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VANDERSTEEN AUDIO TREO CT LOUDSPEAKER Uncommon Musicality

by [Neil Gader](#) | Apr 21st, 2016

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The question is actually a very simple one: Are you an audiophile whose ears are attuned to the sound of live, unamplified acoustic music performed in a natural setting—traditionally defined in these pages as “the absolute sound”? If the answer is yes, Vandersteen Audio would very much like to talk to you. For this is the milieu of its Treo CT, a mid-sized floorstander that, at \$7990, resides midpack in the Vandersteen lineup. It's a loudspeaker that has an uncommon reverence for the music that poses the greatest challenges to an audio system. Reproducing the context and complexities of performance and venue, harmonics and ambience, the micro and the macro is where the Treo CT shines at its most brilliant.

The Treo CT silhouette will be instantly familiar to longtime audiophiles, and not just to Vandersteen fanciers. Elements of this classic look—the slanted front baffle to time-align the drivers, the cabinet widening and deepening as its non-parallel sidewalls flow into its base—have appeared in varying degrees from makers as disparate as Thiel, Avalon, Rockport, Wilson Audio, and, more recently, newcomers like Ryan Audio.

The Treo CT is a four-way floorstanding loudspeaker in a bass-reflex enclosure. (The single port fires downward from the speaker's base.) It shares its general architecture and transducers with the Quatro Wood CT—a hybrid iteration with a powered bass system. CT stands for carbon tweeter—an evolution of the driver type first developed for the Model Seven flagship, later migrated to the Model 5A Carbon, and now an option with the CT (the standard Treo lists for \$6900/pair). For Vandersteen, carbon-driver

Uncommon Musicality

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Vandersteen Audio Treo CT Loudspeaker

True to Vandersteen tradition, the Treo CT is a time-and-phase-correct loudspeaker. The crossovers are first-order, impedance-compensated numbers individually tuned in an anechoic chamber. Crossover points are specified at 80Hz, 900Hz, and 6kHz. As a first-order design, much is asked and expected of the drivers in extended operating range and dynamic demands. To these ends, the drivers include a CT tweeter and Vandersteen's "reflection-free" 4.5" midrange in a proprietary transmission line that breaks up energy from behind the driver rather than directing it

back into the cone. The mid/bass driver is a 6.5" tri-woven cone, while the bass is handled by a ported, carbon-loaded, ultra-long-throw 8" woofer.

Vandersteen describes its dense, narrow, rigid enclosures as “minimum baffle” designs that minimize diffraction effects and time-smearing reflections. Construction is in a word, *extreme*. Vandersteen has engineered a unique system that it describes as “cabinet-within-a-cabinet” construction—essentially an inner MDF cabinet within an outer MDF enclosure, separated by a viscous or “gooey” membrane that eliminates resonances. Vandersteen reports that “measurements bear out that this gives us the kind of silent cabinet performance that is typically seen only in very exotic cabinets made with exotic materials...we only exceed this by combining similar techniques with superior and much more expensive materials, like the carbon fiber in our Model Seven Mk II flagship or even the multi-layer head in the Model 5A Carbon.” Curiously, the Treo CT still uses a terminal plate rather than multi-way binding posts for speaker-cable hookup (bi-wire or single). This reduces cable termination options to bare wire or spades. However, Vandersteen argues that since “the barrier strip terminals are soldered directly to the board on crossover networks, this makes the connection 100% impervious to oxidation and other environmental elements that can corrupt connections over time.” Vandersteen adds that wiring directly into the crossover board avoids any full-range wiring inside the speaker, which is a big plus sonically.

A word about the Treo CT speaker grilles: Don't touch 'em, as they are meant to be left on. Yes, this runs counter to audiophile gospel, which maintains that grille cloths reduce acoustic transparency, but the Treo's grille is anything but ordinary. Rather than a thin, cheesy frame with a sheer cloth membrane, it is actually a physical extension of the baffle itself—literally completing the front baffle in the way a final piece of a jigsaw puzzle finishes the pattern. Feel free to remove them when you audition the Treo CT, but my bet is that you'll reattach them pronto. In my observations they were integral to the level of imaging and coherence that the Treo CT was capable of achieving. The set-up manual is very explicit about placement and provides graphs for optimization. The robust and adjustable cone-footers, three to a side, significantly aid in fine-tuning.



Vandersteen Audio Treo CT Loudspeaker

Sonically, the Treo CT offered a near-full-range experience with exceptional balance, nuance, and continuousness. Its presence in the room was felt immediately in bass response that extended with authority and finesse into the thirty-cycle range. The Treo's was not a heavy or ponderous balance either; rather there was a lightness to its overall personality that belied the power of a four-driver configuration. Tonally, it

perches on the warmer and more relaxed side of neutral, but this trait only manifests itself in contrast with designs that have a drier, more forward, studio-monitor-type sound. The Treo CT has a midrange that calmly draws listeners in rather than forcing them away. There's a civility to the way it steers clear of carving out the last iota of so-called detail or of vying for your attention with a too prominent treble. For example, the top end of the Vandersteen had the air and fluidity that brought the chorus of the Rutter *Requiem* startlingly to life in my listening room. Individual soloists remained cleanly defined and focused amidst the chorus, which led to moments so detailed that each line of vocalists was clearly imaged on the ascending risers of the stage.

There's an implicit sweetness to the carbon tweeter that produces a sibilance range that is well nigh perfect. The Treo captured the leading-edge intensity of singers like Norah Jones and Holly Cole without turning up the sizzle in this precarious treble region. The CT's stock-in-trade was true treble resolution as distinguished from the false detail of many above-average tweeters that are dogged by material colorations. Thus, piano transients and macro-dynamics were potent and aggressive in the way a grand piano is meant to be aggressive under a heavy hand, yet never veered into hard steely territory. And soundboard harmonics rose into the listening space as if borne aloft on cushions of air. In the CT we have the rare tweeter that places its attention squarely on the music without drawing any attention to itself.