

Contour T 2.1



Home Theater, November, 2000

Dynaudio Contour Theater Speaker System by Chris Lewis

If you like speakers, you have to like a company like Dynaudio. You don't necessarily have to like what they offer - their stuff is either going to sound good to you or it isn't - but you have to admire their dedication to the craft of speaker building. Regardless of whether or not you ever buy one of their products, you should be happy that companies like this are around. Any company can sell speakers (and good ones at that), but the backbone of every industry are those companies that develop, design, and build the components that drive it. Dynaudio is probably better known for their long history of supplying drivers to any number of different speaker companies than they are for their own speakers - although that's starting to change.

Building on the success of their Contour series and intended as a home theater speaker line that doesn't compromise musical performance, Dynaudio's new Contour Theater series arrives officially with the floorstanding T2.5 (\$4,499/pair), the multipurpose T2.1 (\$1,799), and the Contour Theater subwoofer (\$2,999). Both the T2.5 and T2.1 employ a 1.1-inch soft-dome tweeter that is based on the company's highly regarded ESOTEC D260 design. The tweeter utilizes a hybrid double-magnet system (neodymium/ferrite) with a damped rear chamber and is set into a cast-aluminum front plate for increased rigidity and cooling. Both full-range models also employ dual 6.7-inch midbass drivers with one-piece cone diaphragms made from a Dynaudio-developed magnesium-silicate polymer (MSP) to help minimize audible distortion and coloration caused by cone breakup. A 12-inch version of the same driver anchors the sub, along with a conservatively rated 210-watt amplifier. The back panel offers phase and level controls, as well as adjustable crossover settings of 80 hertz, 95 Hz, and bypass. All of the drivers use pure-aluminum-wire voice coils.

Build quality on the Contour T series doesn't end with the top-shelf drivers. The cabinets, which are built in an entirely separate Dynaudio facility than the drivers and crossovers to avoid contamination of any kind, feature a unique dual-enclosure construction that is effective in reducing resonances and other image smearing cabinet colorations. Beneath the outer cabinet is a second, internally damped enclosure with no rigid connections to the outer shell. Based on precise measurements of problematic frequency nodes, additional internal bracing and damping are applied throughout. The relatively inert cabinets are constructed from two layers of MDF with a 1-inch-thick baffle, and they have a single set of Dynaudio's gold-plated WBT binding posts. Custom-built first-order crossovers are applied to both the tweeter and woofer sections, delivering considerable linearity and phase accuracy. The upper woofer in the T2.5 is electrically adjusted in phase to reduce early floor reflection.

My demo time with the T series was two-fold, starting in a large room with a more elaborate seven channel rig that included a set of T2.5s in front and T2.1s pulling center-, side-, and rear-channel duty. Two Theater subwoofers rounded out what proved to be a prodigious bottom end. Starting with "The Haunting" in THX Surround LX, I was immediately taken by the full-range punch and thunderous low frequency response of the system. Granted, two healthy subwoofers had much to do with this, but they weren't the only explanation behind the successful combination of widely dispersed, well-layered definition and raw rumble that this setup offered in the lower regions. The T2.5s are hardly bass shy, and the T2.1s deliver well in the neighborhood of their 30-Hz low-end rating. The ominous foot-steps of the evil spirit as he chases our hapless heroine literally shook the room and, having lived in LA. long enough now to understand the potential of a gyrating ceiling, had me relocating to the perimeter of the room - near the door.

Make no mistake, this setup will shake a brick wall without breaking a sweat, but this combination is not without its softer side, as well. DTS-mixed music tracks from Sheryl Crow and Roy Orbison offered a big, open soundstage full of detail and a wide array of delicacies. The sub's aggressive approach to movies was tempered here with a subtle but still ever-present demeanor that mixed nicely with the rest of the system. While the T2.1s did tip their hand at times as surround speakers in terms of localization with soundtracks, these direct-radiators knocked out the rear channels of multichannel-music tracks with the best of them. The rear sound-field was deep and airy, with a nice punch and a truly consistent timbre that helped greatly in re-creating a sense of you-are-there realism. Given that the only vocals delivered during the Haunting chapters that I used were screams of terror, these cuts also gave me my first real impression of the T2.1's center-channel abilities. Voicing was accurate and natural with female and male lyrics, and both horizontal and vertical dispersion were well-addressed by the T2.1's efficient and highly effective crossovers.

A bit of downsizing was in order for our more-intimate listening room. The T2.5s remained in front, along with a single Theater sub, while the T2.1 continued to handle the center-channel signals. Employing only 5.1 channels this time, I added a pair of direct-radiating 1.3 mklIs from the main Contour line as the rear channels (as yet, there are still no dipoles in either Contour series). This is a pugnacious little speaker that won't fool you like a dipole but handles surround duties nicely and is highly musical for a relatively inexpensive bookshelf model Lexicon's MC-1 pre/pro and the combo of B&K's 4430 and 4420 amplifiers were the original electronic back-bone, although I found the B&Ks' mix with the Dynaudios to be too subtle. I was a bit surprised by this, considering how good the seven-channel setup sounded off very similar B&K amps and the fact that these B&Ks have performed rather nicely with other speakers. However, rather than waste time playing scientist, I simply swapped out the B&Ks for the Krell.KAV-500 multichannel

Dynaudio designed the Contour 2.1 center-channel to blend seamlessly with the T2.5 towers by using the same set of drivers in both models. This might seem obvious, but there are a staggering number of center-channel speakers that have little or nothing in common with the main (left/right/rear) speakers with which they are partnered. It seems to me that making a speaker small enough and light enough to sit on top of a TV set has proven to be a bad idea. This is made only too clear upon listening to these plastic horrors in any electronics store. No thanks, just looking.

So, the Danes built the Contours in serious boxes veneered in a very teak-like cherrywood (also available in rosewood, black ash, beech, bird's-eye maple, walnut, lacquers, etc.) over a thick sandwich of MDF and are appropriately inert thanks to elaborate cross-bracing. Little details reveal that they are built by craftsmen: the subtle groove that adds a distinctly European look to the front face and a second set of clip sockets on the back to hold the grilles, should you wish to listen to them naked. These are outward manifestations of the attention to detail that is evident throughout these speakers.

The 35-liter T2.5 enclosures stand on dark-gray plinths, which include carpet-piercing spikes to keep them very stable. The stability of a speaker might be of no concern to those without offspring, but for parents, it merits very serious consideration if you want to avoid the nightmare of lifting an 80-pound speaker system off your traumatized 45-pound child.

At the heart of all Contours is a pair of 170 mm (6.5-inch) woofers that use cones made from a mineral-loaded plastic developed by Dynaudio to provide low mass and low coloration. Lowering the mass increases the driver's efficiency and allows it to start and stop very quickly. In addition, those wily Danes put unusually large aluminum-wire voice coils on all their drivers with an ingenious magnet system that exhibits a low external magnetic field. This makes it safe to place the speaker in close proximity to even the most magnetically sensitive TV without the bizarre purple-and-green syndrome that poorly shielded speakers inflict. These woofers were the brainchild of the engineer who started Dynaudio 25 years ago, Wilfried Ehrenholz, Dynaudio Director and Founder, and Mark Thorup, Dynaudio Lead Engineer, and the Dynaudio Engineering Team.

Naturally, these unusual woofers would be wasted if they were not teamed up with an equally advanced tweeter, and the Contour tweeter is just such a beast. The spec sheet for the 28 mm (1-inch) soft-dome tweeter abounds with technical highlights: a vented pole piece, ferrofluid damping/cooling, and a thick cast-aluminum front plate that doubles as a heat sink. All good stuff.

Tying the two woofers together with the tweeter is a first-order (6 dB/octave) 1600 Hz crossover with a host of impedance conjugates. In plain English, this simple but elegant crossover splits the signal into two frequency ranges, feeds the appropriate range to each driver, and ensures that the amplifier sees a stable, easy-to-drive, 6 ohm load. Proponents of first-order crossovers inevitably point to their excellent phase linearity, and Dynaudio's design is a shining testimonial to the benefits of this philosophy. I don't happen to share this enthusiasm for low-order crossovers, but I must confess that the crossover point of the Contours was entirely inaudible, a feat that is astonishingly rare. There is a slight difference in the crossovers of the T2.5 and T2.1, which is due to the different cabinet geometries. The speakers receive their signals through a pair of WBT-brand connectors placed very low on the back panel, exactly where all makers should put them, yet few do.

Listening

Positioning the Contours is a piece of cake as long as you don't need to use your listening room for anything else. In my room, the T2.5 floorstanders went three feet out from the back and side walls, and the T2.1 center-channel went on a stand above the monitor, with the factory-supplied foam plug in the rear port because it was very near the wall. I let the Contours warm up for a couple of hours before I started listening to them in earnest.

Once the formalities were dispensed with, I set about trying to find the chink in their armor with my most critical material. They rebuffed my efforts with barely a shrug, returning a rock-solid stereo image with a full, slightly polite sonic signature. My old reference recording of Lincoln Mayorga was in its element, and Jennifer Warnes exhibited her full complement of power and subtlety, although perhaps I should use something less emotionally charged.

All in all, 'Braveheart' was nothing short of superb. The lush soundscapes of the Scottish countryside were well rendered, and the battle scenes were dynamic and captivating. The Contours' consistent voicing made the onscreen movements absolutely seamless, and the bottom end of the 10 woofers let me feel each footfall. These speakers do not produce the kidney massage and artifice of a sub-woofer, but they do provide a deep and very realistic bass.

There are a couple of scenes in 'Pulp Fiction' in which the music completely overwhelms the dialog, but the Contours made Bruce Willis come across as clear and articulate, which is no small achievement. Switching between Dolby Digital, Pro Logic, and DTS, I failed to find anything that the Contours did not do well. I love to use Sir John Gielgud for my spoken-word tests, because he has such a distinctive voice that mercilessly reveals any anomalies. Through the Contours, his tone was rich and crisp, with a slight recession in the midrange. This moved Sir John a couple of feet further back from me, but it made some tracks that are normally a little "forward" sound better balanced.

With their high-efficiency drivers and large voice coils, the Contours do not require a large amplifier, in fact, they can achieve impressive out-put levels with as little as 75 watts per channel. Exploring their dynamic range somewhat further, they remained completely composed and produced awesome output levels with the 800 watts per channel delivered by my reference amplifier, the superb QSC DCA3022. Perhaps it's an acquired taste, but I really enjoy techno dance tracks playing at club levels in my living room.

Conclusion

