



Adam Audio A7

By Ron Bartlebaugh,
CBNT

that reproduced an incredibly smooth and bright high-frequency response. The speakers were unlike others we had on display that used the more typical dome or horn tweeters. I haven't seen much of the ribbon tweeter technology since then—until now.

Adam Audio has taken the original ribbon tweeter technology developed by Dr. Oskar Heil to a new level of perfection. The company's Accelerated Ribbon Technology (A.R.T.) utilizes a membrane consisting of a lamella folded diaphragm. The single folds of the diaphragm move according to the applied audio alternating current to squeeze air in and out. The squeezing of air is unlike other conventional voice coil products that act like a piston to move air at a 1:1 ratio. The A.R.T. folded diaphragm technology moves air at a 4:1 velocity, thus creating an airflow that is four times greater than the velocity of the diaphragm movement. That effect produces an extremely clean sound with great transient reproduction. Adam Audio uses eight neodyme magnets of the

at the upper edges of the baffle to reduce diffraction from the cabinet's corners.

In addition to an A.R.T. tweeter, the cabinet also houses a 6.5" low-frequency driver that utilizes a new cone material consisting of a woven Rohacell/carbon-fiber sandwich to combine high rigidity and high internal damping with low weight. The low-frequency driver, with its soft roll-rubber surround, produces excellent detail and clarity with good imaging. Early production cabinets were not magnetically shielded. My test pair also was not magnetically shielded; however, the A7 cabinet now comes with a complete magnetic field shielding system.

Power up

The A7 includes two 50W RMS power amplifiers. One amplifier powers the low-frequency driver, and the other is dedicated to the folded diaphragm ribbon tweeter. The internal crossover frequency of 2.2kHz provides a very smooth transition. Rear-panel amplifier inputs are analog balanced XLR or unbalanced RCA. The rear panel also supports three trim pots: one for tweeter level with an adjustment range of ± 4 dB and two for low- and high-frequency shelving filters (150Hz and 6kHz), each with an adjustment range of ± 6 dB. The shelving filters may be of great assistance in aligning the speaker output to a studio room's acoustics when using a pink noise source with an accurate reference analyzer. I found no need for the shelving filters in my test space, which has good acoustical properties. The front baffle of the speaker cabinet houses the system's on/off power switch, a subtle LED power indicator and a low-profile volume control with a nice linearity curve.

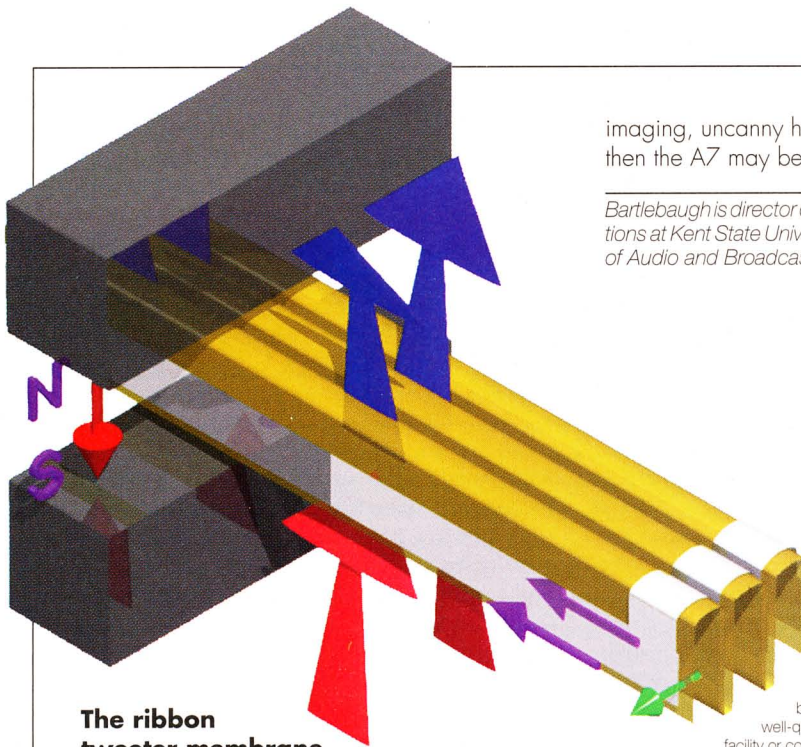
The A7's compact cabinet produces an incredible maximum sound pressure level (SPL) of more than 105dB at 1m with a published THD of less than 1 percent at frequencies above 80Hz. Maximum musical peak SPL at 1m when using a pair of the A7 cabinets is specified to be more than 116dB. The A7's frequency response is 46Hz to 35 kHz

Performance at a glance

- Small footprint
- High SPL
- Transparent sound
- Two on-board amplifiers
- Rear panel equalization controls
- Excellent imaging
- Unique high frequency clarity

greatest strength available in order to gain the efficiency required for best overall performance. The company's effort to redefine Dr. Heil's ribbon tweeter technology has led to a tweeter design that is superior in musical clarity and transient reproduction.

The company utilizes the A.R.T. in its broad line of studio monitor speakers, including the model A7, which was provided to me for review. The A7, intended for use as a nearfield monitor, is a bass reflex cabinet measuring 7" x 13" x 11" and weighing 17.8 pounds. The sturdy cabinet is built from thick medium-density fiberboard and sports a black paintwork with chamfered sections



The ribbon tweeter membrane is a folded diaphragm that produce sound waves by squeezing air instead of the traditional piston-effect of a dome tweeter.

imaging, uncanny high end and a tight low end then the A7 may be the product for you.

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±3dB. The company offers a two-year warranty on the speaker.

My A7 listening tests brought back even more memories of my days spent with the Heil ESS speaker system. Stereo imaging was tremendously accurate and yielded a wide sweet spot. As expected, the high frequencies were incredibly clean and well-defined—even better than some larger and more costly speakers that I have heard.

I wasn't sure what to expect from the 6.5" woofer; but I was pleasantly surprised. The low-frequency response was accurate and smooth, representing what appears to be a well-tuned cabinet. As expected, the A7 isn't going to produce kick-thumping bass, but it does give rise to astonishing reproduction accuracy throughout the audio frequency range with low-end response noticeable well below 100Hz. The midrange audio appeared to be suitably aligned, with any artifacts resulting from the use of a 2.2kHz crossover frequency being unnoticeable. This speaker system produces an admirable sound level for nearfield monitor use and enables the user an opportunity to monitor audio with accuracy.

If you are looking for an affordable nearfield monitor with clarity, excellent