

Infinity

Alpha Home Theater Speaker System



The surround channels feed Alpha 25ES speakers. The three front sides of the speaker form 120° angles, and each has a separately removable grille cloth. The two outer sides each contain a 1-inch tweeter and a 5¼-inch midrange driver, but in different orientations — one has the tweeter on top, the other has it on the bottom. The center face holds a switch for selecting dipole, monopole, or bipole operation.

In monopole (direct-radiating) mode, only one set of drivers is powered. In dipole mode, both sets are playing, but they operate out of phase to provide greater ambience. In bipole mode, the drivers are in phase, providing greater localization. Around back are four keyhole slots for wall mounting.

The subwoofer is the front-firing, rearported Alpha 1200S, with a 12-inch driver and 500-watt amplifier. The large cabinet, big driver, and high-power amp not only provide the muscle you need to achieve loud bass, but the sub also provides controls for getting the bass to sound just right.

In particular, the sub has rotary controls to adjust level and to set the low-pass crossover frequency (between 50 and 150 Hz with a steep, 24-dB-per-octave slope). Switches select phase polarity and turn the low-pass filter and the Bass Optimization System (BOS) on or off. In effect a parametric equalizer, BOS has three more rotary controls: for frequency (20 to 80 Hz), level (0 to -14 dB), and width (4.5 to 49.5 Hz).

All of the speakers share a common driver technology, Infinity's Ceramic Metal Matrix Diaphragm (CMMD), in which a diaphragm with two ceramic layers is separated by a metal substrate. The hybrid is stiffer than all-metal diaphragms, and Infinity claims that it yields smooth frequency response, low coloration, and low distortion.

I set up the speakers, placing the bookshelf-size Alpha 20s on stands with the tweeters at my seated ear level. I put the Alpha 37C on top of my TV. Many folks will decide to wall mount the Alpha 25ES surround speakers, as their shape seems to suggest. For my listening sessions, I put them up on speaker stands flush against the

Choosing a set of speakers is the most subjective part of buying a home theater system. Yes, there's general agreement about what constitutes "good sound," but there's a vast gray area of disagreement about exactly how a speaker should be "voiced." For example, some people prefer bright speakers, whereas others like a darker, more mellow tone. This taste is propagated over entire speaker lines as different companies develop their own distinctive "sounds." It had been a while since I had carefully auditioned Infinity's sound, so I was happy that **Sound & Vision** asked me to review a system from the new, reason-

ably priced Alpha line to see if the company's "ears" had changed.

A pair of Alpha 20 speakers filled the front left/right positions. Behind a detachable grille, this two-way bookshelf speaker sports a 1-inch tweeter, a 6½-inch woofer, and a front port. Center-channel duties were handled by the Alpha 37C, which is larger than most center speakers — in fact, it's almost as wide as some TVs I've owned. This three-way design has a 1-inch tweeter above a 4-inch midrange driver, both flanked by two 6½-inch woofers. Around back, the speaker has a firing-angle adjuster so you can aim it toward your listening position.

side walls. To ensure proper monopole and dipole operation, I was careful to position them as indicated.

In my room, I get the best bass along the front wall, between the TV and left front speaker, so that's where I put the Alpha 1200s. I set my receiver's bass management for "small" speakers all around. Infinity advises that if your receiver lets you adjust the subwoofer crossover, you should use "the lowest setting above 70 Hz." After I adjusted the sub's level to room-shaking volume, I found that a setting of 80 Hz on the receiver gave a good blend between the sub and the satellites. The Bass Optimization System helped me fine-tune the lows, making the sound as smooth as possible.

As usual, I began with music listening, starting with the DVD-Audio rendition of Faith Hill's *Cry*. Personally, I prefer my country straight up, but this is still a pleasant enough set of songs, with good vocals and an excellent surround mix. On "Baby You Belong," lead and backup vocals are placed in the front three channels, but some additional backups come only from behind. The percussion is mainly in front but occasionally pops up in the rear. Guitars are heard from all around, playing independently in front and back.

I switched the Alpha 25Es surrounds between their three modes to see how each fared. In the monopole mode, surround imaging was spot on. Each instrument oc-

cupied a distinct space — and stayed there even when I moved somewhat from my center spot. Moreover, the images had a nice sense of width and depth to them, as you'd expect if you were listening to a live performance. In dipole mode, rearward images were much more diffuse, which focused my attention on the front panorama. The effect was not unpleasant, but perhaps not what the mixer of this particular album had in mind. In bipole mode, the sound field's size was reasonably large, and image localization was decent, too — a good compromise. Whatever your taste, one of these ambience settings will suit you just fine. I should also mention that the tonal similarity of the front and surround speakers immeasurably improved the sense of natural immersion.

"If You're Gonna Fly Away" has a bouncy beat with crisp percussion all around. The snare and high-hat in front have a sharp and dry techno sound accompanied by a great rhythm guitar playing a percussive beat in back. I was impressed by the Alpha system's ability to handle this percussive, snappy sound. Everything stayed taut, particularly in the guitars' lower midrange. Lesser speakers would make mush of this, but the Alphas stayed clean. The lead vocals were slightly aggressive in the



The Infinity Alpha speakers helped convey all the stylish violence of *The Scorpion King*. In dipole mode, the surround sound field was terrifically diffuse yet precise enough for spatial effects.

upper midrange, but not objectionably so. The guitars had a clean, but not piercing, high end. The best speakers, like electronics, do not impose any tonal color of their own. They are simply transparent. That was the case here. The sound quality was open and clear.

The 1200s subwoofer proved to be extremely musical. Many small-box subs are really just one-note boomboxes. They shake the air and give the false sense of bass, but they can't handle really low frequencies. The Alpha sub seemed to be as taut and powerful as the kick drum itself. There was no hint of boom or blossom, and deep pitches were clearly articulated. The Alpha 1200s is among the best subs I've auditioned.

Satisfied with the musical side of the equation, I turned to cinema. If you're not paying close attention, you might mistake *The Scorpion King* for a WWF grudge match. That's because both programs feature silly costumes, lame dialogue, predictable story lines, and The Rock. Still, The Rock swings a pretty good sword and has more muscles than the NFL. The mayhem starts in the first 40 seconds or so. A razor-sharp throwing star whizzes from the left surround to the center front and into

fast facts

	Alpha 20 (front L/R)	Alpha 37c (center)	Alpha 25Es (surround)	Alpha 1200s (subwoofer)
TWEETER	1-inch dome	1-inch dome	two 1-inch domes	—
MIDRANGE	—	4-inch cone	two 5¼-inch cones	—
WOOFER	6½-inch cone	two 6½-inch cones	—	12-inch cone
ENCLOSURE	ported	sealed	sealed	ported
POWER	—	—	—	500 watts
INPUTS AND OUTPUTS	biwireable gold-plated multiway binding posts	gold-plated multiway binding posts	gold-plated multiway binding posts	RCA line-level inputs and speaker-level binding-post inputs and outputs
DIMENSIONS (WxHxD)	8¾ x 15¼ x 11½ inches	23 x 9 x 12½ inches	14 x 13¾ x 7½ inches	17¼ x 17½ x 18¼ inches
WEIGHT	18 pounds	32 pounds	18 pounds	45 pounds
FINISH	black, beech, or cherry vinyl	black, beech, or cherry vinyl	black or white vinyl	black, beech, or cherry vinyl
PRICE Total: \$2,295	\$399 a pair	\$399	\$698 a pair	\$799
MANUFACTURER	Infinity Systems, Dept. S&V, 250 Crossways Park Dr., Woodbury, NY 11797; www.infinitysystems.com; 800-553-3332			



test report

the forehead of a barbarian. The Rock then proceeds to dispatch numerous other barbarians. The stylish violence is mixed in great 3-D surround sound, and the Alpha speakers conveyed it all with consistency, particularly when I switched the surround speakers to dipole mode. This yielded a terrifically diffuse surround sound field that was still precise enough for realistic spatial placement of effects like arrows and knives whizzing through the air.

Dialogue is not the movie's strong suit, but the Alpha 37C center speaker reproduced it all with clean articulation. If anything, the sound was a little too crisp on this particular mix. I tamed that easily enough by turning down the center-channel volume a bit.

In the penultimate battle scene, the bad guy's palace explodes — who would've guessed that ancient Arabian settlements stored so much gunpowder? The Alpha 1200s subwoofer vigorously shook the air (and knick-knacks) in my room as explosions sent fireballs mushrooming into the air, heathen stone idols fell to the ground, and the bad guy's flaming corpse landed with a thud. The sub had absolutely no

HIGH POINTS
Accurate, transparent sound quality.
Surrounds switchable for monopole, bipole, or dipole operation.
Powerful subwoofer.

LOW POINT
Bulky center speaker and subwoofer.

problem handling this, with no hint of clacking, port noise, or other sign of stress.

I liked Infinity's Alpha speakers. They occupy a sweet spot in the home theater lineup. They're far superior to the common system-in-a-box speakers, yet still reasonably priced for the level of performance they deliver. They can fit into most decent-size rooms without crowding out its occupants. Best of all, they provide sound that is not only accurate and transparent, but also brilliant and lively. The Alpha series suggests that Infinity has not changed its mind about what sounds good. The company's dedication to utter transparency remains — and indeed has become even clearer.

S&V

in the lab

Frequency response (at 2 meters)

front left/right.....	78 Hz to 15.5 kHz ±2.7 dB
center.....	100 Hz to 13 kHz ±2.5 dB
surround.....	75 Hz to 14.4 kHz ±8.1 dB
subwoofer.....	39 Hz to 112 Hz ±2.1 dB

Sensitivity (SPL at 1 meter with 2.8 volts of pink-noise input)

front left/right.....	89 dB
center.....	92 dB
surround.....	88 dB

Impedance (minimum/nominal)

front left/right.....	3.8/7 ohms
center.....	2.8/5 ohms
surround.....	3.1/4 ohms

Bass limits (lowest frequency and maximum SPL with limit of 10% distortion at 2 meters in a large room)

front left/right.....	62 Hz at 70 dB SPL
center.....	62 Hz at 65 dB SPL
surround.....	62 Hz at 68 dB SPL
subwoofer.....	25 Hz at 85 dB SPL

105 dB average SPL from 25 to 62 Hz
111 dB maximum SPL at 62 Hz

All of the response curves in the graph are weighted to reflect how sound arrives at a listener's ears with normal speaker placement. The Alpha 20 left/right front speaker had basically flat response, with some roughness above 1 kHz and well-controlled directivity over its entire listening window. The Alpha 37C center speaker had some additional roughness and a

steep rolloff above about 12 kHz, but directivity was well controlled up to 22.5° off-axis. The Alpha 25Es surround had remarkably flat response and uniform directivity for a speaker with multiple driver panels when used in its bipole setting (shown in the graph).

Bass limits for the Alpha 1200s subwoofer were measured with it set to maximum bandwidth and placed in the optimal corner of a 7,500-cubic-foot room. In a smaller room users can expect 2 to 3 Hz deeper extension and up to 3 dB higher sound-pressure level (SPL). The 1200s had unusually robust output (109 dB or more between 32 and 62 Hz). Upper bandwidth was 112 Hz when the crossover was set to a marked 150 Hz. The Bass Optimization System controls were difficult to use, mainly because they had an indeterminate effect on the sub's output.

— Tom Nousaine

