



ADAM AUDIO S2X

'X' marks the (sweet) spot of these next-generation ADAM monitors.

Text: James Wilkinson

Midway through 2009 ADAM Audio released its redesigned range of professional reference monitors, characterised by an 'X' in the name, and although we're now well into 2010, here in Australia the new models have only recently become available. Unfortunately, if you recently bought one of the company's older (baby boomer generation) monitors the bad news is the new 'Gen X' models are a marked improvement. ADAM claims a "fundamental transformation" of its product design, resulting in a "quantum leap in professional monitoring." That said, just how good are the S2Xs?

Firstly, to be pedantic, the phrase "quantum leap" is a term that, although popularly accepted to mean "a significant change," is in fact misleading. In physics a quantum leap actually describes how electrons can change from one quantum state to another within atoms, but in real terms this change can be insignificant or large – it's not always necessarily a *large* change! So while I'm certain someone out there will take me for a wanker for pointing this out, a "quantum leap in professional monitoring" isn't a phrase we can draw much information from, except to say that I reckon the folks at ADAM think their new monitors sound pretty good. To which I'd respond, 'Yeah, they do'.

HI-FI NS-10s?

My own experience of ADAM monitors in recent years has primarily been of the A7 series, the price and sound of which won it lots of fans in Australia. A friend of mine calls them "Hi-Fi NS-10s" and this rings true to some extent, given that both these loudspeakers balance – within their limits – enough information for most to make critical judgements when mixing audio. The new S2Xs by contrast are *not* NS-10s – nothing like them in fact – and do more to express the technological differences in their speaker design than espouse their similarities.

For reviewing purposes the audio I ran into the ADAM S2Xs was first sent digitally to a Crane Song HEDD 192 for A/D conversion (bypassing the HEDD's harmonic enhancement

stages), and from there into an SPL 2 Control which fed signal to the monitors. The room I auditioned the speakers in is approximately 8m x 6m and has acoustic treatment on the ceiling and walls to provide the mix position with a reasonably reflection free sweet spot. The studio is setup for nearfield monitoring and that's how all the critiquing was done, with the S2Xs working well to provide coverage for both an engineer sitting up close and the client on the couch a couple of metres back.

At 10kg each and measuring 370 x 220 x 320mm the S2Xs are small enough to sit on the meter bridge of a console or on stands, and the front-firing bass port ensures the speakers' bass content is more directly audible than if they'd been at the rear. Speaking of porting for a moment, I found the ones on the S2Xs actually quite noisy at high volumes, particularly when monitoring bass-heavy music. The air moving in and out of these ports resonates physically – which is not necessarily how you want a port to behave! To be fair, this discovery was made at a very high volume, and manifest only around the same time as the speaker protection kicked in, but regardless, this is definitely an issue if you're inclined to listen to music loud! Reaching this point is likely a sign that the monitors are too small for the SPL requirements of your room or your listening preferences anyway, so if you experience the S2Xs doing this yourself you may be better off swapping them for the next model up.

BACK TO FRONT

On the rear of an ADAM S2X you'll find little else other than the socket for an IEC cable with recessed power switch, a female XLR for analogue input, and a blanking plate for the optional DA-SX converter. Not supplied for the purposes of this review, the optional D/A converter works up to 24-bit/192k via AES/EBU and S/PDIF (with provision for wordclock), complete with an additional XLR output to chain other speakers for use in surround sound.

Around the front there's more going on with various controls

placed conveniently to fine tune your settings. Stepped 'Input', 'Bass' and 'Tweeter' attenuators reside below the standby power switch. Input has coarse settings from –20dB to +8dB in 4dB steps, and fine settings from –1.5dB to 2dB in 0.5dB steps. In use the Input's coarse and fine controls are handy to set operating/reference levels and were very useful in adjusting balance when used in combination with other monitors. Bass frequencies can be boosted up to 6dB at 80Hz, or shelved below 150Hz, while the tweeter's high frequency volume is adjustable by –2dB to +2dB, or shelved above 6kHz by ±4dB. LEDs indicate the presence of the A/D card (if one is fitted) and light up when you're pushing the speaker into overload.

Amplification is by way of a Class-D amplifier powering the 250W woofer (350W peak), and a more traditional Class-AB amplifier for the 50W tweeter (100W peak). Class-D amplification (the 'D' of which by the way does not stand for 'digital') is more efficient than your regular Class-AB amps and thus runs a lot cooler. They do this by using Pulse Width Modulation, an amplification technology that uses rectangular waveforms to reproduce the incoming signal oscillations. These rectangular waveforms vary in width over time and it's this variation – as their height is always the same – which reproduces the material at hand. By switching on and off as the waveform moves through its positive and negative excursions the amp maps a signals trajectory in a fashion similar to digital sampling. They're used quite commonly in nearfield monitors these days but it's interesting to note that ADAM only uses a Class-D amp in the S2X to drive the woofer, not the tweeter.

The S2X's 7.5-inch woofer is comprised of a 'HexaCone', which combines Kevlar and a Nomex honeycomb to form a very rigid cone. The idea behind this is that a rigid and lightweight structure reduces distortion and handles transients more efficiently. Frequency response of the S2X is published as being 35Hz – 50kHz, with the crossover set at 2.2kHz. In use, however, the workable bottom-end range seems slightly more elevated than that, but suffice it to say a good sub would polish off what is already a very accurate sounding bottom end.

ADAM'S RIB(BON)S

The technology behind the ribbon tweeter design has helped defined ADAM's reputation for many, and my own introduction to the brand was very much captioned along similar lines: "Hey look, they use ribbons for their tweeters!" I remember nodding in agreement at the time and taking this statement as one of fact for many years until recently when I discovered that the tweeter design is not that of a traditional ribbon tweeter at all. ADAM in fact uses an 'Active Ribbon Transformer' employing a membrane that's pleated to move the air between its ridges in and out. ADAM describes it as working in a similar way to the "bellows of an accordion," and claims it has an "improvement in air loading by a factor of four over conventional transducers." All this translates to a tweeter that's more efficient, has wide dispersion, low distortion and great dynamic capacity. My ears can definitely hear these claims in action – there's a lot of dynamic sensitivity to experience with the S2Xs, dispersed over a wide listening area that appears to be accurately reproduced, which is what you want.

AIR APPARENT

As mentioned earlier, the new X-ART models boast a frequency response all the way out to 50kHz, and this extended top end is certainly apparent, although not literally all the way out to

50kHz – I'm not a bat after all! A ride cymbal sounded detailed and lush; strings were revealed, exposing all the detail in the upper-partials. There was breath and air on vocals and all the aliasing you'd ever want to hear on MP3s! For these reasons the S2Xs started to impress upon me an unmitigated reversal in opinion. At first I found their brighter character and the sound of the midrange harder to judge than my usual monitors, and I didn't like that at all.

Factors such as the room you're monitoring in, the audio material and personal taste always play a significant role in how a monitor sounds to your ears. It's very much a case of listening, trialling different settings and allowing some time to get to know their sound, and this was very much my experience with the S2Xs. At first I didn't like them much at all to be honest, but less than two weeks later I didn't want to give them back.

For the money – and it usually comes down to money in the end doesn't it – the question I kept wrestling with was why would you buy a pair of ADAM S2Xs instead of A7Xs? Does the S2X sound twice as good as the A7X? No, I don't think so. Will they last twice as long? Probably not. Will having them mean I can charge twice as much for my services? Not at all. So why buy a pair? Well, primarily because the quality of your work will – in all probability – improve.

Compared to the A7X, the S2Xs have a more refined and defined bottom end that provides a more accurate account of your low frequency audio. The top end sounds smoother and extended but isn't necessarily where you'll appreciate the extra investment. Where the difference between the two monitors most importantly and critically lies is in the midrange, as here resides information that isn't so apparent on the A7Xs. Having this midrange reproduced accurately allows you to make informed decisions based on what you hear, so there's no guessing, and that can only be a good thing. Snares, acoustic guitars and vocals in particular were easier to EQ and mix as all their timbre and dynamic were clearly apparent.

FINAL SHOOTOUT

On returning the monitors to the shop from whence they came, I lastly set them up in a listening room next to a whole range of other monitors, which offered me a chance to hear how they sounded by way of a quick comparison with other options I didn't have back at the studio. I stress this was a very brief and informal audition made against ADAM A7Xs, Dynaudio BM5A MkIIs and Genelec 8030As. These are all respected, popular monitors in their own right, but manufactured for a price range that's below that of the S2Xs, and therefore perfect for gauging if the more expensive monitor actually gives you more. A few CDs later involving the likes of Green Day, The Beatles (re-mastered) and Seal as reference material ("And we're never going to survive, un-less, we get a little cra-zy" – shut up!) it was clear the S2Xs had a lot more of the aural information that's so integral to critical listening – most notably its midrange dynamics and the accuracy of the S2X's crossover.

So where does all this leave us? In summary, the S2Xs have a clear and present soundstage, dynamic mids, accurate bass and a forensic top end. If the money can stretch I'd buy a pair of the S2Xs over the A7Xs in a heartbeat, and if someone tries to sell you the older series, hold out! The X-series is undoubtedly better than the previous range, so much so you may find yourself getting very excited and using figurative expressions about electrons to express your delight. ■

NEED TO KNOW

Price
\$5495 a pair

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Pros
Extended, open sounding,
high frequency reproduction.
Detailed and dynamic
midrange.
Five year warranty.

Cons
Ports are noisy at
high volume.
They may just be an
expensive pair of monitors
you want but still can't
afford!

Summary
The ADAM S2X is a quality
speaker that offers detailed
representation across a
broad range of frequencies.
They're an acquired taste in
some respects; the tweeter
in particular initially offering
more than you may have
bargained for. But a couple
of lengthy sessions with
the ADAMs can form an
unhealthy addiction. Well
worth an audition.