

Gamma Raise

he crossover between the professional audio market and the domestic hi-fi arena can sometimes be an uncomfortable one. The priorities in each situation are quite different and what works for one can be a disaster for the other. Professional monitoring loudspeakers are designed to reveal exactly what's in a recording, warts and all. Any bad aspects need to be obvious so that

suitable corrections can be made, but in the home such a loudspeaker will usually be unbearable to listen to after a while, especially with some of the poor recordings doing the rounds these days...

However, some manufacturers have made a great success of bridging the two markets. The likes of Tannoy, JBL and Dynaudio all make highly respected professional monitoring loudspeakers alongside their

domestic products and very often technologies intermix between the two lines. However, the most recent name to attempt to make the leap of faith is Germany's ADAM Audio.

Founded in 1999, ADAM
Professional Audio has built itself an enviable reputation for professional loudspeakers, and these are used extensively in the likes of Abbey Road Studios, and by 20th Century Fox Digital and the BBC, as well as



by music producers such as George Martin and Alex Callier. They have decided the time is right to now attack the home market with several ranges of loudspeakers distributed in the UK by Unity Audio.

At the top of these ranges, but below the mighty OSS flagship, are the Tensor series, amusingly described by ADAM as "Highest End", above the "Higher End" Classic Series. From the top down, the Tensor range comprises the Alpha, Beta and Gamma floorstanders, the Delta and Epsilon standmounters, the 'Center' centre channel and SW393 subwoofer.

Throughout the range are two ADAM trademarks, namely their use of PWM switching amplifiers in the active portions of the loudspeakers, in this case, B&O's ICEpower modules [the same Class D chips used to aspirate Rotel's massively powerful RA-1092 power amp - Ed.], and the use of what the company calls 'ART' tweeters: this stands for 'Accelerating Ribbon Technology' and is basically a development of the Air Motion Transformer drive unit designed by Dr. Oskar Heil in 1973. More details can be seen about this in my Loudspeaker History feature (Hi-Fi World April 2008, p30), but briefly, the membrane consists of a folded diaphragm that moves in and out like an accordion in response to the input signal. ADAM claim that this offers a much better interface between the driver and the air than a conventional dome tweeter, paying huge dividends in terms of clarity and transient response.

More unusually, ADAM also use this type of driver for the midrange, called X-ART (eXtended ART) on the Delta, Gamma, Beta and Alpha Models. This covers the 600Hz-3.2kHz frequency range and should offer a much better sonic integration across the treble and midrange than if a conventional unit was used.

In the Gammas, the driver lineup consists of one ART tweeter, measuring approximately 30x35mm and with a diaphragm weighing in at 0.15g and one X-ART midrange (50x75mm, 0.72g). Below this are two 9in (220mm) Hexacone bass drivers - one facing forward and acting as a bass/midrange unit, and one at the rear covering bass only.

As with the other models in the Tensor range, the Gammas are available in semi-active and fully active versions. The former accepts normal speaker-level inputs and uses this to drive the midrange and tweeter, along with feeding a pair of 250W amplifiers, one for each bass driver. These retail for £10,000,

saving £2,500 over the fully active versions reviewed here. The fully actives add another pair of 250W amplifier modules for the tweeter and midrange and accept input through an XLR socket - Unity can supply suitable XLR to phono cables if required.

Alongside the inputs on the rear panel are a number of adjustments. namely one for adjusting the tweeter's top end roll off, one to adjust its level, a similar one for the midrange level and an input gain control, variable from -10dB to +10dB to allow compatibility with a wide range of preamplifiers. A parametric equaliser is fitted, and this is basically the same as the Notch Filter that Mordaunt Short have been fitting to their active subwoofers for a number of years, but it allows boost as well as cut [see MEASURED PERFORMANCE for more details]. Finally, an LED Dim button is fitted, which cuts illumination to the 'ADAM Tensor' script on the front panel, leaving only the logo illuminated. A main power switch for each

(Notionally Optimised Electrostatic Loudspeaker?) in the future, I wouldn't be surprised...

SOUND OUALITY

The question on my mind as I fired up the Tensor Gammas was indeed whether they would have me diving for cover in a ruthless barrage of detail and mastering disasters from the material with which they were fed. Fortunately, the answer was a resounding *no*, but it wasn't quite that simple, more of which later.

My goodness, though, if there are a pair of loudspeakers out there that create a more solid and vivid central image, then I have yet to hear them. The way in which the Tensor Gammas fill the space in between themselves is nothing short of astounding. Vocalists could easily have been sat straight in front of me and the way in which their backing instruments were laid out around them was like little else I have ever heard. People talk, quite rightly, about the imaging abilities of the likes of Quad electrostatics for example, but

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loudspeaker is on the rear panel, alongside the IEC mains input socket, and an illuminated on/standby button is on the front panel, by the logo.

The Tensor Gammas' cabinets are very sturdy indeed, as they comprise two layers of wood with a layer of sand in between. Rather cutely, three 'windows' are fitted to the rear panel, presumably so that you can check they've remembered to put some sand in... As a result, the Gammas are not vast, measuring 1080x340x320mm (HxWxD) but they weigh in at an impressive 54kg each. Finishes available are gloss silver or gloss black all over, or gloss black with silver driver panel. Incidentally, the driver mounting panel is an aluminium honeycomb design, offering rigidity but remaining acoustically inert at the same time.

Finally, much as I would like to be flattered by the company's use of my own name, the plain truth is that ADAM actually stands for Advanced Dynamic Audio Monitor. Still, they could be onto something here, and if we see a range of DAVID amplifiers (Dynamic Amplifier - Valve Integrated Design?) or a NOEL 'speaker

I have always found these to give an impressively expansive, but slightly diffuse performance. The ADAMs may not stretch things off into the distance like a pair of 2905s, but the precision with which they fill the area that they do encompass is positively mathematical.

Undoubtedly, this is due to the way in which the midrange and

treble integrate. The Gamma top end is sweet and crisp, with a lightness and swiftness of response that belies the large box from which it is emanating. This hands seamlessly over to the midrange unit to ensure that vocals are emotive, instruments

are incredibly realistic, and the atmosphere of recordings is reproduced in an utterly convincing manner. Spinning Jennifer Warnes' 'The Hunter' showcased the Tensor Gammas' talents perfectly - the lady herself could have been stood in the room in front of me and each backing instrument was vivid and







one of the cabinet's sand 'inspection windows'.

a bit bass-light, until you realise that your favourite bass torture track has just set the sofa rumbling underneath you without the Gammas even breaking into a sweat. These loudspeakers go deep, remaining clean and composed all the way.

On 'Somewhere, Somebody', from Jennifer Warnes' 'The Hunter' album, there is a vocal 'pop' into the microphone a couple of minutes in which usually only manifests itself through a subwoofer. However, through the Tensor Gammas it was loud and clear. Equally, the bass notes from Newton Faulkner's version of 'Teardrop', which are firmly in the 'where the heck did they get those from?' category, were clean and not overpowering, yet had objects rattling on the shelf beside me.

All in all, no matter what I fed the Tensor Gammas, they lapped it up. They are true monitor-quality

loudspeakers however, and the professional heritage can be found in one aspect of their performance, namely that of dealing with poor recordings. As I mentioned earlier, true monitors that take a no-nonsense approach to sound can often sound dire with lesser recordings but the Tensors did not suffer in this way. They did show the deficiencies present quite clearly but still were able to get on with digging out the music therein and actually made a fine job of sorting out some messier recordings, such as a mid-price, mid eighties CD pressing of Led Zeppelin II that's frankly pretty nasty! The Gammas did not mask the poor recording in any way but still allowed Plant, Page and the boys to fight their way through the mush and make a good tune. The problem

is, though, that the

Tensor Gammas are so brilliant with good recordings that anything less than impressive comes across as a bit of a disappointment. Buy these loudspeakers and you may find that some of your CDs and LPs start to get played less and less, not because the results are unlistenable, but purely because they don't do the ADAMs iustice.

CONCLUSION

I was incredibly impressed by the ADAM Tensor Gammas their combination of staggering soundstaging, deep, tight, tuneful bass and astounding realism that they impart to music makes them one of the finest pairs of loudspeakers I've yet auditioned.

If you like your loudspeakers to have a nice, soft, fluffy, warm and cuddly presentation, then they will not be for you. However, if you really want to hear your music as it was intended and, unlike me, can afford the £12,500 asking price, the Tensor Gammas should be right at the very top of your audition list. Beware though, do heed Sound on Sound magazine's words from 2006 regarding the ADAM PIIA monitors as I believe they apply in this case as well, "hear them at your peril; you're unlikely to leave the shop without them"!

Magnificently designed and built monitor loudspeakers with neutrality. central image stability and bass like very few others

ADAM AUDIO TENSOR GAMMA (ACTIVE) £12.500 **Unity Audio** () +44(0)1440 785843 www.unityaudio.co.uk

- staggering soundstaging
- solid, clean bass
- airy atmospherics
- effective adjustments
- build and finish

AGAINST

- price

MEASURED PERFORMANCE

The Adam Audio Tensor Gammas exhibit an impressively flat frequency response across the full audio bandwidth, with all drivers well integrated. This is a distinct advantage of active loudspeakers as the crossover is electronic and allows easier manipulation of the frequency range for optimum integration. Generally, the output rises ever so slightly towards the top end, with a slight lift around 2kHz - this will add presence to the sound but is unlikely to add harshness.

At the bottom end, the Gammas roll down at around 70Hz, but are reinforced by the down-firing ports which operate down to 30Hz. The additional rear-mounted driver operates in phase with, but in the opposite direction to, the main driver, providing cancellation of forces within the cabinet and augmenting bass output to the rear of the speaker. The Tensors should, as a result, have a clean and solid low end.

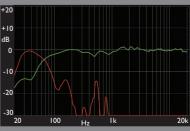
The filter tuning options on the Gammas are comprehensive, allowing treble rolloff to be raised or lowered above 6kHz, by up to $\pm -6dB$ at 20kHz. The tweeter and midrange levels can also be adjusted, the former by +/-4dB above 4kHz and the latter by +/-2dB from 800Hz to 4kHz. These should prove useful in fine-tuning the speakers' response for less than sympathetic

materials (or source components, for that matter) and they are subtle in their action but have enough range of adjustment to be effective.

Finally, the Parametric Equaliser allows a signal boost or cut of up to 12dB across frequencies between 20 and 200Hz with a variable Q. Using the guide in the manual, this can be used to fine-tune bass response according to room conditions and the 'cut' is very effective in attenuating room boom, although this is no substitute for proper

positioning, of course.
All in all the Tensor Gammas
measure very well and appear to have
been carefully designed. Their range of filtering should mean that they will work well in virtually any room and they should offer a tight, detailed and stable sound. AS

FREQUENCY RESPONSE



Green - driver output Red - port output

mean that there is no boom, no wallow and no cabinet intrusion. In fact, on first listening you could almost convince yourself that they're

astonishingly lifelike. The whole

performance was blessed with a

sense of air that makes most other

Moving to classical, the ADAMs

loudspeakers sound closed-in and

were equally emotive and precise.

The sound of bows scraping across

stringed instruments was more

noticeable that I have ever been

using, and performances came

aware of before on the CDs I was

together in a highly satisfying manner.

CDs, I did note that violins could be a

little 'edgy' and have a slight sheen to

them, but tweaking both tweeter and

midrange level controls down by a dB

or so took the edge off the problem

very user-friendly in this respect and

the parametric adjustments fitted are

At the bottom end, the Tensor

Gammas are, if anything, even more

competent. The force-cancelling opposed woofers and solid cabinet

perfectly - the Tensor Gammas are

subtle but effective.

On one or two less well mastered

disinterested.