 22kHz. The front towers mount on wood-and-aluminum subwoofers, with 12" low-frequency drivers and built-in 850-watt amplifiers covering 20–80Hz. The rear towers can be wall-mounted or put on matching aluminum stands. The center channel is also an aluminum column with two woofers, a midrange driver, and a tweeter covering 80–22kHz. All come in a variety of wood finishes.

This is hands-down the most attractive home-theater system I've seen, with the possible exception of the Infinity Intermezzo. I was still biased against it. Infinity has not been one of my favorite brands, and many of the design features in the Prelude MTS system seemed questionable.

That was my first mistake. Even your children can be right—on rare occasions—



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Intermezzo and Interlude series sells for a fraction of that.

I have hinted at my second mistake, and I mention it largely because other audiophiles may have the same prejudices: I was not prepared to take an Infinity product seriously. I owned some of Infinity's high-priced, high-end reference speakers in the days when Infinity was still owned by Arnie Nudell (now at Genesis

Technologies), but even then I once described its more affordable speakers as suitable only as “pet coffins.”

Post-Nudell, Infinity seemed to lose its way entirely. The products I got for review were rarely worth the money. The speakers had punchy, exaggerated bass without genuine deep extension or tight transient definition. They had a rising midrange response and excessive treble, and some were difficult amplifier loads. Sometimes the bass and

and I find my prejudices are often wrong. The Prelude MTS is a damn good speaker system. I have even changed my mind about Infinity. The innovative features here are not advertising hype—they work! Even better, many are available in Infinity's more affordable Intermezzo and Interlude series. The Prelude MTS is \$16,000 for a complete home-theater system of four towers, two subwoofer units, and a center channel. A similar mix of speakers using the

midrange didn't hang together. They had a sound that might stand out in the showroom but became fatiguing at home. So I ceased to pay attention to the brand.

The Prelude MTS, however, stands up to sonic comparison with top speakers like the Revel Salon, Thiel 7.2, and Polk SRTs. It may not equal these more expensive products in every way, but it has much of the same smooth frequency response as the Revel Salon. It has extended—not harsh or exaggerated—highs, and realistic air and extremely deep bass with good control, even on demanding musical transients, and no excessive punch or boom. The sound is smoothly integrated top-to-bottom.

Infinity says that this smooth frequency response and musically natural timbre come from several factors, including a new approach to room equalization in the woofer design, which I'll discuss later. The drivers' resonance points occur well outside their operating range, thanks to the use of CMMD and fourth-order crossovers at 80, 300, and 2kHz. Infinity publishes a response for the towers of +/-3dB from 80Hz–22kHz, and +/-1.5dB from 100Hz–20kHz. I lack a handy home anechoic chamber, and place no faith in measurements made in my listening room, but the speakers certainly measured exceptionally well using a one-third-octave professional RTA under real-world home-listening conditions, and equally well using the TacT RCS 2.2 Room Correction System.

My third prejudice is that I'm leery of tower configurations that separate the tweeter and drivers by significant distances. A number of superb speakers do this, but the result can be poor vertical integration and awkward horizontal dispersion. Don't worry about the Preludes. The integration is very good to excellent at any reasonable listening distance (greater than seven feet).

Fourth, because the towers and center channel use metal as an enclosure material, I believed that visual style had triumphed over common sense and expected enclosure resonance and coloration. I had a brief resonance problem, but it occurred due to a minor problem in fastening one of the towers to the subwoofer enclosure. The tolerances for the mounting bracket were sloppy, requiring a force-fit, compounded by (included) tools that did not fit the product.

Once I reset the tower on the sub-



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woofer and got my own tools, I discovered that the tower drivers operate at ranges well outside the resonant frequency of their aluminum enclosures, and that there was little interaction between the towers and the subwoofer. The stands for the rear towers can be filled with sand, but worked well without it. In short, the enclosure material was not resonance-free, but presented fewer problems than most wood enclosures I've dealt with. Only a few expensive composite and multilayer MDF enclosures seem less resonant at high levels, and even super-high levels excited far more room vibration than enclosure vibration.

My fourth-and-a-half prejudice: "Cordesman's Law" states that all new speaker diaphragm, magnet, and design technology sounds worse than all old speaker diaphragm, magnet, and design technology in direct proportion to the amount of advertising hype used to describe it. Guess what? "Cordesman's Law" failed!

The drivers in the Prelude MTS (and less expensive Intermezzo and Interlude series) all have the horrible acronym CMMD—something you'd expect from crossbreeding an arms controller with a nuclear-weapons designer. In practice, it means a cone and dome material using a ceramic/metal matrix of two outer layers of pure alumina bonded to an internal substrate of low-density aluminum. Infinity says that the alumina ceramic

compound is three times as "dead" as titanium and 85 times stiffer than felted paper, and that the differential between the ceramic outside layer and aluminum substrate provides additional damping that smoothes frequency peaks.

We've heard all this before for other cone/dome materials, and yet some of the best, most expensive speakers still use traditional materials. The drivers and crossovers in the Prelude MTS do, however, produce excellent detail. This came through clearly in the quiet passages of a demanding soundtrack, *Last of the Mohicans*, and equally clearly in a soundtrack that mixes extremely demanding loud passages with directional information, like the battle scenes in *The Patriot*.

I did get slightly more low-level resolution and overall transparency from the Revel Salons and Thiel 7.2s in stereo classical music, but the Preludes brought out the differences between the SACD and CD versions of some recordings and resolved subtle variations in imaging and depth.

Using the Preludes as a reference system also helped me confirm the generally dismal nature of DVD-Audio—at least in its present state. At this writing, reference-quality speakers like the Preludes indicate that DVD-Audio cannot meet the "Naxos test." You get more detail, transparency, and natural sound quality from the average \$6 recording on the Naxos label played in any really decent CD deck than you do from expensive DVD-Audio discs.

This brings me to my fifth mistake, and a feature of the Preludes that may be the salvation of problem rooms. The subwoofers in the Prelude MTS (the same as in the Intermezzo series) have a parametric equalizer feature that allows you to remove the most serious bass resonance under real-world, in-room listening conditions by equalizing the system to cut the bass at a given frequency an adjustable amount and bandwidth. Infinity uses another acronym *horribilis* for this—RABOS (Room Adaptive Bass Optimization System).

I assumed that this feature was a gimmick. My experience with bass equalizers with fixed-frequency response has been dismal. I tried RABOS in three very different rooms, and if you follow the instructions and focus on getting rid of the worst peak above 40Hz, it works very well, indeed. Yes, full parametric or digital equalization is better. I confirmed that in

SPECIFICATIONS

PRELUDE MTS TOWER

Frequency response: 80-22kHz (no tolerance given)
Driver complement: Four 5.25" woofers, one 3.5" midrange, one 1" dome tweeter
Sensitivity: 90dB (1m/2.83V)
Impedance: 4 ohms (+/-1 ohm)
Dimensions: 37" x 6.5" x 7.5"

PRELUDE MTS CENTER CHANNEL

Frequency response: 80-22kHz (no tolerance given)
Driver complement: Two 5.25" woofers, one 3.5" midrange, one 1" dome tweeter
Sensitivity: 89dB (1m/2.83V)
Impedance: 4 ohms (+/-1 ohm)
Dimensions: 6.5" x 7.625" x 37"

PRELUDE MTS SUBWOOFER

Driver complement: One 12" woofer
Integral amplifier power: 850W
Dimensions 20" x 9.5" x 20.5"
Frequency Response 23-80Hz (+/-3dB); 30Hz-80Hz (+/- 1.5dB)

ASSOCIATED COMPONENTS

Theta Voyager Laser Disc/DVD player with progressive-scan upgrade; Theta Casablanca II, Meridian 800, Lexicon MC-1 controllers; Theta Dreadnought power amplifier; Mitsubishi WS-65907 65" HDTV rear-projection TV set; Kimber video and audio interconnects; Kimber and Monster Cable speaker cables. System Two: Onkyo DV-S939 DVD player; Adcom GTP-760 controller; Adcom GFA-7500 power amplifier; Kimber and Discovery video and audio interconnects; Kimber and Discovery speaker cables; Sony XBR-400 36" HDTV monitor. System Three: Sony SCD-777ES SACD player; Theta David DVD/DVD-A/CD transport; Mark Levinson No.360S D/A converter; Pass XO phono preamp; Pass X1 stereo preamp; Pass X600 power amplifiers; Kimber XL and Transparent Audio Reference XL interconnects and speaker cables

comparative listening using the TacT. However, getting rid of a major peak around 40Hz in my home theater opened up the deep bass and produced tighter, cleaner, deeper sound. The differences in a soundtrack with floor-shaking effects, like *Das Boot*, were truly impressive.

I got equally good results in my stereo listening room, particularly when I calibrated each subwoofer separately. I used less equalization than in my home theater and got rid of a smaller peak around 80Hz, but the differences in reproducing organ were clear.

I placed the subwoofers in the worst location—an area I know has multiple bass peaks and major standing-wave problems. The RABOS feature did not solve this set of problems, but it made things listenable. This was a real achievement. Equalize the

wrong frequency with a one-third equalizer set at fixed bass frequencies, and the cure is worse than the disease. However, **with RABOS you get a real improvement.** (Incidentally, my fifth-and-a-half-prejudice was assuming that the measurement system that came with the speaker was a toy. **The SPL meter is much closer to a professional instrument in the low bass than the Radio Shack SPL meter, and the test CD is excellent.** You can buy both as a kit—a cost-effective way to measure bass performance.)

My final prejudice was to fear I might have amplifier problems because of similar difficulties with past Infinity designs. I didn't. The Prelude MTS is rated at 89-90dB sensitivity. It seemed to measure 1-2dB lower than that, but it had typical sensitivity levels for a home-theater system. The speaker load is a nominal 4 ohms. In practice, it requires an amplifier with moderate-to-high power (75 watts is a good starting point) and good high-current output. I don't know of any good multichannel amp that won't work well with it. The Adcom 7500 amplifier drove it easily, and I got good results with an Onkyo receiver. The exceptionally powerful amplifier in the subwoofer unit, which has a maximum rated output of 850 watts with peaks of 2500 watts, also had more than enough steam. **The subwoofer had dynamics and transient detail that matched those of the midrange and treble at peaks above 105dB, and produced good sound at levels louder than I am willing to listen to.** I did not experience interaction problems with a range of cables.

Have I made it clear that the Prelude MTS is an excellent speaker system? Let me sum up. This is a natural-sounding system with a wide range of dynamics. It's as good for music as for home theater, and its upper midrange and treble provide natural life and air without annoying valleys or peaks and without a slope in the upper-octave response that exaggerates or dulls the highs. It won't disguise a bad theatrical sound-mix like the DVD of *Cleopatra*, but it does solo violin, harpsichord, and soprano voice with no exaggeration of sibilants.

Dispersion is wide and well balanced in both the stereo and surround modes; I encountered no problems with irregular fall-off in horizontal dispersion. The level of the tweeter in each tower is well chosen for most listening positions. Although it does rely on direct radiation from the

rear/side channels, rather than diffuse effects, I tend to prefer direct radiation from the rear/side channels in most home-theater configurations, and particularly with subtle directional information in soundtracks and surround music. You may prefer systems with other surround rear/side configurations, and you should have your dealer demonstrate the difference before you buy.

My one reservation that survived my mistakes and prejudices: The MTS center channel isn't quite up to the towers. It doesn't have the same life and upper-bass to lower-midrange naturalness, and its low profile and the cradle-like mounting tend to make the coloration caused by placing it on a TV somewhat worse than usual. Rigging up a stand-mount in front of the set produces notably better balance with white or pink noise. Virtually all center-channel speakers present similar problems compared to really good left-and-right-channel speakers; their timbre is colored by placement on the TV.

I checked out the sound of the Interlude series at a showroom. It doesn't give you Prelude MTS sound quality at mid-fi prices, but Infinity is clearly designing all the speakers in this line to have the same general character. If you are on a shorter budget, audition the Interludes. **If you've got a room problem in the deep bass, the Interlude series has two subwoofers with the same bass optimization feature found in the Prelude subwoofers. A unit like the Infinity IL-120 may be able to solve many difficult room problems at a reasonable price.**

MANUFACTURER INFORMATION

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System Price: \$16,000



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