



## Infinity

### TSS-1100 Home Theater Speaker System

A few minutes into *Cold Mountain*, a U.S. Civil War version of *The Odyssey*, the Union Army detonates massive explosives hidden beneath a Confederate encampment. To say that I flinched would be an understatement — diving for cover was more like it. The compact size, reasonable price, and sleek lines of Infinity's TSS-1100 home theater speaker system didn't prepare me for its big sound.

Designed to fit easily in almost any décor, the five essentially identical satellites are slightly smaller than a large Quaker Oats

container but considerably heavier — large enough to produce high volumes without strain, but still easy to position. Each houses a tweeter and two midrange drivers, all using Infinity's Metal Matrix Diaphragm technology. The brawny, good-looking subwoofer, with a side-firing 12-inch driver and a rear port, stands taller than most of the competition while packing a 250-watt punch.

**SETUP** The system was simple and quick to set up. Two 40-foot and three 30-foot lengths of prestripped speaker cable are supplied along with a 15-foot cable for the subwoofer with RCA plugs at either end. The

sub has no speaker-level inputs, but it does have an adjustable crossover. For my evaluation, I used the crossover in my Denon AVR-2805 receiver (see review, page 61).

Simple wall-mounting brackets come with the satellites, or you can stand them on their attached, nearly invisible feet. An optional stand (\$179 a pair) provides further flexibility for positioning the front left/right and surround satellites. The center speaker has a detachable curved base so you can place it horizontally atop most TVs. I had no problem resting it on my 42-inch wide-screen rear-projection Toshiba HDTV.

I positioned the front L/R speakers at ear height and about 6 inches to the sides of my TV, the surrounds slightly above and behind my listening position. The sub went on the floor next to the front wall a few feet to the right of the TV.

**MOVIE PERFORMANCE** The soundtrack of *Cold Mountain* seems tailor-made to push the limits of a home theater speaker system, containing every possible explosion, cannon blast, and gun report. From the opening explosion to the end, the Infinity system easily filled my 15 x 24-foot home theater with vivid sound, surviving the war far better than its onscreen combatants. Even though the big bang at the beginning had warned me what to expect, I still found myself flinching from the sound of bullets whizzing by my head.

The Infinity speakers kept sharp, quick sounds sharp and quick, without ringing or smearing. At the same time, their smooth, wide dispersion made it seem like bullets were flying around the room, not just across the screen. And in the scene where the men



of the town of Cold Mountain build the chapel, I had no doubt I was hearing hammers driving metal nails into wood. Even during that massive explosion, which by itself earned the subwoofer its keep, the satellites' treble contributions made me appreciate that a boom consists of far much more than just deep-bass rumble.

Dialogue came through crisp, clear, and focused. You won't have to turn to your viewing companion and ask, "What did he say?" The system emphasized the raspiness in Nicole Kidman's voice, as Ada, but male voices lacked some warmth and depth.

*Cold Mountain's* soundscape makes superb use of the surround channels, and the Infinity surrounds acquitted themselves admirably. They not only placed me in the thick of the battle but also in the middle of the church while the congregation sang traditional shape-note hymns. Musical instruments played by characters in the movie, ricocheting gunshots, flies buzzing around the wounded, crickets at night — all took their proper places in the sound field created by the Infinity system. Thunder seemed to break above me during the storm scene when Ada's father (Donald Sutherland) works on his sermon, and in the later scene when Ruby (Renée Zellweger) stomps across the wooden porch, her clodhoppers sounded at floor level. Only in the orchestral score did I ever hear the surrounds as distinct sound sources.

**MUSIC PERFORMANCE** The Infinity system didn't smooth over or sugarcoat either vo-



**Dialogue in *Cold Mountain* came through crisp, clear, and focused on the Infinity TSS-1100 speaker system.**

cals or instrumentals. T-Bone Burnett, who produced *Cold Mountain's* soundtrack, filled it with almost as much folk music as *O Brother Where Art Thou?*, plus originals by himself, Sting, and Elvis Costello. The country fiddling sounded authentically edgy, as if played by rural mountain dwellers on a fiddle rather than a classical violin. You could tell they were low on rosin. Mary Fahl's ethereal off-screen singing floated from the speakers.

For stereo playback with the front L/R satellites and the subwoofer only, I spun Texas singer-songwriter Eliza Gilkyson's CD *Land of Milk and Honey*. The TSS-1100 speakers reproduced it with the outstanding imaging often provided by small sub/sat systems. The stereo soundstage was wide and deep, with the solo singer solidly

## fast facts

	SAT-1100 (L/R front and surround)	TSS-1100 Center	TSS-1100 Subwoofer
<b>TWEETER</b>	¾-inch dome	¾-inch dome	—
<b>MIDRANGE</b>	two 3½-inch cones	two 3½-inch cones	—
<b>WOOFER</b>	—	—	12-inch cone
<b>ENCLOSURE</b>	sealed	sealed	ported
<b>POWER</b>	—	—	250 watts
<b>INPUTS AND CONTROLS</b>	gold-plated multiway binding posts	gold-plated multiway binding posts	line-level RCA inputs; LFE/Normal switch; phase switch; crossover and level knobs
<b>DIMENSIONS (WxHxD)</b>	4⅞ x 9¼ x 4⅜ inches	9¼ x 4⅞ x 4⅜ inches	12 x 17¾ x 16⅞ inches
<b>WEIGHT</b>	4½ pounds	4½ pounds	44 pounds
<b>FINISH</b>	charcoal or platinum brushed aluminum	charcoal or platinum brushed aluminum	charcoal or platinum vinyl
<b>PRICE</b> Total: \$1,099	\$159 each (optional TS-Stand \$179 a pair)	not available separately	not available separately
<b>MANUFACTURER</b>	Infinity, infinitysystems.com, 516-674-4463		

in the center. Twice I had to walk to the TV and put my ear to the center speaker to convince myself that it was off. The subwoofer did well by the upright acoustic and electric basses, while the satellites made clear which was which.

I was equally impressed with 5.1-channel playback in my receiver's Dolby Pro Logic II Music mode — the sound became even more spacious without losing focus. I've heard Gilkyson in concert several times, and the Infinity system reproduced her voice accurately, imperfections and all.

In Yo-Yo Ma's CD *Obrigado Brazil: Live in Concert*, his silky cello stood out against Cyro Baptista's percussion, where each slap on the drumhead sounded hard and smooth. Paquito D'Rivera's clarinet gleamed like brushed platinum. In stereo playback, Ma was dead center, while the other musicians fanned out around him in a very credible image. Pro Logic II enlarged the soundstage to concert-hall size.

For true multichannel music, I invited Lang Lang to perform Rachmaninoff's *Piano Concerto No. 3* with the St. Petersburg Philharmonic conducted by Yuri Temirkanov. Telarc mixed the Super Audio CD

**PLUS**  
**Ideal size and styling for versatile placement.**  
**Superb imaging and ambience.**  
**Plays very loud for its size.**  
**Excellent value.**

**MINUS**  
**Male voices lack warmth.**

so the surround channels contain mostly ambience, and the Infinity speakers reproduced the performance with concert-hall realism. Noises from the audience or players in this live recording only made it easier to sink back in my comfy recliner and imagine being in the Royal Albert Hall where it was recorded.

**BOTTOM LINE** Infinity's TSS-1100 system exhibited some of the minor imperfections common in speaker systems that pair small satellites with large subwoofers. But they detracted little from my overall listening pleasure. This speaker rig was a blast to use, and its attractive size, looks, and price make it a very sound investment. **S&V**

## in the lab

**Sensitivity** (SPL at 1 meter with 2.8 volts of pink-noise input)  
 all satellites ..... 87 dB

**Impedance** (minimum/nominal)  
 all satellites ..... 4.1/6 ohms

**Bass limits** (lowest frequency and maximum

SPL with limit of 10% distortion at 2 meters in a large room)  
 all satellites ..... 100 Hz at 69 dB  
 subwoofer ..... 25 Hz at 88 dB SPL  
 103 dB average SPL from 25 to 62 Hz  
 112 dB maximum SPL at 62 Hz  
 bandwidth uniformity 92%

All of the curves in the frequency-response graph are weighted to reflect how sound arrives at a listener's ears with normal speaker placement. The curve for the left/right front channel reflects response of the SAT-1100 speaker averaged over a  $\pm 30^\circ$  window, with double weight at  $30^\circ$  (the most typical listening angle). The center-channel curve reflects response of the center speaker placed horizontally and averaged over  $\pm 45^\circ$ , with double weight directly on-axis with the primary listener. And the surround-channel curve shows the response of the SAT-1100 placed vertically and averaged over  $\pm 60^\circ$ .

The SAT-1100 had falling low-frequency capability and some roughness around 1 kHz but tightly controlled horizontal directivity. The TSS-1100 Center, basically a horizontally arrayed SAT-1100, had a similar shape but moderate off-axis lobing at listening angles wider than  $15^\circ$ .

The TSS-1100 Subwoofer's bass limits 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). Even though the subwoofer had rapidly falling dynamic capability below 50 Hz, it was still able to deliver 103 to 104 dB at 32 and 40 Hz. There was a minimal (2-dB) interaction between the level and crossover controls over the full range of the crossover dial, but most of the crossover action happened in the upper half of the dial rotation. — Tom Noursaine

