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REVIEW

ADAM Audio T7V Active Monitor

ADAM's most affordable nearfield offers great sound for any budget

REVIEW BY MIKE METLAY

The new T Series from ADAM Audio is a foray into more affordable monitors than the firm's usual high-end fare. The motto behind the T Series monitors appears to be "even better sound for even less money," and as a longtime fan of ADAM speakers, I was very curious to hear them for myself.

Other companies have made inexpensive speakers with folded-ribbon tweeters, but this is the first time the ADAM name has been placed on a speaker at what basically amounts to an entry-level price point. There are two T Series monitors in the line right now—we'll discuss the T5V in a future issue, but for now, let's dive into the T7V.

Why would you fold a ribbon?

ADAM Audio didn't invent the technology of folded-ribbon tweeters, but it can claim credit for firmly establishing this tweeter design in the pro audio world. ADAM's nomenclature for tweeters of this type is the Accelerated Ribbon Tweeter (ART), and the T7V sports the latest-generation U-ART high-frequency driver.

The folded-ribbon tweeter, originally named the Air Motion Transformer, was invented in the 1970s by Dr. Oskar Heil. In this design, electricity is converted into sound by a long, gently pleated flat ribbon of ultra-thin plastic suspended in a magnetic field. This folded ribbon expands and contracts rather like human vocal cords or the bellows of an accordion. (Note that this is a different operating principle than that found in "true" ribbon tweeters used in some other monitors.)

Why make a tweeter in this shape? This particular way of moving air is enormously efficient; the vibrating pleats force air out of the tweeter at very high velocity, and the ribbon's pleats have the equivalent area of a much larger conventional driver. Also, because only very tiny movements are needed to make the tweeter work and the ribbon itself is vanishingly light, transient response is blindingly fast... and that means better treble response and clearer articulation.



Out of the crate

The T7V is a 2-way nearfield monitor that includes a 7" polypropylene woofer and a U-ART folded-ribbon tweeter, this one with four square inches of material that provides the equivalent area of a much larger conventional tweeter. The drivers are fitted with dual Class D amplifiers, 20W RMS for the tweeter and 50W RMS for the woofer, and mounted in a light but fairly nonresonant cabinet with a large rear-firing bass reflex port and angled front fascia to minimize diffraction effects. The DSP-controlled crossover's frequency is set at 2.6 kHz.

At first glance, the amps might seem to be somewhat underpowered; there are monitors out there with much larger amps in the same cabinet size. But in practice, the amps can deliver over 130W peak power, and ADAM claims that they'll easily top 110 dB SPL at one meter without appreciable breakup. I ran them at 95 to 100 dB SPL for short periods (that's way above my comfortable listening level) and they put out plenty of solid audio with ease.

One notable innovation on the T Series is that the U-ART tweeter is now placed within a waveguide. This isn't the first such addition to an ADAM speaker; the HPS waveguide was first featured on the company's multi-kilobuck flagship S Series monitors. Now, it's made a jump down the line past the well-established A Series of mid-level pro monitors to become a mark of distinction on the T Series. Like any waveguide, this one is designed to control treble dispersion in a uniform and predictable way, ideally providing the listener with a wider sweet spot for monitoring.

The rear panel has basic tone controls for boundary placement—high and low frequency shelving EQ switches, ± 2 dB or flat for each. Frustratingly, the specs on the T7V don't list the corner frequencies for these filters. There's a level pot (-60 to $+18$ dB) and two inputs, unbalanced RCA at -10 dBV and balanced XLR at $+4$ dBu. Hidden between the two jacks is a tiny switch to select which one's active; be sure to set it to the proper jack before placing the speakers in their final positions, or they'll remain stubbornly silent no matter what you do. (Don't ask me how I know this.) Power is provided via a standard IEC cable, and the power LED is on the rear panel out of sight—a small gripe.

In use

I set up the T7V in my usual equilateral triangle arrangement, on IsoAcoustics Aperta isolators, burned them in for a day or so, and then dove into my reference library. I left the shelving switches flat for most of my listening, although I did prefer the $+2$ dB LF shelf sometimes (see below).

The first thing I noticed about the T7V was the width of its sweet spot. The HPS

waveguide is really doing its job; I could move my head as much as two feet to either side of my ideal mix position and not hear any appreciable compromised sound. Even more startling was the vertical dispersion—there was practically no negative impact when I stood up, moving my ears over a foot above the plane of the tweeters. That'll be handy for home-studio monitoring, allowing a band to crowd together to hear a mix accurately.

The U-ART tweeter was—as expected for ADAM—clear, crisp with no brittleness, and offered treble extension that was clear enough on high-resolution audio files that I could easily believe ADAM's claim of 25 kHz high-frequency response.

Speaking of frequency response, the low end on the T7V was the one area where I had to take careful note of my set-up and listening levels. Low frequencies are clearly articulated at all levels, with no woofiness or mud and wonderful clarity up to and around the crossover frequency. However, low bass extension depended more strongly than usual on SPL at the listening position; lows reached deep at

conventional levels (75 dB SPL and up), but noticeably less so at softer levels.

ADAM quotes a 39 Hz lower end in the specs, but without tolerances; when listening below 70 dB SPL, I found the T7V benefited from the 2 dB low shelf boost. If you do a lot of work with low frequencies (classical piano, 5-string bass, 808-style drum machines), an additional subwoofer would be a good idea, but for most tracking and mixing duties I consider the T7V a very learnable and translatable monitor.

Final thoughts

There was a time not that long ago when a pair of speakers with such good sound and a ridiculously wide sweet spot was basically unheard of... at twice this price. The T7V represents amazing bang for the buck, and brings folded-ribbon performance to pretty much any studio. ➤

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