by **Strother Bullins**

ADAM A7 Closefield Monitor

ADAM's signature A.R.T. ribbon is now within the reach of every working studio pro.

I had my first experience with ADAM studio monitors several years ago during a mix session at producer/engineer Michael Wagener's Nashville-area studio, Wireworld. Wagener, known for constantly improving his personal arsenal of recording gear, had recently acquired a 5.1 set of S3A active midfield monitors.

I suddenly became very intrigued with the ADAM brand, and specifically with their signature A.R.T. (Accelerated Ribbon Technology) tweeter. I was admittedly listening to Wagener's own tracks and mixes at his personal studio (and the man mixed *Master of Puppets*, folks); so lots of monitors would sound impressive in that environment, I reasoned.

Now I fully understand what Wagener was experiencing with his S3As. I've had ample time to evaluate the company's latest — the far-more-affordable A7 closefield monitor — in my own production/critical listening environment. I've listened to my own recorded tracks and mixes, as well as other all-time favorite mixes I know intimately and/or have heard in a variety of great acoustic environments through great monitors. And, thanks to this pair of A7s, I have had a very impressive experience, indeed.

FAST FACTS

APPLICATIONS
Studio, audio-for-video, broadcast, edit suites

KEY FEATURES
ADAM A.R.T. ribbon tweeters, two shelving filters, tweeter voltage gain adjustment, front panel detented volume control

PRICE
$999 per pair

CONTACT
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| FEATURES

The ADAM A7 ($999 per pair) is a two-way, ported, active studio monitor featuring the A.R.T. ribbon tweeter and a 6.5-inch mid/bass woofer; each transducer has its own internal 50-watt RMS amplifier. Maximum power consumption of the A7 is 100 watts. Frequency response (+/- 3dB) is 46 Hz – 35 kHz, maximum SPL at 1 meter is 105 dB, and the internal crossover frequency is set at 2.2 kHz. The cabinet measures 7 inches x 13 inches x 11 inches and weighs just under 22 pounds.

The front of the A7 features the centered A.R.T. tweeter directly above the also-centered woofer. A bass reflex port is below the woofer and to the bottom left. Then, to the right, is a control panel featuring a power switch, blue LED on/off/standby indicator and a handy detented volume control. (Cheers amongst the "mouse crowd" for that last one — whoo-hoo!)

On the back of the A7 is the AC input, voltage selector switch, two signal input types — XLR and RCA — and a three-knob control panel. The panel offers tweeter voltage gain adjustment and two room EQs: shelving filters located at either end of the frequency, 150 Hz and 6 kHz cut-offs, respectively.

The most notable feature of the ADAM A7, as previously mentioned, is the A.R.T. ribbon tweeter. This, truthfully, could warrant its own separate article. The A.R.T. ribbon, based on the original works of Dr. Oskar Heil in 1972, moves high-frequency sound waves by the design of its folded diaphragm, essentially squeezing air in and out of the monitor. (Visit ADAM's website for more information.)

| IN USE

The two DAW-based rock re-mixes I performed using the A7s — ones in which I made a few crucial EQ adjustments, mostly on vocals and acoustic string instruments, plus one "thick wall" rhythm guitar track — were clear improvements on my original mixes, and took a surprisingly short period of time to complete. Elements of the mix that had originally struck me as potential "slackers" — things that simply could've been recorded better — were more obvious that ever, and I appreciated the tip. Those mixes in the end proceeded to translate well onto every other system where I played them (and, in direct A/B comparison, better than my original mix did).

Once I was sold on A7 production performance I brought out my trusty evaluation reference CD: it's a disc filled with music I love that also represents a few personal production standards on a variety of musical styles.

The fun began with Urge Overkill's "Sister Havana" (from *Saturation*), which really stood tall as I listened to it three or four repeats in succession. "Sister Havana" is a great "kick drum" song, and to my ears my favorite "standard" modern rock mix/production of all time. The A7s nailed it, as expected, and it was just as I had recalled it in some of the best mastering studios and tracking rooms I've had the opportunity to use. Sometimes it was even better. The crisp, non-edgy, non-fatiguing and pleasant transients that the A.R.T. ribbons uniquely deliver carried the production honorably. And, despite their small size, the A7s didn't slouch on this particular song's full,

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tight/punchy and well-balanced bottom end, either.

Yonder Mountain String Band's "Bloody Mary Morning" (from *Mountain Tracks, Vol. 3*) and Sergio Mendes' "Berimbau/Consolacao" (from *Timeless*) next showed the fine, unique acoustic detail of these live bluegrass and Latin music performances, respectively. Banjo, guitar, mandolin, bass and fiddle — with appropriately full, round bottom end and nice string transients throughout — sounded exceptionally detailed, not hyped. On the Mendes tune — the bass-heaviest/busiest cut on the disc — the A7s' tight bass performance was controlled and lots of fun to hear. I may have thought in this particular case for a moment or two about having a sub — a sub coupled with the A7s could likely make your grandmother dance spontaneously. A sub, however, was far from necessary.

| SUMMARY

Simply said, everything I heard during my A7 evaluations seemed to be the truth (and nothing but the truth). So, can you handle the truth? Some engineers can't and, most likely, they are the few that wouldn't enjoy what the A7s have to offer anyway. Therefore it is my opinion that constant seekers of acoustic truth who need a fairly affordable powered close-field monitor should give the ADAM A7 a try. They will work well for critical listeners in a variety of differently sized control rooms, recording environments, post-production and broadcast suites, or wherever more accurate, non-fatiguing and pleasant audio is considered a virtue.

Strother Bullins used to blast Saturation*: Track 1 over and over again from those really big Kinoshita/Hidley mains.*

PRODUCTPOINTS

- Very accurate, non-fatiguing and pleasing performance
- Most affordable ADAM monitor available
- Versatile small size and front-panel volume control

- No negatives worth mentioning

SCORE

The ADAM A7 is a unique, top performer at a more-than-reasonable price

| SECOND OPINION

I set up the A7s in an equilateral 3.5-foot triangle and kept my ample 15-inch active subwoofer engaged initially, seeking to find differences from my normal 2.1 setup. The most obvious change was the sound of high-end transients, which the ADAM ribbons treated with little hype and negligible distortion. The attack portion of the envelope sounding clear, quick and open; the decay seemingly smoother than "normal" with less of that "after-ring" or smearing we're so used to hearing, particularly with aluminum dome drivers.

I exclusively use cloth dome tweets, so it was unusual and nice to hear a new texture still gentle on my ears! I found these qualities to make for longer periods of fatigue-free listening at reasonable mix levels. Fatigue still set in quickly at higher levels, despite the more pleasant sound.

I always look to find a bump (or dip) of response in monitors, and here I had to look very closely. I only heard just a bit of emptiness around 700 - 800 Hz (a good bit lower than the 2200 Hz crossover point where I expected inaccuracy), and a touch of aggressiveness at about 4 kHz. These are only minor quibbles, as overall the mids were quite faithful and honest (noticeably with guitars and vox), especially around 1 kHz where any hype can be disastrous.

The bottom end of the A7s had an unexpected fullness that was impressive. The woofer, with rigid carbon fibers stiffening up the cone, got quite animated for me, reaching impressive distances before finally reaching its max. I then disconnected my sub and was reminded why I have one, as the A7s put out admirable bass, but nonetheless needed reinforcement from about 80 Hz and below. Yet, these were louder, fatter and more "big" than I could ever reasonably expect with only two 50-watt amps within.

These monitors' extremely uncolored highs, largely accurate mids and some nicely punchy bass are an ideal choice for project studios, edit suites and video editors (who will really appreciate their articulate and trustworthy dialogue response). Larger music production rooms will love that forgiving top end, but would probably want to add a sub for the whole picture. Hmmm, I bet some of those bigger ADAM mains with the same accelerated ribbon technology would make for some great "ultra-loud/hype up the client" listening sessions...

— Rob Tavaglione

BENCH TEST
ADAM A7 Closefield Monitor

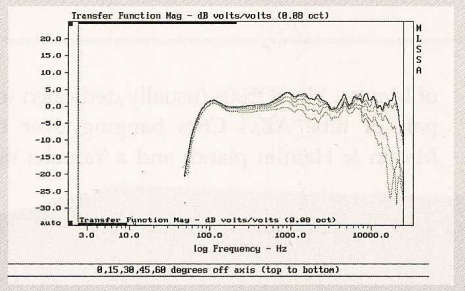
BENCH MEASUREMENT DATA

Frequency Response:
On-axis 70 Hz to 20 kHz +/- 3.1 dB
Bass Limit:
71 dB SPL @ 62 Hz @ 2 meters (<10% Distortion)
Control Action:
Room EQ < 150 Hz - 6
Actual Response -1 dB < 150 Hz
Room EQ < 150 Hz + 6
Actual Response +1 dB < 150 Hz
Room EQ > 6 kHz - 6
Actual Response -6 dB > 6 kHz
Room EQ > 6 kHz + 6
Actual Response +6 dB > 6 kHz
Tweeter Level +4 dB
Actual Response +3.4 dB > 1.5 kHz
Tweeter Level -4 dB
Actual Response -3.9 dB > 1.5 kHz
Front Panel Level +6
Actual Response +16 dB
Front Panel Level -60
Actual Response -37 dB

Note: *The Bass Limit of the speaker is the Sound Pressure generated at 2 meters. The figure of merit 10-percent distortion is used because operating characteristics of drivers (using DLC Design DUMAX) shows that when a speaker has reached the end of its linear operating range (BL product has fallen to 70-percent of the rest position value or the suspension compliance has stiffened by a factor of 4) the unit will still sound clean, but distortion increases exponentially with further drive. With powered speakers amplifier output or limiting may also limit sound pressure capability.*

BENCH MEASUREMENT COMMENTARY

Although the A7 is called a "closefield" monitor a more correct term would be "direct" field monitor where the listener will be in the direct acoustic field of the speaker. Closefield has a specific meaning when it comes to loudspeaker measurement where the microphone is placed within a half-inch of the radiating source. This technique is used when an anechoic chamber is not available. However the closefield technique, by its nature, will ignore front panel resonances and cabinet diffraction. While this is not significant at low frequencies combining near field measurements requires estimating the individual radiating area of woofers and ports that often optimistically reports actual low frequency output. All measurement results here have been measured at a full two meters in a large room on a 6-foot stand. Using time windows then gives equivalent anechoic results above 200 Hz including front panel reflections, cabinet diffraction and true acoustical summation of all drivers and passive radiating elements.



ADAM A7 frequency response

Because ot its size, the A7 has limited bass capability and frequency response exhibits a 4 dB elevation between 500 and 2000 Hz. The system is also relatively directional although the 19 kHz tweeter peak can be seen even at 60 degrees off-axis. An additional 6 dB of SPL at 62 Hz is available if the user is willing to accept 20-percent distortion. Optimal power and electronic protective circuitry is another advantage of active speakers; the system can be designed to prevent drivers from burning out and gross overload even when the speaker is used outside its proper operating range.

The EQ below 150 Hz has the specified turnover frequency but far less effect than anticipated. The front panel master level control has far greater effect in the upper half of rotation than specified so users may wish to use the control with care. The tweeter level and high frequency room EQ function as specified.

— Tom Nouisane